



United States Department of the Interior

BUREAU OF LAND MANAGEMENT

Lake Havasu Field Office

2610 Sweetwater Avenue

Lake Havasu City, AZ 86406-9071

In reply refer to:
1610 (330)

May 2007

Dear Reader:

I am pleased to announce that, after several years of collaborative effort, the Lake Havasu Field Office (LHFO) Resource Management Plan (RMP) is complete. This document will provide guidance for the management of more than 1.3 million acres of Bureau of Land Management (BLM)-administered lands within the LHFO planning area. These lands are on both sides of the Colorado River in California and Arizona.

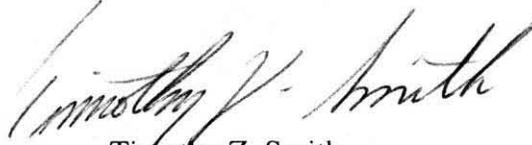
The attached Record of Decision (ROD) and RMP have been prepared in accordance with the Federal Land Policy and Management Act and the National Environmental Policy Act. The document has been sent to members of the public who requested a copy and to pertinent local, State, Tribal and Federal government entities. The ROD links final land use plan decisions to the proposed decisions and analysis presented in the Proposed RMP/Final Environmental Impact Statement (FEIS) that was released on September 22, 2006, and subject to a 30-day protest period that ended on October 23, 2006. One protest letter was received. The protest was reviewed by the BLM Assistant Director, Renewable Resources and Planning in Washington, D. C. After careful consideration of all points raised in the protest, the Assistant Director concluded the responsible planning team and decision makers followed all applicable laws, regulations, policies and pertinent resource considerations in developing the Proposed Plan in the FEIS. Minor adjustments or points of clarification incorporated into the RMP in response to issues raised in the protest process and final BLM review are discussed in the ROD under the sections titled *Modifications* and *Clarifications*. The protest review did not result in any significant changes to the Proposed Plan.

This ROD serves as the final decision for the land use planning decisions, described in the attached Approved RMP. Now that the ROD has been signed, we look forward to your participation as we implement the plan. One such action is the development of the Travel Management Plan (TMP). The TMP will be a detailed and public process in which the public and interested parties can assist BLM as we analyze and designate each route within the planning area. We will conduct the TMP in sections (or small areas) beginning with the Bullhead City area. Route designation will be completed within five years.

Additional hard copies and CD-ROM versions of the RMP/ROD may be obtained by contacting the LHFO at the address above. The document will also be available on the internet at <http://www.blm.gov/az>.

We are pleased to provide this copy of the LHFO RMP for your reference and extend our appreciation for your cooperation and assistance during this planning process. We look forward to your continued participation as the plan is implemented. For further information, please call (928) 505-1200.

Sincerely,

A handwritten signature in cursive script that reads "Timothy Z. Smith". The signature is written in black ink and is positioned above the printed name and title.

Timothy Z. Smith
Field Manager

Record of Decision
And
Lake Havasu Field Office
Approved
Resource Management Plan

May 2007

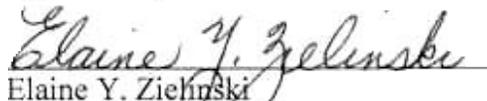
Prepared by:

U.S. Department of the Interior
Bureau of Land Management
Lake Havasu Field Office
Lake Havasu City, Arizona

Cooperating Agencies:

Arizona Department of Transportation
Arizona Game and Fish Department
Bureau of Reclamation
Federal Highways Administration

Approved by.


Elaine Y. Zielinski
Arizona State Director


Date

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Record of Decision

Introduction

This Record of Decision (ROD) approves the Bureau of Land Management's (BLM's) proposal to manage the BLM-administered public lands within the Lake Havasu Field Office as presented in the attached Approved Resource Management Plan (Approved RMP). This Approved RMP was described as Alternative 5 in the September 2006 Proposed Lake Havasu Field Office Resource Management Plan and Final Environmental Impact Statement (PRMP/FEIS) (USDI-BLM 2006). The ROD provides the background on development of the plan and rationale for approving the proposed decisions contained in Alternative 5, and describes the clarifications made to resolve the protest received.

Results of Protest Review

The BLM received one protest letter during the 30-day protest period provided for the proposed land use plan decisions contained in the PRMP/FEIS in accordance with 43 CFR Part 1610.5-2. Protesting parties included in the one protest letter were: Arizona Wilderness Coalition, Natural Trails & Waters Coalition, Sierra Club – Grand Canyon Chapter, and Center for Biological Diversity.

Main protest points pertained to:

Issue 1. The Proposed Plan does not manage sufficient acreage for wilderness characteristics.

Issue 2. The Proposed Plan appears to overestimate the potential negative consequences to other resources or uses while failing to give sufficient weight to the likely benefits from managing these lands to protect wilderness character.

Issue 3. The Proposed Plan does not include management prescriptions that sufficiently protect wilderness characteristics and, therefore, does not comport with BLM's guidance in Instruction Memorandum (IM) No. 2003-275, Change 1.

Issue 4. The FEIS contains prescriptions that are likely to damage and degrade the qualities of solitude, unconfined recreation, and naturalness and do not comport with the BLM's guidance.

Issue 5. The Proposed Plan does not manage off-road vehicles or address travel management in accordance with the BLM's legal obligations.

Issue 6. The BLM failed to disclose the environmental consequences resulting from implementation of its Proposed Plan.

Issue 7. The BLM's Proposed Plan designates Standard Wash as an Open OHV (off-highway vehicle) Area for unrestricted ORV (OHV) use despite lack of a comprehensive survey for vegetation and wildlife.

Issue 8. The Proposed Plan for the Lake Havasu Field Office fails to take into account both ongoing and foreseeable impacts from ORV (OHV) use, thereby underestimating the cumulative impacts of the Preferred Alternative.

Issue 9. The BLM has failed to account for the cumulative impacts by ignoring the potentially significant impacts of the major public highways and county roads that have yet to be constructed but are proposed to cross through the planning area.

Issue 10. Contrary to the National Environmental Policy Act's (NEPA's) requirement, the Proposed Plan implements management strategies that are not adequately supported by scientific data or sufficient information. In addition, the Proposed Plan violates NEPA by failing to adequately disclose the extent to which "it is proceeding in the face of [substantial] scientific uncertainty" concerning the baseline conditions of numerous adversely impacted resources.

Issue 11. The BLM should develop and analyze a true range of management alternatives, specifically including more environmentally protective alternatives that comply with its obligations regarding management of ORVs (OHVs).

Issue 12. The mitigation measures for damage from ORVs (OHVs) in the Proposed Plan are not sufficiently detailed or analyzed to be relied upon by the BLM. The BLM is also required to consider mitigation measures that could avoid or lessen these environmental impacts.

Issue 13. The Proposed Plan also fails to acknowledge and describe future actions (e.g., monitoring, law enforcement, etc.) on which user compliance of a designated route system would be contingent.

Issue 14. The Proposed Plan's "restoration actions," as described in Chapter 2, are not enough to ensure the mitigation of impacts from superfluous vehicle routes. BLM should use more of the area designation of "limited to authorized users," in areas allocated to protect wildlife such as WHA (Wildlife Habitat Area).

Issue 15. The BLM has not adequately responded to comments on the DEIS.

Issue 16. The current 2004 route inventory must be revised to eliminate those routes that cannot be verified as existing prior to adoption of the current RMPs and only those routes that were previously authorized should be carried over for analysis and potential designation for use in the forthcoming TMP (Travel Management Plan).

The BLM Director resolved the protest without making significant changes to the Proposed Resource Management Plan, though minor modifications and clarifications were made and have been explained in the Modifications and Clarifications sections below.

Decision

The decision is hereby made to approve the attached plan as the Approved Resource Management Plan (Approved RMP) for BLM-administered public lands located in California and Arizona that are administered by the Lake Havasu Field Office (see Map 1 in the Approved RMP). The Approved RMP replaces relevant decisions in the *Yuma District Resource Management Plan (YRMP)* (1987) as amended; *Kingman Resource Area Resource Management Plan (KRMP)* (1995); *Lower Gila South Resource Management Plan (LGSRMP)* (1988); *Lower Gila North Management Framework Plan (LGNMFP)* (1983); and the *Approved Amendment to the Lower Gila North Management Framework Plan and the Lower Gila South Resource Management Plan and Decision Record (LGNSA)* (2005).

The plan was prepared under the regulations of 43 Code of Federal Regulations (CFR) Part 1600, which implements the Federal Land Policy and Management Act (FLPMA) of 1976. An Environmental Impact Statement (EIS) was prepared for this Approved RMP in compliance with the National Environmental Policy Act (NEPA) of 1969. The plan is nearly identical to the one presented in the PRMP/FEIS published in September 2006. Management decisions and guidance for public lands under the jurisdiction of the Lake Havasu Field Office are presented in the Approved RMP attached to this ROD in the section titled *Management Decisions*.

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

What the Decision/Approved RMP Provides

Many land use plan decisions are implemented or become effective upon approval of the Approved RMP and may include Desired Future Conditions, Land Use Allocation or Designation decisions, and Special Designations. Management Actions that require additional site-specific project planning as funding becomes available will require further environmental analysis. Administrative Actions are not land use planning decisions, but are a key component of the overall Plan. The BLM will continue to involve and collaborate with the public during implementation of this plan. Brief descriptions of these decisions follow:

Desired Future Conditions

Land use plans express Desired Future Conditions or desired outcomes in terms of specific goals, standards, and objectives for resources and/or uses. They direct the BLM actions in most effectively meeting legal mandates; numerous regulatory responsibilities; national policy; state director (BLM) guidance; and other resource or social needs. The

Land Use Allocations, Special Designations, or Management Actions are the decisions that allow the BLM to work toward achieving the Desired Future Conditions.

Land Use Allocations (Allowable Uses)

Land use allocations specify locations within the planning area that are available or not for certain uses. These include decisions such as what lands are available for livestock grazing, mineral material use and locatable mineral development, disposal, and what lands are open, closed, or limited to motorized travel. It is common for specific resource or use allocations to overlap with other resource or use allocations.

Special Designations

Special designations include those that are designated by Congress for special protection, such as wilderness areas or national historic or scenic trails. Such designations are not land use plan decisions. However, recommendations for designation can be made to Congress at the land use plan level. Congress may then act on these recommendations at a later time.

Administrative designations made by the BLM (e.g., designating Areas of Critical Environmental Concern (ACECs) or watchable wildlife viewing sites) are also considered special designations and can be made in the land use plan.

Management Actions

Management actions include those provisions that help in meeting the established goals and objectives and include measures that will be applied to guide day-to-day activities on public lands, including but not limited to stipulations, guidelines, best management practices, and design features.

Administrative Actions

Administrative actions are day-to-day activities conducted by the BLM, often required by FLPMA. BLM administrative actions do not require NEPA analysis or a written decision by a responsible official to be accomplished. Examples of administrative actions include mapping, surveying, inventorying, monitoring, and collecting information needed such as research and studies. See Appendix B in the Approved RMP.

Key Decisions

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

- Designate OHV management areas (see Map 31). Define existing roads and trails for limited use areas per inventory (see Map 32).
- Designate Standard Wash and Osborne Wash “Open” areas only after compliance with Section 106 of the National Historic Preservation Act and Section 7 of the Endangered Species Act.
- Nominate two new Back Country Byways once partnerships are established.

- Allocate six areas as Special Cultural Resource Management Areas.
- Allocate 15 wildlife movement corridors.
- Prohibit collection of dead and down wood except for wood collected within the vicinity (100 feet) of a dispersed campsite for campsite use only.
- Make 50,616 acres of land available for sale, exchange, R&PP leasing, and disposal.
- Designate a total of 15 utility corridors. This total includes three new corridors. One existing corridor was dropped.
- Exclude the area north of Lake Havasu City (west of State Route 95 and east of the Colorado River) from the Havasu Herd Management Area (HMA).
- Adjust the eastern boundary of the Alamo HMA in coordination with Arizona Game and Fish Department (AGFD).
- Make 1.1 million acres of the field office available for grazing.
- Designate five ACECs.
- Allocate seven Special Recreation Management Areas (SRMAs).
- Identify 41,590 acres for management to maintain wilderness characteristics.

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

What the Decision/Approved RMP Does Not Provide

The Approved RMP does not contain decisions for actions outside the jurisdiction of the BLM. Comments asking for decisions that were beyond the scope of this plan were forwarded to the appropriate agency. Additionally, to facilitate resolution of concerns that were received concerning activities on Lake Havasu, BLM identified the need for a multi-agency, multi-year coordinated effort. While the Lake Havasu/Lower Colorado River Regional Management Area is not a land use allocation or a management action, the identification encourages a multi-agency, multi-year coordinated effort. The mission would be to define the issues, responsibilities, and actions required to maintain a quality lake recreation experience, properly functioning habitat (both terrestrial and aquatic), and common management relationships and goals among the jurisdictions.

In addition, many decisions are not appropriate at this level of planning and are not included in the ROD. Examples of these types of decisions include:

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

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

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

Monitoring strategies to determine the effectiveness of these decisions in achieving plan goals and objectives. These will be addressed in specific activity-based plans that will be completed to implement the Approved RMP, with the exception of the Lake Havasu Fisheries Partnership program that has monitored and will continue to monitor fish and habitat productivity and dynamics.

Implementation Decisions

The Approved RMP does not contain Implementation Decisions. Future activity-level plans will address the implementation of the Approved RMP.

Modifications

- In response to **Protest Issue 4**, the BLM added text to a prescription for lands managed to maintain wilderness characteristics. The clarifying text is in italics. The decision coded WC-3 will read:

WC-3 Use of motor vehicles and mechanical transport, and the construction of temporary roads, structures, and installations will be allowed for emergency purposes. *Any emergency actions will be conducted in a manner that creates the least disturbance and will be reclaimed as soon as possible after the situation has ended.*

- Also in response to **Protest Issue 4**, the BLM added text to an additional prescription for lands managed to maintain wilderness characteristics. The clarifying text is in italics. The decision coded WC-5 will read:

WC-5: The administrative use of motorized/mechanized equipment for natural and cultural resource management would be allowed. Administrative activities include, but are not limited to, water supplementation, collar retrieval, and capture/release of wildlife, maintenance/repair and reconstruction or construction of wildlife waters. *Cross-country travel for administrative purposes will be permitted only with prior approval by the authorized officer. Any administrative actions will be conducted in a manner that creates the least disturbance and reclaimed as soon as possible after the administrative need has ended.*

- In response to **Protest Issue 6**, the BLM edited a Travel Management Action. The clarifying text is in italics. The decision coded TM-27 will read:

TM-27: *Approximately 5,023 acres identified as protection sites in previous plans would be designated as "limited" and the specific concerns for these areas will be identified as evaluation criteria and addressed through the route evaluation and designation process.*

- In response to **Protest Issue 7**, the BLM added text to a Travel Management Action. The clarifying text is in italics. The decision coded TM-24 will read:

TM-24: Standard Wash and Shea Road/Osborne Wash RMZs [Recreation Management Zones] will be allocated "Open" *following compliance with NHPA [National Historic Preservation Act], the ESA [Endangered Species Act] and the successful resolution of adverse effects to historic properties and threatened and*

endangered species. Until these consultations are completed in these two RMZs, travel will remain restricted to existing roads and trails.

- In response to **Protest Issue 12**, the BLM added examples of mitigation measures to Appendix L, *Travel Management*, in the Approved RMP.

Clarifications

As the result of continued internal review, the BLM made several clarifications between the PRMP/FEIS and the Approved RMP.

- To facilitate locating a resource, the BLM restructured the resource sections; the resources now appear in alphabetical order.
- Some decisions presented in the PRMP/FEIS were placed in the incorrect decision category. These decisions were moved to their correct category. (This includes some Management Actions that were actually Administrative Actions. Administrative Actions were moved to Appendix B in the Approved RMP.)
- SRMA acres were corrected and updated to only include BLM acres.
- Mineral acres were corrected for surface occupancy.
- Some decisions were clarified with additional text.
- Some decisions presented in the PRMP/FEIS were repeated in two program areas. In the Approved RMP, these decisions are coded only once. The code reflects the program that is most affected.
- Additional text was added to Appendix K, *Special Designations*, from *Arizona Statewide Wild and Scenic Rivers Legislative Environmental Impact Statement*, December 1994.

Minor grammatical or editorial edits were not part of this discussion.

Also, some PRMP/FEIS appendices were not included in the Approved RMP.

- Appendix A, *Summary of Scoping*, was deleted since this addressed the process prior to the DRMP/DEIS and the PRMP/FEIS.
- Appendix C, *Planning Process Overview*, was deleted because it was a general planning overview intended to aid the reader to participate in the DRMP/DEIS and PRMP/FEIS process.
- Appendix D, *Existing Land Use Planning Decisions*, was deleted. This appendix contained the decisions that constituted Alternative 1.
- Appendix O, *Environmental Justice*, Appendix P, *Socioeconomic Conditions*, and Appendix R, *Minerals*, were not included because they were not referenced in the Approved RMP.
- Numerous resource appendices also have been revised to delete reference to alternatives other than the Approved RMP.

Several new appendices were added to the Approved RMP:

- Appendix B, *Administrative Actions and Standard Operating Procedures*. This appendix also includes Administrative Actions (by program area) from the PRMP/FEIS. Administrative Actions are not land use plan decisions. However, these are day-to-day, non-ground-disturbing activities and are an important component when considering program activities.
- Appendix N, *Lake Havasu Field Office Resource Management Plan Priorities*.
- Appendix O, *Plan Maintenance Roster*.
- Appendix P, *Plan Monitoring Roster*.

Overview of the Alternatives

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

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

Alternative 1 (No Action Alternative)

Alternative 1 described the current management of BLM-administered lands in the Lake Havasu Field Office planning area. The current management identifies the management decisions contained within existing management plans that would have continued to occur if new decisions had not been made to alter them. Alternative 1 served as a baseline and an opportunity to compare the current management with the various strategies that were proposed for future management (Alternatives 2, 3, 4, and 5).

Supplemental Rules are another category of decisions that affect the way the BLM manages the Lake Havasu Shoreline Program, the Parker Strip Recreation Area, and Craggy Wash. The Supplemental Rules are part of the implementation of ongoing management. These rules are revised periodically to reduce conflicts among a highly diverse group of resource users and notices have been published in the *Federal Register*. Current Supplementary Rules are listed in Appendix A. At the time of publication of the Approved RMP, the revised Supplementary Rules covering the decisions in the Approved RMP have not been finalized. When the rules become final, they will replace those listed in Appendix A.

Because their decisions affect the way the BLM manages public land today, decisions from implementation or activity-level plans written since the previous RMPs were completed were also included in Alternative 1. For example: OHV area designations

were changed from Limited to *Existing* Roads and Trails, to Limited to *Designated* Roads and Trails [italics added for emphasis] in *Gibraltar Mountain Interdisciplinary Management Plan and Environmental Assessment* (Bureau of Land Management 2001).

Alternative 2

Alternative 2 emphasized resource protection through a focus on natural processes and other discrete methods for resource management, minimal human use and influence, and enhanced protection of remoteness and primitive recreation. For example, more areas were restricted from mineral development; recreation management focused on more primitive and semi-primitive recreation activities within SRMAs; and there was designation of more public lands as ACECs than under any of the other alternatives.

Alternative 3

Alternative 3 placed an emphasis on maximum resource use and a more permissive resource management approach. For example, there were very few restrictions on mineral development. There was a higher level of motorized recreation and the fewest number of ACECs would have been designated than under any of the other alternatives.

Alternative 4

Alternative 4 sought to preserve the unique values of lands within the Lake Havasu Field Office planning area while accommodating reasonable levels of use. The “middle-of-the-road” approach to resource management proposed in Alternative 4 would have provided a moderate amount of mineral development. Recreation would have included a mix of motorized and primitive recreation opportunities, and a median number of ACECs would have been designated.

Alternative 5 (Approved RMP)

Alternative 5 was the BLM’s Proposed Plan in the PRMP/FEIS. Using the Preferred Alternative in the DRMP/DEIS, the BLM revised the alternative to incorporate comments received during the 90-day public comment period. The resultant alternative (updated in response to the protest) is the Approved RMP attached to this ROD. In the most comprehensive manner, the Proposed Plan is designed to respond to each of the issues and management concerns recognized during the planning process. The BLM has determined that the decisions presented under Alternative 5 will provide an optimal balance between authorized resource use and the protection and long-term sustainability of sensitive resources within the planning area. As with Alternatives 1 through 4, Alternative 5 is the summation of its Desired Future Conditions, Land Use Allocations, and Management Actions, as well as the information in *Administrative Actions and Standard Operating Procedures* (see Appendix B in the Approved RMP).

Alternative 5, Proposed Plan (in the PRMP/FEIS) is considered the preferable alternative when taking into consideration the human (social and economic) environment as well as the natural environment. The U.S. Council on Environmental Quality (CEQ) has defined the preferable alternative as the alternative that will promote the national environmental

policy as expressed in Section 101 of the National Environmental Policy Act of 1969. This section lists six broad policy goals for all federal plans, programs, and policies:

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

Based on these criteria, identification of the preferable alternative involved balancing current and potential resource uses with the need to protect resources, as well as consideration of the human environment. Alternative 3 could be viewed the least environmentally preferable alternative, as it offered the most intensive, active management for use of the area, which may have impacted other resource values the most or limited the rate of ecosystem recovery. However, this alternative could have provided the most economic benefit to the region in the short term. Alternative 4 would have been less environmentally preferable than Alternative 2, but more preferable than Alternatives 1 or 3. This alternative would have provided a balance between sustainable economic benefits and resource protection. Alternative 2 would have been more protective of natural and biological values than Alternatives 1, 3, or 4, but would have provided for fewer uses with more restrictions on those uses. The Proposed Plan provides a balanced approach with protection for the environment while also providing economic and recreational activities.

Management Considerations in Selecting the Approved RMP

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

Due to the diversity of community needs and stakeholders affected by management of BLM-administered lands, there has been both support and opposition to certain components of the Proposed Plan (as presented in the PRMP/FEIS). The BLM's objective in choosing Alternative 5 as the Proposed Plan was to address these diverse needs and concerns in a fair manner and provide a practical and workable framework for management of BLM-administered public lands. The BLM is ultimately responsible for

preparing a plan consistent with its legal mandates that reflects its collective professional judgment, incorporating the best from competing viewpoints and ideas. The Approved RMP (Alternative 5 as modified in consideration of public and agency comments and internal review) provides a balance between those reasonable measures necessary to protect the existing resource values and the continued public need for use of the BLM-administered public lands within the planning area.

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

The Approved RMP responds to issues related to managing for healthy rangelands and riparian and upland vegetation while still providing for livestock grazing and fish and wildlife habitat. The Approved RMP achieves this end by making most of the planning area available for livestock grazing, as long as Standards for Rangeland Health continue to be met, and by restricting grazing where it is incompatible with resource values.

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

Concerns about specific resource values are addressed throughout the Approved RMP. Since standard management contained in the Approved RMP protects many of the relevant and important values in the planning area, only five areas were designated as ACECs where additional special management is necessary.

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

The Approved RMP responds to travel management and access issues by providing a mechanism for route designation under the Travel Management Plan, to be completed in 5 years. Pending completion of route designation, travel is restricted to existing routes of travel with a network of transportation routes that tie into roads administered by the counties, the States of Arizona and California, and federal agencies. Users who value non-motorized areas for hunting, hiking, solitude, etc., are accommodated by areas that are closed to motorized or mechanized travel, as in designated Wilderness.

Consistency of the Approved RMP with other local, state, Tribal, and federal plans and policies (which sometimes conflict among themselves) was also considered as a factor in alternative selection. The Approved RMP is consistent with plans and policies of the

Department of the Interior and Bureau of Land Management, other federal agencies, state government, and local governments to the extent that the guidance and local plans are also consistent with the purposes, policies, and programs of federal law and regulation applicable to public lands.

Neither the Arizona nor the California Governor's Office identified any inconsistencies between the PRMP/FEIS and state or local plans, policies, and programs following the 60-day Governor's Consistency Review of the Proposed RMP/Final EIS (initiated August 23, 2006, in accordance with planning regulations at 43 CFR Part 1610.3- 2(e)).

Mitigation Measures

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

Plan Monitoring

Monitoring is the repeated measurement of activities and conditions over time with the implied purpose to use this information to adjust management if need be, to achieve or maintain resource objectives. The BLM planning regulations (43 CFR Part 1610.4-9) call for monitoring resource management plans on a continual basis and establishing intervals and standards based on the sensitivity of the resource to the decisions involved. CEQ regulations implementing NEPA state that agencies may provide for monitoring to assure that their decisions are carried out and should do so in important cases (40 CFR Part 1505.2(c)).

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

Implementation Monitoring

Implementation monitoring is the most basic type of monitoring and simply determines whether planned activities have been implemented in the manner prescribed by the plan. Some agencies call this compliance monitoring. This monitoring documents the BLM's progress toward full implementation of the land use plan decision. There are no specific thresholds or indicators required for this type of monitoring, but progress towards plan compliance will be evaluated and reported at a 5-year interval from the date of plan

approval. Aspects of the following two monitoring types may also be addressed in this report.

Effectiveness Monitoring

Effectiveness monitoring is aimed at determining if the implementation of activities has achieved the Desired Future Conditions (or goals and objectives). Effectiveness monitoring asks the question: Was the specified activity successful in achieving the objective? This requires knowledge of the objectives established in the Approved RMP as well as indicators that can be measured. Indicators are established by technical specialists in order to address specific questions, and thus avoid collection of unnecessary data. Success is measured against the benchmark of achieving the objectives (Desired Future Conditions) established by the plan, which may include regulated standards for resources such as endangered species, air, and water. The interval between these efforts will vary by subject and expected rate of change, but effectiveness monitoring progress will generally be reported to the Field Office Manager on an annual basis with trends and conclusions when appropriate and also incorporated in 5-year evaluation reports.

Validation Monitoring

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

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

The BLM will monitor the Approved RMP to determine whether the objectives set forth in this document are being met and if applying the land use plan direction is effective. (see Appendix P in the Approved RMP for a Plan Monitoring Roster). Monitoring for each program area is outlined in the *Management Decision* section of the Approved RMP. If monitoring shows land use plan actions or best management practices are not effective, the BLM may modify or adjust management without amending or revising the plan as long as assumptions and impacts disclosed in the analysis remain valid and broad-scale goals and objectives are not changed (see the discussion entitled *Maintaining the Plan* in the Approved RMP). Where the BLM considers taking or approving actions that will alter or not conform to overall direction of the plan, the BLM will prepare a plan amendment or revision and environmental analysis of appropriate scope (see the discussion entitled *Changing the Plan* in the Approved RMP).

Public Involvement

One of the BLM's primary objectives during development of the Lake Havasu Approved RMP was to understand the views of various publics by providing opportunities for

meaningful participation in the resource management planning process. The BLM interdisciplinary planning team used the scoping process to identify issues relevant to the Lake Havasu Field Office planning area. Through communication media such as meetings, newsletters, and news releases, the public was provided opportunities to identify issues that needed to be addressed in the PRMP/FEIS. The goal was for this process to result in an increased sense of the planning process, the decisions that result from it, and the importance of collaborative stewardship as a strategy for implementation.

Additionally, CEQ regulations mandate that federal agencies responsible for preparing NEPA analysis and documentation do so “in cooperation with state and local governments” and other agencies with jurisdiction by law or special expertise. In support of this mandate, the BLM invited a broad range of local, state, Tribal, and federal agencies to establish cooperating agency status with the BLM. Cooperating agency status offers the opportunity to assume additional roles and responsibilities beyond the collaborative planning processes of attending public meetings and reviewing and commenting on plan documents. Four agencies requested Cooperating Agency status for the Lake Havasu Field Office Approved RMP: the Arizona Department of Transportation (ADOT), AGFD, the U.S. Bureau of Reclamation (Reclamation), and the Federal Highway Administration.

Specifically, the process began when the BLM published the Notice of Intent to prepare an RMP with EIS in the *Federal Register* on August 3, 2001. The Notice of Availability of the DRMP/DEIS was published on September 30, 2005. The BLM facilitated public involvement through a series of open houses in 2001 and 2003, and another series of meetings was held to announce and discuss the DEIS in 2005. The Notice of Availability of the PRMP/FEIS was published on September 22, 2006.

Neither the Arizona nor the California Governor’s Office identified any inconsistencies between the PRMP/FEIS and state or local plans, policies, and programs following the 60-day Governor's Consistency Review of the Proposed RMP/Final EIS (initiated August 23, 2006, in accordance with planning regulations at 43 CFR Part 1610.3-2(e)).

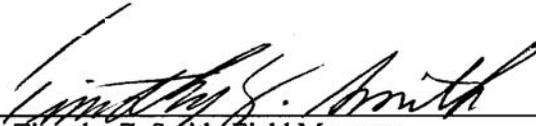
Lake Havasu Field Office also maintained a national mailing list of approximately 1,500 individuals, agencies, interest groups, and Tribes who expressed interest in the planning process. The BLM mailed planning bulletins to those on the mailing list to keep them informed of project status. Additionally, public meetings were announced at least 15 days prior to the event in local news media. The BLM also participated in numerous meetings with cooperating agencies, other federal agencies, American Indian Tribes, and state and local governments. Additional details concerning the coordination process are included in the Approved RMP in the section entitled *Planning Process*, and in the PRMP/FEIS.

Availability of the Plan

Copies of the Record of Decision and the Lake Havasu Field Office Resource Management Plan are available by request from the following locations: The BLM Lake Havasu Field Office, 2610 Sweetwater Avenue, Lake Havasu City, Arizona 86406 (928) 505-1200, and on the Lake Havasu Field Office website at www.blm.gov/az.

Field Manager Recommendation

Having considered a full range of reasonable alternatives, associated effects, and public input, I recommend adoption and implementation of the attached Lake Havasu Field Office Resource Management Plan



Timothy Z. Smith, Field Manager
Lake Havasu Field Office

May 10, 2007
Date

District Manager Concurrence

I concur with adoption and implementation of the attached Lake Havasu Field Office Resource Management Plan

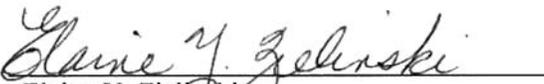


Rebecca Heick, District Manager
Colorado River District

May 10, 2007
Date

State Director Approval

In consideration of the foregoing, I approve the Lake Havasu Field Office Resource Management Plan



Elaine Y. Zielinski
Arizona State Director

May 10, 2007

Approved Resource Management Plan

Introduction

The Bureau of Land Management (BLM) Lake Havasu Field Office has prepared the Approved Lake Havasu Field Office Resource Management Plan (Approved RMP) to provide comprehensive current and future management of the more than 1.3 million acres of BLM-administered public land located within the Lake Havasu Field Office planning area. The planning area is comprised of portions of Mohave, La Paz, Yavapai, and Maricopa Counties in Arizona and San Bernardino County in California (Map 1). This plan represents years of ongoing, coordinated efforts on the part of BLM Lake Havasu Field Office staff, BLM Arizona State Office staff, representatives of communities located within the planning area, cooperating and collaborating government agencies, special interest and user groups, and hundreds of concerned citizens. The decisions outlined in this document will enable the BLM to manage the resources and uses of BLM-administered public lands located within the Lake Havasu Field Office planning area as a comprehensive unit.

Purpose and Need

The current planning area was formerly known as the Havasu Resource Area of the Yuma District. The BLM restructured management responsibility for public lands a few times starting on December 15, 1991. As a result, portions of four other planning areas within Arizona were transferred into the Havasu Resource Area. The Havasu Resource Area became the Lake Havasu Field Office in 1997. In June 2004, the Colorado River District was established. The District is composed of the Lake Havasu, Yuma, and Kingman Field Offices.

Lake Havasu Field Office managed resources under five different land use plans: the *Yuma District Resource Management Plan* (YRMP) (1987) as amended, *Kingman Resource Area Resource Management Plan* (KRMP) (1995), *Lower Gila South Resource Management Plan* (LGSRMP) (1988a), *Lower Gila North Management Framework Plan* (LGNMFP) (1983), and the *Approved Amendment to the Lower Gila North Management Framework Plan and the Lower Gila South Resource Management Plan and Decision Record* (LGNSA) (2005). The Approved RMP combines the relevant portions of those documents and updates the plan with issues and concerns identified during the scoping process (Map 2).

Sections 102 and 202 of the Federal Land Policy and Management Act (FLPMA) require the Secretary of the Interior to develop land use plans for all public lands. This Approved RMP conforms to FLPMA and BLM planning regulations as set forth in Title 43 Code of Federal Regulations (CFR) Part 1600.

The FLPMA directs the BLM to manage the public lands and their various resource values for multiple use and sustained yield to ensure they are utilized in a manner that will best meet the present and future needs of the public. As required by these Acts of Congress and current BLM policy, the BLM prepared this Approved RMP to establish management directions for the balanced use of such renewable and non-renewable resources as rangeland, wildlife, wilderness, recreation, cultural resources, and other natural, scenic, scientific, and historical values within the planning area.

The National Environmental Policy Act (NEPA) requires federal agencies to prepare an Environmental Impact Statement (EIS) on major federal actions. Since the Approved RMP is a major federal action, the BLM distributed the Draft Resource Management Plan/Draft Environmental Impact Statement (DRMP/DEIS) in September 2005 and the Proposed Resource Management Plan/Final Environmental Impact Statement (PRMP/FEIS) in September 2006. The FEIS documented the potential environmental impacts of implementing the Preferred Alternative from the DRMP/DEIS as well as other alternatives and conforms to U.S. Council on Environmental Quality regulations for implementing NEPA (40 CFR 1500).

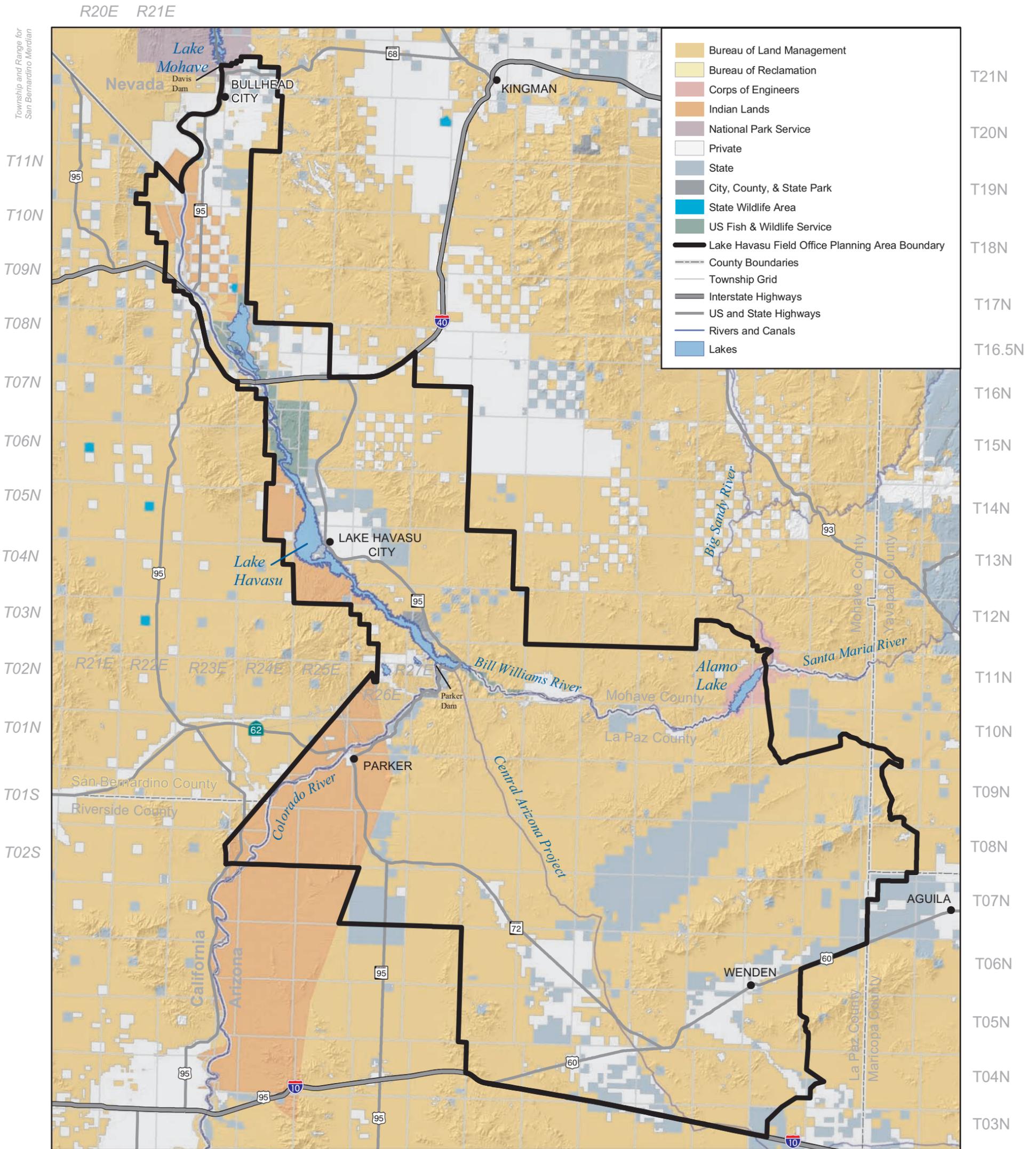
Planning Area and Map

The planning area boundary includes the Colorado River from Davis Dam in the north, (bordering Nevada/Arizona) to south of Parker Dam. On the California side, the planning area varies in width from less than one-quarter mile to approximately 6 miles west of the Colorado River. The planning area also trends east to Alamo Dam and the Harcuvar Mountains, which are located near the community of Wenden, Arizona. The planning area includes two incorporated cities (Lake Havasu City and Bullhead City), and the town of Parker, Arizona, along with more than a dozen smaller communities, and encompasses more than 1.3 million acres of BLM-administered public land, resources, and uses (Map 1).

Located within the planning area are the Havasu National Wildlife Refuge, Bill Williams River National Wildlife Refuge, five designated BLM wilderness areas, and other critical fisheries, migratory waterfowl, and desert plant and wildlife habitats. Seven Native American Indian tribes (Chemehuevi Indian Tribe, Fort Mojave Indian Tribe, Hopi Tribe, Hualapai Tribe, Salt River Pima-Maricopa Indian Community, Yavapai-Prescott Tribe, and Colorado River Indian Tribes) either currently reside within boundaries of the planning area or have recognized cultural ties to these lands.

The area is widely known as a recreation destination. Seasonal population changes significantly influence water and land-dependant outdoor recreation use within the planning area. The Lake Havasu Convention and Visitor Center estimates that recreational visitation during both the winter and summer tourist seasons increases the area's base population of approximately 55,000 people by another 15,000 to 20,000 persons (Cunning pers. comm.). Visitation thus plays a substantial role in the

Map 1 Planning Area with Surface Management

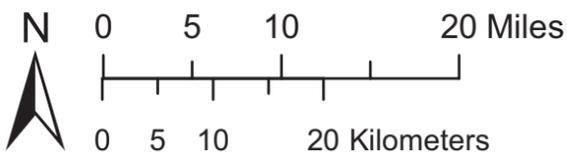


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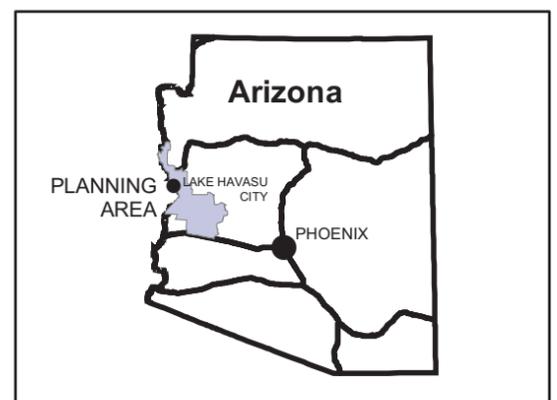


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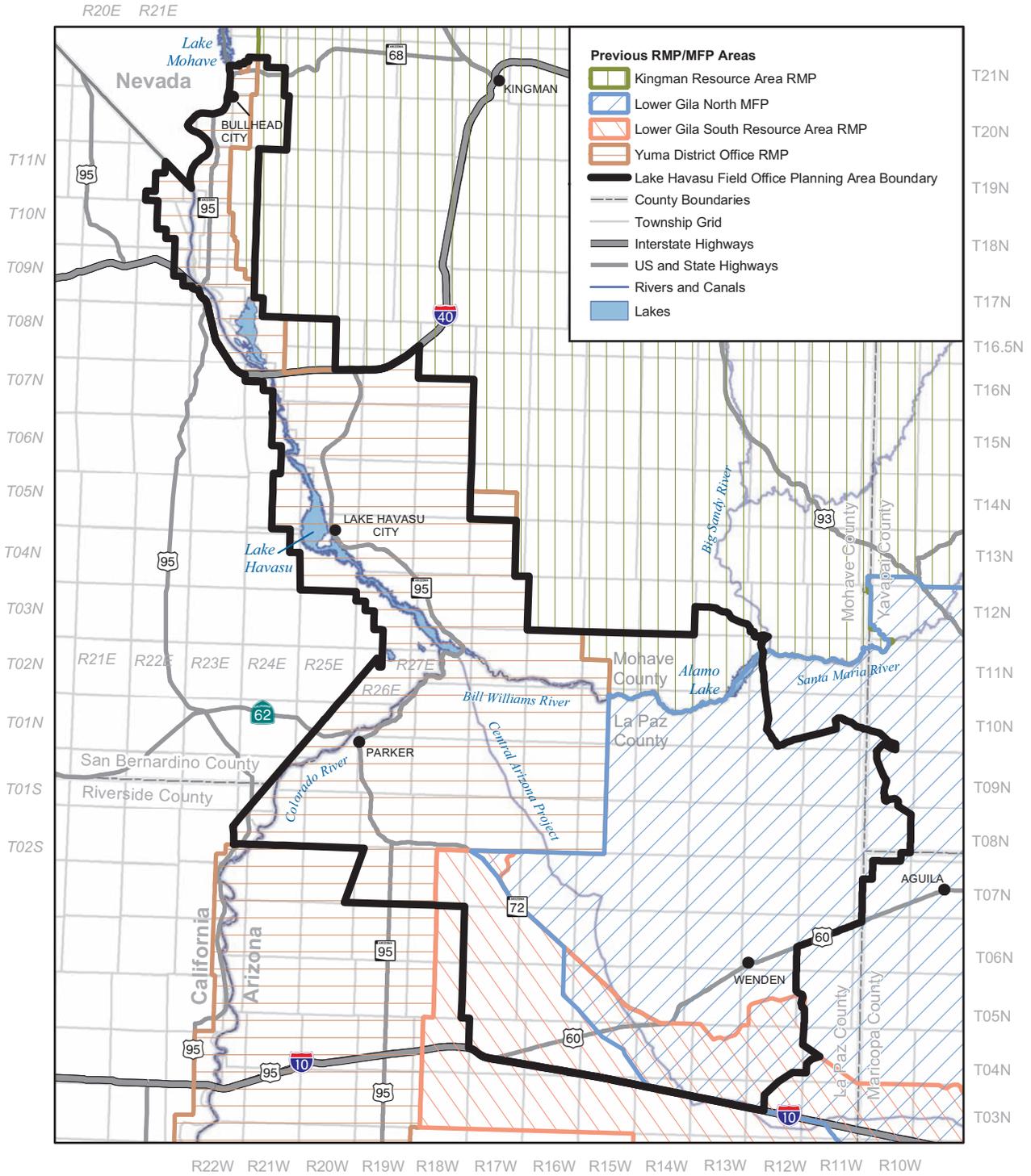


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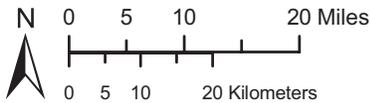
R22W R21W R20W R19W R18W R17W R16W R15W R14W R13W R12W R11W R10W Township and Range for Gila & Salt River Meridian

Map 2 Previous RMP and MFP Boundaries



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regional economy, in land uses within the planning area, and potentially in natural resource conditions.

Decisions in the Approved RMP apply to more than 1.3 million acres of BLM-administered public land within the 2.1-million-acre planning area (Table 1, Map 1). This area includes approximately 70,992 acres of U.S. Bureau of Reclamation (Reclamation) acquired and withdrawn land.

Table 1. Surface Management within the Lake Havasu Planning Area

Land Status	Acreage	Percentage
Federal		
Bureau of Land Management	1,359,103	64.82
U.S. Fish and Wildlife Service	45,835	2.18
National Park Service	1,626	0.08
U.S. Army Corps of Engineers	11,932	0.57
Bureau of Reclamation	216	0.01
Subtotal	1,418,712	67.66
Tribal Lands		
Subtotal	177,356	8.46
State		
Arizona Game and Fish Department	464	0.02
State Trust Lands	245,812	11.72
Arizona State Parks	3,545	0.17
Subtotal	249,821	11.91
Private		
County and City Parks	614	0.03
Private	250,355	11.94
Subtotal	250,969	11.97
Total	2,096,858	100.00

Generally, public lands within the planning area consist of large, contiguous blocks containing scattered state and private land holdings, known as “inholdings.” In a few locations, public lands are isolated or “checkerboarded” between state and private lands. Most of the state and private lands are located in populated areas associated with the Colorado River and along the highways that transect the area. While the planning area encompasses more than BLM-administered public lands, all actions and decisions created by the Approved RMP will be limited to public lands administered by the BLM. However, it is important to recognize that population growth could impact public land natural resources, in which case coordinated monitoring efforts would guide management

direction. Federal agencies, Tribes, private landowners, and state and local municipal entities within the planning area have been and will continue to be consulted throughout the Approved RMP's implementation.

Development of this Approved RMP was formally initiated with publication of a Notice of Intent in the *Federal Register* on August 3, 2001. Over the next 5 years, the BLM conducted extensive public outreach, and initiated a number of collaborative efforts involving diverse interests as part of plan development. (These opportunities are summarized in the Public Involvement section below and fully described on pages 1-4 through 1-10 of the Proposed RMP/Final EIS). The BLM also provided standard public comment periods and an opportunity to protest the proposed decisions to the Director of the Bureau of Land Management prior to approval of this ROD as required by the BLM planning regulations.

Scoping Issues

Resource Management Plans are prepared to resolve significant issues and management concerns associated with the management of the public lands in the planning area. The issues drive the RMP in that the Approved Plan is primarily designed to resolve the identified planning issues.

The BLM interdisciplinary planning team used the scoping process to identify issues relevant to the Lake Havasu Field Office planning area. Through communication media such as meetings, newsletters, and news releases, the public was provided opportunities to identify issues that needed to be addressed in the Approved RMP. The planning team then analyzed the public's comments and identified the major planning issues to be resolved. The specific criteria by which changes in current resource management practices were considered are:

- Management of one resource significantly constrains or curtails use of another resource.
- Existing land use allocations conflict with agency resource management policies or guidance.
- Existing resource management practices conflict with management plans, policies, and guidance of another federal or state surface management agency.
- Documented public controversy regarding management of a specific resource value indicates a management issue.

Issues Addressed

In August 2002, the BLM published the *Lake Havasu Field Office Resource Management Plan Scoping Report*. This document summarized the procedures, issues, and management concerns that were identified over 2 years as the result of public meetings, comments received through the mail, and via email. Following the publication of the scoping report, the BLM continued to solicit input from the public, agencies, and staff members. Those additional comments all fell within the issues identified in the scoping report (Bureau of Land Management 2002a).

After the publication of the DRMP/DEIS in September 2005, the BLM received more than 200 comment letters during the public comment period. These letters contained more than 800 comments. Of these comments, 23% concerned recreation issues; 19% concerned the alternatives (i.e., readers voicing a preference); 11% concerned travel management issues; 8% concerned fish and wildlife issues; 8% concerned Special Designation; 8% concerned administrative issues; and 6% concerned disposal or retention of public lands. The remaining comments were divided between other resources. Most (73%) of the comments were from Arizona residents; 6% were from California residents; and 21% of the comments were from residents of miscellaneous other states. The issues remained consistent with those outlined in the scoping report.

Issues Considered but not Further Analyzed

During the planning process, the BLM received comments concerning issues that were beyond the scope of this plan (e.g., safety issues on Lake Havasu). When applicable, the BLM forwarded comments received to agencies that have authority over the issues that were beyond the scope of this plan. Other issues that were not included could be addressed through administrative or policy action (e.g., use of an area for educational purpose).

Planning Criteria

Planning criteria are the constraints or ground rules that guide and direct the development of the plan. Criteria are taken from laws and regulations, BLM guidance, and input from state, county, and federal agencies, Indian tribes, and the public. These criteria were developed by the BLM to assure that the planning process and decision-making are focused on the pertinent issues, and to ensure that the BLM avoids unnecessary data collection and analyses. The criteria were used at four stages of the planning process (resource inventory, assessment of the current situation [which includes a description of current BLM guidance, discussion of existing problems, and opportunities to resolve them], formulation of alternatives, and selection of the Preferred Alternative).

The basic planning criteria are identified in Section 202 of the FLPMA:

- Follow the principles of multiple use and sustained yield.
- Use a systematic interdisciplinary approach, fully considering physical, biological, economic, and social aspects of public land management.
- Identify, designate, protect, and specially manage Areas of Critical Environmental Concern (ACECs).
- Consider the relative significance of public land products, services, and use to local economies.
- Rely on the inventory of public lands, their resources, and other values to the extent such information is available.
- Consider present and potential uses of public lands.
- Consider the impact of federally approved actions on adjacent or nearby non-federal lands and on private land surface over federally owned subsurface minerals.

- Consider the relative scarcity of the values involved and alternative means and sites for realization of those values.
- Weigh the long-term benefits and consequences of proposed actions against short-term benefits and consequences.
- Comply with applicable pollution control laws, including state and federal air, water, noise, and other pollution standards and plans.
- Coordinate, to the extent consistent with public laws, resource planning and management programs of other federal departments and agencies, states, local governments, and Indian tribes.
- Provide the public with early notices and frequent opportunities to participate in the preparation of plans.
- Manage the public lands to prevent unnecessary or undue degradation of the lands.

Planning Process

Collaboration/Partnership Relationship

The BLM's Lake Havasu Field Office conducts many activities that require coordination with tribes, state, other federal agencies, and interested public. Coordination has been ongoing throughout this planning effort. Coordination is accomplished as a matter of course when implementing land use plan decisions through project development and site-specific activities. Key coordination efforts include those described below.

Intergovernmental, Inter-Agency, and Tribal Relationships

In developing this plan, the BLM coordinated with Reclamation; U.S. Fish and Wildlife Service (USFWS); Federal Highway Administration; Arizona Game and Fish Department (AGFD); Arizona Department of Transportation (ADOT); Arizona State Parks; California Department of Fish and Game (CDFG), the cities of Lake Havasu City, Bullhead City, and Needles; Mohave County; La Paz County; San Bernardino County; the town of Parker; and with Lake Havasu Fisheries Improvement Program partners, including the Metropolitan Water District of Southern California (MWD) and Anglers United.

The BLM initiated consultation with American Indian Tribes who have oral traditions or cultural concerns relating to the planning area, or who are documented as having occupied or used portions of the planning area during prehistoric or historic times. These tribes include the Fort Mojave Indian Tribe, Chemehuevi Indian Tribe, Colorado River Indian Tribes, Hopi Tribe, Hualapai Tribe, Yavapai-Prescott Tribe and Salt River Pima-Maricopa Indian Community. Four tribes (the Chemehuevi, Fort Mojave, Hopi, and Colorado River Indian Tribes) requested follow-up meetings.

Cooperating Agencies

In the first sentence of NEPA, Congress declares that,

It is the continuing policy of the Federal Government, in cooperation with State and local governments, and other concerned public and private organizations...to create and maintain conditions under which man and nature can exist in productive harmony, and fulfill the social, economic, and other requirements of present and future generations of Americans. (Sec. 101(a))

Additionally, U.S. Council on Environmental Quality regulations, contained in 40 CFR 1501.6 and 1508.5, mandate that federal agencies responsible for preparing NEPA analysis and documentation do so “in cooperation with state and local governments” and other agencies with jurisdiction by law or special expertise (42 United States Code [USC] 4331(a), 4332(2)).

In support of this mandate, the BLM invited a broad range of local, state, tribal, and federal agencies to attend a series of meetings with the aim of developing Memorandum of Understanding (MOU) that would establish cooperating agency status with the BLM. Cooperating agency status offers the opportunity for interested agencies to assume additional roles and responsibilities beyond the collaborative planning processes of attending public meetings and reviewing and commenting on plan documents. MOUs are time-limited documents that describe the roles and responsibilities of the BLM and the cooperating agency during the planning process for a particular RMP.

Four agencies requested Cooperating Agency Status for the Lake Havasu Field Office Approved RMP: ADOT, AGFD, Reclamation, and the Federal Highway Administration. Reclamation is considered a Cooperating Agency because a valid MOU, dated July 15, 1991, exists between the BLM and Reclamation, in which Reclamation agreed to be “a cooperating agency on land use plans, including amendments, affecting resources on project lands administered by the BLM.”

Transportation Agencies

Both ADOT and the Federal Highway Administration requested cooperating agency status on the plan. In addition to working with cooperating agencies, BLM coordinated with city and county transportation departments. 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. The BLM would work with the responsible agency to evaluate and incorporate safe and effective wildlife crossings to ensure long-term species viability and maintaining habitat connectivity. Where planned roadways potentially fragment other resources, such as (but not limited to) recreation routes or trails, grazing allotments, or mining operations, the BLM would work with the responsible agency to provide continued connectivity for those purposes as well. The BLM would also work with the agency to provide continued safe access to public lands from any developed roadway for recreation and other public land users.

Arizona Game and Fish Department and California Department of Fish and Game

AGFD, CDFG, and the BLM work cooperatively to manage resources within the Lake Havasu Field Office planning area. The BLM is responsible for management of wildlife habitats on BLM-administered lands, while AGFD and CDFG are responsible for managing fish and wildlife. Continued efforts will be made to coordinate with AGFD and CDFG for opportunities to enhance fish and wildlife habitat, species diversity, and riparian health.

In 2003, the BLM and AGFD signed a MOU giving AGFD cooperating agency status on the BLM planning efforts in Arizona. Throughout the planning process for this plan, the close, cooperative nature of the relationship is cited. At the writing of this document, AGFD and the BLM are revising the current Master MOU. The MOU establishes protocols that direct the cooperative working relationship between the agencies. The MOU will provide context to better enable both agencies to work in partnership and to make decisions in a consistent manner across the state. The guidelines established in the MOU apply to implementation of this Approved RMP.

Bureau of Reclamation

Bureau of Reclamation Project Lands

Several hundred thousand acres of Reclamation land, both acquired and withdrawn, accommodate the Boulder Canyon and related projects from Davis Dam to Mexico, including lands within the planning area. Under a unique provision of the Department of the Interior Departmental Manual (DM) (613 DM 1.1), the Secretary assigned management responsibilities for certain resources on these withdrawn lands to the BLM, in coordination with Reclamation (Map 3).

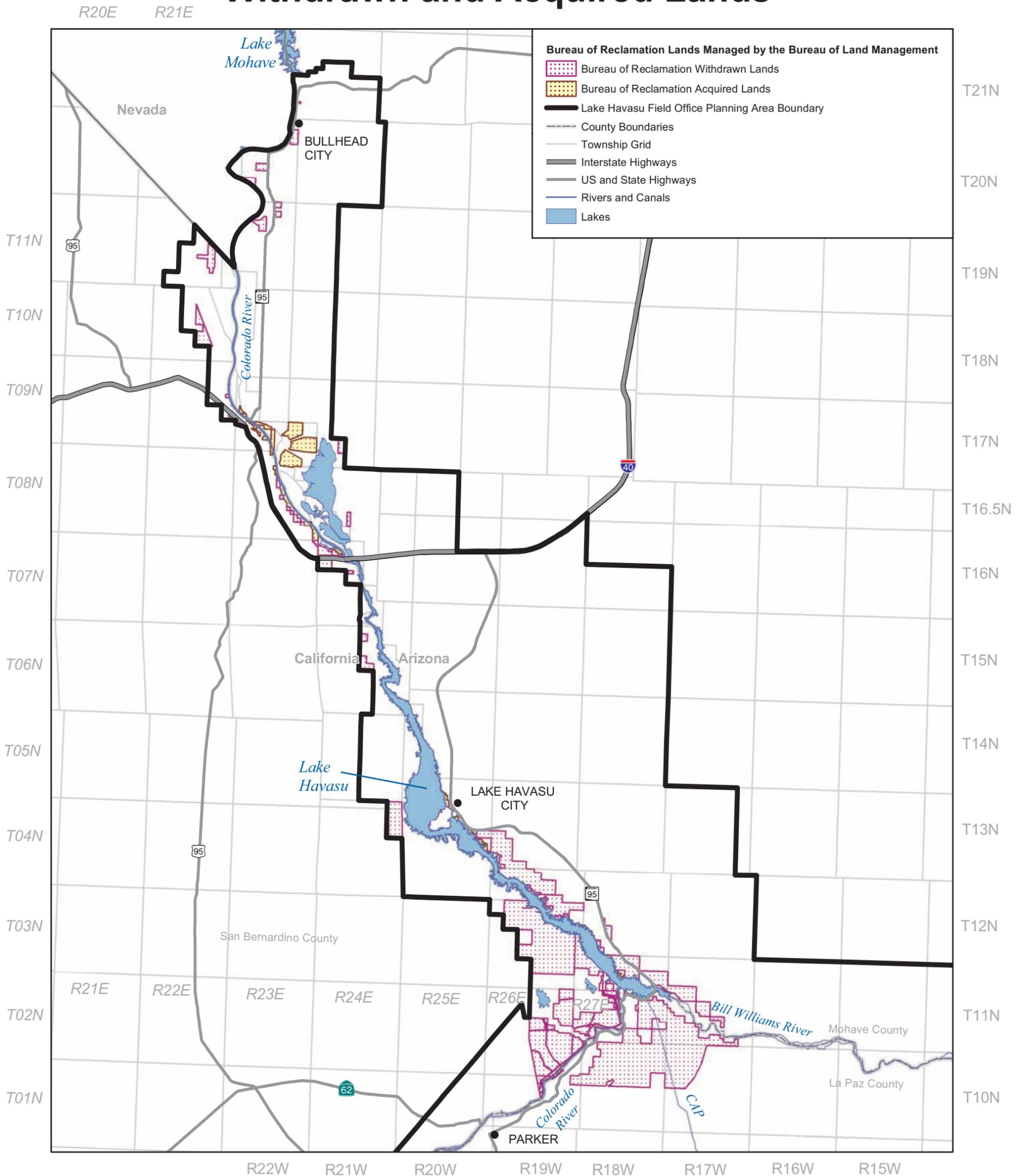
These lands constitute a corridor along the Lower Colorado River in Arizona and California, and are managed by the BLM for multiple uses. However, they remain Reclamation lands, and their use is dedicated primarily to support various Reclamation projects. 613 DM 1.1 was added in 1972, following completion of the *Lower Colorado River Land Use Plan* in 1964 by the Office of the Secretary of Interior.

The BLM and Reclamation work and coordinate closely on the management of these lands. The BLM exercises primary day-to-day management for non-Reclamation project uses. However, Reclamation retains certain management responsibilities to maintain the projects.

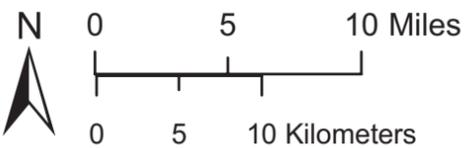
Management of Bureau of Reclamation Project Lands

The BLM has a unique responsibility for management of Reclamation project lands pursuant to the Departmental Manual at 613 DM 1. About 71,000 acres of land within the planning area are Reclamation lands that have been withdrawn from the public lands or acquired from non-federal owners to accommodate Reclamation projects along the Lower Colorado River. The Secretary of the Interior, acting through Reclamation, retains the role of Watermaster for the Lower Colorado River, and for operation of the various dams, river works, and irrigation project facilities authorized by Congress.

Map 3 Bureau of Reclamation Withdrawn and Acquired Lands



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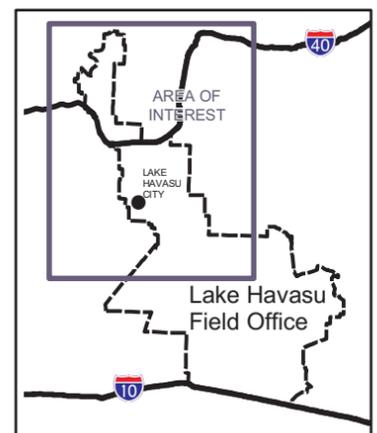


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To maximize opportunities for multiple-use management, the BLM has the responsibility of managing these lands, in coordination with Reclamation. Reclamation relies on the BLM to take the lead role in non-Reclamation project management of the Reclamation lands along the Lower Colorado River. The BLM may not dispose of any of these lands without written approval of Reclamation.

It is important for the reader to understand that on these lands, Reclamation retains the responsibility for Reclamation project operation and maintenance, and certain environmental mitigation and enhancement activities associated with its mission. Every effort has been made by the BLM and Reclamation to ensure that this plan does not conflict with existing and planned Reclamation project activities. In addition, Reclamation will make every effort to assist the BLM in implementation of this plan. However, on Reclamation lands included in this plan, project operational situations may arise that would preclude full implementation of certain prescriptions, or may cause curtailment, modification, or delay of portions of certain decisions affecting Reclamation lands. DM 613 and the above mentioned MOU provides guidance to cover this issue. Reclamation has the final authority over DM 613 lands.

Bureau of Reclamation Non-Project Lands

Reclamation also has a right-of-way (ROW) for the Central Arizona Project (CAP), which delivers Colorado River water to central Arizona. A portion of the ROW occurs within the boundaries of the Lake Havasu Field Office, which coordinates with Reclamation to ensure that other projects adjacent to their ROW do not adversely affect the CAP. Reclamation has established a national CAP recreation trail in other areas outside of the Lake Havasu Field Office. However, Reclamation has not proposed any recreation routes with the field office boundaries.

The BLM and Reclamation work and coordinate closely on the management of these lands. While the BLM exercises primary day-to-day management for non- Reclamation project uses, Reclamation retains certain management responsibilities to maintain the projects.

Lower Colorado River Multiple-Species Conservation Plan

Reclamation and other cooperators completed the *Lower Colorado River Multiple Species Conservation Program* (LCRMSCP) that was signed by the Secretary of Interior in 2005. This program represents a 50-year-long comprehensive native species conservation approach to both federal actions and nonfederal activities on the Lower Colorado River management. All participating Department of Interior officials are directed to cooperate and implement such agreements to achieve the important species conservation actions identified within the plan.

As a partner to the LCRMSCP, the BLM coordinates with Reclamation (the implementing agency) to achieve LCRMSCP goals and objectives. In the LCRMSCP ROD published in April 2005, the Secretary of the Interior directed that “all participating agencies within the Department of the Interior [will] utilize their authorities in furtherance of this conservation program to the fullest extent allowed by law.”

Compliance

Consultation with the Arizona and California SHPOs and all potentially affected Tribes is also conducted, in compliance with Section 106 of the National Historic Preservation Act (NHPA). BLM actions will also comply with existing programmatic environmental analyses, land use plans, and other federal environmental legislation, such as the Clean Air Act, the Clean Water Act, and the Safe Drinking Water Act, and with state and local government regulations (applicable laws, regulations, policies, and planning can be seen in Appendix A).

U.S. Fish and Wildlife Service

As a part of this planning effort and in implementing on-the-ground activities, the BLM executed Endangered Species Act (ESA), Section 7 consultation with the USFWS. In 2001, the BLM and USFWS finalized a consultation agreement to establish an effective and cooperative ESA, Section 7 consultation process. A biological assessment (BA) was prepared and submitted to determine the effect of the Proposed Plan on all relevant listed, proposed, and candidate species, and associated critical habitat. All anticipated environmental effects, conservation actions, mitigation, and monitoring were disclosed in the BA, including analysis of all direct, indirect, and cumulative effects of the Proposed Plan/FEIS. The USFWS provided the BLM with a Biological Opinion of proposed actions on June 15, 2006 (USFWS 2006). As this plan's decisions are implemented, actions determined through environmental analysis to potentially affect species listed or candidate species for listing under ESA would trigger additional site-specific consultation on those actions.

Sikes Act

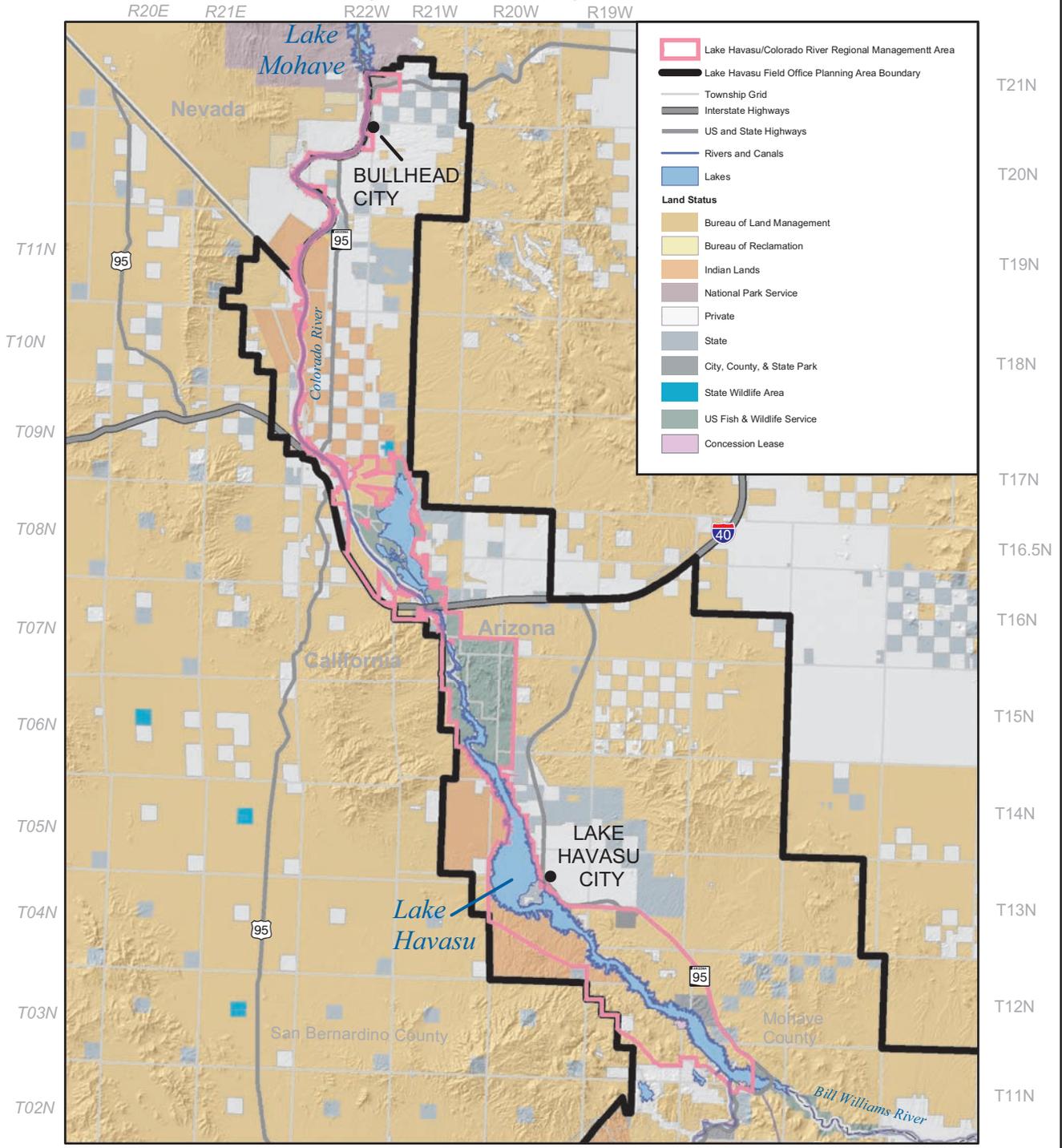
The Sikes Act (16 U.S.C. 670 et seq.) authorizes the Department of the Interior, in cooperation with state agencies responsible for administering fish and game laws, to plan, develop, maintain, and coordinate programs for conserving and rehabilitating wildlife, fish, and game on public lands within its jurisdiction. The plans must conform to overall land use and management plans for the lands 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.

Other Stakeholder Relationships

Lake Havasu/Colorado River Regional Management Area

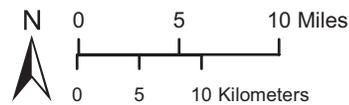
Because of the multi-jurisdictional nature of the issues and the complexity of management on Lake Havasu, the BLM recognized the need for collaboration. However, many issues are beyond the scope of this plan. To facilitate regional collaboration, BLM identified the Lake Havasu/Colorado River Regional Management Area (see Map 4). Identification could give rise to efforts focused on such over-arching issues as public safety, recreation opportunities, conservation of natural resources, and regional economic development.

Map 4 Lake Havasu/Colorado River Regional Management Area



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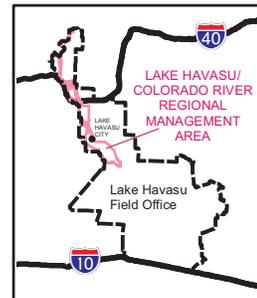
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A coordinated Lake Management Plan should be completed for the Lake Havasu/Colorado River Regional Management Area that would engage all of the involved jurisdictions and stakeholders on a voluntary basis. This plan would be a multi-year, multi-agency coordinated effort with the mission of defining the issues, responsibilities, and action items required to maintain a quality lake recreation experience, properly functioning habitat (both terrestrial and aquatic), and common management relationships and goals among the jurisdictions.

While BLM has limited authority on the lake surface, BLM could participate as a cooperating agency and provide data and information. A steering committee for the Lake Havasu/Colorado River Regional Management Area is warranted to better focus all of the involved jurisdictions on common issues and opportunities that assure multiple uses and sustained yields for future generations. Because identification is not a land use plan decision, the management area is described in Appendix B.

Lake Havasu Fisheries Improvement Partnership

The Lake Havasu Fisheries Partnership has been a successful and accomplished BLM-led cooperative since 1992. Official partners include AGFD, CFGD, Reclamation, USFWS, the U.S. Geological Survey (USGS), and Anglers United, but many others have helped, from local governments and the military, to private parties and business interests. To date accomplishments include:

- Building and installation of 875 acres of fish habitat improvements in 42 coves.
- Rearing and release of two endangered fish species totaling over 30,000 individuals of each species.
- Construction of five independent, barrier-free, public shoreline fishing facilities.

Results of this achievement have rippled through the regional community with multiple economic, social, and environmental benefits too numerous to mention in this text. In 2006, these same partners signed a new MOU charting a future course of action that includes:

- Development of at least one more shoreline fishing facility.
- Coordinated monitoring of endangered fish survival and preferred habitat.
- Long-term fish habitat results in terms of longevity, and fish use.
- Coordinated maintenance of all fish habitat installations and recreational fishing areas.
- Collaboration through leverage of partner authorities to assure the long term health and vitality of the Lake Havasu Fishery renewable resources.

Bill Williams River Corridor Steering Committee

A direct tributary to Lake Havasu is the Bill Williams River that forms at the confluence of the Big Sandy and the Santa Maria Rivers just above Alamo Lake. This remotely rugged desert watershed of 5,000 square miles is home to very few people, several BLM

wilderness areas, and a unique assemblage of natural resource managers known as the Bill Williams River Corridor Steering Committee. This group has been active since the late 1980s and is composed of AGFD, Arizona State Parks Department, the U.S. Army Corps of Engineers (Corps), the Nature Conservancy, USFWS, Reclamation, and the BLM. The committee recently authorized an MOU to cooperate toward the study and management of the watershed. The group's objective is to optimize environmental vitality within this river system. An initial effort toward this objective has been cooperative river flow releases from Alamo Dam. Approximately 21 miles of the 40 river miles between Alamo Dam and Lake Havasu is administered by the BLM.

Water Quality

The BLM works cooperatively through separate MOUs under the Clean Water Act authorities of both Arizona Department of Environmental Quality and the California State Water Resources Control Board to manage public lands in a way that minimizes non-point source pollution.

The objective of this cooperation within this plan is to restore and maintain the chemical, physical, and biological integrity of the Colorado River and tributaries for all users, with emphasis on non-consumptive water uses of productive fish and wildlife habitat, and safe water recreation.

Related Plans

Title II, Section 202 of the FLPMA provides guidance for the land use planning process of the BLM to coordinate planning efforts with Native American Indian tribes, other federal departments, and agencies of state and local governments. To accomplish this directive, the BLM is instructed to keep informed of state, local, and tribal plans; assure that consideration is given to such plans; and to assist in resolving inconsistencies between such plans and federal planning. The section goes on to state in Subsection (c)(9) that "Land use plans of the Secretary [of the Interior] under this section shall be consistent with state and local plans to the maximum extent he finds consistent with Federal law and the purposes of this Act." The provisions of this section of the FLPMA are echoed in Section 1610.3 of BLM Resource Management Planning regulations.

In keeping with the provision of this section, state, local, and tribal officials were made aware of the planning process through the previously described mailings and meetings. The following is a list of plans reviewed during the Lake Havasu Field Office Approved RMP planning effort:

- *Mohave County General Plan* (1995)
- *La Paz County Comprehensive Plan* (March 2005 Revised Draft)
- *San Bernardino County Plan* (2001)
- *Lake Havasu City General Plan* (2001)
- *Bullhead City General Plan* (2002)
- *Town of Parker General Plan* (June 1996)
- *Lower Colorado River Multiple Species Conservation Program* (April 2005)

- *Lake Havasu Coordinated Fisheries Management Plan (January 2005)*
- *California Desert Conservation Area Plan of 1980, as amended*

Policy

This plan is consistent with and incorporates requirements identified in various laws, regulation and policy. These include Executive Orders, legislative designations, and court settlements/rulings. The policies and decisions that existed prior to this plan being written are outside the scope of the plan but have influenced the decisions, constrained the alternatives, and are needed to understand management of the area.

Refer to Appendix A for a summary of laws, regulations, policy, and planning criteria.

Vision

The BLM's mission is to sustain the health, diversity, and productivity of the public lands for the use and enjoyment of present and future generations. In keeping with its mandate for developing multiple-use plans, the BLM developed a vision to provide overall direction for the public lands administered by the BLM's Lake Havasu Field Office to support a rich variety of public experiences while simultaneously providing for long-term protection of the area's natural resources. The vision states:

Within the capability of the resources:

- *Provide opportunities for environmentally responsible recreation and commercial activities and address community expansion needs along the Colorado River.*
- *Manage resources wisely, while promoting citizen-based partnerships through public awareness and education.*

Management Decisions

This section of the Approved RMP presents the Desired Future Conditions, Land Use Allocations, and Management Actions established for public lands managed by the BLM's Lake Havasu Field Office. Most of the Desired Future Conditions are long-range in nature and will not be achieved immediately, but rather are assumed to require a period of time to achieve. These management decisions are presented by program area. Not all types of decisions were identified for each program.

Implementation or activity level decisions are decisions that take action to implement land use plan decisions. These types of decisions require appropriate site-specific planning and NEPA analysis. Implementation decisions generally constitute BLM's final approval allowing on-the-ground actions to proceed and are generally appealable to the Interior Board of Land Appeals (IBLA) under 43 CFR 4.410. This Approved RMP does not identify Implementation Decisions. However, some decisions listed within this section (e.g., WF-12 and TE-23) will be incorporated into future implementation (activity- or project-level) plans. These implementation plans will provide the required additional site-specific planning and NEPA analysis. At that time, the decisions will

become appealable. The appeal process will be listed in the future individual implementation (activity- or project-level) plans.

A monitoring section is also included for each program to describe how the program decisions will be tracked to ensure implementation. Through Adaptive Management, a monitoring plan ensures that Land Use Allocations and Management Actions achieve Desired Future Conditions. The content of the decisions remains as contained in the Proposed RMP, except as described in the Modifications and Clarifications sections of the ROD.

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

Complete consideration of the Approved RMP also includes Administrative Actions and Standard Operating Procedures (which are presented in Appendix B). These actions and procedures outline the objectives, basic management policy, and program direction. Administrative Actions are not land use plan decisions. However, these are day-to-day non-ground-disturbing activities and are an important component when considering program activities.

This section is organized alphabetically by program area. The decisions for each program are coded to reflect the primary resource that is affected. The codes are presented below. Because the discussion for the Lake Havasu/Colorado River Regional Management Area does not contain land use planning decisions, the section was moved to Appendix B.

- Biological Resources Management
 - Riparian (RP)
 - Soil, Water, Air (Watershed) (WS)
 - Special Status Species (TE)
 - Vegetation (VM)
 - Wildlife and Fisheries (WF)
- Cultural Resource Management (CL)
- Fire Management (FM)
- Lands and Realty Program (LR)
- Mineral Resources (MI)
- Paleontological Resource Management (GL)
- Rangeland Management/Grazing (GM)
- Recreation Management (RR)

- Special Designations
 - Area of Critical Environmental Concern (AC)
 - Back County Byway (BB)
 - Wilderness (WM)
 - Wild and Scenic Rivers (WR)
- Travel Management (TM)
- Visual Resource Management (VR)
- Wild Burro Management (HB)
- Wilderness Characteristics (WC)

Biological Resources Management

The areas of consideration are: vegetation and riparian management, fish and wildlife habitat management, special status species management, invasive or noxious species management, and watershed management.

Conservation measures applicable to the Lake Havasu Field Office planning area were derived from all applicable Recovery Plans, Conservation Plans, and Management Plans available for species with in the LHFO planning area.

Vegetation and Riparian Management

Desired Future Conditions

VM-1. Native plant communities (Appendix C, Table C-1) will be maintained appropriate to climate and landform to:

- Provide watershed stability.
- Provide adequate forage for native wildlife species.
- Improve or restore riparian-wetland functions.
- Enhance groundwater recharge.
- Satisfy state water quality standards.

VM-2. Establishment of invasive and noxious species will diminish throughout the planning area and many will begin to decline in aerial extent, density, and cover.

RP-1. Riparian areas will be maintained in sufficient quality and quantity to provide roosting and potential nesting trees and adequate prey base for riparian obligate species such as bald eagle, willow flycatcher, western yellow-billed cuckoo, etc.

Land Use Allocations

For additional Land Use Allocations, refer to the *Mineral Resources* section and to the Land Health Standards in Appendix A.

See the *Special Designations* section for proposed Wild and Scenic Rivers. See the *Lands and Realty Program* section for Management Actions related to utility corridors and telecommunication sites.

RP-2. New facilities and campgrounds will be located away from riparian wetland areas if they are incompatible with achieving or maintaining riparian wetland function.

VM-3. Lake Havasu Field Office will protect all woodlands, including mesquite bosques, by limiting wood collection to authorized users (see Map 5).

Management Actions

The following Management Actions were designed to incorporate the needs expressed by related plans including:

- Migratory Bird Executive Order 13186, Executive Order 12962 of June 7, 1995, *Arizona Partners in Flight Bird Conservation Plan* (Latta, Beardmore, and Corman 1999), *Partners in Flight Desert and Riparian Conservation Plan* (California Partners in Flight 2006), *USFWS North American Waterfowl Management Plan* (USFWS et al. 1998), other bird Conservation Plans (Riparian Habitat Joint Venture 2004) and LCRMSCP (Reclamation, USFWS, and MWD 2004).

- Conservation measures found in the *Sonoran Desert Tortoise Habitat Management on the Public Lands: A Rangeland Plan* (November 1988) and subsequent plans.

- Conservation tasks for the Western yellow-billed cuckoo.

- Recovery tasks found in the Recovery Plans and subsequent plans for: Mojave Desert Tortoise, Bonytail Chub, Razorback Sucker, Yuma Clapper Rail (YCR), Southwestern Willow Flycatcher, and Southwestern Bald Eagle. When recovery plans are revised and updated, new conservation measures applicable to the Lake Havasu Field Office will be incorporated into the Lake Havasu Field Office Approved RMP.

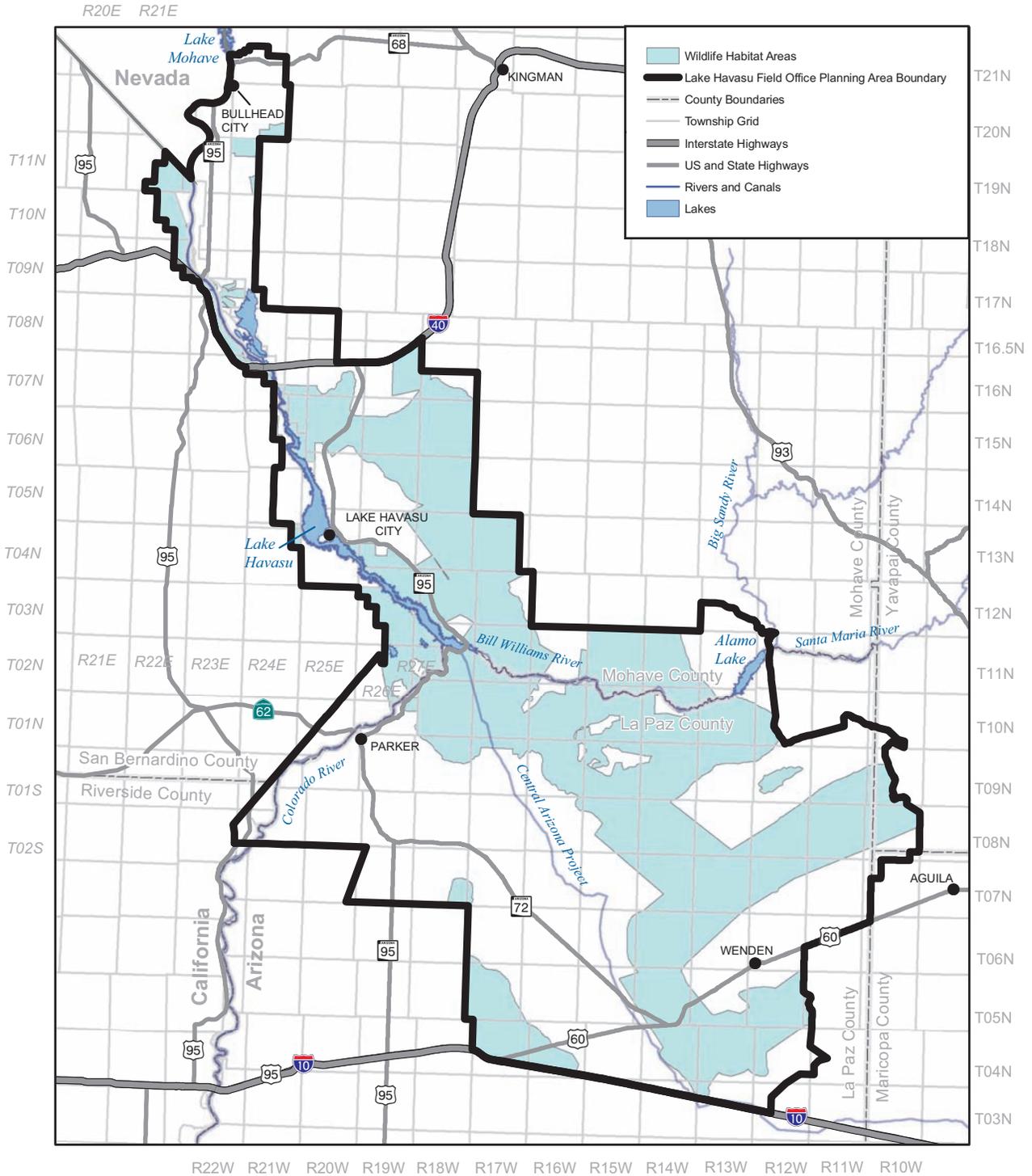
RP-3. The BLM will manage for proper functioning condition within riparian areas and springs, but where hydrological modifications and soil conditions prohibit proper functioning condition, a desired plant community will be defined and managed appropriately (see Maps 6, 7, and 8).

RP-4. No-wake zones will be recommended as needed, to protect the shore from erosion, prevent damage to riparian growth, and reduce noise to nesting wildlife and fish habitat.

RP-5. Monkey Head, the Needles Revegetation Site, Beale Slough, Standard Wash, and the Colorado River Nature Center Riparian Areas will continue to be restored to proper functioning condition (see Map 7).

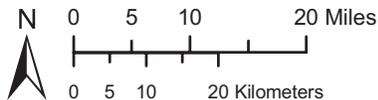
VM-4. The BLM will require the use of certified weed-free forage for all stock in Wilderness Areas (WAs), Wilderness Study Areas (WSAs), lands managed for wilderness characteristics, and WHAs. Domestic-sheep-free forage will be required for any permitted activity within or adjacent to bighorn sheep habitat.

Map 6 Wildlife Habitat Areas



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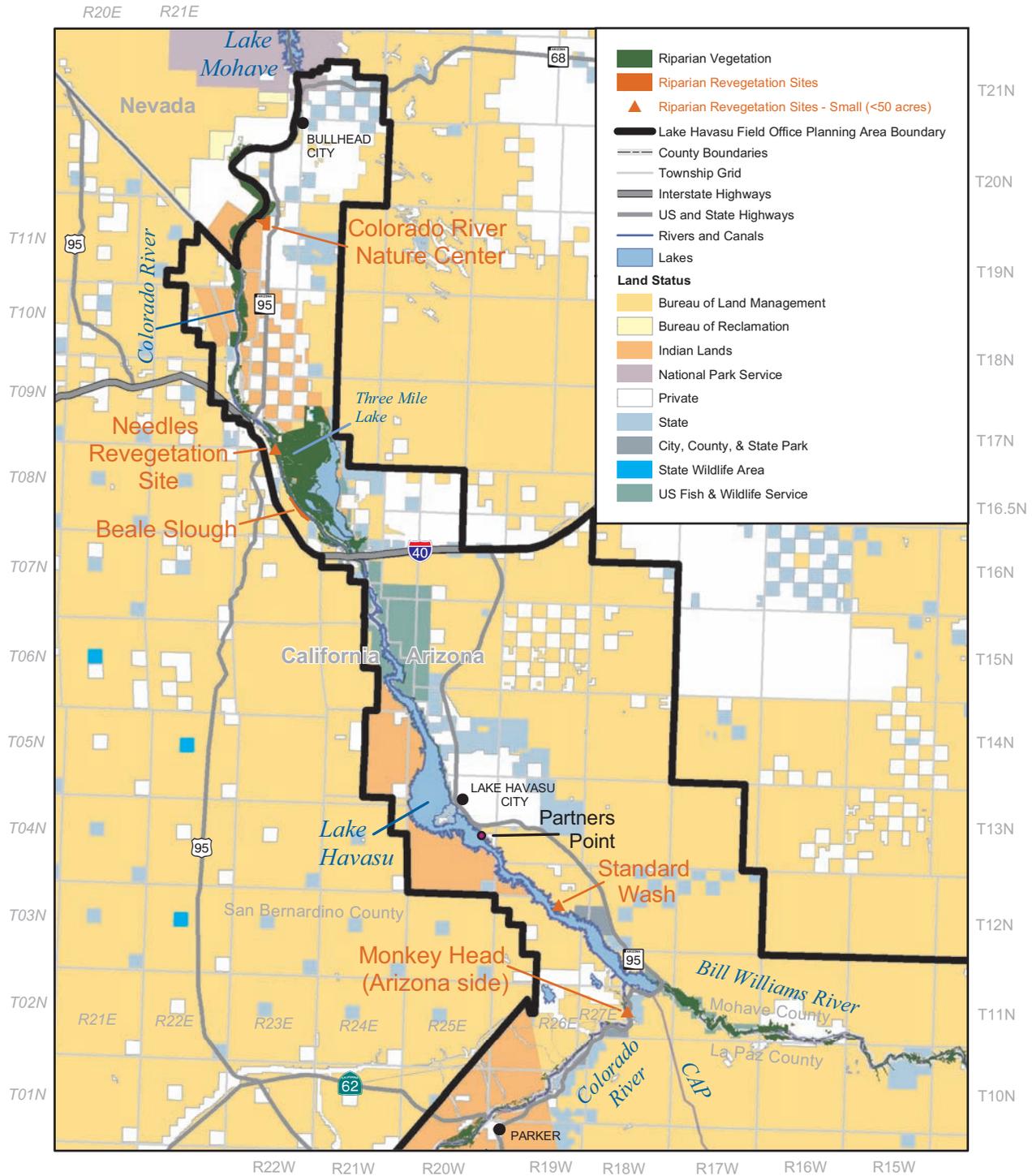


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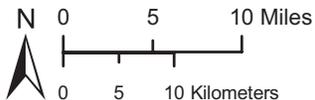


Map 7 Riparian Zones - Colorado River



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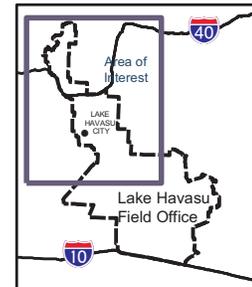


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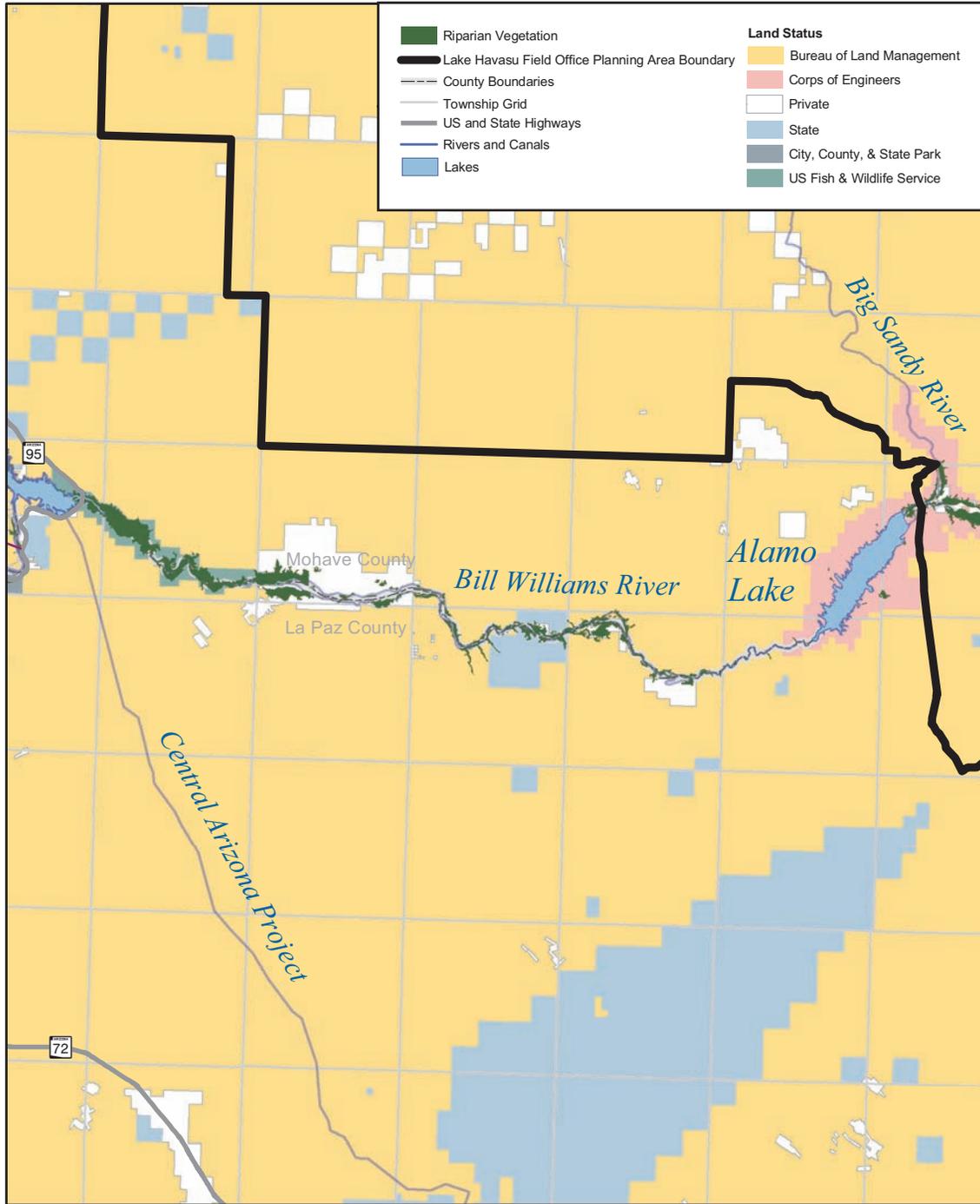


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Map 8 Riparian Zones - Bill Williams River

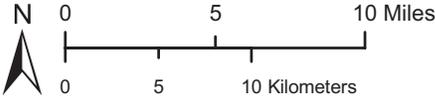
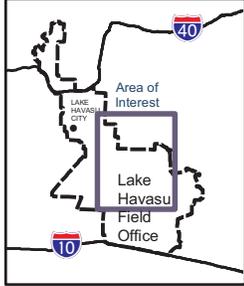


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- VM-5. Only native vegetation will be utilized in all landscaping designs that will incorporate a Desired Plant Community (DPC) concept. Exceptions to this requirement could be made in high-traffic public recreation areas or soil stabilization/reclamation efforts where native species will have a poor likelihood of success due to existing site characteristics. Acceptable non-native plants used for this purpose will consist of genetic variations of natives that will not become invasive and or noxious species (e.g., Chilean mesquite trees).
- VM-6. BLM vegetation/seed collection permits will be required for all collection (except for cultural resources privileges as stipulated in *Cultural Resources*). Areas for collection will be identified on each individual permit.
- VM-7. Protection will be provided for the scaly sandplant (*Pholisma arenarium*) and fringe-toed lizard (*Uma scoparia*), which exists on sandy soil and edges of washes within the low dunes (325 to 820 feet) southeast of Parker, Arizona, by requiring all vehicles to remain on existing roads and trails within the range of this rare plant.

Monitoring

Upland

Land Health Assessments will determine upland conditions and trend as a part of all grazing allotment assessments and Travel Management Plans (TMPs). These will serve as a baseline measure for any further monitoring required to measure management success in that area. This will include route restoration efforts to assure achievement of desired plant communities, and revegetation prescriptions associated with utility and transportation corridor work.

Riparian

Proper Functioning Condition Assessments will be performed in combination with plan implementation on at least a 10-year revolving schedule, with all riparian resources receiving an initial assessment by 2012. More detailed measures will occur in cooperation with partners and in association with restoration projects. A desired plant community will be prescribed and monitored for implementation success in all waterside recreation or concession leases with condition reports to the Field Office Manager included with all 5-year implementation plan reports.

Fish and Wildlife Habitat Management

Desired Future Conditions

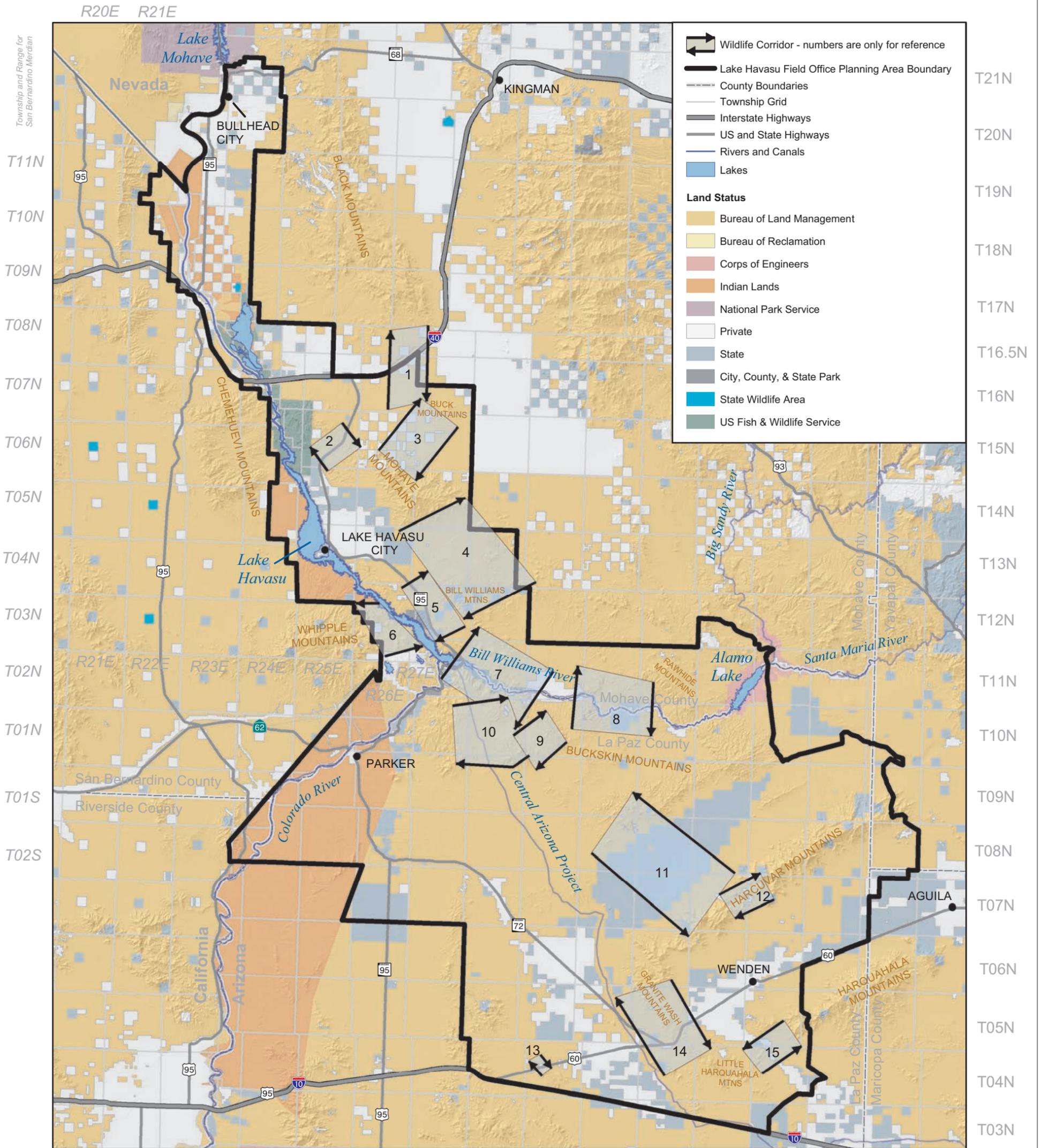
- WF-1. Wildlife movement corridors will be maintained for biotic diversity, to minimize fragmentation of habitat and to minimize barriers to movement.
- WF-2. The BLM will manage all wildlife habitats with the objective to conserve native species for sustainable public benefits.

- WF-3. Integrity of roost sites, lek sites and maternity sites within caves and abandoned mine lands for bat species will be maintained. Food and water sources will be conserved and protected.
- WF-4. Ensure that important habitats for migratory birds are managed, maintained, increased and improved to attain the vegetation structure plant species diversity and density to provide diverse habitat of quality and quantity (see Maps 6, 7, and 8).
- WF-5. Recognize the importance of the tortoise as a keystone species, which via its burrowing systems provides habitats for many other species.

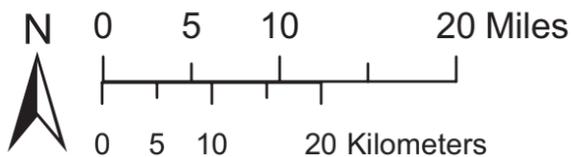
Land Use Allocations

- WF-6. Within WHAs, the route designation process will determine route closures and/or limitation to meet habitat objectives (see *Travel Management*).
- WF-7. A total of 15 wildlife movement corridors will be allocated as identified on Map 9. Corridors overlap the draft Arizona's Wildlife Linkages workgroup map.
- WF-8. Previous lambing grounds are now identified as sensitive sheep habitat (Map 10) and existing seasonal closures (43 CFR 8365.1-6 Part II) will remain for wildlife habitat and scenic values and Recreation Opportunity Spectrum (ROS) recreation settings until evaluation by TMP. The TMP may change this limitation by individual routes; limitation may also change as a result of scientific studies.
- WF-9. Domestic or feral sheep or goats will not be allowed on public lands within 9 miles of desert bighorn habitat.
- WF-10. 791,885 acres in the Lake Havasu Field Office planning area will be cooperatively managed as WHAs with state and federal wildlife agencies. See Map 6. This land is comprised of (some of these areas overlap leading to the smaller total acreage);
- Riparian Habitat, Springs and Seeps (6,126 acres)
 - Bighorn Sheep Habitat (562,022 acres)
 - Mojave and Sonoran Desert Tortoise Habitat (I,II) (440,599 acres)
 - Wildlife Corridors (288,206 acres)
 - Threatened and Endangered (T&E) Species Habitat
- WF-11. New developments on WHAs will be compatible with wildlife habitat to the extent possible to preserve, maintain, and/or enhance plant and wildlife diversity.

Map 9 Wildlife Movement Corridors



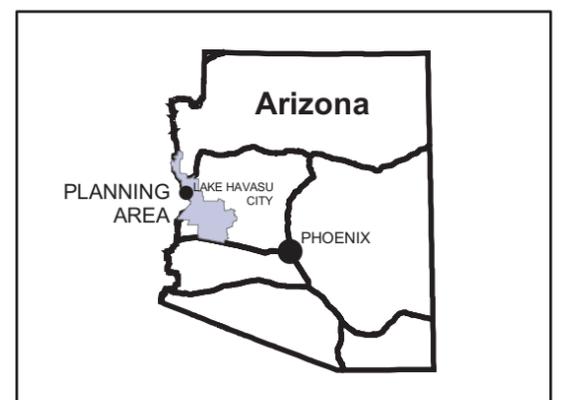
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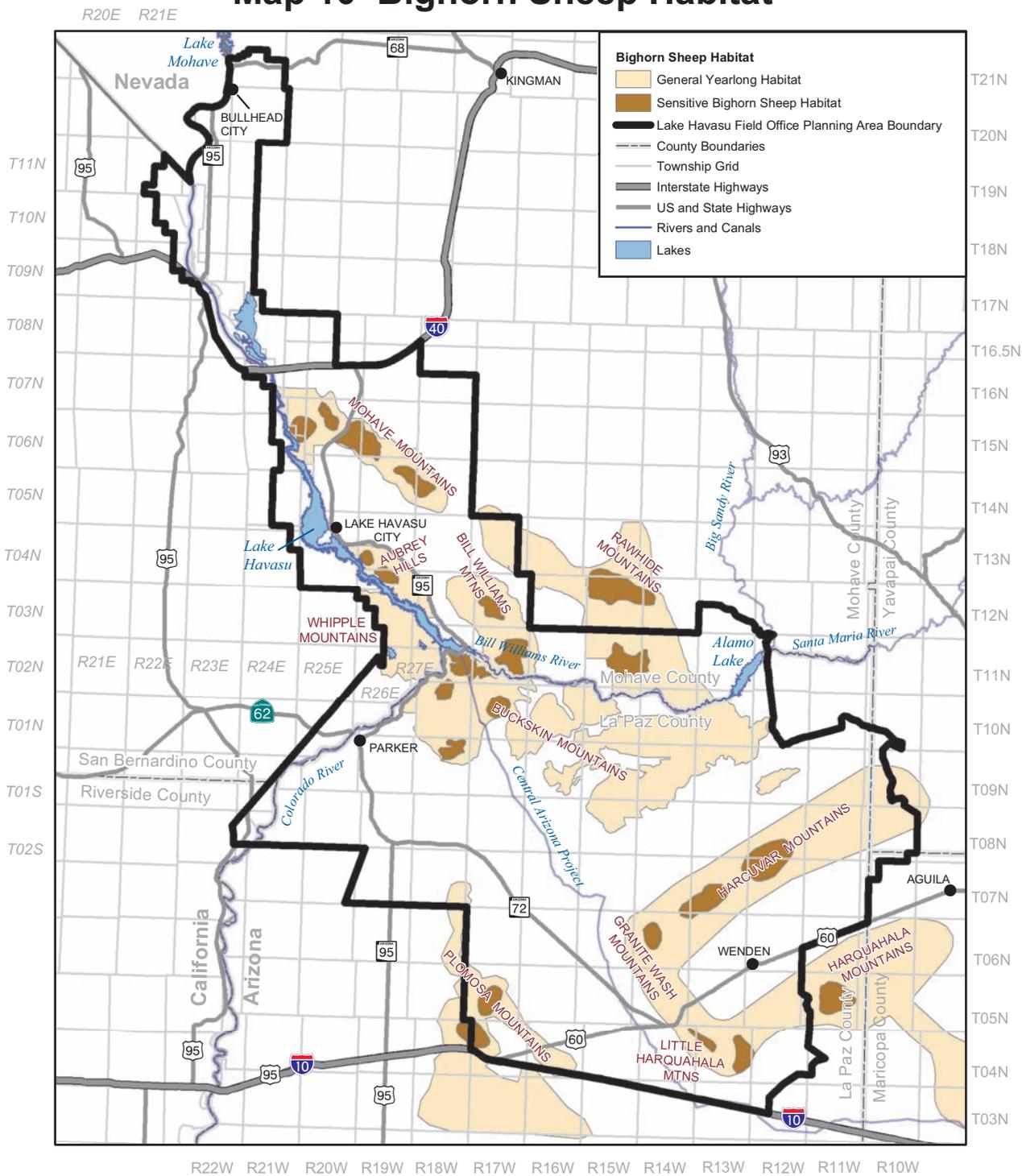
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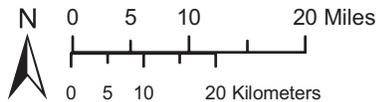


Map 10 Bighorn Sheep Habitat



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- WF-12. An area of 7 acres of Lake Havasu bottom will receive organic brush maintenance each year to replace woody habitat improvements that have decomposed over the previous 10-year period. This process will occur only in areas that already contain fish habitat improvements.

Management Actions

- WF-13. Conduct research to identify important migratory bird habitat and restore/enhance that identified habitat.
- WF-14. To the extent practicable, avoid, minimize impacts and/or take of migratory birds and their habitat.
- WF-15. During construction and tree pruning associated with plan implementation, identify and avoid all migratory bird nests.
- WF-16. Recognize that Category III habitats may serve as important buffer and dispersal zones and provide genetic linkage to core population areas. Incorporate these areas into long-term and ecosystem management and planning.
- WF-17. Wildlife habitat improvement projects will be implemented where necessary to stabilize or improve degraded or declining wildlife habitat conditions.
- WF-18. Reintroductions, transplants, release of rehabilitated native species, and supplemental stockings of wildlife populations will be carried out in collaboration with federal and state wildlife agencies within suitable habitat to: 1) restore, enhance, maintain current populations, distributions, and/or genetic diversity; 2) conserve or recover species that are in danger of becoming listed; and/or 3) restore or enhance native wildlife diversity and distribution and 4) release rehabilitated wildlife. Species that could be reintroduced, transplanted, or augmented include, but are not limited to rehabilitated wildlife, threatened and endangered species (see Table 3-3 in the PRMP/FEIS), special status species (see Table 3-4 in the PRMP/FEIS) pronghorn, desert bighorn sheep, mountain lions, burrowing owls, other raptors, reptiles, mule deer, other game species, fish, and frogs.
- WF-19. All new and existing range improvements on public lands will allow for wildlife passage or escape, in compliance with the BLM standards. Wildlife escape devices will be installed on all new and existing water tanks and/or troughs.
- WF-20. Construction sites for wind turbines, power lines, telecommunication, towers, solar power sites, and any other new technology, etc., will conform with guidelines developed by USFWS to minimize impacts to wildlife species, particularly migratory birds and bats.

- WF-21. Abandoned mines will be examined to determine species utilization prior to deciding on the method of mine closure. Bat-friendly mine closures will be an intermediate measure for protecting bat maternity roosts, lek sites, and year-round use by bat colonies. Management and protection of the quantity and quality of foraging habitat surrounding important bat colonies will be achieved to the fullest extent possible.
- WF-22. The natural existing quality and quantity of vegetation will be maintained within a wash to the extent possible where there is an established bat species colony.
- The Bat Cave north of Lake Havasu City will be protected and managed to minimize disturbance within the cave to the extent possible.
- WF-23. Distribution/density of wildlife waters throughout the planning area will be maintained, improved, and/or increased to sustain and enhance wildlife populations across their range. All existing wildlife waters will be maintained or improved as necessary to maintain the presence of perennial water for wildlife. New wildlife waters, including in new locations, may be constructed if necessary to replace old wildlife waters, restore, or enhance native wildlife populations and for improving wildlife distributions. All wildlife water projects will be evaluated through the NEPA analysis to determine necessity and effects.
- WF-24. Water developments for purposes other than wildlife will include design features that ensure safe and continued access to water by wildlife on year-round basis. If it is not feasible to provide water on a year-round basis, a determination will be made whether to design the feature for wildlife access.
- WF-25. Within wildlife corridors construction of overpasses, underpasses, culverts, and all fences on public lands will be built to allow for wildlife passage, unless the fence is specifically constructed for directing or excluding wildlife from locations for the protection of the wildlife (e.g., desert tortoise fence along a highway, directing wildlife to a corridor for safe highway crossing, etc.). Any existing fences not specifically constructed for directing wildlife that obstructs wildlife movements should be brought into compliance with the BLM fence standards.
- WF-26. Identified wildlife corridors will be used to help the BLM make decisions on land tenure (retention, acquisition, disposal), land use authorizations, or permits to address and avoid habitat fragmentation.
- WF-27. Fish habitat improvements in Lake Havasu will be maintained to sustain fish productivity by providing permanent escape cover and rearing habitat for young. Damaged artificial reef structures will be repaired if needed and replaced in the original location. This work will be accomplished cooperatively by the Lake Havasu Fisheries Partnership program.
- WF-28. Approximately 875 acres in 42 separate locations in Lake Havasu will be designated as Fish Habitat Areas (FHAs).

- WF-29. Vehicular access within the Lake Havasu Aubrey Hills to retrieve game will not be allowed.
- WF-30. The BLM will coordinate with appropriate interests, the Multi-Species Conservation Program (MSCP), and jurisdictions to create backwaters along the Colorado River and tributaries to increase native aquatic species habitat availability and diversity.
- The BLM will coordinate with Parker Strip interests and other agencies to enhance the sport fishery below Parker Dam through the development of both aquatic and bank habitat improvements.

Monitoring

Fish Habitat

Artificial reef installations in Lake Havasu will be monitored for longevity and performance in cooperation with program partners according to procedures established by the partnership. AGFD protocols will be used when appropriate. Results and trends will be reported to partner organization executives on an annual basis.

Wildlife Management

Lake Havasu Field Office will support and assist AGFD and CDFG in monitoring wildlife habitat and population goals through Arizona's Comprehensive Wildlife Conservation Strategy and the California Fish and Game Code. Changes in habitat distribution, canopy, composition, and condition will be assessed on a landscape and watershed basis during the development of the TMP.

Lake Havasu Field Office will also participate in Sonoran Joint Venture and Arizona Bird Conservation Initiative and will continue to support and participate in achieving the conservation goals identified within the MSCP, the Comprehensive Conservation Plans of National Wildlife Refuges, Conservation Goals and Objectives for the Lower Colorado River Watershed, and ecoregional plans of the Nature Conservancy.

A long-term monitoring program appropriate for the habitat and species identified within each activity level plan (ACECs, Special Recreation Management Areas [SRMAs]) will be developed.

This information will be included in the annual planning update, along with a summary of areas monitored for changes in species composition and structure, and the number/type of baseline inventories completed.

Special Status Species Management

Desired Future Conditions

- TE-1. Conserve and protect Migratory Bird species (see Appendix C Table C-7) and their habitats, Lake Havasu Field Office will follow the guidance provided within the Migratory Bird Executive Order 13186, *Arizona Partners in Flight Bird Conservation Plan* (Latta, Beardmore, and Corman 1999), *Partners in*

Flight Desert and Riparian Bird Conservation Plan (California Partners in Flight 2006), *USFWS North American Waterfowl Management Plan* (USFWS et al. 1998), and LCRMSCP (Reclamation, USFWS, and MWD 2004).

- TE-2. No net loss of quantity or quality of priority species and/or priority habitats will occur on the Lake Havasu Field Office. (See Table 3-4 in the PRMP/FEIS.)
- TE-3. Conserve habitat and work toward the recovery of T&E species, as well as reduce the likelihood of additional species listings under the ESA and California ESA.
- TE-4. Sustainable populations of native species currently absent from the area, and those species whose genetic pools require augmentation, will be achieved.
- TE-5. Wildlife habitat projects will be designed to maintain, restore, and improve species biodiversity.
- TE-6. Ecosystems will be restored and supported in conjunction with vegetation, aquatic, and terrestrial wildlife habitat requirements.
- TE-7. Management will seek instream flows suitable to sustain aquatic and terrestrial T&E species habitat on public lands in the Bill Williams River.

Land Use Allocations

- TE-8. Approximately 1,017,759 acres of public lands will be allocated for management as Category I, II, or III Sonoran Desert tortoise and Mojave Desert tortoise habitat. See Map 11.
 - ❑ Category I - 108,499 acres
 - ❑ Category II - 286,388 acres
 - ❑ Category III - 573,767 acres
 - ❑ Mojave - 49,105 acres
- TE-9. In Category I and II Sonoran Desert tortoise habitat, only range improvements that will not conflict with tortoise populations will be allowed.
- TE-10. Within Wildlife Habitat Areas (WHAs), uses that are in conflict with restoration and/or maintenance of T&E habitats will be restricted as determined by NEPA process (see Map 6).
- TE-11. The BLM, in cooperation with other authorities, will allocate 75 acres at the Colorado River Nature Center, Three Mile Lake, and Beale Slough to be used for spawning and rearing habitat for special status fish species (see Map 7).
- TE-12. Spawning, nesting, brood rearing, or larval fish rearing habitat used by special status species will be identified as FHAs. Incompatible uses or development, modification, and/or negative impacts where practicable will not be allowed.

Management Actions

- TE-13. Complete and maintain a continuing inventory and monitoring program for tortoise populations and habitats to assist in making management decisions, including habitat categorization.
- TE-14. Include monitoring provisions specific to decisions affecting the desert tortoise. Maintain a log of Environmental Assessments containing stipulations pertaining to the desert tortoise, for express purpose of tracking compliance and effectiveness of the stipulations. The monitoring of these stipulations and recommendations for improvement will be documented in the log.
- TE-15. 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.
- TE-16. Quantify suitable habitat on BLM lands within Lake Havasu Field Office planning area for all T&E species.
- TE-17. Carry out a program of public conservation, education, and planning directed towards preservation of Southwestern willow flycatcher habitat.
- TE-18. Riparian areas that could physically support Southwestern willow flycatcher habitats will be managed, maintained, increased, and improved to attain the vegetation structure plant species diversity, density, and canopy cover to constitute suitable habitat (see Maps 7 and 8 in the Approved RMP for habitat).
- TE-19. Increase enforcement of access into restricted areas occupied by T&E species.
- TE-20. Establish areas near existing occupied Western yellow-billed cuckoo habitat for restoration, before focusing on areas further away.
- TE-21. The BLM will participate in a coordinated effort to develop a scientific based inventory and evaluation process to periodically identify species density and to possibly reevaluate desert tortoise categories following the criteria as set forth in Management Plan for the Sonoran Desert Population of the Desert Tortoise in Arizona 1996 or future updates.
- TE-22. Areas classified as Category I, II, or III tortoise habitat will be reevaluated periodically by extensive scientific survey and the category could be updated by RMP amendment based on changes in species density.
- TE-23. Develop roosting habitat (artificial structures) in managed backwaters to facilitate foraging habitat for wintering bald eagle along the Lower Colorado River.
- TE-24. At a minimum, the BLM will follow the management guidelines in the Bald Eagle Conservation Assessment Strategy.

The following restriction in three buffer zones around all known nests will protect breeding attempts from adverse impacts:

Buffer Zone 1: 500 foot radius around the nest.

During breeding season – December 1 to June 30: No activity occurs around all known nests.

During non-breeding season – July 1 to November 30: No activity will be permitted that will permanently change the landscape.

Buffer Zone 2: 500- to 1,000 foot radius around the nest.

During breeding season – December 1 to June 30: Limited human activity.

During non-breeding season – July 1 to November 30: No activity should permanently change the landscape.

Buffer Zone 3: 1,000- to 2,500 foot radius around the nest.

During breeding season – December 1 to June 30: No activity should permanently change the landscape.

During non-breeding season – July 1 to November 30: Maintenance activities such as upkeep of existing buildings and roads can occur, but no activity should permanently change the landscape.

TE-25. Collection of federally listed T&E species will not be authorized.

Monitoring

TE-26. Participate with other agencies in the recovery, conservation, research, management, and monitoring activities for bonytail chub and razorback suckers.

TE-27. Sample every 5 years all known regions where YCR populations are found using standardized techniques and develop and implement a plan of local population surveys every year.

TE-28. Continue to survey, monitor, and conduct research to improve the recovery of the Southwestern willow flycatcher.

Fish

The BLM will coordinate the Lake Havasu Fisheries Partnership and cooperate with MSCP authorities to monitor critical habitat for, and survival of, two endangered fish in the Colorado River. Monitoring Standards and protocol will be consistent with state requirements and maintain BLM compliance with terms of the Biological Opinion for this Approved RMP that calls for monitoring all T&E fish habitat. Information gathered will support future BLM river decisions and aid completion of Section 7 Consultation on any future BLM projects or actions involving the Colorado River. The BLM will support interagency monitoring efforts on Lake Havasu as a priority, and other river reaches and tributaries as resources permit. Reports and recommendations will be submitted annually

to the seven-member Lake Havasu Fisheries Executive Committee as well as MSCP officials.

Wildlife

The BLM will continue to monitor known populations of special status species in conjunction with federal, state, and private agencies or organizations (Southwestern willow flycatcher, desert tortoise, marsh birds and bald eagle). Monitoring may use intensive research projects or periodic population/habitat inventories to determine habitat extent or population status. This monitoring may be accomplished through contracts and/or with the aid of partnership funding sources in support of individual species conservation strategies.

Watershed Management

Desired Future Conditions

- WS-1. Management objectives will seek to meet land health standards for soil resources on all BLM lands.
- WS-2. Water resources and natural communities associated with springs, wetlands, seeps, and streams will be conserved, enhanced, and restored, with water supplies protected by state law (see Appendix D).

Land Use Allocations

- WS-3. Domestic and commercial collection or sales of fuel wood for home heating purposes will not be authorized.
- WS-4. For the protection of habitat and other natural values, no motorized vehicles will be allowed within the Lake Havasu Aubrey Hills Area. This restriction does not include authorized vehicles for administrative purposes, authorized ROWs, lands under Recreation and Public Purposes Act (R&PP) lease/patent, and ownership access to private land.

Invasive or Noxious Species Management

Monitoring

Monitoring of noxious weeds and invasive species will focus on two tasks: prevention and control. Identifying and protecting land that is not presently infested is the single most important management goal. Examples of monitoring for prevention include compliance monitoring to insure that weeds, forages, and bilge contents are not being introduced on to public lands and waters.

When a noxious weed or invasive species is detected in association with public lands, the BLM will coordinate stakeholders to produce an Integrated Pest Management plan incorporating the best-suited mechanical, cultural, biological, and/or chemical strategies presenting the greatest likelihood of environmental success. The acres of public land infestation will be reported in the annual planning update to track plan implementation.

The update will include acreage inventoried, acreage evaluated to determine treatment effectiveness, and acreage treated.

Cultural Resource Management

Cultural resources can be allocated to one or more of the categories listed in Table 2 below.

Table 2. Categories for Cultural Resource Allocation		
Land Use Allocation^a	Desired Future Condition	Management Actions
a. Scientific Use	Preserved until research potential is realized	Permit appropriate research, including data recovery
b. Conservation for Future Use	Preserved until conditions for use are met	Propose protective measures or designations
c. Traditional Use	Long-term preservation	Consult with tribes; determine limitations ^b
d. Public Use	Long-term preservation, on-site interpretation	Determine limitations, permitted uses ²
e. Experimental Use	Protected until used	Determine nature of experiment
f. Discharged from Management	No use after recordation; not preserved	Remove protective measures

Notes:

^a These categories are defined in Appendix E. The majority of the cultural properties in a given geographic area will fall into categories “a” and “f.” The less common properties in categories “b” through “e” are likely to be associated with particular settings that can be delineated geographically in the planning process. Properties in categories “b” through “d” will require the most attention to balance their proactive uses with other land and resource uses.

^b Safeguards against incompatible land and resource uses may be imposed through withdrawals, stipulations on land use authorizations, such as leases, permits, and ROWs, design requirements, and similar measures that are developed and recommended by an appropriately staffed interdisciplinary team.

Desired Future Conditions

- CL-1. Preserve and protect significant cultural resources and ensure that they are available for appropriate uses by present and future generations.
- CL-2. The BLM will identify sacred sites in consultation with Indian tribes, accommodate tribal access to sacred sites, and prevent physical damage or intrusions that might impede their use by religious practitioners. The locations of sacred sites and other places of traditional or religious importance to Indian tribes will be kept confidential to the extent allowed by law.

Land Use Allocations

- CL-3. **Conservation for Future Use**—Some sites currently managed under Conservation for Future Use will be allocated to the Traditional Use category.

Additional sites **may** be shifted to Traditional Use category if Indian tribes identify them in the future.

Traditional Use – Sites allocated to Traditional Use will be limited to those identified by Indian tribes as important for maintaining their cultural identity, heritage, or wellbeing.

Significant sites (or features) will be stabilized, fenced, or otherwise managed to protect the values ascribed to these sites by Indian tribes.

Public Use – Sites allocated to Public Use will be limited to those considered suitable as an interpretive exhibit-in-place, a subject of supervised participation in scientific or historical study, or related educational and recreational uses by members of the general public.

Scientific Use – Sites allocated to Scientific Use are those with the potential to yield important information where current archaeological and historical investigative techniques can adequately extract that information. These sites will be preserved in place until their scientific values are recovered.

Experimental Use – Sites allocated to Experimental Use will generally be drawn from properties that are not eligible for the National Register of Historic Places (NRHP) but may include eligible properties if the experimental uses will not adversely affect the characteristics that make them eligible.

Discharged from Management – Only sites determined ineligible for inclusion on the NRHP will be placed in the Discharged from Management category.

- CL-4. The BLM will allocate 28 sites to Conservation for Future Use, seven sites to Traditional Use, and eight sites to Public Use.
- CL-5. Public Use - Swansea is managed as a Public Use site. A 1995 *Federal Register* Notice, 60 FR 53194-53195, details specific allocations and management prescriptions for Swansea, effectively changing Swansea from Conservation for Future Use to Public Use.
- CL-6. Manage Schwanbeck's Store as a Public Use site and maintain existing interpretive panels.
- CL-7. Allocate the following sites to Conservation for Future Use – Three intaglios/intaglio complexes, 10 petroglyph/pictograph sites, 13 habitation/site complex areas, and two historic mining areas will be allocated to the Conservation for Future Use category and preserved in place. Sites are listed in the cultural resource appendix (Appendix E).
- CL-8. Allocate the following sites to Traditional Use – Five intaglios, one petroglyph site, and one site complex (trail, intaglio and rock art) will be allocated to the Traditional Use category. Sites are listed in the cultural resource appendix (Appendix E).

- CL-9. Allocate the following sites to Public Use – Manage Atlantic & Pacific (A&P) Railroad, Culling’s Well and Hardy Toll Road, McGuffie Cabin, Camp Bouse, Swansea, Schwanbeck’s and Hargus Cabin for public visitation and preserve them for future generations.
- CL-10. Under Special Designations, Crossman Peak will be managed as an ACEC, in part due to associated Native American values.
- CL-11. Allocate the following areas as Special Cultural Resource Management Areas (SCRMAs):
- Bullhead Bajada, 4,387 acres (Conservation for Future Use and Traditional Use); Harcuvar Mountain East, 17,048 acres (Conservation for Future Use); Harcuvar Mountain West, 10,249 acres (Conservation for Future Use and Public Use); Topock-Needles, 1,127 acres (Conservation for Future Use and Traditional Use); Black Peak, 768 acres (Traditional Use); Swansea, 6,839 acres (Conservation for Future Use and Public Use) (see Map 12).

Management Actions

- CL-12. The following apply to sites managed for Conservation for Future Use, Traditional Use, and Public Use:

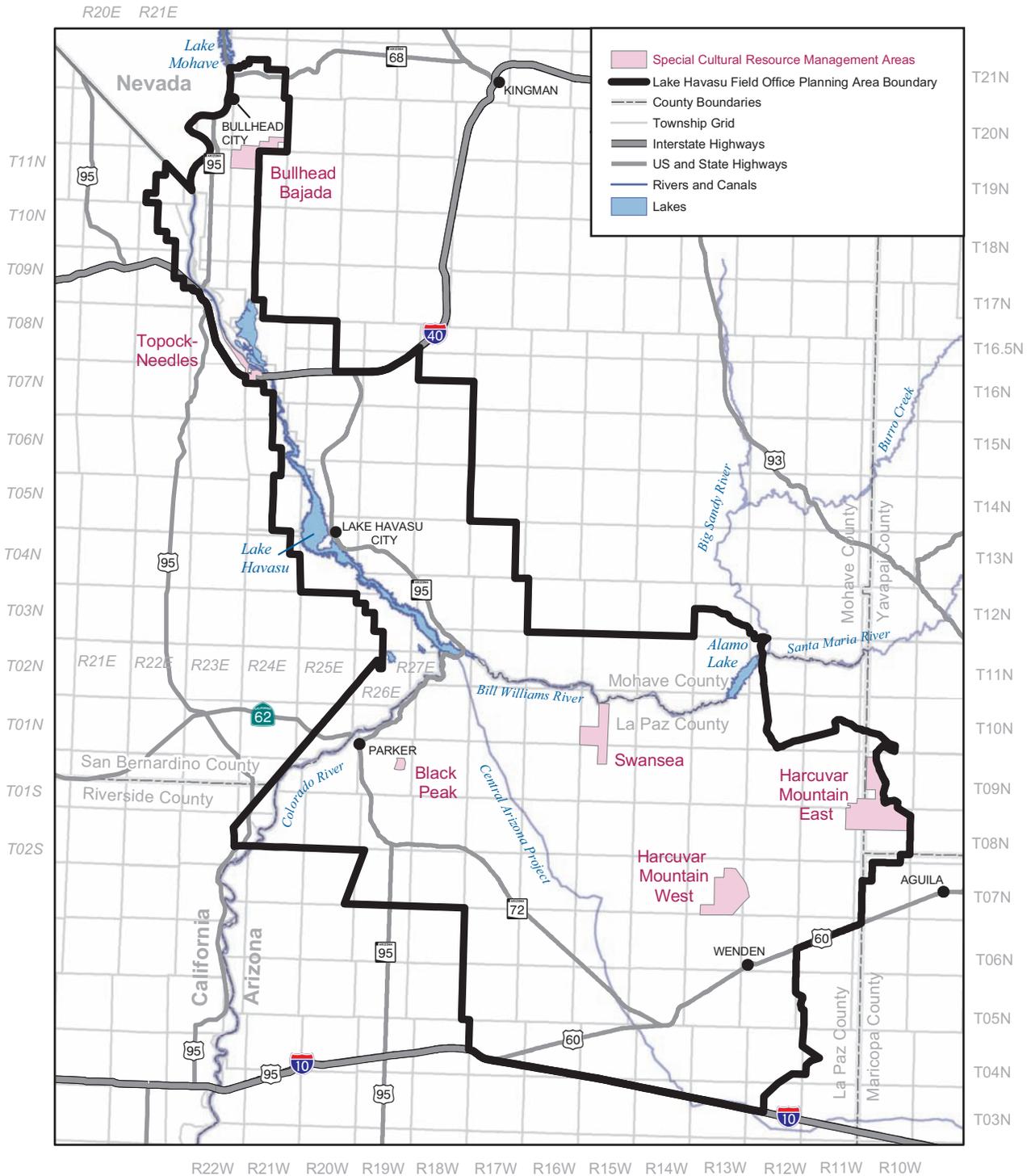
Motorized use on cultural resource sites and site complexes managed for Conservation for Future Use, Traditional Use, and Public Use will be restricted to designated open roads and trails. Prior to completion of the Transportation Management Plan, motorized use will be restricted to existing roads and trails except for the Swansea Townsite and Plomosa Mountains where route designation has already occurred (see TM-20).

Allowable uses on the cultural resource sites and site complexes managed for Conservation for Future Use, Traditional Use, and Public Use include activities that are compatible with the objective of preserving these resources for future use.

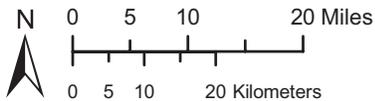
Improvements on cultural resource sites and site complexes managed for Conservation for Future Use, Traditional Use, and Public Use will be restricted to those that are compatible with the cultural resources or those required for mining. Some of the cultural resource sites and areas are under Reclamation withdrawal and are therefore segregated from mineral entry and development. The BLM will pursue a mineral withdrawal for Swansea Townsite, a portion of the Bullhead Bajada Natural and Cultural ACEC, and the Incline Railway. Mining activity on the remaining sites and areas will be managed to avoid disruption or, where avoidance is not possible, to minimize damage to cultural values using regulatory standards contained in 43 CFR 3800.

Surface occupancy for oil and gas leases, mineral material disposals, and ROWs will not be authorized on the cultural resource sites and site complexes managed for Conservation for Future Use, Traditional Use, and Public Use (see MI-2, MI-12, LR-7).

Map 12 Special Cultural Resource Management Areas



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Management for sites allocated to Public Use may include but is not limited to signs, educational displays, picnic tables, ramadas, parking areas, and protective fencing.

- LR-36. All communication facilities on Black Peak will be phased out and relocated at a suitable site through negotiation with the Colorado River Indian Tribes and the site lessees.
- CL-13. Management prescriptions for SCRMA's will reflect and support the primary values for which the areas are allocated. Management prescriptions in SCRMA's allocated primarily to conserve sites for the future will protect selected sites within the SCRMA that are scarce, that are of singular importance, and that should not be subjected to invasive studies or other uses that will threaten their present condition. Management prescriptions for SCRMA's allocated primarily for Traditional Use will seek to accommodate the traditional cultural practices of Indian tribes or other cultural groups that ascribe religious or other heritage values to specific places within the SCRMA. Management prescriptions for SCRMA's allocated primarily for public use will focus on developing and interpreting selected sites for public visitation, including heritage tourism.
- CL-14. Acquire properties from owners who are willing to sell or exchange or donate adjacent to public lands that contain significant cultural resources including, but not limited to, those properties eligible for inclusion on NRHP. Priority acquisitions will be for lands that contain portions of eligible sites also located on public lands.
- CL-15. The BLM will work and coordinate with Native Americans to select harvesting areas and noncommercial (personal or tribal use) collection of medicinal or ceremonial herbs and necessary vegetation with specific annual authorization as appropriate.
- CL-16. The BLM will work and coordinate with Native Americans to select harvesting areas and allow noncommercial (personal use) collection of minerals (e.g., quartz, clay) for traditional or ceremonial use without specific authorization or sale as appropriate.
- TE-25. Collection of federally listed T&E species will not be authorized.
- CL-17. The BLM will review requests for vehicular access to sacred areas not normally open to vehicles and consider authorizing such use on a case-by-case basis if Indian tribes identify such areas.

Monitoring

All previously recorded cultural resource properties that are listed on the NRHP or determined eligible for listing, and allocated to the Conservation for Future Use, Traditional Use, or Public Use categories will be monitored on an annual basis at a minimum. Analysis and documentation of the monitoring will include updating of the site form to current professional standards, if necessary, and assessment of the current condition and trend of significant resource values.

Visitation of the previously recorded cultural properties or designated ACECs will be made by the cultural resource specialist or designated representative. The purpose of the visits will be to monitor the condition of the site(s) and document any disturbance or deterioration.

A long-term monitoring program will be established for the designated ACECs containing cultural resource values. The program will also include the visitation of a representative sample of cultural resource values within each of the designated ACECs to establish baseline information on the current condition of cultural resources values. Once the baseline condition assessment information has been compiled, ACECs will be monitored on an annual basis to identify any potential adverse impacts.

A periodic review of the cultural resource program will be conducted to ensure that the program is meeting established parameters for proactive cultural resources inventory under Section 110 of the NHPA.

The number of acres inventoried by the BLM under Section 110 will be reported annually in the Annual Planning Update Report and Summary to the Field Office Manager.

Fire Management

Lake Havasu Field Office coordinates with other agencies to manage fire in accordance with the nationwide BLM fire policy. In 2003, the BLM Arizona State Office prepared the *Arizona Statewide Land Use Plan Amendment for Fire, Fuels and Air Quality Management* (AZLUP), which incorporates new management direction coming from the National Fire Plan and the 2001 Federal Fire Policy. Fire and fuels management are integrated with other management activities to benefit both natural resources and multiple uses on lands administered by BLM within Arizona and the portion of California that falls within Lake Havasu Field Office and Yuma Field Office boundaries. The Approved RMP carries forward the decisions in the AZLUP.

Desired Future Conditions

- FM-1. Fire is recognized as a natural process in fire-adapted ecosystems and is used to achieve objectives for other resources.
- FM-2. Fuels in Wildland-Urban Interface areas are maintained at non-hazardous levels to provide for public and firefighter safety.
- FM-3. Prescribed fire activities comply with federal and state air quality regulations.
- FM-4. Each vegetation community is maintained within its natural range of variation in plant composition, structure, and function. Fuel loads are maintained below levels that are considered to be hazardous. Desired future conditions for vegetation communities are listed in Table 3.

Land Use Allocations

As authorized in the AZLUP, BLM-administered public lands will be assigned to one of two Land Use Allocations for fire management. Within the Lake Havasu Field Office

area, the Harcuvar and Mohave mountain ranges fall into Allocation 1. The remainder of the Lake Havasu Field Office falls within Allocation 2. Table 3 below details these allocations.

Table 3. Desired Future Conditions and Land Use Allocations for Vegetation Communities (see Map 13)

Fire Specific Vegetation Community Type	Approximate Acreage	Desired Future Conditions	Land Use Allocation Category
Desertscrub 3,500-4,500-ft elevation	4,603	Adequate cover and a mix of natural plant species that have good vigor. In terms of fire management and fire ecology, the desired future conditions are for fire to control or reduce exotic annual weeds such as red brome and to limit woody vegetation to non-hazardous levels.	2
Desertscrub below 3,500 ft elevation	1,264,562	Adequate cover and a mix of natural plant species that have good vigor. In terms of fire management and fire ecology, the desired future conditions are for fire to control or reduce exotic annual weeds such as red brome and to limit woody vegetation to non-hazardous levels.	2
Interior Chaparral	35,424	Fire naturally maintains shrub cover while reducing annual grass cover, the invasion of woody plants such as juniper and piñon pine are controlled, and the average age of chaparral stands is reduced through controlled fire or mechanical treatment.	1
Riparian/ Mesquite	41,963	Adequate cover and a mix of natural plant species that have good vigor. In terms of fire management and fire ecology, the desired future conditions are for fire to control or reduce exotic annual weeds such as red brome and to limit woody vegetation to non-hazardous levels.	2

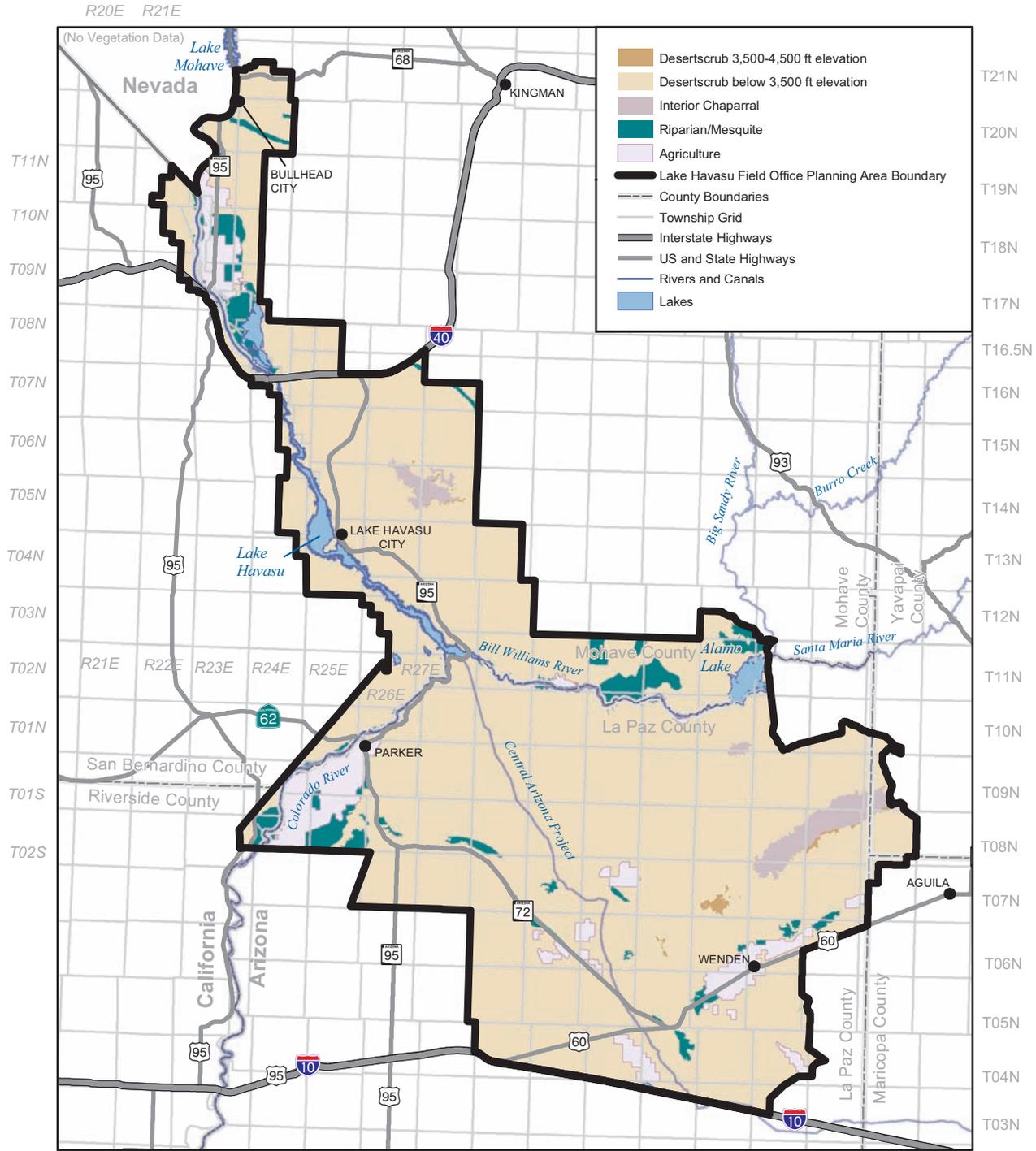
Management Actions

FM-5. The following decision was derived from the 1987 YRMP and will be applicable to the entire planning area: Fires on or threatening public lands will be suppressed and fuels will be managed in accordance with BLM fire policy, agreements with other government agencies, approved modified fire suppression plans, relevant resource management plans, and the AZLUP. The structure of the fire management organization and fire management implementation guidance can be found in the Yuma-Lake Havasu Zone Fire Management Plan (Bureau of Land Management 2004).

FM-6. In areas suitable for fire where fuel loading is high and current conditions constrain fire use, the BLM will emphasize prevention and mitigation programs to reduce unwanted fire ignitions, and use mechanical, biological, or chemical treatments to mitigate the fuel loadings and meet resource objectives.

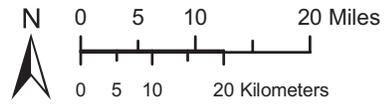
- FM-7. In areas suitable for fire and where conditions allow, the BLM will allow naturally ignited wildland fire, use prescribed fire, and employ a combination of biological, mechanical, and chemical treatments to maintain non-hazardous levels of fuels, reduce the hazardous effects of unplanned wildland fires, and meet resource objectives.
- FM-8. In areas suitable for fire, the BLM will monitor existing air quality levels and weather conditions to determine which prescribed fires can be ignited and which, if any, must be delayed to ensure that air quality meets federal and state standards. If air quality approaches unhealthy levels, the BLM will delay igniting prescribed fires.
- FM-9. The BLM will implement conservation measures during fire suppression and all fire management activities as required, to minimize or eliminate adverse effects to federally threatened, endangered, proposed, and candidate federally protected species and habitats, unless firefighter, public safety, protection of property, improvements or natural resources render them infeasible during a particular operation (Bureau of Land Management 2004). Conservation measures noted as recommended in Appendix F are not mandatory for implementation to help minimize effects to federally protected species and to provided consistency. Procedures within the Interagency Standards for Fire and Fire Aviation Operations 2002, including future updates, relevant to fire operations that may affect federally protected species or their habitat are incorporated here by reference.
- FM-10. The BLM will undertake education, enforcement and administrative fire prevention mitigation measures to reduce human-caused fires. Education measures will include various media information including a signing program, information as to the natural role of fire within local ecosystems, 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 cooperating agencies.
- FM-11. Firefighter and public safety is the first priority in every fire management activity. Setting priorities among protecting human communities and community infrastructure, other property and improvements, and natural and cultural resources must be based on the values to be protected, human health and safety, and costs of protection (National Interagency Fire Center 2001).
- FM-12. During fire suppression actions, resource advisors may be designated to coordinate concerns regarding federally protected species, and to serve as a liaison between the field office manager and the incident commander/incident management team. They will also serve as a field contact representative responsible for coordination with USFWS. The resource advisors will have the necessary information on federally protected species and habitats in the area and the available conservation measures for the species. They will be briefed on the intended suppression actions for the fire, and will provide input on which conservation measures are appropriate, within the standard constraints of safety and operational procedures. The incident commander has the final

Map 13 Vegetation Communities for Fire Management



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decision-making authority on implementation of conservation measures during fire suppression operations.

- FM-13. Because of the number of species located within the action area for the Approved RMP, combined with a variety of fire suppression and proposed fire management activities, conflicts may occur in attempting to implement all conservation measures for every species potentially affected by a particular activity. Implementing these conservation measures effectively will depend on the number of federally protected species and their individual life history or habitat requirements within a particular location that is being affected by either fire suppression or a proposed fire management activity. This will be particularly true for timing restrictions on fuels treatment activities if the ranges of several species with differing restrictions overlap, making effective implementation of the activity unachievable. Resource advisors (in coordination with USFWS), fire management officers or incident commanders, and other resource specialists will need to coordinate to determine which conservation measures will be implemented during a particular activity. If conservation measures for a species cannot be implemented, the BLM will be required to initiate Section 7 consultation with USFWS for that particular activity.
- FM-14. In WAs, WSAs, and areas with wilderness characteristics according to wilderness plans or the Approved RMP, when suppression actions are required, minimum impact suppression tactics (Interagency Standards for Fire and Aviation Operations 2003) will be applied and coordinated with WA management objectives and guidelines. In all cases, determining appropriate attack strategies and tactics, including the use of Minimum Impact Suppression Tactics (MIST), must be based on appropriate management response while providing for fire fighter and public safety, land and resource management objectives, values at risk, weather, fuel conditions, threats and values to be protected, and available resources
- FM-15. Fire management activities along National Historic Trails will be conducted to assure no adverse effects occur to those resources and values identified in the legislation designating the trail.
- FM-16. ACEC and Back Country Byways are established in the Approved RMP. The Desired Future Conditions and management prescriptions for these special areas will be considered in implementing fire management activities.

Fire Suppression Actions

- FM-17. Suppression tactics will be utilized that limit damage or disturbance to the habitat and landscape. No heavy equipment will be used (such as dozers) unless approved by the field office manager.
- FM-18. Use of fire retardants or chemicals adjacent to waterways will be accomplished in accordance to the Environmental Guidelines for Delivery of Retardant or Foam near Waterways (Interagency Standards for Fire and Aviation Operations pages 8–13).

- FM-19. All known cultural resources will be protected from disturbance.
- FM-20. In WAs, WSAs, and lands with wilderness characteristics according to land use plans, when suppression actions are required, minimum impact suppression tactics (Interagency Standards for Fire and Aviation Operations 2003) will be utilized and coordinated with WA management objectives and guidelines.
- FM-21. The general and species-specific conservation measures listed in Appendix D of the AZLUP (USDI-BLM 2004) will be implemented to the extent possible to minimize adverse effects to federally listed, proposed, or candidate species occurring within the planning area.
- FM-22. For fire suppression activities, a protocol for consultation has been developed as a part of the Biological Opinion for the AZLUP (USDI-BLM 2004). This programmatic consultation contains conservation measures and prescriptions for use in fire suppression activities. Emergency consultation should only be needed in the future if suppression actions fall outside of these prescriptions/measures. The Biological Opinion will outline coordination needs for emergency response actions that may affect a listed/proposed species and/or critical habitat.
- FM-23. The BLM will contact the appropriate USFWS biologist as soon as practical once a wildfire starts and a determination is made that a federally protected species and/or its habitat could be affected by the fire and/or fire suppression activities. USFWS will work with the BLM during the emergency response to apply the appropriate conservation measures. If conservation measures cannot be applied during the suppression activities, the BLM will need to consult after the fact on any suppression actions that may have affected the federally protected species or its habitat. If conservation measures are adhered to, then the BLM will report on the actions taken and effects to the species and its habitat following the fire, but no further consultation on that incident will be required.

Monitoring

Monitoring will determine whether fire management strategies, practices, and activities are meeting resource management objectives and concerns. Fire management plans and policies will be updated as needed to keep current with national and state fire management direction. Scheduled program reviews (post-season fire review) will be conducted to evaluate fire management effectiveness in meeting goals and to reassess program direction. In the case of wildfire rehabilitation, monitoring will be specific to resource objectives. Monitoring information and conclusions of this type will be included in the *Annual Planning Update Report and Summary*.

Lands and Realty Program

The Lands and Realty program consists generally of two distinct segments: Land tenure and use authorization. The following shows the current policy for the Lands and Realty program. The decisions for the Lands and Realty program follow the policy section and are noted by the symbol LR.

Land Tenure

The land tenure segment of the Lands and Realty program specifies that the Lake Havasu Field Office 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 Management

Split estate is property for which the surface estate is owned by one entity and the mineral estate is owned by another entity. For purposes of the Lands and Realty program, split estate refers to federal government ownership of the surface estate and ownership of the mineral estate by another entity. In this situation, the BLM may attempt to acquire the mineral estate from the owner(s).

Land Acquisition

Lake Havasu Field Office may acquire lands or interests in lands by purchase using Land and Water Conservation Fund funds or through other funding. The BLM may also acquire lands from donations or exchanges.

Acquisition of non-federal lands would be prioritized based on the potential to enhance the conservation and management of threatened or endangered species habitat, riparian habitat, desert tortoise habitat, key big game habitat, or to improve the overall manageability of wildlife habitat.

Land Disposal

The BLM may dispose of lands or interests through sales, exchanges, conveyance of mineral interests, R&PP patents. Legal descriptions of parcels that have been identified (and the approved method of disposal) are listed in Appendix G.

The BLM may also use withdrawals in which jurisdiction of the land or interests in lands are transferred to another federal agency. If Lake Havasu Field Office discovers an area that needs the protection of a withdrawal, the withdrawal will be processed. If other agencies' withdrawals are revoked, the BLM will manage the land consistently with the current land use plan.

- Public lands may have potential for disposal when they are isolated and/or difficult to manage. Disposal actions are usually in response to public request or application that results in a title transfer, wherein the lands leave the public domain. All public lands would be retained unless specifically identified for disposal. The criteria for land disposals are listed below.
- Public lands classified, withdrawn, reserved, or otherwise designated as not available or subject to sale are unavailable. A land use plan amendment would be required to dispose of lands not identified for disposal in the current land use plan. All disposal

actions are coordinated with adjoining landowners, local governments, and current land users.

- There are two distinct sets of criteria in the FLPMA for evaluating whether disposal will serve the national interest. One set is for disposal by sale and the other is for disposal by exchange:
 - a) Land disposal by public sale is addressed in Section 203(a) of the FLPMA. This section contains three criteria to apply in identifying public lands suitable for disposal by public sale. The criteria, as paraphrased, are that a) the tract of public land is difficult and uneconomical to manage as part of the public lands and is not suitable for management by another federal department or agency, b) the land is no longer required for a specific purpose, or c) disposal will serve important public objectives.
 - b) The criteria for determining which public lands or land interests are available for disposal by exchange are covered in Section 206(a) of the FLPMA. These criteria require the BLM to consider the public interest by giving full consideration to better federal land management and the needs of state and local people. These include the need of lands for the economy, community expansion, recreation areas, food, fiber, minerals, and fish and wildlife. The criteria also require that the public objectives to be served must be greater on the lands to be acquired than on the lands to be conveyed.

The Recreation and Public Purposes (R&PP) Act of 1954, as amended, authorizes the lease and/or conveyance of BLM-administered lands for recreational or public purposes to state and local governments and to qualified nonprofit organizations under specified conditions at less than the fair market value.

The Airport and Airway Improvement Act of 1982 provides for the conveyance of BLM-administered lands to public agencies for use as airports and airways. Disposal criteria with respect to Endangered Species Act listed, proposed, or candidate species and critical habitat are as follows:

- The BLM will not transfer out of federal ownership designated or proposed critical habitat for a listed or proposed threatened or endangered species.
- The BLM will not transfer out of federal ownership lands supporting listed or proposed threatened or endangered species if such transfer would be inconsistent with recovery needs and objectives or would likely affect the recovery of the listed or proposed species.
- The BLM will not transfer out of federal ownership lands supporting federal candidate species if such action would contribute to the need to list the species as threatened or endangered.

Exceptions to the three previous criteria could occur if the recipient of the lands would protect the species or critical habitat equally well under the Endangered Species Act, such as disposal to a nonfederal governmental agency or private organization if conservation purposes for the species would still be achieved and ensured.

In addition, the Federal Land Transaction Facilitation Act of 2000, commonly referred to as the Baca Bill, allows the BLM to retain receipts from land sales to cover

administrative costs and acquire properties. Section 205 of the Act requires that the public land be identified for disposal in an approved land use plan as of July 25, 2000. Those Baca lands identified for disposal in the Approved RMP are identified in Appendix G. Lands identified for disposal that are large enough to show on a map are displayed on Map 14.

Use Authorization

Lake Havasu Field Office may allow the use of the public lands or interests in lands through issuance of ROWs, leases, and permits. The types of uses that would be authorized by a ROW issued pursuant to Title 5 FLPMA would include access roads, power lines, telephone lines, fiber optic systems, communications facilities, and so forth. Examples of uses authorized pursuant to the Mineral Leasing Act include crude oil pipelines and oil and gas pipelines. Typical uses authorized by permits would include filming and establishing and maintaining apiary sites.

To minimize adverse environmental impacts and the proliferation of separate ROWs, the utilization of shared ROWs would be required to the extent practical. Any existing transportation and utility corridors may be designated as transportation and utility corridors pursuant to FLPMA Section 503 [43 USC 1763] without further review. Map 15 displays the locations of the corridors.

Public lands may also be designated for use as a communications site or a communications facility. A communications facility is a building and/or tower or other physical improvement that is built, installed, or established to house and support authorized communications uses. Lake Havasu Field Office communications sites accommodate the wireless systems referred to in the Telecommunications Act of 1996 as well as many other uses, including AM/FM broadcast facilities, commercial mobile radios, private mobile radios, and microwaves on designated communications sites located on mountaintops. Map 15 also displays the location of the communication sites.

Land Use Allocations

Acquisitions

LR-1. Acquisition of lands, or interests in lands, including non-federal minerals, will be considered if the three following conditions exist:

- (a) The lands are free and clear of any hazardous materials, or legal encumbrances.
- (b) The owners are willing to sell or exchange or donate.
- (c) One or more of following criteria apply:
 - Inholdings and easements encompassed within the boundaries of special designated areas (ACECs, WAs, WSAs, National Trails, proposed Wild and Scenic River, and so forth) as designated in the Approved RMP.
 - Properties adjacent to public lands that contain significant cultural resources including, but not limited to, those properties eligible for inclusion on the National Register of Historic Places. Priority

acquisitions will be for lands that contain portions of eligible sites also located on public lands.

- ❑ Lands made available by willing non-federal landowners that are within Category 1 and II desert tortoise habitat and/or will improve the status of desert tortoise by protecting areas large enough to support viable populations of desert tortoise.
- ❑ Properties within wildlife habitat management areas as allocated in the Approved RMP.
- ❑ Properties adjacent to wildlife habitat management areas where the species are jeopardized by future proposed activities.
- ❑ Properties with important wildlife corridors or properties that provide for continuity of important wildlife corridors where links between fragmented habitats will be made available for movement of species.
- ❑ Properties within or adjacent to SRMAs or Recreation Management Zones (RMZs), or that enhance recreational opportunities available on adjacent public lands.
- ❑ Lands that provide connectivity for trails or routes.
- ❑ Properties within areas with high wilderness characteristics as described in the Approved RMP.
- ❑ Properties that will consolidate public ownership for the benefit of a resource program.

LR-2. Lake Havasu Field Office could acquire conservation easements to protect resources within the Special Designations, WHAs, cultural resource sites, and SRMAs.

Disposals

LR-3. Approximately 50,616 acres (see Appendix G) will be available for potential disposal by land tenure category as follows:

2,934 acres as current leases for disposal under R&PP Act

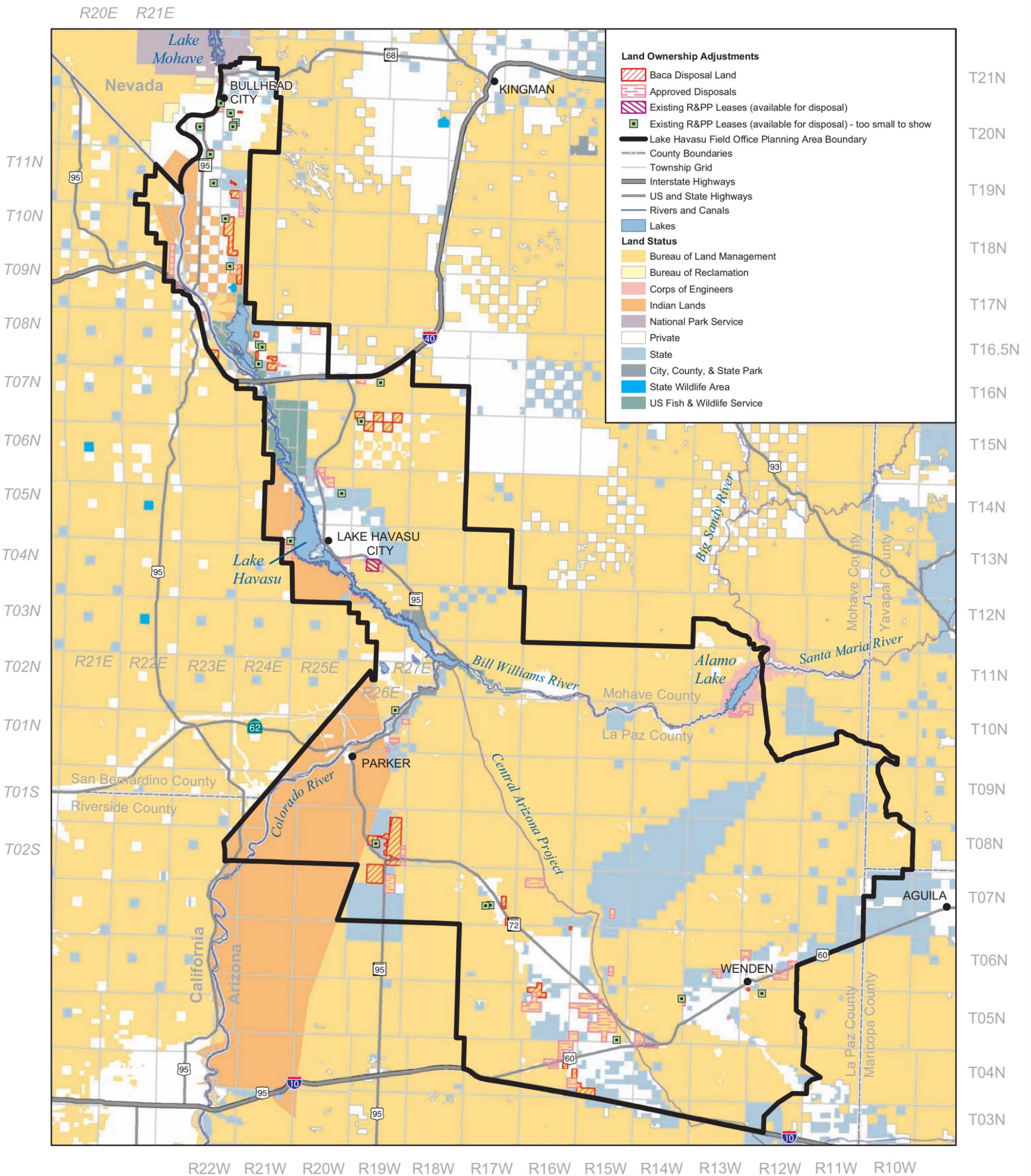
47,682 acres as available for sale, exchange, and R&PP leasing and disposal

LR-4. The BLM will dispose of federal minerals underlying state and private land and acquire nonfederal minerals underlying public lands to eliminate split estate property. Any lands acquired by the BLM will include both the surface and the mineral estate whenever possible.

Use Authorizations

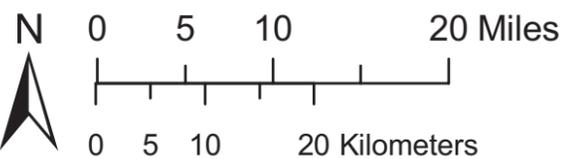
Lake Havasu Field Office may allow the use of the public lands or interests in lands through issuance of ROWs, leases, and permits. The types of uses that will be authorized by a ROW issued pursuant to Title 5 FLPMA will include access roads, power lines, telephone lines, fiber optic systems, communications facilities, and so forth. Examples of uses authorized pursuant to the Mineral Leasing Act include crude oil pipelines and oil

Map 14 Disposal Lands



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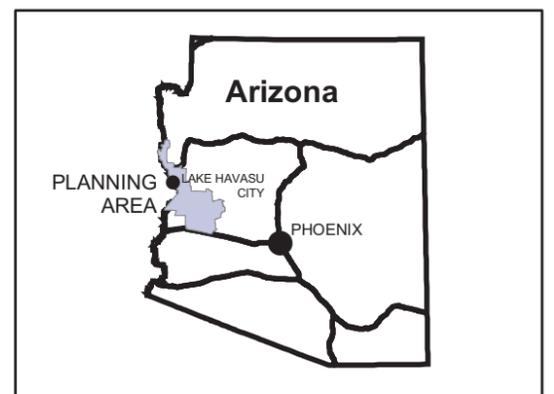
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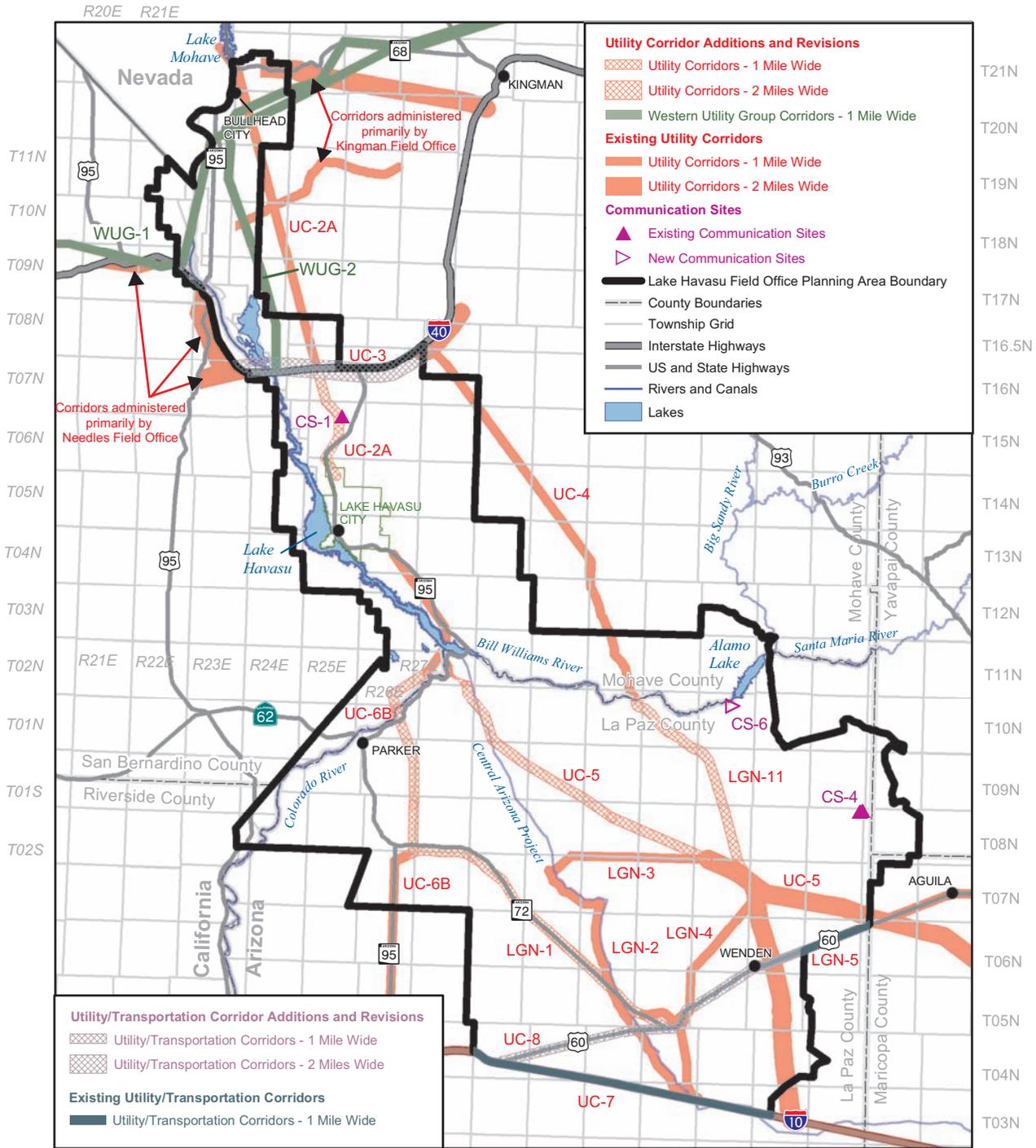
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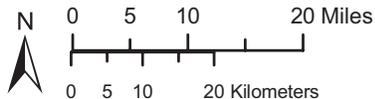


Map 15 Utility/Transportation Corridors and Communication Sites



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and gas pipelines. Typical uses authorized by permits will include filming and establishing and maintaining apiary sites.

- LR-5. When lands currently managed under agricultural lease no longer are authorized for agricultural use they will revert to uses that will benefit other programs carried out by the BLM or return to natural condition for use as wildlife habitat in accordance with the LCRMSCP.
- LR-6. The BLM will continue to lease recreation areas for concessions, state parks, county parks, and city parks in accordance with the prescribed recreation settings (see Map 20).
- LR-7. Within the boundaries of Special Designations (such as but not limited to: ACEC, WSA, proposed Wild and Scenic Rivers, etc.) as identified in this Approved RMP, no new utility and roads ROWs will be authorized, with the exception of utilities and access roads that provide service to nonfederal land within these areas. One additional ROW will be issued in the proposed Crossman Peak Scenic ACEC to authorize an existing building and two towers on public land in T. 14 N., R. 19 W. section 13, lot 1. The Lake Havasu Field Office may issue ROWs to ADOT for the construction and associated activities of the realignment of State Route (SR) 95 through the Bullhead Bajada Natural and Cultural ACEC.
- TM-4. Public access easements will be acquired across private or state lands where public access to federal lands and waterways is not available.
- LR-8. Locating facilities outside of designated corridors and communications sites will be avoided in WHAs if practicable.
- LR-9. The BLM will not permit placement of memorial monuments on the BLM. However, the BLM will cooperate with other parties to place memorials (e.g., tree or park bench) to enhance a recreation site or wildlife habitat.
- LR-10. If ADOT realigns SR 95 through the Bullhead Bajada Natural and Cultural ACEC, the BLM will issue a ROW for the realigned SR 95 and ROWs for the associated work including but not limited to drainage, temporary work areas, etc.
- LR-11. New utility facilities will be located in designated corridors unless an evaluation of the project shows that location outside of a designated area is the only practicable alternative.
- LR-12. Locating utility facilities outside of designated corridors and communications sites will be prohibited in Special Designations.
- LR-13. Locating utility facilities outside of designated corridors and communications sites will be avoided in Wildlife Habitat Areas.

- LR-14. In utility corridors, uses including but not limited to transportation, pipelines, and electrical transmission lines will be allowed when the uses are compatible. These designated corridors apply only to BLM-administered lands.

Table 4 is a summary of existing and new ROW corridors and the adjustments made in the Approved RMP. Table 5 shows a summary of communications sites as designated, renamed, and undesignated. See Map 2-11 in the PRMP/FEIS for the original locations of the dropped and revised corridors and sites.

Table 4. ROW Corridors Designations Summary (See Map 15)

Decision Code	ROW Corridor/Location	Width in Miles	Designation in Approved RMP
LR-15.	California Desert Conservation Area "F" (CA) (UC-1)	1	Dropped
LR-16.	Western Utility Group (WUG 1) (new)	1	Designated
LR-17.	Interstate 40 (UC-3)	1–2	Rerouted and designated
LR-18.	Davis-Parker "A" (UC-2A)	1	Rerouted and designated
LR-19.	Parker-Blaisdell "B"-(UC-6B)	1	Rerouted and designated
LR-20.	Parker-Liberty (UC-5)	1–2	Rerouted and designated
LR-21.	Central Arizona Project (CAP) (LGN-2)	1	Route returned to original location
LR-22.	Bouse-Salome [Adjust] (LGN-1)	1	Rerouted, adjusted and designated
LR-23.	El Paso Natural Gas (LGN-11)	2	Rerouted and designated
LR-24.	San Juan Crossover (UC-4)	1	Designated
LR-25.	Interstate 10 (UC-7)	1	Designated
LR-26.	Bouse-Harcuvar (LGN-3)	1	Designated
LR-27.	Little Harquahala (LGN-4)	1	Designated
LR-28.	Wenden-Wickenburg (LGN-5)	1	Designated
LR-29.	State Route 60 (UC-8) (new)	1	Designated
LR-30.	Western Utility Group (WUG 2) (new)	1	Designated

Table 5. Communication Sites: Designated, Renamed, and Undesignated

Decision Code	Communication Site	Approved RMP
LR-31.	Smith Peak Communication Site (CS)-4	Designated
LR-32.	Citizens Utilities/Mohave Mountain (CS-1)	Designated/renamed
LR-33.	Black Peak (CS-3)	Undesignated (no new uses)
LR-34.	American Cable TV (CS-2)	Undesignated (no new uses)
LR-35.	Alamo Dam (CS-6)	Designated (new site)
LR-36.	All communication facilities on Black Peak	All communication facilities on Black Peak will be phased out and relocated at a suitable site through negotiation with the Colorado River Indian Tribes and the site lessees.
LR-37.	Facilities located outside of designated corridors and communication sites	Locating communication facilities outside of designated corridors and communication sites will be prohibited in ACEC, WAs, WSAs, and cultural sites eligible for inclusion on the NRHP.
LR-38.	New utility and communication facilities	New communication facilities will be located in designated communication sites or corridors unless an evaluation of the project shows that location outside of a designated area is the only practicable alternative.

Monitoring

All lands and realty actions implemented in this plan will be specifically addressed in separate NEPA documents that will generate mitigations, management objectives, and monitoring designs.

A compilation of new monitoring obligations for lands actions will be assembled for reporting in the *Annual Planning Update Report and Summary*. Opportunities to combine redundant efforts may be presented over time and will be addressed in the 5-year plan evaluation report.

Mineral Resources

The minerals program consists of three categories: Saleable, Leasable, and Locatable. Saleable minerals (also referred to as mineral materials) include sand, gravel, and common varieties of stone and clay. These materials are sold to the public, on request, at fair market value or are provided to federal, state, and local government agencies through free use permits. Leasable minerals include, but are not limited to, oil, gas, coal, sodium, potassium, and geothermal resources. Locatable minerals are those minerals that are

appropriated by the public under the General Mining Law of 1872, as amended. Locatable minerals include, but are not limited to, metals such as gold, silver, zinc, manganese, copper, and uncommon varieties of stone.

Subject to valid existing rights at the time of designation, all wilderness areas are withdrawn from all forms of appropriation under the mining laws and closed mineral leasing and mineral material disposal. The designated wilderness areas cover a total of 120,599 acres.

Reasonable Foreseeable Development

Saleable Minerals

The reasonable foreseeable development (RFD) scenario for saleable minerals will be 40 new mineral material sites distributed throughout the planning area over the life of the plan, disturbing a maximum of 1,000 acres. The disturbed areas will be reclaimed when they are no longer needed or the permit expires.

Leasable Minerals

The RFD for oil, gas, and geothermal resources for the life of the plan will be a maximum of 10 holes drilled. The BLM does not anticipate that any of these wells will be capable of production. The 10 holes will be dispersed throughout the planning area, with each drill hole disturbing an area of 5 to 7 acres, including the access road. The pads and associated access roads will subsequently be reclaimed.

There are no known coal resources within the planning area. It is not expected that a coal lease will be issued or a coal mine developed.

The RFD for other solid leasable minerals for the life of the plan will be a maximum of three exploration permits issued, resulting in a maximum of six exploration holes drilled, with minerals found but not in sufficient a quantity or quality to anticipate development. Each exploratory drilling will disturb 5 to 7 acres, including any access roads. Maximum area of disturbance will be 42 acres for roads and pads, which will be reclaimed.

Locatable Minerals

The RFD for locatable minerals will be three to five new exploration level notices submitted per year for 20 years that will disturb a maximum of 5 acres per notice. There will be 5 to 10 new small locatable mineral operations developed over the life of the plan, which will disturb approximately 20 acres at each operation. There may be one large mine that may disturb 200 to 300 acres. The total estimated disturbance related to new mining exploration and operations over the life of the plan is 1,000 acres.

Land Use Allocations

Saleable Mineral Resources

MI-1. Community pits will be authorized on a case-by case basis.

- MI-2. No new or expansion of existing mineral material disposal sites will be authorized in the Swansea Townsite, cultural sites and areas, and site complexes managed for Conservation for Future Use, Traditional Use, and Public Use.
- MI-3. No new or expansion of existing mineral material disposal sites will be authorized in the Aubrey Hills and the Cactus Plain WSA.
- MI-4. No new or expansion of existing mineral material disposal sites will be authorized in riparian areas.
- MI-5. No new or expansion of existing mineral material disposal sites will be authorized in desert tortoise Category I habitat.
- MI-6. No new or expansion of existing mineral material disposal sites will be authorized in the Bullhead Bajada Natural and Cultural ACEC and the Beale Slough Riparian and Cultural ACEC.
- MI-7. No new or expansion of existing mineral material disposal sites will be authorized in Open off-highway vehicle (OHV) Areas.
- MI-8. Mineral material development will only be authorized on lands managed to maintain wilderness characteristics when there will be no lasting impacts to solitude, unconfined recreation, and naturalness.
- MI-9. The total area open to mineral material disposal is 1,044,027 acres, and 299,297 acres are restricted from mineral development as shown in Map 16.

Leasable Mineral Resources

- MI-10. The entire planning area, outside of wilderness areas, will be open to mineral leasing for exploration and development. 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 NEPA. Stipulations will mitigate impacts to special status species, cultural areas, and other resources affected by leasing-related activities.
- MI-11. Surface occupancy for mineral leases will not be permitted on the Cactus Plain WSA.
- MI-12. Surface occupancy for mineral leases will not be authorized on the cultural resource sites and site complexes managed for Conservation for Future Use, Traditional Use, and Public Use.
- MI-13. Surface occupancy for mineral leases will be prohibited within 0.25 mile of the Bill Williams and Colorado Rivers and within the riparian zone of the Three Rivers Riparian ACEC.

- MI-14. Surface occupancy for mineral leases will be permitted on lands managed to maintain wilderness characteristics when there will be no lasting impacts to solitude, unconfined recreation, and naturalness.
- MI-15. 69,123 acres are restricted with a no surface occupancy stipulation as shown in Map 17.

Locatable Mineral Resources

- MI-16. Approximately 200 acres of the Swansea Townsite will be recommended for withdrawal.
- MI-17. The riparian area of the Three Rivers Riparian ACEC will be recommended for withdrawal, which covers 238 acres.
- MI-18. Recommend for withdrawal approximately 185 acres within the Bullhead Bajada Natural and Cultural ACEC.
- MI-19. Recommend for withdrawal approximately 10 acres to protect the Incline Railway in the Harcuvar Mountains.

See Map 18 for areas recommended for withdrawal.

Monitoring

Monitoring minerals activities consists of periodic field inspections that ensure compliance with applicable laws, regulations, and site-specific authorizations. Findings for each inspection are documented and placed in the case file. The number of sites inspected and the number of sites in compliance will be reported in the *Annual Planning Update Report and Summary*.

Paleontological Resource Management

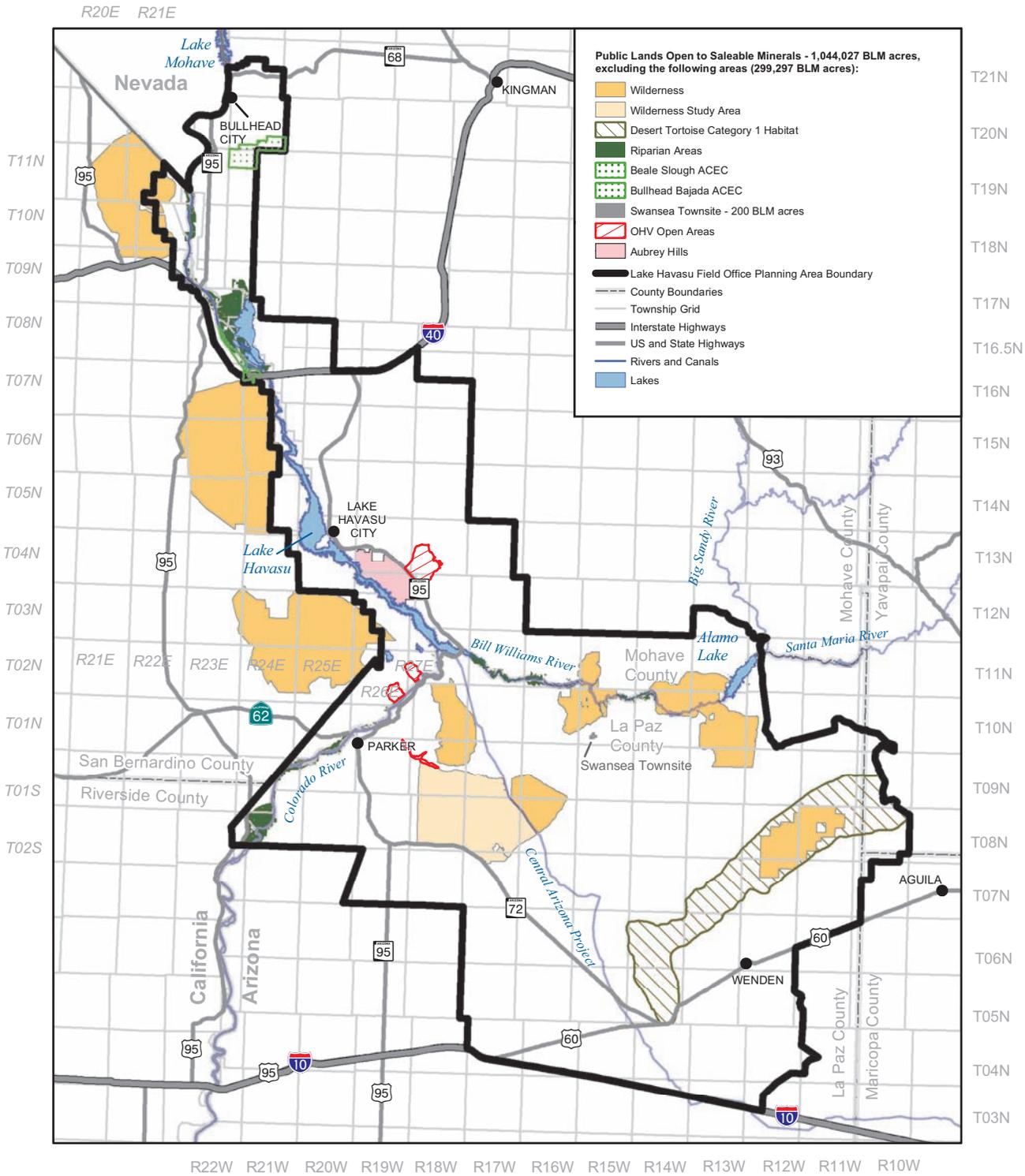
Desired Future Conditions

- GL-1. Paleontological resources will be managed for their scientific, educational, and recreational values, and adverse impacts to these resources will be mitigated.
- GL-2. The BLM will preserve and protect significant vertebrate paleontological resources for present and future generations. Scientifically significant invertebrates (to be determined by a qualified paleontologist) will also be protected.

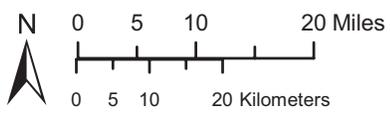
Land Use Allocations

- GL-3. The Golden Shores mammoth site and the Chemehuevi Formation localities will be managed for their scientific values.

Map 16 Saleable Minerals



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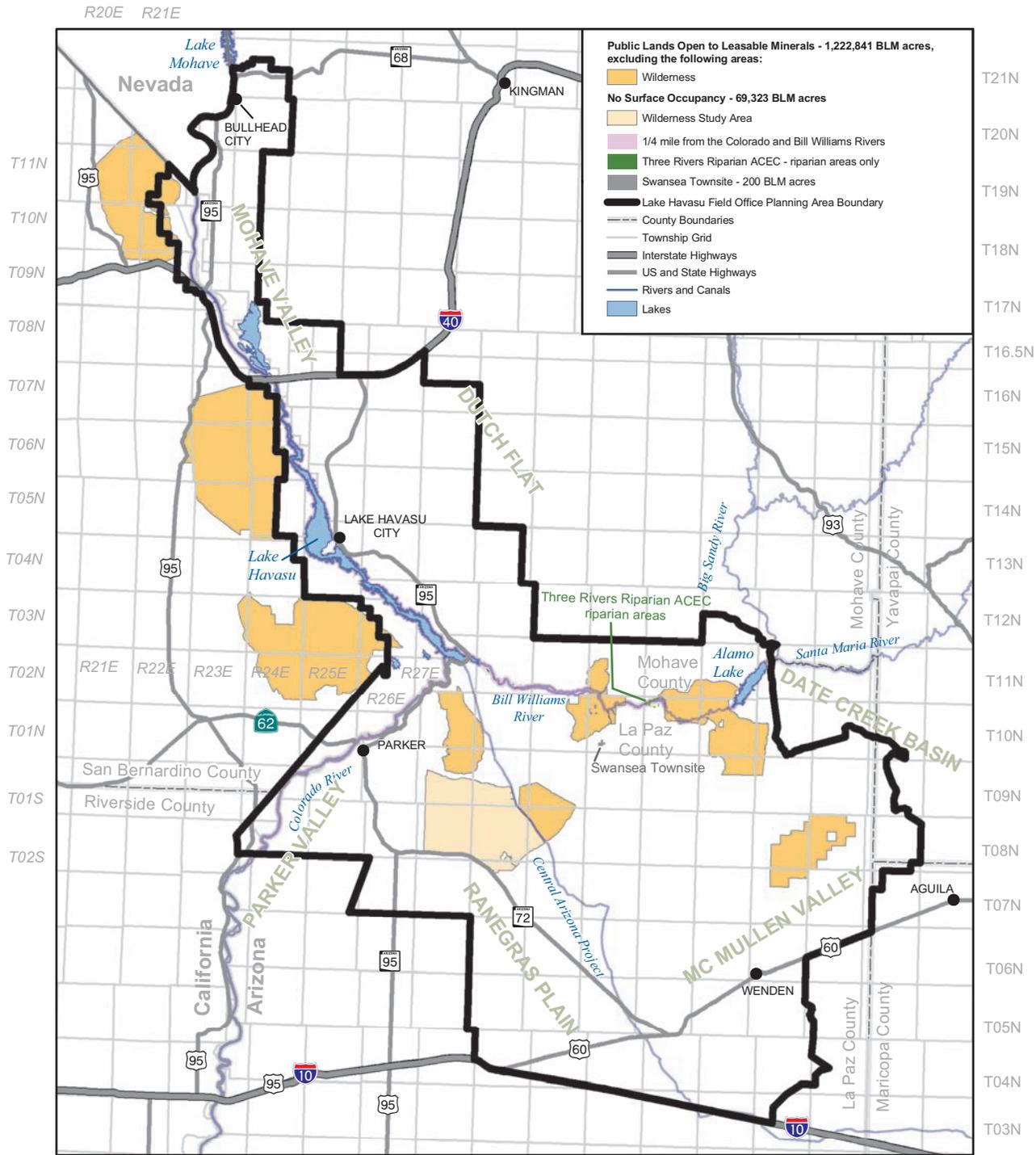


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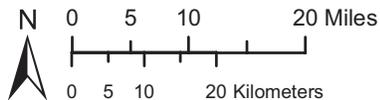
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Map 17 Leasable Minerals



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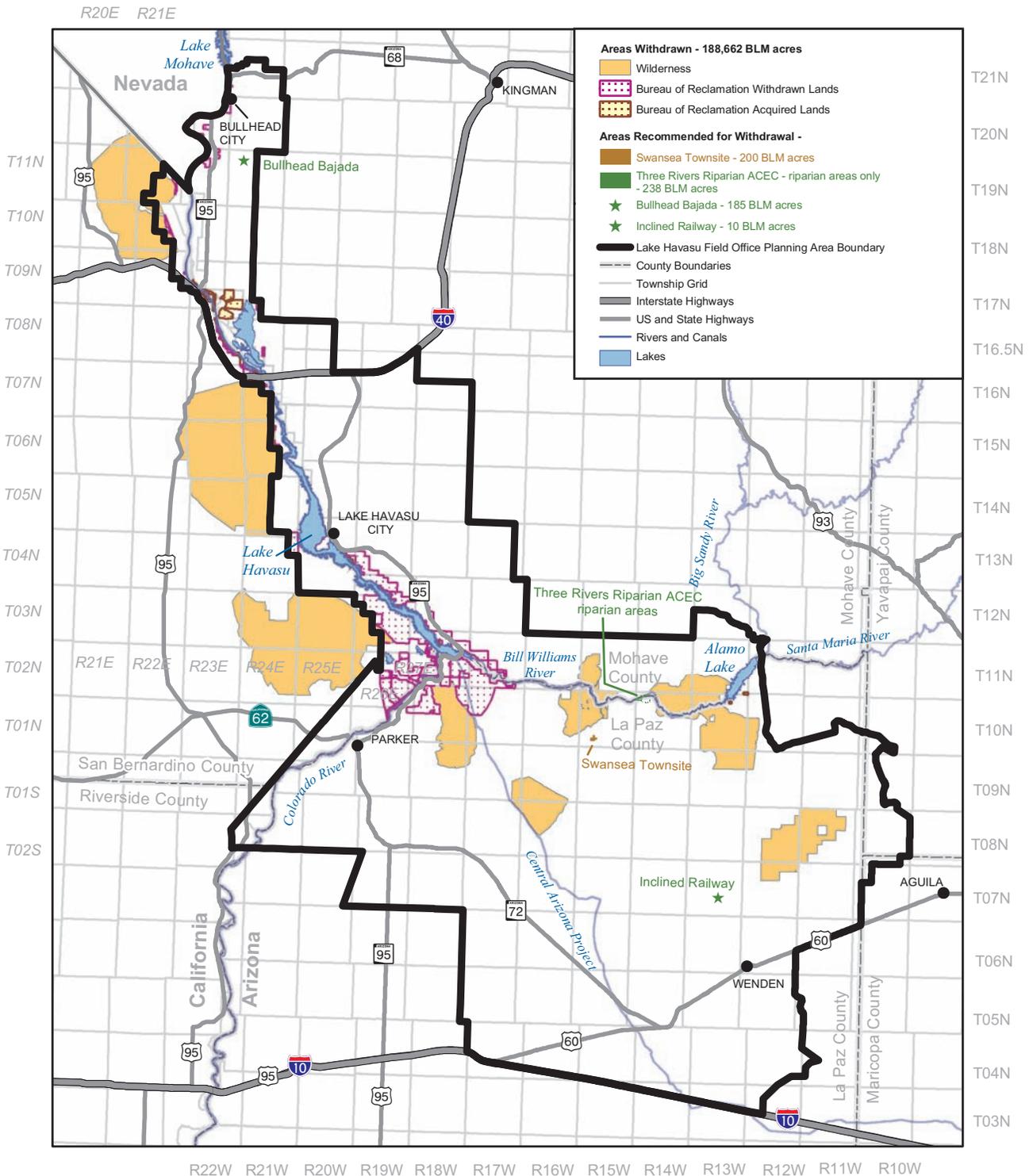


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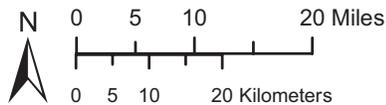


Map 18 Locatable Minerals



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- GL-4. Areas will be classified according to their potential to contain vertebrate fossils or noteworthy occurrences of invertebrate or plant fossils. These classifications will be based on future inventory of geological units and will be accomplished through adaptive management and plan maintenance. There are four such classifications ranging from Class 1 (low sensitivity) to Class 4 (high sensitivity), shown in Table 6 below.

Table 6. Paleontological Resource Classifications	
Classification	Definition
Class 1 (Low sensitivity)	Igneous and metamorphic geologic units and sedimentary geologic units where vertebrate fossils or uncommon non-vertebrate fossils are unlikely to occur.
Class 2 (Moderate sensitivity)	Sedimentary geologic units that are known to contain or have unknown potential to contain fossils that vary in significance, abundance, and predictable occurrence.
Class 3 (Moderate sensitivity)	Areas where geologic units are known to contain fossils but have little or no risk of human-caused adverse impacts and/or low risk of natural degradation.
Class 4 (High sensitivity)	Areas where geologic units regularly and predictably contain vertebrate fossils and/or uncommon non-vertebrate fossils, and are at risk of natural degradation and/or human-caused adverse impacts.

- GL-5. Fossil localities will be identified and managed in accordance with their scientific, educational, and recreational values through the life of the plan. All vertebrate fossils and noteworthy invertebrate and plant fossils will be managed for their scientific values. Common invertebrate and plant fossils will be available for recreational collecting.

Management Actions

No Management Actions were identified.

Monitoring

A long-term monitoring program will consist of the annual visitation to Golden Shores Mammoth site to identify adverse impacts, if any. The same approach would apply to other significant localities identified in the future.

Rangeland Management/Grazing

See Appendix H.

Desired Future Conditions

- GM-1. Provide forage on a sustained yield basis for livestock consistent with meeting Land Health Standards and multiple use objectives. Healthy, sustainable

rangeland ecosystems will be maintained or improved to meet Land Health Standards (Arizona's Standards for Rangeland Health [1997a]); and produce a wide range of public values such as wildlife habitat, livestock forage, recreation opportunities, clean water, and functional watersheds.

- GM-2. Livestock use and associated management practices will be conducted in a manner consistent with other multiple use needs and objectives to ensure that the health of rangeland resources is preserved or improved so that they are productive for all rangeland values. Where needed, public rangeland ecosystems will be improved to meet objectives.

Land Use Allocations

- GM-3. A total of 1,359,765 acres will be allocated for livestock grazing use as follows:

1,121,701 acres as Available

238,064 acres as Unavailable

Note that acreage is included in allotments managed by neighboring Field Offices (Kingman and Yuma). See Map 19.

Management Actions

- GM-4. Guidelines for grazing administration apply to all livestock grazing activities on BLM-administered-lands.

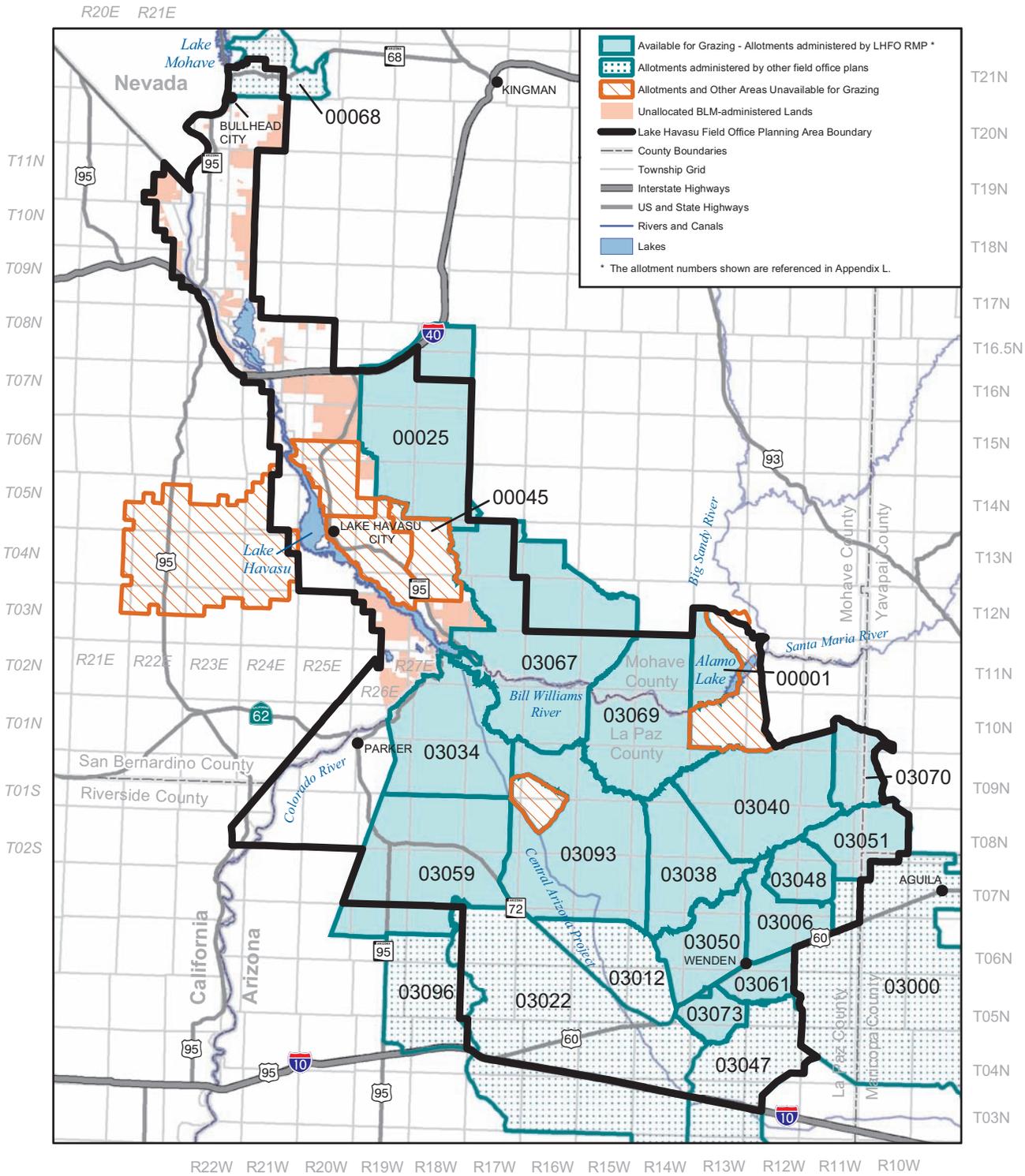
Monitoring

A majority of the perennial/ephemeral allotments have monitoring studies established at key areas. Monitoring data collected includes climatic information, actual use, utilization, and trend in condition. These studies will continue to be collected periodically, as necessary to ensure that current grazing management continues to meet or is making progress towards existing goals and objectives.

All grazing allotments within the Approved RMP area will be assessed in accordance with the Arizona Standards for Rangeland Health prior to October 1, 2009. If the assessment finds that an allotment does not meet or is not making significant progress to meet the Land Health Standards, management actions to correct the deficiency will be implemented in accordance with the grazing regulations at 43 CFR 4100. During assessments, each allotment will be analyzed in relation to the criteria for classifying allotments as ephemeral, as enumerated in the Approved RMP.

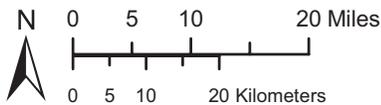
Progress towards this commitment will be reported annually in the Annual Planning Update Report and Summary to the Field Office Manager.

Map 19 Grazing Management



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Approved Resource Management Plan



UNITED STATES DEPARTMENT OF THE INTERIOR
Bureau of Land Management



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May 2007



Recreation Management

The plan addresses the BLM's local, regional, and national goals (see Appendix I) for providing a wide range of opportunities for environmentally responsible recreation.

Outdoor Recreation on public lands will be managed through a societal benefits-based management approach to achieve specific targeted outcomes, with the goal to maintain a freedom of recreational choice with a minimum of regulatory constraints. Where the nature of the resource attracts concentrated or intensive recreational use, public lands may be managed as a SRMA. These are areas where the BLM focuses specific management, funding, and planning to provide for the best possible recreation experience while protecting, sustaining, and enhancing the environmental resources of these areas. A framework for each SRMA's activity plan can be found in Appendix B under Administrative Actions.

Specific management direction in a SRMA is devised to provide public enjoyment, resource protection, and public health and safety. Within SRMAs, RMZs have been identified to provide better site-specific planning and management. Although identified in this document, the RMZs are subject to minor adjustment during future implementation-level planning to account for the environmental and visitor use flux that occurs. In addition, new or adjusted management/administrative actions may be developed in specific SRMA activity plans. The BLM also manages recreation in the area outside of SRMAs; this area is known as the Extensive Recreation Management Area (ERMA). There are no RMZs in ERMAs because these are by definition areas that do not receive focused, specific recreation program management.

Prescribed recreation settings or recreation management objectives are best summarized by six recreation settings or classes: Primitive, Semi-Primitive, Rural Natural, Rural Developed, Suburban, and Urban (see Appendix I). Each class prescribes an experience, setting, and potential activities as well as desired societal outcomes. Lake Havasu Field Office will manage public lands to maintain or meet these prescribed recreation settings (see Map 20).

Tables 7a through 7g describe the desired future conditions by the SRMA and RMZ. The description of desired future conditions under the Approved Plan includes:

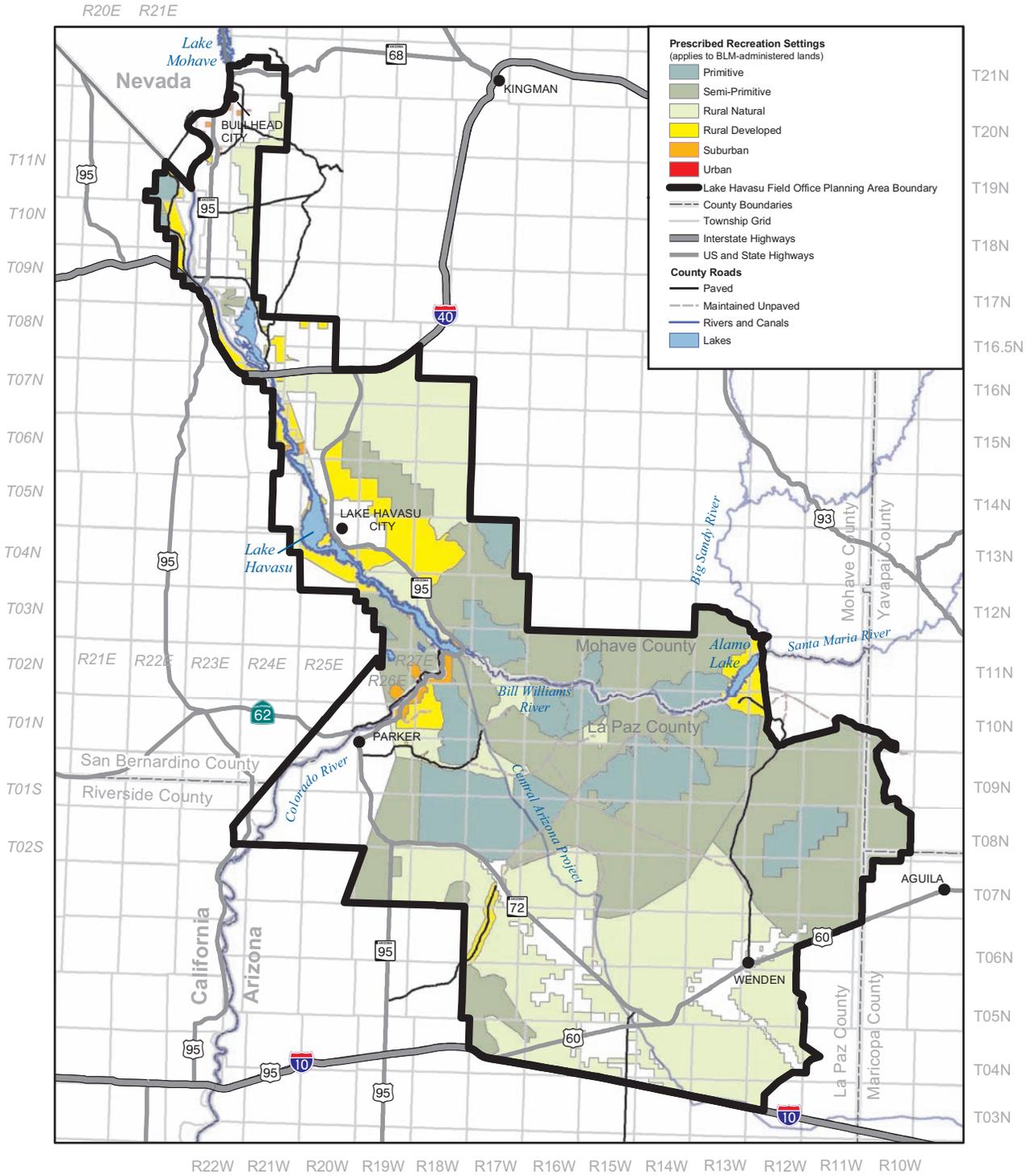
- Primary market strategy.
- Market composition.
- The niche specific to the RMZ.
- Detailed description of specific management objectives for the RMZ.
- The type of primary activities the public could expect to find within the RMZ.
- A list of experiences, benefits, and settings for which the RMZ will be managed.
- Potential outcomes for which the RMZ will be managed.

Desired future conditions for the ERMA appear in Table 7h.

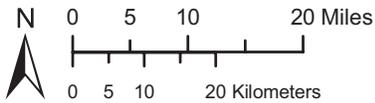
Desired Future Conditions

Table 7a. Colorado River Nature Center SRMA (See Map 21)	
RR-1	Desired Future Conditions for Colorado River Nature Center Special Recreation Management Area are as:
<i>Primary Market Strategy:</i>	Community
<i>Market</i>	Residents of the Bullhead City urban development and surrounding rural areas
RR-2	Desired Future Conditions for Colorado River Nature Center RMZ 1 – Southern Bluff will be generally managed as “Rural Natural” providing the following:
<i>Niche</i>	Provide needed natural open space, accessible only by foot, close to a population center for the appreciation of open space, cultural and biological resources.
<i>Management Objective</i>	Manage this zone to provide opportunities for community residents to engage in sustainable personal discovery, while protecting critical resources located in the area. This area serves as open space for the residents of Bullhead City. Partnerships will be sought to help improve this RMZ so that within the life of this plan most responsible visitors will attain a greater appreciation for their public lands and the natural and cultural resources found therein.
<i>Primary Activities</i>	<ul style="list-style-type: none"> ▪ Wildlife watching ▪ Hiking ▪ Cultural/historical sightseeing
<i>Experiences</i>	<ul style="list-style-type: none"> ▪ Enjoying easy access to natural landscapes ▪ Feeling good about the way shared cultural heritage is being protected ▪ Contemplating humanity’s relationship with the land ▪ Knowing that things are not going to change
<i>Benefits</i>	<p>Personal:</p> <ul style="list-style-type: none"> ▪ Greater spiritual growth ▪ Increased appreciation of the area’s cultural history

Map 20 Prescribed Recreation Settings



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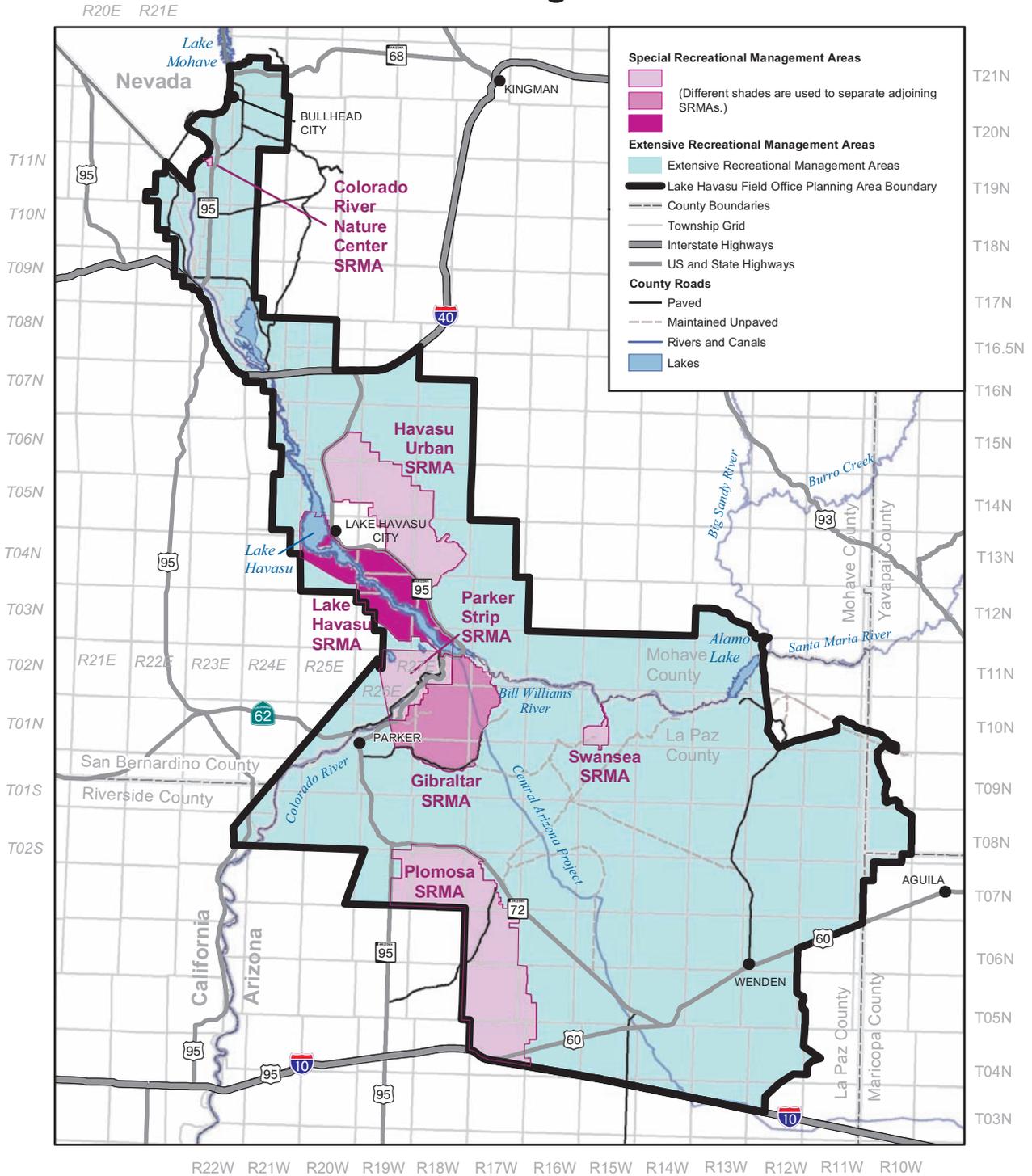


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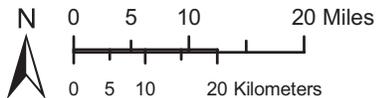
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Map 21 Lake Havasu Field Office Recreational Management Areas



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Table 7a. Colorado River Nature Center SRMA (See Map 21)

<p><i>Benefits</i></p>	<p>Community/Social:</p> <ul style="list-style-type: none"> ▪ Greater community valuation of its ethnic diversity <p>Environmental:</p> <ul style="list-style-type: none"> ▪ Greater protection of the area’s historic and archaeological sites ▪ Greater community ownership and stewardship of park, recreation, and natural resources <p>Economic:</p> <ul style="list-style-type: none"> ▪ Increased property value 		
<p><i>Setting Character Conditions</i></p>	<p>Physical</p> <p>Remoteness: Rural Natural</p> <p>Naturalness: Semi-Primitive</p> <p>Facilities: Semi-Primitive</p>	<p>Social</p> <p>Contacts: Semi-Primitive</p> <p>Group Size: Semi-Primitive</p> <p>Evidence of Use: Semi-Primitive</p>	<p>Administrative</p> <p>Mechanized Use: Primitive</p> <p>Management Controls: Semi-Primitive</p> <p>Visitor Services: Rural-Natural</p>
<p><i>Potential Outcomes</i></p>	<ul style="list-style-type: none"> ▪ Opportunities for partnerships with local agencies to realize the full potential of this area, i.e., open space, natural and cultural resource appreciation. 		
<p>RR-3</p>	<p>Desired Future Conditions for Colorado River Nature Center RMZ 2 – River Side will be generally managed as “Rural Developed” providing the following:</p>		
<p><i>Niche</i></p>	<p>Quick, easy access from Bullhead City to sustainable day-use adventure, enjoyment of Colorado River scenery, and appreciation of wildlife viewing opportunities.</p>		
<p><i>Management Objective</i></p>	<p>Manage this zone to provide opportunities for community residents to engage in sustainable personal exploration and discovery, while protecting critical resources located in the area. This RMZ is most important as open space and foot access to the Colorado River for the residents of Bullhead City. Partnerships will be sought to help improve this RMZ so that within the life of this plan most responsible visitors will attain a greater appreciation for their public lands and the natural and cultural resources found therein.</p>		
<p><i>Primary Activities</i></p>	<ul style="list-style-type: none"> ▪ Wildlife watching ▪ Fitness activity (routine walking/running) ▪ Picnicking ▪ River/beach access 		

Table 7a. Colorado River Nature Center SRMA (See Map 21)

<i>Experiences</i>	<ul style="list-style-type: none"> ▪ Enjoying easy access to natural landscapes ▪ Enjoying access to hands-on environmental learning ▪ Enjoying needed physical exercise ▪ Enjoying access to outdoor amenities close to home 		
<i>Benefits</i>	<p>Personal:</p> <ul style="list-style-type: none"> ▪ Improved opportunity to view wildlife close up ▪ Better-informed and more responsible visitor ▪ Enhanced awareness and understanding of nature <p>Community/Social:</p> <ul style="list-style-type: none"> ▪ Citizenry better informed about where to go for different kinds of recreation experiences and benefits <p>Environmental:</p> <ul style="list-style-type: none"> ▪ Reduced wildlife harassment by users of recreational facilities ▪ Increased awareness and protection of natural landscapes ▪ Reduced negative human impacts such as litter, trampling of vegetation, and unplanned trails <p>Economic:</p> <ul style="list-style-type: none"> ▪ Increased desirability as a place to live or retire 		
<i>Setting Character Conditions</i>	<p>Physical</p> <p>Remoteness: Rural Developed</p> <p>Naturalness: Rural Developed</p> <p>Facilities: Rural Developed</p>	<p>Social</p> <p>Contacts: Suburban</p> <p>Group Size: Suburban</p> <p>Evidence of Use: Rural Developed</p>	<p>Administrative</p> <p>Mechanized Use: Suburban</p> <p>Management Controls: Rural Developed</p> <p>Visitor Services: Rural Developed</p>
<i>Potential Outcomes</i>	<ul style="list-style-type: none"> ▪ Opportunities for partnerships with local agencies to realize the full potential of this area, i.e., open space, natural resource appreciation ▪ Foot access to the Colorado River 		

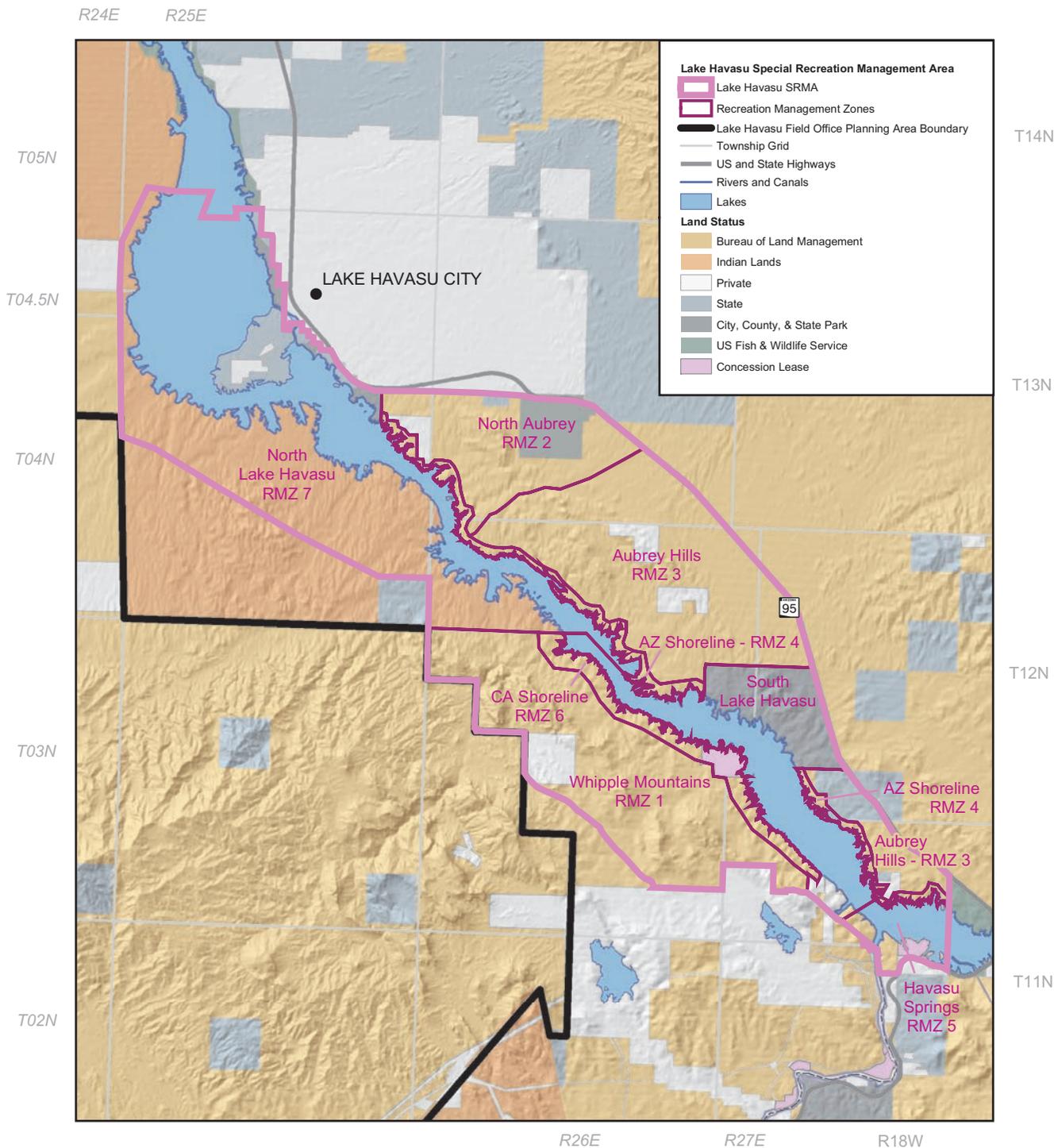
Table 7b. Lake Havasu SRMA (See Map 22)

RR-4	Desired Future Conditions for Lake Havasu Special Recreation Management Area are as:
<i>Primary Market Strategy:</i>	Destination
<i>Market</i>	Residents of and visitors to the Lake Havasu Region
<i>SRMA Desired Future Condition</i>	Manage high-volume recreation on the lake and shoreline to sustain natural resource values and recreational opportunities
RR-5	Desired Future Conditions for Lake Havasu RMZ 1 – Whipple Mountains will be generally managed as “Semi-Primitive” providing the following:
<i>Niche</i>	Primitive trekking and OHV touring in rugged scenic natural settings for visitors seeking a more primitive experience.
<i>Management Objective</i>	Manage this RMZ to provide opportunities for visitors to engage in a remote isolated recreational experience. Manage this RMZ to provide opportunities for community residents and regional visitors who use the area seasonally to engage in sustainable, primarily primitive day-use opportunities and gain appreciation of the natural setting of the Colorado River corridor through self-discovery and exploration. This area provides a back county experience in an area close to an urban area. Because of the undeveloped, primitive opportunities available in this RMZ, this area will be subject to a moderate level of management actions to achieve the desired outcomes for the majority of visitors during the life of the Approved RMP.
<i>Primary Activities</i>	<ul style="list-style-type: none"> ▪ Hiking ▪ OHV touring ▪ Backpacking ▪ Wilderness access ▪ Rockhounding
<i>Experiences</i>	<ul style="list-style-type: none"> ▪ Developing skills and abilities ▪ Testing personal endurance ▪ Enjoying risk-taking adventure ▪ Savoring the total sensory experience of a natural landscape ▪ Escaping everyday responsibilities for awhile

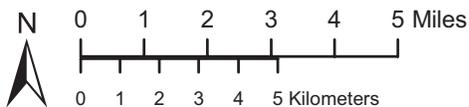
Table 7b. Lake Havasu SRMA (See Map 22)

<p><i>Benefits</i></p>	<p>Personal:</p> <ul style="list-style-type: none"> ▪ Greater self-reliance ▪ Improved skills for outdoor enjoyment ▪ Closer relationship with the natural world <p>Community/Social:</p> <ul style="list-style-type: none"> ▪ Enhanced lifestyle ▪ Increasing independence/autonomy <p>Environmental:</p> <ul style="list-style-type: none"> ▪ Reduced negative human impacts ▪ Increase awareness and protection of natural landscapes <p>Economic:</p> <ul style="list-style-type: none"> ▪ Increased desirability as a place to live or retire 		
<p><i>Setting Character Conditions</i></p>	<p>Physical</p> <p>Remoteness: Semi-Primitive</p> <p>Naturalness: Semi-Primitive</p> <p>Facilities: Primitive</p>	<p>Social</p> <p>Contacts: Primitive</p> <p>Group Size: Primitive</p> <p>Evidence of Use: Semi-Primitive</p>	<p>Administrative</p> <p>Mechanized Use: Rural Natural</p> <p>Management Controls: Semi-Primitive</p> <p>Visitor Services: Semi-Primitive</p>
<p><i>Potential Outcomes</i></p>	<ul style="list-style-type: none"> ▪ Moderate improvements to achieve targeted benefits, increased effort to manage unauthorized motor vehicle use, realize potential for solitude, unconfined primitive activities. ▪ Outfitting and guiding operations may be considered. However, other commercial activities will be evaluated on a case-by-case basis for consistency with targeted benefits and prescribed recreation settings. 		
<p>RR-6</p>	<p>Desired Future Conditions for Lake Havasu RMZ 2 - North Aubrey will be generally managed for Rural Developed to provide the following:</p>		
<p><i>Niche</i></p>	<p>Hiking, birding, scenic enjoyment, and equestrian activities in close proximity to a population center, primarily for members of the local community.</p>		

Map 22 Lake Havasu Special Recreation Management Area



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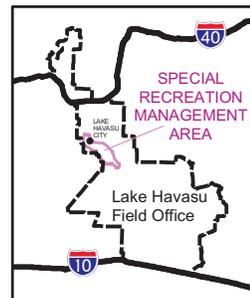


Table 7b. Lake Havasu SRMA (See Map 22)

<i>Management Objective</i>	Manage this zone to provide opportunities for regional visitors and community residents to engage in the targeted activities in a short time frame (i.e., after work or during a single day); for primarily day-use and to gain knowledge of surrounding wildlife of the Colorado River corridor through self-discovery. Motorized access restrictions (authorized users only) will be retained to support and encourage most forms of non-motorized use and to protect the sensitive natural and cultural resources contained herein. Minimal developments and considerable protection measures will be set to retain and enhance the stated outcomes in this semi-primitive setting, by the majority of visitors targeted.
<i>Primary Activities</i>	<ul style="list-style-type: none"> ▪ Hiking ▪ Wildlife viewing ▪ Pet exercise ▪ Equestrian ▪ Fitness activity ▪ Hunting
<i>Experiences</i>	<ul style="list-style-type: none"> ▪ Testing personal endurance ▪ Enjoying easy access to natural landscapes ▪ Enjoying unguided exploration ▪ Savoring the total sensory experience of a natural landscape
<i>Benefits</i>	<p>Personal:</p> <ul style="list-style-type: none"> ▪ Sense of wellness ▪ Greater self-reliance ▪ Improved physical fitness and health maintenance

Table 7b. Lake Havasu SRMA (See Map 22)

<p><i>Benefits</i></p>	<p>Community/Social:</p> <ul style="list-style-type: none"> ▪ Heightened sense of satisfaction with the community ▪ Feeling that this community is a special place to live <p>Environmental:</p> <ul style="list-style-type: none"> ▪ Greater community ownership and stewardship of park, recreation, and natural resources ▪ Greater retention of distinctive natural landscape features <p>Economic:</p> <ul style="list-style-type: none"> ▪ Increased desirability as a place to live or retire ▪ Enhanced ability for visitors to find areas providing wanted recreation experiences and benefits 		
<p><i>Setting Character Conditions</i></p>	<p>Physical</p> <p>Remoteness: Suburban</p> <p>Naturalness: Rural Developed</p> <p>Facilities: Primitive</p>	<p>Social</p> <p>Contacts: Rural Natural</p> <p>Group Size: Rural Natural</p> <p>Evidence of Use: Rural Natural</p>	<p>Administrative</p> <p>Mechanized Use: Semi-Primitive</p> <p>Management Controls: Semi-Primitive</p> <p>Visitor Services: Semi-Primitive</p>
<p><i>Potential Outcomes</i></p>	<ul style="list-style-type: none"> ▪ Opportunities for urban residents of Lake Havasu to experience a wildland setting in close proximity to the city for a wide of range environmentally sound, non-motorized, dispersed recreation activities – realizing solitude and freedom. ▪ Greater potential for interpretive developments and signing. ▪ A scenic trail will further optimize the realization of the targeted benefits. 		

Table 7b. Lake Havasu SRMA (See Map 22)

RR-7	Desired Future Conditions for Lake Havasu RMZ 3 – Aubrey Hills will be generally managed for Rural Natural to provide the following:
<i>Niche</i>	Hiking, birding, scenic enjoyment, and equestrian activities in close proximity to population center primarily for members of the local community.
<i>Management Objective</i>	Manage this zone to provide opportunities for regional visitors and community residents to engage in the targeted activities in a short time frame (i.e., after work or during a single day); for primarily day-use and to gain knowledge of surrounding wildlife of the Colorado River corridor through self-discovery. Motorized access restrictions (authorized users only) will be retained to support and encourage most forms of non-motorized use and to protect the sensitive natural and cultural resources contained herein. Minimal developments and considerable protection measures will be set to retain and enhance the stated outcomes in this semi-primitive setting, by the majority of visitors targeted.
<i>Primary Activities</i>	<ul style="list-style-type: none"> ▪ Hiking ▪ Wildlife viewing ▪ Equestrian ▪ Fitness activity ▪ Hunting
<i>Experiences</i>	<ul style="list-style-type: none"> ▪ Testing personal endurance ▪ Enjoying easy access to natural landscapes ▪ Enjoying unguided exploration ▪ Savoring the total sensory experience of a natural landscape
<i>Benefits</i>	<p>Personal:</p> <ul style="list-style-type: none"> ▪ Sense of wellness ▪ Greater self-reliance ▪ Improved physical fitness and health maintenance <p>Community/Social:</p> <ul style="list-style-type: none"> ▪ Heightened sense of satisfaction with the community ▪ Feeling that this community is a special place to live

Table 7b. Lake Havasu SRMA (See Map 22)

	<p>Environmental:</p> <ul style="list-style-type: none"> ▪ Greater community ownership and stewardship of park, recreation, and natural resources ▪ Greater retention of distinctive natural landscape features <p>Economic:</p> <ul style="list-style-type: none"> ▪ Increased desirability as a place to live or retire ▪ Enhanced ability for visitors to find areas providing wanted recreation experiences and benefits 		
<i>Setting Character Conditions</i>	<p>Physical</p> <p>Remoteness: Rural Developed</p> <p>Naturalness: Rural Natural</p> <p>Facilities: Primitive</p>	<p>Social</p> <p>Contacts: Semi-Primitive</p> <p>Group Size: Semi-Primitive</p> <p>Evidence of Use: Semi-Primitive</p>	<p>Administrative</p> <p>Mechanized Use: Semi-Primitive</p> <p>Management Controls: Semi-Primitive</p> <p>Visitor Services: Semi-Primitive</p>
<i>Potential Outcomes</i>	<ul style="list-style-type: none"> ▪ Opportunities for urban residents of Lake Havasu to experience a wildland setting in close proximity to the city for a wide range of environmentally sound, non-motorized, dispersed recreation activities – realizing solitude and freedom. ▪ Partnerships will be developed with landowners, agencies, and stakeholders. ▪ A scenic trail will further optimize the realization of the targeted benefits. 		
RR-8	<p>Desired Future Conditions for Lake Havasu RMZ 4 – AZ Shoreline will be generally managed for Rural Developed to provide the following:</p>		
<i>Niche</i>	<p>Fishing, boat-in-only campsites, day-use sites for personal enjoyment, watercraft motor sports activities, scenic value, wildlife observation, remote rugged setting, social appreciation, an escape for urban visitors.</p>		

Table 7b. Lake Havasu SRMA (See Map 22)

<p><i>Management Objective</i></p>	<p>The BLM will provide opportunities for visitors to this extremely high-demand, water-based outdoor recreation resource to engage in fishing, watercraft motor sports activities, camping, and day-use activities and realize the targeted benefits. The BLM will intensely manage public lands in this RMZ to provide opportunities for regional visitors from Southern California and Arizona who use the area seasonally to engage in sustainable recreational activities in this easily accessed but rare desert water-based opportunity. Targeted use is primarily day-use and overnight camping for the purpose of participating in all manner of motorized boating activities and fishing in a natural environment. The BLM had begun intense shoreline campsite development, law enforcement patrols, visitor services patrols, and fee collection operations. The BLM anticipates continued leadership of the Lake Havasu Fisheries Partnership to sustain a healthy and productive fishery, plus participating with more than 25 separate jurisdictions on and adjacent to the lake to develop a Coordinated Lake Management Plan (interagency and stakeholders). From this future planning process will come more detailed benefits-based outcomes for the public lands in this SRMA. The BLM will continue with current lake and shoreline operations and increase the BLM’s presence of both staff members and facilities. Visitor demand and preference already exceed the BLM’s capacity to manage with current resources. Surveys will be conducted of visitor demand and satisfaction and future planning with the other jurisdictions will be initiated as soon as possible to better target or modify the desired outcomes currently understood by the BLM. This water-based recreation resource is unique and demand is growing each season at such an exponential rate that further study may reveal the scope of demand of national significance. A more intensive “park-like” management approach will be required to achieve future outcomes. Funding for such an approach will be sought from many sources.</p>
<p><i>Primary Activities</i></p>	<ul style="list-style-type: none"> ▪ Special Recreational Permits (SRPs) ▪ Recreation use permits ▪ Personal watercraft (PWC) use ▪ Waterskiing and wakeboarding ▪ Shoreline fishing ▪ Boat fishing ▪ Competitive fishing ▪ Meat fishing ▪ Camping ▪ Boating motor sports ▪ Poker run, aquatic ▪ Swimming ▪ Scuba/snorkel

Table 7b. Lake Havasu SRMA (See Map 22)

	<ul style="list-style-type: none"> ▪ Hiking ▪ Wildlife watching ▪ Sunbathing/relaxing
<i>Experiences</i>	<ul style="list-style-type: none"> ▪ Developing skills and abilities ▪ Enjoying the esteem of others ▪ Testing personal endurance ▪ Telling others about the trip ▪ Enjoying risk-taking adventure ▪ Discussing equipment with others ▪ Escaping everyday responsibilities for awhile ▪ Experiencing a greater sense of independence ▪ Enjoying unguided exploration ▪ Being in control of things that happen ▪ Enjoying the closeness of friends and family ▪ Relishing group affiliation and togetherness ▪ Enjoying meeting new people with similar interests ▪ Enjoying participating in group outdoor events ▪ Savoring the total sensory experience (sight, sound, and smell) of a natural landscape ▪ Enjoying easy access to natural landscapes

Table 7b. Lake Havasu SRMA (See Map 22)

<i>Benefits</i>	<p>Personal:</p> <ul style="list-style-type: none"> ▪ Restored mind from unwanted stress ▪ Greater self-reliance ▪ More balanced competitive spirit ▪ Stronger ties with family and friends <p>Community/Social:</p> <ul style="list-style-type: none"> ▪ Greater family bonding ▪ Improved group cooperation ▪ Lifestyle improvement or maintenance ▪ Enhanced lifestyle <p>Environmental:</p> <ul style="list-style-type: none"> ▪ Maintenance of distinctive recreation setting character ▪ Improved maintenance of physical facilities ▪ Reduced negative human impacts <p>Economic:</p> <ul style="list-style-type: none"> ▪ Improved local economic stability ▪ More positive contributions to local and regional economies ▪ Increased local tax revenue ▪ Increased local job opportunities ▪ Greater value-added local services/industry ▪ Increased desirability as a place to live or retire ▪ Maintenance of community’s distinctive recreation-tourism market niche or character ▪ Increased property values
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Table 7b. Lake Havasu SRMA (See Map 22)

<i>Setting Character Conditions</i>	Physical	Social	Administrative
	Remoteness: Suburban Naturalness: Rural Developed Facilities: Rural Developed	Contacts: Suburban Group Size: Suburban Evidence of Use: Suburban	Mechanized Use: Urban Management Controls: Rural Developed Visitor Services: Rural Developed
<i>Potential Outcomes</i>	<ul style="list-style-type: none"> ▪ Opportunities for extreme world-class power boating, fishing, and water-based motor sports in a rare, wildland desert setting. ▪ Partnerships with many agencies and jurisdictions will be sought to develop a coordinated management approach to lake-based recreation and resource protection. ▪ As demand increases, further environmentally sound recreation developments may be considered. ▪ The personal delivery of on-the-ground visitor services and interpretation must be expanded. ▪ Appropriate vending may be considered on a site-specific basis and with a multi-jurisdictional approach. ▪ A more sophisticated/automated means for the collection of fees will be considered. ▪ A non-motorized scenic trail and additional shoreline fishing sites may enhance the realization of the targeted benefits. 		
RR-9	Desired Future Conditions for Lake Havasu RMZ 5 – Havasu Springs will be generally managed for Suburban to provide the following:		
<i>Niche</i>	Boat launch, boating activities, shoreline fishing facilities, and commercial amenities in a more primitive setting for personal enjoyment. Winter visitors seeking the region’s mild winter weather.		
<i>Management Objective</i>	Manage this RMZ to provide visitors with access to a variety of water sports, recreational fishing, and vacation use/seasonal occupancy opportunities. Manage this zone to provide opportunities for regional, national, and international visitors who use the area seasonally to engage in sustainable, easy urban access for primarily day-use/long-term winter occupancy and overnight camping to engage in all manner of recreational activities in a natural environment. This area joins the Bill Williams River National Wildlife Refuge and the Parker Dam Security zone and contains the BLM-authorized concession known as Havasu Springs Resort, managed for specific outcomes based on economic demand, clean water, and a productive fishery. Emphasis will be placed on improved facilities, facilities maintenance, fish habitat improvements, and access/interpretive developments.		

Table 7b. Lake Havasu SRMA (See Map 22)

<i>Primary Activities</i>	<ul style="list-style-type: none"> ▪ Wildlife viewing ▪ Boating access ▪ Parker Dam viewing ▪ Golf carts ▪ Recreational shoreline fishing
<i>Experiences</i>	<ul style="list-style-type: none"> ▪ Telling others about the trip ▪ Enjoying unguided exploration ▪ Discussing equipment with others ▪ Enjoying the closeness of friends and family ▪ Relishing group affiliation and togetherness ▪ Enjoying meeting new people with similar interests
<i>Benefits</i>	<p>Personal:</p> <ul style="list-style-type: none"> ▪ Restore mind from unwanted stress ▪ Stronger ties with family and friends <p>Community/Social:</p> <ul style="list-style-type: none"> ▪ Greater interaction with visitors from different cultures ▪ Increased independence/autonomy <p>Environmental:</p> <ul style="list-style-type: none"> ▪ Maintenance of distinctive recreation setting character ▪ Maintenance of productively diverse sport and native fishery <p>Economic:</p> <ul style="list-style-type: none"> ▪ Improved local economic stability ▪ More positive contributions to local and regional economies ▪ Increased local tax revenue ▪ Increased local job opportunities ▪ Greater value-added local services/industry

Table 7b. Lake Havasu SRMA (See Map 22)

	<ul style="list-style-type: none"> ▪ Increased desirability as a place to visit ▪ Increased property values ▪ Clean water to satisfy all designated beneficial uses 												
<i>Setting Character Conditions</i>	<table border="0" style="width: 100%;"> <tr> <td style="width: 33%;">Physical</td> <td style="width: 33%;">Social</td> <td style="width: 33%;">Administrative</td> </tr> <tr> <td>Remoteness: Suburban</td> <td>Contacts: Suburban</td> <td>Mechanized Use: Urban</td> </tr> <tr> <td>Naturalness: Suburban</td> <td>Group Size: Rural Developed</td> <td>Management Controls: Suburban</td> </tr> <tr> <td>Facilities: Urban</td> <td>Evidence of Use: Suburban</td> <td>Visitor Services: Semi-Primitive</td> </tr> </table>	Physical	Social	Administrative	Remoteness: Suburban	Contacts: Suburban	Mechanized Use: Urban	Naturalness: Suburban	Group Size: Rural Developed	Management Controls: Suburban	Facilities: Urban	Evidence of Use: Suburban	Visitor Services: Semi-Primitive
Physical	Social	Administrative											
Remoteness: Suburban	Contacts: Suburban	Mechanized Use: Urban											
Naturalness: Suburban	Group Size: Rural Developed	Management Controls: Suburban											
Facilities: Urban	Evidence of Use: Suburban	Visitor Services: Semi-Primitive											
<i>Potential Outcomes</i>	<ul style="list-style-type: none"> ▪ Continue cooperation and coordination with concession operators to enhance targeted benefits. ▪ Where long-term impacts from recreation patterns are observed or anticipated in this zone, the BLM will focus on mitigating further environmental impacts. ▪ The BLM may consider environmental education and interpretation on site with coordination of concessionaire. 												
RR-10	Desired Future Conditions for Lake Havasu RMZ 6 – CA Shoreline will be generally managed for Semi-Primitive (except for the area commonly known as Black Meadow Landing, which will generally be managed for Suburban, consistent with the recreation concessions located on the Parker Strip RMZ 1) to provide the following:												
<i>Niche</i>	Fishing for personal enjoyment, watercraft motor sports activities, scenic appreciation, wildlife observation in a primitive setting, and social appreciation. Shoreline use minimal due to terrain.												
<i>Management Objective</i>	Manage to provide opportunities for visitors to engage in fishing, watercraft motor sports activities, day-use activities, and realize the targeted benefits. Manage this zone to provide opportunities for regional visitors to engage in sustainable recreational activities. These activities include access for primarily day use and overnight camping and boating activities in a natural environment. The BLM will continue to coordinate with Black Meadow Landing and enhance the unique opportunities provided by this development. Beyond Black Meadow Landing, minor developments may be permitted and regulatory signing may be used minimally. The BLM will continue to monitor and protect the prescribed recreation setting.												
<i>Primary Activities</i>	<ul style="list-style-type: none"> ▪ Fishing ▪ Camping ▪ Boating/access ▪ Boating motor sports ▪ PWC use 												

Table 7b. Lake Havasu SRMA (See Map 22)

	<ul style="list-style-type: none"> ▪ Poker run, aquatic ▪ Waterskiing/wakeboarding
<i>Experiences</i>	<ul style="list-style-type: none"> ▪ Developing skills and abilities ▪ Enjoying the esteem of others ▪ Testing personal endurance ▪ Telling others about the trip ▪ Enjoying risk-taking adventure ▪ Discussing equipment with others ▪ Escaping everyday responsibilities for awhile ▪ Experiencing a greater sense of independence ▪ Enjoying unguided exploration ▪ Being in control of things that happen ▪ Enjoying the closeness of friends and family ▪ Relishing group affiliation and togetherness ▪ Enjoying meeting new people with similar interests ▪ Enjoying participating in group outdoor events ▪ Savoring the total sensory experience (sight, sound, and smell) of a natural landscape ▪ Enjoying easy access to natural landscapes
<i>Benefits</i>	<p>Personal:</p> <ul style="list-style-type: none"> ▪ Restored mind from unwanted stress ▪ Greater self-reliance ▪ More balanced competitive spirit ▪ Stronger ties with family and friends <p>Community/Social:</p> <ul style="list-style-type: none"> ▪ Greater family bonding ▪ Improved group cooperation ▪ Lifestyle improvement or maintenance

Table 7b. Lake Havasu SRMA (See Map 22)

	<ul style="list-style-type: none"> ▪ Enhanced lifestyle <p>Environmental:</p> <ul style="list-style-type: none"> ▪ Maintenance of distinctive recreation setting character ▪ Improved maintenance of physical facilities ▪ Reduced negative human impacts <p>Economic:</p> <ul style="list-style-type: none"> ▪ Improved local economic stability ▪ More positive contributions to local and regional economies ▪ Increased local tax revenue ▪ Increased local job opportunities ▪ Greater value-added local services/industry ▪ Increased desirability as a place to live or retire ▪ Maintenance of community’s distinctive recreation-tourism market niche or character ▪ Increased property values 		
<i>Setting Character Conditions</i>	<p>Physical</p> <p>Remoteness: Rural Natural</p> <p>Naturalness: Semi-Primitive</p> <p>Facilities: Primitive</p>	<p>Social</p> <p>Contacts: Semi-Primitive</p> <p>Group Size: Rural Natural</p> <p>Evidence of Use: Primitive Transition</p>	<p>Administrative</p> <p>Mechanized Use: Urban</p> <p>Management Controls: Primitive</p> <p>Visitor Services: Semi-Primitive</p>
<i>Potential Outcomes</i>	<ul style="list-style-type: none"> ▪ The BLM will maintain the primitive setting of this unique, world-class, water-based recreation opportunity. ▪ The BLM may consider fully self-contained, floating camping pads, to be used as a tool for resource protection and enhancement of public safety. However, development of these facilities will be minimal, on a site-specific basis, and will occur where evidence of environmental impact and danger to the public exist. 		

Table 7b. Lake Havasu SRMA (See Map 22)

RR-11	Desired Future Conditions for Lake Havasu RMZ 7 – North Lake Havasu will be generally managed for Rural Developed to provide the following:
<i>Niche</i>	Boating for pleasure in close proximity to the services provided by Lake Havasu City. SRPs related to events that impact lake bottom managed by the BLM.
<i>Management Objective</i>	Manage this zone to provide opportunities for visitors and residents to engage in a variety of water and shoreline related activities, providing continuity to management through collaborative partnerships with other entities. Manage this zone to provide environmentally responsible recreation opportunities to include Arizona shoreline fishing docks and enhancement or protection of important fish habitats from impacts to the lake bottom.
<i>Primary Activities</i>	<ul style="list-style-type: none"> ▪ Boating, motor sports ▪ Fishing ▪ Public safety ▪ SRPs
<i>Experiences</i>	<ul style="list-style-type: none"> ▪ Enjoying risk-taking adventure ▪ Enjoying easy access to natural landscapes
<i>Benefits</i>	<p>Personal:</p> <ul style="list-style-type: none"> ▪ Improved outdoor recreation skills ▪ More balanced competitive spirit ▪ Closer relationship to the natural world <p>Community/Social:</p> <ul style="list-style-type: none"> ▪ Greater family bonding ▪ Improved group cooperation ▪ Lifestyle improvement or maintenance ▪ Enhanced lifestyle <p>Environmental:</p> <ul style="list-style-type: none"> ▪ Maintenance of distinctive recreation setting character

Table 7b. Lake Havasu SRMA (See Map 22)

	<ul style="list-style-type: none"> ▪ Improved maintenance of physical facilities ▪ Reduced negative human impacts <p>Economic:</p> <ul style="list-style-type: none"> ▪ Improved local economic stability ▪ More positive contributions to local and regional economies ▪ Increased local tax revenue ▪ Increased local job opportunities ▪ Greater value-added local services/industry ▪ Increased desirability as a place to live or retire ▪ Maintenance of community’s distinctive recreation-tourism market niche or character ▪ Increased property values 												
<i>Setting Character Conditions</i>	<table border="0" style="width: 100%;"> <tr> <td style="width: 33%;">Physical</td> <td style="width: 33%;">Social</td> <td style="width: 33%;">Administrative</td> </tr> <tr> <td>Remoteness: Rural Developed</td> <td>Contacts: Suburban</td> <td>Mechanized Use: Urban</td> </tr> <tr> <td>Naturalness: Rural Developed</td> <td>Group Size: Suburban</td> <td>Management Controls: Semi-Primitive</td> </tr> <tr> <td>Facilities: Rural Developed</td> <td>Evidence of Use: Suburban</td> <td>Visitor Services: Semi-Primitive</td> </tr> </table>	Physical	Social	Administrative	Remoteness: Rural Developed	Contacts: Suburban	Mechanized Use: Urban	Naturalness: Rural Developed	Group Size: Suburban	Management Controls: Semi-Primitive	Facilities: Rural Developed	Evidence of Use: Suburban	Visitor Services: Semi-Primitive
Physical	Social	Administrative											
Remoteness: Rural Developed	Contacts: Suburban	Mechanized Use: Urban											
Naturalness: Rural Developed	Group Size: Suburban	Management Controls: Semi-Primitive											
Facilities: Rural Developed	Evidence of Use: Suburban	Visitor Services: Semi-Primitive											
<i>Potential Outcomes</i>	<ul style="list-style-type: none"> ▪ Partnerships with many agencies and jurisdictions will be sought to develop a coordinated management approach to lake-based recreation and resource protection. ▪ Increased visitor services patrols and expanded shoreline fishing opportunities may enhance the targeted benefits. ▪ The BLM will continue to require SRP applications for all events impacting the lake bottom. 												
RR-12	Desired Future Conditions for Lake Havasu RMZ 8 – South Lake Havasu will be generally managed for Rural Natural to provide the following:												
<i>Niche</i>	Boating for pleasure in a natural scenic rural area. SRPs related to events that impact lake bottom managed by the BLM.												
<i>Management Objective</i>	This RMZ is entirely Cattail Cove State Park. The BLM will cooperate with Arizona State Parks to assist in the management of this zone in whatever manner is consistent with the BLM law, policy, and regulation and as funding is available.												

Table 7b. Lake Havasu SRMA (See Map 22)

<i>Primary Activities</i>	<ul style="list-style-type: none"> ▪ Boating, motor sports ▪ Fishing ▪ Public safety ▪ SRPs
<i>Experiences</i>	<ul style="list-style-type: none"> ▪ Enjoying risk-taking adventure ▪ Enjoying easy access to natural landscapes
<i>Benefits</i>	<p>Personal:</p> <ul style="list-style-type: none"> ▪ Improved outdoor recreation skills ▪ More balanced competitive spirit ▪ Closer relationship to the natural world <p>Community/Social:</p> <ul style="list-style-type: none"> ▪ Greater family bonding ▪ Improved group cooperation ▪ Lifestyle improvement or maintenance ▪ Enhanced lifestyle <p>Environmental:</p> <ul style="list-style-type: none"> ▪ Maintenance of distinctive recreation setting character ▪ Improved maintenance of physical facilities ▪ Reduced negative human impacts <p>Economic:</p> <ul style="list-style-type: none"> ▪ Improved local economic stability ▪ More positive contributions to local and regional economies ▪ Increased local tax revenue ▪ Increased local job opportunities ▪ Greater value-added local services/industry ▪ Increased desirability as a place to live or retire

Table 7b. Lake Havasu SRMA (See Map 22)			
	<ul style="list-style-type: none"> ▪ Maintenance of community’s distinctive recreation-tourism market niche or character ▪ Increased property values 		
<i>Setting Character Conditions</i>	Physical	Social	Administrative
	Remoteness: Rural Natural	Contacts: Suburban	Mechanized Use: Urban
	Naturalness: Rural Developed	Group Size: Suburban	Management Controls: Semi-Primitive
	Facilities: Semi-Primitive	Evidence of Use: Suburban	Visitor Services: Semi-Primitive
<i>Potential Outcomes</i>	<ul style="list-style-type: none"> ▪ The BLM will cooperate with Arizona State Parks, and will partner with many agencies and jurisdictions to develop a coordinated management approach to lake-based recreation and resource protection. ▪ The BLM will continue to require SRP applications for all events impacting the lake bottom, where applicable. 		

Table 7c. Parker Strip SRMA (See Map 21)	
RR-13	Desired Future Conditions for Parker Strip Special Recreation Management Area are as:
<i>Primary Market Strategy:</i>	Destination
<i>Market</i>	Regional, national, and international visitors to the Lower Colorado River
RR-14	Desired Future Conditions for Parker Strip RMZ 1 – Parker Strip Urban will be generally managed for Suburban providing the following:
<i>Niche</i>	Vacation use/seasonal occupancy sites and recreation opportunities including boat launching along the banks of the Lower Colorado River.
<i>Management Objective</i>	Manage to provide visitors with access to a wide variety of recreational opportunities through concessions and BLM-managed facilities. Manage this zone to provide opportunities for regional, national, and international visitors who use the area seasonally. Enable them easy access to enjoyment of the natural environment through a variety of sustainable recreational activities, including day-use or overnight camping and long-term winter use.

Table 7c. Parker Strip SRMA (See Map 21)

<p><i>Primary Activities</i></p>	<ul style="list-style-type: none"> ▪ All-terrain vehicle (ATV) use ▪ Wildlife viewing ▪ Boating access ▪ Cultural/historical sightseeing ▪ Golf ▪ Camping, staying in resorts
<p><i>Experiences</i></p>	<ul style="list-style-type: none"> ▪ Telling others about the trip ▪ Enjoying unguided exploration ▪ Discussing equipment with others ▪ Enjoying the closeness of friends and family ▪ Relishing group affiliation and togetherness ▪ Enjoying meeting new people with similar interests
<p><i>Benefits</i></p>	<p>Personal:</p> <ul style="list-style-type: none"> ▪ Restore mind from unwanted stress ▪ Stronger ties with family and friends <p>Community/Social:</p> <ul style="list-style-type: none"> ▪ Greater interaction with visitors from different cultures ▪ Increased independence/autonomy <p>Environmental:</p> <ul style="list-style-type: none"> ▪ Maintenance of distinctive recreation setting character <p>Economic:</p> <ul style="list-style-type: none"> ▪ Improved local economic stability ▪ More positive contributions to local and regional economies ▪ Increased local tax revenue ▪ Increased local job opportunities ▪ Greater value-added local services/industry

Table 7c. Parker Strip SRMA (See Map 21)

	<ul style="list-style-type: none"> ▪ Increased desirability as a place to live or retire ▪ Increased property values 												
<i>Setting Character Conditions</i>	<table border="0" style="width: 100%;"> <tr> <td style="width: 33%;">Physical</td> <td style="width: 33%;">Social</td> <td style="width: 33%;">Administrative</td> </tr> <tr> <td>Remoteness: Suburban</td> <td>Contacts: Suburban</td> <td>Mechanized Use: Urban</td> </tr> <tr> <td>Naturalness: Suburban</td> <td>Group Size: Rural Developed</td> <td>Management Controls: Suburban</td> </tr> <tr> <td>Facilities: Urban</td> <td>Evidence of Use: Suburban</td> <td>Visitor Services: Semi-Primitive</td> </tr> </table>	Physical	Social	Administrative	Remoteness: Suburban	Contacts: Suburban	Mechanized Use: Urban	Naturalness: Suburban	Group Size: Rural Developed	Management Controls: Suburban	Facilities: Urban	Evidence of Use: Suburban	Visitor Services: Semi-Primitive
Physical	Social	Administrative											
Remoteness: Suburban	Contacts: Suburban	Mechanized Use: Urban											
Naturalness: Suburban	Group Size: Rural Developed	Management Controls: Suburban											
Facilities: Urban	Evidence of Use: Suburban	Visitor Services: Semi-Primitive											
<i>Potential Outcomes</i>	<ul style="list-style-type: none"> ▪ Continue cooperation and coordination with concession operators to enhance targeted benefits. ▪ Where long-term impacts from recreation patterns are observed or anticipated in this zone, the BLM will focus on mitigating further environmental impacts. ▪ The BLM may consider environmental education and interpretation on site with cooperation of concessionaire to enhance targeted benefits. 												
RR-15	Desired Future Conditions for Parker Strip RMZ 2 – Crossroads and Copper Basin will be generally managed for Suburban providing the following:												
<i>Niche</i>	Unrestricted OHV recreation in an open area setting for personal exploration and challenge.												
<i>Management Objective</i>	Manage to provide opportunities for visitors to engage in unrestricted OHV play/recreation in an open area. Areas for this type of recreation are rare in this region. Manage this zone to provide opportunities for regional, national, and international visitors who use the area seasonally to engage in sustainable, easy urban access for unrestricted OHV recreation primarily as day use in a natural environment. Increased signing, development, and interpretive measures will be adopted. Stop OHV play outside of the open areas.												
<i>Primary Activities</i>	<ul style="list-style-type: none"> ▪ 4×4 vehicles ▪ ATV use ▪ OHV ▪ Golf carts (modified utility) ▪ Hill climbing ▪ Motorcycle use ▪ Permitted motorcycle/ATV ▪ Public safety 												

Table 7c. Parker Strip SRMA (See Map 21)

	<ul style="list-style-type: none"> ▪ Staging area ▪ Utility vehicle (UTV)
<i>Experiences</i>	<ul style="list-style-type: none"> ▪ Developing skills and abilities ▪ Enjoying the esteem of others ▪ Testing personal endurance ▪ Gaining a greater sense of self-confidence ▪ Telling others about the trip ▪ Enjoying risk-taking adventure ▪ Discussing equipment with others ▪ Enjoying meeting new people with similar interests
<i>Benefits</i>	<p>Personal:</p> <ul style="list-style-type: none"> ▪ Improved mental wellbeing ▪ Greater self-reliance ▪ Improved skills for outdoor enjoyment <p>Community/Social:</p> <ul style="list-style-type: none"> ▪ Heightened sense of satisfaction with the community ▪ Greater community involvement in recreation and other land use decisions <p>Environmental:</p> <ul style="list-style-type: none"> ▪ Maintenance of distinctive recreation setting character ▪ Improved maintenance of physical facilities <p>Economic:</p> <ul style="list-style-type: none"> ▪ Increased desirability as a place to live or retire ▪ Increased property values ▪ Increased local tourism revenue

Table 7c. Parker Strip SRMA (See Map 21)

<i>Setting Character Conditions</i>	Physical	Social	Administrative
	Remoteness: Rural Natural Naturalness: Rural Developed Facilities: Suburban	Contacts: Rural Natural Group Size: Rural Natural Evidence of Use: Rural Natural	Mechanized Use: Rural Developed Management Controls: Rural Developed Visitor Services: Suburban
<i>Potential Outcomes</i>	<ul style="list-style-type: none"> ▪ The BLM will manage this RMZ as an OHV open area, which as such, fully realizes the targeted benefits. ▪ The BLM will cooperate with USFWS, CDFG, the California Off-Highway Vehicle Commission, California State Parks, Off-Highway Motorized Vehicle Recreation Division, grants programs, and other stakeholders and jurisdictions. ▪ The BLM will prioritize the use of methods and mechanisms to contain OHV recreation within the open areas. ▪ To realize desired outcomes the BLM will emphasize rider education and environmental interpretation through increased developments, signs, and brochures. 		
RR-16	Desired Future Conditions for Parker Strip RMZ 3 – Parker Strip Back Country will be generally managed for Semi-Primitive providing the following:		
<i>Niche</i>	Primitive trekking and OHV touring on designated routes in rugged scenic natural settings for visitors seeking a semi-primitive experience.		
<i>Management Objective</i>	Manage to provide opportunities for visitors to engage in a remote isolated recreation experience. Manage this zone to provide opportunities for community residents and visitors who use the area seasonally to engage in sustainable, urban access for primarily primitive day-use opportunities and gain appreciation of the natural setting of the Colorado River corridor through self-discovery, and OHV touring on designated routes. Stop OHV play outside of the open areas.		
<i>Primary Activities</i>	<ul style="list-style-type: none"> ▪ Hiking ▪ OHV touring ▪ Backpacking ▪ Rockhounding 		

Table 7c. Parker Strip SRMA (See Map 21)

<i>Experiences</i>	<ul style="list-style-type: none"> ▪ Developing skills and abilities ▪ Testing personal endurance ▪ Enjoying risk-taking adventure ▪ Savoring the total sensory experience of a natural landscape ▪ Escaping everyday responsibilities for awhile 		
<i>Benefits</i>	<p>Personal:</p> <ul style="list-style-type: none"> ▪ Greater self-reliance ▪ Improved skills for outdoor enjoyment ▪ Closer relationship with the natural world 		
	<p>Community/Social:</p> <ul style="list-style-type: none"> ▪ Enhanced lifestyle ▪ Increasing independence/autonomy 		
<i>Benefits</i>	<p>Environmental:</p> <ul style="list-style-type: none"> ▪ Reduced negative human impacts ▪ Increase awareness and protection of natural landscapes <p>Economic:</p> <ul style="list-style-type: none"> ▪ Increased desirability as a place to live or retire 		
<i>Setting Character Conditions</i>	<p>Physical</p> <p>Remoteness: Semi-Primitive</p> <p>Naturalness: Rural Natural</p> <p>Facilities: Primitive</p>	<p>Social</p> <p>Contacts: Primitive</p> <p>Group Size: Primitive</p> <p>Evidence of Use: Semi-Primitive</p>	<p>Administrative</p> <p>Mechanized Use: Rural Natural</p> <p>Management Controls: Semi-Primitive</p> <p>Visitor Services: Semi-Primitive</p>
<i>Potential Outcomes</i>	<ul style="list-style-type: none"> ▪ Minimal improvements to achieve targeted benefits, realize potential for solitude, unconfined primitive activities; increased effort to manage unauthorized motor vehicle use. ▪ Outfitting/guiding could be considered in certain situations. 		

Table 7d. Swansea SRMA (See Map 21)

RR-17	Desired Future Conditions for Swansea Special Recreation Management Area are as:
<i>Primary Market Strategy:</i>	Destination/Undeveloped
<i>Market</i>	Residents and visitors to western Arizona
RR-18	Desired Future Conditions for Swansea RMZ 1 – Swansea will be generally managed for Rural Natural providing the following:
<i>Niche</i>	Cultural discovery and personal exploration of historic mining.
<i>Management Objective</i>	Manage this zone to provide opportunities for visitors to engage in personal and guided (interpreted) discovery of the historical significance of the area. Manage this zone to provide opportunities for community residents and regional, national, and international visitors who use the area seasonally to engage in sustainable day-use/camping, OHV touring opportunities, opportunities to learn about historical mining, and to gain appreciation of the natural setting of the greater Swansea region through self-discovery.
<i>Primary Activities</i>	<ul style="list-style-type: none"> ▪ Camping ▪ Cultural/historical sightseeing ▪ Rockhounding ▪ Picnicking ▪ 4-wheel-drive touring ▪ Wilderness access ▪ Sightseeing, photography
<i>Experiences</i>	<ul style="list-style-type: none"> ▪ Savoring the total sensory experience of a natural landscape ▪ Escaping everyday responsibilities for awhile ▪ Feeling good about the way shared cultural heritage is being protected ▪ Learning about things here ▪ Just knowing this attraction is in or near the community

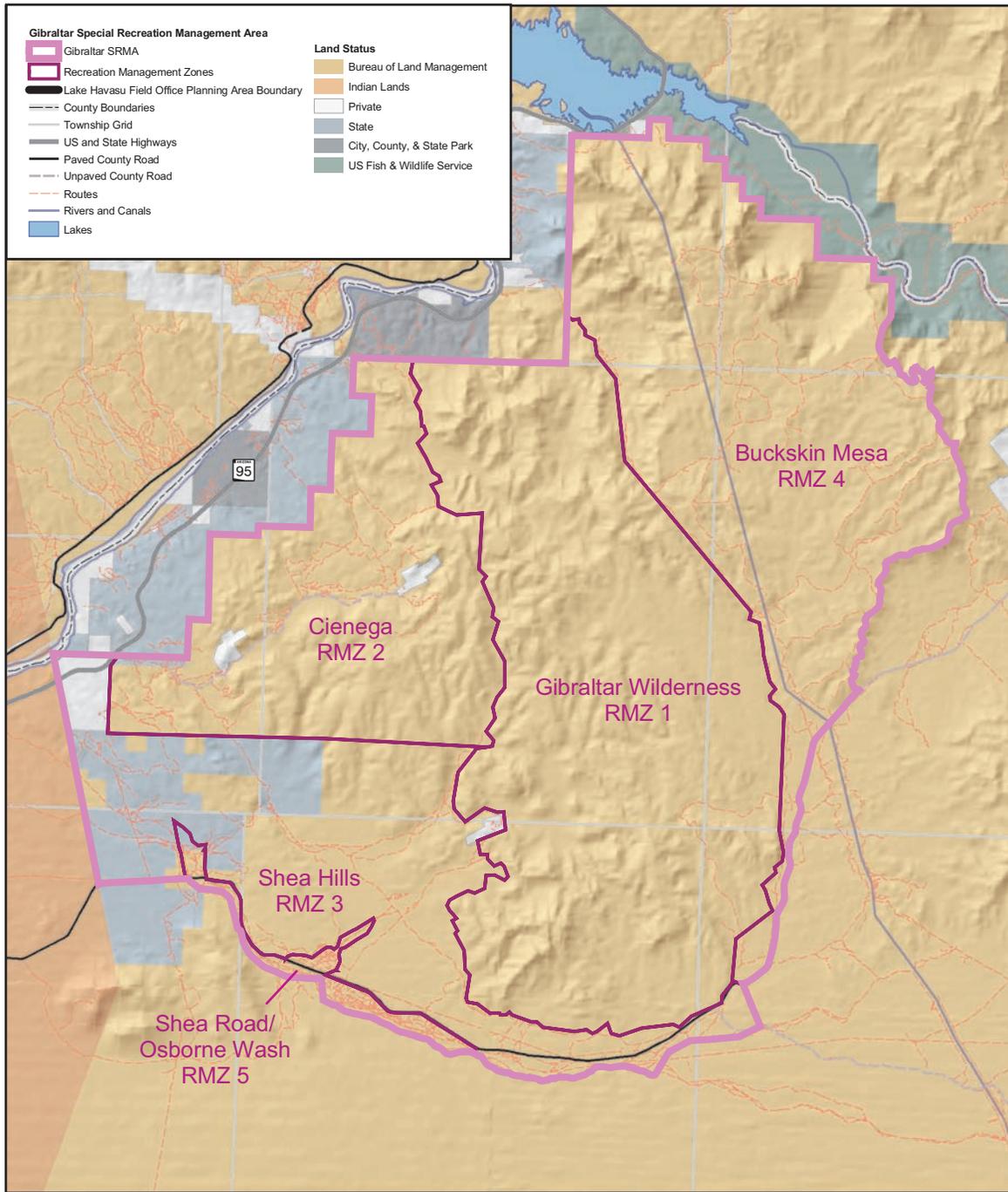
Table 7d. Swansea SRMA (See Map 21)

<i>Benefits</i>	<p>Personal:</p> <ul style="list-style-type: none"> ▪ Greater respect for shared cultural heritage ▪ Closer relationship with the natural world ▪ Enhanced sense of personal freedom <p>Community/Social:</p> <ul style="list-style-type: none"> ▪ Greater understanding of the community’s cultural identity ▪ Greater community involvement in recreation and other land use decisions <p>Environmental:</p> <ul style="list-style-type: none"> ▪ Reduced negative human impacts ▪ Increase awareness and protection of natural landscapes ▪ Reduced looting of historic and prehistoric sites ▪ Sustainability of community’s cultural heritage <p>Economic:</p> <ul style="list-style-type: none"> ▪ Increased desirability as a place to live or retire ▪ Enhanced ability for visitors to find areas providing wanted recreation experiences and benefits 		
<i>Setting Character Conditions</i>	<p>Physical</p> <p>Remoteness: Rural Developed</p> <p>Naturalness: Rural Developed</p> <p>Facilities: Rural Developed</p>	<p>Social</p> <p>Contacts: Semi-Primitive</p> <p>Group Size: Semi-Primitive</p> <p>Evidence of Use: Rural Natural</p>	<p>Administrative</p> <p>Mechanized Use: Rural Developed</p> <p>Management Controls: Rural Natural</p> <p>Visitor Services: Rural Developed</p>
<i>Potential Outcomes</i>	<ul style="list-style-type: none"> ▪ Minimal improvements to achieve targeted benefits, increased effort to manage unauthorized motor vehicle use. ▪ Public education related to historic mining will be emphasized to realize desired benefits. ▪ The development of interpretive trails will further achieve the targeted benefits and resource protection. ▪ Camping may be allowed. 		

Table 7e. Gibraltar SRMA (See Map 23)

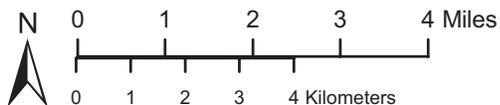
RR-19	Desired Future Conditions for Gibraltar Special Recreation Management Area are as:
<i>Primary Market Strategy:</i>	Destination/Undeveloped
<i>Market</i>	Residents of and visitors to La Paz County
RR-20	Desired Future Conditions for Gibraltar RMZ 1 – Gibraltar Wilderness will be generally managed for Primitive providing the following:
<i>Niche</i>	Wilderness trekking in a natural scenic environment.
<i>Management Objective</i>	Manage this zone to provide opportunities for visitors to find solitude, engage in unconfined recreation, and experience personal challenge and reflection. Preserve the primitive opportunities and wilderness characteristics in this zone.
<i>Primary Activities</i>	<ul style="list-style-type: none"> ▪ Hiking ▪ Mountain climbing ▪ Backpacking ▪ Equestrian activities ▪ Primitive dispersed camping ▪ Wildlife watching ▪ Hunting
<i>Experiences</i>	<ul style="list-style-type: none"> ▪ Gaining a greater sense of self-confidence ▪ Testing personal endurance ▪ Savoring the total sensory experience (sight sound, and smell) of a natural landscape ▪ Enjoying risk-taking adventure ▪ Feeling good about solitude, being isolated and independent ▪ Enjoying an escape from crowds of people ▪ Nurturing personal spiritual values and growth
<i>Benefits</i>	<p>Personal:</p> <ul style="list-style-type: none"> ▪ A more holistic sense of wellness ▪ A greater sensitivity to awareness of outdoor aesthetics, nature’s art and elegance ▪ Greater self-reliance

Map 23 Gibraltar Special Recreation Management Area



LAKE HAVASU FIELD OFFICE

Record of Decision /
Approved Resource Management Plan



UNITED STATES DEPARTMENT OF THE INTERIOR
Bureau of Land Management



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

May 2007

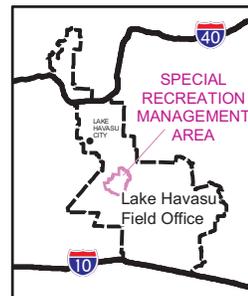


Table 7e. Gibraltar SRMA (See Map 23)

	<ul style="list-style-type: none"> ▪ A closer relationship with the natural world <p>Community/Social:</p> <ul style="list-style-type: none"> ▪ Enhanced lifestyle ▪ Enlarged sense of community dependence on public lands <p>Environmental:</p> <ul style="list-style-type: none"> ▪ Greater retention of distinctive landscape features ▪ Improved soil, water, and air quality ▪ Greater protection of fish, wildlife, and plant habitat from growth, development, and public land use impacts ▪ Conservation of entire sustainable ecosystems <p>Economic:</p> <ul style="list-style-type: none"> ▪ Increased desirability as a place to live or retire ▪ Increased property value ▪ Enhanced ability for visitors to find areas providing wanted recreation experiences and benefits 		
<i>Setting Character Conditions</i>	<p>Physical</p> <p>Remoteness: Primitive</p> <p>Naturalness: Primitive</p> <p>Facilities: Primitive</p>	<p>Social</p> <p>Contacts: Primitive</p> <p>Group Size: Primitive</p> <p>Evidence of Use: Primitive</p>	<p>Administrative</p> <p>Mechanized Use: Primitive</p> <p>Management Controls: Primitive</p> <p>Visitor Services: Primitive</p>
<i>Potential Outcomes</i>	<ul style="list-style-type: none"> ▪ The BLM will manage this zone to protect wilderness values and provide the targeted benefits and outcomes. 		

Table 7e. Gibraltar SRMA (See Map 23)

RR-21	Desired Future Conditions for Gibraltar RMZ 2 – Cienega will be generally managed for Rural Developed providing the following:
<i>Niche</i>	Motorized access to back country trails in natural scenic environment with plentiful opportunities for cultural and wildlife appreciation and interpretation of the historical mining district.
<i>Management Objective</i>	Manage this zone to provide opportunities for community residents and regional, national, and international visitors who use the area seasonally to engage in sustainable primitive day-use/camping, OHV touring opportunities, technical rock-crawling. Opportunities will also be provided to learn about historical mining and to gain appreciation of the natural setting of the greater Gibraltar region through self-discovery. Recreational use and environmental education will be prioritized to enhance a more primitive experience; minor developments and regulatory signing may be used moderately.
<i>Primary Activities</i>	<ul style="list-style-type: none"> ▪ OHV touring/ATV ▪ Technical motorized trails ▪ Dispersed camping ▪ Cultural/historic sightseeing ▪ Wildlife watching
<i>Experiences</i>	<ul style="list-style-type: none"> ▪ Developing skills and abilities ▪ Testing personal endurance ▪ Enjoying risk-taking adventure ▪ Savoring the total sensory experience of a natural landscape ▪ Escaping everyday responsibilities for awhile ▪ Discussing equipment with others ▪ Feeling good about the way shared cultural heritage is being protected ▪ Enjoying access to outdoor amenities close to home ▪ Having others near by to help
<i>Benefits</i>	<p>Personal:</p> <ul style="list-style-type: none"> ▪ Greater self-reliance ▪ Improved skills for outdoor enjoyment ▪ Closer relationship with the natural world

Table 7e. Gibraltar SRMA (See Map 23)

	<ul style="list-style-type: none"> ▪ Improved skills for outdoor enjoyment with others <p>Community/Social:</p> <ul style="list-style-type: none"> ▪ Greater family bonding, improved parenting skills ▪ Greater understanding of the community’s cultural identity ▪ Greater community involvement in recreation and other land use decisions <p>Environmental:</p> <ul style="list-style-type: none"> ▪ Reduced negative human impacts ▪ Increase awareness and protection of natural landscapes ▪ Reduced looting of historic and prehistoric sites ▪ Sustainability of community’s cultural heritage <p>Economic:</p> <ul style="list-style-type: none"> ▪ Increased desirability as a place to live or retire ▪ Enhanced ability for visitors to find areas providing wanted recreation experiences and benefits ▪ Maintenance of community’s distinctive recreation-tourism market niche or character 		
<p><i>Setting Character Conditions</i></p>	<p>Physical</p> <p>Remoteness: Rural Developed</p> <p>Naturalness: Rural Developed</p> <p>Facilities: Rural Developed</p>	<p>Social</p> <p>Contacts: Rural Developed</p> <p>Group Size: Rural Natural</p> <p>Evidence of Use: Rural Natural</p>	<p>Administrative</p> <p>Mechanized Use: Rural Developed</p> <p>Management Controls: Rural Developed</p> <p>Visitor Services: Suburban</p>
<p><i>Potential Outcomes</i></p>	<ul style="list-style-type: none"> ▪ Moderate improvements to achieve targeted benefits. ▪ Public education related to historic mining will be conducted to realize desired benefits. ▪ The development of interpretive trails will further achieve the targeted benefits and resource protection. ▪ Areas will be identified for camping. 		

Table 7e. Gibraltar SRMA (See Map 23)

RR-22	Desired Future Conditions for Gibraltar RMZ 3 – Shea Hills will be generally managed for Rural Natural providing the following:
<i>Niche</i>	Primitive trekking and OHV touring in rugged scenic natural settings for visitors seeking a recreational experience.
<i>Management Objective</i>	Manage to provide opportunities for visitors to engage in a remote recreation experience. Manage this zone to provide opportunities for community residents and regional visitors who use the area seasonally to engage in sustainable day-use/camping, OHV touring opportunities and gain appreciation of the natural setting of the greater Gibraltar region through self-discovery. Naturalness and unconfined recreation will be prioritized to enhance a more primitive experience. Minor developments and regulatory signing may be used very discreetly.
<i>Primary Activities</i>	<ul style="list-style-type: none"> ▪ Hiking ▪ OHV touring ▪ Wilderness access ▪ Wildlife viewing ▪ Rockhounding ▪ Cultural/historical sightseeing ▪ Commercial recreation permits ▪ Shooting ▪ Dispersed camping
<i>Experiences</i>	<ul style="list-style-type: none"> ▪ Developing skills and abilities ▪ Testing personal endurance ▪ Enjoying risk-taking adventure ▪ Enjoying easy access to a natural landscape ▪ Escaping everyday responsibilities for awhile

Table 7e. Gibraltar SRMA (See Map 23)

<p><i>Benefits</i></p>	<p>Personal:</p> <ul style="list-style-type: none"> ▪ Greater self-reliance ▪ Improved skills for outdoor enjoyment ▪ Greater freedom from urban living <p>Community/Social:</p> <ul style="list-style-type: none"> ▪ Enhanced lifestyle ▪ Increasing independence/autonomy <p>Environmental:</p> <ul style="list-style-type: none"> ▪ Increased awareness and protection of natural landscapes ▪ Maintenance of distinctive recreation setting character ▪ Greater protection of fish, wildlife, and plant habitat from growth, development, and public use impacts ▪ Reduced negative human impacts <p>Economic:</p> <ul style="list-style-type: none"> ▪ Increased desirability as a place to live or retire ▪ Improved economic stability for the local community 		
<p><i>Setting Character Conditions</i></p>	<p>Physical</p> <p>Remoteness: Rural Natural</p> <p>Naturalness: Rural Natural</p> <p>Facilities: Rural Natural</p>	<p>Social</p> <p>Contacts: Semi-Primitive</p> <p>Group Size: Rural Natural</p> <p>Evidence of Use: Rural Natural</p>	<p>Administrative</p> <p>Mechanized Use: Rural Natural</p> <p>Management Controls: Rural Natural</p> <p>Visitor Services: Rural Natural</p>
<p><i>Potential Outcomes</i></p>	<ul style="list-style-type: none"> ▪ Moderate improvements to achieve targeted benefits, increased effort to manage unauthorized motor vehicle use, realize potential for solitude, unconfined primitive activities. ▪ Provide improvements to support OHV touring opportunities. ▪ Targeted environmental education, such as Leave-No-Trace, to improve user stewardship ethic. ▪ Developed camping may be considered as a response to resource protection. 		

Table 7e. Gibraltar SRMA (See Map 23)

RR-23	Desired Future Conditions for Gibraltar RMZ 4 – Buckskin Mesa will be generally managed for Semi-Primitive providing the following:
<i>Niche</i>	Trekking and OHV trail exploration for self-directed, primitive-mode challenge and recreation adventure.
<i>Management Objective</i>	Manage this zone to provide opportunities for visitors to engage in personal exploration and discovery though the outlined activities. Preserve the semi-primitive opportunities in this zone. Naturalness and unconfined recreation will be prioritized to enhance a more primitive experience. Minor developments and regulatory signing may be used very discreetly.
<i>Primary Activities</i>	<ul style="list-style-type: none"> ▪ Wildlife watching ▪ Hunting ▪ Hiking ▪ OHV touring ▪ Mountain biking ▪ Vista sightseeing and photography
<i>Experiences</i>	<ul style="list-style-type: none"> ▪ Testing personal endurance ▪ Developing skills and abilities ▪ Experiencing a greater sense of independence ▪ Feeling good about solitude, being isolated and independent ▪ Savoring the total sensory experience of a natural landscape
<i>Benefits</i>	<p>Personal:</p> <ul style="list-style-type: none"> ▪ Improved skills for outdoor enjoyment ▪ Enhanced sense of personal freedom ▪ Improved opportunity to view wildlife at close range <p>Community/Social:</p> <ul style="list-style-type: none"> ▪ Enlarged sense of community dependency on public lands <p>Environmental:</p> <ul style="list-style-type: none"> ▪ Increased awareness and protection of natural landscapes ▪ Greater protection of fish, wildlife, and plant habitat from growth, development, and public use impacts

Table 7e. Gibraltar SRMA (See Map 23)

	Economic:		
	<ul style="list-style-type: none"> ▪ Increased desirability as a place to live or retire 		
<i>Setting Character Conditions</i>	Physical	Social	Administrative
	Remoteness: Semi-Primitive	Contacts: Primitive	Mechanized Use: Rural Natural
	Naturalness: Semi-Primitive	Group Size: Semi-Primitive	Management Controls: Semi-Primitive
	Facilities: Semi-Primitive	Evidence of Use: Semi-Primitive	Visitor Services: Semi-Primitive
<i>Potential Outcomes</i>	<ul style="list-style-type: none"> ▪ The BLM will manage this area to maintain the semi-primitive setting. The current designation of routes will be maintained. 		
RR-24	Desired Future Conditions for Gibraltar RMZ 5 – Shea Road/Osborne Wash will be generally managed for Rural Developed providing the following:		
<i>Niche</i>	Unrestricted OHV use/play and dispersed camping opportunities as a staging area for a wider trail network.		
<i>Management Objective</i>	Manage to provide opportunities for visitors to engage in dispersed camping, unrestricted OHV recreation in an open area, and also will serve as a staging area for long-range OHV touring. Areas for this form of recreation are rare in this region. Manage this zone to provide opportunities for regional, national, and international visitors who use the area seasonally to engage in sustainable access for unrestricted OHV recreation in a natural environment. Naturalness and unconfined recreation will be prioritized; minor developments and regulatory signing will be necessary to contain and control OHV play and to focus riders onto designated routes on leaving the open area.		
<i>Primary Activities</i>	<ul style="list-style-type: none"> ▪ 4×4 vehicles ▪ ATV use ▪ OHV ▪ Golf carts/UTV (modified utility) ▪ Hill climbing ▪ Motorcycle use ▪ Permitted motorcycle/ATV ▪ Dry or dispersed camping 		

Table 7e. Gibraltar SRMA (See Map 23)

	<ul style="list-style-type: none"> ▪ Staging area
<i>Experiences</i>	<ul style="list-style-type: none"> ▪ Developing skills and abilities ▪ Enjoying the esteem of others ▪ Testing personal endurance ▪ Gaining a greater sense of self-confidence ▪ Telling others about the trip ▪ Enjoying risk-taking adventure ▪ Discussing equipment with others
<i>Benefits</i>	<p>Personal:</p> <ul style="list-style-type: none"> ▪ Improved mental wellbeing ▪ Greater self-reliance ▪ Improved skills for outdoor enjoyment <p>Community/Social:</p> <ul style="list-style-type: none"> ▪ Heightened sense of satisfaction with the community ▪ Greater community involvement in recreation and other land use decisions <p>Environmental:</p> <ul style="list-style-type: none"> ▪ Maintenance of distinctive recreation setting character ▪ Improved maintenance of physical facilities ▪ Greater community ownership and stewardship of park, recreation, and natural resources <p>Economic:</p> <ul style="list-style-type: none"> ▪ Increased desirability as a place to live or retire ▪ Increased property values

Table 7e. Gibraltar SRMA (See Map 23)

<i>Setting Character Conditions</i>	<p>Physical</p> <p>Remoteness: Rural Developed</p> <p>Naturalness: Rural Developed</p> <p>Facilities: Rural Developed</p>	<p>Social</p> <p>Contacts: Rural Developed</p> <p>Group Size: Rural Developed</p> <p>Evidence of Use: Rural Natural</p>	<p>Administrative</p> <p>Mechanized Use: Rural Developed</p> <p>Management Controls: Rural Developed</p> <p>Visitor Services: Rural Developed</p>
<i>Potential Outcomes</i>	<ul style="list-style-type: none"> ▪ The BLM will manage this RMZ as OHV open area, which as such, will fully realize the targeted benefits. ▪ The BLM will cooperate with USFWS, AGFD, Arizona State Parks OHV grant program, and other stakeholders and jurisdictions. ▪ The BLM will prioritize the use of methods and mechanisms to contain OHV recreation within the open area. ▪ Visitor services and law enforcement patrols will be increased to improve resource protection and public safety. ▪ The identification and development of individual and group campsites will enhance the targeted benefits. 		

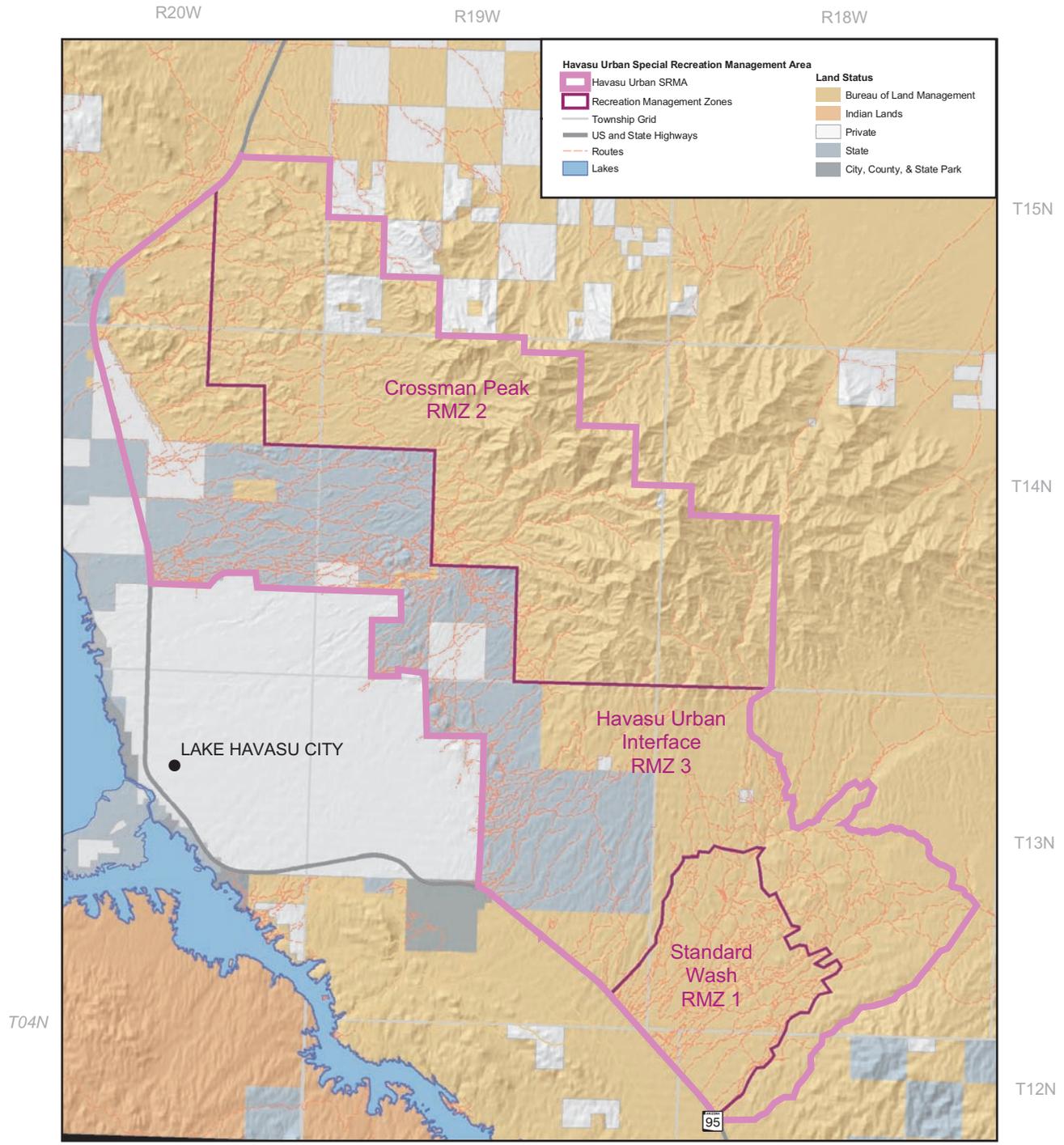
Table 7f. Havasu Urban SRMA (See Map 24)

RR-25	Desired Future Conditions for Havasu Urban Special Recreation Management Area are as:
<i>Primary Market Strategy:</i>	Community
<i>Market</i>	Residents of Lake Havasu City and surrounding communities
RR-26	Desired Future Conditions for Havasu Urban RMZ 1 – Standard Wash will be generally managed for Rural Developed providing the following:
<i>Niche</i>	Unrestricted OHV use/play and dispersed camping opportunities as a staging area for a wider trail network.

Table 7f. Havasu Urban SRMA (See Map 24)

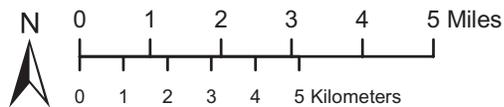
<i>Management Objective</i>	<p>Manage to provide opportunities for visitors to engage in dispersed camping, unrestricted OHV recreation in an open area. The zone will also serve as a staging area for long-range OHV touring. Areas for this form of recreation are rare in this region. Manage this zone to provide opportunities for regional, national, and international visitors who use the area seasonally to engage in sustainable access for unrestricted OHV recreation in a natural environment. Naturalness and unconfined recreation will be prioritized; minor developments and regulatory signing will be necessary to contain and control OHV play and to focus riders onto designated routes upon leaving the open area.</p>
<i>Primary Activities</i>	<ul style="list-style-type: none"> ▪ 4×4 vehicles ▪ ATV use ▪ OHV ▪ Golf carts/UTV (modified utility) ▪ Hill climbing ▪ Motorcycle use ▪ Permitted motorcycle/ATV ▪ Dry or dispersed camping ▪ Staging area
<i>Experiences</i>	<ul style="list-style-type: none"> ▪ Developing skills and abilities ▪ Enjoying the esteem of others ▪ Testing personal endurance ▪ Gaining a greater sense of self-confidence ▪ Telling others about the trip ▪ Enjoying risk-taking adventure ▪ Discussing equipment with others

Map 24 Havasu Urban Special Recreation Management Area



LAKE HAVASU FIELD OFFICE

Record of Decision /
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Table 7f. Havasu Urban SRMA (See Map 24)

<p><i>Benefits</i></p>	<p>Personal:</p> <ul style="list-style-type: none"> ▪ Improved mental wellbeing ▪ Greater self-reliance ▪ Improved skills for outdoor enjoyment <p>Community/Social:</p> <ul style="list-style-type: none"> ▪ Heightened sense of satisfaction with the community ▪ Greater community involvement in recreation and other land use decisions <p>Environmental:</p> <ul style="list-style-type: none"> ▪ Maintenance of distinctive recreation setting character ▪ Improved maintenance of physical facilities ▪ Greater community ownership and stewardship of park, recreation, and natural resources <p>Economic:</p> <ul style="list-style-type: none"> ▪ Increased desirability as a place to live or retire ▪ Increased property values 		
<p><i>Setting Character Conditions</i></p>	<p>Physical</p> <p>Remoteness: Rural Developed</p> <p>Naturalness: Suburban</p> <p>Facilities: Rural Developed</p>	<p>Social</p> <p>Contacts: Suburban</p> <p>Group Size: Rural Developed</p> <p>Evidence of Use: Suburban</p>	<p>Administrative</p> <p>Mechanized Use: Rural Developed</p> <p>Management Controls: Rural Developed</p> <p>Visitor Services: Rural Natural</p>
<p><i>Potential Outcomes</i></p>	<ul style="list-style-type: none"> ▪ The BLM will manage this RMZ as OHV open area, which as such, will fully realize the targeted benefits. ▪ The BLM will cooperate with USFWS, AGFD, Arizona State Parks OHV grant program, and other stakeholders and jurisdictions. ▪ The BLM will prioritize the use of methods and mechanisms to contain OHV recreation within the open area. ▪ Visitor services and law enforcement patrols will be increased to improve resource protection and public safety. ▪ The identification and development of individual and group campsites will enhance the targeted benefits. 		

Table 7f. Havasu Urban SRMA (See Map 24)

RR-27	Desired Future Conditions for Havasu Urban RMZ 2 – Crossman Peak will be generally managed for Semi-Primitive providing the following:
<i>Niche</i>	Scenic hiking and equestrian opportunities and limited OHV trail riding for personal exploration and discovery.
<i>Management Objective</i>	Manage this zone to provide visitors and residents with a scenic backdrop to Lake Havasu City and associated Lake Havasu SRMA and provided access to those targeted activities. Further, manage this zone to provide opportunities for community residents to engage in sustainable personal discovery, while protecting critical resources located in the area. This area serves as open space for the residents of Lake Havasu City. Partnerships will be sought to help improve this RMZ so that within the life of this plan most responsible visitors will attain a greater appreciation for their public lands and the natural and cultural resources found therein.
<i>Primary Activities</i>	<ul style="list-style-type: none"> ▪ Hiking ▪ OHV touring ▪ Backpacking ▪ Equestrian/Trail riding ▪ Rockhounding
<i>Experiences</i>	<ul style="list-style-type: none"> ▪ Developing skills and abilities ▪ Testing personal endurance ▪ Enjoying risk-taking adventure ▪ Savoring the total sensory experience of a natural landscape ▪ Escaping everyday responsibilities for awhile
<i>Benefits</i>	<p>Personal:</p> <ul style="list-style-type: none"> ▪ Greater self-reliance ▪ Improved skills for outdoor enjoyment ▪ Closer relationship with the natural world <p>Community/Social:</p> <ul style="list-style-type: none"> ▪ Enhanced lifestyle ▪ Increasing independence/autonomy

Table 7f. Havasu Urban SRMA (See Map 24)

	<p>Environmental:</p> <ul style="list-style-type: none"> ▪ Reduced negative human impacts ▪ Increase awareness and protection of natural landscapes <p>Economic:</p> <ul style="list-style-type: none"> ▪ Increased desirability as a place to live or retire 		
<i>Setting Character Conditions</i>	<p>Physical</p> <p>Remoteness: Semi-Primitive</p> <p>Naturalness: Semi-Primitive</p> <p>Facilities: Primitive</p>	<p>Social</p> <p>Contacts: Primitive</p> <p>Group Size: Primitive</p> <p>Evidence of Use: Semi-Primitive</p>	<p>Administrative</p> <p>Mechanized Use: Rural Natural</p> <p>Management Controls: Semi-Primitive</p> <p>Visitor Services: Semi-Primitive</p>
<i>Potential Outcomes</i>	<ul style="list-style-type: none"> ▪ Minimal improvements to achieve targeted benefits, increased effort to manage unauthorized motor vehicle use, realize potential for solitude, unconfined primitive activities. ▪ Outfitting/guiding could be considered in certain situations. ▪ The BLM will emphasize maintaining the scenic quality of this RMZ due to the fact that it is the scenic backdrop for Lake Havasu City. ▪ Partnerships will be created and maintained with Lake Havasu City and Mohave County. 		
RR-28	<p>Desired Future Conditions for Havasu Urban RMZ 3 – Havasu Urban Interface will be generally managed for Rural Developed providing the following:</p>		
<i>Niche</i>	<p>Access to public lands with opportunities for hiking, equestrian use, OHV, wildlife and cultural appreciation, and other recreational activities.</p>		
<i>Management Objective</i>	<p>Manage this zone to provide opportunities for visitors and residents quick access to engage in targeted activities and realize benefits to persons, community, and environment. Manage this zone to provide opportunities for community residents to engage in sustainable personal discovery, while protecting critical resources located in the area. This area serves as open space for the residents of Lake Havasu City. Partnerships will be sought to help improve this RMZ so that within the life of this plan most responsible visitors will attain a greater appreciation for their public lands and the natural and cultural resources found therein.</p>		

Table 7f. Havasu Urban SRMA (See Map 24)

<i>Primary Activities</i>	<ul style="list-style-type: none"> ▪ Hiking ▪ OHV touring ▪ Backpacking ▪ Equestrian/Trail riding ▪ Rockhounding
<i>Experiences</i>	<ul style="list-style-type: none"> ▪ Developing skills and abilities ▪ Testing personal endurance ▪ Enjoying risk-taking adventure ▪ Savoring the total sensory experience of a natural landscape ▪ Escaping everyday responsibilities for awhile
<i>Benefits</i>	<p>Personal:</p> <ul style="list-style-type: none"> ▪ Greater self-reliance ▪ Improved skills for outdoor enjoyment ▪ Closer relationship with the natural world <p>Community/Social:</p> <ul style="list-style-type: none"> ▪ Enhanced lifestyle ▪ Increasing independence/autonomy <p>Environmental:</p> <ul style="list-style-type: none"> ▪ Reduced negative human impacts ▪ Increase awareness and protection of natural landscapes <p>Economic:</p> <ul style="list-style-type: none"> ▪ Increased desirability as a place to live or retire

Table 7f. Havasu Urban SRMA (See Map 24)

<i>Setting Character Conditions</i>	Physical	Social	Administrative
	Remoteness: Semi-Primitive	Contacts: Primitive	Mechanized Use: Rural Natural
	Naturalness: Semi-Primitive	Group Size: Primitive	Management Controls: Semi-Primitive
	Facilities: Primitive	Evidence of Use: Semi-Primitive	Visitor Services: Semi-Primitive

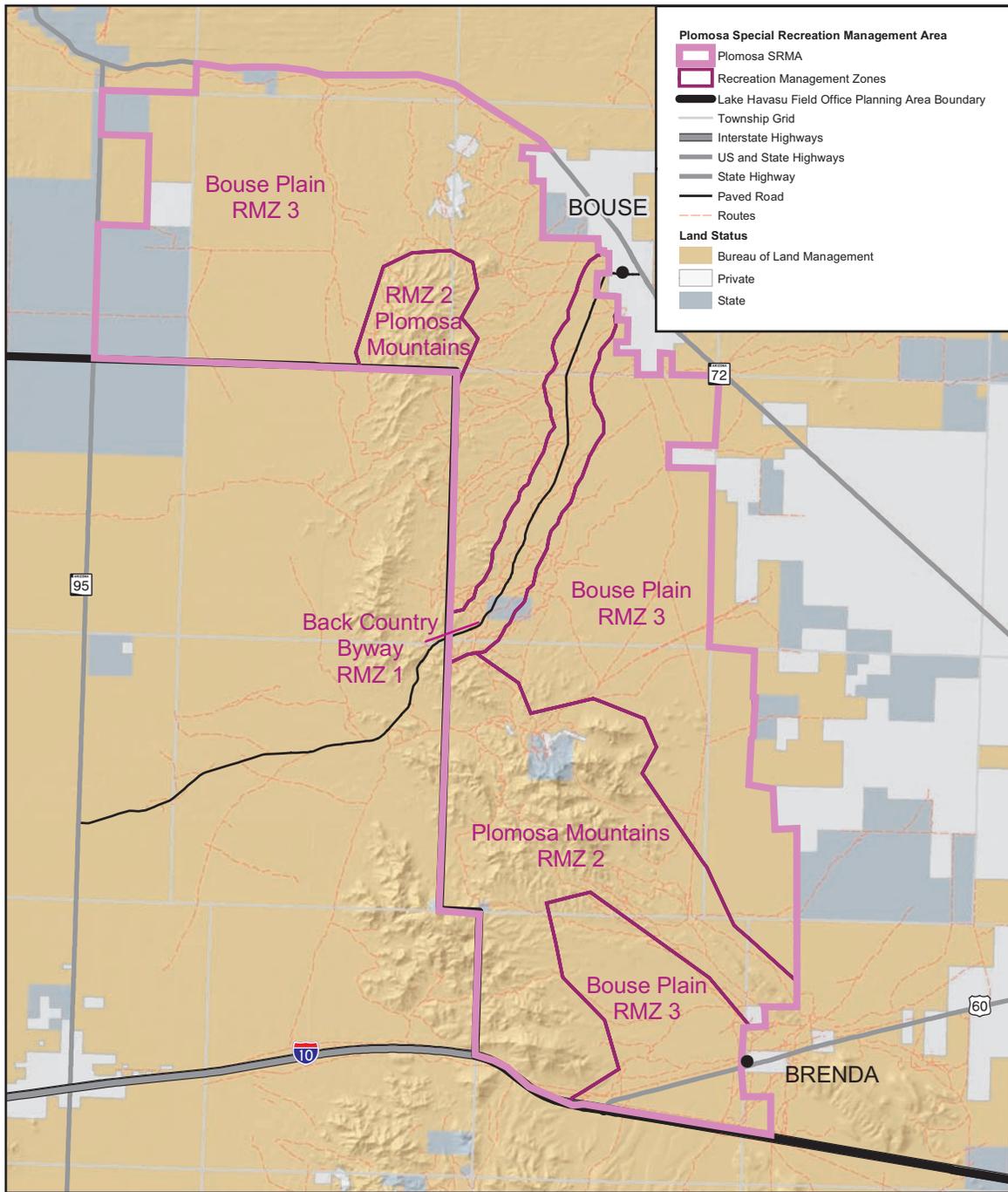
Table 7g. Plomosa SRMA (See Map 25)

RR-29	Desired Future Conditions for Plomosa Special Recreation Management Area are as:
<i>Primary Market Strategy:</i>	Undeveloped
<i>Market</i>	Visitors to and residents of the local communities in the area
RR-30	Desired Future Conditions for Plomosa RMZ 1 – Back Country Byway will be generally managed for Rural Developed providing the following:
<i>Niche</i>	Driving for pleasure along a scenic byway connecting two communities.
<i>Management Objective</i>	Manage this zone to provide opportunities for visitors to engage in targeted activities and gain knowledge and appreciation of the byway theme through interpretation. Reduce impacts to natural and cultural resources and protect recreational opportunities from potentially conflicting uses. Developments and signing will be increased to enhance the targeted activities.
<i>Primary Activities</i>	<ul style="list-style-type: none"> ▪ Cultural/historical sightseeing ▪ Vistas and photography ▪ Wildlife watching ▪ Public education ▪ Mountain biking ▪ OHV touring

Table 7g. Plomosa SRMA (See Map 25)

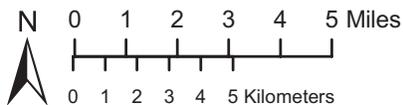
<i>Experiences</i>	<ul style="list-style-type: none"> ▪ Enjoying closeness of family and friends ▪ Learning more about the things that are there ▪ Enjoy having easy access to natural landscapes ▪ Enjoying access to hands-on environmental learning 		
<i>Benefits</i>	<p>Personal:</p> <ul style="list-style-type: none"> ▪ Improved outdoor knowledge and self-confidence ▪ Enhanced awareness and understanding of nature <p>Community/Social:</p> <ul style="list-style-type: none"> ▪ Enlarged sense of community dependence on public lands ▪ Increase community involvement, reducing erosion of the community’s small-town, rural character <p>Environmental:</p> <ul style="list-style-type: none"> ▪ Reduced wildlife harassment by users of recreational facilities ▪ Greater protection of area’s historical structures and archaeological sites ▪ Reduced negative impacts such as litter, trampling of vegetation, and unplanned trails ▪ Increased ecologically friendly tourism operations <p>Economic:</p> <ul style="list-style-type: none"> ▪ Improved stability of the local economy ▪ More positive contributions to local and regional economies ▪ Increased local tourism revenues 		
<i>Setting Character Conditions</i>	<p>Physical</p> <p>Remoteness: Rural Developed</p> <p>Naturalness: Rural Developed</p> <p>Facilities: Rural Developed</p>	<p>Social</p> <p>Contacts: Suburban</p> <p>Group Size: Rural Natural</p> <p>Evidence of Use: Rural Developed</p>	<p>Administrative</p> <p>Mechanized Use: Suburban</p> <p>Management Controls: Rural Developed</p> <p>Visitor Services: Rural Developed</p>
<i>Potential Outcomes</i>	<ul style="list-style-type: none"> ▪ Manage this RMZ to realize the targeted benefits. ▪ The BLM will consider increased interpretive signing, day-use sites, and Watchable Wildlife sites along the byway. 		

Map 25 Plomosa Special Recreation Management Area



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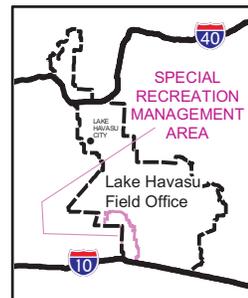


Table 7g. Plomosa SRMA (See Map 25)

RR-31	Desired Future Conditions for Plomosa RMZ 2 – Plomosa Mountains will be generally managed for Semi-Primitive providing the following:
<i>Niche</i>	Trekking and seasonal OHV use for wildlife appreciation and personal challenge.
<i>Management Objective</i>	Manage this zone to provide visitors and residents with a scenic backdrop and provide access to targeted activities. Naturalness and unconfined recreation will be prioritized to enhance a more natural public lands experience; minor developments and regulatory signing may be used very discreetly. Further, manage this zone to provide opportunities for community residents and visitors to engage in sustainable personal discovery, while protecting critical resources located in the area. Partnerships will be sought to help improve this RMZ so that within the life of this plan most responsible visitors will attain a greater appreciation for their public lands and the natural and cultural resources found therein.
<i>Primary Activities</i>	<ul style="list-style-type: none"> ▪ Cultural/historical sightseeing ▪ Vistas and photography ▪ Wildlife watching ▪ Public education ▪ Mountain biking ▪ OHV touring ▪ Hunting ▪ Hiking
<i>Experiences</i>	<ul style="list-style-type: none"> ▪ Enjoying closeness of family and friends ▪ Learning more about the things that are there ▪ Enjoy having easy access to natural landscapes ▪ Feeling good about the way shared cultural heritage is being protected
<i>Benefits</i>	<p>Personal:</p> <ul style="list-style-type: none"> ▪ Improved outdoor knowledge and self-confidence ▪ Enhanced awareness and understanding of nature <p>Community/Social:</p> <ul style="list-style-type: none"> ▪ Enlarged sense of community dependence on public lands ▪ Increase community involvement, reducing erosion of the community’s small-town, rural character

Table 7g. Plomosa SRMA (See Map 25)

	<ul style="list-style-type: none"> ▪ Greater sense of place and community identity <p>Environmental:</p> <ul style="list-style-type: none"> ▪ Reduced wildlife harassment by users of recreational facilities ▪ Greater protection of area’s historical structures and archaeological sites ▪ Reduced negative impacts such as litter, vegetative trampling, and unplanned trails ▪ Increased ecologically friendly tourism operations <p>Economic:</p> <ul style="list-style-type: none"> ▪ Improved local economy stability ▪ More positive contributions to local and regional economies 												
<i>Setting Character Conditions</i>	<table border="1"> <thead> <tr> <th>Physical</th> <th>Social</th> <th>Administrative</th> </tr> </thead> <tbody> <tr> <td>Remoteness: Rural Natural</td> <td>Contacts: Semi-Primitive</td> <td>Mechanized Use: Rural Natural</td> </tr> <tr> <td>Naturalness: Semi-Primitive</td> <td>Group Size: Semi-Primitive</td> <td>Management Controls: Semi-Primitive</td> </tr> <tr> <td>Facilities: Rural Natural</td> <td>Evidence of Use: Rural Natural</td> <td>Visitor Services: Semi-Primitive</td> </tr> </tbody> </table>	Physical	Social	Administrative	Remoteness: Rural Natural	Contacts: Semi-Primitive	Mechanized Use: Rural Natural	Naturalness: Semi-Primitive	Group Size: Semi-Primitive	Management Controls: Semi-Primitive	Facilities: Rural Natural	Evidence of Use: Rural Natural	Visitor Services: Semi-Primitive
Physical	Social	Administrative											
Remoteness: Rural Natural	Contacts: Semi-Primitive	Mechanized Use: Rural Natural											
Naturalness: Semi-Primitive	Group Size: Semi-Primitive	Management Controls: Semi-Primitive											
Facilities: Rural Natural	Evidence of Use: Rural Natural	Visitor Services: Semi-Primitive											
<i>Potential Outcomes</i>	<ul style="list-style-type: none"> ▪ The BLM will manage this area to maintain the semi-primitive setting. ▪ Support environmentally responsible OHV touring. Minor improvements may be considered as a tool for resource protection and public safety. 												
RR-32	Desired Future Conditions for Plomosa RMZ 3 – Bouse Plain will be generally managed for Rural Natural providing the following:												
<i>Niche</i>	Dispersed camping and OHV opportunities for pleasure.												
<i>Management Objective</i>	Manage this zone to provide opportunities for visitors to engage in challenging personal discovery in a semi-isolated setting. Allow visitors to appreciate the natural setting while protecting the natural resources of the Bouse Plains. Partnerships will be sought to help improve this RMZ with minimal developments, so that within the life of this plan most responsible visitors will attain a greater appreciation for their public lands and the natural and cultural resources found therein.												
<i>Primary Activities</i>	<ul style="list-style-type: none"> ▪ Sightseeing ▪ Wildlife watching 												

Table 7g. Plomosa SRMA (See Map 25)

	<ul style="list-style-type: none"> ▪ OHV touring ▪ Dispersed camping ▪ Hunting ▪ Hiking ▪ Fitness activities ▪ Rockhounding
<i>Experiences</i>	<ul style="list-style-type: none"> ▪ Enjoying closeness of family and friends ▪ Learning more about the things that are there ▪ Enjoying easy access to natural landscapes ▪ Experiencing a greater sense of independence ▪ Participating frequently in enjoyable activities in desirable settings ▪ Enjoying solitude in a country setting
<i>Benefits</i>	<p>Personal:</p> <ul style="list-style-type: none"> ▪ Improved outdoor knowledge and self-confidence ▪ Enhanced awareness and understanding of nature ▪ Improved mental wellbeing ▪ Stronger ties with families and friends ▪ An enhanced sense of personal freedom <p>Community/Social:</p> <ul style="list-style-type: none"> ▪ Enlarged sense of community dependence on public lands ▪ Greater sense of place and community identity ▪ A heightened sense of satisfaction with the community <p>Environmental:</p> <ul style="list-style-type: none"> ▪ Reduced wildlife harassment by uses of recreational facilities ▪ Reduced negative impacts such as litter, trampling of vegetation, and unplanned trails <p>Economic:</p> <ul style="list-style-type: none"> ▪ Improved stability of the local economy

Table 7g. Plomosa SRMA (See Map 25)

	<ul style="list-style-type: none"> More positive contributions to local and regional economies 		
<i>Setting Character Conditions</i>	<p>Physical</p> <p>Remoteness: Rural Natural</p> <p>Naturalness: Rural Natural</p> <p>Facilities: Rural Natural</p>	<p>Social</p> <p>Contacts: Semi-Primitive</p> <p>Group Size: Semi-Primitive</p> <p>Evidence of Use: Rural Natural</p>	<p>Administrative</p> <p>Mechanized Use: Rural Developed</p> <p>Management Controls: Rural Natural</p> <p>Visitor Services: Rural Natural</p>
<i>Potential Outcomes</i>	<ul style="list-style-type: none"> The BLM will manage this area to maintain the Rural Natural setting. Support environmentally responsible OHV touring. Moderate improvements such as trail signing and naming, interpretive signs, and day-use areas may be considered as tools to protect resources and public safety and to enhance the recreation opportunities and the targeted benefits available in this RMZ. 		

Table 7h. Extensive Recreation Management Area (ERMA) (See Map 21)

RR-33	<p>Desired Future Conditions for Extensive Recreation Management Area are: The BLM will manage this area in a custodial manner to ensure quality of experience and enjoyment of natural and cultural resources. The BLM will provide for enhanced recreation experiences and enjoyment while protecting resources, ensuring public safety, and work towards resolving user conflicts. The BLM’s approach will include all manner of responsible public lands-dependent outdoor recreation opportunities. These activities and settings may range across the six prescribed recreation settings depending on location (see Map 21). These lands are all BLM-administered public lands within the planning area and are outside of SRMAs, and are subject to less intensive management. However, these lands will be protected to maintain the prescribed recreation settings (see Map 20), as well as natural and cultural resources.</p>
<i>Potential Outcomes</i>	<p>The ERMA will be managed in a purely custodial manner across a spectrum of recreation settings (see Map 20) to realize all environmentally sound public-lands-dependent recreation opportunity benefits.</p>

Land Use Allocations

- RR-34. 1,097,495 acres will be allocated as the ERMA; the remaining BLM acres will be allocated between seven SRMAs as detailed below.

Colorado River Nature Center SRMA

- RR-35. The Colorado River Nature Center SRMA is 363 acres, an area that includes the previous facilities developed in partnership with other agencies (see Map 21).

The SRMA is divided into two RMZs (see Map 21):

RMZ 1 — Southern Bluff – 100 acres

RMZ 2 — River Side – 263 acres

Lake Havasu SRMA

- RR-36. The Lake Havasu SRMA (41,918 acres) will include an area from the south edge of the Havasu Wildlife Refuge to the Parker Dam (see Appendix J) including both AZ and CA shorelines. The area will also include the Lake Havasu Aubrey Hills region west of SR 95 and the Whipple Mountains west of the CA shoreline (see Maps 21 and 22). The SRMA will consist of 8 RMZs that will have management prescribed to them to achieve the goals, setting, and experiences desired for recreational resources in each.

RMZ 1 – Whipple Mountains – 8,859 acres

RMZ 2 – North Aubrey – 4,587 acres

RMZ 3 – Aubrey Hills – 10,251 acres

RMZ 4 – AZ Shoreline – 1,698 acres

RMZ 5 – Havasu Springs – 1,339 acres

RMZ 6 – CA Shoreline – 1,588 acres

RMZ 7 – North Lake Havasu – 9,752 acres

RMZ 8 – South Lake Havasu – 3,844 acres

Parker Strip SRMA

RR36. The Parker Strip SRMA will continue to manage the area outlined in the *Parker Strip Recreation Area Management Plan* (1993) (see Map 21). This consists of approximately 12,913 acres of land. Three RMZs will be identified within the SRMA.

RMZ 1 – Parker Strip Urban – 2,890 acres

RMZ 2 – Crossroads and Copper-basin – 2,602 acres

RMZ 3 – Parker Strip Back Country – 7,421 acres

Swansea SRMA

RR-37. The Swansea SRMA (3,837 acres) will encompass the historical town site and outlying areas (see Map 21). This SRMA comprises one RMZ consisting of the total acreage of the SRMA.

Gibraltar SRMA

RR-38. The Gibraltar SRMA (50,691 acres) will include from the Bill Williams wildlife refuge to Osborne Wash, Shea Road, and west to the tribal lands and Parker urban interface. Within this area five RMZs are identified (see Maps 21 and 23).

RMZ 1 – Gibraltar Wilderness – 18,719 acres

RMZ 2 – Cienega – 8,876 acres

RMZ 3 – Shea Hills – 7,234 acres

RMZ 4 – Buckskin Mesa – 15,118 acres

RMZ 5 – Shea Road/Osborne Wash – 744 acres

Havasu Urban SRMA

RR-39. The Havasu Urban SRMA (49,470 acres) is identified as the area immediately east of Lake Havasu City and to the north and south of the city limits. It extends back up towards Crossman Peak. Within this SRMA three RMZs are allocated (see Maps 21 and 24).

RMZ 1 – Standard Wash – 6,291 acres

RMZ 2 – Crossman Peak – 24,970 acres

RMZ 3 – Havasu Urban Interface – 18,209 acres

Plomosa SRMA

RR-40. The Plomosa SRMA (102,053 acres) contains the public lands between Bouse and Brenda (see Maps 21 and 25). Three SRZs have been identified.

RMZ 1 – Back Country Byway – 5,759 acres

RMZ 2 – Plomosa Mountains – 27,243 acres

RMZ 3 – Bouse Plain – 69,051 acres

Management Actions

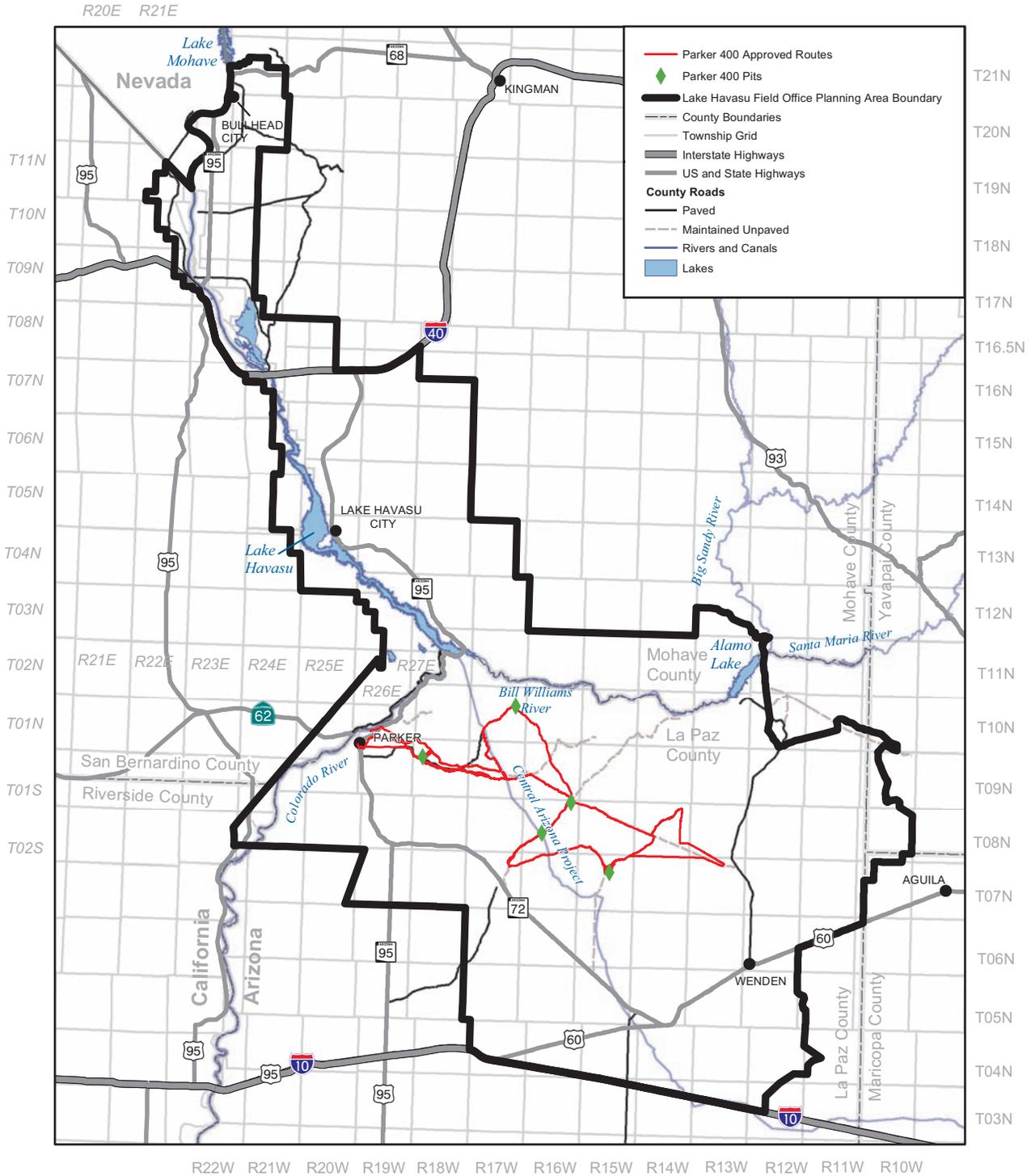
Administrative Actions, such as the Framework for SRMAs are listed in Appendix B, *Administrative Actions and Standard Operating Procedures*.

- RR-41. Where long-term impacts from recreational use patterns are observed or anticipated that exceed acceptable thresholds, control activities through specialized management actions such as designated campsites, permits, and limitations on number of users, types of use, and duration of use will be implemented to maintain the prescribed social settings and targeted benefits. Recreation management plans will be reviewed to ensure that they are maintaining the prescribed social settings.
- RR-42. No new development of any kind will be allowed in the floodplain of desert washes except for public health and safety or resource protection.
- RR-43. New concession leases will be allowed in accordance with the desired ROS settings of the area and NEPA compliance.
- RR-44. Vending will be allowed except in areas identified as primitive or semi-primitive under prescribed recreation settings (see Map 20), and only if the issuance of the permits will be consistent with the criteria outlined in Appendix I.
- RR-45. Custodial management within the ERMA will include the development and construction of orientation and informational kiosks at scenic views, trail heads to support resource protection and public safety, and wildlife viewing areas to interpret the cultural, wildlife, and recreational value of the area.
- RR-46. Throughout the lands managed by Lake Havasu Field Office, unless otherwise posted or restricted, dispersed camping (in undeveloped areas) is allowed without permit for no longer than 14 days within any 28-day period. After the 14th day, campers must move beyond a 25-mile radius of their previous camp.

This decision does not apply to concessions, public agency leases, and Long-Term Visitor Areas (LTVAs).

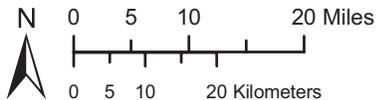
- RR-47. BLM will coordinate with incorporated towns and cities to create restrictions or limitations to dispersed camping on public lands within the boundaries of these towns.
- RR-48. Collection of dead and down wood within the Lake Havasu Field Office will be prohibited except for wood collected within the vicinity (100 feet) of a dispersed campsite for campsite use only. Firewood collection for campsites may be closed within specific areas identified in activity plans. Education will be used to promote use of commercial firewood and camping stoves on public lands. (See *Biological Resources Management*.)
- RR-49. Paintball activities will not be allowed in WAs and ACEC. Paintball activities will be allowed beyond 0.25 mile of any established facilities or sites, campgrounds, residences, trailheads, staging areas, roads, Special Designations, and other areas as posted. In addition, paintball activities will be restricted in accordance with any applicable local and state laws governing recreational shooting. Further stipulations will apply, if SRPs are required, and are outlined in Appendix I.
- RR-50. Recreational shooting is governed by state law. These laws apply across the field office boundaries for the respective states. The activities may be further restricted where public safety and significant resource concerns exist. Shooting sports will continue to be allowed in R&PPs and other leases specifically designed to manage these activities.
- RR-51. The Parker 400 course will continue as a competitive, commercial-use off-highway race course. The season of use will continue to run from December 1 through February 28. The race will only be authorized on designated routes. The specific course alignment will be determined through a NEPA process. The Parker 400 course will be limited to two competitive-use events per year (see Map 26).
- RR-52. No additional competitive-use off-highway race courses will be allowed, except in designated open areas (see *Travel Management*).
- RR-53. Specialized vehicle recreation (see Glossary for definition) activities will be allowed in open areas and on routes/trails designated for this purpose.
- RR-54. The establishment of new camping areas including LTVAs will be based on criteria outlined in Appendix I.

Map 26 Allocated Competitive Use Routes



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Lake Havasu SRMA

- RR-55. Development of visitor-oriented facilities will include and will not be limited to, interpretive installations, parking and boat ramps, contact stations and both hiking and water trails.
- RR-56. Along the AZ/CA shoreline (RMZs 4 and 6) overnight camping will be limited to recreation sites allocated to that use, including undeveloped areas signed to that effect.
- RR-57. New overnight camping and day use sites will be developed in conjunction with environmental mitigation and assessment consistent with the LCRMSCP. Any facilities established on the California side (RMZ 6) will provide for a more primitive and isolated experience.
- RR-58. Lake Havasu Field Office will continue to charge a day use/camping fees for BLM-developed sites within the area. The fee will be appropriate to the economics of maintaining the area and provide for fair value in recreation.
- RR-59. A scenic non-motorized trail will be developed in RMZs 2, 3, and 4. Coordination and partnerships with other landowners, agencies, and user groups will be undertaken to achieve this development.
- RR-60. Within the SRMA BLM will require SRPs for organized events and activities that impact the public lands comprising the lake bottom and shoreline.
- RR-61. Lake Havasu Field Office and the Lake Havasu Fisheries Program partners and other interests will develop no more than three additional free public shoreline fishing facilities on the Arizona side of Lake Havasu at either Black Rock Cove, Contact Point, or Partners Point (see Map 27) (RMZ 4).
- RR-62. Educational and informational buoys will be installed to alert the public to important fish and wildlife habitat areas.

Parker Strip SRMA

- RR-63. Camping in the Parker Strip SRMA will be limited to concession resorts and designated campgrounds (see Map 27), or to at least 0.5 mile from all maintained paved roads, unless otherwise posted.

Swansea SRMA

- RR-64. Camping will be allowed within the SRMA only in the identified campsites for a maximum stay of 3 nights.
- RR-65. Interpretive trails will be constructed to protect resources and provided for visitor enjoyment and safety.

Gibraltar SRMA

- RR-66. Within the SRMA, except for the WA (RMZ 1), BLM will consider developing campsites and facilities to protect important natural and cultural resources and to provide for growing recreation demand.
- RR-67. Low-impact trails may be developed and interpretive materials provided at trailheads.
- RR-68. Within Shea Road/Osborne Wash area (RMZ 5) Lake Havasu Field Office will develop OHV staging areas, facilities for enhanced use of the area and educational kiosks. Sensitive wildlife habitat, cultural resources, and public safety issues will be identified and mitigated for in this area.

Havasu Urban SRMA

- RR-69. Within Standard Wash (RMZ 1) Lake Havasu Field Office will develop OHV staging areas, facilities for enhanced use of the area and educational kiosks. Sensitive wildlife habitat, cultural resources, and public safety issues will be identified and mitigated for in this area.
- RR-70. Standard Wash (RMZ 1) will be closed to recreational shooting activities (except legal hunting).
- RR-71. The Craggy Wash area will be maintained as a 14-day camping area. The camping area will be identified with signs. This approach will include enforcing a 1-mile no-camping limit from the city limits of Lake Havasu City.
- RR-72. The Crossman Peak Natural Scenic Area (26,080 acres) addressed in the 1987 YRMP is addressed as RMZ 2 within the Havasu Urban SRMA.

Plomosa SRMA

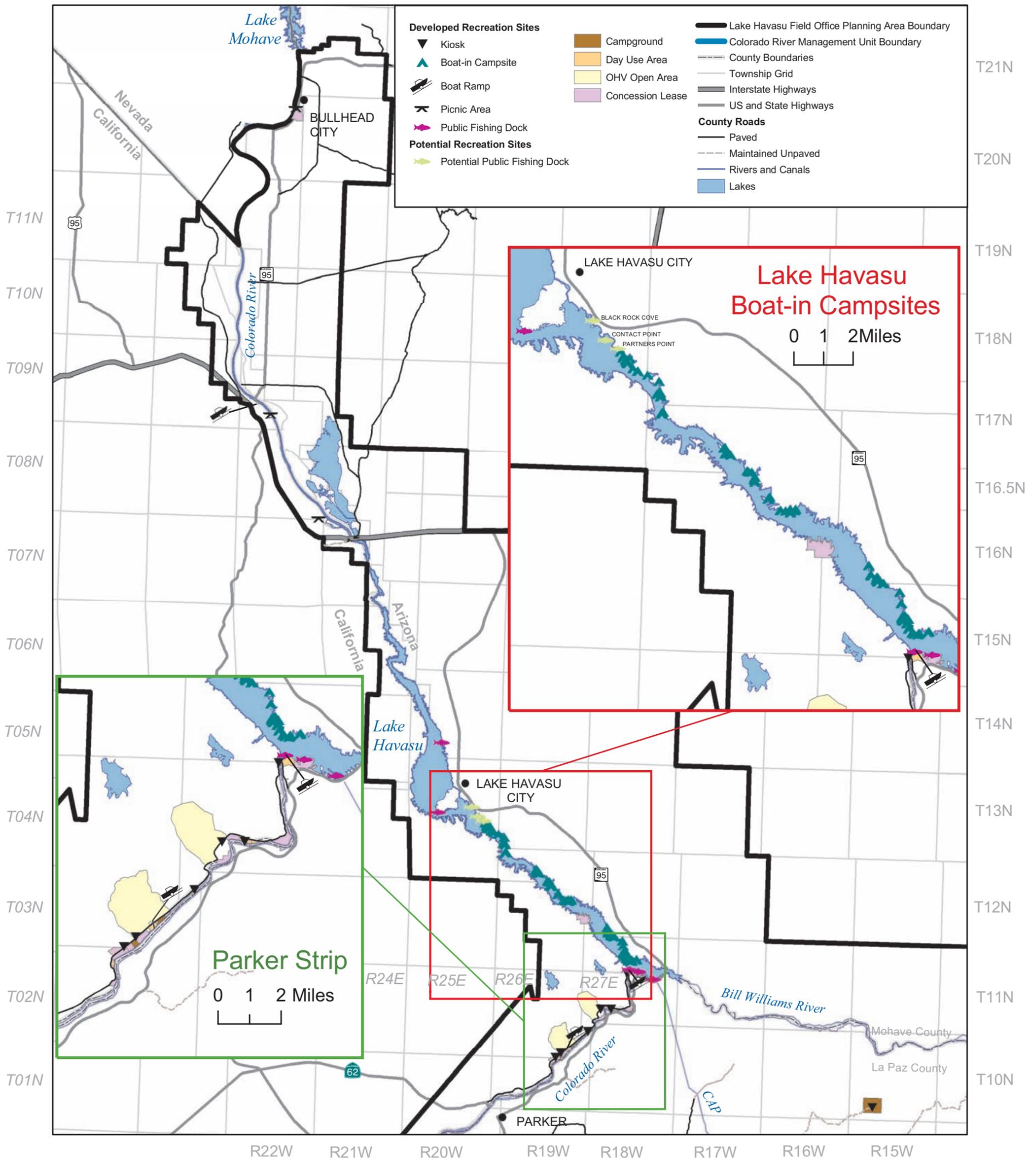
- RR-73. Recreation activities will be limited to pastimes that are sensitive to cultural and natural resources within RMZ 2. These limitations will include seasonal restrictions to OHV use to enhance protection of sensitive resources, such as wildlife habitat.
- RR-74. BLM will encourage learning and appreciation of the natural world by developing interpretive kiosks throughout the SRMA.

Monitoring

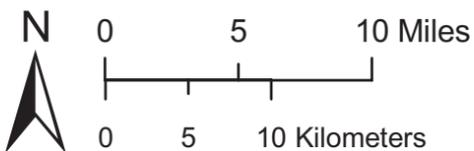
Detailed monitoring for potential recreational impacts to soil, water, and air resources along the Colorado River will be addressed through either the Lake Havasu SRMA implementation plan and/or the Lake Havasu Regional Management Plan. Monitoring activities will be accomplished through partnerships.

Map 27 Existing Developed Recreation Sites and Potential Fishing Dock Locations

R20E R21E



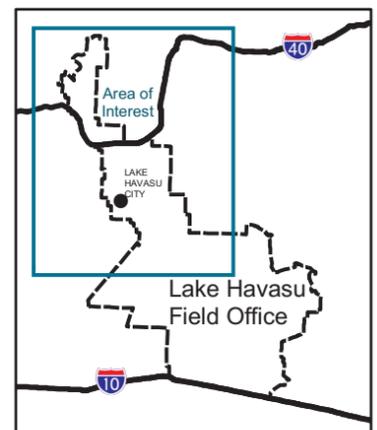
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Public lands within ERMA will be monitored so that the quality of desired experience, environmental setting and potential activities which were identified during the planning process and prescribed by this Approved RMP (see *Prescribed Recreation Settings*, Map 20) are being maintained. Annually and on a rotating basis, one to three sites/areas within the ERMA will be evaluated for the seven elements used to describe recreational settings: Access, Remoteness, Naturalness, Site Management, Visitor Management, Social Encounters, Visitor Impacts (see Appendix I).

Other recreation program and natural resource issues will be addressed in the development of Special Recreation Management Area Plans. Activity planning framework(s), including general monitoring requirements for each SRMA are provided in Appendix B under Administrative Actions. These individual activity-oriented plans will set monitoring standards and indicators that assess whether recreation benefits/objectives are being met and setting prescriptions are being maintained. Land health will also be measured in relation to existing standards and/or Desired Future Conditions for natural resources. The plans will be developed according to existing priorities, Approved RMP implementation schedules, and available future funding levels.

Until the SRMAs plans are completed, each RMZ will be monitored annually for the Setting Character Conditions as described in the Approved RMP (see *Desired Future Conditions* Tables 7a through 7g for each RMZ). The BLM will monitor the seven elements as described for the ERMA monitoring, to establish that quality of experiences and settings provided in these RMZ continue to be met or will meet the prescribed recreation setting.

Special recreation use permits and vendor permits will be monitored for compliance and effectiveness on an as-needed basis through the NEPA process.

Concession leases will be monitored for compliance and effectiveness on an as-needed basis through the existing Concession Review Policy on a quarterly basis and the NEPA process, as needed. The results of the quarterly compliance will be compiled annually and submitted to the Field Manager.

Any new development will be monitored for compliance utilizing site-specific stipulations developed during the NEPA process. Additionally, the impact of recreation concession facilities on recreational, cultural, and natural resources will be monitored as needed. Baseline collection of data will be identified during activity plan development. The frequency of monitoring will be determined after the collection of baseline data.

Photo points will be initiated at popular boat-in camp sites, dispersed camping areas, and OHV RMZ to document potential impacts, erosion, and existing plant community at a minimum of 20 such BLM facilities/sites each year. Photos will be repeated at 5-year intervals. Additionally, as many as five aquatic locations adjoining recreational facilities will be sampled annually during periods of high use to determine compliance with appropriate state standards for primary contact recreation and warm water fish habitat.

Remote sensing techniques using satellite and low-level imagery will be used to document total boats on the water at one time on a summer holiday weekend, along with the shoreline footprint created by this use. This will be repeated at 5-year intervals to understand use patterns, measure compliance with prescribed recreation settings, and document growth within the watershed.

Noise throughout public land reaches of Lake Havasu will be monitored during high use periods to document cumulative noise extremes relative to prescribed recreation settings, state law, and worker safety.

Annual data collected on recreational activities (e.g., visitation, SRPs, and conditions of facilities) will be reported in the BLM Recreation Management Information System (RMIS) and Facilities Maintenance Information System (FAMS).

Completion of these recreation-oriented plans will be tracked and reported on a 5-year basis through the plan evaluation schedule. Resource monitoring obligations and protocols generated through development of the above plans will be progressively included into Field Office monitoring schedules. Resource monitoring findings and trends derived from other activities within RMZs will be combined with information from recreation activity plans to be reported concisely in the Annual Planning Update Report and Summary to the Field Office Manager.

Special Designations

The following are recognized land use designations for protection of one or more sensitive resources that will be used in this Approved RMP: ACEC, Back Country Byway, Wild and Scenic River, Wilderness/WSA.

Congressional Designations

Wilderness

Desired Future Conditions for Wilderness Areas

- WM-1. To provide for the long-term protection and preservation of the designated area's wilderness character under the principle of non-degradation. The area's natural condition, opportunities for solitude, opportunities for primitive and unconfined types of recreation, and any ecological, geological, or other features of scientific, educational, scenic, or historical value present will be managed so that they will remain unimpaired.
- WM-2. To manage the WA for the use and enjoyment of visitors in a manner that will leave the area unimpaired for future use and enjoyment as wilderness. The wilderness resources will be dominant in all management decisions where a choice must be made between preservation of wilderness and visitor use.

- WM-3. To manage nonconforming but accepted uses permitted by the Wilderness Act and subsequent laws in a manner that will prevent unnecessary or undue degradation of the area's wilderness character. Nonconforming uses are the exception rather than rule; therefore, emphasis is placed on maintaining wilderness character.

Management Actions for Wilderness Areas

- WM-4. Accommodate the traditional or sacred use that may be identified in the future by the tribes that historically used the WAs.
- WM-5. No recreational facilities, including trails, will be constructed within the WAs unless needed for public safety or the protection of natural conditions and/or any ecological, cultural, geological, or other features of scientific, educational, scenic, or historical value.

Monitoring for Wilderness Areas

Each WA will be monitored annually for preservation of wilderness values (i.e., naturalness, opportunities for solitude, and unconfined recreation) and the condition of special features found within the area. Baseline conditions for each area will be referenced to analyze change, if any. Existing and future Wilderness Management Plans have focused/will focus on monitoring and management actions through the development of "Limits of Acceptable Change" standards and indicators.

Wilderness Study Area (WSA)

In the 1990 Arizona Desert Wilderness Act Congress designated Cactus Plain as a WSA. This area will be managed in accordance to BLM's Interim Management Policy and Guidelines for Lands under Wilderness Review H-8550-1, until Congress designates it as part of the National Wilderness Preservation System or removes it from its Congressional Wilderness Study Status.

Desired Future Conditions for WSA

- WM- 6. Cactus Plain WSA (see Map 29) will be managed in a manner that does not impair the suitability of the area for the future designation as wilderness by Congress.

Management Actions for WSA (if released by Congress)

- WM-7. If Cactus Plain were released from WSA status by Congress, the management of the area will not change extensively. To protect the stabilized sand dune complex and the associated vegetation within the area, it will be classified "Limited to Authorized Users" (see *Travel Management* in this Approved RMP). Mineral material disposals will not be authorized within the area and mineral leasing will be subject to no surface occupancy (see also *Mineral Resources*). The area will continue to be managed to meet the prescribed "Primitive" recreation setting (see Map 20).

Monitoring for WSA

The WSA will be monitored annually to assure that management has met the non-impairment standard set in BLM's H-8002-1.

Administrative Designations

Areas of Critical Environmental Concerns (ACECs)

Desired Future Conditions for ACECs

AC-1. Three Rivers Riparian ACEC will be managed to protect and prevent irreparable damage to the relevant characteristics or important values (Map 28).

Relevance

- Riparian resources.
- Threatened and endangered species habitat.
- Scenic characteristics.

Importance

- Protects riparian habitat, a limited resource in the southwestern United States.
- Provides for semi-primitive setting around the Bill Williams River while allowing for a degree of interaction with the natural environment around Lake Alamo.

AC-2. Swansea Historic District ACEC will be managed to protect and prevent irreparable damage to the relevant characteristics or important values (Map 28).

Relevance

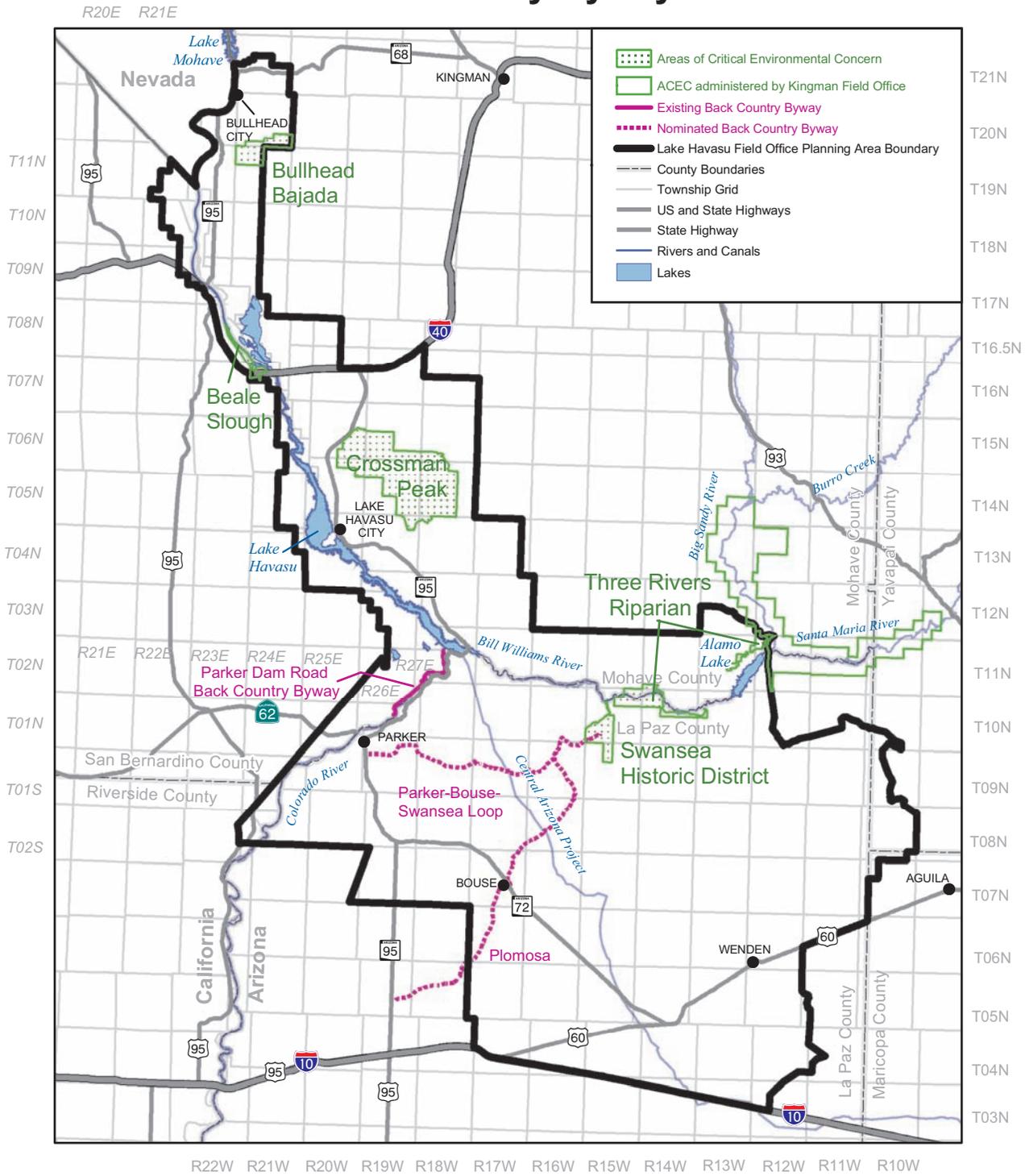
- Historic Swansea Townsite Cultural/historical resources. Includes associated shafts, adits, historical features, roads, railroads, and the Swansea pump station.
- Natural and scenic character.

Importance

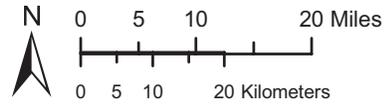
- Eligible for inclusion on the NRHP and provides a unique opportunity to interpret turn-of-the-century mining.
- The remote, natural location is irreplaceable and adds to public's understanding of the Swansea story.

AC-3. Beale Slough Riparian and Cultural ACEC will be managed to protect and prevent irreparable damage to the relevant characteristics or important values (Map 28).

Map 28 Special Designations - ACECs and Back Country Byways



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Relevance

- Regional rare riparian resources and wildlife habitat.
- Significant cultural resources, cultural sites within part of a regional cultural complex.
- Place of traditional Native American importance.

Importance

- The area has regional importance as it was set in reserve to stop the gradual decline of aquatic and associated riparian and terrestrial habitat along the Colorado River.
- The area's fragile and irreplaceable prehistoric sites are eligible for inclusion on the NRHP.
- Assure that the public will continue to have an opportunity to have an interaction with the natural environment and cultural values of the area.
- This area was part of mitigation for the channelization by Reclamation in 1951 and identified by the LCRMSCP for its fish and wildlife values.

- AC-4. Bullhead Bajada Natural and Cultural ACEC will be managed to protect and prevent irreparable damage to the relevant characteristics or important values (Map 28).

Relevance

- Historic Beale's Wagon Road.
- Adjacent prehistoric resources.
- Habitat for Arizona State-listed Sonoran Desert tortoise.
- Other special status or sensitive species present throughout the area.

Importance

- The site complex is eligible for the NRHP and is of regional, if not national, importance.
- Protects the complex from expanding urbanization around Bullhead City.
- Beale built the wagon road in 1857 in the "Great Camel Experiment" along the 35th parallel. He followed existing prehistoric trails and associated sites.

- AC-5. Crossman Peak Scenic ACEC will be managed to protect and prevent irreparable damage to the relevant characteristics or important values (Map 28).

Relevance

- Significant places of traditional cultural importance.
- Natural scenic backdrop or mountain preserve for Lake Havasu City.
- Major lambing grounds for bighorn sheep.

- ❑ Large tract of public land that exhibits high degree of naturalness with little human modification of the landscape.

Importance

- ❑ The scenic value of Crossman Peak is irreplaceable to the region.
- ❑ Protects a sacred mountain, sites eligible for inclusion on the NRHP, and priority wildlife habitat from impacts of expanding urbanization in the Lake Havasu region.
- ❑ Includes large area that provides the region with high opportunity for isolation from the sights and sounds of human development.

Designations (see Map 28)

- AC-6 Designate an estimated 2,246 acres of public lands as Three Rivers Riparian ACEC.
- AC-7 Designate an estimated 5,973 acres of public lands as Swansea Historic District ACEC.
- AC-8 Designate an estimated 2,395 acres of public lands as Beale Slough Riparian and Cultural ACEC.
- AC-9 Designate an estimated 7,090 acres of public lands as Bullhead Bajada Natural and Cultural ACEC.
- AC-10 Designate an estimated 48,855 acres of public lands as Crossman Peak Scenic ACEC.

Management Actions for ACECs

- AC-11. Acquire all non-federal lands and minerals within ACEC boundary from willing sellers (Three Rivers Riparian, Swansea Historic District, Bullhead Bajada Natural and Cultural, Beale Slough Riparian and Cultural, Crossman Peak Scenic).
- AC-12. Develop desired plant community descriptions and design grazing prescriptions to achieve the desired plant community objectives (Three Rivers Riparian, Swansea Historic District, Crossman Peak Scenic).
- AC-13. In ACECs that contain recreation values, facilities will be limited to projects that protect the values that initiated the ACEC designation. The values for each ACEC include those settings and experiences that were identified as management objectives in recreation management prescriptions (Three Rivers Riparian, Swansea Historic District, Bullhead Bajada Natural and Cultural, Beale Slough Riparian and Cultural, Crossman Peak Scenic).

- AC-14. Camping will be limited to developed or signed sites (town site within Swansea Historic District, Bullhead Bajada Natural and Cultural, Beale Slough Riparian and Cultural).
- AC-15. Camping may be limited to identified areas. Some parts or whole ACEC will be closed to overnight camping. These allocations will be made in activity-level plans (Three Rivers Riparian, Swansea Historic District, Crossman Peak Scenic).
- AC-16. Prohibit recreational shooting, except for legal hunting, in identified areas (e.g., within town site at Swansea) or posted (Three Rivers Riparian, Swansea Historic District, Crossman Peak Scenic).
- AC-17. Prohibit recreational shooting, except for legal hunting, within ACEC boundaries (Bullhead Bajada Natural and Cultural, Beale Slough Riparian and Cultural).
- AC-18. Hiking and non-motorized use will be encouraged by developing a non-motorized trail network (Swansea Historic District, Bullhead Bajada Natural and Cultural, Beale Slough Riparian and Cultural, Crossman Peak Scenic).
- AC-19. Prohibit firewood collection in the Three Rivers Riparian ACEC, Beale Slough Riparian and Cultural ACEC, and within town site in Swansea Historic District ACEC.
- AC-20. Prohibit driving except on designated open and signed routes in Swansea Townsite (Swansea Historic District).

Monitoring for ACECs

ACECs designated through this Approved RMP will be monitored for potential damage to the relevant characteristics or important values. This monitoring will be accomplished primarily under guidance provided from the cultural and biological sections of this document. ACEC management plans will be developed in the future with associated monitoring plans.

Back Country Byways

Desired Future Conditions for Back Country Byways

- BB-1. Provide for interconnectivity between local communities and to work in partnership for the regional development of eco- and recreational tourism.
- BB-2. Expose visitors to the local recreational resources, various multiple-use management programs and interpret natural, cultural, geological, and scenic features.

- BB-3. Manage these corridors in a manner consistent with the intrinsic values that will allow for a future byway designation.

Designations

- BB-4. An estimated 17 miles of the Parker Dam Road will continue as a designated National Back Country Byway (see Map 28).
- BB-5. An estimated 20 miles of the Plomosa Road is identified for nomination as a designated National Back Country Byway, which will be managed in partnership with local communities (see Map 28).
- BB-6. An estimated 47 miles of the Parker-Bouse-Swansea loop are identified for nomination as a designated National Back Country Byway, which will be managed in partnership with local communities (see Map 28).

Management Actions for Back Country Byways

- BB-7. Acquire easements where needed to ensure long-term public access.
- BB-8. Directional, safety, and interpretive signing will be installed to enhance public use, enjoyment, and stewardship of the route. A list of potential interpretive topics is included in Appendix K.
- BB-9. Back Country Byways that cross bighorn sheep habitat will include protection measures such as but not limited to: speed limits of 25 miles per hour (mph) and warning signs and or speed bumps.

Monitoring for Back Country Byways

The existing Back Country Byways visitation and facilities will be monitored annually to document effectiveness of interpretive messages, management actions, and to determine conditions and trends. Visitor use data and resources will be monitored to establish baseline conditions on the two potential byways, during the development of the TMPs. Specific monitoring requirements will be addressed in the development of the individual National Back Country Byway Plans and nomination packages.

Potential Wild and Scenic River

Desired Future Conditions for Potential Wild and Scenic Rivers

- WR-1. Eligible stream segments will be managed to preserve their suitability for inclusion into the Wild and Scenic River System. Outstandingly remarkable values must be protected and the free-flowing character of the stream segments cannot be modified.
- WR-2. A new segment may be identified by the BLM for inclusion in the Wild and Scenic River system after possible acquisition of private property (Planet Ranch) on the Bill Williams River. A study/EIS will be completed within

5 years of acquisition to determine the suitability of the segment for inclusion in the Wild and Scenic River system.

Designations

WR-3. This RMP will not change the final *Arizona Statewide Wild and Scenic Rivers Legislative Environmental Impact Statement and Study Report/Record of Decision* (December 1994) determination that approximately 20.5 miles of the Bill Williams River are suitable for inclusion into the National Wild and Scenic Rivers System, classified as follows (see Map 29):

- ❑ Segment 1 will be 8.3 miles in length, covering 2,314 acres, and determined suitable as Wild.
- ❑ Segment 2 will be 5.1 miles in length, covering 494 acres, and determined suitable as Scenic.
- ❑ Segment 3 will be 6.2 miles in length, covering 1,850 acres, and determined suitable as Wild.

Congress has not acted on these determinations. Pending congressional action, these segments will be managed to protect the outstandingly remarkable values identified as making the segments eligible for protection under the Wild and Scenic Rivers Act.

Management Actions for Potential Wild and Scenic Rivers

WR-4. The Management Actions listed in the final *Arizona Statewide Wild and Scenic Rivers Legislative Environmental Impact Statement and Study Report/Record of Decision* (Bureau of Land Management 1994) will apply only after Congress designates the Bill Williams River as Wild and Scenic. The ongoing management actions also listed in the final *Arizona Statewide Wild and Scenic Rivers EIS* would continue regardless of wild and scenic river designation. See Appendix K, *Special Designations*.

Monitoring for Potential Wild and Scenic Rivers

The segments suitable for inclusion into the National Wild and Scenic Rivers System will be monitored annually to assure the segments remain eligible for future Congressional action. This monitoring can be accomplished in conjunction with the monitoring done for Swansea and Rawhide Mountain Wilderness and Three River Riparian ACEC. Additional hydrological and ecological standards for the Bill Williams River will be developed and monitored as part of BLM's participation with Bill Williams River Steering Committee.

Travel Management

OHV area designations as defined in 43 CFR 8340.0-5(f), (g) and (h) and further specified in 43 CFR 8342.1 are made in this Approved RMP throughout the planning area. The BLM's OHV area designations are listed below:

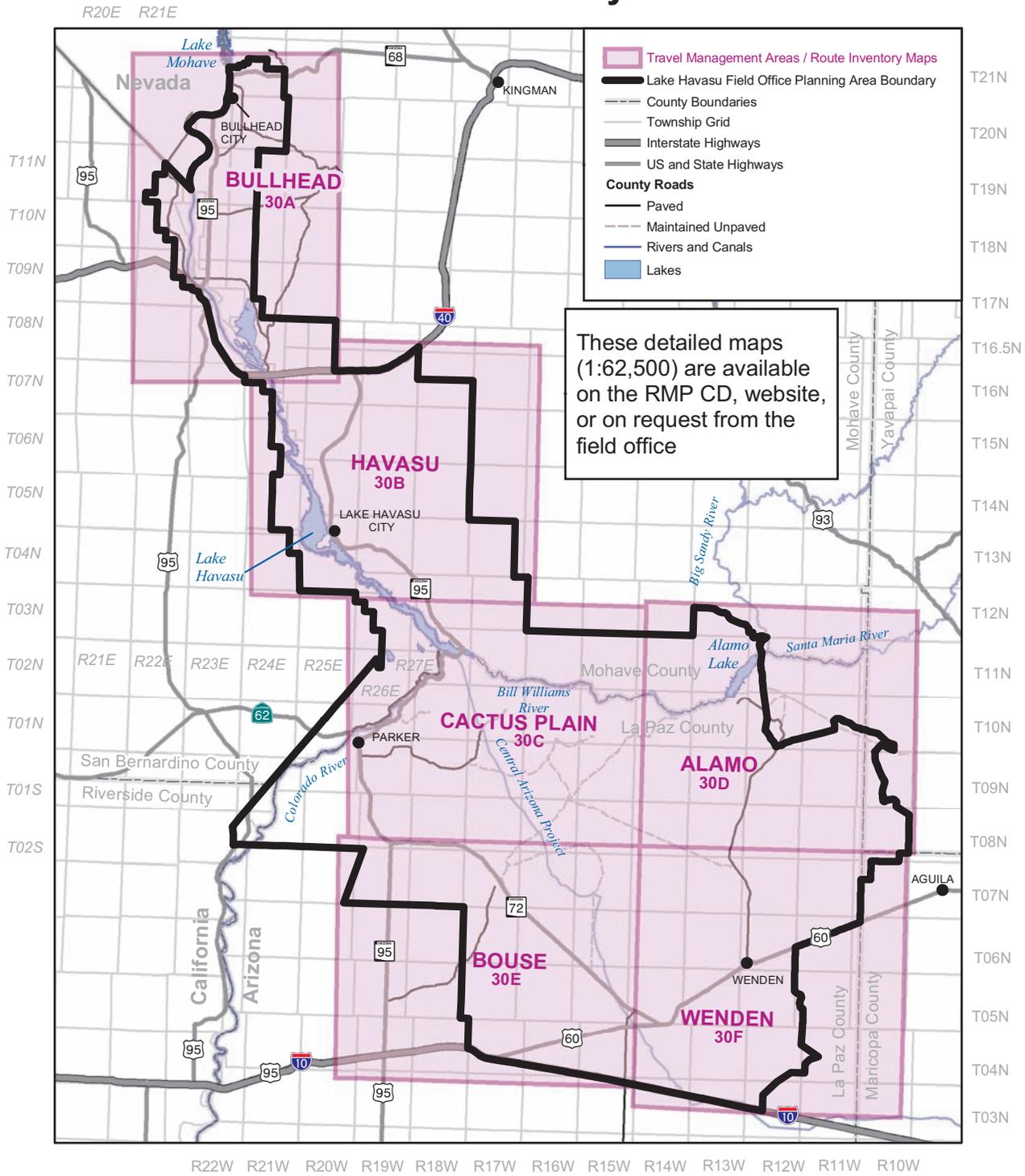
- *Open area* means an area where all types of vehicle use are permitted at all times and anywhere in the area. Use is subject to the operating regulations and vehicle standards set forth in 43 CFR 8341 and 8342.
- *Limited area* means an area restricted at certain times, in certain areas, and/or to certain vehicular use. These restrictions may be of any type but can generally be accommodated within the following type of categories:
 - numbers of vehicles
 - types of vehicles
 - time or season of vehicle use
 - authorized user only
 - use on existing roads and trails
 - use on designated roads and trails
- *Closed area* means an area where any motorized use is prohibited. Use of motorized vehicles in closed areas may be allowed for certain reasons; however, such use will be made only with the approval of the authorized officer.

The BLM will designate a Travel Management Network (TMN) for the planning area within 5 years of adoption of this Approved RMP through the TMP. The TMP will evaluate and designate all individual routes/trails for use within the planning area unless specified elsewhere in this Approved RMP. The BLM will follow the process as listed in Appendix B, *Administrative Actions and Standard Operating Procedures*, of this Approved RMP, when creating the TMN, including evaluating routes using the criteria listed in the Route Evaluation Tree in Appendix L. Map 30 identifies the six travel management areas that will be used in the development of the TMP.

Desired Future Conditions

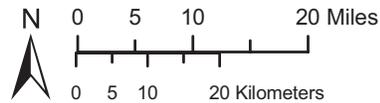
- TM-1. Designations will be made and management implemented for a balance of opportunities for the entire range of motorized and non-motorized access needs, while in balance with other resource values found on public lands.
- TM-2. Reasonable, safe, and environmentally sound access will be provided to visitors, local residents, licensed or permitted activities, and property owners. Lake Havasu Field Office will be linked with other state, regional, and land management agencies or interest groups to better facilitate travel management.
- TM-3. Travel between communities within the planning area will be made safer.
- TM-4. Public access easements will be acquired across private or state lands where public access to federal lands and waterways is not available.
- TM-5. Instill and strengthen a more effective and responsible user ethic through public outreach programs for motorized and non-motorized users.

Map 30 Travel Management Areas and Route Inventory Index



These detailed maps (1:62,500) are available on the RMP CD, website, or on request from the field office

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- TM-6. The BLM will continue to provide motorized and non-motorized access across public lands, with emphasis on development of non-motorized trails and trailheads.
- TM-7. The BLM will assess its responsibility to manage boat related transportation opportunities as they relate to BLM facilities on the Colorado River and Lake Havasu and to develop and implement management practices accordingly.
- TM-8. Opportunities for “touring” and “loop” travel beyond the boundaries of the planning area will be maintained or enhanced when creating the travel management network for the planning area.

Land Use Allocations

- TM-9. OHV area designations are shown in Table 8 and on Map 31. Generally, the planning area will be classified as “limited to existing roads and trails” for motorized travel, unless a specific classification has been applied to the area as in Table 8. Existing roads and trails for motorized use will be defined as those routes and trails found on route inventories completed in the period between 1990 and 2004 and shown on the Lake Havasu Field Office inventory maps (Map 32 and the six detailed electronic maps with inserts found in the attached CD).

Estimated acreages by OHV area designation are shown below in Table 8.

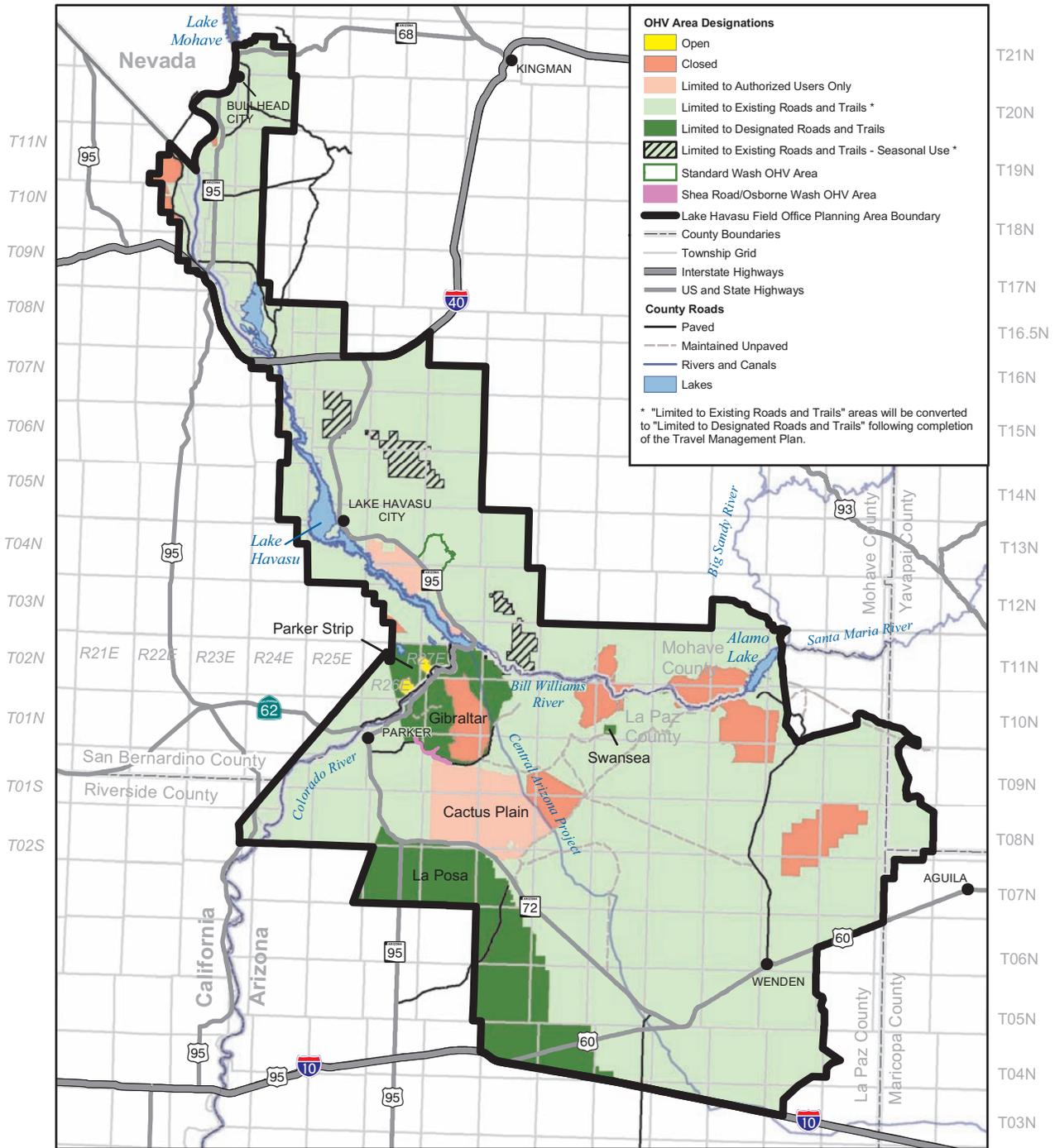
Table 8. OHV Area Designations

General Description of Classification	Estimated Acres of Public Lands In the Approved RMP (Map 31)
Open	9,637
Closed	120,990
Limited	
▪ Limited to authorized users only	71,752
▪ Limited to existing roads and trails	941,352
▪ Limited to designated roads and trails ^a	164,348
▪ Limited to existing roads and trails—seasonal use	30,943
▪ Limited to designated roads and trails—seasonal use	5,049

- TM-10. Washes in areas designated Open, are available for motorized travel. In areas designated “existing road or trails” only washes with routes shown on inventory maps will be open to motorized travel. After the TMP is completed only washes with designated routes will be open for travel. All other washes will be closed to motorized travel unless at a later date reviewed as a new route or trail and evaluated under the route evaluation process as outlined in Appendix L.
- TM-11. Between the ROD and the completion of the TMP, three areas totaling 30,943 acres (see Map 31) will retain seasonal closures for motorized vehicles from January 1 to June 30, to protect sensitive habitats, ACEC values, recreational settings, and/or cultural sites. These areas were originally seasonally closed under the YRMP for bighorn sheep lambing grounds. All routes in these areas will be evaluated and designated in the TMP and the area allocation dropped. This does not affect areas currently limited to designated routes.
- TM-12. “Limited to Existing Roads and Trails” areas will be converted to “Limited to Designated Roads and Trails” following the Travel Management Network Plan.
- TM-13. Wheeled non-motorized carts will be allowed except in WAs.
- TM-14. Motorized vehicles may be allowed to pull off an existing/designated route 100 feet either side of centerline. 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 either side of centerline in those areas where resource damage has exceeded limits of acceptable change.
- TM-15. Technical Vehicle Specialized Sport Sites could be identified and managed as an RMZ or specific sites within RMZ or the ERMA and not part of the travel management network.
- TM-16. Foot and equestrian cross-country travel will be allowed on public lands. California and Arizona state laws consider bicycles vehicles and cross-country travel will not be allowed except in designated open areas. Except in WAs, all roads and trails will be open to bicycles unless designated otherwise.
- TM-17. Public lands within the Gibraltar Mountain Interdisciplinary Management Planning Area, except in the WA and the proposed Shea Road/Osborne Wash Open Area, will be classified as limited to designated roads and trails or limited to designated routes closed seasonally. These designated trails and routes were established under the 2001 Gibraltar Mountain Interdisciplinary Management Plan (see Map 31).

Map 31 Off-Highway Vehicle Area Designations

R20E R21E



OHV Area Designations

- Open
- Closed
- Limited to Authorized Users Only
- Limited to Existing Roads and Trails *
- Limited to Designated Roads and Trails
- Limited to Existing Roads and Trails - Seasonal Use *
- Standard Wash OHV Area
- Shea Road/Osborne Wash OHV Area

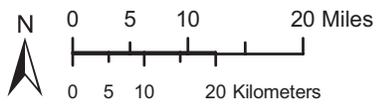
Other Symbols:

- Lake Havasu Field Office Planning Area Boundary
- County Boundaries
- Township Grid
- Interstate Highways
- US and State Highways
- County Roads
- Paved
- Maintained Unpaved
- Rivers and Canals
- Lakes

* "Limited to Existing Roads and Trails" areas will be converted to "Limited to Designated Roads and Trails" following completion of the Travel Management Plan.

R22W R21W R20W R19W R18W R17W R16W R15W R14W R13W R12W R11W R10W

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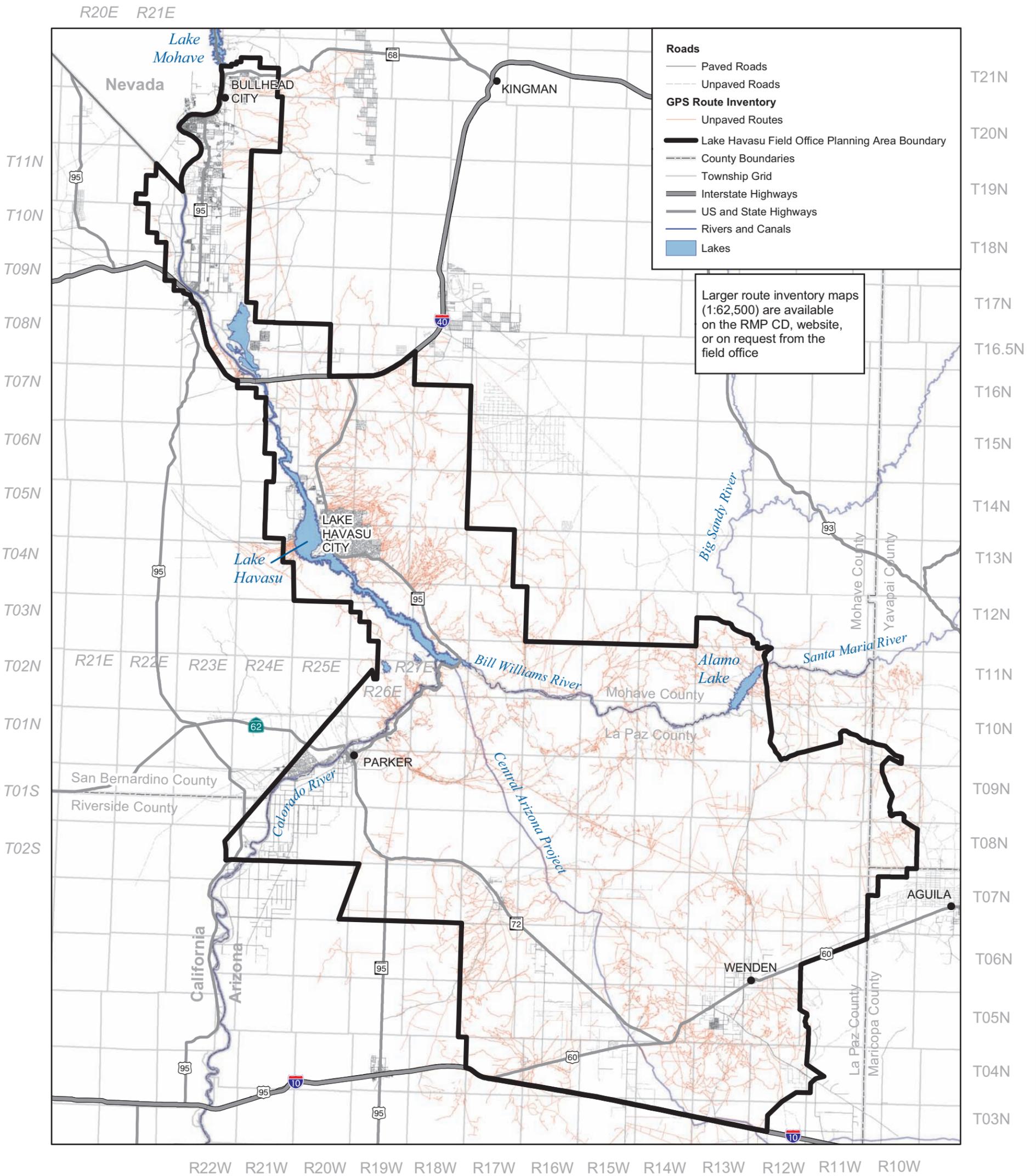
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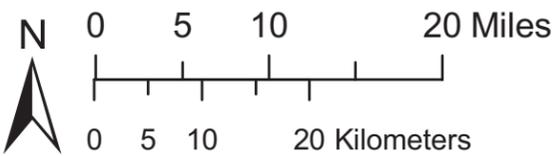
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Map 32 Existing Routes



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- TM-18. Public lands within the La Posa Management Planning Area and within the Lake Havasu Field Office planning area will be classified as limited to designated roads and trails. These designated trails and routes were established under the *La Posa Interdisciplinary Management Plan* (Bureau of Land Management 1997b) (see Map 31).
- TM-19. Public lands within the Parker Strip Recreation Area, except in developed facilities and the two OHV areas, will be classified as limited to designated roads and trails. These designated trails and routes were established under the 1993 *Parker Strip Recreation Area Management Plan* (see Map 31).
- TM-20. Public lands within the Swansea Townsite will be classified as limited to designated roads and trails. These designated trails and routes were established under the *Swansea Historic District Cultural Resource Management Plan* (Bureau of Land Management 1997c) (see Map 31).
- TM-21. Individual designated routes within the four areas listed above may be reevaluated in the TMP, only if it can be shown that sensitive resources or unique recreational opportunities are impacted by the earlier designations.
- TM-22. The 2,602 acres in the Crossroads and Copper Basin OHV areas will remain designated open to intensive OHV use. The Recreation Project Plan for the Parker Strip Off-Highway Vehicle Area and Routes was completed in 1996, and no changes in management are proposed (Bureau of Land Management 1996).
- TM-23. Approximately 602 acres identified as resource protection sites in previous implementation documents (including activity level plans or NEPA actions) will be designated Closed (see Map 31). (Note: Sites smaller than 5 acres are not shown.)
- TM-24. Standard Wash and Shea Road/Osborne Wash RMZs will be allocated “Open” following compliance with NHPA and the Endangered Species Act and the successful resolution of adverse effects to historic properties and threatened and endangered species. Until these consultations are completed in these two RMZs, travel will remain restricted to existing roads and trails.
- TM-25. The Southern bluff RMZ above the Colorado River in the Colorado River Nature Center SRMA will be limited to authorized users for motorized vehicles.
- TM-26. Within Lake Havasu Aubrey Hills area, motorized use will be limited to authorized users. (See Map 31 and *Biological Resources*.)
- TM-27. Approximately 5,023 acres identified as protection sites in previous plans would be designated as “limited” and the specific concerns for these areas will be identified as evaluation criteria and addressed through the route evaluation and designation process.

Refer to the discussion in the *Special Designations* section for additional motorized vehicle provisions in these areas (see Map 28).

Management Actions

- TM-28. To maintain the natural landscape in lands managed for maintaining wilderness characteristics, vehicles will be limited to existing routes until the route designation process is complete. Each route will be evaluated on individual merit and designated open, limited, or closed. Non-motorized access may include development of some trails or, to minimize disturbance of the ground surface, be limited to marking foot routes with posts.
- TM-29. The BLM will require permittees (e.g., for hunting, wood gathering, livestock operators) to comply with field office route designations. Exceptions may be authorized on a case-by-case basis.
- TM-30. Impacts of motorized activity (except for authorized vehicles) will be evaluated and the areas converted to limited to administrative access to motorized vehicles within 0.25 mile of any spring. If necessary to maintain access, a new route may be established.
- TM-31. Specific routes or portions of specific routes through WHAs established for special status species may be closed to vehicular traffic (except for administrative use) during the seasons when the habitats are being used and will be addressed during the route designation process.
- TM-32. No new permanent motorized routes will be authorized in lands managed to maintain wilderness characteristics, except those required by law.
- TM-33. Upon completion of the TMP process, the route network will be limited to *designated* roads, primitive roads, and trails. Upon completion of each TMP, a map will be published showing the status, maintenance intensity, and other relevant information for all roads, primitive roads, and trails within each respective Travel Management Area.
- TM-34. The BLM will not develop, endorse, or establish route or trail ratings. The BLM may describe physical characteristics of a route.
- TM-35. Proposals for new roads, routes, or trails (including but not limited to ROWs and/or administrative needs) will be evaluated and the route designated in conjunction with the NEPA process (see Appendix L).
- TM-36. Use of authorized ROWs will be managed for public access and through the TMPs designated either open or limited.
- TM-37. On BLM published maps, areas designated as limited to authorized users will be shown as closed to general motorized use.

- TM-38. All rockcrawling activities will be limited to locations away from special status species. This will be a consideration in the Route Evaluation Process.
- TM-39. Prior to completing the TMP and route designation process, any vehicle routes not represented on the route inventory maps will be subject to restoration actions as described in *Administrative Actions and Standard Operating Procedures*, Appendix B. After site-specific cultural and wildlife clearances are accomplished, the restoration action could be completed without further NEPA or public notice.
- TM-40. Through the route designation process, the BLM will decrease Bill Williams River vehicle access crossings to two sites downstream of Alamo Dam. The BLM will continue working with landowners to provide non-motorized access to the river.

Monitoring

TMPs will be developed and include prescriptions and monitoring strategies.

In the 5 years prior to the completion of the TMP, monitoring of OHV use on the interim route network will be completed in conjunction with other resource programs. Mitigation measures (such as those listed in Appendix L, *Travel Management*) may be initiated where impacts from OHV use impacts sensitive resources. The interim route network includes the "Existing Roads and Trails" as defined by the Route Inventory Maps. The inventory maps include routes already designated in previous activity plans and these designations still apply. These areas/routes will be monitored for compliance.

Land Health Assessments will determine upland conditions and trend as a part of all TMPs and serve as a baseline measure for any further monitoring required to measure management success in that area. This will include route restoration prescriptions to satisfy land health objectives, and monitoring strategy to measure progress and management success. Revegetation and soil stabilization prescriptions associated with utility and transportation corridor work, plus monitoring requirements will be addressed as part of this effort on existing corridors; new proposals will have prescriptions and monitoring strategies addressed in the NEPA process.

At the end of many roads and trails exists an abandoned mine. Therefore, the TMP is an opportunity to identify abandoned mines as an inventory for risk assessment, management actions, and further monitoring to assure public and environmental health. Abandoned mine lands identified through this process will be included in the BLM database. Sites with high risk factors will be included in the Annual Planning Update Report and Summary.

Visual Resource Management

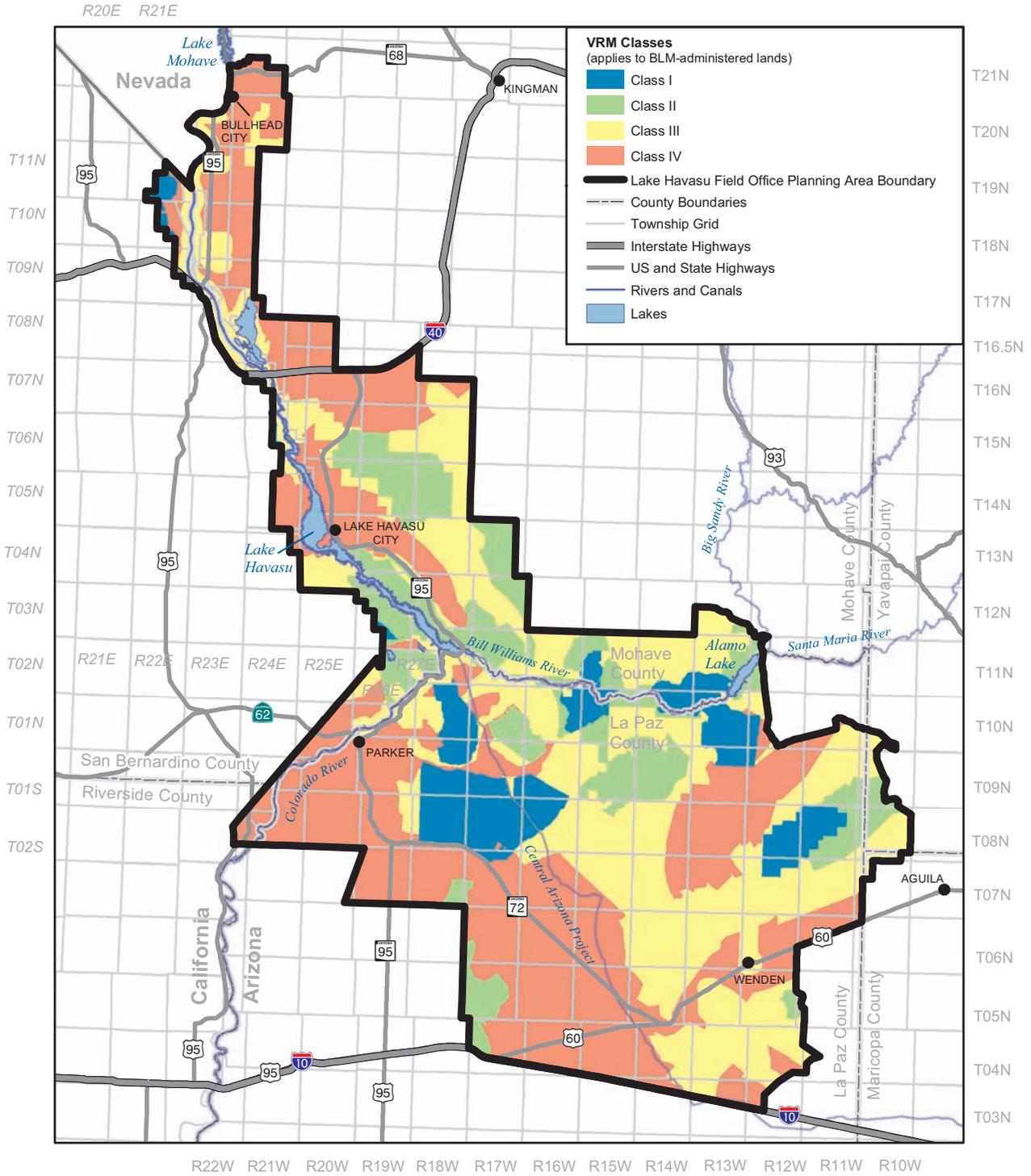
Visual resource values are managed in accordance with Visual Resource Management (VRM) class objectives (see Map 33). VRM classes are allocated for all areas of BLM-administered land, based on an inventory of visual resources and management considerations for other land uses. The following criteria were used in determining the VRM Management Class allocations for this plan:

- The overall management emphasis intended for each alternative.
- Recognize all applicable Special Designations and all Land Use Allocations as VRM classifications are applied.
- Assure that other management activities and land uses being provided for in a specific area may be achieved within the VRM Class objective being set, consistent with Special Designations and Land Use Allocations.
- Use of the least restrictive class that still achieves objectives to attain Desired Future Conditions.

Desired Future Conditions

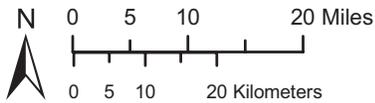
- VR-1. VRM Class I – The objective of this class is to preserve the existing character of the landscape. This class provides for the natural ecological changes; however, it does not preclude very limited management activity. The level of change of the characteristic landscape should be very low and must not attract attention.
- VR-2. VRM 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 the attention of the casual observer. Any changes must repeat the basic elements of form, line, color, and texture found in the predominant natural features of the characteristic landscape.
- VR-3. VRM 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. Changes should repeat the basic elements found in the predominant natural features of the characteristic landscape.
- VR-4. VRM 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. However, every attempt should be made to minimize the impact of these activities through careful location, minimal disturbance, and repeating the basic elements.

Map 33 Visual Resource Management



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Land Use Allocations (Shown in Map 33)

- VR-5. Class I: 179,133 acres
- VR-6. Class II: 253,367 acres
- VR-7. Class III: 521,356 acres
- VR-8. Class IV: 405,247 acres

Management Actions

- VR-9. Visual resource design techniques and best management practices will be used to mitigate the potential for short- and long-term visual impacts from other uses and activities.
- VR-10. Contrast ratings are required for major projects proposed on public lands that fall within VRM Class I, II, and III areas that have high sensitivity levels. Contrast-rating procedures are described in Handbook H-8341-1 and outlined in Appendix B, *Administrative Actions and Standard Operating Procedures*.
- VR-11. The BLM will protect the scenic quality in a corridor on each side of SR 95 from south of Lake Havasu City to the Bill Williams River, a distance of approximately 20 miles. The width of the corridor will be 0.5 mile to either side of the paved shoulders of SR 95 (Map 33). Public lands in this scenic corridor will generally be managed to VRM Class II or III objectives. Physical improvements to existing leases or activities such as ROWs will be managed per existing agreements.

Monitoring

Since the overall VRM goal is to minimize visual impacts, mitigating measures will be prepared for all adverse contrasts that can be reduced. These measures will be evaluated for effectiveness in meeting VRM Management Objectives as part of compliance monitoring.

Some or all of the Key Observation Points (KOPs) used during the VRM inventory, and the establishment of new KOPs identified by changing conditions, plans, or actions will be evaluated in VRM Class I, II, and III areas and monitored for changes in landscape character every 5 years in rotation.

Wild Burro Management

The management of wild burros on public land is accomplished at the minimum level necessary to assure the herd's free-roaming character, health, and self-sustaining ability in accordance with the Act. Herd areas (HAs) are limited to the geographic areas identified as being habitat used by wild burros at the time of passage of the Act (Map 34).

Herd Management Areas (HMAs) are established on areas within HAs through the land use planning process, within which wild burros can be managed for the long term. Upon designation as an HMA, wild burros shall be managed as an integral component of the public lands on the basis of multiple uses and in a manner that maintains an ecological balance (Map 35).

Desired Future Conditions

- HB-1. Viable, color-diverse burro populations will be maintained within the HMA, while maintaining a thriving natural ecological balance with other resources and consistent with other management agencies' objectives (including wildlife, riparian and upland vegetation, recreation, and others).

Land Use Allocations

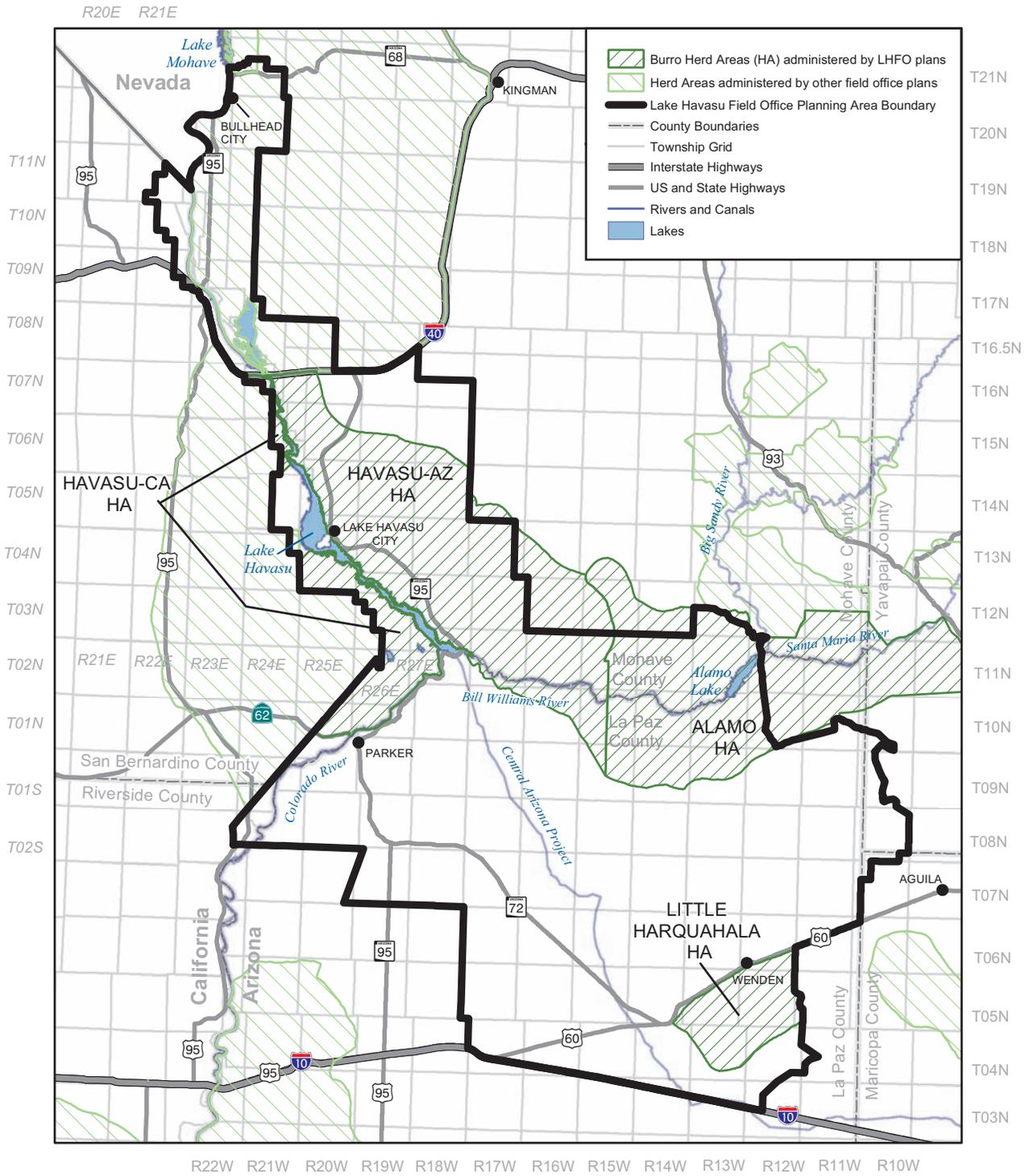
- HB-2. In accordance with the Wild Free-Roaming Horses and Burros Act, non-BLM-administered lands including the Alamo Wildlife Area, will be excluded from HMAs. These lands will be excluded from determinations of Appropriate Management Level (AML) for burros within the HMA. Wild burros that use non-BLM lands as part of their habitat remain protected under the Wild Horse and Burro Act; therefore, any removal actions remain the responsibility of the BLM.

The California side of the Havasu HMA (Havasus-CA HMA) will be managed in accordance with the *Northern and Eastern Colorado Desert Coordinated Management Plan*, which combines the Havasu-CA HMA with the Chemehuevi HMA (Bureau of Land Management 2002b). The combined area will be named Chemehuevi HMA and the initial AML will be 108 burros.

Based on the manageability analysis found in Appendix M, wild burros will not be managed within the Little Harquahala HA boundaries; therefore, the HA will not be designated as an HMA and the BLM does not intend to maintain a burro herd in this areas.

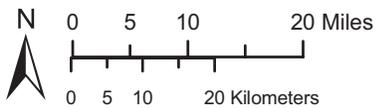
- HB-3. The eastern boundary of the Alamo HMA will run west from the southern boundary of the Alamo Wildlife Area, and then extend south from the state land block within the Palmerita Allotment, excluding the Alamo Wildlife Area, state, and private land. This demarcation will provide protection for threatened and endangered species, riparian, and wildlife issues.
- HB-4. The area north of Lake Havasu City (west of SR 95 and east of the Colorado River) will be excluded from the Havasu HMA due to increasing population pressures, traffic concerns, and refuge conflicts.
- HB-5. The initial AML levels will be adjusted based on the AMLs in the existing plans, the effects of boundary changes on the critical area, and existing monitoring data, which is the basis for the AML.

Map 34 Wild Horse and Burro Herd Areas



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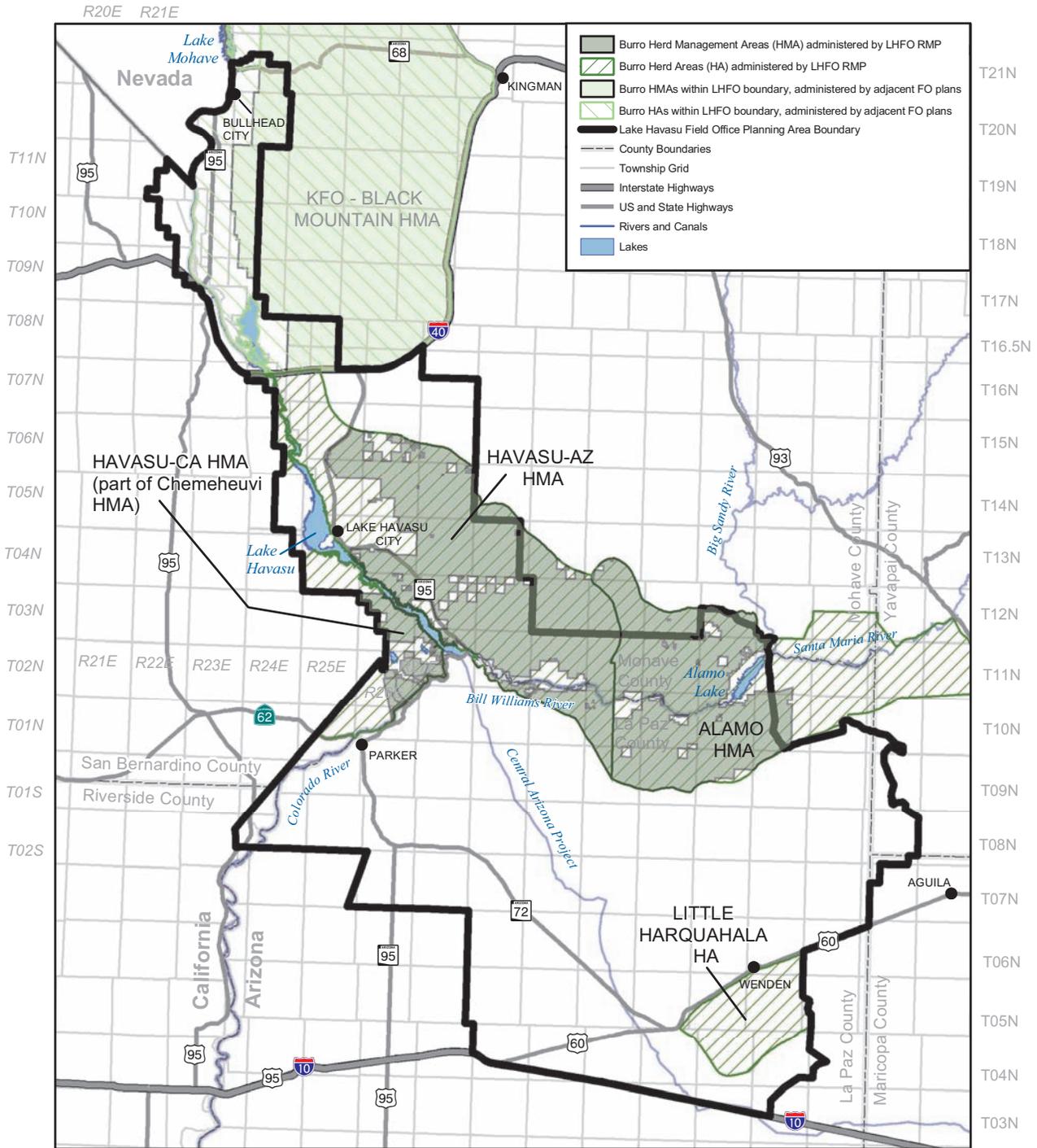


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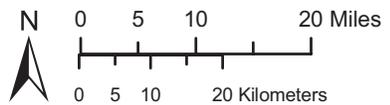
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Map 35 Wild Burro Herd Management Areas



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Management Actions

- HB-6. Management of burros in the Alamo HMA will consider and assess the fish and wildlife conservation purposes and objectives for the Alamo Wildlife Area and the mandates of the Fish and Wildlife Coordination Act and the Endangered Species Act. The purposes and objectives for the Wildlife Area are outlined in AGFD's Alamo Wildlife Area Management Plan. AGFD has indicated that they will periodically (approximately every 5 years) review and possibly revise the plan. The BLM will manage the burros in consultation with AGFD and USFWS consistent with the Alamo Wildlife Area Management Plan. Decisions concerning burros within the wildlife area will be consistent with federal laws and regulations, including the Wild Free-Roaming Horse and Burro Act of 1971, as amended 1976 and 1978.

The BLM does not intend to maintain burros that are outside of HMA boundaries but are within the HAs, nor maintain burros that are within HA that have not been designated as an HMA. Burro use will occur within the Alamo Wildlife Area as outlined in the Alamo Wildlife Area Management Plan. Burro use may occur within the Santa Maria and Big Sandy corridors at levels developed cooperatively with AGFD and USFWS.

The BLM and AGFD will work collaboratively to provide wild burros with access to water in Alamo Lake within specific areas of the Alamo Wildlife Area. Such access will be through agreement with AGFD and compatible with the goals and objectives of the wildlife area as outlined in the Alamo Wildlife Area Management Plan.

The level of burro use that is compatible and acceptable within the Alamo Wildlife Area will be cooperatively determined by AGFD and the BLM and identified in the Alamo Wildlife Area Plan. The BLM, AGFD, and USFWS will work together to establish key monitoring areas within sensitive riparian habitat. AGFD has indicated that they believe burro use will be compatible with the purposes of the wildlife area if annual bark stripping of live trees does not exceed 3% in any of the key areas. Additional upland monitoring sites and associated levels of acceptable use may be established within the Alamo Wildlife Area if resource damage by burros is observed in those areas.

The BLM will target burro removals in sensitive habitat areas and work with AGFD and USFWS to develop other management practices (if needed) such as the construction of fencing and alternative water sources to maintain levels of acceptable burro use within the wildlife area and to protect sensitive habitats.

The BLM will evaluate all monitoring data, population data, and removal data every 5 years to assess whether the current AML continues to be appropriate for all HMAs (Havasu and Alamo). During the evaluation process, monitoring protocols and additional data needs will be analyzed. The evaluation will consider acceptable levels of use within the Alamo Wildlife Area. The evaluation and any adjustments in AML will be conducted in coordination and

consultation with the AGFD and USFWS. The AGFD has stated that they will periodically re-evaluate monitoring and acceptable burro use levels within the Alamo Wildlife Area. Every effort will be made to insure that these evaluations occur as concurrently and collaborative as feasible.

- HB-7. Any new fence construction within burro HMAs will not prevent burro access to water, unless the water has been developed for a specific purpose (such as wildlife catchments) that will make it necessary to exclude burros.
- HB-8. The guidelines and criteria for adjusting AML will include the use of monitoring data and be coordinated with affected resources and agencies.
- HB-9. Safety issues will continue to be handled as emergency/nuisance removals, receiving top priority to correct public safety concerns. Additionally, the BLM will work with ADOT to create accessible safe crossings for wildlife and wild burros.
- HB-10. The initial Appropriate Management Levels for wild burros (the number of wild burros to be managed with the HMA) in the Approved RMP are listed below. Acreages within the HMAs appear in Table 9:

Alamo: 160
 Havasu-AZ: 166
 Havasu-CA/Chemehuevi: 108

Table 9. Acreages within Herd Management Areas	
HMA	Acreage
Alamo	189,237
Havasu AZ	268,271
Havasu-CA/Chemehuevi	24,318

Monitoring

Monitoring data will continue to be collected on the Havasu and Alamo HMAs to ensure proper use and to provide a tool to evaluate the Appropriate Management Level. The data collected include climate, actual use, utilization, and trend. Population data will continue to be collected in coordination with AGFD every 3 to 5 years through collaborative census techniques. Age and sex data are collected following removals of excess burros. Census flights and burro removals will be reported in the *Annual Planning Update Report and Summary*.

The simultaneous double-count census method has been tested in coordination with the AGFD as a technique for accurately estimating burro populations. As any technique becomes available, the BLM and AGFD will work collaboratively to test its effectiveness.

Wilderness Characteristics

Desired Future Conditions

- WC-1. The following wilderness characteristics will be maintained or enhanced where lands are allocated for that purpose:

Naturalness – Lands and resources exhibit a high degree of naturalness when affected primarily by the forces of nature and where the imprint of human activity is substantially unnoticeable. Naturalness attributes may include the presence or absence of roads and trails, fences, wildlife facilities and other improvements; the nature and extent of landscape modifications; the presence of native vegetation communities; and the connectivity of habitats. Wildlife populations and habitat are recognized as important aspects of the naturalness and will be actively managed.

Solitude – Visitors may have outstanding opportunities for solitude when the sights, sounds, and evidence of other people are rare or infrequent, where visitors can be isolated, alone or secluded from others.

Primitive and Unconfined Recreation – Visitors may have outstanding opportunities for primitive and unconfined types of recreation where the use of the area is through non-motorized, non-mechanical means off designated routes or as specifically excepted, and where no or minimal developed recreation facilities are encountered.

Land Use Allocations

- WC-2. 41,590 acres will be managed to maintain wilderness characteristics (Map 36).

Management Actions

- WC-3. Use of motor vehicles and mechanical transport, and the construction of temporary roads, structures, and installations will be allowed for emergency purposes. Any emergency actions will be conducted in a manner that creates the least disturbance and will be reclaimed as soon as possible after the situation has ended.
- WC-4. Use of non-motorized wheeled carts (game carriers) will be allowed.
- WC-5. The administrative use of motorized/mechanized equipment for natural and cultural resource management will be allowed. Administrative activities include, but are not limited to, water supplementation, collar retrieval, and capture/release of wildlife, maintenance/repair and reconstruction or construction of wildlife waters. Cross-country travel for administrative purposes will be permitted only with prior approval by the authorized officer. Any administrative actions will be conducted in a manner that creates the least

disturbance and reclaimed as soon as possible after the administrative need has ended.

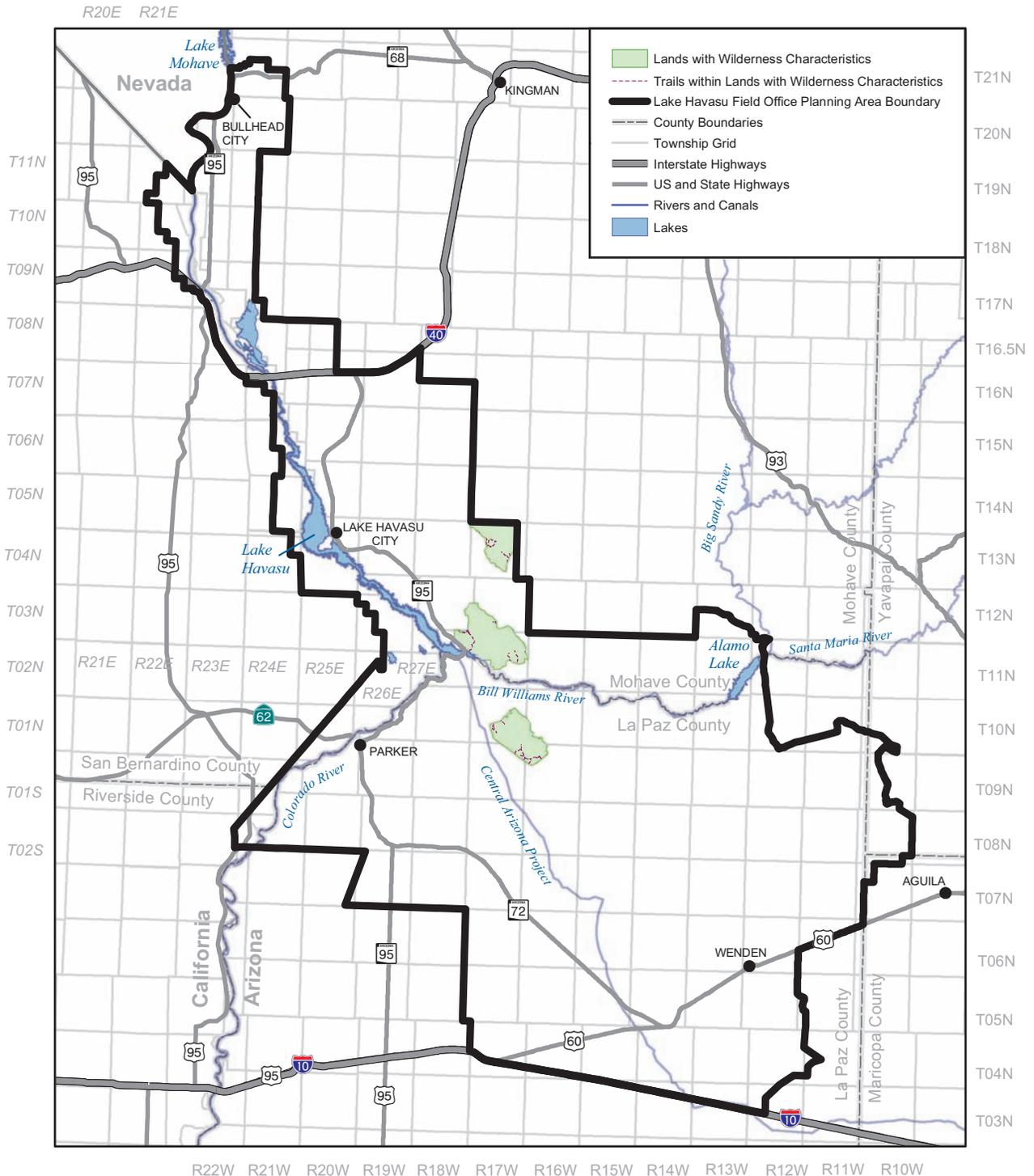
- WC-6. Surface-disturbing activities or the permanent placement of structures including the rerouting of inventoried and/or designated routes will be allowed only when the level of change to the landscape is low. Though such changes may be seen, they will not attract the attention of the casual observer, subject to criteria outlined below.¹
- WC-7. Develop and maintain recreation facilities only when compatible with maintaining wilderness characteristics or when needed to protect resources or provide for public safety.
- WC-8. Maintenance of existing facilities will be allowed.
- WC-9. Decrease the visual effect of facilities on naturalness or scenic resources, when the opportunity arises, during reconstruction, replacement, or major maintenance of new or existing facilities.
- WC-10. Vending operations and concession leases will be prohibited. Other temporary commercial or recreation permits that meet the land use plan objectives for the area could be issued. These permits include, but not limited to, SRPs for backcountry guides or temporary land use authorizations for filming.
- WC-11. Public lands within lands managed to maintain wilderness characteristics will be retained in public ownership.

¹ Project consideration criteria: In general, projects with a small footprint that, across the area as a whole, would benefit maintenance of wilderness characteristics and are compatible with other resource objectives could be approved. Criteria to consider include:

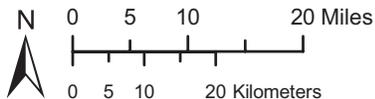
- Need for project to protect natural and cultural resources.
- Opportunity to manage and control public use or provide for public safety.
- Opportunity to restore or enhance natural, cultural, or visual resources and meet resource objectives.
- Magnitude of long-term effect (positive or negative) on naturalness and resources.
- Ability to restore the use area after the project is completed to its previous natural state.
- Size and scale of project.
- Compatibility with the specified VRM zone and recreation settings.
- Loss of opportunity for solitude and primitive recreation.
- Potential for project or use to be accommodated outside of area.

When approved, projects would be completed using the least impacting methods that could be reasonably used to accomplish the project, considering resource effects as well as labor effort and cost, including designs for the facility to blend into the landscape, consideration of site selection and use of a low profile, design facilities that would require minimal maintenance, and use of best management practices to minimize surface and vegetation disturbance during construction. When completed, a restoration plan would be implemented to actively restore disturbed areas.

Map 36 Lands with Wilderness Characteristics



LAKE HAVASU FIELD OFFICE
Record of Decision /
Approved Resource Management Plan



UNITED STATES DEPARTMENT OF THE INTERIOR
Bureau of Land Management



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

May 2007



- WC-12. Acquire state and private inholdings from willing sellers whenever practicable, within lands managed to maintain wilderness characteristics.
- WC-13. Recreational or hobby collecting of mineral specimens when conducted without location of a mining claim and limited to hand collection and detection equipment may be allowed.
- MI-8. Mineral material development will only be authorized on lands managed to maintain wilderness characteristics when there will be no lasting impacts to solitude, unconfined recreation, and naturalness.
- MI-14. Surface occupancy for mineral leases will be permitted on lands managed to maintain wilderness characteristics when there will be no lasting impacts to solitude, unconfined recreation, and naturalness.
- WC-14. Existing livestock grazing operations and support facilities are allowed to continue.
- WC-15. During fire suppression operations, minimum impact suppression techniques will be used.
- WC-16. Prescribed fires are allowed in conformity with a fire management plan so long as it is consistent with improving or maintaining the area's wilderness characteristics.
- WC-17. Vegetative manipulation to control noxious, exotic, or invasive plant species is allowed when there is no effective alternative and when the control is necessary to maintain the natural ecological balances within the area. Control may include manual, chemical, and biological treatment provided it will not cause adverse impacts to the wilderness characteristics.
- WC-18. Rehabilitation, stabilization, reconstruction, and restoration work on prehistoric and historic sites and structures, as well as, excavations and surface collection may be specifically permitted if wilderness characteristics are maintained.

Monitoring

Lands managed for wilderness characteristics will be monitored to determine the effectiveness of management prescriptions to maintain naturalness, solitude, and Primitive Unconfined Recreation as defined in IM 2003-275 – Change 1 Attachment 2 (see Appendix A, *Applicable Laws, Regulations, Policy, and Planning Criteria*).

Monitoring can be completed in conjunction with other resource programs, such as Recreation, Travel Management (TMP), Biological Resources (Land Health Standards). Monitoring will be conducted in rotation (one area per year or as needed.) Results and conclusions of this work will be presented in the 5-year plan evaluation.

Public Involvement

The BLM will continue to actively seek the views of the public, using techniques such as news releases and mass mailings to ask for participation and to inform the public of new and ongoing project proposals (including the status of the TMP), site-specific planning, and opportunities and timeframes for comment. The public is encouraged to contact the BLM (Lake Havasu Field Office at 2610 Sweetwater Avenue, Lake Havasu City, Arizona 86406) and request that their name be placed in the field office mailing list along with their specific area of interest (e.g., recreation, cultural, or mineral) for future projects. The public may also make this request by calling (928) 505-1200.

The BLM will also continue to coordinate, both formally and informally, with the numerous federal and state agencies, American Indian Tribes, local agencies, and officials interested and involved in the management of public lands in the planning area.

Management Plan Implementation

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

Immediate Decisions

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

One-Time Decisions

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

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

Long-Term Guidance/Life of Plan Direction

These decisions include the goals, objectives (Desired Future Conditions), and management actions established by the plan that are applied during site-specific analyses and activity planning. This guidance is applied whether the action is initiated by the BLM or by a non-BLM project proponent. Long-term guidance and plan direction is incorporated into BLM management as implementation-level planning and project analysis occurs. For instance, if any developer, including the BLM, proposes construction of a new launch ramp on Lake Havasu that involves public land, that proposal would need to be in harmony with the goals, allocations, and actions established through this Approved RMP relative to that parcel of land, for the associated biological, prescribed recreation settings, VRM, and lands interests. If the proposal was in compliance with the BLM's long-term guidance, it could easily move onto the next level of assessment. In short, these decisions "guide" BLM decision-makers in what is, and is not acceptable through the life of the plan.

General Implementation Schedule of "One-Time" Actions

Decisions in the Approved RMP will be implemented over a period of years depending on budget and staff availability. Appendix N identifies the priority and schedules for projects. Most of these actions require additional analysis and site-specific activity planning. The priority list and schedule will assist BLM managers and staff members in preparing budget requests and in scheduling work. However, the proposed priorities must be considered tentative and will be affected by future funding, changing program priorities, non-discretionary workloads, community dynamics, and cooperation by partners and external publics.

Implementation Updates

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

Maintaining the Plan

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

- Correcting minor data, typographical, mapping, or tabular data errors.

- Refining baseline information as a result of new inventory data (e.g., changing the boundary of an archaeological district, refining the known habitat of special status species, or adjusting the boundary of a fire management unit based on updated fire regime condition class inventory, fire occurrence, monitoring data, and/or demographic changes).

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

Plan maintenance will be documented in supporting records (see Appendix O for an example of a Plan Maintenance Roster) and reported in annual planning updates. Plan maintenance does not require formal public involvement, inter-agency coordination, or the NEPA analysis required for making new land use plan decisions.

Changing the Plan

Land use plan decisions are changed through either a plan amendment or a plan revision. Amendments and revisions are accomplished with public input and the appropriate level of environmental analysis.

Plan amendments are often prompted by the need to:

- consider an action that does not conform to the plan,
- implement a policy that changes land use plan decisions,
- respond to changed uses on public lands, and
- consider significant new information from resource assessments, monitoring, or scientific studies that change land use plan decisions.

Plan revisions involve preparation of a new RMP to replace an existing RMP. Revisions are necessary if monitoring and evaluation findings, new data, new or revised policy, or changes in circumstances indicate that decisions for an entire plan, or a major portion of the plan, no longer serve as a useful guide for resource management.

The Approved RMP may be changed, should conditions warrant, through a plan amendment. A plan amendment may become necessary if major changes are needed or in consideration of a proposal or action that is not in conformance with the plan. The results of monitoring, evaluation of new data, or policy changes and changing public needs might also provide the impetus for an amendment. Generally, an amendment is issue-specific. If several areas of the plan become outdated or otherwise obsolete, a plan

amendment may become necessary. Amendments are accomplished with public input and the appropriate level of environmental analysis.

Plan Evaluation and Adaptive Management

Plan Evaluation

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

The BLM will use land use plan evaluations to determine if the decisions in the Approved RMP, supported by the accompanying NEPA analysis, are still valid in light of new information and monitoring data. Evaluation of the Approved RMP will generally be conducted every 5 years, unless unexpected actions, new information, or significant changes in other plans, legislation, or litigation triggers an evaluation.

The following estimated evaluation schedule will be followed for the Lake Havasu Field Office RMP:

- 2012
- 2017
- 2022
- 2027

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

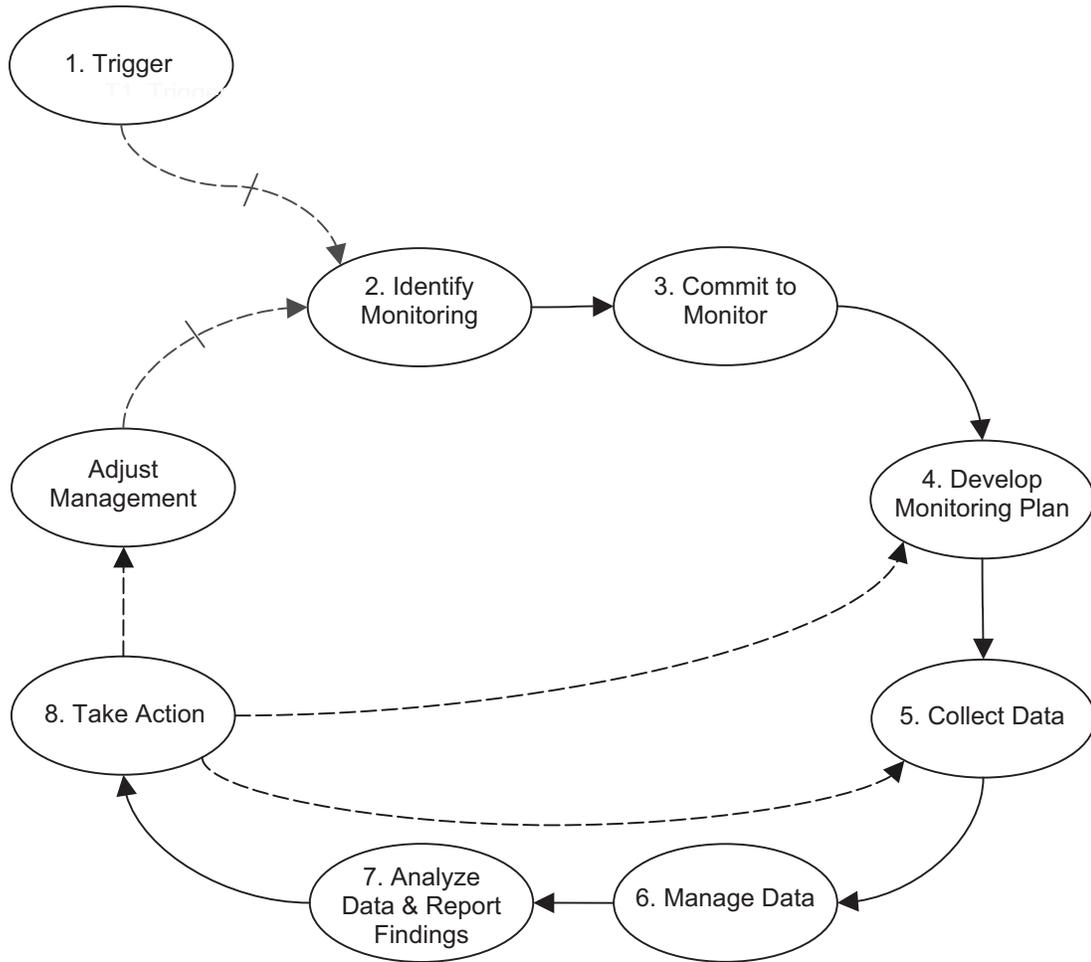
Adaptive Management

As defined by the Office of Environmental Policy and Compliance, adaptive management is a system of management practices based on clearly identified outcomes, monitoring to determine if management actions are meeting outcomes, and, if not, facilitating management changes that will best ensure that outcomes are met or re-evaluated.

As described in the DRMP/DEIS and the PRMP/FEIS, the Lake Havasu Field Office Approved RMP fosters “adaptiveness” by the presentation of desired future conditions that focus on reaching outcomes rather than identifying inflexible standards and prescriptions that may not be applicable in certain situations.

When land use plan actions or best management practices are found to be ineffective, modifications may occur without amendment of the plan as long as assumptions and impacts disclosed in the analysis remain valid and broad-scale goals and objectives are not changed. This approach, as depicted on Figure 1, uses on-the-ground monitoring, review of scientific information, and consideration of practical experience to adjust management and modify implementation of the plan to reach the desired outcome. See Appendix P for a Plan Monitoring Roster.

FIGURE 1: MONITORING MODEL FLOW DIAGRAM



Glossary

A

ACCESS: The ability to legally make use of route or way across public or private lands; without barriers to use by the public or a specified user.

ACQUIRED PUBLIC LANDS: Lands in federal ownership that the government obtained as a gift or by purchase, exchange, or condemnation. Also see PUBLIC LANDS.

ACQUISITION: The activity of obtaining land and/or interest in land through purchase, exchange, donation, or condemnation.

ACTIVITY PLAN: A detailed and specific plan for managing a single resource program or plan element undertaken as needed to implement the more general resource management plan (RMP) decisions. BLM prepares activity plans for specific areas to reach specific resource management objectives within stated time frames. Synonymous with Implementation Plan.

ALLOTMENT MANAGEMENT PLAN (AMP): A livestock grazing management plan dealing with a specific unit of rangeland and based on multiple use resource management objectives. The AMP considers livestock grazing in relation to other uses of rangelands and to renewable resources (e.g., watershed, vegetation, and wildlife). An AMP establishes the seasons of use, number of livestock to be permitted on rangelands, and the range improvements needed.

ALL TERRAIN VEHICLE (ATV): A two- to six-wheeled vehicle equipped with low-pressure tires and a seat straddled by the rider.

ANIMAL UNIT: One mature (1,000-pound) cow or the equivalent based upon an average daily forage consumption of 26 pounds of dry matter per day.

ANIMAL UNIT MONTH (AUM): The amount of forage needed to sustain one cow, five sheep, or five goats for a month.

APPROPRIATE MANAGEMENT LEVEL: That “optimum number” of wild horses, which results in a thriving ecological balance and avoids a deterioration of the range.

AQUATIC HABITATS: Habitats confined to streams, rivers, springs, lakes, ponds, reservoirs, and other water bodies.

ARCHAEOLOGICAL FEATURE: Non-portable object, not recoverable from its matrix (usually in an archaeological site) without destroying its integrity. Examples are rock paintings, hearths, postholes, floors, and walls.

AREAS OF CRITICAL ENVIRONMENTAL CONCERN (ACECs): Areas where special management attention is required to protect and prevent irreparable damage to important cultural, historic, or scenic values, fish and wildlife resources, or other natural systems or processes, or to protect life and safety from natural hazard under section 202I(3) of the Federal Land Policy and Management Act of 1976.(FLPMA)

ARIZONA REVISED STATUE ARS 17-301B [USE OF FIREARMS]: A person shall not take wildlife, except aquatic wildlife, or discharge a firearm or shoot any other device from a motor vehicle, including an automobile, aircraft, train or powerboat, or from a sailboat, boat under sail, or a floating object towed by powerboat or sailboat except as expressly permitted by the commission. No person may knowingly discharge any firearm or shoot any other device upon, from, across, or into a road or railway.

ARIZONA STANDARDS FOR RANGELAND HEALTH AND GUIDELINES FOR GRAZING ADMINISTRATION: Standards and guidelines developed collaboratively by BLM and the Arizona Resource Advisory Council (RAC) to address the minimum requirements of the Department of the Interior’s final rule for Grazing Administration, effective August 21, 1995.

AUTHORIZED: Invested with legal authority through a written agreement, permit, or other legal document by the BLM.

AVAILABLE FORAGE: Forage that can be grazed and still allow sustained forage production on rangeland. Available forage may or may not be authorized for grazing.

B

BACA BILL: The Federal Land Transaction Facilitation Act of 2000, commonly referred to as the Baca Bill, amended FLPMA to allow a percentage of receipts from qualifying land sales and equalization payments from qualifying exchanges to be returned to the Department.

BACK COUNTRY BYWAYS: A component of the national scenic byway system that focuses primarily on corridors along back country roads that have high scenic, historic, archaeological, or other public interest values. The road may vary from a single-track bike trail to a low-speed, paved road that traverses back country areas.

BASIN AND RANGE: A landscape characterized by a series of fault block mountains separated by sediment-filled basins.

BENEFIT (RECREATION/SOCIETAL): A benefit is defined as an improved condition or the prevention of a worse condition. Benefits of leisure and recreation engagements can be realized by individuals (e.g., improved physical and psychological well-being), groups of individuals (strengthened bonds among family and friends), communities (economic gain from tourism), society (the cumulative effects of individual and group benefits), and the environment (a result of a stronger environmental ethic among individuals).

BENEFITS-BASED MANAGEMENT (RECREATION/SOCIETAL): Benefits-based management is an approach to park and recreation management that focuses on the positive outcomes of engaging in recreational experiences.

BIG GAME: Large species of wildlife that are hunted, such as elk, deer, bighorn sheep, and pronghorn antelope.

BIGHORN SHEEP HABITAT: Area is open to non-vehicular traffic year around (e.g., hiking, biking, and equestrian). Restrictions vary by location and are listed in RMP. Typically, roads are closed during lambing season (January 1–June 30).

BIOLOGICAL ASSESSMENT: Information prepared by or under the direction of a federal agency to determine whether a proposed action is likely to: 1) harm threatened or endangered species or designated critical habitat, 2) jeopardize the existence of species that are proposed for listing, or 3) adversely modify proposed critical habitat. Biological assessments must be prepared for major construction activities. The outcome of a biological assessment determines whether formal Section 7 consultation or a conference is needed. Also see BIOLOGICAL EVALUATION.

BIOLOGICAL DIVERSITY (BIODIVERSITY): The full range of variability within and among living organisms and the ecological complexes in which they occur. Biological diversity encompasses ecosystem or community diversity, species diversity, and genetic diversity.

BIOLOGICAL EVALUATION: The gathering and evaluation of information on proposed endangered and threatened species and critical and proposed critical habitat for actions that do not require a biological assessment. Also see BIOLOGICAL ASSESSMENT.

BIOLOGICAL OPINION: A document that includes the following: 1) the opinion of the U.S. Fish and Wildlife Service or the National Marine Fisheries Service as to whether a federal action is likely to jeopardize the existence of a species listed as threatened or endangered or destroy or adversely modify designated critical habitat, 2) a summary of the information on which the opinion is based, and 3) a detailed discussion of the effects of the action on listed species or designated critical habitat.

BLM SENSITIVE SPECIES: See SENSITIVE SPECIES.

BOSQUE: Woodland dominated by trees more than 15 feet tall.

C

CAMPING, SHORT TERM: Camping for short terms of up to 14 days (in any 28-day period) on BLM-managed primitive or undeveloped public land.

CANDIDATE SPECIES: Species not protected under the Endangered Species Act but being considered by the U.S. Fish and Wildlife Service for inclusion on the list of federally threatened and endangered species.

CASUAL USE (RECREATION): Noncommercial or non-organized group or individual activities on public land. Complies with land use decisions and designations, (e.g., Special Area 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. If the use goes beyond those conditions, the activity should be treated as any other organized recreational group or competitive activity or event for which BLM would require the event organizer to obtain an SRP.

CASUAL USE (MINING): Mining that only negligibly disturbs federal lands and resources and does not include the use of mechanized earth moving equipment or explosives or motorized equipment. Casual use generally includes panning, non-motorized sluicing, and collecting mineral specimens using hand tools.

CATTLE GUARD: A device placed in a road, usually a grate or series of metal bars placed perpendicular to the flow of traffic, which allows free passage of vehicles but which livestock will not cross.

CHAINING: A mechanical vegetation treatment in which two tractors drag an anchor chain extended between them over the terrain to uproot brush and small trees.

CLOSED AREA: Closed area mean an area where motorized vehicle use is prohibited. Use of motorized vehicles in closed areas may be allowed for certain reasons; however, such use shall be made only with the approval of the authorized officer.

COLORADO RIVER FLOODPLAIN: Combined area of the Colorado River floodway and the Colorado floodway fringes (See Public Law 99-450).

COLORADO RIVER FLOODWAY: The channel of the Colorado River and that part of the floodplain that are necessary to safely convey the floodway flow of either a one-in-one hundred-year flow consisting of controlled releases and tributary inflow or a flow of 40,000 cfs, which ever is greater.

COLORADO RIVER FLOODWAY FRINGE: That area subject to inundation by flood of varying magnitude up to and including the floodway flow, but which is not required for safe conveyance of the floodway flow, and is not included in the computation of the Colorado River floodway elevation.

COMMERCIAL USE: Recreational use of public lands and related waters for business or financial gain.

COMMERCIAL COLLECTION: The collection of plant materials (mainly seeds) that are harvested for commerce whether for seed distribution and/or for plant production.

COMMUNITY: A collective term used to describe an assemblage of organisms living together; an association of living organisms having mutual relationships among themselves and with their environment and thus functioning at least to some degree as an ecological unit.

COMMUNITY RECREATION-TOURISM MARKET: A community or communities dependent on public lands recreation and/or related tourism use, growth, and/or development. Major investments in facilities and visitor assistance are authorized within SRMAs where BLM's strategy is to target demonstrated community recreation-tourism market demand. Here, recreation management actions are geared toward meeting primary recreation-tourism market demand for specific activity, experience, and benefit opportunities. These opportunities are produced through maintenance of prescribed natural resource and/or community setting character and by

COMPETITIVE USE: 1) Any organized, sanctioned, or structured use, event, or activity on public land in which two or more contestants compete and either or both of the following elements apply: (i) Participants register, enter, or complete an application for the event;

(ii) A predetermined course or area is designated; or 2) One or more individuals contesting an established record such as for speed or endurance.

CONSERVATION EASEMENT: An easement to assure the permanent preservation of land in its natural state or in whatever degree of naturalness the land has when the easement is granted. Also see EASEMENT.

CONSERVATION FOR FUTURE USE: This category is reserved for any unusual cultural resource that, because of scarcity, a research importance, cultural importance, architectural interest, or comparable reasons, is not currently appropriate for consideration as the subject of scientific or historical study that would result in its physical alteration. A cultural property or location included in this category is considered worthy of segregation from all other land or resource uses, including cultural resource uses, that would threaten the maintenance of the present condition or setting, as pertinent, and it will remain in this category until specific provisions are met in the future. A cultural resource will be separated and protected from other non-compatible land uses and preserved in place because a) that particular site type is scarce or unique, b) its information potential cannot be realized through available archaeological methods, or c) it represents an outstanding example of a particular site type.

CONTINUITY: Habitat that is uninterrupted by urbanization or other factors. Large continuous blocks of habitat with corridors that connect other similar blocks of habitat can create a continuity of habitat types. Large blocks of habitat can create healthy vegetative communities, fish and wildlife populations.

CORRIDOR: See DESIGNATED CORRIDOR.

COVER: 1) Plants or plant parts, living or dead, on the surface of the ground; 2) plants or objects used by wild animals for nesting, rearing of young, escape from predators, or protection from harmful environmental conditions.

CRITICAL ELEMENT: The BLM NEPA Handbook (H-1790-1), Appendix 5 lists critical elements of the human environment and notes the need to reflect consideration of these resources or values in all forms of NEPA analysis. This list is intended to present the minimum of elements that must be addressed: air quality, ACECs, cultural resources, prime and unique farmlands, floodplains, Native American religious concerns, threatened and endangered species, hazardous and solid wastes, water quality, wetlands and riparian zones, suitable and designated Wild and Scenic Rivers and Wilderness (and Wilderness Study Areas).

CRITICAL HABITAT, DESIGNATED: Specific parts of an area that are occupied by a federally listed threatened or endangered plant or animal at the time it is listed and that contain physical or biological features essential to the conservation of the species or that may require special management or protection. Critical habitat may also include specific areas outside an area occupied by a federally listed species if the Secretary of the Interior determines that these areas are essential for conserving the species.

CROSS COUNTRY TRAVEL: Leaving designated, existing, or open route or trail, by either motorized or non-motorized transportation.

CULTURAL PROPERTY: A definite location of past activity, occupation, or use including, but not limited to, archaeological, historic or architectural sites; structures or places with important public and scientific uses; and may include sites or places of traditional cultural or religious importance to specified social and/or cultural groups.

CULTURAL RESOURCES: Any material remains of human life or activities that are at least 50 years old and of archaeological interest. Cultural resource is a broad, general term meaning any cultural property (see CULTURAL PROPERTY) and any traditional lifeway value.

CULTURAL RESOURCE INVENTORY (SURVEY): A descriptive listing and documentation including photographs and maps of cultural resources. Included in an inventory are the processes of locating, identifying, and recording sites, structures, buildings, objects, and districts through library and archival research, information from persons knowledgeable about cultural resources, and on-the-ground surveys of varying intensity.

Class I: A professionally prepared study that compiles, analyzes, and synthesizes all available data on an area's cultural resources. Information sources for this study include published and unpublished documents, BLM inventory records, institutional site files, and state and National Register files. Class I inventories may have prehistoric, historic, and ethnological and sociological elements. These inventories are periodically updated to include new data from other studies and Class II and III inventories.

Class II: A professionally conducted, statistically based sample survey designed to describe the probable density, diversity, and distribution of cultural properties in a large area. This survey is achieved by projecting the results of an intensive survey carried out over limited parts of the target area. Within individual sample units, survey aims,

methods, and intensities are the same as those applied in Class III inventories. To improve statistical reliability, Class II inventories may be conducted in several phases with different sample designs.

Class III: A professionally conducted intensive survey of an entire target area aimed at locating and recording all visible cultural properties. In a Class III survey, trained observers commonly conduct systematic inspections by walking a series of close-interval parallel transects until they have thoroughly examined an area.

D

DECISION RECORD: A manager's decision on a categorical exclusion review or an environmental assessment. Comparable to the record of decision for an environmental impact statement, the decision record includes: 1) a finding of no significant impact, 2) a decision to prepare an environmental impact statement, or 3) a decision not to proceed with a proposal. Also see RECORD OF DECISION.

DEFERRED ROTATION GRAZING: Moving grazing animals to various parts of a range in succeeding years or seasons to provide for seed production, plant vigor, and seedling growth.

DESIGNATED CORRIDOR: BLM's preferred route for placing rights-of-way for utilities (e.g., pipelines and powerlines) and transportation (e.g., highways and railroads).

DESIRED PLANT COMMUNITY: The plant community that has been determined through a land use or management plan to best meet the plan's objectives for a site. A real, documented plant community that embodies the resource attributes needed for the present or potential use of an area, the desired plant community is consistent with the site's capability to produce the required resource attributes through natural succession, management intervention, or a combination of both.

DESERT TORTOISE HABITAT: Roads closed February through November. Any construction needs to be monitored. Habitat compensation required for disturbance.

DESIGNATED ROADS AND TRAILS: Legal term used in CFR 8340 — OFF ROAD VEHICLES as a type of limited area designation. The term "roads and trails" includes all types routes use by off highway vehicles.

DESIRED FUTURE CONDITIONS: Land use plans must describe the outcomes in terms of specific goals and objectives. Goals are usually not quantifiable. Standards are descriptions of healthy, sustainable lands. They may describe sight specific or watershed scale.

DESTINATION RECREATION – TOURISM MARKET: National or regional recreation-tourism visitors and other constituents who value public lands as recreation-tourism destinations. Major investments in facilities and visitor assistance are authorized within SRMAs where BLM's strategy is to target demonstrated destination recreation-tourism market demand. Here, recreation management actions are geared toward meeting primary recreation-tourism market demand for specific activity, experience, and benefit opportunities. These opportunities are produced through

maintenance of prescribed natural resource setting character and by structuring and implementing management, marketing, monitoring, and administrative actions accordingly.

DEVELOPED RECREATION SITES AND AREAS: Those sites and areas that contain structures or capital improvements primarily used by the public for recreation purposes. Such sites or areas may include such features as: delineated spaces for parking, camping, or boat launching; sanitary facilities; potable water; grills or fire rings; or controlled access.

DISCHARGED FROM MANAGEMENT: This category is assigned to cultural properties that have no remaining identifiable use. Most often these are prehistoric and historic archaeological properties, such as small surface scatters of artifacts or debris, whose limited research potential is effectively exhausted as soon as they have been documented. Also, more complex archaeological properties that have had their salient information collected and preserved through mitigation or research may be discharged from management, as should cultural properties destroyed by any natural event or human activity. Properties discharged from management remain in the inventory, but they are removed from further management attention and do not constrain other land uses.

DISPERSED CAMPING: Generally staying on public lands overnight outside of developed campgrounds or established recreational sites.

DISPOSAL: Through the land use planning process, lands may be identified for release through several methods: R&PP patent, competitive sales or exchange. Tracts identified for disposal must meet criteria identified in the regulations.

E

EASEMENT: The right to use land in a certain way granted by a landowner to a second party. BLM acquires two basic types of easements, conservation easements for the protection of resources and access easements to enhance the ability of the public to use and enjoy the public lands. Also see CONSERVATION EASEMENT.

ECOLOGICAL SITE (RANGE SITE): A distinctive kind of land that has specific physical characteristics and that differs from other kinds of land in its ability to produce a distinctive kind and amount of vegetation.

ECOLOGICAL SITE DESCRIPTIONS (RANGE SITE GUIDE): Descriptions of the following characteristics of an ecological site: soils, physical features, climatic features, associated hydrologic features, plant communities possible on the site, plant community dynamics, annual production estimates and distribution of production throughout the year, associated animal communities, associated and similar sites, and interpretations for management.

ECOLOGICAL SITE INVENTORY: The basic inventory of present and potential vegetation on BLM rangelands. Ecological sites are differentiated on the basis of significant differences in kind, proportion, or amount of plant species present in the plant community. The ecological site inventory utilizes soils, the existing plant community, and ecological site data to determine the

appropriate ecological site for a specific area of rangeland and to assign the appropriate ecological status.

ECOLOGICAL STATUS: Ecological status is the present state of vegetation of a range site in relation to the potential natural community for that site. It is an expression of the relative degree to which the kinds, proportions, and amounts of plants in a plant community resemble that of the potential natural plant community for the site. Four classes are used to express the degree to which the production or composition of the present plant community reflects that of the potential natural community (climax).

ECOLOGICAL SITE RATING (ECOLOGICAL CONDITION/ ECOLOGICAL STATUS): The present state of vegetation of an ecological site in relation to the potential natural community for the site. Independent of the site's use, the ecological site rating is an expression of the relative degree to which the kinds, proportions, and amounts of plants in a community resemble those of the potential natural community. The four ecological status classes correspond to 0–25%, 25–50%, 51–75%, or 76–100% similarity to the potential natural community and are called early-seral, mid-seral, late-seral, and potential natural community, respectively.

EDGES: Breaks in continuity of vegetation allowing predation on species utilizing the area.

ELIGIBLE RIVER SEGMENT: Qualification of a river for inclusion into the National Wild and Scenic Rivers System by determining that it is free flowing and, with its adjacent land area, has at least one river-related value considered to be outstandingly remarkable.

ENDANGERED SPECIES: An animal or plant species that is in danger of extinction throughout all or a significant portion of its range (as defined in the Endangered Species Act Amendments of 1982). Also see THREATENED SPECIES.

ENVIRONMENTAL ASSESSMENT (EA): A concise public document for which a federal agency is responsible. An EA serves: 1) to briefly provide enough evidence and analysis for determining whether to prepare an environmental impact statement (EIS) or a finding of no significant impact and to aid an agency's compliance with the National Environmental Policy Act when no EIS is needed; and 2) to facilitate preparing an EIS when one is needed. Also see ENVIRONMENTAL IMPACT STATEMENT.

ENVIRONMENTAL IMPACT STATEMENT (EIS): An analytical document that portrays potential impacts on the human environment of a particular course of action and its possible alternatives. Required by the National Environmental Policy Act (NEPA), an EIS is prepared for use by decision makers to weigh the environmental consequences of a potential decision. Also see ENVIRONMENTAL ASSESSMENT.

ENVIRONMENTAL JUSTICE (EJ): The fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income in developing, implementing, and enforcing environmental laws, regulations, and policies.

EPHEMERAL ALLOTMENTS: Allotments that are only authorized for grazing when there is adequate growth of annual vegetation (in spring).

EPHEMERAL FORAGE: Part-time or seasonal forage; forage produced by annual forage species.

EPHEMERAL STREAM: A stream or portion of a stream that: 1) flows only in direct response to precipitation, 2) receives little or no water from springs or no long continued supply from snow or other sources, and 3) has a channel that is always above the water table.

EXCAVATION: The scientific examination of an archaeological site through layer-by-layer removal and study of the contents within prescribed surface units (e.g., square meters).

EXCHANGE: A trading of public lands (surface and/or subsurface estates) that usually do not have high public value for lands in other ownerships that do have value for public use, management, and enjoyment. The exchange may be for the benefit of other federal agencies as well as for BLM.

EXECUTIVE ORDER 11644 (February 8 1972): An executive order is a Presidential directive that carries the weight of law. This order requires areas and trails to be designated “open,” “closed,” or “limited” within 1 year of the above date.

EXECUTIVE ORDER 11989 (May 24 1977): An executive order is a Presidential directive that carries the weight of law. This order provides for special protection for areas and trails on the public lands when it is determined that off-road vehicles will cause or are causing considerable adverse effects

EXTENSIVE RECREATION MANAGEMENT AREA (ERMA): A public lands unit identified in land use plans containing all acreage not identified as a SRMA. Recreation management actions within an ERMA are limited to only those of a custodial nature.

EXISTING ROADS AND TRAILS: Legal term used in CFR 8340 — OFF ROAD VEHICLES as a type of limited area designation. The term “roads and trails” includes all types routes use by off-highway vehicles. For the LHFO RMP “existing roads and trails” would be those roads and trails identified on the Route Inventory Maps as of the date of the Record of Decision.

EXOTIC SPECIES: A species of plant or animal that is not native to the area where it is found. Any species that is not indigenous, native, or naturalized.

EXPERIMENTAL USE: This category may be applied to a cultural property judged well-suited for controlled experimental study, to be conducted by BLM or others concerned with the techniques of managing cultural properties, which would result in the property’s alteration, possibly including loss of integrity and destruction of physical elements. Committing cultural properties or the data they contain to loss must be justified in terms of specific information that would be gained and how it would aid in the management of other cultural properties. Experimental study should aim toward understanding the kinds and rates of natural or

human-caused deterioration, testing the effectiveness of protection measures, or developing new research or interpretation methods and similar kinds of practical management information.

F

FEDERAL LAND POLICY AND MANAGEMENT ACT (FLPMA): The act that: 1) set out, for the Bureau of Land Management, standards for managing the public lands including land use planning, sales, withdrawals, acquisitions, and exchanges; 2) authorized the setting up of local advisory councils representing major citizens groups interested in land use planning and management; 3) established criteria for reviewing proposed wilderness areas; and 4) provided guidelines for other aspects of public land management such as grazing.

FINDING OF NO SIGNIFICANT IMPACT (FONSI): A document that is prepared by a federal agency and that briefly explains why an action (not otherwise excluded from the requirement to prepare an environmental impact statement [EIS]) would not significantly affect the human environment and not require an EIS.

FIREARMS, USE OF: See ARIZONA REVISED STATUTE ARS 17-301B [USE OF FIREARMS].

FIRE MANAGEMENT: The integration of fire protection, prescribed burning, and fire ecology knowledge into multiple use planning, decision-making, and land management.

FIRE SUPPRESSION: All the work of extinguishing or confining a fire beginning with its discovery.

FIRE SUPPRESSION RESOURCES: People, equipment, services, and supplies available or potentially available for assignment to incidents.

FLOODPLAIN, FLOODWAY, FLOODWAY FRINGE: See COLORADO RIVER.

FORAGE: All browse and herbage that is available and acceptable to grazing animals or that may be harvested for feed.

FUEL LOAD (IN FIRE SUPPRESSION): The oven-dry weight of fuel per unit area usually expressed in tons/acre.

FUNDAMENTALS OF RANGELAND HEALTH: As Described in 43CFR 4180, the conditions in which 1) rangelands are in proper functioning physical condition, 2) ecological process are supporting healthy biotic populations and communities, 3) water quality is meeting state standards and BLM objectives, and 4) special status species habitat is being restored or maintained.

FUNCTIONING WATERS (WILDLIFE): A well, catchment, spring, reservoir, or other feature (human made or natural) that provides a reliable source of potable water on a yearlong basis. For such a source of water to be considered functional, the quality and quantity of water must be sufficient to sustain native wildlife populations in the local area. For example, a reservoir that fills up during monsoon rains, but goes dry in a few weeks, is not functional from a wildlife standpoint.

G

GRAZING CAPACITY (CARRYING CAPACITY): The highest livestock stocking rate possible without damaging vegetation or related resources. Grazing capacity may vary from year to year or in the same area because of fluctuating forage production.

GRAZING CYCLE: The amount of time required for livestock to rotate completely through all the pastures in an allotment management plan.

GRAZING PERMIT/LICENSE/LEASE: Official written permission to graze a specific number, kind, and class of livestock for a specified period on a defined rangeland.

GRAZING PRIVILEGES: The use of public land for livestock grazing under permits or leases.

GRAZING REST: Any period during which no livestock grazing is allowed within an area.

GRAZING SEASON: An established period for which grazing permits are issued.

GRAZING SYSTEM: A systematic sequence of grazing use and nonuse of an allotment to meet multiple use goals by improving the quality and amount of vegetation.

GROUND COVER: See COVER.

GROUND LITTER: See LITTER.

GROUNDWATER: Subsurface water and underground streams that supply wells and springs. Use of groundwater in Arizona does not require a water right but must only be “reasonable.” Groundwater is separated from surface water by the type of alluvium in which the water is found. Water in the younger, floodplain alluvium is considered surface water. Water in the older, basin-fill alluvium is considered groundwater.

GUZZLER: A structure that provides water to wildlife from a water collection source.

H

HABITAT: The natural environment of a plant or animal: 1) Specific parameters of physical conditions used by a single species, a group of species, or a large community. The major components of habitat are generally considered to be food, water, cover, and living space; 2) the natural living space of an organism.

HERD AREA: The geographic area identified as having been used by wild horse or burro herds as their habitat in 1971.

HERD MANAGEMENT AREA: Public land under the jurisdiction of the BLM that has been designated for special management emphasizing the maintenance of an established wild horse and/or wild burro herd.

HERD MANAGEMENT AREA PLAN: An action plan that prescribes measures for the protection, management, and control of wild horses and burros and their habitat on one or more herd management areas, in conformance with decisions made in approved management framework or resource management plans.

HISTORICAL SITE: An archaeological site that is more than 50 years old and dates to the historic period, commonly after contact with Europeans and when history is recorded in writing. These sites include, but are not limited to, wagon roads, railroads, mill sites, mining sites, ranching sites, homesteads, and military sites.

IMPLEMENTATION PLAN: A site-specific plan written to implement decisions made in a land use plan. An implementation plan usually selects and applies best management practices to meet land use plan objectives. Implementation plans are synonymous with “activity” plans. Examples of implementation plans include interdisciplinary management plans, habitat management plans, and allotment management plans.

IMPROVE GRAZING ALLOTMENTS (“I” Category): These allotments are best described by one or more of the following characteristics: vegetation or watershed conditions are not satisfactory; the allotment’s potential production is high to moderate, but it is producing below its potential; there are substantive conflicts with other resource uses; the allotment’s size, physical characteristics, and the anticipated benefits from changes in management would warrant investing public funds for range improvements and supervision.

INFILTRATION: The downward entry of water into the soil or other material.

INFRASTRUCTURE: The set of systems and facilities that support a region or community’s social and economic structures. Examples of such systems include energy, transportation, communication, education, medical service, and fire and police protection.

INHALABLE PARTICULATE MATTER (PM 10): Particulate matter in ambient air exceeding 10 microns in diameter. Also see PARTICULATE MATTER and FINEPARTICULATE MATTER.

INTERMITTENT STREAM: A stream that generally flows during wet seasons but is dry during dry seasons.

INVASIVE: An “invasive species” is defined as a species that is 1) non-native (or alien) to the ecosystem under consideration and 2) whose introduction causes or is likely to cause economic or environmental harm or harm to human health. Human actions are the primary means of invasive species introductions.

J**K****L**

LAND AND WATER CONSERVATION FUND: Established by the Land and Water Conservation Fund Act, a fund that the federal government can use to acquire and develop land and water for conservation and outdoor recreation and to help states in planning for, acquiring, and developing land and water areas and facilities.

LAND CLASSIFICATION: A process for determining the suitability of public lands for certain types of disposal or lease under the public land laws or for retention under multiple use management.

LAND TENURE: The right to exclusively occupy and use a specified area of land. Tenure may also be limited to certain resources (“resource tenure”) such as timber but not to all resources in a given area. Tenure may be held by individuals, communities, government, or corporations.

LAND USE ALLOCATION: The identification in a land use plan of the activities and foreseeable development that are allowed, restricted, or excluded for all or part of the planning area, based on desired future conditions.

LAND USE AUTHORIZATION: BLM’s authorizing through leases, permits, and easements of uses of the public land. Land use authorizations may allow occupancy, recreational residences and cabin sites, farming, manufacturing, outdoor recreation concessions, National Guard maneuvers, and many other uses.

LAND USE PLAN: A set of decisions that establish management direction for land within an administrative area, as prescribed under the planning provisions of FLPMA; an assimilation of land-use-plan-level decisions developed through the planning process, regardless of the scale at which the decisions were developed.

LAND USE PLAN DECISION: Establishes desired outcomes and actions needed to achieve them. Decisions are reached using the BLM planning process. When they are presented to the public as proposed decisions, they can be protested to the BLM Director. They are not appealable to Interior Board of Land Appeals.

LEASABLE MINERALS: Minerals whose extraction from federally managed land requires a lease and the payment of royalties. Leasable minerals include coal, oil and gas, oil shale and tar sands potash, phosphate, sodium, and geothermal steam.

LEAVE NO TRACE: A nationwide (and international) program to help visitors with their decisions when they travel and camp on America’s public lands. The program strives to educate visitors about the nature of their recreational impacts as well as techniques to prevent and minimize such impacts.

LIMITED AREAS: Limited area means an area restricted at certain times, in certain areas, and/or to certain vehicular use. These restrictions may be of any type but can generally be accommodated within the following type of categories. Numbers of vehicles; types of vehicles; time or season of vehicle use; permitted or licensed use only; use on existing roads and trails; use on designated roads and trails; and other restrictions.

LITTER: The uppermost layer of organic debris on the soil surface, essentially freshly fallen or slightly decomposed vegetal material.

LIVE FUEL MOISTURE: See FUEL MOISTURE.

LIVESTOCK PERFORMANCE: The efficiency of livestock within an operation as measured by such indicators as percent calf crop, weaned calf weights, animal death rates, and cull cow weights.

LIVESTOCK TRESPASS: The unauthorized grazing of livestock.

LOCATABLE MINERALS: Minerals subject to exploration, development, and disposal by staking mining claims as authorized by the Mining Law of 1872, as amended. This includes deposits of gold, silver, and other uncommon minerals not subject to lease or sale.

LONG TERM VISITOR AREA (LTVA): With the purchase of a permit, visitors may camp for the entire winter season (September 15 to April 15). Permit holders may move from one LTVA to another without incurring additional user fees.

LOWER COLORADO RIVER MULTI-SPECIES CONSERVATION PLAN (LCRMSCP): This plan was conceived in 1995 by a partnership of water interests on the Lower River. It was approved in 2005 for a period of 50 years, with the following two-pronged objective:

- 1) Conserving threatened and endangered species habitat, moving listed species toward recovery, and reducing further listing of species associated with the lower Colorado River.
- 2) Accommodating current water diversions and power production, plus optimizing future water benefits to water users to the extent allowable by law.

LOW-INCOME POPULATION: Persons living below the poverty level based on total income, of \$18,244 for a family household of four people (two adults and two children) based on the 2002 official measure of poverty.

M

MAJOR RIGHTS-OF-WAY: Rights-of-way along which pass transmission lines (consisting of 115kV or higher) used to transmit large blocks of energy to load centers for distribution.

MAINTAIN GRAZING ALLOTMENTS (“M” Category): These allotments are best described by one or more of the following characteristics: vegetation and watershed conditions

are satisfactory; the allotment has the potential for high resource production and is producing close to its potential; there are no serious resource use conflicts; and/or the allotment's size and physical characteristics would warrant investment of public funds for range improvements and supervision.

MAINTENANCE: The work required keeping a facility in such a condition that it may be continuously utilized at its original or designed capacity and efficiency, and for its intended purposes.

MANAGEMENT ACTIONS: Land use plans must identify the actions needed to achieve the desired outcomes, including actions to restore or protect land health. These actions include proactive measures (e.g., measures that will be taken to enhance watershed function and condition) as well as measures or criteria that will be applied to guide day-to-day activities occurring on public land.

MANAGEMENT USE: A cultural resource is used for controlled experimental study that would result in its physical alteration. This study is conducted to obtain specific information on a) the kinds and rates of natural and human-caused deterioration or b) the effectiveness of protection measures.

MINERAL ENTRY: The filing of a claim on public land to obtain the right to any minerals it may contain.

MINERAL ESTATE: The ownership of minerals, including rights necessary for access, exploration, development, mining, ore dressing, and transportation operations.

MINERAL MATERIAL DISPOSAL: The sale of sand, gravel, decorative rock, or other materials defined in 43 CFR 3600.

MINERAL MATERIALS: Materials such as common varieties of sand, stone, gravel, pumice, pumicite, and clay that are not obtainable under the mining or leasing laws but that can be acquired under the Mineral Materials Act of 1947, as amended. See also SALEABLE MINERALS.

MINERAL RIGHTS: Mineral rights outstanding are third-party rights, an interest in minerals not owned by the person or party conveying the land to the United States. It is an exception in a deed that is the result of prior conveyance separating title of certain minerals from the surface estate.

MINERAL WITHDRAWAL: A formal order that withholds federal lands and minerals from entry under the Mining Law of 1872 and closes the area to mineral location (staking mining claims), development, and leasing.

MINING CLAIM: A mining claim is a selected parcel of Federal Land, valuable for a specific mineral deposit or deposits, for which a right of possession has been asserted under the General Mining Law. This right is restricted to the development and extraction of a mineral deposit. The rights granted by a mining claim protect against a challenge by the United States and other claimants only after the discovery of a valuable mineral deposit. The two types of mining claims

are lode and placer. In addition, mill sites and tunnel sites may be located to provide support facilities for lode and placer mining.

MINING DISTRICT: An area, usually designated by name, with described or understood boundaries, where minerals are found and mined under rules prescribed by the miners, consistent with the Mining Law of 1872.

MINING PLAN OF OPERATIONS: A plan for mineral exploration and development that a mining operator must submit to BLM for approval for all mining, milling, and bulk sampling of more than 1,000 tons or more and for exploration disturbing more than 5 acres or on special status lands, including wilderness, areas of critical environmental concern, national monuments, national conservation areas, and lands containing proposed or listed threatened or endangered species or their critical habitat. A plan of operations must document in detail all actions that the operator plans to take from exploration through reclamation.

MINORITY: Individual(s) classified by Office of Management and Budget's Directive No.15 as Black/African American, Hispanic, Asian and Pacific Islander, American Indian, Eskimo, Aleut, and other non-white persons.

MINORITY POPULATION: Minority populations are identified as either: (1) the minority population of the affected area exceeds 50 %, or (2) the minority population percentage of the affected area is meaningfully greater than the minority population percentage in the general population or other appropriate unit of geographic analysis.

MONITORING: The collection of information to determine the effects of resource management and detect changing resource trends, needs, and conditions.

MULTIPLE USE: A combination of balanced and diverse resource uses that considers long-term needs for renewable and nonrenewable resources, including recreation, wildlife, rangeland, timber, minerals, and watershed protection; and scenic, scientific, and cultural values.

N

NATIONAL AMBIENT AIR QUALITY STANDARDS (NAAQS): The allowable concentrations of air pollutants in the ambient (public outdoor) air specified in 40 CFR 50. National ambient air quality standards are based on the air quality criteria and divided into primary standards ("sensitive" populations such as asthmatics, children, and the elderly) and secondary standards (allowing an adequate margin of safety to protect the public welfare). Welfare is defined as including effects on soils, water, crops, vegetation, and human-made materials.

NATIONAL ENVIRONMENTAL POLICY ACT (NEPA): The federal law, going into effect on January 1, 1970, which established a national policy for the environment and requires federal agencies 1) to become aware of the environmental ramifications of their proposed actions, 2) to fully disclose to the public proposed federal actions and provide a mechanism for public input to federal decision making, and 3) to prepare environmental impact statements for every major action that would significantly affect the quality of the human environment.

NATIONAL HISTORIC PRESERVATION ACT OF 1966, AS AMENDED (NHPA): A federal statute that established a federal program to further the efforts of private agencies and individuals in preserving the Nation's historic and cultural foundations. NHPA 1) authorized the National Register of Historic Places, 2) established the Advisory Council on Historic Preservation and a National Trust Fund to administer grants for historic preservation, and 3) authorized the development of regulations to require federal agencies to consider the effects of federally assisted activities on properties included on or eligible for the National Register of Historic Places.

NATIONAL REGISTER DISTRICT: An area containing sites of cultural significance that is listed on the National Register of Historic Places. See NATIONAL REGISTER OF HISTORIC PLACES.

NATIONAL REGISTER OF HISTORIC PLACES: The official list, established by the National Historic Preservation Act, of the Nation's cultural resources worthy of preservation. The National Register lists archeological, historic, and architectural properties (e.g., districts, sites, buildings, structures, and objects) nominated for their local, state, or national significance by state and federal agencies and approved by the National Register Staff. The National Park Service maintains the National Register. Also see NATIONAL HISTORIC PRESERVATION ACT.

NATIONAL REGISTER QUALITY (CULTURAL RESOURCES): Cultural resource properties that meet the National Register criteria and have been determined eligible for nomination to the National Register of Historic Places because of their local, state, or national significance.

NATIONAL TRAILS: The National Trail System Act of 1968 (Public Law 90-543) authorized creation of a national trail system composed of National Recreation Trails, National Scenic Trails, and National Historic Trails. While National Scenic Trails and National Historic Trails may be designated only by an act of Congress, National Recreation Trails may be designated by the Secretary of Interior or the Secretary of Agriculture to recognize exemplary trails of local and regional significance in response to an application from the trail's managing agency or organization. Through designation, these trails are recognized as part of America's national system of trails.

NATIONAL WILD AND SCENIC RIVERS SYSTEM: A system of nationally designated rivers and their immediate environments that have outstanding scenic, recreational, geologic, fish and wildlife, historical, cultural, and other similar values and are preserved in a free-flowing condition. The system consists of three types of streams: 1) recreation—rivers or sections of rivers that are readily accessible by road or railroad and that may have some development along their shorelines and may have undergone some impoundments or diversion in the past, 2) scenic—rivers or sections of rivers free of impoundments with shorelines or watersheds still largely undeveloped but accessible in places by roads, and 3) wild—rivers or sections of rivers free of impoundments and generally inaccessible except by trails with watersheds or shorelines essentially primitive and waters unpolluted.

NATIVE SPECIES: A species of plant or animal that naturally occurs in the area and that was not introduced by humans (indigenous).

NATURAL SCENIC AREA (NSA): Allocation made in the YUMA RMP that is associated with special management prescriptions. It has no legal authority but is a management tool.

NAVIGABLE WASHES: A wash or arroyo that is wide enough for a vehicle to pass through without damage to vegetation or bank soils and generally has a sandy streambed.

NICHE: (See Recreation)

NON-POINT SOURCE POLLUTION: Precipitation-oriented runoff that transports pollutants from surrounding landscape to waterways. Non-point source pollutants typically include fertilizers, pesticides, oils, solvents, metals, feces, sediment, and other wastes commonly found on the surface throughout human communities.

NONUSE: An authorization that BLM issues to applicants for nonuse of grazing privileges in whole or part, usually for one grazing season.

NO SURFACE OCCUPANCY: A mineral leasing stipulation that prohibits occupancy or disturbance on all or part of the lease surface to protect special values of uses. Lessees may explore for or exploit the minerals under leases restricted by this stipulation by using directional drilling from sites outside the no surface occupancy area.

NOXIOUS PLANT: An unwanted plant specified by federal or state laws as being undesirable and requiring control. Noxious weeds are usually non-native and highly invasive.

O

OFF-HIGHWAY VEHICLE (OHV): Any vehicle capable of or designed for travel on or immediately over land, water, or other natural terrain, deriving motive power from any source other than muscle. OHVs exclude: 1) any non-amphibious registered motorboat; 2), any fire, emergency, or law enforcement vehicle while being used for official or emergency purposes; 3) any vehicle whose use is expressly authorized by a permit, lease, license, agreement, or contract issued by an authorized officer or otherwise approved; 4) vehicles in official use; and 5) any combat or combat support vehicle when used in times of national defense emergencies.

OHV DESIGNATION: Public lands designated for off-highway vehicle use. Lands in the LHFO planning area are designated as “Open,” “Closed,” or “Limited” for OHV use.

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

ORGANIZED GROUP ACTIVITY: Structured, ordered, consolidated, or scheduled event on, or occupation of, public lands for the purpose of recreational use that is not commercial or competitive.

OUTCOMES (TARGETED, BENEFITS-BASED, SOCIETAL): Outcomes create a focal point for the expression of the ultimate benefit that would be produced for each recreation

management land use zone under different assumptions of management goals, they serve to articulate the collections of recreation activities, recreation experiences, societal benefits, and environmental settings. Historically, research has shown a strong variation in psychological experiences desired by recreational users across different use management zones.

P

PALEONTOLOGICAL RESOURCES (FOSSILS): The physical remains of plants and animals preserved in soils and sedimentary rock formations. Paleontological resources are important for understanding past environments, environmental change, and the evolution of life.

PALEONTOLOGY: A science dealing with the life forms of past geological periods as known from fossil remains.

PARTICULATE MATTER: Fine liquid or solid particles suspended in the air and consisting of dust, smoke, mist, fumes, and compounds containing sulfur, nitrogen, and metals. Also see FINE PARTICULATE MATTER and INHALABLE PARTICULATE MATTER.

PERENNIAL/EPHEMERAL ALLOTMENTS: Allotments that are authorized for yearlong grazing of a specific number of animals and can add additional livestock when there is adequate growth of annual vegetation.

PERENNIAL PLANT: A plant that has a life cycle of 3 or more years. Also see ANNUAL PLANT.

PERENNIAL STREAM: A stream that flows continuously during all seasons of the year.

PERSONAL INCOME: The sum of wage and salary payments, other labor income, proprietors' income, rental income of persons, personal dividend and interest income, and transfer payments to persons, less personal contributions for social insurance.

PLAN OF OPERATIONS: See MINING PLAN OF OPERATIONS

PLANNING CRITERIA: The standards, rules, and other factors developed by managers and interdisciplinary teams for their use in forming judgments about decision making, analysis and data collection during planning. Planning criteria streamline and simplify the resource management planning actions.

PLANT COMMUNITY: Assemblage of plant populations in a defined area or physical habitat; an aggregation of plants similar in species composition and structure, occupying similar habitats over the landscape.

POINT SOURCE POLLUTION: The discharge of pollution into the environment from a point, typically a pipe.

PRESCRIBED FIRE (BURNING): The planned applying of fire to rangeland vegetation and fuels under specified conditions of fuels, weather, and other variables to allow the fire to remain

in a predetermined area to achieve such site specific objectives as controlling certain plant species; enhancing growth, reproduction, or vigor of plant species; managing fuel loads; and managing vegetation community types.

PRESCRIBED RECREATION SETTING: A term used to summarize the broad description of the desired experiences, environmental settings, and potential activities included in the desired future outcome for an area. The general definition for each prescription class (see Appendix I) matches those which were used to define the ROS/WROS inventory classes.

PRIMARY MARKET STRATEGY: (SEE RECREATION-TOURISM MARKET)

PRIME FARMLAND: As defined by the Farmland Protection Policy Act of 1981, land that has the best combination of physical and chemical characteristics for producing food, feed, fiber, forage, oilseed, and other agricultural crops with minimum inputs of fuel, fertilizer, pesticides, and labor; and without intolerable soil erosion, as determined by the Secretary of Agriculture. Prime farmland includes land with the above characteristics, but is being used to produce livestock and timber. It does not include land already in or committed to urban development or water storage. Also see UNIQUE FARMLAND.

PRIMITIVE RECREATION: Recreation that provides opportunities for isolation from the evidence of humans, a vastness of scale, feeling a part of the natural environment, having a high degree of challenge and risk, and using outdoor skills. Primitive recreation is characterized by meeting nature on its own terms, without comfort or convenience of facilities.

PRIMITIVE ROAD: A linear route managed for use by four-wheel-drive or high-clearance vehicles. Primitive roads do not normally meet any BLM road design standards.

PRIORITY WILDLIFE HABITAT AREA: General areas that are managed to enhance the habitat of one or more priority wildlife species. These areas are now called Wildlife Habitat Management Areas (WHMAs).

PRIORITY WILDLIFE SPECIES: Includes all federally listed threatened, endangered or candidate species and all species of concern (BLM sensitive and state designated).

PROPER FUNCTIONING CONDITION (RIPARIAN WETLAND AREAS): The condition where 1) enough vegetation, land form, or large woody debris is present to dissipate the stream energy of high water flows, thereby reducing erosion and improving water quality; 2) sediments are filtered, bedload is captured, and floodplains develop; 3) flood water retention and ground water recharge are improved, root masses that stabilize streambanks against cutting action develop, and diverse ponding and channel characteristics are created to provide the habitat and the water depth, duration, and temperature needed for fish production, waterfowl breeding, and other uses; and 4) greater biodiversity is supported.

PUBLIC LANDS: As defined by Public Law 94-579 (Federal Land Policy and Management Act of 1976), lands and interest in land owned by the United States and administered by the Secretary of the Interior, through BLM, regardless of how the United States acquired possession. In common usage, public lands may refer to all federal land, no matter what agency manages it.

PUBLIC USE: A cultural property is eligible for consideration as an interpretive exhibit-in-place, a subject of supervised participation in scientific or historical study, a subject of unsupervised collecting under permit or related educational and recreational uses by members of the general public.

Q

R

RANGE IMPROVEMENT: Any activity or program on or relating to the public lands designed to improve forage production, change vegetation composition, control use patterns, provide water, stabilize soil and water conditions, or provide habitat for livestock and wildlife. Range improvements may be structural or nonstructural.

Structural Improvement: requires placement or construction to facilitate the management or control the distribution and movement of animals. Such improvements may include fences, wells, troughs, reservoirs, pipelines, and cattleguards.

Nonstructural Improvement: consist of practices or treatments that improve resource conditions (e.g., seedings; chemical, mechanical, and biological plant control; prescribed burning; water spreaders; pitting; chiseling; and contour furrowing).

RANGELAND: A kind of land on which the native vegetation, climax, or natural potential consists predominately of grasses, grass-like plants, forbs, or shrubs. Rangeland includes lands revegetated naturally or artificially to provide a plant cover that is managed like native vegetation. Rangelands may consist of natural grasslands, savannas, shrublands, moist deserts, tundra, alpine communities, coastal marshes, and wet meadows.

RAPTOR: A raptor is a bird of prey that is known for its predatory habits of feeding on other animals. This group of birds possesses several unique anatomical characteristics that allow them to be superior hunters. These characteristics include excellent sensory abilities, such as binocular vision and keen hearing in order to detect prey; large, powerful grasping feet with razor-sharp talons for catching prey; and generally large hooked bills that can tear prey apart. They include diurnal or daytime species such as hawks, falcons, ospreys, and eagles; and nocturnal or nighttime species such as owls.

RAPTOR HABITAT: Raptors have specific requirements that their habitat must provide, including food and water, cover from weather, space in which to gather food, and a large enough area to attract mates, establish nesting locations (aeries), and find safe corridors between habitats. Raptors generally nest in low densities and need large areas for successful breeding. Drainage of wetlands, urban expansion, and exotic plant invasions are all affecting raptor habitats.

RECORD OF DECISION: A document signed by a responsible official recording a decision that was preceded by the preparing of an environmental impact statement. Also see DECISION RECORD.

RECOVERY: Improvement in the status of the listed threatened or endangered species to the point at which listing is no longer appropriate under the criteria set forth in Section 4 of the Endangered Species Act. Also, the process by which a species and/or its ecosystems are restored to such an extent that the species is self-sustaining and future survival in the wild can be ensured.

RECREATION AREA MANAGEMENT PLAN (RAMP): A plan prepared for recreation areas requiring special management.

RECREATION AND PUBLIC PURPOSES ACT of 1926 (44 Stat. 741, as amended; 43 U.S.C. 869 et seq.): An act of Congress that allows lease or acquisition of public land to be used for recreation or public purposes by local government entities (county or city governments) and non-profit organizations.

RECREATION AND PUBLIC PURPOSE (R&PP) LEASE: A federal statute that allows the disposal of public lands to any state, local, federal, or political instrumentality or non-profit organization for any recreational or public purpose, at the discretion of the authorized officer.

RECREATION MANAGEMENT ZONES (RMZs): Subunits within a SRMA managed for distinctly different recreation products. Recreation products are comprised of recreation opportunities, the natural resource and community settings within which they occur, and the administrative and service environment created by all affecting recreation-tourism provides, within which recreation participation occurs. (SEE Special recreation management area)

RECREATION NICHE: The place or position within the strategically targeted recreation-tourism market for each SRMA that is most suitable (i.e., capable of producing certain specific kinds of recreation opportunities) and appropriate (i.e., most responsive to identified visitor or resident customers), given available supply and current demand, for the production of specific recreation opportunities and the sustainable maintenance of accompanying natural resource and/or community setting character.

RECREATION OPPORTUNITY SPECTRUM (ROS): One of the existing tools for classifying recreation environments (existing and desired) along a continuum ranging from primitive, low-use, and inconspicuous administration to urban, high-use, and a highly visible administrative presence. This continuum recognizes variation among various components of any landscape's physical, social, and administrative attributes; and resulting descriptions (of existing conditions) and prescriptions (of desired future conditions) define recreation setting character.

RECREATION SETTINGS: The collective, distinguishing attributes of landscapes that sometimes actually determine, what kinds of recreation opportunities are produced.

RECREATION – TOURISM MARKET: Recreation-tourism visitors, affected community residents, affecting local governments and private sector business, or other constituents and the communities or other places where these customers originate (local, regional, national, or international). Based on analysis of supply and demand, land uses plans strategically identify primary recreation-tourism markets for each SRMA—destination, community, or undeveloped.

RECREATIONAL ROCK COLLECTING: See ROCKHOUNDING.

RESOURCE ADVISORY COUNCILS (RACs): Advisory councils appointed by the Secretary of the Interior and consisting of representatives of major public land interest groups (e.g., commodity industries, recreation, environmental and local area interests) in a state or smaller area. RACs advise the BLM, focusing on a full array of multiple-use public land issues. RACs also help develop fundamentals for rangeland health and guidelines for livestock grazing.

RESOURCE MANGEMENT PLAN (RMP): A BLM planning document that is prepared in accord with Section 202 of FLPMA that presents systematic guidelines for making resource management decisions for a resource area. An RMP is based on an analysis of an area's resources, its existing management, and its capability for alternative uses. RMPs are issue oriented and developed by an interdisciplinary team with public participation.

RIGHT-OF-WAY (ROW): A permit or easement that authorizes the use of lands for certain specified purposes, commonly for pipelines, roads, telephone lines, or powerlines.

RIGHT-OF-WAY CORRIDOR: A parcel of land that has been identified by law, Secretarial order, through a land use plan or by other management decision as being the preferred location for existing and future right-of-way grants and suitable to accommodate one type of right-of-way or one or more rights-of-way which are similar, identical or compatible.

RIPARIAN: Pertaining to or situated on or along the bank of streams, lakes, and reservoirs.

RIPARIAN AREA: Riparian areas are the green, vegetated areas on each side of streams and rivers. They serve many important functions, including purifying water by removing sediments and other contaminants; reducing the risk of flooding and associated damage; reducing stream channel and streambank erosion; increasing available water and stream flow duration by holding water in stream banks and aquifers; supporting a diversity of plant and wildlife species; maintaining a habitat for healthy fish populations; providing water, forage, and shade for wildlife and livestock; and creating opportunities for recreationists to fish, camp, picnic, and enjoy other activities. They can be a form of wetland transition between permanently saturated wetlands and upland areas. Riparian areas exhibit vegetation or physical characteristics that reflect the influence of permanent surface or subsurface water. Typical riparian areas include lands along, adjacent to, or contiguous with perennially and intermittently flowing rivers and streams, and the shores of lakes and reservoirs with stable water levels. Excluded are ephemeral streams or washes that lack riparian vegetation and depend on free water in the soil.

ROAD: A linear route declared a road by the owner, managed for use by low-clearance vehicles having four or more wheels, and maintained for regular and continuous use.

ROADSIDE: A general term denoting the area adjoining the outer edge of the road.

ROCK CRAWLING: The use of specialized motor vehicles for the purpose of traversing difficult terrain. Also known as Extreme Technical Trail driving.

ROCKHOUNDING: The free collection of rock, mineral and semi-precious gemstones, invertebrate fossils, and petrified wood in reasonable amounts. BLM Arizona defines reasonable limits for personal use as up to 25 pounds per day, plus one piece, with a total of 250 pounds per

person, per year. Rockhounding does not include removal aid by motorized mechanical devices, including heavy equipment or explosives.

ROUTE: any motorized, non-motorized, or mechanized transportation corridor. Corridor may either be terrestrial or a waterway. "Roads," "trails," and/or "ways" are considered routes.

RUNOFF: The portion of a drainage area's precipitation that flows from the area.

R.S. 2477: Revised Statute 2477 was enacted as part of the Mining Law of 1866, during a time when the federal government's focus was on encouraging settlement and development of the West. Congress passed R.S. 2477 to ensure miners' routes to their claims and cattlemen's trails for their herds by granting rights-of-way over any federal land not otherwise set aside. Although Congress repealed the statute in 1976 with the Federal Land Policy and Management Act, it did not terminate rights-of-way in existence at that time. As part of the new law in 1976, Congress recognized all valid existing claims to these rights-of-way as of that date.

S

SALEABLE MINERALS: Common variety minerals on the public lands, such as sand and gravel, which are used mainly for construction and are disposed by sales or free use permits to local governments. See also MINERAL MATERIALS.

SCIENTIFIC USE: This category applies to any cultural property determined to be available for consideration as the subject of scientific or historical study at the present time, using currently available research techniques. Study indicates methods that would result in the property's physical alteration or destruction. This category applies almost entirely to prehistoric and historic archaeological properties, where this method of use is generally archaeological excavation, controlled surface collection, and/or controlled recordation (data recovery). Recommendation to allocate individual properties to this use must be based on documentation of the kinds of data the property is thought to contain and the data's importance for pursuing specific research topics.

SCOPING: An early and open process for determining the scope of issues to be addressed in an environmental impact statement and the significant issues related to a proposed action.

SHOULDER: The portion of the roadway contiguous to the travelway for accommodation of stopped vehicles.

SEASONAL GRAZING: Grazing restricted to a specific season.

SECTION: 640 acres or 1 square mile.

SECTION 404 PERMIT: A permit required by the Clean Water Act, under specified circumstances, when dredge or fill material is placed in the waters of the United States, including wetlands.

SECTION 7 CONSULTATION: The requirement of Section 7 of the Endangered Species Act that all federal agencies consult with the U.S. Fish and Wildlife Service or the National Marine Fisheries Service if a proposed action might affect a federally listed species or its critical habitat.

SEDIMENT: Solid material that originates mostly from disintegrated rocks and is transported by, suspended in, or deposited from water. Sediment includes chemical and biochemical precipitates and decomposed organic material such as humus.

SENSITIVE SHEEP HABITAT: Habitat identified by BLM and AZGFD that provides one or more essential biological elements including: lambing areas, migration routes, mineral licks, water source, and foraging areas.

SHEEP-FREE FORAGE: Alfalfa, hay, and other forage that has not been grown on fields grazed by domestic sheep.

SIKES ACT OF 1974: A federal law that promoted federal-state cooperation in managing wildlife habitats on both BLM and Forest Service lands. The act required BLM to work with state wildlife agencies to plan the development and maintenance of wildlife habitats and had as its main tool, the habitat management plan.

SIMULTANEOUS DOUBLE COUNT: A census technique to estimate animal populations. The technique uses tandem observers counting groups of animals on the same transect.

SOCIO-CULTURAL USE: A social and/or cultural group perceives that a cultural resource, place, structure, or geographic location has characteristics that help to maintain the group's heritage or identity.

SOIL MOISTURE: The water content stored in a soil.

SPECIAL CULTURAL RESOURCE MANAGEMENT AREA: An area containing cultural resources (e.g., 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.identified

SPECIAL DESIGNATION: These are nationally recognized land use designations for protection of one or more sensitive resources. Designations may include ACECs, Back Country Byways, Wild and Scenic Rivers, Wilderness Areas, and Wilderness Study Areas.

SPECIAL RECREATION MANAGEMENT AREA: (SRMA): A public lands unit identified in land use plans to direct recreation funding and personnel to fulfill commitments made to provide specific structured recreation opportunities (i.e., activity, experience, and benefit opportunities). Both land use plan decisions and subsequent implementing actions for recreation in each SRMA are geared to a strategically identified primary market-destination, community, or undeveloped.

SPECIAL RECREATION PERMIT (SRP): An authorization that allows for specific nonexclusive permitted recreational uses of the public lands and related waters. SRPs are issued

to control visitor use, protect recreational and natural resources, provide for the health and safety of visitors, and accommodate commercial recreational uses.

SPLIT-ESTATE: Land whose surface rights and mineral rights are owned by different entities.

SPECIAL STATUS SPECIES: Plant or animal species listed as endangered, threatened, candidate or sensitive by federal or state governments.

SPECIAL VEHICLE RECREATION ACTIVITIES: Recreation activities that require special, custom, modified, usually motorized OHV equipment that involves site-specific landscape elements required for a specialized sport. Examples include: rock crawling and motorcycle trials.

SPUR: A route that exists for a unique use, such as access to a specific use or feature. Uses include, but are not limited to recreational and commercial. Features include, but are not limited to, campsites, mines, or range developments. A spur route is connected to a designated route. Spur routes should be designated in the TMP.

STAKEHOLDERS(S): A person, party, group, organization, or agency interested either through ownership, management jurisdiction, share, or socioeconomic reliance in a location, area, or specific resource.

STAGING AREA: An area where participants in an activity gather and make final preparations for the activity.

STANDARDS AND GUIDELINES FOR RANGELAND HEALTH: See Arizona Standards for Rangeland Health and Guidelines for Grazing Administration.

STATE HISTORIC PRESERVATION OFFICER (SHPO): The official within and authorized by each state at the request of the Secretary of the Interior to act as liaison for the National Historic Preservation Act. Also see NATIONAL HISTORIC PRESERVATION ACT.

STATE LANDS: See STATE TRUST LANDS.

STATE TRUST LANDS: Lands granted to Arizona by the Federal government at territorial establishment and at statehood. Totaling 10.9 million acres, these lands are managed by the Arizona State Land Department to yield revenue over the long term for the 14 trust beneficiaries. The chief beneficiary consists of the public schools. Whenever Arizona sells or leases these lands and their natural resources, it must pay the beneficiaries. Revenues from land sales are maintained in a permanent fund managed by the State Treasurer, and interest from this fund is paid to the beneficiaries.

STREAMBANK: The portion of a stream channel that restricts the sideward movement of water at normal water levels. The streambank's gradient often exceeds 45° and exhibits a distinct break in slope from the stream bottom.

STREAMBANK STABILITY: A streambank's relative resistance to erosion, which is measured as a percentage of alteration to streambanks.

SURFACE OCCUPANCY: See NO SURFACE OCCUPANCY.

T

TAILINGS: The waste matter from ore after the extraction of economically recoverable metals and minerals.

TAKE: As defined by the Endangered Species Act, “to harass, harm, pursue, hunt, shoot, wound, kill, capture, or collect, or attempt to engage in any such conduct.”

TARGET SPECIES: Plant species to be reduced or eliminated by a vegetation treatment. Also see VEGETATION TREATMENTS.

TERRESTRIAL SPECIES: Ground dwelling plants and animals.

THREATENED SPECIES: Any plant or animal species likely to become endangered within the foreseeable future throughout all or part of its range and designated by the U.S. Fish and Wildlife Service under the Endangered Species Act. Also see ENDANGERED SPECIES.

TITLE 5: That section of the Federal Land Policy and Management Act that allows BLM to authorize certain types of rights-of-way.

TRADITIONAL LIFEWAY VALUE: The quality of being useful to the maintenance of a specified social and/or cultural group’s traditional systems of 1) religious belief, 2) cultural practice, or 3) social interaction, not closely identified with definite locations. Another group’s shared values are abstract, nonmaterial, ascribed ideas that one cannot know about without being told.

TRADITIONAL USE: This category is to be applied to any cultural resource that is perceived by a specified social and/or cultural group as having attributes that contribute to maintaining the heritage or existence of that group. This use category signifies that the cultural resource is to be managed in a way that takes those attributes into account, as applicable.

TRAIL: (Interagency definition): linear route managed for human powered, stock, or

off-highway vehicle forms of recreation or for historic or heritage values. Trails are not generally managed for use by four wheel drive or high clearance vehicles.

TRAILHEAD: The terminus of a hiking, horse, or bicycle trail, accessible by motor vehicle and sometimes having parking, signs, a visitor register, and camping and sanitary facilities.

TRAVEL MANAGEMENT NETWORK: A system that addresses access requirements to public lands. This includes, but is not limited to: Title 5 rights-of-way, RS 2477 Roads, OHV routes, county maintained roads, trails (hiking, equestrian, bike, and vehicular), authorized or permitted uses (ranchers, miners, and other agencies), and ADA needs. The network aims to also improve the lack of legal access to public lands over private or state lands.

TREAD LIGHTLY: A not-for-profit organization whose mission is to increase awareness of ways to enjoy the great outdoors while minimizing human impacts.

U

UNIQUE FARMLAND: As defined by the Farmland Protection Policy Act of 1981, land other than prime farmland that is used for producing specific high-value food and fiber crops, as determined by the Secretary of Agriculture. Unique farmland has the special combination of soil quality, location, growing season, and moisture supply needed to economically produce sustained high quality or high yields of specific crops when treated and managed according to acceptable farming methods. Examples of such crops include citrus, tree nuts, olives, cranberries, fruits, and vegetables. Also see PRIME FARMLAND.

UNAUTHORIZED USE: Any use of the public lands not authorized or permitted.

USER ETHIC: All visitors arrive at the public lands with a set of perceptions, habits, activities, and values, which, based upon their socialization, they determine to be appropriate or inappropriate behaviors. These ethics change over time, by region of the country, and by group affiliation/norms. Some ethics are less impacting to the natural setting. When a user group or subset of a user group is observed to demonstrate a poor user ethic, it may be valuable to provide information and interpretation in order to seek a change in user ethic.

UPLANDS: Lands at higher elevations than the alluvial plain or low stream terrace; all lands outside the riparian-wetland and aquatic zones.

V

VANDALISM (CULTURAL RESOURCE): The unauthorized collecting, excavating, or defacing of cultural resources.

VALID EXISTING RIGHTS: Locatable mineral development rights that existed when FLPMA was enacted in 1976. Some areas are segregated from entry and location under the Mining Law to protect certain values or allow certain uses. Mining claims that existed as of the effective date of the segregation may still be valid if they can meet the test of discovery of a valuable mineral required under the Mining Law. Determining the validity of mining claims located on segregated lands requires BLM to conduct a valid existing rights determination.

VEGETATION TREATMENTS: Treatments that improve vegetation condition or production. Such treatments may include seedings; prescribed burning; or chemical, mechanical, and biological plant control.

VENDING: the sale of goods or services, not from a permanent structure, associated with recreation on the public lands or related waters, such as food, beverages, clothing, firewood, souvenirs, photographs, or film (video or still), or equipment repairs.

VERTICAL MULCHING: A reclamation strategy, designed to conform to adjacent vegetation and terrain, for restoring roads, trails, and other disturbed areas in desert tortoise and other sensitive species' habitats. This technique involves the placement of structure (live vegetation, rocks, dead shrubs and "snags," bunchgrasses, and various woody materials) within the confines of the treatment area, both on the ground surface and in a vertical manner.

VISITOR SERVICES: The delivery, to the visiting public, of use information, interpretation, and use rules. Visitor services may be provided in written form (maps and brochures), signing, or the direct face-to-face contact with a BLM Park Ranger or other visitor services staff. Emergency services and visitor assistance are also included as visitor services. The goal of visitor services is to improve the visitor experience, provide a BLM presence, and protect the resource.

VISUAL RESOURCE MANAGEMENT (VRM): A BLM developed system used to evaluate the visual resources of a given area to determine what degree of protection, rehabilitation, or enhancement is desirable and possible.

W, X, Y, Z

WASH: A channel or miniature valley cut by concentrated runoff but through which water commonly flows only during and immediately after heavy rains, or while snow is melting.

WATERSHED (CATCHMENT): A topographically delineated area that is drained by a stream system, that is, the total land area above some point on a stream or river that drains water past that point. The watershed is a hydrologic unit often used as a physical-biological unit and a socioeconomic-political unit for planning and managing natural resources.

WATERSHED CONDITION (WATERSHED HEALTH): The comparison of watershed processes to normal or expected measurements of properties such as soil cover, erosion rate, runoff rate, and groundwater table elevation; an assessment or categorization of an area by erosion conditions, erosion hazards, and the soil moisture/temperature regime.

WATERSHED FUNCTION: The combination of processes attributed to watersheds as part of the hydrologic cycle including interception of rain by plants, rocks, and litter; surface storage by the soil; groundwater storage; stream channel storage; soil evaporation; plant transpiration; and runoff. These processes affect the following properties of the watershed: runoff rate, water infiltration rate, soil building rate, soil erosion rate, groundwater recharge rate, groundwater discharge rate, water table elevation, and surface water discharge. These properties in turn affect plant communities through soil attributes, including soil parent material, soil moisture, and nutrients; stream and rivers through flooding duration and magnitude; and sediment load, which structures the dimension, pattern, and profile of channels; and lakes and reservoirs through sedimentation and nutrient input.

WAY: As used herein, a road-like feature used by vehicles having four or more wheels, but not declared a road by the owner and which receives no maintenance to guarantee regular and continuous use.

WETLAND: An area that is inundated or saturated by surface- or ground water often and long enough to support a prevalence of vegetation typically adapted for life in saturated soil. Wetlands include marshes, shallows, lakeshores, cienegas, and riparian areas.

WILD and SCENIC RIVER CORRIDOR: See NATIONAL WILD and SCENIC RIVER SYSTEM.

WITHDRAWAL: As defined in FLPMA: “Withholding an area of Federal land from settlement, sale, location, or entry, under some or all of the general land laws, for the purpose of limiting activities under those laws in order to maintain other public values in the area or reserving the area for a particular public purpose or program; or transferring jurisdiction over an area of Federal land, other than ‘property’ governed by the Federal Property and Administrative Services Act, as amended (40 U.S.C. 471) from one department, bureau or agency to another department, bureau or agency.”

WILD BURROS: All unbranded and unclaimed burros using public lands as all or part of their habitat.

WILDERNESS: Area designated by Congress to protect their wilderness values or characteristics as described under the Wilderness Act of 1964.

WILDERNESS CHARACTERISTICS: features of the land and are specifically identified in BLM Instruction Memorandum (IM) No. 2003-275 – Change 1 as naturalness, solitude, and primitive/unconfined recreation.

WILDERNESS STUDY AREA (WSA): A roadless area of public lands that the BLM has determined possesses the wilderness qualities described in the Wilderness Act of 1964. The WSA system was established under Section 603 of FLPMA as a means of identifying for Congress those public lands that possess wilderness characteristics described by the Wilderness Act of 1964. Congress can designate WSAs, release them from study status, or maintain their wilderness study status.

WILDFIRE: Any wildland fire that is not meeting management objectives and therefore requires a suppression response.

WILDLAND FIRE: Any non-structure fire, other than prescribed fire, that occurs in the wildland.

WILDLAND-URBAN INTERFACE (WUI): Areas where urban fuels directly meet natural fuels. This is primarily within 20–60 meters (66–200 feet) of houses, where fire most directly threatens the house, and where a defensible zone can be developed.

WILDLIFE: A broad term that includes birds, reptiles, amphibians, and non-domesticated mammals.

WILDLIFE HABITAT AREAS (WHAs): General areas that are managed to enhance the habitat of one or more priority wildlife species. These areas were previously called Priority Wildlife Habitat.

WITHDRAWAL: An action that restricts the disposition of public lands and holds them for specific public purposes; public lands that have been dedicated to public purpose. Also see MINERAL WITHDRAWAL.

References Cited

- Arizona Game and Fish Department, Arizona State Parks, The Nature Conservancy, U.S. Army Corps of Engineers, U.S. Bureau of Land Management, U.S. Bureau of Reclamation and U.S. Fish and Wildlife Service. 2005. Memorandum of Understanding Concerning Cooperation and Coordination within the Bill Williams River Watershed in Southwest Arizona. The BLM became signatory on January 3, 2005.
- Bureau of Land Management. 1980. *The California Desert Conservation Area Plan*. Desert District, Riverside, CA.
- . 1983. *Lower Gila North Management Framework Plan*. Phoenix District Office, Phoenix, AZ.
- . 1987. *Final Yuma District Resource Management Plan and Environmental Impact Statement*. Yuma District Office, Yuma, AZ.
- . 1988a. *Lower Gila South Resource Management Plan and Environmental Impact Statement*. Phoenix District Office, Phoenix, AZ.
- . 1988b. *Desert Tortoise Habitat Management on Public Lands: A Rangeland Plan*. Washington, D.C.
- . 1993. *Parker Strip Recreation Area Management Plan*. BLM Havasu Resource Area, Yuma District Office. Yuma, AZ.
- . 1994. *Arizona Statewide Wild and Scenic Rivers Legislative Environmental Impact Statement*. Arizona State Office, Phoenix, AZ.

- . 1995. *Kingman Resource Area Resource Management Plan and Final Environmental Impact Statement*. Kingman Resource Area Office, Kingman, AZ.
- . 1996. *Recreation Project Plan for the Parker Strip Off-Highway Vehicle Area and Routes*. BLM Havasu Field Office, Lake Havasu, AZ.
- . 1997a. *Arizona Standards for Rangeland Health and Guidelines for Grazing Administration*. Arizona State Office, Phoenix, AZ.
- . 1997b. *La Posa Interdisciplinary Management Plan*. Yuma Field Office, Yuma, AZ.
- . 1997c. *Swansea Historic District Cultural Resource Management Plan: A Review of Past Management and Proposed Decisions for the Future Public Use of Swansea*. Lake Havasu Field Office, Lake Havasu, AZ.
- . 2001. *Gibraltar Mountain Interdisciplinary Management Plan*. Lake Havasu Field Office, Lake Havasu City, AZ.
- . 2002a. *Resource Management Plan Scoping Report*. Lake Havasu Field Office, Lake Havasu City, AZ.
- . 2002b. *Northern and Eastern Colorado Desert Coordinated Management Plan (NECO Plan)*. California Desert District Office, Riverside, CA.
- . 2003. *Arizona Statewide Land Use Plan Amendment for Fire, Fuels, and Air Quality Management*. Arizona State Office, Phoenix, AZ.
- . 2004. *Proposed Statewide LUP Amendment for Fire, Fuels & Air Quality Management*. Arizona State Office, Phoenix, AZ.
- . 2005. *Approved Amendment to the Lower Gila North Management Framework Plan and the Lower Gila South Resource Management Plan and Decision Record*. Phoenix, AZ.
- . 2006. *Lake Havasu Coordinated Fisheries Management Plan*. Lake Havasu Field Office. Lake Havasu City, AZ.
- Bureau of Land Management and USDA Forest Service. 2002. *Interagency Standards for Fire and Aviation Operations*. Washington, D.C.
- Bureau of Reclamation, U.S. Fish and Wildlife Service, and the Metropolitan Water District of Southern California. 2004. *Lower Colorado River Multi-Species Conservation Program*. Volume I, II, III, IV, and V. Available: <<http://www.usbr.gov/lc/region/g2000/mscpdocs.html>>.

- California Partners in Flight. 2006. *The Desert Bird Conservation Plan: a Strategy for Protecting and Managing Desert Habitats and Associated Birds in the Mojave and Colorado Deserts*. Version 1.0. Available: <<http://www.prbo.org/calpif/plans.html>>.
- City of Bullhead City. 2002. *City of Bullhead City General Plan Update*. Bullhead City, AZ: DFD.
- Cunning, Dan. President and CEO. Lake Havasu Convention and Visitors Bureau. Lake Havasu, AZ. November 17, 2004—telephone conversation regarding the number of annual visitors to the Lake Havasu region.
- La Paz County. 2005. *La Paz County Comprehensive Plan*. Revised March 2005. Adopted April 2005. La Paz County, Parker, AZ.
- Lake Havasu City. 2002. *Lake Havasu City General Plan 2001*. Revised December 2004. Partners for Strategic Action, Inc. Lake Havasu City, AZ.
- Latta, M. J., C. J. Beardmore, and T. E. Corman. 1999. *Arizona Partners in Flight Bird Conservation Plan*. Version 1.0. Nongame and Endangered Wildlife Program Technical Report 142. Arizona Game and Fish Department. Phoenix, Arizona.
- Mohave County. 1995. *Mohave County, Arizona, General Plan*. Kansas City, MO: Freilich, Leitner & Carlisle.
- National Interagency Fire Center. 2001. Review and Update of the 1995 Federal Wildland Fire Management Policy January 2001. Available: <http://www.nifc.gov/fire_policy/history/index.htm>.
- Parker Town Council and Staff, Planning and Zoning Commission. 1996. *Town of Parker General Plan*. Partners for Strategic Action, Inc. Fountain Hills, AZ.
- Riparian Habitat Joint Venture. 2004. *The Riparian Bird Conservation Plan: a Strategy for Reversing the Decline of Riparian Associated Birds in California*. California Partners in Flight. Available: <<http://www.prbo.org/calpif/riparian.v-2.pdf>>.
- San Bernardino County. 2001. *General Plan*. Economic Development and Public Services Group. Land Use Services Department. San Bernardino, CA.
- Bureau of Reclamation, U.S. Fish and Wildlife Service, and the Metropolitan Water District of Southern California. 2004. *Lower Colorado River Multi-Species Conservation Program*. Volume I, II, III, IV, and V. Available: <<http://www.usbr.gov/lc/region/g2000/mscpdocs.html>>.

- U.S. Department of the Interior. 1964. *Lower Colorado River Land Use Plan*. Washington, D.C.
- U.S. Department of Interior Bureau of Land Management. 2004. *Proposed Statewide LUP Amendment for Fire, Fuels and Air Quality Management*. Arizona State Office, Phoenix, AZ.
- . 2006. *Lake Havasu Field Office Proposed Resource Management Plan and Final Environmental Impact Statement*. Lake Havasu, AZ.
- U.S. Department of the Interior Bureau of Land Management, Arizona State Office, and Arizona Department of Environmental Quality. 1997. Cooperative Agreement. ADEZ Contract No. 98-0094. Agreement number 22021. Filed with the Secretary of State November 6.
- U.S. Department of the Interior Bureau of Land Management, and the California State Water Resources Control Board. 1993. Memorandum of Understanding for Planning and Coordination of Nonpoint Source Water Quality Policies and Activities. 1993. Signed January 27.
- U.S. Department of Interior Bureau of Land Management, U.S. Bureau of Reclamation, U.S. Fish and Wildlife Service, U.S. Geological Survey, Arizona Game and Fish Department, California Department of Fish and Game, and Anglers United, Inc. 2006. Lake Havasu Fisheries Improvement Program Partnership 2006 Memorandum of Understanding. BLM Agreement No. AZ-932-0601.
- U.S. Fish and Wildlife Service (USFWS). 2006. *Biological Opinion on the Effects of the Lake Havasu Field Office (LHFO) Proposed Resource Management Plan*. Arizona Ecological Services Field Office. Phoenix, AZ.
- U.S. Fish and Wildlife Service (USFWS), Canadian Wildlife Service, SEMARNAP Mexico. 1998. *Update North American Waterfowl Management Plan*. Washington, D.C.

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Acronyms and Abbreviations

A&P	Atlantic & Pacific Railroad
ACEC	Area of Critical Environmental Concern
ADOT	Arizona Department of Transportation
AGFD	Arizona Game and Fish Department
AML	Appropriate Management Level
Approved RMP	Approved Lake Havasu Field Office Resource Management Plan
ATV	all-terrain vehicle
AZLUP	<i>Arizona Statewide Land Use Plan Amendment for Fire, Fuels, and Air Quality Management</i>
BA	Biological Assessment
BLM	Bureau of Land Management
CAP	Central Arizona Project
CFR	Code of Federal Regulations
Corps	U.S. Army Corps of Engineers
CS	Communication Site
DM	Department of the Interior Departmental Manual
DPC	Desired Plant Community
DRMP/DEIS	Draft Resource Management Plan/Draft Environmental Impact Statement
EIS	Environmental Impact Statement
ERMA	Extensive Recreation Management Area
ESA	Endangered Species Act
FAMS	Facilities Maintenance Information System

FHA	Fish Habitat Area
FLPMA	Federal Land Policy and Management Act
HA	Herd Area
Havasu-CA HMA	California side of the Havasu HMA
HMA	Herd Management Area
IBLA	Interior Board of Land Appeals
KOP	Key Observation Point
KRMP	<i>Kingman Resource Area Resource Management Plan</i>
LCRMSCP	<i>Lower Colorado River Multiple Species Conservation Program</i>
LGNSA	<i>Approved Amendment to the Lower Gila North Management Framework Plan and the Lower Gila South Resource Management Plan and Decision Record</i>
LGSRMP	<i>Lower Gila South Resource Management Plan</i>
LTVAs	Long-Term Visitor Areas
MIST	Minimum Impact Suppression Tactics
MOU	Memorandum of Understanding
mph	miles per hour
MSCP	Multi-Species Conservation Program
MWD	Metropolitan Water District of Southern California
NECO Plan	<i>Northern and Eastern Colorado Desert Coordinated Management Plan</i>
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
NRHP	National Register of Historic Places
OHV	off-highway vehicle
PRMP/FEIS	Proposed Resource Management Plan/Final Environmental Impact Statement
PWC	personal watercraft
R&PP	Recreation and Public Purposes Act
RFD	reasonable foreseeable development
RMIS	Recreation Management Information System
RMZ	Recreation Management Zone
ROS	Recreation Opportunity Spectrum
ROW	right-of-way
SCRMA	Special Cultural Resource Management Area
SR	State Route
SRMA	Special Recreation Management Area
SRP	Special Recreational Permit

T&E	Threatened and Endangered
TMN	Travel Management Network
TMP	Travel Management Plan
USC	United States Code
USGS	U.S. Geological Survey
UTV	utility vehicle
VRM	Visual Resource Management
WA	Wilderness Area
WHA	Wildlife Habitat Area
WSA	Wilderness Study Area
YCR	Yuma Clapper Rail
YRMP	<i>Yuma District Resource Management Plan</i>

List of Preparers

Though individuals have primary responsibility for preparing sections of an RMP, the document is an interdisciplinary team effort. In addition, internal review of the document occurs throughout preparation. Specialists at the BLM's district, state, and Washington office levels both review the analysis and supply information. Contributions by individual preparers may be subject to revision by other BLM specialists and by management during internal review.

Name	Job Title	Experience/Expertise	Primary Responsibility
Adams, Doug	Fisheries Biologist	20 years State of LA 4 years BLM	Fisheries and Aquatic Resources
Allert, Les	Computer Specialist	30 years Federal Service 20 years BLM	Computer Support and GIS Mapping
Barnes, Cindy	GIS Specialist	22 years BLM	RMP Core Team. GIS Specialist; Maps and Data
Bates, Christine	Renewable Resources Advisor	25 years Federal Service 6 years BLM	RMP Core Team. Biological Resources, Biological Assessment
Blomquist, Brad	Recreation Planner	24 years BLM, 5 years NPS. Both positions involved law enforcement and outdoor recreation planning/management.	Recreation Resource
Bodman, Cory	Realty Specialist	13 years BLM	Lands/Realty and Soils
Bouldin, Brent	Lead Editor	32 years of experience in technical, environmental, and general publication	Co-editor
Coyle, Charles	Editor	11 years of experience in environmental publication	Co-editor

Name	Job Title	Experience/Expertise	Primary Responsibility
De Witt, Peter	Lake Park Ranger	Contractor	Recreation and Travel Management, Field Observations
Dodson, Amanda	Geologist	6 years BLM	Minerals Resources
Gatto, Angela	Wildlife Biologist	7 years Federal Service 2 year BLM	Biological Resources
Henderson, Mike	Assistant Field Manager, Recreation and Visitor Services	30 years BLM	Technical Review
Koch, Kirk	Lake Havasu Fisheries Program Manager (Special Program Manager)	28 years BLM in aquatic and water-related resource management	Water/Soil/Air, Riparian, and Aquatic Habitat
Lichtkoppler, Richard	Economist, Bureau of Reclamation	22 years of Federal Service: 1 year, BLM; 3 years, General Services Administration; 9 years, National Park Service; 9 years, Bureau of Reclamation Economics and park planning	Socio-economics and Environmental Justice
Lovato, Bernadette	Lead Concession Management Specialist	16 years Federal Service: 15 years experience in Concession Management Programs (10 years with National Park Service and 5 years with BLM)	Concessions
McCoy, Myron	Recreation Planner	21 years Federal Service: 16 years BLM, 5 years National Park Service	Recreation Resources, Travel Management
Miller-Allert, Jill	Recreation Planner, Wilderness	30 years Federal Service: 17 years BLM, 10 years Corps of Engineers, 3 years National Park Service	RMP Core Team Special Designations, VRM, and Wilderness Characteristics
Murray, Sarah C.	Archaeologist	18 years with BLM	Cultural and Paleontological Resources
Oyler, Roger H.	Senior Rangeland Management Specialist	31 years BLM	Range Management and Burro Management
Parry, Bill	Civil Engineer Tech, Safety Officer	30 years Federal Service: 20 years BLM, 10 years U.S. Forest Service Fire Dept Training Captain	Public Health and Safety and Engineering

Name	Job Title	Experience/Expertise	Primary Responsibility
Rosalez, Maria	Realty Specialist	32 years Federal Service: 11 years BLM, 21 years NOAA	Lands/Realty
Smith, Tim	Field Manager	28 years BLM	Management Oversight
Taylor, Patricia	Assistant Field Manager, Lands and Customer Services	29 years BLM	Technical Review
Trafton, Gina	Planning and Environmental Coordinator	28 years Federal Service: 6 years BLM Planning, economics, natural resource management	RMP Team Lead
Williams, Diane	Public Affairs Specialist	27 years Federal Service: 12 Congressional, 15 BLM	Public Affairs, Publications, Outreach, and FOIA
Wilson, Mike	Recreation Planner	35 years Federal Service: 15 years National Park Service, 20 years with BLM	Technical review of recreation analysis
Wolff-White, Catherine	Environmental Protection Specialist	23 years Federal Service: Oklahoma RMP Team, Texas RMP Team Plan Amendments	Public Safety and Hazmat

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Appendix A

Applicable Laws, Regulations, Policy, and Planning Criteria

When considering the affected environment, physical, biological, economic, and social factors must be considered. In addition to the National Environmental Policy Act (NEPA), other environmental laws and Executive Orders (EOs) should be considered when preparing EAs and EISs. These laws are summarized below.

Programmatic Documents

A number of existing management plans, programmatic documents, and standards and guidelines were considered in the preparation of the Approved RMP. These documents have been examined not only to assure appropriate integration and compliance, but also to identify information that is still appropriate for inclusion in the Approved RMP and/or decisions that are still valid and can be carried forward into the documents being prepared. Activity plans that have been tiered off these plans have also been considered in this planning effort, but may require revision to be consistent with the Approved RMP.

These documents include:

- *Kingman Resource Management Plan* (Bureau of Land Management, Kingman Resource Area Office 1995)
- *Yuma District Resource Management Plan* as amended (Bureau of Land Management, Yuma District Office 1987)
- *Lower Gila North Management Framework Plan* as amended (Bureau of Land Management, Phoenix District Office 1983)
- *Approved Amendment to the Lower Gila North Management Framework Plan and the Lower Gila South Resource Management Plan and Decision Record* (LGNSA) (Bureau of Land Management, Phoenix District Office 2005)
- *Lower Gila South Resource Management Plan* as amended (Bureau of Land Management, Phoenix District Office 1988)
- *Arizona Standards for Rangeland Health and Guidelines for Grazing Administration* (Bureau of Land Management, Arizona State Office 1997)
- *Arizona Statewide Land Use Plan Amendment for Fire, Fuels, and Air Quality Management* (Bureau of Land Management, Arizona State Office September 2003)

- *Arizona Statewide Wild and Scenic Rivers Legislative Environmental Impact Statement* (Bureau of Land Management, Arizona State Office 1994)

Environmental Laws and Executive Orders

Recreation & Public Purposes Act

Recognizing the strong public need for a nationwide system of parks and other recreational and public purposes areas, the Congress, in 1954, enacted the Recreation and Public Purposes Act 68 statute 173; 43 United States Code 896 et. seq.) as a complete revision of the Recreation Act of 1926 (44 Stat. 741). This law is administered by the Bureau of Land Management.

The act authorizes the sale or lease of public lands for recreational or public purposes to state and local governments and to qualified nonprofit organizations. Examples of typical uses under the act are historic monuments sites, campgrounds, schools, firehouses, law enforcement facilities, municipal facilities, landfills, hospitals, parks, and fairgrounds.

Clean Air Act (CAA) of 1970 and Amendments of 1977 and 1990

The CAA recognizes that increases in air pollution result in danger to public health and welfare. To protect and enhance the quality of the Nation's air resources, the CAA authorizes the Environmental Protection Agency (EPA) to set six National Ambient Air Quality Standards (NAAQSs), which regulate carbon monoxide, lead, nitrogen dioxide, ozone, sulfur dioxide, and particulate matter pollution emissions. The CAA seeks to reduce or eliminate the creation of pollutants at their source, and designates this responsibility to state and local governments. States are directed to utilize financial and technical assistance as well as leadership from the federal government to develop implementation plans to achieve NAAQS. Geographic areas are officially designated by the EPA as being in attainment or non-attainment to pollutants in relation to their compliance with NAAQS. Geographic regions established for air quality planning purposes are designated as Air Quality Control Regions (AQCR). Pollutant concentration levels are measured at designated monitoring stations within the AQCR. An area is designated as unclassifiable where insufficient monitoring data exists. Section 309 of the CAA authorizes the EPA to review and comment on impact statements prepared by other agencies.

An agency should consider what effect an action may have on NAAQS due to short-term increases in air pollution during construction as well as long-term increases resulting from changes in traffic patterns. For actions in attainment areas, a federal agency may also be subject to EPA's Prevention of Significant Deterioration (PSD) regulations. These regulations apply to new major stationary sources and modifications to such sources. Although few agency facilities will actually emit pollutants, increases in pollution can result from a change in traffic patterns or volume. Section 118 of the CAA waives federal immunity from complying with the CAA and states that all federal agencies will comply with all federal- and state-approved requirements.

Clean Water Act (CWA) of 1977

The CWA, a 1977 amendment to the Federal Water Pollution Control Act of 1972, is administered by the EPA and sets the basic structure for regulating discharges of pollutants into waters of the United States. The CWA requires the EPA to establish water quality standards for specified contaminants in surface waters and forbids the discharge of pollutants from a point source into navigable waters without a National Pollutant Discharge Elimination System (NPDES) permit. NPDES permits are issued by EPA or the appropriate State if it has assumed responsibility. Section 404 of the CWA establishes a federal program to regulate the discharge of dredged and fill material into waters of the United States. Section 404 permits are issued by the U.S. Army Corps of Engineers (USACE). Waters of the United States include interstate and intrastate lakes, rivers, streams, and wetlands that are used for commerce, recreation, industry, sources of fish, and other purposes. The objective of the Act is to restore and maintain the chemical, physical, and biological integrity of the Nation's waters. Each agency should consider the impact on water quality from actions such as the discharge of dredge or fill material into United States waters from construction, or the discharge of pollutants as a result of facility occupation.

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) of 1980 and the Superfund Amendments and Reauthorization Act of 1986 (SARA)

CERCLA authorizes the EPA to respond to spills and other releases of hazardous substances to the environment, and authorizes the National Oil and Hazardous Substances Pollution Contingency Plan. CERCLA also provides a federal "Superfund" to respond to emergencies immediately. Although the "Superfund" provides funds for clean up of sites where potentially responsible parties (PRPs) cannot be identified, the EPA is authorized to recover funds through damages collected from responsible parties. This funding process places the economic burden for cleanup on polluters. SARA mandates strong cleanup standards, and authorizes the EPA to use a variety of incentives to encourage settlements. Title III of SARA authorizes the Emergency Planning and Community Right to Know Act (EPCRA), which requires facility operators with "hazardous substances" or "extremely hazardous substances" to prepare comprehensive emergency plans and to report accidental releases. EO 12856, "Federal Compliance with Right-to-Know Laws and Pollution Prevention Requirements," requires federal agencies to comply with the provisions EPCRA. If a federal agency acquires a contaminated site it can be held liable for clean up as the property owner/operator. A federal agency can also incur liability if it leases a property, as the courts have found lessees liable as "owners." However, if the agency exercises due diligence by conducting a Phase I Environmental Site Assessment, it may claim the "innocent purchaser" defense under CERCLA. According to Title 42 United States Code (USC) 9601(35), the current owner/operator must show it undertook "all appropriate inquiry into the previous ownership and uses of the property consistent with good commercial or customary practice" before buying the property to use this defense.

Resource Conservation and Recovery Act (RCRA) of 1976

RCRA, an amendment to the Solid Waste Disposal Act, authorizes the EPA to provide for “cradle-to-grave” management of hazardous waste, and sets a framework for the management of non-hazardous municipal solid waste. Under RCRA, hazardous waste is controlled from generation to disposal through tracking and permitting systems, and restrictions and controls on the placement of waste on or into the land. Under RCRA, a waste is defined as hazardous if it is ignitable, corrosive, reactive, toxic, or listed by the EPA as being hazardous. With the 1984 Hazardous and Solid Waste Amendments (HSWA), Congress targeted stricter standards for waste disposal and encouraged pollution prevention by prohibiting the land disposal of particular wastes. The HSWA amendments strengthen control of both hazardous and nonhazardous waste and emphasize the prevention of pollution of groundwater.

Safe Drinking Water Act (SDWA) of 1974

The SDWA establishes a federal program to monitor and increase the safety of all commercially and publicly supplied drinking water. Congress amended the SDWA in 1986, mandating dramatic changes in nationwide safeguards for drinking water and establishing new federal enforcement responsibility on the part of the EPA. The 1986 amendments to the SDWA require the EPA to establish Maximum Contaminant Levels (MCLs), Maximum Contaminant Level Goals (MCLGs) and Best Available Technology (BAT) treatment techniques for organic, inorganic, radioactive, and microbial contaminants and turbidity. MCLGs are maximum concentrations below which no negative human health effects are known to exist. The 1996 amendments set current federal MCLs, MCLGs, and BATs for organic, inorganic, microbiological, and radiological contaminants in public drinking water supplies.

Federal Land Policy and Management Act (FLPMA) of 1976

FLPMA and the regulations contained in 43 CFR Part 1600 govern the Bureau of Land Management planning process. Land Use Plans ensure that public lands are managed in accordance with the intent of Congress as stated in FLPMA, under the principles of multiple use and sustained yield. As required by FLPMA, the public lands must be managed in a manner that protects the quality of scientific, scenic, historical, ecological, environmental, air and atmospheric, water resource, and archaeological values; that, where appropriate, will preserve and protect certain public lands in their natural condition, that will provide food and habitat for fish and wildlife and domestic animals; and that will provide for outdoor recreation and human occupancy and use by encouraging collaboration and public participation throughout the planning process. In addition, the public lands must be managed in a manner that recognizes the Nation’s need for domestic sources of minerals, food, timber, and fiber from the public lands.

Taylor Grazing Act of 1934, as amended and supplemented

The Taylor Grazing Act was the federal government's first effort to regulate grazing on federal public lands. The act established grazing districts of vacant, unappropriated, and unreserved land from any parts of the public domain (excluding Alaska) that are not national forests, parks, and monuments; Indian reservations; railroad grant lands; or revested Coos Bay Wagon Road grant lands; and which are valuable chiefly for grazing and raising forage crops. Residents and stock owners pay an annual fee to obtain a grazing permit that is used to manage livestock grazing in established districts. Grazing Administration Regulations (43 CFR 4100) provide for the development of state Standards for Rangeland Health and Guidelines for Grazing Management. The Standards and Guidelines are approved through Bureau of Land Management planning and NEPA processes.

Public Rangelands Improvement Act of 1978

The Public Rangelands Improvement Act was instituted to improve the conditions on public rangelands. Rangelands are defined as lands administered by the Secretary of the Interior through the Bureau of Land Management or the Secretary of Agriculture through the Forest Service in 16 contiguous western states, including Arizona, on which there is domestic livestock grazing or which the appropriate Secretary determines may be suitable for domestic livestock grazing. Rangeland quality is determined by soil quality, forage values, wildlife habitat, watershed and plant communities, the current state of vegetation in a site in relation to its potential, and the relative degree to which the kinds, proportions, and amounts of vegetation in a plant community resemble the desired plant community. The act requires a national rangelands inventory and consistent federal management policies. In addition, the act provides funding for range improvement projects.

Arizona Standards and Guidelines

Arizona Standards and Guidelines (S&G) for grazing administration have been developed through a collaborative process involving the Bureau of Land Management State S&G Team and the Arizona Resource Advisory Council. Together, through meetings, conference calls, correspondence, and Open Houses with the public, the BLM State Team and RAC prepared Standards and Guidelines to address the minimum requirements outlined in the grazing regulations. The Standards and Guidelines, criteria for meeting Standards, and indicators are an integrated document that conforms to the fundamentals of rangeland health and the requirements of the regulations when taken as a whole.

Upland sites, riparian-wetland areas, and desired resource conditions are each addressed by a standard and associated guidelines.

Standard 1: Upland Sites

Upland soils exhibit infiltration, permeability, and erosion rates that are appropriate to soil type, climate and landform (ecological site).

Criteria for meeting Standard 1:

Soil conditions support proper functioning of hydrologic, energy, and nutrient cycles. Many factors interact to maintain stable soils and healthy soil conditions, including appropriate amounts of vegetative cover, litter, and soil porosity and organic matter. Under property functioning conditions, rates of soil loss and infiltration are consistent with the potential of the site.

Ground cover in the form of plants, litter or rock is present in pattern, kind, and amount sufficient to prevent accelerated erosion for the ecological site; or ground cover is increasing as determined by monitoring over an established period of time.

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

As indicated by such factors as:

- Ground Cover
 - litter
 - live vegetation, amount and type (e.g., grass, shrubs, trees, etc.)
 - rock
- Signs of erosion
 - flow pattern
 - gullies
 - rills
 - plant pedestaling

Exceptions and exemptions (where applicable):

- none

Guidelines:

1-1. Management activities will maintain or promote ground cover that will provide for infiltration, permeability, soil moisture storage, and soil stability appropriate for the ecological sites within management units. The ground cover should maintain soil organisms and plants and animals to support the hydrologic and nutrient cycles, and energy flow. Ground cover and signs of erosion are surrogate measures for hydrologic and nutrient cycles and energy flow.

1-2. When grazing practices alone are not likely to restore areas of low infiltration or permeability, land management treatments may be designed and implemented to attain improvement.

Standard 2: Riparian-Wetland Sites

Riparian-wetland areas are in properly functioning condition.

Criteria for meeting Standard 2:

Stream channel morphology and functions are appropriate for proper functioning condition for existing climate, landform, and channel reach characteristics. Riparian-wetland areas are functioning properly when adequate vegetation, landform or large woody debris is present to dissipate stream energy associated with high water flows.

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

The checklist for riparian areas is in the Technical Reference 1737-9 "Process for Assessing Proper Functioning Condition." The checklist for wetlands is in Technical Reference 1737-11 "Process for Assessing Proper Functioning Conditions for Lentic Riparian-Wetland Areas." These checklists are reprinted on the pages following the Guidelines for Standard 3.

As indicated by such factors as:

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

Exceptions and exemptions (where applicable):

- Dirt tanks, wells, and other water facilities constructed or placed at a location for the purpose of providing water for livestock and/or wildlife and which have not been determined through local planning efforts to provide for riparian or wetland habitat are exempt.
- Water impoundments permitted for construction, mining, or other similar activities are exempt.

Guidelines:

2-1. Management practices maintain or promote sufficient vegetation to maintain, improve or restore riparian-wetland functions of energy dissipation, sediment capture, groundwater recharge and stream bank stability, thus promoting stream channel morphology (e.g., gradient, width/depth ratio, channel roughness and sinuosity) and functions appropriate to climate and landform.

2-2. New facilities are located away from riparian-wetland areas if they conflict with achieving or maintaining riparian-wetland function. Existing facilities are used in a way that does not conflict with riparian-wetland functions or are relocated or modified when incompatible with riparian-wetland functions.

2-3. The development of springs and seeps or other projects affecting water and associated resources shall be designed to protect ecological functions and processes.

Standard 3: Desired Resource Conditions

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

Criteria for meeting Standard 3:

Upland and riparian-wetland plant communities meet desired plant community objectives. Plant community objectives are determined with consideration for all multiple uses. Objectives also address native species, and the requirements of the Taylor Grazing Act, Federal Land Policy and Management Act, Endangered Species Act, Clean Water Act, and appropriate laws, regulations, and policies.

Desired plant community objectives will be developed to assure that soil conditions and ecosystem function described in Standards 1 and 2 are met. They detail a site-specific plant community, which when obtained, will assure rangeland health, State water quality standards, and habitat for endangered threatened, and sensitive species. Thus, desired plant community objectives will be used as an indicator of ecosystem function and rangeland health.

As indicated by such factors as:

- Composition
- Structure
- Distribution

Exceptions and exemptions (where applicable):

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

Guidelines:

3-1. The use and perpetuation of native species will be emphasized. However, when restoring or rehabilitating disturbed or degraded rangelands, non-intrusive, non-native plant species are appropriate for use where native species (a) are not available, (b) are not economically feasible, (c) cannot achieve ecological objectives as well as non-native species, and/or (d) cannot compete with already established non-native species.

3-2. Conservation of Federal threatened or endangered, proposed, candidate, and other special status species is promoted by the maintenance or restoration of their habitats.

3-3. Management practices maintain, restore, or enhance water quality in conformance with State or Federal standards.

3-4. Intensity, season and frequency of use, and distribution of grazing use should provide for growth and reproduction of those plant species needed to reach desired plant community objectives.

3-5. Grazing on designated ephemeral (annual and perennial) rangeland may be authorized if the following conditions are met:

- Ephemeral vegetation is present in draws, washes, and under shrubs and has grown to useable levels at the time grazing begins.
- Sufficient surface and subsurface soil moisture exists for continued plant growth.
- Serviceable waters are capable of providing for proper grazing distribution.
- Sufficient annual vegetation will remain on site to satisfy other resource concerns, (i.e., watershed, wildlife, and burros).
- Monitoring is conducted during grazing to determine if objectives are being met.

3-6. Management practices will target those populations of noxious weeds that can be controlled or eliminated by approved methods.

3-7. Management practices to achieve desired plant communities will consider protection and conservation of known cultural resources, including historical sites, and prehistoric sites and plants of significance to Native American peoples.

Toxic Substance Control Act (TSCA) of 1976

Title I of the Toxic Substance Control Act established requirements and authorities to identify and control toxic chemical hazards to human health and the environment. TSCA authorized the EPA to gather information on chemical risks, require companies to test chemicals for toxic effects, and regulate chemicals with unreasonable risk. TSCA also singled out polychlorinated bi-phenyls (PCBs) for regulation, which as a result are being phased out. TSCA and its regulations govern the manufacture, processing, distribution, use, marking, storage, disposal, cleanup, and release reporting requirements for numerous chemicals like PCBs. PCBs are persistent when released into the environment and accumulate in the tissues of living organisms. They have been shown to cause adverse

health effects on laboratory animals and may cause adverse health effects in humans. TSCA Title II provides statutory framework for “Asbestos Hazard Emergency Response,” which applies only to schools. TSCA Title III, “Indoor Radon Abatement,” states indoor air in buildings of the United States should be as free of radon as the outside ambient air. Federal agencies are required to conduct studies on the extent of radon contamination in buildings they own. TSCA Title IV, “Lead Exposure Reduction,” directs Federal agencies to “...conduct a comprehensive program to promote safe, effective, and affordable monitoring, detection, and abatement of lead-based paint and other lead exposure hazards.” Further, any federal agency having jurisdiction over a property or facility must comply with all federal, state, interstate, and local requirements concerning lead-based paint.

The Wilderness Act of 1964 (P.L. 88-577)

Established the National Wilderness Preservation System to be composed of federally owned areas designated by Congress as wilderness areas. These areas should be administered for the use and enjoyment of the American people in such a way that will leave them unimpaired for the future use and enjoyment as wilderness, to provide for the protection of their wilderness character, and for the gathering and dissemination of information regarding their use and enjoyment as wilderness.

Criteria set by Congress within this Act states that wilderness areas have the following characteristics: (1) Generally appears to have been affected primarily by the forces of nature, with the imprint of man’s work substantially unnoticeable; (2) has outstanding opportunities for solitude or a primitive and confined types of recreation; (3) has at least five thousand acres of land or is of sufficient size as to make practicable its preservation and use in an unimpaired condition; and (4) may also contain ecological, geological or other features of scientific, educational, scenic or historical value. The Wilderness Act also set the accepted uses of designated Wilderness Areas and what uses are prohibited. The act sets special provisions for an agency’s continuing management of existing or grandfathered rights such as mining and grazing and other agency mission related activities.

The provisions of the Wilderness Act were not applied to BLM administered lands when this act was first passed. It was not until the passage of FLPMA in 1976 that the BLM was directed to begin inventories for its lands as possible candidates for inclusion into the National Wilderness Preservation System.

The Arizona Desert Wilderness Act of 1990 (P.L. 101-628)

In furtherance of the purpose of the Wilderness Act, the following public lands in five areas within LHFO were designated as components of the National Wilderness Preservation System: approximately 14,630 acres as East Cactus Plain Wilderness, 41,600 acres as Rawhide Mountains Wilderness, 25,287 acres as Harcuvar Mountains Wilderness, 18,805 acres as Gibraltar Mountain Wilderness, and 15,755 acres as Swansea Wilderness. The Act also retained 57,800 of public lands as “Cactus Plain Wilderness Study Area,” (WSA). This WSA continues to be managed under section 603 of Federal

Land Policy and Management Act of 1976, pertaining to its management in a manner that does not impair its suitability for preservation as wilderness at a later date.

The California Desert Protection Act (CDPA) of 1994 (P.L. 103-433)

This act designated lands in the California Desert as wilderness, established Death Valley and Joshua Tree National Parks, and established the Mojave National Preserve. The law designated certain lands in the California Desert Conservation Area, and the Yuma District (including LHFO) as three wilderness areas: 1) approximately 70,520 acres, which will be known as the Whipple Mountain Wilderness, 2) approximately 64,320 acres which will be known as the Chemehuevi Mountains Wilderness Area, 3) approximately 48,850 acres which will be known as the Dead Mountains Wilderness. Each wilderness area designated would be administered by BLM in accordance with the provisions of the Wilderness Act, except that any reference to the effective date of the Wilderness Act shall be deemed to be a reference to the effective date of this title.

Wild and Scenic Rivers Act (WSRA) of 1968

By recognizing the outstandingly remarkable values of specific rivers of the Nation, the WSRA provides for a national wild and scenic river system. These selected rivers and their immediate environment are preserved in a free-flowing condition, without dams or other construction. The policy not only protects the water quality of the selected rivers but also provides for the enjoyment of present and future generations. Any river in a free-flowing condition and that has one or more of the outstandingly remarkable values mentioned in the act is eligible for inclusion, and can be authorized as such by an Act of Congress, an act of State legislature, or by the Secretary of Interior upon the recommendation of the Governor of the State(s) through which the river flows.

EO 11988, “Floodplain Management,” May 24, 1977

EO 11988 directs agencies to consider alternatives to avoid adverse effects and incompatible development in floodplains. An agency may locate a facility in a floodplain if the head of the agency finds there is no practicable alternative. If no practicable alternative is found, the agency must minimize potential harm to the floodplain and circulate a notice explaining why the action is to be located in the floodplain prior to taking action. Finally, new construction in a floodplain must apply accepted floodproofing and flood protection to include elevating structures above the base flood level rather than filling in land.

EO 11990, “Protection of Wetlands,” May 24, 1977

EO 11990 directs agencies to consider alternatives to avoid adverse effects and incompatible development in wetlands. Federal agencies are to avoid new construction in wetlands, unless the agency finds there is no practicable alternative to construction in the wetland, and the proposed construction incorporates all possible measures to limit harm to the wetland. Agencies should use economic and environmental data, agency mission statements, and any other pertinent information when deciding whether or not to

build in wetlands. EO 11990 directs each agency to provide for early public review of plans for construction in wetlands.

Pollution Prevention Act (PPA) of 1990

The PPA encourages manufacturers to avoid the generation of pollution by modifying equipment and processes, redesigning products, substituting raw materials, and making improvements in management techniques, training, and inventory control. EO 12856, “Federal Compliance with Right-to-Know Laws and Pollution Prevention Requirements,” requires federal agencies to comply with the provisions of the PPA and also requires federal agencies to ensure all necessary actions are taken to prevent pollution. In addition, in Federal Register Volume 58 Number 18 (January 29, 1993), the Council on Environmental Quality provides guidance to Federal agencies on how to “...incorporate pollution prevention principles, techniques, and mechanisms into their planning and decision making processes and to evaluate and report those efforts, as appropriate, in documents pursuant to NEPA.”

Endangered Species Act (ESA) of 1973

The ESA establishes a federal program to conserve, protect, and restore threatened and endangered plants and animals and their habitats. The ESA specifically charges federal agencies with the responsibility of using their authority to conserve threatened and endangered species. All federal agencies must ensure that any action they authorize, fund, or carry out is not likely to jeopardize the continued existence of an endangered or threatened species or result in the destruction of critical habitat for these species, unless the agency has been granted an exemption. The Secretary of the Interior, using the best available scientific data, determines which species are officially endangered or threatened, and the U.S. Fish and Wildlife Service (FWS) maintains the list. A list of federal endangered species may be obtained from the Endangered Species Division, U.S. Fish and Wildlife Service (703-358-2171). States may also have their own lists of threatened and endangered species, which may be obtained by calling the appropriate State Fish and Wildlife office. Some species, such as the bald eagle, also have laws specifically for their protection (e.g., Bald Eagle Protection Act).

Migratory Bird Treaty Act of 1918, amended in 1936, 1960, 1968, 1969, 1974, 1978, 1986, and 1989

The Migratory Bird Treaty Act implements treaties and conventions between the United States, Canada, Japan, Mexico, and the former Soviet Union for the protection of migratory birds. Unless otherwise permitted by regulations, the Act makes it unlawful to pursue, hunt, take, capture or kill; attempt to take, capture or kill; possess, offer to or sell, barter, purchase, deliver or cause to be shipped, exported, imported, transported, carried or received any migratory bird, part, nest, egg or product, manufactured or not. The Act also make it unlawful to ship, transport or carry from one state, territory, or district to another, or through a foreign country, any bird, part, nest or egg that was captured, killed, taken, shipped, transported or carried contrary to the laws from where it was obtained; and import from Canada any bird, part, nest or egg obtained contrary to the laws of the

province from which it was obtained. The U.S. Department of the Interior has authority to arrest, with or without a warrant, a person violating the Act.

EO 13186, “Conservation of Migratory Birds,” January 10, 2001

EO 13186 creates a more comprehensive strategy for the conservation of migratory birds by the federal government. The Order provides a specific framework for the federal government’s compliance with its treaty obligations to Canada, Mexico, Russia, and Japan. The Order provides broad guidelines on conservation responsibilities and requires the development of more detailed guidance in Memoranda of Understanding (MOU) within 2 years of its implementation. The Order will be coordinated and implemented by the Fish and Wildlife Service. The MOU will outline how federal agencies will promote conservation of migratory birds. The Order will require the support of various conservation planning efforts already in progress; incorporation of bird conservation considerations into agency planning, including NEPA analyses; and reporting annually on the level of take of migratory birds.

EO 11514, “Protection and Enhancement of Environmental Quality,” March 5, 1970

EO 11514 states the President, with assistance from the CEQ, will lead a national effort to provide leadership in protecting and enhancing the environment for the purpose of sustaining and enriching human life. Federal agencies are directed to meet national environmental goals through their policies, programs, and plans. Agencies should also continually monitor and evaluate their activities to protect and enhance the quality of the environment. Consistent with NEPA, agencies are directed to share information about existing or potential environmental problems with all interested parties, including the public, in order to obtain their views.

EO 13175, “Consultation and Coordination with Indian Tribal Governments”

Executive Order 13175, Consultation and Coordination with Indian Tribal Governments, signed on May 14, 1998 and reissued in November 6, 2000 directs federal agencies to respect tribal self-government and sovereignty, tribal rights, and tribal responsibilities whenever they formulate policies “significantly or uniquely affecting Indian tribal governments.” When developing regulatory policies, agencies should provide for “meaningful and timely” consultation with tribes, and must also consider the compliance costs imposed upon tribal governments. The Order further states: “On issues relating to tribal self-government, trust resources or treaty and other rights, each agency should explore and, where appropriate, use consensual mechanisms for developing regulations, including negotiated rule-making.”

Presidential Executive Memorandum September 23, 2004

On September 23, 2004, President George W. Bush issued Executive Memorandum Government-to-Government Relationship with Tribal Governments recommitting the federal government to work with federally-recognized Native American tribal governments on a government-to-government basis and strongly supporting and respecting tribal sovereignty and self-determination.

Secretarial Order 3206

On June 5, 1997, the Secretary of the Interior and the Secretary of Commerce (Secretaries) issued this order pursuant to the Endangered Species Act of 1973, 16 USC 1531, as amended (the Act), the federal-tribal trust relationship, and other federal law. Specifically, this Order clarifies the responsibilities of the component agencies, bureaus and offices of the Department of the Interior and the Department of Commerce (Departments), when actions taken under authority of the Act and associated implementing regulations affect, or may affect, Indian lands, tribal trust resources, or the exercise of American Indian tribal rights, as defined in this Order. This Order further acknowledges the trust responsibility and treaty obligations of the United States toward Indian tribes and tribal members and its government-to-government relationship in dealing with tribes. Accordingly, the Departments will carry out their responsibilities under the Act in a manner that harmonizes the federal trust responsibility to tribes, tribal sovereignty, and statutory missions of the Departments, and that strives to ensure that Indian tribes do not bear a disproportionate burden for the conservation of listed species, so as to avoid or minimize the potential for conflict and confrontation.

Economic and Social Factors: Environmental Quality Improvement Act (EQIA) of 1970

The EQIA ensures that each federal agency conducting or supporting public works activities affecting the environment implements policies that are established under existing law. The EQIA also created the Office Environmental Quality to provide professional and administrative staff for the Council on Environmental Quality (CEQ). The Director of the Office of Environmental Quality assists and advises the President on federal policies and programs affecting environmental quality. The Office of Environmental Quality reviews the adequacy of existing environmental monitoring and predicting systems, and assists federal agencies in appraising the effectiveness of existing and proposed facilities that affect environmental quality.

National Historic Preservation Act (NHPA) of 1966, as amended

The NHPA sets forth national policy to identify and preserve properties of State, local, and national significance. The Act establishes the Advisory Council on Historic Preservation (Council), State Historic Preservation Officers, and the National Register of Historic Places (NRHP). The Council advises the President, Congress, and federal

agencies on historic preservation issues. Section 106 of the act directs federal agencies to take into account effects of their undertakings (actions and authorizations) on properties included in or eligible for NRHP. Section 110 sets inventory, nomination, protection, and preservation responsibilities for federally owned cultural properties. Section 106 of the act is implemented by regulations of the Council, 36 CFR Part 800. The Bureau of Land Management in Arizona complies with Section 106 according to a national Programmatic Agreement dated March 26, 1997, supplemented by a Protocol between the BLM Arizona State Director and the Arizona State Historic Preservation Officer.

The agency should coordinate studies and documents prepared under Section 106 with NEPA where appropriate. However, NEPA and NHPA are separate statutes and compliance with one does not constitute compliance with the other. For example, actions that qualify for a categorical exclusion under NEPA may still require Section 106 review under NHPA. The agency official is responsible for identifying properties in the area of potential effects and whether they are included or eligible for inclusion in the National Register of Historic Places. Section 110 of the NHPA requires federal agencies to identify, evaluate, and nominate historic property under agency control to the National Register of Historic Places.

Archaeological Resource Protection Act (ARPA) of 1979

ARPA protects archaeological resources on public and Indian lands. It provides felony-level penalties for the unauthorized excavation, removal, damage, alteration or defacement of any archaeological resource, defined as material remains of past human life or activities which are at least 100 years old. Before archaeological resources are excavated or removed from public lands, the federal land manager must issue a permit detailing the time, scope, location, and specific purpose of the proposed work. ARPA also fosters the exchange of information about archaeological resources between governmental agencies, the professional archaeological community, and private individuals. ARPA is implemented by regulations found in 43 CFR Part 7.

American Indian Religious Freedom Act of 1978 and Amendments of 1994

The American Indian Religious Freedom Act of 1978 recognizes that freedom of religion for all people is an inherent right, and traditional American Indian religions are an indispensable and irreplaceable part of Indian life. It also recognized the lack of federal policy on this issue and made it the policy of the United States to protect and preserve the inherent right of religious freedom for Native Americans. The 1994 Amendments provide clear legal protection for the religious use of peyote cactus as a religious sacrament. Federal agencies are responsible for evaluating their actions and policies to determine if changes should be made to protect and preserve the religious cultural rights and practices of Native Americans. These evaluations must be made in consultation with native traditional religious leaders.

Native American Graves Protection and Repatriation Act (NAGPRA) of 1990

NAGPRA establishes rights of Indian tribes to claim ownership of certain “cultural items,” defined as Native American human remains, funerary objects, sacred objects and objects of cultural patrimony held or controlled by federal agencies. Cultural items discovered on federal or tribal lands are, in order of primacy, the property of lineal descendants, if these can be determined, the tribe owning the land where the items were discovered, of the tribe with the closest cultural affiliation with the items. Discoveries of cultural items on federal or tribal land must be reported to the appropriate Indian tribe and the federal agency with jurisdiction over the land. If the discovery is made as a result of a land use, activity in the area must stop and the items must be protected pending the outcome of consultation with the affiliated tribe.

EO 11593, “Protection and Enhancement of the Cultural Environment,” May 13, 1971

EO 11593 directs the federal government to provide leadership in the preservation, restoration, and maintenance of the historic and cultural environment. Federal agencies are required to locate and evaluate all federal sites under their jurisdiction or control that may qualify for listing on the National Register of Historic Places. Agencies must allow the Advisory Council on Historic Preservation to comment on the alteration, demolition, sale, or transfer of property that is likely to meet the criteria for listing as determined by the Secretary of the Interior in consultation with the State Historic Preservation Officer. Agencies must also initiate procedures to maintain federally owned sites listed on the National Register.

EO 12898, “Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations,” February 11, 1994

EO 12898 directs federal agencies to make achieving environmental justice part of their mission. Agencies must identify and address adverse human health and/or environmental effects its activities have on minority and low-income populations and develop agency-wide environmental justice strategies. The strategy must list “...programs, policies, planning and public participation processes, enforcement, and/or rulemakings related to human health or the environment that should be revised to promote enforcement of all health and environmental statutes in areas with minority populations and low-income populations, ensure greater public participation, improve research and data collection relating to the health of and environment of minority populations and low-income populations, and identify differential patterns of consumption of natural resources among minority populations and low-income populations.” A copy of the strategy and progress reports must be provided to the Federal Working Group on Environmental Justice. Responsibility for compliance with this EO lies with each federal agency.

EO 13007, “Indian Sacred Sites,” May 24, 1996

EO 13007 provides that agencies managing federal lands, to the extent practicable, permitted by law, and not inconsistent with agency functions, shall accommodate Indian religious practitioners’ access to and ceremonial use of Indian sacred sites, shall avoid adversely affecting the physical integrity of such sites, and shall maintain the confidentiality of such sites. Federal agencies are responsible for informing tribes of proposed actions that could restrict future access to or ceremonial use of, or adversely affect the physical integrity of, sacred sites.

EO 13287, “Preserve America,” March 3, 2003

EO 13287 orders the federal government to take a leadership role in protection, enhancement, and contemporary use of historic properties owned by the federal government, and promote intergovernmental cooperation and partnerships for preservation and use of historic properties. The order established new accountability for agencies with regard to inventories and stewardship.

Case Law on Supplementation of NEPA

The lead case from the United States Supreme Court on supplementation is *Marsh v. Oregon Natural Resources Council*, 490 U.S. 360 (1989). It provides that “an agency need not supplement an EIS every time new information comes to light after the EIS is finalized. To require otherwise would render agency decision-making intractable, always awaiting updated information only to find the new information outdated by the time the decision is made.” *Id.* at 373.

Rather, to trigger supplementation obligations, the new information must be sufficient to show that the proposed action will affect the quality of the human environment “in a significant manner or to a significant extent not already considered.” *Id.* at 374.

Planning Criteria

During preparation of the plan, the BLM with input from the public, develops planning criteria that serves to:

- Constrain and guide the development of the Plan.
- Determine how the planning team approaches the development of alternatives.
- Determine how the planning team approaches selection of the Preferred Alternative.

Additional planning criteria can be added at any point in the planning process. The following are the Draft Planning Criteria as of the printing of this document:

1. The Plan will be completed in compliance with the Federal Land Management and Policy Act, The Endangered Species Act, the National Environmental Policy Act, and all other relevant federal law and executive orders (including wilderness legislation), and management policies of the BLM..

2. The planning team will work collaboratively with the States of Arizona and California, Mohave, La Paz, Maricopa, Yavapai and San Bernardino counties, tribal governments, municipal governments, other federal agencies and all other interested groups, agencies and individuals.
3. Where planning decisions have previously been made that still apply, those decisions will be carried forward into these Plans.
4. The planning process will include an Environmental Impact Statement that will comply with the National Environmental Policy Act standards.
5. The Plan will set forth a framework for managing recreational activities in order to maintain existing natural landscapes and to provide for the enjoyment and safety of the visiting public.
6. Laws and regulations regulate the management of grazing. The Plan will incorporate the statewide standards and guidelines established by the Arizona Bureau of Land Management State Director and approved by the Secretary of the Interior. It will present out a strategy for ensuring that proper grazing practices are followed while preserving habitats for sensitive plant and wildlife species. Livestock grazing is permitted, pursuant to the terms and conditions of existing permits and leases. Appropriate best management practices will be followed to protect rangeland resources, and where necessary, to mitigate any conflicts with other uses and values. Administrative actions to assure compliance with existing permit/lease requirements, to modify permits and leases, to monitor and supervise grazing use, and to remedy unauthorized grazing use will continue.
7. Consultations will be conducted with American Indian Tribes in accordance with policy and tribal concerns will be given due consideration. The planning process will include the consideration of any impacts on Indian trust assets.
8. Coordination with the Arizona State Historic Preservation Office (SHPO) will be conducted throughout the Plan.
9. The Plan will identify opportunities for using cultural properties for scientific, educational, recreational, or experimental purposes.
10. The lifestyles of area residents, including activities of grazing, hunting, motorized use and recreation, will be recognized in the Plan.
11. The Plan will recognize the State's authority to manage wildlife, including hunting and fishing, within the planning area in accordance with the current Memorandum of Understanding (MOU).
12. The Plan will address transportation, route management, and access, and identify which routes/roads should remain open to accommodate resource users, recreational users, protection of resource values, and administrative needs.
13. The existing BLM wilderness inventory and vehicle route inventory will provide a basis for consideration of any new wilderness-related proposals. Such proposals will be assessed consistent with appropriate BLM policy and guidance.
14. Lands that will be open to mineral leasing will be identified in the Plan. Where the plan identifies lands as open to mineral leasing, it will also define any constraints to surface use.

15. Ecological status and Ecological Site Inventory will be completed as necessary consistent with rangeland management policy.
16. Visual Resource Management classification will be conducted to address the public's concerns about open space and natural vistas.
17. The Plans will designate which acquired lands currently not segregated from mining by overriding actions (i.e., Wilderness) should be opened to mining location.
18. Consultations with the Fish and Wildlife Service will take place throughout the Plan process in accordance with the recent MOU.
19. Minerals management will be consistent with FLPMA and existing policy and regulation including the Mining and Minerals Policy Act of 1970, Section 102(a)(12) of FLPMA, the National Materials and Minerals Policy, Research and Development Act of 1980, and current BLM Mineral Resources policy.
20. National, State, and local policy on management of Noxious Weeds will be considered in the plans. Where possible, management practices that control invasive plant species will be emphasized.
21. Management of wild burros within the California portion of the Havasu HMA will be in accordance with the NECO Plan. Management of wild burros within the Arizona portion of the Havasu HMA will be in accordance with the existing Herd Management Area Plan, as amended by subsequent land use plans. Management of the Alamo Herd Management Area will be guided primarily by management prescriptions developed through the Lake Havasu RMP, since Alamo HMA only has an interim Herd Management Area Plan. There are existing monitoring studies on these HMAs and future adjustments in the AML, either up or down, will be based on the monitoring data.

Supplementary Rules

At the time of publication of the Approved RMP, the revised Supplementary Rules covering the decisions in the Approved RMP have not been finalized. When the revised rules become final, they will replace those listed below.

Supplementary Rules for the Lake Havasu Field Office, 43 CFR 8365.1-6

Part I – September 15, 2003

1. Lake Havasu Shoreline
2. Parker Strip Recreation Area
3. Craggy Wash

Part II – October 12, 1995

1. Swansea
2. Aubrey Hills Area

3. Desert Bighorn Sheep Habitat

Part III – Supplemental Rules That Are Still Valid

1. BLM lands in Arizona
2. BLM lands in California
3. BLM lands in Yuma, Lake Havasu Field Office, and California Desert District

Part I – September 15, 2003

[*Federal Register*: September 15, 2003 (Volume 68, Number 178)]

[Notices]

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[DOCID:fr15se03-108]

DEPARTMENT OF THE INTERIOR

Bureau of Land Management

[AZ-070-07-1230-00: 8371]

Notice of Final Supplementary Rules for the BLM-Managed Shoreline of Lake Havasu, the Parker Strip Recreation Area, and the Craggy Wash Area, in Mohave and La Paz Counties, AZ and in San Bernardino County, CA

AGENCY: Lake Havasu Field Office, Bureau of Land Management (BLM), Interior.

SUMMARY: This notice contains Supplementary Rules for the BLM-managed shoreline of Lake Havasu, a manmade lake on the Colorado River located in Arizona and California, including the boat-access campsites; supplementary rules for the Parker Strip Recreation Area, located along the Colorado River downstream from Lake Havasu; and supplementary rules for the Craggy Wash area, located north of the Lake Havasu City Municipal Airport (AZ). These supplementary rules are part of the implementation of the ongoing management of the Lake Havasu Shoreline Program. The supplementary rules replace existing rules for the Parker Strip Recreation Area and for the Crossroads and Empire Landing Campgrounds. Heavy visitation during the fall, winter and spring makes new supplementary rules for Craggy Wash necessary. The supplementary rules will help reduce conflicts among a wide variety of multiple users.

EFFECTIVE DATE: October 15, 2003.

FOR FURTHER INFORMATION CONTACT: Mike Henderson, Assistant Field Manager, or Bryan Pittman, Field Staff Law Enforcement Ranger, Bureau of Land Management, Lake Havasu Field Office, 2610 Sweetwater Avenue, Lake Havasu City, Arizona 86406, telephone (928) 505-1200.

SUPPLEMENTARY INFORMATION:

- I. Background
- II. Discussion of Supplementary Rules
- III. Procedural Matters

I. Background

The supplementary rules for the Lake Havasu Shoreline areas are part of the ongoing management of the Lake Havasu Shoreline Program. The program, initiated in 1997, manages the shoreline riparian area. It includes the pre-existing shoreline campsites as federal fee recreation sites under the authorities described in 36 CFR part 71. The sites had been developed as designated fee sites by the Arizona State Parks Department while these lands were under a lease administered by the Bureau of Land Management. The lease was voluntarily terminated, leaving the sites to return to the jurisdiction of BLM.

The primary purpose of the Lake Havasu Shoreline Program is to provide areas for boating, camping, and day use. The recreation sites, designated as camp or day use sites, are in most cases the traditional use areas of boat camping visitors. Arizona State Parks selected designated sites using criteria based on visitor use patterns, availability of shoreline access, and a need to establish sanitation facilities along heavily used shoreline areas. This program was established to accommodate the increasing demand for boat accessible site safety and property, to provide natural resource protection through improved management of the camping use and the riparian area. The designation of fee campsites assures that specific locations are available for such use year after year.

The Parker Strip Recreation Area is a heavily used area that contains campgrounds, day use areas, boat ramps, picnic areas, concession operated resorts, and a National Backcountry Byway. Authority for the designation of fee campsites is contained in Title 43, Code of Federal Regulations, part 8360, subpart 8365, sections 2 and 2-3. Authority for the payment of fees is in 36 CFR, subpart 71. Authority for including this program in the Fee Demonstration Pilot Program was contained in the Omnibus Budget Reconciliation Act of 1993 (Pub. L. 103-66) and the FY 1996 Appropriations Act (Pub. L. 104-134).

The Craggy Wash area is located north of the Lake Havasu City Municipal Airport and east of State Route 95. It is a heavily used dispersed camping area during the cooler part of the year. The area is also frequented by target shooters, off-road vehicle operators, sightseers, bicyclists, and hikers. More than 300 people may be present at the same time on frequent occasions.

The Proposed Supplementary Rules for the BLM-Managed Shoreline of Lake Havasu, the Parker Strip Recreation Area, and the Craggy Wash Area, in Mohave and LaPaz Counties, AZ, and San Bernardino County, CA, were published in the Federal Register on June 16, 2003. Changes in the proposed rules to the final rules resulted from internal review of comments received from the Arizona Game and Fish Department. These changes related to the distance (one-quarter mile) from occupied recreation sites that firearms may be discharged (Rules 14 and 27); and that except in designated OHV Open areas, vehicles must be operated on existing roads, trails, and washes (Rule 31).

II. Discussion of Supplementary Rules

The final supplementary rules for Lake Havasu Shoreline supercede the Rules for Lake Havasu Shoreline, published on May 21, 1998 (63 FR 27995). The shoreline supplementary rules would apply to the BLM-managed lands located within 1,000 linear feet of the high water mark (450 foot elevation line) of Lake Havasu, located in Mohave and La Paz Counties, Arizona and in San Bernardino County, California. These rules

also apply to the portions of Lake Havasu located within 500 linear feet of designated campsites, day use sites, boat ramps, fishing docks, boat docks and swimming beaches. Included in this are the following currently designated campsites listed generally from North to South:

Bluebird 1, 2
Wren Cove 1, 2, 3
Mallard Cove 1, 2, 3, 4, 5, 6
Teal Point 1, 2
Widgeon Key 1, 2, 4
Road Runner 2, 3, 4
Solitude Cove
Balance Rock Cove
Friendly Island 1, 2, 3, 4
Goose Bay 1, 2
Pilot Rock 1, 2, 3
Steamboat Cove 1, 2, 3, 4
Buzzard Cove
Eagle Cove
Eagle Point
Ewe Camp
Rachel's Camp
Burned Camp
Linda's Camp
Sand Isle 1, 2, 3, 4
Standard Wash 1, 2, 3, 4, 5, 6
Echo Cove 1, 2, 3, 4
Coyote Cove 1, 2
BLM 1, 2
Whyte's Retreat 1, 2
Rocky Landing 1, 2, 3, 4
Satellite Cove 1, 2, 3
Hum Hum Cove 1, 2
Cove of the Little Foxes
Disneyland 1, 2, 3, 4
Gnat Keys 1, 2, 3, 4
Hi Isle 2, 4, 5, 6, 7, 8, 10, 11, 12, 14, 15
Big Horn 1, 3, 4
Bass Bay 1, 2
Larned Landing 1, 2, 3, 4, 5
Bill Williams 1, 2, 3, 4, 5

The final supplementary rules for the Parker Strip Recreation Area supercede Rules for Parker Strip Recreation Area, published on October 12, 1995 (60 FR 53194), and rules for Empire Landing and Crossroads Campgrounds, published on May 18, 1998 (63 FR 27316). The Parker Strip rules apply to the Parker Strip Recreation Area, which is defined as follows:

Gila and Salt River Meridian, Arizona

- T11N, R18W, Sec. 15, 16, 22, 28, and 34.

- T10N, R18W, Sec. 5 (W1/2, NW1/4, SW1/4), Sec. 6, Sec. 7, Lots 1-4, (NE1/4, N1/2, SE1/4, SW1/4, SE1/4), Sec. 18 (Lot 1, NW1/4, NE1/4).
- T10N, R19W, Sec. 12, Sec. 13 (N1/2, N1/2, N1/2, SW1/4, NE1/4, NW1/4, SE1/4, NE1/4, N1/2, SE1/4, NW1/4, SW1/4, NW1/4, W1/2, SW1/4), Sec. 14, 22 and 23. Section 24 (W1/2, NW1/4).

San Bernardino Meridian, California

- T2N, R27E, all.
- T2N, R26E, Sec. 1, 11-15, 21-27 and 34-36.
- T1N, R26E, Sec. 2, 3, 10, and 11.

The final supplementary rules for Craggy Wash dispersed camping area would be new, made necessary by heavy visitation during the fall, winter, and spring. The Craggy Wash area is defined as public lands located with the following legal description:

- T14N, R20W, sec. 4 (N1/2), sec. 3 (N1/2), sec. 2 (N1/2).
- T15N, R20W, sec. 33, 34, 35, 36.

BLM has developed the shoreline, Parker Strip, and Craggy Wash supplementary rules to manage continued multiple use of the sites. These rules will be available in the Lake Havasu Field Office, and BLM will post them at the sites affected. Most of the shoreline supplementary rules that follow were first published in 1998. We have expanded the area of applicability to include all of the BLM-managed shoreline of Lake Havasu in Arizona and California. The previous supplementary rules applicable to the lake shoreline were limited to the areas in the vicinity of the shoreline campsites. The term “recreation site” includes any developed campsite, day-use site, or similar recreational development. The supplementary rules that follow also apply to the surface of Lake Havasu located within 500 linear feet of designated campsites. Acts occurring in that portion of the lake have a direct impact on, and connection with, public safety and resource protection of the campsite areas.

III. Procedural Matters

The principal author of these supplementary rules is Bryan Pittman, Field Staff Law Enforcement Ranger, BLM Lake Havasu Field Office.

Regulatory Planning and Review (EO 12866)

These supplementary rules are not significant and are not subject to review by the Office of Management and Budget under Executive Order 12866.

- (1) These supplementary rules will not have an effect of \$100 million or more on the economy. They will not adversely affect in a material way the economy, productivity, competition, jobs, the environment, public health or safety, or state, local, or tribal governments or communities.

- (2) These supplementary rules will not create a serious inconsistency or otherwise interfere with an action taken or planned by another agency.
- (3) These supplementary rules do not alter the budgetary effects or entitlements, grants, user fees, or loan programs or the rights or obligations of their recipients.
- (4) These supplementary rules do not raise novel legal or policy issues.

The supplementary rules will not affect legal commercial activity, but merely contain rules of conduct for public use of a limited selection of public lands.

Regulatory Flexibility Act

The Department of the Interior certifies that these supplementary rules will not have a significant economic effect on a substantial number of small entities under the Regulatory Flexibility Act (5 USC 601 et seq.). The supplementary rules will not affect legal commercial activity, but will govern conduct for public use of a limited selection of public lands.

Small Business Regulatory Enforcement Fairness Act (SBREFA)

These supplementary rules do not constitute a major rule under 5 USC 804(2), the Small Business Regulatory Enforcement Fairness Act.

These supplementary rules:

- Do not have an annual effect on the economy of \$100 million or more. (See the discussion under Regulatory Planning and Review, above.)
- Will not cause a major increase in costs or prices for consumers, individual industries, federal, state, or local government agencies, or geographic regions. See the discussion above under Regulatory Flexibility Act.
- Do not have significant adverse effects on competition, employment, investment, productivity, innovation, or the ability of U.S.-based enterprises to compete with foreign-based enterprises.

Unfunded Mandates Reform Act

These supplementary rules do not impose an unfunded mandate on state, local, or tribal governments or the private sector of more than \$100 million per year. The supplementary rules do not have a significant or unique effect on state, local, or tribal governments or the private sector. The supplementary rules have no effect on governmental or tribal entities. A statement containing the information required by the Unfunded Mandates Reform Act (2 USC 1531 et seq.) is not required.

Takings (E.O. 12630)

In accordance with Executive Order 12630, the supplementary rules do not have significant takings implications. The enforcement provision in the supplementary rules does not include any language requiring or authorizing forfeiture of personal property or

any property rights. EO 12630 addresses concerns based on the Fifth Amendment dealing with private property taken for public use without compensation. The land covered by the supplementary rules is public land managed by the Bureau of Land Management; therefore, no private property is affected. A takings implications assessment is not required.

Federalism (E.O. 13132)

In accordance with Executive Order 13132, BLM finds that the supplementary rules do not have sufficient federalism implications to warrant the preparation of a federalism summary impact statement. The supplementary rules do not have substantial direct effects on the states, on the relationship between the national government and the states, or on the distribution of power and responsibilities among the various levels of government. The supplementary rules do not preempt state law.

Civil Justice Reform (E.O. 12988)

In accordance with Executive Order 12988, the Office of the Solicitor has determined that these supplementary rules do not unduly burden the judicial system and meet the requirements of sections 3(a) and 3(b)(2) of the Order.

Consultation and Coordination with Indian Tribal Governments (E.O. 13175)

In accordance with Executive Order 13175, we have found that this final rule would not include policies that have tribal implications. The supplementary rules would not affect lands held for the benefit of Indians, Aleuts, or Eskimos.

Paperwork Reduction Act

These supplementary rules do not contain information collection requirements that the Office of Management and Budget must approve under the Paperwork Reduction Act, 44 U.S.C. 3501 et seq.

National Environmental Policy Act

These supplementary rules do not constitute a major federal action significantly affecting the quality of the human environment. A detailed statement under the National Environmental Policy Act of 1969 is not required.

Under the authority of 43 U.S.C. 1733a and 43 CFR 8360.0-7, BLM establishes the following supplementary rules.

Dated: August 4, 2003.

Elaine Y. Zielinski, State Director, Bureau of Land Management, Arizona.

Supplementary Rules for Lake Havasu Shoreline Area

1. You must purchase a permit in order to use a designated recreation site, including occupying a site for any use exceeding 20 minutes.

2. You must not moor any watercraft or floating platform at a recreation site or offshore in the vicinity or cove of any such site for more than 20 minutes without purchasing a permit. The fee for a use permit will be in accordance with the fee schedule, requirements, and procedures that BLM established under the Recreation Fee Demonstration Pilot Program, and are payable in U.S. funds only.
3. You must present the appropriate use permit upon demand to any authorized BLM official inspecting the site. If you are away from the campsite, the permit must be visibly displayed in accordance with posted instructions, or in the manner directed by a BLM official.
4. You must not reassign or transfer your permit to another individual or group and/or campsite(s).
5. Any authorized BLM official may revoke your permit, without reimbursement, if you violate any BLM rule or regulation. If BLM revokes your permit, you must remove all personal property and leave the recreation site within one hour of notice.
6. A recreation site is considered occupied after you have paid the appropriate permit fee, you have taken possession of the site by placing personal property at the site, and the permit is displayed in accordance with written instructions or as directed by a BLM official. You must not occupy a site in violation of instructions from a BLM official, or when there is reason to believe that the unit is properly occupied by another person or persons.
7. Except for authorized federal, state, or local personnel, during the commission of their duties, a permitted site cannot be occupied by other visitors without the consent of the permittee.
8. You must not occupy a site designated as “day use” between sunset and sunrise.
9. A single vessel and its occupants may not occupy more than one site.
10. During the hours of 10 p.m. to 6 a.m., in accordance with applicable state time zone standards, you must maintain quiet within normal hearing range of the designated recreation sites.
11. You must not cut or collect any firewood, including dead and down wood and all other vegetative material.
12. You must not moor vessels to vegetation, signs, shade ramadas, tables, grills or fire rings, toilets, trash receptacles, or other objects or structures not designed for such use.
13. You must not beach or moor a vessel in excess of posted time limits.
14. You must not discharge or use firearms or projectile weapons inside or within a quarter-mile of any occupied recreation site.
15. You must not discharge or possess any fireworks.

16. You must keep the site free of litter and trash during the period of occupancy. You must remove all personal property, and the site must be clean, upon your departure.
17. You must keep pets on a leash no longer than six (6) feet.
18. You must not leave pets unattended, and you must remove pet waste from the site or dispose of it in available trash receptacles.
19. You must not violate any provisions of boating laws as described in Title 5, Chapter 3, of the Arizona Revised Statutes or in the California Harbors and Navigation Code (as applicable).
20. Possession of alcoholic beverages by a person under the age of 21 years is prohibited.
21. Consumption of alcoholic beverages by a person under the age of 21 years is prohibited in the portions of the affected area that are located within Arizona.
22. You must not possess glass beverage containers on land or in the water. You may possess glass beverage containers only within the confines of a vessel.
23. Reserving recreation sites in any manner, including leaving personal property unattended overnight, is prohibited.
24. Recreation sites used for camping activities must be occupied overnight by the permittee.
25. You must not leave personal property unattended for more than 24 hours. Personal property left unattended beyond such time limit is subject to disposition under the Federal Property and Administration Services Act of 1949, as amended (40 U.S.C. 484(m)).

Supplementary Rules for the Parker Strip Recreation Area

Rules number 1, 3, 4, 5, 6, 7, 8, 15, 16, 20, 21, 23, 24, and 25 of the Lake Havasu Shoreline Supplementary Rules also apply to the Parker Strip Recreation Area. In addition, the following rules apply to the Parker Strip Recreation Area:

26. You must not park or operate vehicles in violation of posted restrictions.
27. Except in designated OHV Open areas, you must operate vehicles only on existing roads, trails, and washes.
28. Vehicles operated between Parker Dam Road and the Colorado River in California must be legal for highway operation. You may operate non-highway legal golf carts in this area only within concession resorts and facilities, and within BLM-managed campgrounds.
29. Within one-half mile of Parker Dam Road, you may camp only in designated campsites.

30. Disorderly conduct is prohibited.
31. You must not discharge or use firearms in California within 1 mile of Parker Dam Road. In Arizona, you must not discharge or use firearms within one quarter-mile of any occupied recreation site or residential structure.
32. In BLM-managed campgrounds, no more than 8 persons may occupy a single campsite.

Supplementary Rules for Craggy Wash

From October 1 through April 30 of each year, the following supplementary rules are in effect:

1. You must maintain your campsite free of trash and litter.
2. You must not discharge a firearm for the purpose of target practice or plinking. You may engage in legitimate hunting activities.
3. You must not operate a motor vehicle at a speed greater than 15 mph.
4. You must maintain quiet within hearing range of any other person or camp unit between 10 p.m. and 6 a.m. You must not operate a generator during these hours.
5. You must not collect firewood, including any dead and down wood, or any other vegetative material.
6. You must restrain a pet with a leash not longer than six (6) feet.
7. You must not leave a pet unattended.
8. You must not possess or discharge fireworks.
9. You must not leave personal property unattended for more than 24 hours.

Penalties

The authority for these supplementary rules is provided in 43 CFR 8365.1-6. Persons who violate these rules are subject to arrest, and upon conviction may be fined up to \$100,000 and/or imprisoned for not more than 12 months, as amended by 18 U.S.C. 3571 and 18 U.S.C. 3581.

Part II – October 12, 1995

[FR Doc. 03-23445 Filed 9-12-03; 8:45 a.m.]

Billing Code 4310-32-P

[*Federal Register*: October 12, 1995 (Volume 60, Number 197)]

[Notices]

[Page 53194-53195]

DEPARTMENT OF THE INTERIOR
[AZ-050-05-1210-00; 8365]

Arizona: Establishment of Supplementary Rules for the Parker Strip Recreation Area, Swansea Townsite, Aubrey Hills, and Desert Bighorn Sheep Lambing Grounds

AGENCY: Bureau of Land Management, Interior.

ACTION: Publication of supplementary rules for the Parker Strip Recreation Area, Swansea Townsite, Aubrey Hills, and Desert Bighorn Sheep Lambing Grounds.

SUMMARY: To implement decisions of the Yuma Resource Management Plan and the Parker Strip Recreation Management Plan, to protect valuable and fragile natural and cultural resources, and to provide for public safety and enjoyment, the following supplementary rules are established for the lands described.

EFFECTIVE DATE: October 12, 1995.

FOR FURTHER INFORMATION CONTACT: Leslie Allert, Outdoor Recreation Planner or Mark Harris, Ranger, Havasu Resource Area, 3189 Sweetwater Avenue, Lake Havasu City, Arizona 86406, telephone (520) 855-8017.

SUPPLEMENTARY INFORMATION: To protect valuable and fragile natural and cultural resources and to provide for public enjoyment the following supplementary rules are established for the areas described.

Parker Strip Recreation Area

This section is replaced by Supplemental rules in *Federal Register*: September 15, 2003 (Volume 68, Number 178).

Swansea Townsite

The following rules apply within the Swansea Townsite area, which is described as follows:

Gila and Salt River Meridian, Arizona
T. 10 N., R. 15 W.,
 Sec. 28, W1/2 SW1/4;
 Sec. 29, S1/2;
 Sec. 32, N1/2;
 Sec. 33, W1/2 NW1/4.

Vehicles

Taking any vehicle through, around, or beyond a restrictive sign, recognizable barricade, fence, or traffic control barrier is prohibited. Operation of a vehicle in a wash, off a roadway, or on an unsigned historic roadway is prohibited.

Camping

Camping is permitted only at designated sites. Camping stay is limited to 3 days in any 30-day period.

Wood Collection

No wood collection is permitted within the Townsite, including but not limited to dead and down wood, live plants, and lumber from historic structures.

Collection of Artifacts

No item may be collected or removed from the Townsite without the written permission of the Havasu Resource Area Manager. This includes but is not limited to old cans, nails, lumber, bricks, or glassware, whole or broken.

Safety

Climbing, leaning, sitting, or walking on the remains of the walled structures at Swansea inherently damages the structures, is unsafe, and is therefore prohibited. No person shall enter into any fenced area, shaft, tunnel, or structure.

Fires

Fires are allowed only at the designated sites and must be located in the fire ring provided. Construction of new fire rings is prohibited.

Aubrey Hills Area

The Aubrey Hills Area is defined as that public land south of the Lake Havasu City limits, west of Highway 95, east of the Colorado River, and north of the Bill Williams River, not including the area of SARA Park. No motorized vehicles are allowed off paved roads. This does not include authorized agency service vehicles for authorized rights-of-way or for ownership access to private land.

Desert Bighorn Sheep Lambing Grounds and Year Long Use Areas

The following rules apply to public lands during the period of January 1 through June 30 in any year in all bighorn sheep lambing grounds and year-round use areas whose boundaries are defined as follows.

Gila and Salt River Meridian, Arizona

North Mohave Mountains

T. 15 N., R. 20 W.,
Sec 4, 5, 8-10, 15, 16, 20-22, 28, & 29;
Sec 27 NW1/4.

Crossman Peak

- T. 14 N., R. 18 W.,
 - Sec 7 W1/2 W1/2;
 - Sec 17 SW1/4;
 - Sec 18-20.
- T. 15 N., R. 18 W.,
 - Sec 31 SW1/4.
- T. 14 N., R. 19 W.,
 - Sec 1 W1/2 W1/2;
 - Sec 2-4;
 - Sec 5 E1/2;
 - Sec 9-16.
- T. 15 N., R. 19 W.,
 - Sec 28, 30, & 32-36.
- T. 15 N., R. 20 W.,
 - Sec 25 NE1/4.

Paloma Wash

- T. 12 N., R. 17 W.,
 - Sec 17 S1/2 S1/2;
 - Sec 19 NE1/4;
 - Sec 21 SW1/4;
 - Sec 27 SW1/4 SW1/4;
 - Sec 33 N1/2 N1/2;
 - Sec 34 NW1/4 NW1/4.

Little Black Mountains

- T. 11 N., R. 17 W.,
 - Sec 3, 10, 11, 14, 15, 22, 23, & 26;
 - Sec 12 W1/2, W1/2 SE1/4;
 - Sec 13 W1/2, W1/2 E1/2;
 - Sec 21 E1/2;
 - Sec 25 W1/2;
 - Sec 27 NE1/4.
- T. 12 N., R. 17 W.,
 - Sec 34 SE1/4;
 - Sec 35 SW1/4 SW1/4.

The North Mesa

- T. 11 N., R. 17 W.,
 - Sec 19 SW1/4;
 - Sec 28 SW1/4;
 - Sec 29 S1/2;
 - Sec 30 all;
 - Sec 31 N1/2;
 - Sec 32 N1/2;
 - Sec 33 N1/2.
- T. 11 N., R. 18 W.,
 - Sec 22 NE1/4;
 - Sec 23-26;
 - Sec 27 E1/2 E1/2;

Sec 35 N1/2 N1/2;
Sec 36 N1/2, N1/2 SE1/4.

No motorized vehicles are allowed off paved roads. This does not include authorized agency service vehicles for authorized rights-of-way or for ownership access to private land.

Authority: The authority for establishing supplementary rules is contained in Title 43 Subpart 8365, Section 1-6. These rules will be available in the Havasu Resource Area Office, which manages these lands. A violation of a supplementary rule is punishable as class A misdemeanor.

Dated: October 2, 1995.
Judith I. Reed, District manager

[FR Doc. 95-25208 Filed 10-11-95; 8:45 a.m.]
Billing Code 4310-32-P

Part III - Supplementary Rules Brought forward from Past Rules That Are Still Valid.

See attached Federal Regulations as cited after each rule.

All BLM Lands in Arizona

1. Minor in possession of alcohol is prohibited. Minor consumption of alcohol is prohibited. FR 98-21831

This rule went into effect October 1, 1998.

All BLM Lands in California

1. Minor in possession of alcohol is prohibited. FR 93-7611

This rule went into effect April 2, 1993.

All BLM Lands in the Yuma and Lake Havasu Field Offices and the California Desert District

1. Camping is restricted to 14 days within any period of 28 consecutive days. After the 14th day campers must move outside of a 25-mile radius of the previous location. FR 64-30021

This rule went into effect July 30, 1964.

Instruction Memorandum No. 2003-275, Change 1

UNITED STATES DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
WASHINGTON, D.C. 20240

October 23, 2003

In Reply Refer To:
1610 (210) P
Ref. IM No. 2003-195
IM No. 2003-274
IM No. 2003-275

EMS TRANSMISSION 10/23/2003
Instruction Memorandum No. 2003-275 – Change 1
Expires: 09/30/2004

To: All State Directors

From: Assistant Director, Renewable Resources and Planning

Subject: Consideration of Wilderness Characteristics in Land Use Plans
(Excluding Alaska)

Program Area: Land Use Planning

Purpose: This Instruction Memorandum corrects the reference to the Code of Federal Regulations (CFR) used twice in the “Reviewing New Information” section of Instruction Memorandum No. 2003-275. No other changes to Instruction Memorandum No. 2003-275 have been made.

This Instruction Memorandum (IM) provides guidance regarding the consideration of wilderness characteristics in the land use planning process. In addition the IM sets forth policy to comply with the settlement in *Utah v. Norton* and the decision to apply the terms of the settlement Bureau-wide, excluding Alaska. The IM applies to all other public lands, except approximately 6.5 million acres of public land designated by Congress as wilderness, 15.5 million acres of wilderness study areas (WSAs) already established by the Bureau of Land Management (BLM) or Congress, and any other lands not designated by Congress but subject to specific provisions of law that direct BLM to manage those lands as if they were congressionally designated wilderness or WSAs. The IM also modifies the Land Use Planning Handbook (H-1601-1) to delete a statement that land use plan decisions include designation of WSAs.

Background: The BLM submitted wilderness suitability recommendations to Congress pursuant to Section 603 of the Federal Land Policy and Management Act (FLPMA) by October 21, 1993. BLM, however, continued to inventory for wilderness characteristics under the authority of

Section 201 of FLPMA and made formal determinations regarding wilderness character consistent with the definition of wilderness as described in Section 2 (c) of the Wilderness Act of 1964. The BLM assumed that Section 202 of FLPMA authorized designation, through the land use planning process, of additional WSAs. These Section 202 WSAs, according to the BLM's Interim Management Policy (IMP), as modified in 1995, would be managed to retain their suitability as wilderness (non-impairment provision) until Congress designated them as wilderness or they were made available for other land uses by the decisions resulting from a new land use planning process.

In *Utah v. Norton*, the State of Utah, Utah School and Institutional Trust Land Administration, and the Utah Association of Counties filed suit challenging the authority of the BLM to conduct wilderness inventories after completion of the Section 603 identification, study, and recommendation processes. The Department of the Interior and the plaintiffs agreed to a settlement in April 2003.

The settlement acknowledges: (1) that the BLM's authority to conduct wilderness reviews, including the establishment of new WSAs, expired no later than October 21, 1993, with the submission of the wilderness suitability recommendations to Congress pursuant to Section 603 of the FLPMA; and (2) that the BLM is without authority to establish new WSAs. The settlement did not, however, diminish the BLM's authority under Section 201 of the FLPMA to inventory public land resources and other values, including characteristics associated with the concept of wilderness, and to consider such information during land use planning.

Consistent with the settlement, the BLM rescinded the Wilderness Inventory and Study Procedures Handbook (H-1630-1). See IM-2003-195, dated June 20, 2003. It is, therefore, no longer BLM policy to continue to make formal determinations regarding wilderness character, designate new WSAs through the land use planning process, or manage any lands – except WSAs established under Section 603 of the FLPMA and other existing WSAs – in accordance with the non-impairment standard prescribed in the IMP.

Refer to IM 2003- 274 for general guidance regarding interpretation of the *Utah v. Norton* wilderness lawsuit settlement.

Policy/Action:

Nothing in this guidance changes current policy on the management of designated wilderness and existing WSAs. The BLM will continue to protect and manage congressionally designated wilderness and existing WSAs according to the provisions of applicable laws and the BLM's wilderness program policies. Those lands designated as WSAs in the BLM's land use plans after October 21, 1993, may continue to be managed consistent with the decisions contained in the approved land use plan.

The BLM will not designate new WSAs through the land use planning process. In addition, the BLM will not allocate any additional lands to be managed under the non-impairment standard prescribed in the IMP. Instead, the BLM may consider information on wilderness characteristics, along with information on other uses and values, when preparing land use plans. Wilderness characteristics are features associated with the concept of wilderness that may be considered in land use planning (see Attachment #1).

The BLM will involve the public in the planning process to determine the best mix of resource use and protection consistent with the multiple-use and other criteria established in the FLPMA

and other applicable laws, regulations and policies. Lands with wilderness characteristics may be managed to protect and/or preserve some or all of those characteristics. This may include protecting certain lands in their natural condition and/or providing opportunities for solitude, or primitive and unconfined types of recreation.

The BLM can make a variety of land use plan decisions to protect wilderness characteristics, such as establishing Visual Resource Management (VRM) class objectives to guide the placement of roads, trails, and other facilities; establishing conditions of use to be attached to permits, leases, and other authorizations to achieve the desired level of resource protection; and designating lands as open, closed, or limited to Off Highway Vehicles (OHV) to achieve a desired visitor experience.

The BLM also has authority to designate Areas of Critical Environmental Concern (ACEC) where special management attention is required to protect and prevent irreparable damage to important cultural, historic, or scenic values, fish and wildlife resources or other natural systems or processes, or to protect life and safety from natural hazards. To qualify for consideration of the ACEC designation, such values must have substantial significance and value, with qualities of more than local significance and special worth, consequence, meaning, distinctiveness, or cause for concern. Where ACEC values and wilderness characteristics coincide, the special management associated with an ACEC, if designated, may also protect wilderness characteristics. See BLM Manual 1613, Areas of Critical Environmental Concern, for more information.

See the Land Use Planning Handbook, H-1601-1, Section II, Land Use Plan Decisions and Attachment #1 of this IM for more information about making land use plan decisions to accomplish goals and objectives for resource management.

Considering wilderness characteristics in the land use planning process may result in several outcomes, including, but not limited to: 1) emphasizing other multiple uses as a priority over protecting wilderness characteristics; 2) emphasizing other multiple uses while applying management restrictions (conditions of use, mitigation measures) to reduce impacts to some or all of the wilderness characteristics; 3) emphasizing the protection of some or all of the wilderness characteristics as a priority over other multiple uses (though the area will not be designated a WSA).

The BLM is authorized to implement current land use plans until those plans are revised or amended (if appropriate), provided the implementation actions conform to the approved plans and are supported by adequate National Environmental Policy Act (NEPA) documentation, usually an environmental assessment (EA), environmental impact statement (EIS), or Categorical Exclusion (CE).

If the BLM determines that an area has wilderness characteristics that warrant consideration in the land use planning process, the BLM may initiate a plan amendment (or revision) with an accompanying NEPA document (EIS or EA) to consider changes to the current land use plan decisions. A decision regarding the timing of the plan amendment (or revision) is at the discretion of the State Director, and depends on the level of public interest, the position of State and local governments and cooperators, the adequacy of available information, funding, and other factors.

BLM Wilderness Inventories and Public Wilderness Proposals

Typically, the resource information contained in the BLM wilderness inventories was collected to support a land use planning process. Public wilderness proposals represent a land use proposal. In either case, the BLM is authorized to consider such information during preparation of a land use plan amendment or revision. For example, information contained in BLM wilderness inventories and public wilderness proposals may be considered when developing the affected environment section of the NEPA document that accompanies the land use plan. The information may also be used to develop the range of alternatives or to analyze the environmental impacts to the various natural, biological, and cultural resources—such as air, soil, water, vegetation, cultural, paleontological, visual, special status species, fish and wildlife—as well as resource uses—such as forestry, livestock grazing, recreation, lands and realty, coal, and fluid minerals. Refer to the Land Use Planning Handbook, H-1601-1, Appendix C, for guidance concerning the resources and resource uses to be considered in land use plans.

Alternatives are developed to reflect a reasonable range of management options considering all applicable information sources, such as the results of scoping, coordination with cooperating agencies, and practicality of management. The boundary of an area being considered in the land use plan for management of wilderness characteristics, therefore, is dependent on many factors and may or may not exactly follow the boundary of previous inventory areas.

Reviewing New Information

When implementing land use plans, the BLM must, as with any new information, determine if the BLM wilderness inventories or public wilderness proposals contain significant new circumstances or information relevant to environmental concerns and bearing on the proposed action or impacts that have not previously been analyzed. Since every land use plan and supporting NEPA document is different, this determination will need to be done on a case-by-case basis. New information or changed circumstances alone, however, or the failure to consider a factor or matter of little consequence, is not a sufficient basis to require additional NEPA consideration prior to implementing a previously approved decision.

If the new information is sufficient to show that the action will affect the quality of the human environment in a significant manner or to a significant extent not already considered, then a supplemental NEPA document shall be prepared (40 CFR 1502.9).

To help determine whether the new information or circumstances are significant, the BLM should look at the definition of “significantly” at 40 CFR 1508.27, which requires consideration of both context and intensity. See Attachment 2 for more information regarding the review of new wilderness information during plan implementation.

The analysis of new information and the BLM’s determination regarding its significance should be documented, using, as an example, the Documentation of Land Use Plan Conformance and NEPA Adequacy (DNA) worksheet.

It is important to note that the BLM must review the new information only when it is relevant to a pending decision or its environmental effects. When no action is being considered, the BLM may defer the reviews until a more appropriate time, such as when preparing a land use plan amendment or revision.

Using New Information on Lands with Wilderness Characteristics to Implement Approved Land Use Plans

The BLM wilderness inventories and public wilderness proposals may contain new information on land and resource conditions that can be used in a variety of day-to-day operations. Examples of using the new information in day-to-day operations include applying new mitigation measures to on-the-ground projects; establishing reclamation standards; updating the BLM's resource databases; refining previously approved plan decisions (plan maintenance) to correct data, typographical, or mapping errors in the planning records; or implementing the decisions of the land use plan, such as when selecting routes in areas designated as limited to OHV travel.

When preparing NEPA documents for actions that implement the approved plan, the BLM may also use the information on lands and resources contained in BLM wilderness inventories and public wilderness proposals to describe the affected environment, and environmental impacts to the various natural, biological, and cultural resources. For example, information on naturalness may help describe the condition and trend of important wildlife habitat and could be included in the affected environment discussion if applicable. Similarly, information on the presence of roads and other facilities may be used to describe the current status of visual resources as well as the potential for the proposed action to affect those resources. Provided relevant new information is considered in the NEPA document in this fashion, it is not necessary to analyze impacts to the area identified by BLM wilderness inventories or public wilderness proposals as having wilderness characteristics.

If a NEPA document is being prepared for an action affecting lands with wilderness characteristics, and those characteristics are currently being considered in an on-going land use planning process, the BLM may acknowledge the status of the planning process and describe how the proposed action might affect future management considerations.

This may be accomplished in the discussion of the no action alternative or in the section of the NEPA document on plan conformance. The fact that the BLM is considering alternative management goals for the affected lands in a pending land use plan revision or amendment, however, does not change the management or use of those lands during the interim. The BLM is authorized to implement current land use plans until those plans are revised or amended, if appropriate, and may acknowledge on-going planning efforts to ensure that the decision-maker and the public are fully informed of the consequences of the proposed action.

Effect on On-going plans

This policy may require some BLM Field Offices to modify current Resource Management Plan (RMP) efforts. For RMPs where a Draft RMP/EIS has not been issued, Field Offices must ensure that the Draft RMP/EIS is consistent with this IM. If the BLM has already discussed or identified possible WSA designations with the public, BLM must explain the change in policy. There is no requirement, however, to reinitiate scoping or provide an additional comment period before releasing the Draft RMP/EIS since the public will be provided an opportunity to comment on the draft, including the range of alternatives and proposed management prescriptions.

For Draft RMP/EISs already issued that include designation of new WSAs in an alternative, it will be necessary to modify the Proposed RMP/Final EIS. If the effects of an alternative modified to comply with this policy are within the range of alternatives already analyzed in the Draft RMP/EIS, preparing a supplement to the Draft RMP/EIS is not necessary. Each affected Field Office must determine the need for a supplement in consultation with WO-210.

After receiving this guidance, State and Field Offices have 45 days to consider the implications of this IM in coordination with WO-210. In addition, within 45 days, State Directors will review and update their existing State and field office policies and other guidance and make necessary modifications to comply with the terms of this IM.

Timeframes: This policy is in effect immediately.

Budget Impact: This policy is expected to increase slightly the costs of ongoing planning efforts as modifications are made to planning documents to comply with this IM. For all other land use plans the policy should result in diminished costs.

Manual/Handbook Sections Affected: That sentence in the Land Use Planning Handbook (H-1601-1, Appendix C, Part III.B.1.a, Page 18) that directs BLM to “Designate WSAs to be managed under the interim management policy (H-8550-1),” is hereby deleted. No other portions of H-1601-1 are affected.

The Wilderness Inventory and Study Procedures Handbook (H-6310-1) was rescinded in “Rescission of National Level Policy Guidance on Wilderness Review and Land Use Planning” (IM-2003-195).

Coordination: This guidance was coordinated with WO-170, WO-200 and WO-300.

Contact: For further information, contact Mike Mottice at (202) 452-0362 or Geoff Middaugh at (202) 785-6592.

Signed by:
James G. Kenna
Acting Assistant Director
Renewable Resources and Planning

Authenticated by:
Barbara J. Brown
Policy & Records Group, WO-560

2 Attachments

- 1- Definitions of Wilderness Characteristics for the Purpose of Land Use Planning and Management Considerations to Accomplish Plan Goals and Objectives (1 p)
- 2- Review of New Wilderness Information during Plan Implementation (2 pp)

Attachment 1

Definitions of Wilderness Characteristics for the Purpose of Land Use Planning and Management Considerations to Accomplish Plan Goals and Objectives

Definitions:

Wilderness Characteristics. Features of the land associated with the concept of wilderness that may be considered in land use planning when BLM determines that those characteristics are reasonably present, of sufficient value (condition, uniqueness, relevance, importance) and need (trend, risk), and are practical to manage.

Naturalness. Lands and resources exhibit a high degree of naturalness when affected primarily by the forces of nature and where the imprint of human activity is substantially unnoticeable. BLM has authority to inventory, assess, and/or monitor the attributes of the lands and resources on public lands, which, taken together, are an indication of an area's naturalness. These attributes may include the presence or absence of roads and trails, fences and other improvements; the nature and extent of landscape modifications; the presence of native vegetation communities; and the connectivity of habitats.

Solitude and Primitive/Unconfined Recreation. Visitors may have outstanding opportunities for solitude, or primitive and unconfined types of recreation when the sights, sounds, and evidence of other people are rare or infrequent, where visitors can be isolated, alone or secluded from others, where the use of the area is through non-motorized, non-mechanical means, and where no or minimal developed recreation facilities are encountered.

Management Considerations:

A decision to protect or preserve certain lands in their natural condition, if appropriate, or provide outstanding opportunities for solitude, or primitive and unconfined types of recreation may be made at the conclusion of the land use planning process. Land use plan decisions may include establishing goals and objectives that describe the desired future condition of the land and resources, desired outcome of the recreation experience, and allowable uses. BLM may also identify the management actions necessary to achieve the intended goals and objectives, including the conditions of use that would be attached to permits, leases, and other authorizations to avoid or minimize impacts to the affected natural, biological, and cultural resources and other land uses. In some cases, when BLM determines that certain uses of the land could be incompatible with the achievement of other desired goals and objectives, those uses could be conditioned to the extent necessary to reach the necessary level of resource protection.

Attachment 2

Review of New Wilderness Information during Plan Implementation

The Land Use Planning Handbook (H-1601-1) provides some criteria to use when reviewing new information. Other factors to consider when reviewing new information contained in BLM wilderness inventories or public wilderness proposals that may be relevant to an implementation action are:

1. Was the information on land and resource conditions available to the BLM and adequately considered within the range, scope, and analysis of the alternatives in the plan/EIS or other NEPA document, and is there adequate documentation to that affect?
2. Does the new information suggest significant changes in land and resource conditions have occurred since the plan/EIS or other NEPA document was completed?
3. Though BLM may not have formally disclosed in existing NEPA documents the impacts to the wilderness characteristics that have been identified in new inventories or public wilderness proposals, did BLM reasonably consider the environmental effects to the lands and resources that contribute to the wilderness characteristics in relevant NEPA documents?
4. Does the new information suggest that the impacts to those lands, if analyzed today, would be significantly different than the impacts already disclosed in the plan EIS or other NEPA document(s)?
5. Can BLM condition use of the lands for which new information exists in such a way that the effects of the action would not be significantly different from the effects already described?
6. Is the information at such a scale that BLM would ordinarily use the new information to make land use plan level decisions or is it more appropriate to consider for implementation level decisions?

New information or changed circumstances alone, however, or the failure to consider a factor or matter of little consequence, may not be sufficient basis to require additional NEPA consideration prior to implementing a previously approved decision. For example, the fact that roads and trails have become overgrown since previous inventories were completed represents a changed circumstance. Such change is most likely the result of natural environmental processes and, alone, may not be sufficient to require the preparation of additional NEPA documentation. The fact that BLM did not specifically analyze impacts of the proposed action on wilderness characteristics identified since the current land use plan or NEPA document was prepared is not an omission that, alone, would indicate that additional NEPA consideration is required. In all cases then, BLM should evaluate: 1) the extent to which the new information presents potential significant environmental consequences associated with the proposed action that were not analyzed in the previous NEPA analysis; and 2) whether those consequences are of significant gravity in context or intensity.

Case Law on Supplementation of NEPA

The lead case from the United States Supreme Court on supplementation is *Marsh v. Oregon Natural Resources Council*, 490 U.S. 360 (1989). It provides that “an agency need not supplement an EIS every time new information comes to light after the EIS is finalized. To require otherwise would render agency decision-making intractable, always awaiting updated information only to find the new information outdated by the time the decision is made.” *Id.* at 373.

Rather, to trigger supplementation obligations, the new information must be sufficient to show that the proposed action will affect the quality of the human environment “in a significant manner or to a significant extent not already considered.” *Id.* at 374.

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Appendix B

Administrative Actions and Standard Operating Procedures

This appendix includes Administrative Actions and Standard Operating Procedures by program area. The information that follows pertains to BLM-administered public lands in the Lake Havasu Field Office area, except as noted. The BLM will maintain the practices, procedures, and policies listed below.

Administrative Actions are not land use plan decisions. However, these are day-to-day non-ground disturbing activities and are an important component when considering program activities. These activities are often required by FLPMA and do not require NEPA analysis or a written decision by a responsible official to be accomplished. Examples include mapping, surveying, inventorying, monitoring, and collecting information needed such as research and studies.

Standard Operating Procedures are based on laws, regulations, executive orders, BLM planning manuals, policies, instruction memoranda, and applicable planning documents.

Air Quality

Standard Operating Procedures

The Clean Air Act of 1970 and the 1990 amendments govern air quality. The objective of the LHFO air resource program is to maintain and/or improve air quality as established by the National Ambient Air Quality Standards, achieve State Implementation Plan goals for non-attainment areas, and reduce emissions from point/non-point sources. The Mohave Desert Air Quality Management District covers the California lands within the planning area. Within Arizona, air quality in various portions of the planning area is regulated as follows:

Open Areas, Dry Washes, and Riverbeds: The control of airborne dust from open areas, dry washes, and river beds is addressed in Arizona Rules and Regulations for Air Pollution Control, R9-3-404 A-C.

Roadways and Streets: Regulation R9-3-405 A prohibits the use, repair, building, or rebuilding of roadways without taking reasonable dust abatement measures.

Mineral Tailings: Regulation R9-3-408 addresses prohibition on permitting or allowing construction on mineral tailings piles.

Fire Management: Regulations R9-3-402 and 403 direct BLM to follow permitting procedures before conducting any prescribed burning projects, to ensure that smoke from fires does not degrade air quality. Section 118 of the Clean Air Act (49.501 of the Arizona Laws Relating to Environmental Quality) charges ADEQ to protect the health and welfare of Arizona residents from adverse impacts of air pollution. Those wishing to conduct prescribed burns must contact ADEQ.

Biological Resources

Administrative Actions

Vegetation and Riparian Management

- All riparian areas including springs within the WHAs will be assessed to achieve proper functioning condition or desired plant community composition for native species (see Maps 6, 7, and 8 in the Approved RMP).

Fish and Wildlife Habitat Management

- Mitigate adverse effects on migratory species habitat.
- Replace the quality and quantity of important migratory bird habitat that is lost due to the BLM permitted activities.
- Initiate, collaborate, and/or support projects related to conservation measures set forth in the following plans: the Migratory Bird Executive Order 13186, *Arizona Partners in Flight Bird Conservation Plan*, *Partners in Flight Desert and Riparian Bird Conservation Plans*, *USFWS North American Waterfowl Management Plan*, and *LCRMSCP*.
- Identify potential bird conservation projects and seek grant funding.
- No net loss of Category I and II Sonoran Desert tortoise habitat.
- In Category I and II Sonoran Desert tortoise habitat, only range improvements that will not conflict with tortoise populations will be allowed (see Map 11 in the Approved RMP).
- Implement and/or support desert tortoise research and studies, especially relating to management issues and overall population viability.
- Manage tortoise habitats using an ecosystem management approach with emphasis on maintaining or restoring natural biological diversity.
- Institute a “no net loss” in quantity or quality of desert tortoise habitat especially in Category I and II habitat.
- Implement conservation strategies and recommendations in the Sonoran Desert Tortoise Conservation Strategy (in preparation) by the Arizona Interagency Desert Tortoise Team.
- Recognize Key Habitat Areas designated by the Arizona Interagency Desert Tortoise Team and institute Management Actions that protect or enhance the viability of these areas.

- Develop and implement land acquisitions and disposals strategies that use the best available information to provide habitat to sustain viable populations of tortoises throughout their range.
- Enhance and restore habitat corridors that connect significant desert tortoise subpopulations.
- Coordinate and support efforts from AGFD and other agencies in the planning and implementation of strategies designed for long-term survival of tortoise populations.
- Incorporate information from current and future research and studies into short-term and long-term planning, especially new information on genetics, dispersal corridors, connectivity, and population viability.
- Habitat management categories and boundaries will be revised as new scientific population information becomes available.
- The BLM will address and include restoration measures in decision documents to offset the loss of quality or quantity of Category III tortoise habitat.
- In Category I and II tortoise habitats, all motorized and non-motorized competitive events will be restricted between March 31 and October 15; all other use requests will be reviewed on a case-by-case basis. Compensation for conflicts may be required to achieve protection of quantity or quality of desert tortoise habitat.
- Desert tortoise Management Actions appropriate to each category goal will be applied to habitat areas, consistent with the current desert tortoise management plan.
- Provide access to and promote awareness of opportunities for the public participation and enjoyment of U.S. recreational fishery resources.
- Support outreach programs designed to stimulate angler participation in the conservation and restoration of aquatic systems.
- Achieve habitat quality and quantity of riparian areas within the foraging range of bald eagles to maintain nesting and wintering birds within the Bill Williams and Colorado River drainages (see Maps 7 and 8 in the Approved RMP).
- Coordinate with the Southwestern Bald Eagle Management Committee to continue implementation of the guidelines set forth in the Arizona Conservation Assessment and Strategy Plan for the bald eagle in Arizona.
- Continue to support federal and state agencies efforts to protect and enhance Bald eagle breeding areas on all BLM lands.
- In cooperation with the AGFD, initiate winter bald eagle counts on the Lower Colorado River in areas not currently covered by the AGFD.
- Wildlife habitat improvement projects will be implemented where necessary to stabilize or improve unsatisfactory or declining wildlife habitat condition. These projects will be identified through habitat management plans (under the Sikes Act), Inter-agency cooperative resource management plans (e.g., AGFD, CDFG, USFWS plans, etc.), and/or interdisciplinary coordinated resource management plans (e.g., ACEC, Wilderness).
- The BLM will manage fish and wildlife habitats in cooperation with stakeholders to sustain diversified multiple-use habitat benefits in the planning area.

- Existing aquatic habitat improvements will be monitored periodically to document long-term durability and fishery results.
- The BLM will cooperate with other agencies to actively manage for native fish populations and habitat.
- The facility known as Partners Point will be retained and maintained by the BLM and cooperating parties to facilitate aquatic habitat management and other BLM management requirements.

Special Status Species Management

- Comply with Section 7 (a) of the Endangered Species Act by carrying out positive actions promoting and the recovery of listed and proposed populations, and by assuring that BLM actions do not jeopardize the continued existence of the Mojave desert tortoise.
- Maintain stable, viable populations, and protect existing tortoise habitat values and increased populations where possible. Retain all-natural shelter sites, caliche caves, or similar features used by Mohave desert tortoises for sheltering and maintain unfragmented habitat.
- When possible employ a precautionary principle in Sonoran desert tortoise habitat management using the best available information until site-specific research can be conducted.
- To the extent possible avoid and minimize impacts on the Mojave Desert Tortoise (LCRMSCP).
- Protect existing occupied Mohave desert tortoise habitat (LCRMSCP).
- No disposal of known occupied Mohave desert tortoise habitat.
- Avoid impacts on individual tortoise and their burrows.
- Develop increased awareness of tortoise resources on the public lands.
- Establish manageable boundaries for the two designated OHV areas, Cross Roads and Copper Basin. The BLM will survey the OHV area boundaries and record unauthorized access into closed areas. If the annual surveys indicate that current boundary management is not preventing access into protected Mojave Desert tortoise habitat, more secure boundary management such as fencing will be implemented.
- Assure that all personnel working within desert tortoise habitat on public lands are knowledgeable about the tortoise and its resource.
- Develop a strong awareness of tortoises and their habitats, particularly in the BLM planning, environmental assessment and budget processes.
- Record and document all Mojave Desert tortoise sightings (tortoises and sign) into appropriate special status species databases for future work.
- Provide and protect adequate habitat and sufficient range for all life stages of endangered fish to support survival of recovering populations.
- Investigate habitat requirements for all bonytail chub and razorback sucker life stages and provide those habitats where feasible.

- Minimize the risk of hazardous materials spills and/or releases by BLM approved activities.
- Provide leadership to cooperatively quantify water-quality problems and affect long-term improvement.
- Provide for the long-term management and protection of bonytail chub and razorback sucker populations and their habitats beyond delisting (i.e., conservation plans).
- Minimize the threats and adverse impacts to the bonytail chub and their habitats.
- Participate in an education program to increase public awareness of bonytail chub and razorback sucker.
- Participate with other agencies in the recovery, conservation, research, management and monitoring activities.
- Provide leadership with other agencies to ensure adequate protection from over-utilization of identified bonytail chub and razorback sucker habitat.
- Minimize the threats and adverse impacts to the razorback sucker and their habitats.
- Aggressively work with all federal agencies to identify and minimize conflicts between recreational fisheries and their respective responsibilities under the Endangered Species Act of 1973.
- Preserve and maintain breeding habitat to support populations of Yuma Clapper Rail within Lake Havasu Field Office.
- Maintain existing important YCR habitat areas.
- Preserve winter habitat of the Yuma Clapper Rail within the Lake Havasu Field Office.
- Carry out a program of public conservation, education, and planning directed towards preservation of rail habitat.
- Avoid, minimize, and/or mitigate to the extent possible disturbance in occupied Yuma clapper rail territories during the breeding and molting seasons (March 15-September 1).
- Assure implementation of laws, policies, and agreements that benefit the flycatcher.
- To the extent practical, avoid and minimize disturbance of the Southwestern willow flycatcher during the breeding season (May 1 through September 30).
- Review and evaluate existing USFWS riparian restoration programs within the Lake Havasu Field Office to determine how these programs may be modified to maximize conservation for the SWWF.
- Avoid intense and repeated human disturbance from Western yellow-billed cuckoo nesting areas especially from May 20 through September 1.
- Increase cooperation between state and federal agencies and private organizations regarding Western yellow-billed cuckoo habitat.
- Establish riparian corridors and “island” habitats to allow natural dispersal and recolonization of historic Western yellow-billed cuckoo habitats.
- Establish areas near existing Western yellow-billed cuckoo occupied habitat for restoration, before focusing on areas further away.

- Apply the conservation measures for Southwestern willow flycatcher for potential or suitable Western yellow-billed cuckoo habitat.
- Removal of state-listed protected plants will be in accordance with state law and will only be authorized through state permit. Additional restrictions will include: collection within a sample population will not exceed 20% (Way et al. 2002) of any one species, and collection of dead and down ironwood and cactus skeletons under a state permit will be limited to an approximate combined weight not to exceed 10 pounds per year.
- Natural open space will be maintained for special status species (e.g., burrowing owls and other migratory species) in the planning for new facility development and these species will be considered when issuing authorizations for public lands.
- The BLM will cooperate with other authorities in the recovery strategies found in the Management Plan for the Big-River Fishes of the Lower Colorado River Basin, as approved in 2005.
 - Management strategies intended to contribute to and assist with basin-wide recovery of the bonytail chub, razorback sucker, and other endangered fishes of the Lower Colorado River will be adopted.
- Acquisition of non-federal lands will be prioritized based on the potential to enhance the conservation and management of threatened or endangered species habitat, riparian habitat, desert tortoise habitat, key big game habitat, or improve the overall manageability of wildlife habitat.
- Based on changes in species density and/or habitat quality Sonoran Desert tortoise habitat will be compensated in accordance with the *Management Plan for the Sonoran Desert Population of the Desert Tortoise in Arizona 1996* or future updates.
- The BLM will cooperate with other agencies to actively manage, protect, and/or improve special status species habitat to maintain and/or increase populations to achieve common goals and objectives. Wildlife habitat, both aquatic and terrestrial, will be managed in cooperation with the state and federal wildlife agencies and other interested parties to conserve or improve the habitat of all sensitive species, all native species, and those resident species that have recreational value.
- Conduct surveys in all Mojave Desert tortoise habitats in the planning area to determine population density estimates. Coordinate with the survey protocols being evaluated and developed by the Desert Tortoise Recovery Plan Assessment Committee, to determine which survey protocol will be most appropriate for this area.

Invasive or Noxious Species Management

- The BLM will cooperate on a landscape basis with other authorities to educate the community to the risks to the environment from invasive and noxious species. In cooperation with other authorities the BLM will research the means of control, monitor the resources affected, and implement control actions when needed. Riparian, wetland areas, shoreline, and all springs (see Maps 7 and 8 in the Approved RMP) will be evaluated and invasive or noxious species will be eradicated if possible. Areas from which the invasive or noxious species are removed will subsequently be re-vegetated with suitable bank-stabilizing species.

- To help stop the spread of invasive or noxious weeds, the BLM will provide educational material to equestrian users on the use of certified weed-free hay, straw, pellets, hay cubes, and processed grains.

Watershed Management

- Identify recreational fishing opportunities that are limited by water quality and habitat degradation and promote restoration to support viable, healthy, and, where feasible, recreational fisheries.
- The BLM will work with local agencies and private entities through public outreach to minimize the risk of hazardous spills that occur on BLM lands. Operations to assure that the Colorado River meets water quality standards for fish and wildlife species will be actively reviewed.
- The BLM will coordinate and collaborate in the management of the Bill Williams River below Alamo Dam with neighboring landowners and appropriate state and federal agencies to sustain the river flow, vegetation and wildlife diversity, and wild and scenic outstandingly remarkable values.
- The BLM will cooperate with appropriate interests to develop a cooperative watershed program to assure the use of best management practices in the watershed to safeguard against pollutant sediments degrading aquatic habitat conditions.
- The BLM will quantify, file for, and protect water rights, including those for instream flows, on streams, springs, and other water sources important to wildlife, fish, and riparian values.

Standard Operating Procedures

The LHFO planning area provides unique habitat for federally listed and special status species. This diversity of habitats also supports a wide variety of more common game and non-game fish and wildlife species. If not properly managed, other uses of the public lands can damage wildlife habitat. The BLM's Fundamentals of Rangeland Health (43 CFR 4180) addresses habitats that have been restored or may make significant progress towards restoration, as well as those that are actively being maintained for federally listed threatened, endangered, proposed, and candidate species, and other special status species. The BLM Arizona's Standards for Rangeland Health include provisions for ensuring that productive and diverse upland and riparian wetland plant communities of native species exist and are maintained.

No activities or projects that would jeopardize the continued existence of federally listed threatened or endangered plant or wildlife species, or species proposed for listing (see table 3-3), will be permitted on BLM-administered lands.

Vegetation and Riparian Management

Standard operating procedures and treatment methods will be used in a vegetation treatment program. BLM policies and guidance for public land treatments will be followed in implementing all treatment methods.

- Impacts to vegetation from construction, recreation, and other activities will be minimized or avoided. Unavoidable impacts will be mitigated. Where impacts to vegetation occur beyond approved boundaries, vegetative rehabilitation with suitable seed mix or root stock will follow.
- Where plants will normally be lost due to development or disturbance of public land, salvage of useable native plants and parts of plants will be permitted. Plants and parts of plants will be removed from public land pursuant to applicable state law and federal regulations governing sale and/or transportation of plants.
- All future activity-level plans will identify desired plant communities on a site-by-site basis. Existing and potentially suitable riparian habitat will be occupied by native trees and other woody species. Available and current information will be utilized (e.g., National Resource Conservation Service site guides).
- Riparian, wetland areas, and all springs will be evaluated and rehabilitated to achieve proper functioning condition.
- Practice will continue to adhere to the guidelines provided in BLM Manual Handbook H-1740-1, *Renewable Resource Improvement and Treatment Guidelines and Procedures* (1987).
- Programmatic documents such as the BLM's *Environmental Impact Statement for Vegetation Treatments, Watersheds and Wildlife Habitats on Public Lands Administered by the BLM in the Western United States, Including Alaska* (1991) will be followed as will other general and specific program policy.
- Management and implementation of all resource programs will comply with the *Arizona Standards for Rangeland Health and Guidelines for Grazing Administration* (1997).
- The desired plant community standard for upland sites will provide native vegetation for adequate wildlife habitat and improved watershed function based on monitoring and ecological site potential. Upland sites include 5% or greater dry-weight composition of native perennial grass, as limited by the potential of the ecological site as described by National Resource Conservation Service *Ecological Site Guides*.
- The desired plant community for upland sites will have long-term, stable populations of cacti and agaves where the sites have the potential for such plant communities.
- The desired plant community standard for riparian areas will consist of streambanks dominated (>50%) by native species from the genera *Scirpus*, *Carex*, *Juncus*, and *Eleocharis*. The size class distribution of native riparian obligate trees will be >15% seedlings, >15% mid-size, and >15% large size (dependent of the existing conditions and potential of the site). Size classes are defined as follows: seedlings are < 1 inch basal diameter, mid-sizes are 1–6 inches in basal diameter, and large sizes are >6 inches in basal diameter.
- Allowable use livestock grazing within the ranges of the Southwestern willow flycatcher will 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 Threatened and Endangered Species* (Bureau of Land Management and U.S. Fish and Wildlife Service, Arizona and New Mexico, 1999), or any subsequent agreed-upon amendment to these guidelines.
- Adverse impacts to natural plant and animal communities associated with invasive species will be reduced. Efforts to control or eradicate invasive wildlife species will

be carried out in cooperation and collaboration with AGFD. A monitoring, management, and educational program will be established to reduce the insurgence of plants classified as invasive by the U.S. Department of Agriculture.

- The use and perpetuation of native plant species will be emphasized. However, when restoring or rehabilitating disturbed or degraded rangelands, non-intrusive, non-native plant species are appropriate for use where native species: (a) are not available, (b) are not economically feasible, (c) cannot achieve ecological objectives as well as non-native species, and/or (d) cannot compete with already established non-native species.
- The evaluation of vehicle routes, in conjunction with the route designation process, will consider the effect on wildlife habitat values. Routes that conflict with maintenance of sensitive wildlife habitat values will be mitigated. Mitigation could include, but will not necessarily be limited to: route closure, seasonal use restriction, rerouting, vehicle type restrictions, vehicle speed restrictions, or other mitigation measures appropriate to the nature of the conflict.
- Additionally, in coordination with AGFD, the BLM will develop specific drought policy for LHFO to address continued livestock grazing impacts on wildlife habitat values during drought. This policy will address the need for timely response, sufficient vegetation recovery periods, indicators of drought recovery, and appropriate Management Actions.

Vegetation Treatment

Standard operating procedures and treatment methods will be used in a vegetation treatment program. BLM policies and guidance for public land treatments will be followed in implementing all treatment methods. Many guidelines are provided in BLM Handbook H-1740-1, *Renewable Resource Improvement and Treatment Guidelines and Procedures* (1987); in BLM Arizona's *Standards for Rangeland Health and Guidelines for Grazing Administration* (1997); in programmatic documents such as BLM's *Environmental Impact Statement for Vegetation Treatments, Watersheds and Wildlife Habitats on Public Lands Administered by the BLM in the Western United States, Including Alaska* (1991); and in other general and specific program policy, procedures, and standards pertinent to implementation of renewable resource improvements. The manual, chemical, mechanical, biological, and/or fire treatment methods described in Appendix F, *Vegetation Treatments*, would be used for all alternatives.

Fish and Wildlife Habitat Management

Fish

In 1993, *Lake Havasu Fisheries Improvement Program Environmental Assessment* (No. AZ-050-92-013) approved the enhancement of 875 acres of fish habitat in 42 separate coves and approved rearing 30,000 endangered razorback sucker and 30,000 endangered bonytail chub to 300 millimeters in length for population augmentation into Lake Havasu. The Environmental Assessment was supported by Yuma RMP decisions to improve wildlife habitat where needed. The seven-member Lake Havasu Fisheries Improvement Partnership was formed through a Memorandum of Understanding to

accomplish these two decisions and to develop at least six barrier-free shoreline fishing facilities on Lake Havasu (Bureau of Land Management 1993a).

By the end of 2001, a total of 30,017 razorback sucker had been stocked to Lake Havasu, and by August 2004 more than 24,000 bonytail chub had been released into the lake.

Fish habitat improvement goals on Lake Havasu were accomplished in November 2002.

On December 5, 2003 the Lake Havasu Fisheries Improvement Partnership dedicated the fifth barrier-free shoreline fishing facility on Lake Havasu.

The Lake Havasu Fisheries Improvement Partnership is committed to achieving the 30,000 bonytail chub stocking goal and constructing the sixth recreational shoreline fishing site as soon as possible. The Partnership is also committed verbally to maintaining these improvements for public safety and functionality, and to monitoring fish populations within the lake to achieve the best possible understanding of population dynamics and habitat needs for all fish in the reservoir.

LHFO/BLM will utilize the following guidance as common to all alternatives:

- Ensure that all proposed BLM activities and authorizations in the planning area are reviewed and conducted in compliance with the Endangered Species Act of 1973 (ESA). Federal and state-listed species and critical habitats are protected by requiring site-specific evaluations and clearances. The findings of these evaluations may result in mitigation and/or some restrictions to plans or even disallow use and occupancy that would be in violation of the ESA by detrimentally affecting endangered or threatened species or their habitats. Any action that may affect federally listed species also requires consultation with USFWS under Section 7 of ESA.
- Provide opportunities for training and utilization of volunteers.
- Coordinate with state governments, tribes, and other governmental entities (under existing agreements and any new arrangements deemed necessary) to disseminate and exchange information and cooperate in Management Actions, consistent with applicable legal authorities and other directives.
- Establish collaborative research partnerships with academic institutions, professional and non-profit organizations, and other governmental entities.
- Evaluate needs for new data regarding population, distribution, and habitat requirements for special status species.
- Implement actions identified in recovery plans for listed species and protection of critical habitat. Monitoring of bonytail chub and razorback sucker populations will be conducted, in cooperation with the Lake Havasu Fisheries Improvement Partnership.
- Ensure that decisions are being implemented as scheduled and provide continuing evaluation of consistency with state and local plans and programs.
- Protect water quality to meet federal and state standards, and ensure the needs of fish and wildlife resources are met along with the needs of people.

Wildlife

Wildlife habitat use of riparian lands is managed in a manner consistent with BLM Manual 6740 (Wetland-Riparian Area Protection and Management), Federal floodplain management regulations, Reclamation needs, and floodway clearance obligations of the International Boundary and Water Commission.

The State wildlife agencies of California and Arizona establish regulations and enforcement concerning fish and wildlife on all lands administered by the LHFO. Nothing will be construed as affecting the jurisdiction or responsibilities of the State agencies on these lands. Fishing, hunting and trapping are allowable activities on these lands.

The BLM will provide diverse and high-quality habitats by restoration and maintenance of the native diversity, natural distribution, and abundance of wildlife species within the LHFO planning area, with sufficient resources and in a manner that perpetuates naturally functioning ecosystem processes.

The BLM will conserve, enhance, and restore wildlife habitats, including conservation of natural springs, wetlands, and streams through cooperative partnerships with the federal, state, county, city, and private entities.

The BLM will identify, minimize, and mitigate for wildlife habitat degradation, loss, and fragmentation.

The BLM will coordinate and cooperate with federal and state agencies, along with partners, to assess the need to maintain, improve, and/or adjust the density or distribution of wildlife waters throughout the planning area to maintain the presence of water for wildlife populations across their range.

The development of springs and seeps, or other projects affecting water and associated resources, will be designed to protect ecological functions and processes and to continue to provide habitat at the source for endemic invertebrates that may be present.

Water developments for purposes other than wildlife will include design features that will ensure safe and continued access to water by wildlife.

Special Status Species Management

Consistent with requirements of the Endangered Species Act of 1973, as amended, LHFO will continue an active program to benefit endangered species and to ensure that no activities funded, authorized, or carried out by the BLM jeopardize the continued existence of any listed wildlife species or their essential habitats. The BLM will not dispose of lands occupied by species that are listed or proposed to be listed as threatened or endangered under the Endangered Species Act.

The BLM will utilize all means available to identify, protect, and conserve special status species habitat, then manage these habitats in consultation with authorities and in conformance with recovery and conservation management plans.

The BLM will cooperate with other appropriate authorities to achieve desired populations for special status species.

Wind turbines, transmission lines, and telecommunication sites will conform with guidelines developed by the U.S Fish and Wildlife Service (USFWS) to minimize impacts to special status species.

The BLM will follow the Department of Interior's *Rangewide Plans for Special Status Species on Public Lands*.

Cultural Resources

Administrative Actions

- Design and maintain facilities in a manner that preserves the visual integrity of cultural resource settings and cultural landscapes, in accordance with Visual Resource Management (VRM) objectives established in this Approved RMP.
- Avoid the disturbance or removal of Native American human remains and associated items to the extent possible. Avoid directing site visitors toward areas where these items could be observed or disturbed.
- Implement physical and administrative protection measures to stop, limit, or repair damage and vandalism to sites. On a site-specific basis, these measures may include route closures, route realignment, restrictions on grazing or other uses, construction of fences or other types of barriers, construction of erosion control measures, backfilling or stabilization of structures, or placement of signs.
- Maintain the placement and condition of fiberglass post signs with the message of the Arizona Site Steward Program on sites that are vulnerable to vandalism. Install protective signs in a manner that avoids drawing attention to sites.
- Include stipulations in special recreation permits to ensure that commercial tour operations will not damage cultural resources. Require tour operators to report any new vandalism or damage to sites.
- Ensure that all undertakings and authorizations for land and resource use are reviewed and conducted in compliance with Section 106 of NHPA, the Archaeological Resources Protection Act, the Native American Graves Protection and Repatriation Act, and other applicable laws.
- Complete Class II (sample) and Class III (intensive) field inventories to identify cultural resources and evaluate the condition of sites, in accordance with Section 110 of NHPA. Seek to inventory 100 - 400 acres per year for cultural values. Use the information obtained through these archaeological surveys to allocate sites to appropriate use categories, develop protection measures, and integrate survey results into research designs and interpretation efforts.
- Complete documentary research and oral histories to gain a better understanding of cultural resources associated with homesteading, mining, ranching, and other historical period activities.

- Establish collaborative research partnerships with academic institutions, professional and non-profit organizations, and advocational organizations. Provide opportunities for volunteer training and participation in site documentation, research, protection, and educational projects.
- Continue to consult with the Chemehuevi Indian Tribe, Colorado River Indian Tribes, Fort Mojave Indian Tribe, Hopi Tribe, Hualapai Tribe, Salt River Pima-Maricopa Indian Community, Yavapai-Prescott Indian 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.
- Honor tribal requests to protect the confidentiality of sensitive information to the extent permitted by law.
- Restrict public information about the specific locations of sites that are not allocated to public use (selected for interpretive and educational uses).
- Coordinate with state governments, tribes, and other governmental entities (under existing agreements and any new arrangements deemed necessary) to disseminate and exchange information and cooperate in Management Actions consistent with applicable legal authorities and other directives.
- Provide opportunities for Native American participation in research and interpretation.
- Continue to participate in educational outreach efforts that highlight the values of cultural heritage resources and the need to protect the resources.
- Implement procedures for systematic monitoring of all sites developed or authorized for public visitation.
- Require that holders of special recreation permits provide site visitors with appropriate educational information on archaeological site etiquette and resource conservation.
- Continue support of the Site Steward Program.
- Develop cultural resource protection systems for selected cultural resources that have either a high level of significance or a history of vandalism.
- Reduce or eliminate indirect impacts of land uses on cultural resources as identified through study plots.
- Provide immediate and long-term in-place preservation and protection of selected cultural resources that are threatened or deteriorating.
- Specific management prescriptions for the sites managed for Traditional Use will be developed in consultation with the Indian tribes to which they are culturally important.
- The BLM will identify sacred areas in consultation with Indian tribes and, where practicable, limit land uses to those that do not conflict with ascribed values.
- The BLM will identify sacred areas or sites within the Crossman Peak Natural Scenic Area or ACEC in consultation with Indian tribes and, where practicable, limit land uses to those that do not conflict with ascribed values.
- Nominate eligible properties to NRHP.

- All previously submitted NRHP nominations will be evaluated, and those that merit listing will be resubmitted.
- Additional sites determined to be significant will be nominated to NRHP. Possible sites include petroglyphs, pictographs, previously unidentified intaglios, and large habitation sites.
- Conduct mapping and site documentation prior to interpretive development or use for commercial tours to the extent needed to preserve archaeological data, plan for interpretive facilities, and provide a baseline condition assessment for monitoring changes associated with visitor use.
- Identify priority areas for inventory.
- Define priority areas for new field inventories (Section 110 surveys) based primarily on imminent threats or land use conflicts in areas having a relatively high probability for significant sites.
- If appropriate and feasible, amend the Recreation and Public Purposes Act (R&PP) leases to preserve and protect any identified significant cultural resources.

In accordance with 60 FR 53194-53195, the BLM will:

- Limit camping and fires at Swansea Townsite to designated campgrounds.
- Prohibit firewood collection within the town site at Swansea.
- Prohibit driving in Swansea Townsite except on designated open and signed routes.

Fire Management Response

Standard Operating Procedures

The appropriate management response concept represents a range of available management responses to wildland fires. Responses range from full fire suppression to managing fires for resource benefits (fire use). Management responses applied to a fire will be identified in the fire management plans and will be based on objectives derived from the area's land use allocation, as determined in the *Arizona Statewide Land Use Plan Amendment for Fire, Fuels and Air Quality Management* (Bureau of Land Management 2003); relative risk to resources, the public, and firefighters; potential complexity; and the ability to defend management boundaries. Any wildland fire can be aggressively suppressed and any fire that occurs in an area designated for fire use can be managed for resource benefits if it meets the prescribed criteria from an approved fire management plan.

Lake Havasu/Colorado River Regional Management Area

Administrative Actions

Because of the multi-jurisdictional nature of the issues, and the complexity of management on Lake Havasu, the BLM recognized the need for collaboration. However, many issues are beyond the scope of this plan. To facilitate regional collaboration, BLM identified the Lake Havasu/Colorado River Management Area (see Map 4 in the approved RMP). A coordinated Lake Management Plan should be completed for the Lake Havasu/Colorado River Regional Management Area that would engage all of the involved jurisdictions and stakeholders on a voluntary basis. This plan would be a multi-year, multi-agency coordinated effort with the mission of defining the issues, responsibilities, and action items required to maintain a quality lake recreation experience, properly functioning habitat (both terrestrial and aquatic), and common management relationships and goals among the jurisdictions. This is not plan allocation of any sort, nor is it a proposed management action.

- Consensus will be sought with other jurisdictions and resource stakeholders to cooperatively manage the identified area with agreed vision and objectives to foster improvement of all resource values.
- Partners, agencies, and other organizations will cooperate to create dynamic management systems for the future of the Lake Havasu/Colorado River Regional Management Area.
- Each resource or resource use, whether part of the social, economic, or environmental setting will be given emphasis in the planning and management of the area.
- The public will see the cooperative management of the area and understand the importance of each resource and how the resources and resource uses are inseparably intertwined.
- The BLM will work cooperatively with local and regional plans to monitor lake issues within the BLM's authority.
- Management to provide compatibility across the Lake Havasu/Colorado River Regional Management Area will be developed between jurisdictions and will address the multitude of issues that affect the region.
- A strategy will be created that recognizes the importance of each individual resource and the strong links among them in maintaining the unique environment. Planning concerning this area will be interdisciplinary, cooperative in nature, and provide balanced management to specific areas within the Lake Havasu/Colorado River Regional Management Area.
- The creation of a Lake Havasu/Colorado River Regional Management Area board, council, and/or friends group will be supported in the interest of gaining partners to collaboratively approach the management of the area for the benefit of all resource stakeholders

- A communication model (e.g., informational and interpretive media) will be fashioned that will address common and needed visitor services across the Lake Havasu/Colorado River Regional Management Area and between jurisdictions.

Land Tenure

Standard Operating Procedures

Acquisition

Land and Water Conservation Fund: Congressionally appropriated funds are provided for conservation of significant resources within designated project areas.

Baca Bill: The Federal Land Transaction Facilitation Act of 2000, commonly referred to as the Baca Bill, amended FLPMA to allow a percentage of receipts from qualifying land sales and equalization payments from qualifying exchanges to be returned to the BLM. Acquisition of lands using Baca receipts is limited to the purchase of private and state parcels within the boundaries of Special Designations (such as, but not limited to ACEC, Wilderness, WSA, and Wild and Scenic River etc.) as designated in this Approved RMP.

Easements: The BLM acquires two basic types of easements: conservation easements for the protection of resources and access easements to enhance the ability of the public to use and enjoy the public lands.

Exchanges (43 CFR 2200) are generally undertaken at the request of an external customer or proponent. The BLM must make a determination of public interest before processing an exchange. The regulations require that an exchange proponent cover at least half the processing costs of an exchange if the BLM decides to pursue the action.

Disposal

FLPMA Sales: Sales are discretionary actions undertaken by the BLM either in response to a request from an external customer or in furtherance of land use plan decisions to dispose of lands no longer needed by the federal government. If a determination is made that there are no known mineral values, or where a reservation of the minerals to the United States would interfere with or preclude non-mineral development and the non-mineral development is a more beneficial use of the land than the mineral development, the BLM will not dispose of the surface and mineral estates.

BLM policy requires the use of competitive sale procedures unless the authorized officer determines the public interest will be best served by modified competitive bidding or direct (non-competitive) sale. In no case may the lands be sold for less than fair market value.

Baca Sales: Baca sales are processed the same as FLPMA sales but the receipts are returned to the BLM and can be used for enhancement of resource programs and/or purchase of high-value resources. Lands considered Baca sale lands are those that were

identified for disposal by sale in land use plans in place at the passage of the Baca Legislation, P.L. 106-248 (July 25, 2000).

Recreation and Public Purposes (R&PP) Act Patents: R&PP actions are externally generated actions typically requested in support of community development. Normally, lands are leased until substantially developed as intended, and then a patent can be issued. However, in situations where there is potential for contaminants to create a liability for the government, lands are transferred without first requiring the lease, and the reversionary provision of the transfer is limited to lands that have not been contaminated. Even after lands are patented, the BLM has a continuing responsibility for ensuring compliance with the terms of the patent. If the patented lands are not used as described in the Plan of Development, the land could revert to the U.S. Government.

Split Estate: Landowners or prospective landowners may request purchase of the minerals underlying their surface estate when there are no known mineral values, or where the reservation of the minerals interferes with or precludes appropriate non-mineral development and such development is more beneficial use of the land than the mineral development. Split estate also occurs when the federal government owns the surface and the minerals are owned by a private entity. This type of split estate is addressed in the *Mineral Resources* section of this appendix.

Public lands have potential for disposal when they are isolated and/or difficult to manage. Disposal actions are usually in response to a public request or application that results in a title transfer, wherein the lands leave the public domain. The lands are sold at their fair market value. All public lands will be retained unless specifically identified for disposal.

Leases/Permits

BLM will review all leases and permits prior to land use adjustments.

Withdrawal

LHFO will continue to review existing withdrawals periodically to ensure that the reasons for the withdrawal are still valid and that only the acreage needed is retained in withdrawn status. LHFO policy will be to continue to minimize the amount of land withdrawn (particularly from mining and mineral leasing) in favor of leases, permits, or cooperative use agreements, which are more flexible.

Use Authorization

Rights-of-Way

Under the authority of FLPMA and the Mineral Leasing Act of 1920, the LHFO grants ROWs and temporary use permits to qualified individuals, businesses, and government entities for use of public lands. LHFO processes ROW applications for access, oil and gas, pipeline, power line, water line, telephone lines, fiber optic lines, communication sites, etc. All ROW applications will continue to receive environmental review on a case-by-case basis. The public may use motorized vehicles on existing and future road

ROWs unless they are specially closed by a mitigation stipulation(s) or other designations such as ACEC, Wilderness etc. The use of these ROWs does not give the public the right to enter or use private property without the permission of the landowner.

Specific proposals for ROWs within corridors will still be required to go through the environmental and permitting process.

Corridors/Communication Sites

To the extent possible, new ROWs will be located within or parallel to existing ROWs or ROW corridors to minimize resource impacts. Designated corridors will be the preferred location for major utility ROWs.

Leases/Permits

Permits or leases issued under the 43 CFR 2920 regulations will not be issued for less than fair market value rent.

Renewable Energy

The BLM will consider the need for the production and distribution of energy and the need to encourage the development of renewable energy sources. Future applications will undergo site-specific environmental analysis as part of the ROW or commercial lease process.

Law Enforcement

Standard Operating Procedures

LHFO presently has two law enforcement rangers who report to the Field Office Manager. The current table of organization approved for LHFO includes one Field Staff Ranger and one Field Ranger.

The priorities of the law enforcement program include drug interdiction, homeland security, vandalism, illegal dumping, closure violations, occupancy trespass, wilderness violations, camping limit violations, arson, archaeological and historical site damage, vegetative damage and theft, OHV use violations, and human-caused wildland fires. The majority of the law enforcement activities are associated with the area's highly active recreation program and its year-round visitor use.

LHFO manages areas of important wildlife habitat that are a primary law enforcement concern. The protection of these resources includes monitoring camping activities, investigating human-caused wildland fires, enforcing seasonal closures of bighorn sheep habitat, and enforcing OHV restrictions. Thefts of cacti occur periodically in the Alamo Lake area. LHFO also maintains revegetation sites, habitat mitigation areas, and grow-out coves for endangered fish.

Law enforcement priorities are accomplished by rangers through routine patrols of high-use areas and known locations of repeated violations. Reports of violations by resource specialists and the public result in a significant portion of the investigative leads and enforcement actions by the ranger staff.

Numerous other agencies with law enforcement missions cooperate with BLM rangers on a wide variety of enforcement actions. These agencies include, but are not limited to, the Arizona Department of Public Safety, the California Highway Patrol, Bullhead City and Lake Havasu City Police Departments, Mohave and La Paz County Sheriff's Departments, San Bernardino County Sheriff's Department, USFWS, National Park Service, AGFD, California Department of Fish and Game (CDFG), and Arizona State Parks Department. Reclamation law enforcement authority for all U.S. Bureau of Reclamation lands (613 DM 1) has been delegated to the BLM.

The following topics represent program priorities that are present and of special significance to the law enforcement program. The list is not all-inclusive and is subject to change as conditions and emphases evolve.

Employee and Public Safety

Increased pressure from urban interface, growth in visitor use at recreation sites, and the escalation of anti-government sentiment has heightened the awareness of possible conflict in the field.

Confrontations between public land users are becoming more frequent. Gang activities in the recreation sites and back country areas have increased as evidenced by incidents of vandalism and graffiti at facilities and back country areas, by law enforcement contacts and third party reports. Public lands near urban areas provide relative isolation and have experienced an increase in criminal activities, including homicides, stolen vehicles, and the illegal disposal of household and commercial wastes.

The Lower Colorado River corridor has received a steady increase in boating and camping recreation. This increase has been reflected in a growing number of boating accidents and problems related to alcohol and drug use. Increased use of the boat-in campsites has significantly increased the number of incidents involving alcohol, drug use, and natural resource destruction, requiring response from law enforcement.

With its warm weather and southern travel route, the Lower Colorado River has a large transient population. These individuals commonly have criminal histories and present a threat to any public land users who might encounter them. The problem of transients has increased in past years in the Lake Havasu City, Needles, and Bullhead City areas.

Drugs and Controlled Substance Manufacture

LHFO has not had a significant drug problem relating to public lands. Waste from methamphetamine lab operations has been recovered on public lands, and occasional reports of marijuana cultivation have been received. In a 5-year period, one such site was located. However, the remote nature of the managed lands combined with infrequent patrols presents a significant opportunity for drug operations to exist without detection.

There is also personal use of drugs by public land users in both developed and undeveloped recreation sites within the LHFO management area. This problem is dealt with as encountered in the routine ranger patrols of these areas.

Hazardous Materials

The BLM will comply with all federal, state, and local environmental, health, and safety laws and regulations governing storage, handling, use, and disposal of hazardous materials and/or waste.

BLM employees or the public may encounter solid waste and hazardous materials while on BLM-administered lands. Such materials or waste may include clandestine drug lab waste, unexploded military ordnance, mining wastes, domestic solid waste dumping, and transportation accidents, including hazardous material incidents on ROWs. BLM employees who may encounter such situations while in the field will be trained as mandated by the BLM and the Occupational Safety and Health Administration (OSHA) requirements to recognize, retreat, and report any discovery. The BLM will notify state and federal agencies responsible for hazardous materials or waste responses and cleanups.

- The BLM will educate the public about the risks associated with abandoned mine land sites and unexploded ordnance through signs, bulletin boards, and/or kiosks.
- When the current cleanup of hazardous materials sites is completed including Pacific Gas and Electric Company Topock and Big Bend Resort leaking underground storage tank, the BLM will continue to monitor sites for residual hazardous conditions as needed.
- The BLM will clean up any hazardous materials that are illegally dumped on public land.

Abandoned Mine Lands

As funding is available, the Management Actions listed below will continue:

- Inventory abandoned mine lands in high-use areas to determine mines that pose the greatest risk to public health and safety, and identify the sites that should be closed to protect biological and cultural resources. Through the information gathered from the inventories, the BLM will attempt to close all mines within 0.25 mile of developed recreation areas, campgrounds, access roads, and trails that pose the greatest risk to visiting public and mines that have significant cultural and biological resources.
- Assess the impacts to waters of Arizona and California from abandoned mines, tailings, or mineral deposits within 1 mile of surface waters and reclaim sites presenting water quality concerns.
- Method of closure will vary and be identified during site-specific NEPA analysis.
- LHFO will inspect abandoned mine land sites to identify all physical hazards presenting a safety risk to the public and take appropriate action to mitigate any hazards.

- Take steps to prevent public access to abandoned mine land contaminated areas.
- Notify the public of the conditions at an abandoned mine land site in close proximity to populated areas.
- Where surveys indicate the potential for important bat habitat, the BLM and its partners will take appropriate actions, such as bat gates, to preserve the habitat while addressing the public hazards.
- In cases where abandoned mine land remediation actions may affect biological, cultural, or historical resources, the impacts are mitigated by recording the resources, relocating the resources, or stabilizing significant resources, consistent with reducing the threat to public health and safety.

Mineral Resources

Standard Operating Procedures

Acquired lands (excluding lands acquired by the U.S. Bureau of Reclamation [Reclamation]) will be opened to mineral entry unless critical resource values—including but not limited to special status species, eligible archeological sites, riparian habitat—or public health and safety require mineral withdrawal.

Post mining use should be determined by the prevailing land use before the disturbance or as deemed appropriate by the authorized officer.

The BLM will not normally allow mineral material disposal without the surface owner's consent when the BLM owns the mineral estate but not the surface estate. Where private surface has been developed for non-mineral use, the BLM will limit or forego mineral materials sales and will seek the consent of the surface owner. On split estate lands, the BLM will not normally manage for solid mineral development without surface owner consent, unless it is determined to be detrimental to the public interest.

Locatable Minerals

Regulations contained in 43 CFR 3715 and 43 CFR 3809 provide for the management of surface disturbance associated with mineral exploration and development, including mining claim use and occupancy. 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 will be conducted for lands identified in a mining notice by the geologist and an archeologist and biologist, if available. A site visit will always be conducted by the BLM during the processing of a Mining Plan of Operations. Mining plans and notice-level operations when mining claim occupancy is proposed will be assessed for impacts to desert tortoise habitat and will be mitigated to the extent allowable in 43 CFR 3809 regulations.

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% 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 provide for numerous other permits, including but not limited to an Aquifer Protection Permit and a National Pollutant Discharge Elimination Act (NPDES) permit, both issued by the Arizona Department of Environmental Quality (ADEQ); a Section 404 permit issued by the U.S. Army Corps of Engineers; and a flood control permit issued by the applicable county. Also, Arizona state law requires mining claimants to keep mining property in a safe condition. The State Mine Inspector's office is responsible for enforcing this law. 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, local health and 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 contained in the BLM Arizona's 1997 *Programmatic Environmental Assessment for Mining Claim Use and Occupancy*.

In designated wilderness, any disturbance greater than casual use will be grounds for initiating a validity examination. Mining in wilderness is allowed only on claims with a valid discovery and location existing before designation. Before the BLM can approve Mining Plans of Operations submitted for work in a designated WA, a BLM mineral examiner must verify that a valid claim exists. The mineral examination and mineral report must confirm that minerals have been found and the evidence is of such character that a person of ordinary prudence would be justified in the further expenditure of her or his labor and means with a reasonable prospect of success in developing a valuable mine.

Saleable Minerals

The Material Sale Act of 1947 and 43 CFR 3600 provide for the disposal and regulation of mineral materials. Mineral material disposals will be administered on a case-by-case basis. Saleable minerals are sold at appraised value. Free use permits will continue to be issued to state and federal agencies, local communities, and nonprofit organizations as the need arises. Compensation will be required for new or expansions of mineral material disposal sites within desert tortoise Category I, II, and III habitat. Disposals from lands withdrawn or acquired on behalf of BOR are allowed pursuant to a March 25, 1983, Memorandum of Understanding between the BLM and Reclamation, which has administrative and surface management responsibility for disposal and use of mineral materials on project lands. Reclamation also has authority to allocate mineral materials for its own use.

Leasable Minerals

The Mineral Leasing Act of 1920, the Geothermal Steam Act of 1970, and 43 CFR 3100–3500 provide the regulatory framework for issuing mineral leases. These regulations apply where public interest exists for the development of oil, gas, sodium, potassium, and geothermal energy. Where the need is identified in this Approved RMP, stipulations

intended to mitigate impacts to special status species, cultural areas, and other resources susceptible to impacts from leasing-related activities will be attached to leases where impacts could occur to sensitive species. Site-specific use authorization stipulations to protect sensitive resources may be required prior to approval of specific proposals. All leases will be subject to the terms and conditions of the standard lease form.

The BLM will manage leasable minerals on all Reclamation withdrawn and acquired lands that are open to the mineral leasing laws. The BLM will request Reclamation's consent and/or comments as to whether leasing is acceptable and, if so, any terms and conditions deemed necessary to protect the use for which the lands were withdrawn or acquired.

No leasing is permitted on lands with federal surface ownership and state or private subsurface ownership. If subsurface ownership is acquired, the lands will become available to leasing subject to the same stipulations that are placed on the surrounding lands.

Lands with state or private surface ownership and federal subsurface ownership are open to leasing. In such cases, the BLM requests the lessees to indicate that they have reached an agreement with the surface owners prior to entertaining these lands for oil and gas exploration or development activities.

Lands that have been segregated from entry prior to disposal (e.g., R&PP lease and/or patent or sales) are open to oil and gas leasing unless specifically restricted in their classification.

Paleontological Resources

Administrative Actions

- When evaluating proposed actions on public lands, apply the following goals and objectives:
 - Identify areas and geological units (e.g., formations, members) containing paleontological resources.
 - Evaluate the potential of these areas to contain vertebrate fossils or noteworthy invertebrate or plant fossils.
 - Develop management recommendations (including mitigation measures in specific locations) to promote the scientific, educational, and recreational uses of fossils on public lands.
- Develop a monitoring program on public lands where important paleontological localities have been identified.
- The BLM will identify and protect significant fossil resources and allow for scientific research at paleontological sites, in accordance with the applicable permitting procedures.
- The BLM will include paleontological resources in its cultural resources public education programs. These programs will provide information directly related to

procedures to be followed if fossilized items are found, and will specify fines for removing fossilized items from BLM-administered lands.

- Newly identified vertebrate localities will be evaluated to assess their importance and the potential threat of loss. These findings will be used to determine an adequate monitoring program.
- A records search for paleontological resources will be conducted on all major land use actions as appropriate. Surveys prior to, or monitoring during, ground-disturbing land uses will be conducted as necessary to protect significant paleontological values.
- The BLM will survey for paleontological resources in Class 4 areas as funding becomes available.
- The Golden Shores mammoth site will be monitored annually. Other localities with scientifically important fossils will be monitored annually or as needed to address potential threats.
- Preserve and protect scientifically significant paleontological resources for scientific, educational, and recreational uses.
- Ensure that all land use authorizations consider and are consistent with objectives for proactive use of scientifically significant paleontological resources.

Public Education and Interpretation

Standard Operating Procedures

General information on the planning area may be obtained from LHFO. Some information is also presented in cooperatively funded maps and brochures. Supplies of brochures at visitor centers vary throughout the year. The current trend is to scan all brochures and maps onto computers, allowing information to be printed from computer web sites to replace material traditionally printed. The public is increasingly accessing these sites. The public generates significant amounts of information on the planning area through internet sites, guide books, and other publications. The exact amount, accuracy, or contents of such information is unknown, nor is it known if this information supports management objectives.

The public may also obtain OHV maps and general guides by mail or by picking up copies at LHFO, which is located at 2610 Sweetwater Avenue, Lake Havasu City, AZ 86406. Brochures or maps are occasionally available at the historic Swansea Townsite or given out by volunteers. The main information source for most visitors to the planning area consists of displays on kiosks.

LHFO presents informal and formal interpretive/educational programs for schools, universities, professional, and other groups. Often the requesting parties are professional organizations conducting seminars, field trips, or large conferences. Many informal requests for presentations are received with little notice, and BLM specialists may deliver formal or informal presentations depending on the time available for preparation.

Rangeland Management/Grazing

Standard Operating Procedures

Desired plant community objectives will be quantified for each allotment through the rangeland monitoring and evaluation process. Ecological site descriptions available through the National Resource Conservation Service and other data will be used as a guide for addressing site capabilities and/or potentials for change over time. These desired plant community objectives are vegetative values that the BLM is managing over the long term. Once established, desired plant community objectives will be updated and monitored based on indicators for Land Health Standard 3. This standard is derived from the Arizona Standards for Rangeland Health, developed through a collaborative process with the Arizona Resource Advisory Council, and identifies the characteristics of and management actions needed to promote and sustain healthy ecosystems on public lands.

Monitoring studies will be used to determine conformance with the *Arizona Standards for Rangeland Health and Guidelines for Grazing Administration*. Monitoring studies generally include actual use, utilization, trend, and climate. The three management categories will be used to set priorities. These studies will be analyzed through the evaluation process to determine management actions needed to achieve standards and meet multiple-resource management objectives.

Typical Range Improvements

Following is a discussion of typical design features, construction practices, and implementation procedures for range improvements that could be constructed. 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.

Fences

All new fences will be built to BLM manual specifications. Fences will normally be constructed to provide exterior allotment boundaries, divide allotments into pastures, protect streams or other riparian areas, and control livestock. Most fences will be three-wire or four-strand with steel posts spaced 16.5 feet apart with intermediate wire stays. Existing fences that create wildlife movement problems will be modified. Proposed fence lines will usually not be bladed or scraped. Gates or cattle guards will be installed where fences cross existing roads.

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

Pipelines

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

Reservoirs

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

Wells

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

Supplemental Feed Authorization

Supplemental feed must be authorized in advance. Supplemental feed means a feed that supplements the forage available from the public lands and is provided to improve livestock nutrition or rangeland management.

If used, salt should be placed at least 0.25 mile from water sources to disperse impacts.

Management actions outlined in the *Arizona Standards for Rangeland Health and Guidelines for Grazing Administration* will be applied to identify and correct potential erosion problems that could negatively impact other resources. Prioritized emphasis will be placed on those sites that might directly impact species that have been listed as threatened, endangered, or candidate species by USFWS.

Recreation Management

Administrative Actions

- On-the-ground presence will be used to provide the delivery of visitor services, information, interpretation, and stewardship as a tool to protect public land resources.
- Coordination will be conducted with general public, federal and state agencies, county and local governments, and Tribes in recreation planning and travel management. Working partnerships will be developed and sustained to this end.
- “Tread Lightly, and Leave No Trace” travel and camping techniques will be encouraged throughout the lands managed by LHFO.

- All recreational shooting-related materials will be required to be removed upon competition of the activity. In addition, paintball ammunition must be classified biodegradable by the manufacturer.
- Organized, competitive, and/or commercial specialized vehicle recreation activities will be evaluated on a case-by-case basis as part of an SRP process.

Activity Planning Framework

An activity planning framework outlines the direction and essential structure to attain management objectives and setting prescriptions for the ERMA and SRMA (with RMZs) identified in this plan. This guidance is intended to provide over-arching direction to future activity level plans that will be developed to implement the Approved RMP. This conceptual framework covers Management, Marketing, Monitoring, and Administrative measures to be addressed.

Lake Havasu Field Office Extensive Recreation Management Area

An activity level plan will not be written for the ERMA. Rather the LHFO will follow the structure established below to maintain the continuity of prescriptions found in the Prescribed Recreation Settings (see Map 20 in the Approved RMP). These actions are common to all of the ERMA unless otherwise noted.

Management:

- LHFO will limit management to custodial actions that would improve visitor safety and decrease user and resource conflicts.
- Recreational opportunities and benefits will be maintained to meet the specific ROS settings as inventoried.
- BLM may develop facilities such as trailheads, parking areas, bulletin boards, trails, and/or restrooms, consistent with public demand and as long as the action is environmentally sound and appropriate to the ROS setting.

Marketing:

- Focus visitor information services and products on dispersed recreation opportunities, resource protection, and public safety.
- LHFO will incorporate “Tread Lightly” and/or “Leave No Trace” programs in all visitor related media.

Monitoring:

- ERMA will be monitored to insure that the environmental prescriptions and social outcomes are being met for the specific ROS settings previously inventoried.
- Monitoring will be done by BLM staff through observations/studies of environmental conditions and by visitor service personal contacts with public land users.

Administrative:

- Visitors will realize the experience and benefits of the ERMA with little on site management controls and services other than signing for route designation and resource protection.
- Organized, competitive, and/or commercial specialized vehicle recreation activities will be evaluated on a case-by-case basis as part of an SRP process.

Colorado River Nature Center Special Recreation Management Area

An inter-disciplinary and -agency activity level plan will be developed for the SRMA covering the River Side and Southern Bluff RMZs. The River Side RMZ will be managed consistently with AGFD's property along the river, west of the RMZ. The following actions are common to all RMZs unless otherwise noted.

Management:

- Make local partnerships a high priority to develop and maintain the SRMA.
- Work with AGFD to create ponds/wetland areas.
- Maintain the SRMA as day-use area.
- Develop and maintain nature trails, which provide for public education, use and protect resources within the SRMA.
- Limit vehicle use to one maintained access route in River Side RMZ and only administrative use of routes in the Southern Bluff RMZ.
- Rehabilitate closed roads that have no administrative benefits in the Southern Bluff RMZ.
- Contain parking facilities and roadways to prevent encroachment.

Marketing:

- Develop comprehensive interpretive plan, which includes all aspects of interpretation, education, and public outreach.
- Strive to involve user groups, volunteers, and other interested members of the public to help maintain resources through partnerships, adoption programs, special events, and/or a "friends group."
- Work with AGFD and Bullhead City to create on-site interpretive media within River Side RMZ.
- Work with local schools and teachers to create materials and/or curriculum to be used when visiting the nature center.

Monitoring:

- Assure objectives are being met and setting prescriptions are maintained.
- Monitor implemented actions and evaluate effectiveness.

- Monitoring will be done by observations and visitor service personnel contacts with users.
- Evaluations by the partners will, at minimum, be done annually or as needed.

Administrative:

- The BLM in collaboration with partners will establish a strong visitor services presence within the SRMA.
- Work with Bullhead City Police, Mohave County Sheriff to assure the public safety is maintained within the SRMA.

Lake Havasu Special Recreation Management Area

A multi-jurisdictional cooperative management plan will be written for the LHSRMA and the eight associated RMZs (Whipple Mountains, North Aubrey, Aubrey Hills, AZ Shoreline, Havasu Springs, CA Shoreline, North Lake Havasu, and South Lake Havasu). Partnerships and collaboration with other jurisdictions on the lake including but not limited to the U.S. Coast Guard, County Sheriffs, BOR , ADGF, tribes and other federal, state and local entities will be sought to improve recreational management of the lake for sustainable environmental health and customer satisfaction. The following actions are common to all RMZs unless otherwise noted.

Management:

- Make local partnerships a high priority to develop and maintain the SRMA. Including working with Tri-State Water Ways Inter-agency Group and the Lake Havasu Fisheries Partnership to meet management objectives for the SRMA.
- The BLM will, when practical, implement agreements with other political entities or private sector operators for the shared installation, operation, or maintenance of new developed recreation facilities under conditions appropriate to its agency mission and consistent with public demand.
- On the AZ Shoreline RMZs, additional facilities could only be developed where there is a public demand and where the actions are environmentally sound and meet the ROS setting, experiences and benefits (DFC) set for the specific RMZs in the Approved RMP. On the CA Shoreline RMZs facilities will only be considered as a tool to manage user conflicts, protect natural resources, and assure public safety.
- The BLM will identify, with signs and maps, those areas of undeveloped shoreline where camping will be allowed. Campfire rings will not be allowed and fires limited to developed sites where barbeques are provided.
- The BLM will continue leadership of the Lake Havasu Fisheries Improvement Partnership, aiming to cooperatively manage the diverse, and healthy native and sport fishery, while working to maintain and enhance free public shoreline angling access.
- Shoreline development will be through a coordinated approach, reviewed and approved through the Bureau of Reclamation to ensure compatibility with Parker Dam and Lake Havasu project's uses as well as the *Lower Colorado River Multiple Species Conservation Program*.

- Develop and maintain non-motorized trails in the North Aubrey and Aubrey Hills for non-motorized recreational opportunities near an urban area. This would include a trail that would connect BLM Lands with Lake Havasu City Parks, State Parks Lands, and the Wildlife Refuges.
- Restore closed roads that have no administrative benefits with in North Aubrey, Aubrey Hills, and Whipple Mountains RMZs.
- Information and orientation materials dealing with recreation, maps, safety, and resource concerns will be posted on kiosks located at all primary access points and at critical areas within the SRMA.
- Increase law enforcement patrols on the Lake during high use weekends and periods.
- The BLM, in collaboration with partners, will establish a strong visitor services presence within the SRMA. Example: Visitors will see park rangers, maintenance workers, and law enforcement officers on a regular basis. Visitor services will be provided in accordance with desired ROS settings.
- The BLM will continue leadership of the Lake Havasu Fisheries Improvement Partnership, and will continue to support the five existing handicapped-accessible shoreline fishing facilities constructed on Lake Havasu, plus those yet to be constructed. The five facilities are Mesquite Bay, Site Six, Bill Williams Refuge, Havasu Springs Resort, and Take-off Point.

Marketing:

- Develop comprehensive interpretive plans that will provide a unified interagency approach to all aspects of interpretation, education, and public outreach.
- Provide high profile presence on the lake, through the use of visitor contact areas/facilities. Including use of mobile contact stations such as boats or trailers during high use periods.
- Strive to involve user groups, volunteers, and other interested members of the public to help maintain resources through partnerships, adoption programs, special events, and/or a “friends group.”
- Information and orientation materials dealing with recreation, maps, safety, and resource concerns will be posted on kiosks located at all primary access points and at critical areas within the SRMA.

Monitoring:

- In coordination with multi-jurisdictional partners, the BLM will participate in formal visitor demand, satisfaction, use, and preference surveys.
- Resources will be evaluated to ensure that there be no net loss of quality regarding the recreation or natural resources that provide the targeted benefits and opportunities using the date of the adoption of this plan as a baseline.
- Maintenance of resource and recreational benefits sustainability shall be paramount in all monitoring activities.
- Monitoring will be accomplished formally using the best available science and techniques.

- At least on a monthly basis monitoring of all developed sites will be accomplished by staff to assure site conditions meet public health and safety requirements.
- In coordination with multi-jurisdictional partners, the BLM will participate in natural resource monitoring activities and share that information in formal and informal cooperative groups to better understand “health of the river” objectives and applicable laws.

Administrative:

- The BLM, in collaboration with partners, will establish a strong visitor services presence within the SRMA.
- Work with law enforcement agencies with jurisdiction on the lake to assure the public safety is maintained within the SRMA.
- Use thresholds will be determined from research and monitoring. Actions such as closures and use allocation will be considered to maintain sustainability of both the recreational opportunities and of natural resource condition.
- The BLM will charge a day use/camping fees for BLM-developed sites within the area.
- The BLM will work to coordinate the fee structure and collections with other agencies, primarily Arizona State Parks within the Lake Havasu SRMA.
- The BLM will work to coordinate organized events with partners. The BLM will require special recreational permits (SRPs) for organized events and activities that impact public lands comprising the lake bottom and shoreline.

Parker Strip Special Recreation Management Area

The 1993 Parker Strip Recreation Management Plan will be updated to assure that the SRMA with its three RMZs (Parker Strip Urban, Crossroads and Copper Basin, and the Parker Strip Backcountry) complies with the Approved RMP. The BLM, working closely with concessionaires, will ensure that the Plan’s objectives are being met. Listed below are only those implementation actions that are not covered by the current plan. These actions are common to all RMZs unless otherwise noted.

Management:

- The BLM will, when practical, implement agreements with other political entities or private sector operators for the shared installation or operation of new developed recreation facilities under conditions appropriate to its agency mission and consistent with public demand. All new concession facilities will be limited to east of the Back Country Byway.
- The Parker Strip RMZ will be managed to provide a full array of facilities striving to meet the targeted benefits and desired outcomes for both its aquatic and terrestrial resources.
- Update the Back Country Byway Kiosks as needed.
- Manage Parker Strip Backcountry RMZ to provide open space and targeted benefits.

- Manage the Crossroads and Copper Basin open areas, in partnership with the California State Park's OHV Grant Programs with an emphasizing responsible OHV use, appreciation of natural resource values and public safety.

Marketing:

- The Rock House Information Center and Boat Ramp will serve as a central location to provide information which will help enhance the physical, social and a recreational setting for the wide spectrum of Parker Strip visitors.
- Pursue local partnerships and cooperate with local agencies, chambers of commerce, and concessionaires to market the recreation opportunities in the Parker Strip RMZ to local, regional, national, and international visitors.

Monitoring:

- Monitoring will be performed by evaluating visitor use through traffic counters, recreation use permits, amount and types of revenue generated, and observations by site host volunteers, LE rangers, recreation and maintenance staff.
- Employ visitor demand and preference surveys for visitors and concession customers to determine their level of satisfaction with existing facilities.

Administrative:

- The BLM, in collaboration with partners, will establish a strong visitor services presence within the SRMA.
- Continue to manage concessionaires through existing use authorizations. Maintain the front country experience through the use of law enforcement, visitor services, and fees.
- Coordinate with the San Bernardino County Sheriffs office on issues and concerns relating to public safety.

Gibraltar Special Recreation Management Area

The 2001 Gibraltar Mountain Interdisciplinary Plan will be updated to ensure that the total SRMA with its five RMZs (Gibraltar Wilderness, Cienega, Shea Hills, Buckskin Mesa, and the Shea Road/Osborne Wash RMZs) comply with Approved RMP decisions. Portions of the Shea Road/Osborne Wash were not covered in the planning area for Gibraltar Mountain Interdisciplinary Plan. These actions are common to all RMZs unless otherwise noted.

Management:

- Make local partnerships a high priority to develop and maintain the SRMA.
- The BLM will continue to maintain bulletin boards and kiosks containing maps and information on natural, cultural, historical, and local features as well as public safety. Locations would be near main intersections, remote recreation areas, and popular sites.
- Maintain wilderness boundary signs and maps.

- Manage Shea Road/Osborn Wash RMZ for intensive OHV and dispersed camping.
- The BLM will clearly establish the boundaries of Shea Road/Osborn Wash RMZ to contain OHV “freeplay” use to within the RMZ.
- The BLM will establish non-motorized trailheads to discourage vehicle trespass into the Wilderness Area or the Wilderness Study Area.
- If use analysis determines that visitor levels have increased and that dispersed camping presents significant conflicts with other resource values, the BLM may develop campgrounds or designate camping sites within the SRMA to manage those conflicts.

Marketing:

- Will be directed to local/regional users.
- The BLM, in collaboration with partners, will establish a strong visitor services presence within the Gibraltar SRMA. Example: Visitors will see park rangers, maintenance workers, and law enforcement officers on a regular basis. Visitor services will be provided consistent with the ROS setting, experiences and benefits (DFC) set for the specific RMZs in the Approved RMP.
- The BLM will provide a presence in Shea Road/Osborne Wash RMZ during high use periods through the use of mobile contact stations.
- Strive to involve user groups, volunteers, and other interested members of the public to help maintain resources through partnerships, adoption programs, special events, and/or a “friends group.”
- Information and orientation materials dealing with recreational, maps, safety, and resource concerns will be posted on kiosks located at all primary access points and at critical areas within the SRMA.

Monitoring:

- Monitoring will be done by observations and visitor service contacts with users.
- Resources will be evaluated to ensure that there be no net loss of quality regarding the recreation or natural resources that provide the targeted benefits and opportunities using the date of the adoption of this plan as a baseline.
- At a minimum OHV use will be monitored monthly and more frequently if necessary, during the high use period.

Administrative:

- The BLM in collaboration with partners will establish a strong visitor services presence within the SRMA.
- Coordinate with the La Paz County Sheriffs Office on matters relating to public safety within this SRMA.

Havasu Urban Special Recreation Management Area

An inter-disciplinary activity level plan will be written for Crossman Peak ACEC and this SRMA covering the three RMZs (Standard Wash, Crossman Peak, and Havasu Urban Interface). These actions are common to all RMZs unless otherwise noted.

Management:

- A task force of stakeholders will be established to coordinate an approach to managing the Havasu Urban SRMA to maintain the Lake Havasu view shed and desired ROS setting, experiences and benefits (DFC) set for the specific RMZs in the Approved RMP.
- The BLM will, when practical, implement agreements with other political entities or private sector operators for the shared installation or operation of new developed recreation facilities under conditions appropriate to its agency mission and consistent with public demand.
- The BLM will maintain bulletin boards and kiosks containing maps and information on natural, cultural, historical, and local features as well as public safety. Locations will be near main intersections, and remote popular recreational sites.
- The BLM near developed communities will increase signage and enforcement of pertinent laws and regulations to manage camping and other recreation use.
- Uncontrolled recreational shooting within the SRMA will be discouraged through increased patrols and ethics programs.
- Implementation-level planning will make determinations as to where specific trails, trailheads, facilities and kiosks will be needed in conjunction with cultural and biological resource needs and mitigations.
- Non-motorized use will be encouraged within the SRMA, by the establishment of trails and trailheads.
- Dispersed camping will be discouraged within the Havasu Urban Interface RMZ. If use analysis determines that levels have increased, and that dispersed camping present significant conflicts with other resource values or with local community interfaces, the BLM will develop a campground or designate camping sites within the SRMA to manage those conflicts.

Marketing:

- Marketing will be regional in nature and would be commensurate with the ability of the area to maintain its ROS setting and provide the recreational experiences and benefits set for each RMZ.
- Strive to involve user groups, volunteers, and other interested members of the public to help maintain resources through partnerships, adoption programs, special events, and/or a “friends group.”
- Information and orientation materials dealing with recreation, maps, safety, and resource concerns will be posted on kiosks located at all primary access points and at critical areas within the SRMA.

Monitoring:

- Resources will be evaluated to ensure that there be no net loss of quality regarding the recreation or natural resources that provide the targeted benefits and opportunities using the date of the adoption of this plan as a baseline.
- Monitoring will be done through observations and by visitor service contacts with users.

Administrative:

- The BLM in, collaboration with partners, will establish a strong visitor services presence within the SRMA.
- Coordinate with the Mohave County Sheriffs Office and other local enforcement agencies on issues and concerns relating to public safety within this SRMA.

Plomosa Special Recreation Management Area

The 1997 La Posa Interdisciplinary Management Plan covered much of the area within this SRMA. This plan will be used as a framework, and updated to ensure that the SRMA with its three RMZs (Back Country Byway, Plomosa Mountains, and Bouse Plain) comply with the Approved RMP. These actions are common to all RMZs unless otherwise noted.

Management:

- Co-manage the area with Yuma Field Office to meet DFC set in this Approved RMP and goals and objectives set in the 1997 La Posa Interdisciplinary Management Plan.
- Cooperate with AGFD regarding sensitive species and their habitat.
- Establish partnerships with La Paz County, the communities of Bouse and Quartzsite and others to nominate the Plomosa Road within the Back Country Byway RMZ as a Department of the Interior Back Country Byway.
- Make determinations as to where specific trails, trailheads, facilities and kiosks will be needed in conjunction with the proposed Back Country Byway, and cultural and biological resource needs and mitigations.
- Bouse Plain RMZ will continue to provide opportunities for dispersed recreation.

Marketing:

- Strive to involve user groups, volunteers, and other interested public to help maintain resources through partnerships, adoption programs, special events, and/or a “friends group.”
- Marketing will be commensurate with the ability of the RMZ to maintain the experience and recreational benefits, which are described in the DFC (Table 2-22 of the PRMP/FEIS).
- Marketing for the Plomosa Road Back Country Byway will be regional in nature and in response to local visitation.

- In the Plomosa Mountains RMZ, no marketing will be done until use analysis determines that levels have increased, that recreation and tourism present significant conflicts with other resource values or that unforeseen recreation activities have emerged which present unique management challenges.
- Tread Lightly travel and camping techniques will be encouraged throughout the lands managed by LHFO.

Monitoring:

- Resources will be evaluated to ensure that there be no net loss of quality regarding the recreation or natural resources that provide the targeted benefits and opportunities using the date of the adoption of this plan as a baseline.
- Dispersed camping areas in the Bouse Plain will be monitored for the total number of conflicts with other resources and the ability to provide the targeted benefits.
- Monitoring will be done through observations, visitor service contacts, site stewards, AGFD personnel and volunteers and using traffic counters, GPS and photo-telemetry.

Administrative:

- The BLM, in collaboration with partners, will establish a strong visitor services presence within the SRMA, especially with AGFD.
- Coordinate with the La Paz County Sheriffs Office on matters relating to public safety within this SRMA.

Swansea Special Recreation Management Area

The implementation of recreation management for this SRMA will be incorporated into the implementation plan for the Swansea Historic District ACEC. The activity planning framework for this SRMA also incorporates the 1997 Swansea Historic District Cultural Resources Management Plan. These actions are covering all of the SRMA unless otherwise noted.

Management:

- Additional SRMA facilities will be considered to manage conflicts between visitor use and cultural resources or public and/or to maintain the identified recreational experiences and benefits for the public.
- The BLM will continue working with volunteers such as the Friends of Swansea to maintain and enhance the cultural resources and educate the public.
- Temporary closures will be utilized in parts of the Swansea SRMA while stabilization/preservation work and maintenance is completed, if necessary, for the protection of the work site and/or resources.
- The current supplemental rules 43 CFR 8365.1-6 part 2 would be maintained, rules covering:
 - Camping limitations (to developed sites campsites for no more than 3 days).
 - Fire restrictions.

- ❑ No collecting - fire wood or other items.
- ❑ Safety closures of structures.
- Except for legal hunting, the BLM will enforce the area as a no recreational shooting zone.
- Interpretive trails will continue to be developed and maintained.
- Existing motorized route designations will be valid and incorporated into the ACEC and TMP plans. The BLM will rehab non-designated routes and trails.

Marketing:

- Develop opportunities to maintain resources through information/education to the public about cultural resources.
- Pursue local partnerships with La Paz County and others to market the SRMA to local, regional, and national visitors.
- Marketing will be commensurate with the ability of the area to maintain its remote setting.

Monitoring:

- Maintenance of resource and recreational benefits sustainability shall be paramount in all monitoring activities.
- Resources will be evaluated to ensure that there be no net loss of quality regarding the recreation or cultural resources that provide the targeted benefits and opportunities using the date of the adoption of this plan as a baseline.
- Monitoring will be accomplished formally and informally using the best available science and techniques.

Administrative:

- The BLM, in collaboration with partners and friends group, will establish a stronger visitor services presence within the SRMA.
- SRP will be limited to those activities and events that will help public recognize the identified recreational experiences and benefits. No SRP for competitive events will be issued.
- Coordinate with the La Paz County Sheriffs Office on issues and concerns relating to public safety within this SRMA.

Standard Operating Procedures

FLPMA provides for management of outdoor recreation resources on public lands. Section 202(c) (9) calls for land use planning consistent with Statewide Comprehensive Outdoor Recreation Plans (1989, 1994, 2003). Other national laws that govern the management of recreation in LHFO include the National Trails System Act of 1968, as amended; the Land and Water Conservation Fund Act of 1964, as amended; the Recreation and Public Purposes Act, as amended; and the Wilderness Act of 1964.

Public lands along the Colorado River are to be managed in conformance with the Colorado River Floodway Protection Act of October 8, 1986 (Public Law 99-450) as amended 1994.

Generally, the goal of the LHFO outdoor recreation program is to ensure the continued availability of public land for a diverse array of quality outdoor recreation opportunities. Recreation use is managed to protect the health and safety of visitors; to protect natural, cultural, and other resource values; to stimulate enjoyment of public lands; and to resolve user conflicts. Visitor demands for new recreation will continue to influence the nature of recreational opportunities on public lands.

Most public lands are managed to maintain a freedom of recreational choice with a minimum of regulatory constraints. Where the nature of the resource and visitation dictates, public lands can be managed as Special Recreation Management Areas (SRMA). Primary concerns in recreation management planning are for resource protection, public health and safety, and enjoyment.

LHFO will continue using the following guidance to manage recreational use:

- Concession leases are considered when necessary to provide developed commercial recreation opportunities in appropriate settings when and where it would not be feasible for the BLM or other government agencies to do so. These leases authorize the construction and/or implementation of long-term facilities and services that will require a substantial financial investment by private business or other non-governmental entities.
- Universal designs to facilitate needs of the physically challenged will be used in all or part of new construction or rebuilt BLM facilities.
- The BLM will provide law enforcement rangers to protect natural and cultural resources and help provide for public health and safety.
- The BLM will strive to make available staff members to provide visitor services, interpretive programs and maintain an agency presence within SRMAs. Their mission will be regularly to contact the public for resource information and environmental education. These staff members will be additional to law enforcement rangers.
- The BLM will fully support Arizona Revised Statute 17-308, Unlawful Camping (no camping within 0.25 mile of natural or human-made water hole).

Special Recreation Permits

Special Recreation Permits (SRPs) are authorizations allowing specific recreation uses of public lands and related waters. SRPs are issued to manage visitor use and protect natural and cultural resources while avoiding user conflicts. The legal authorities are the Federal Land Policy and Management Act, 43 USC 1701 *et seq.*, and the Land and Water Conservation Fund Act, as amended, 16 USC 4601–6a. BLM Handbook H-2930-1 Recreation Permit Administration application process contains applicable laws, policy, rules and regulations and conformance with resource planning decisions. The decision to authorize a proposed use depends on potential resource impacts, conflicts with other users, any public health and safety issues, past or present performance of the applicant

with the BLM or other agencies, and LHFO receiving a complete SRP application in a timely manner to process and administer the permit.

Types of Permits

1. Commercial Use: recreational use of the public lands and related waters for business or financial gain.
2. Competitive Use: any organized sanctioned or structured use, event or activity on public land and related waters in which two or more participants compete and (a) participants register, enter and/or complete an application; (b) a predetermined course or area is designated; or (c) participants contest an established record such as speed or endurance.
3. Organized group activity or event: a structured, ordered, consolidated, or scheduled event or occupation of public lands for recreational purposes not considered commercial or competitive.
4. Vending Use: use permitted to market, sell, or rent recreation-related goods or services including but not limited to, food, beverages, clothing, firewood, tool or equipment repair on public lands or related waters.

Vending on Public Lands

Vending is the marketing or sale of approved products or services to members of the public by a person or persons authorized by the BLM.

Such sales may occur on concessions by parties to whom a concession lease has been issued. Concession leases are ordinarily utilized by the BLM where long-term operations are desired and where a sizeable investment by a non-government or private party is required to furnish real property improvements.

Vending may also occur on a more restricted basis, for temporary or short periods at narrowly prescribed locations. For discussion in this plan, a vending permit is either a Special Recreation Permit or a Land Use Permit (43 CFR 2920, *Leases, Permits and Easements*), which may allow specific individuals commercial rights to sell services or items on public lands for a specified time period. Vending on Lake Havasu is included insofar as the vendor will anchor or operate within BLM-managed areas.

The BLM will charge for its vending permits, and will never receive less than full fair value, which at a minimum will be its cost to issue and administer the vending permit. The BLM may submit vending endeavors to a competitive bidding process and/or such other requirements it deems necessary to ensure minimum impact on the resource, minimum commercial intrusion on visitors to public lands, and to ensure that maximum quality, safety, and value are offered to the public when vending operations are *necessary* and *appropriate*.

Necessary means that the proposed vending contributes to visitor understanding and enjoyment of Lake Havasu, and that it enhances visitor experiences consistent with BLM resource values. *Necessary* also means that vending assists in managing visitor use and is

an essential service or facility not available within a reasonable distance in the established business community.

Appropriate means the proposed vending activity is consistent with resource management laws, regulations, and policies applicable and that it does not compromise public health and safety or significantly impact or impair resources or values. *Appropriate* also means that the proposed vending activity does not unduly conflict with other uses or provide unfair or undue competition with existing similar businesses. Vending also will not exclude the general public from participating in recreational opportunities.

Vending authorizations are a privilege and revocable without compensation under conditions named by the BLM. The BLM has no obligation to issue or to renew a vending permit of any kind to any party. Vending permits are further managed according to BLM Handbook H-2930-1, *Recreation Permit Administration* (2003).

Some commercial and organized group uses requiring Special Recreation Permits (SRPs) have little to no resource impacts, user conflicts, or health and safety concerns, and usually require little monitoring. Examples of such uses are hunting outfitter and guide operations, motorized tours, photography tours, nature hikes, dual-sport rides, horseback rides, and organized club campouts. Special stipulations for SRPs have been developed to protect natural resources, reduce user conflicts, and minimize health and safety risks. These stipulations are included with all authorized SRPs and must be followed to keep the permit valid (see Appendix I).

Final decisions for permit issuance will be based on other valid concerns, including the following:

- performance
- other conflicting activities such as hunting seasons
- the BLM's ability to process the permit
- other unforeseen circumstances

The permittee must also comply with any special allocations or restrictions. Proposed uses that do not meet the above criteria will be subject to further environmental analysis.

Special Designations

Administrative Actions

ACECs

- Partnerships will be sought to provide for cooperative management of the ACEC including but not limited, other agencies, city municipalities, and other interested stakeholders, e.g., Beale Slough.
- The BLM will work with partners, local, state, and private landowners to secure conservation easements where necessary to protect designating values of ACEC.

Wilderness

- Provide guidance for the application of nonconforming but accepted uses permitted by the Wilderness Act and subsequent laws. This guidance will be established in the following plans:
 - The East Cactus Plain Wilderness will be managed under the 1994 *East Cactus Plain Wilderness Management Plan*; this plan will be updated as needed.
 - Gibraltar Mountain WA will be managed under the 2001 *Gibraltar Mountain Interdisciplinary Management Plan* and updated as needed.
 - Segments of the Dead Mountains Wilderness, Chemehuevi Mountains Wilderness, and Whipple Mountains Wilderness plans will be completed in conjunction with the Needles Field Office.
 - An interdisciplinary plan will be developed for the Bill Williams River area, which will incorporate the Rawhide Mountains and Swansea WAs.
 - Harcuvar Mountains WAs will be managed under the East Harcuvar Mountains Interdisciplinary Management Plan, which is now in preparation.
- Reduce unauthorized vehicle use in all WAs through use of visitor education outside of wilderness, construction of trailheads, and development of barriers and/or restoration of closed vehicle trails.
- Sign wilderness boundaries along boundary roads at least every 0.2 mile or at specific sites of vehicle intrusion.

Wild and Scenic River Management

- Instream flow will be monitored to establish the minimum flow necessary to protect the outstandingly remarkable values.

Travel Management

Administrative Actions

- The BLM will identify a Travel Management Network (TMN) through the development of an activity-level plan(s).
- Area designations (e.g., open, closed, and limited) set in the Approved RMP will not be changed by the activity-level plan without an amendment to the Approved RMP.
- Public scoping meetings will be held in local communities on the proposed TMN (route designations).
- The BLM will evaluate the TMN as needed, and proposed new routes (motorized and non-motorized) will be considered during development of the TMP.
- All routes will be analyzed during the route evaluation process, considering all uses and resources within the area. No use or resource will automatically predetermine a route decision.

- The BLM will continue to work with state or local agencies to provide necessary public access from their public roads to the secondary routes on public lands.
- The BLM will help inform the public about requirements for access on or across private and state lands adjacent to LHFO lands. Any designated routes would not include non-BLM lands.
- California Department of Fish and Game (CDFG)'s and AGFD's use of motorized and mechanized equipment off designated routes is considered an administrative use and will be allowed in suitable locations (as agreed to by BLM, CDFG, and AGFD) for such purposes as the following:
 - water supplementation
 - collar retrieval
 - capture and release of wildlife
 - maintenance, repair, and building or rebuilding of wildlife

The goals of the TMP will be in concurrence with BLM's 2001 *National Management Strategy for Motorized Off-Highway Vehicle Use on Public Lands*. The plan(s) will:

- Use the six Travel Management Areas (TMAs) to develop the TMP (see Map 30 in the Approved RMP). These areas are consistent with LHFO access guides, providing for more public familiarity. When establishing these TMAs, LHFO considered public use patterns on routes around local communities or other major recreational destinations, and other resource program goals and objectives.
- Identify trails, ways, and routes in the LHFO planning area intended for motorized and non-motorized travel on public lands.
- Improve legal access to public lands by identifying access needs across non-federal lands and recommend acquisition and funding strategies.
- Provide reasonable access to private inholdings surrounded by public lands.
- Be consistent with the Americans with Disabilities Act and develop greater access for the physically challenged.
- Set guidelines for managing roads and trails to protect resource values, promote public safety, and improve public compliance on designated routes.
- Develop monitoring procedures sufficient to detect and evaluate related public safety or natural resource impacts so that management changes could occur, if needed.
- Create an implementation schedule that must cover public education, mapping, signing of designated trails and routes, rehabilitation of closed routes, law enforcement, and maintenance.
- Incorporate the effective use of volunteers to provide "on the ground" information and route marking/signing for the public.
- Increase public involvement in the establishment, monitoring, and protection of routes/trails on public lands.
- Set timelines for monitoring and plan review.

Cross-country motorized use will be prohibited, except in designated open areas and for authorized administrative uses.

Standard Operating Procedures

Public lands managed by the BLM are intermingled with other federal agencies, county, state, and private lands. Managing access to and across public lands is a vital task for the BLM. This authority includes but is not limited to items listed below.

- Federal Land Policy and Management Act of 1976 (43 USC 1701 *et seq.*)
- Endangered Species Act (16 USC 1531 *et seq.*)
- National Trails System Act (16 USC 1241 *et seq.*)
- Americans with Disabilities Act
- Executive Order 11644, Use of Off-Road Vehicles on Public Lands
- Executive Order 11989, Off-Road Vehicles on Public Lands (Amendment to E.O. 11644)
- FLPMA Title 5 rights-of-way
- Revised Statute (RS) 2477 roads
- National Management Strategy for Motorized Off-Highway Vehicle Use on Public Lands (2001)
- National Mountain Bicycle Strategic Action Plan (2002)

From IMAZ-2005-007:

“Permittees (e.g., for hunting, wood gathering, livestock operators) shall comply with field office route designations. Exceptions may be authorized on a case-by-case basis.”
“Outside of National Monuments and National Conservation Areas, motorized vehicles may be allowed through a resource management plan level decision to pull off a designated route 100 feet either side of centerline. This use shall be monitored on a continuing basis. If monitoring results show effects that exceed limits of acceptable change, motorized vehicles would not be allowed to pull off a designated route 100 feet either side of centerline.”

“BLM would not develop, endorse, or publish road or trail ratings. BLM may describe physical characteristics of a route.”

“Technical Vehicle Specialized Sport Site - could be managed as a Recreation Management Zone (RMZ), but not part of the travel management network.”

Travel Management Network

All paved roads and gravel/dirt roads maintained by a state, county, or city will automatically be included as open or limited in the TMP.

All other routes, including roads, trails, ways, or navigable washes shown on the existing inventory will be designated by the plan as either an open route, a limited route by type of use or season, or a route closed to motorized use.

Each route would be evaluated by a BLM interdisciplinary team using the criteria derived from Executive Order 11644. Routes previously designated in an activity-level plan (e.g., *Parker Strip Recreation Area Management Plan*, *Gibraltar Mountain Interdisciplinary Management Plan*, and *La Posa Interdisciplinary Management Plan*) will not be affected. New route numbers may be assigned to previously designated routes to incorporate them into the TMN. Individual routes within these areas may be reevaluated only if it can be shown that sensitive resources or recreational opportunities are impacted by the earlier designation.

While areas of public lands designated as open will be exempt from route designation, specific routes crossing open areas may be identified as part of the TMN.

On public lands designated as closed (e.g., WAs), no roads or trails will be designated open for motorized travel. Roads and trails may be designated limited by type of use (horse, hiking, or administrative) or by season of use such as seasonal restrictions to minimize disturbance to wildlife during the times of the year when they are rearing young.

Revisions to the TMP would follow the same process described above, including public notification within the LHFO planning area, and will be subject to NEPA review and analysis.

Legal decisions can conceivably have an effect on the designation of routes.

Restoration of Closed Routes

The BLM's strategy for restoring closed routes or trespasses will be accomplished as rapidly as funding permits. Sensitive resources in immediate danger, or those that have been damaged by vehicle trespass would be a high priority for restoration. Typically, the restoration will be limited to that portion of the route or trespass that is in line of sight from an open route. The proposal for restoration will include:

- Not repairing washed-out routes.
- Using natural barriers, such as large boulders.
- Using rocks and dead and down wood to obscure the route entryway.
- Employing vertical mulching and pitting.
- Ripping up the route bed and reseeding with vegetation natural to that area.
- Utilizing fences or barriers.
- Providing signage, including information to OHV users, on the need and value of resource protection.
- Leaving the first 100 feet from the centerline of an open route unrestored to provide pullout areas or camping opportunities intended to discourage or prevent new ground disturbance elsewhere.

Each route will be evaluated, and the least intrusive method will be used based on geography, topography, soils, hydrology, and vegetation.

Overflights

Aircraft overflights, including low-level helicopter and fixed-wing overflights by other agencies and other use of the airspace over public lands, are not regulated by the BLM. These uses occur now and would continue.

Visual Resource Management

Standard Operating Procedures

Class objectives will help the BLM apply visual design techniques to ensure that surface-disturbing activities are in harmony with their surroundings. A visual contrast rating process will be used for analysis, which involves comparing the project features with the major features in the existing landscape using the basic design elements of form, line, color, and texture. Visual design consideration will be incorporated into all surface-disturbing projects regardless of size or potential impact. Emphasis is placed on the BLM providing inputs during the initial planning and design phase to minimize costly redesign and mitigation at later phases of a project. The overall goal of VRM analysis is to minimize visual impacts through development of mitigating measures.

The BLM will analyze all surface-disturbing projects according to the guidelines and procedures provided in BLM Manual 8431-1, Visual Resource Contrast Rating. Visual simulations could be used in evaluating the visual resource effects of a project. These projects will be assessed for the degree of visual contrast from the landscape using the elements of form, line, color, and texture. Proposed surface-disturbing projects will be evaluated from Key Observation Points for the following factors:

1. distance (project from Key Observation Points)
2. angle of observation
3. length of time the proposed project would be in view
4. relative size or scale
5. season of use
6. light conditions
7. recovery time
8. spatial relationships
9. atmospheric conditions
10. motion

Water Resources

Standard Operating Procedures

Watershed Management

FLPMA defines the BLM's multiple-use management mission to include protection of watersheds. FLPMA requires that public lands be managed to protect scientific, environmental, air and atmospheric, and water resources. FLPMA also requires that the BLM develop land use plans to guide the Management Actions on these lands, and that land use plans comply with state and federal air, water, and pollution standards. In addition, BLM Manual 7000 and executive orders provide field guidance in managing soil, water, and air.

FLPMA requires compliance with the following laws:

- Soil Conservation and Domestic Allotment Act of 1935
- Watershed Protection and Flood Control Act of 1954
- Colorado River Basin Salinity Control Act of 1974
- Wild and Scenic Rivers Act of 1968
- National Environmental Policy Act of 1969
- Federal Pollution Control Act with amendments of 1972
- Clean Water Act of 1989
- Safe Drinking Water Act of 1977

Water Resource Management Program

The BLM's water resource program consists of the following mandates:

- To ensure the physical presence and legal availability of water on public lands.
- To ensure that those waters meet or exceed federal and state water quality standards for specific uses.
- To mitigate activities to prevent water quality degradation.

The water resource program is divided into three parts: water inventory, water rights, and monitoring.

BLM policy is to inventory all water resources on public lands it administers and to document and store this data in its Water Data Management System.

BLM policy on water is to file for water rights on all water sources on public and acquired lands in accordance with State of Arizona or California water laws. This water policy also requires the BLM to file a request for a recommendation for use of the waters of the Lower Colorado River with either the State of Arizona or the Colorado River

Board of California. Upon receiving a positive recommendation, the BLM will enter an Interagency Agreement with BOR to legalize its use of Colorado River water. The Secretary of the Interior has given BOR authority to enter Colorado River contracts along the Lower Colorado River.

BLM policy is to monitor water quality to assess resource impacts from specific activities and to obtain baseline resource information.

Non-point source pollution abatement authority is addressed in Section 319 of the Federal Clean Water Act Amendments of 1987 and the State of Arizona Environmental Quality Act of 1986. The BLM has agreements with both Arizona and California environmental departments regarding non-point source pollution controls and assures attainment of water quality to meet all designated beneficial uses. ADEQ monitors conditions and bi-annually publishes the status of water quality and any impaired waters.

Wild Burro Management

Administrative Actions

Burro information will be included on bulletin boards and kiosks within HMAs.

Standard Operating Procedures

The BLM will coordinate with AGFD and other affected interests during its evaluation of any proposed decisions or actions concerning burro management.

The BLM will work with AGFD to determine if Land Health Standards are being met and if any additional monitoring is needed to make such a determination.

All burro-related activities will be conducted in a manner that ensures the safety of the burros and personnel involved.

The BLM will continue to work collaboratively with AGFD to resolve burro-related issues.

Wild Burro Removals

All wild burros that are removed are made available for adoption through the Wild Horse and Burro Adoption Program.

Wild burros will be removed as nuisance animals whenever a safety problem becomes apparent (such as burros crossing highways, burro-related vehicle accidents, etc.). Removal of nuisance burros from private land is required when requested in writing from the landowner. Excess wild burros will be removed from the HMAs when the population exceeds the Appropriate Management Level (AML), as set by the Herd Management Area Plans.

Burros continuing to use public lands, even outside of a HA or HMA, as any part of their habitat remain protected under the Wild Horse and Burro Act. These burros will be removed by the BLM when requested, or when a regular removal is scheduled.

Methods for burro removal include bait or water trapping, roping, helicopter drive trapping, and helicopter-assisted roping. The method will vary with the situation. Helicopter drive trapping is usually required for gathering larger numbers of wild burros. Bait trapping is normally used for private land removals or when smaller numbers are planned for removal.

Wilderness Characteristics

Administrative Actions

- Sites and areas affected by human activities will be reclaimed when such locales or sites are no longer needed by authorized land uses.
- At time of renewal of any existing ROWs, the BLM will discuss with the grant holder the possibility of relocating the ROW outside of lands managed to maintain wilderness characteristics. Remove facilities that are no longer used.
- Existing and new operations for locatable mining will be regulated using the 43 CFR 3809 regulations to prevent unnecessary and undue degradation of the lands.
- AGFD's use of motorized and mechanized equipment off designated routes is considered an administrative use and will be allowed in suitable locations (as agreed to by the BLM and AGFD) for such purposes including but not limited to:
 - Water supplementation.
 - Collar retrieval.
 - Capture and release of wildlife.
 - Maintenance, repair, and building or rebuilding of wildlife waters.
 - Discretionary surface-disturbing activities would be addressed as provided for in Management Actions.

Standard Operating Procedures

The BLM will review, through this land use planning process, lands within the planning area that may possess wilderness characteristics, but that are not currently designated WAs or WSAs. Consistent with the Secretary of the Interior letter to Senator Robert Bennett, dated April 11, 2003, the settlement in the case of *Utah v. Norton*, dated April 14, 2003, and IM No. 2003-275 – Change 1, *Consideration of Wilderness Characteristics in Land Use Plans*, dated October 23, 2003, the BLM has the authority to address wilderness characteristics and describe management prescriptions in the Approved RMP. In keeping with the public involvement process that is part of all land use planning efforts, the BLM is committed to considering public input regarding wilderness characteristics through the land use planning process. Where appropriate, the BLM may specify in the Approved RMP areas to be managed for maintenance or

enhancement of their wilderness characteristics. However, also consistent with the documents cited above, the BLM will not establish new WSAs, manage any lands not already established as WSAs prior to April 2003 under the FLPMA Section 603 non-impairment standard, or report such areas to Congress. Where lands having resource values meeting the relevance and importance criteria necessary to establish an ACEC coincide with the presence of wilderness characteristics, the special management associated with an ACEC, if designated, may also protect wilderness characteristics.

Appendix C

Biological Resources

The species listed in the following tables come from personal staff observations, information provided by partnering agencies, and texts listed in the reference section.

Vegetation

Table C-1: Vegetation Communities within LHFO Boundaries

Vegetation Community	Acres	LHFO Land	Plant Growth Form	Dominant Species	Elevation (Feet)	Climate	Precipitation (inches)
Lower Sonoran Desertscrub	567,107.08	41.74%	Shrub-microphyllous	Creosotebush <i>(Larrea tridentata)</i> White bursage <i>(Ambrosia dumosa)</i> Ocotillo <i>(Fouquieria splendens)</i> Brittlebrush <i>(Encelia farinose)</i> Fourwing saltbrush <i>(Atriplex canescens)</i> Blue palo verde <i>(Parkinsonia florida)</i> Foothill palo verde <i>(Parkinsonia microphylla.)</i> Saguaro <i>(Carnegiea gigantea)</i> Mesquite <i>(Prosopis sp.)</i> Ironwood <i>(Olneya tesota)</i>	<3,000	Subtropical	2–9

Vegetation Community	Acres	LHFO Land	Plant Growth Form	Dominant Species	Elevation (Feet)	Climate	Precipitation (inches)
				Catclaw acacia (<i>Acacia greggii</i>)			
				Smoketree (<i>Psorothamnus spinosus</i>)			
				Big galleta grass (<i>Pleuraphis rigida thurb</i>)			
Upper Sonoran Desertscrub	621,834.72	45.8%	Shrub-microphyllous	Blue palo verde (<i>Parkinsonia florida</i>)	984–3,280	Subtropical	3–10
				Foothill palo verde (<i>Parkinsonia microphylla.</i>)			
				Ironwood (<i>Olneya tesota</i>)			
				Creosotebush (<i>Larrea tridentate</i>)			
				White bursage (<i>Ambrosia dumosa</i>)			
				Ocotillo (<i>Fouquieria splendens</i>)			
				Jojoba (<i>Simmondsia chinensis</i>)			
				Cholla (<i>Opuntia spp.</i>)			
				Fish-hook pincushion (<i>Mammillaria grahamii</i>)			
				Compass cactus (<i>Ferrocactus cylindracens</i>)			
				Saguaro (<i>Carnegiea gigantea</i>)			
Mohave Desertscrub	73,519.24	5.4%	Shrub microphyllous	Creosotebush (<i>Larrea tridentata</i>)	980–4,000	Warm-Temperate	1–8
				Joshua tree (<i>Yucca brevifolia</i>)			

Vegetation Community	Acres	LHFO Land	Plant Growth Form	Dominant Species	Elevation (Feet)	Climate	Precipitation (inches)
				All-scale atriplex (<i>Atriplex pyncarpa</i>)			
				Brittlebush (<i>Encelia farinosa</i>)			
				Desert holly (<i>Atriplex hymenelytra</i>)			
				White burrobrush (<i>Hymenolea salsola</i>)			
				Shadescale (<i>Atriplex confertifolia</i>)			
				Blackbrush (<i>Coleogyne ramosissima</i>)			
				Engelman hedgehog (<i>Echinocereus engelmannii</i>)			
				Silver cholla (<i>Opuntia echinocarpa</i>)			
				Mojave pricklypear (<i>Opuntia phaeacantha</i>)			
				Beavertail cactus (<i>Opuntia basilaris</i>)			
				Many-headed barrel cactus (<i>Echinocactus polycephalus</i>)			
				Big galleta grass (<i>Pleuraphis rigida</i>)			
				Numerous ephemeral forbs			
Great Basin Pinyon- Juniper Woodland	254.53	0.02%	Tree-Conifer	California juniper (<i>Juniperus californica</i>)	5,000– 5,100	Warm- Temperate	5–15

Vegetation Community	Acres	LHFO Land	Plant Growth Form	Dominant Species	Elevation (Feet)	Climate	Precipitation (inches)
				Singleleaf pinyon pine (<i>Pinus monophylla</i>)			
				Big sagebrush (<i>Artemisia tridentata</i>)			
				Snakeweed (<i>Gutierrezia sarothrae</i>)			
				Rabbitbush (<i>Ericameria</i> spp.)			
				Winterfat (<i>Ceratoides lanata</i>)			
				Cliffrose (<i>Purshia stansburiana</i>)			
				Apache plume (<i>Fallugia paradoxa</i>)			
				Blue gramma (<i>Bouteloua gracilis</i>)			
				Galleta grass (<i>Pleuraphis jamesii</i>)			
				Indian rice grass (<i>Achratherum hymenoidesi</i>)			
				Western wheatgrass (<i>Agropyron smithii</i>)			
				Several muhleys (<i>Muhlenbergia</i> sp.)			
				Dropseeds (<i>Sporobolus</i> sp.)			
Interior Chaparral	35,139.24	2.48%	Shrub-sclerophyll	Shrub live oak (<i>Quercus turbinella</i>) Skunkbush sumac (<i>Aromatica</i>)	3,280–6,070	Warm-Temperate	5–15

Vegetation Community	Acres	LHFO Land	Plant Growth Form	Dominant Species	Elevation (Feet)	Climate	Precipitation (inches)
				<i>vartrilobata</i>) Silktassel (<i>Garrya flavescens</i>) Desert ceanothus (<i>Ceanothus greggii</i>) Cliffrose (<i>Purshia stansburiana</i>) Arizona rosewood (<i>Vauquelina californica</i>) Sideoats gramma (<i>Bouteloua curtipendula</i>) Hairy gramma (<i>Bouteloua hirsute</i>) Plains lovegrass (<i>Eragrostis intermedia</i>) Wolftail (<i>Lycurus setosus</i>) Single threeawn (<i>Aristida schiedeana</i>).			
Riparian	5,253.11	0.4%	Tree–deciduous	Mesquite (<i>Prosopis</i> sp.) Gooddings willow (<i>Salix gooddingii</i>) Netleaf hackberry (<i>Celtis reticulata</i>) Cottonwood (<i>Populus fremontii</i>) Arrow-weed (<i>Pluchea sericea</i>) Quailbush	Various	Various	Various

Vegetation Community	Acres	LHFO Land	Plant Growth Form	Dominant Species	Elevation (Feet)	Climate	Precipitation (inches)
				<i>(Atriplex lentiformis)</i> Saltcedar <i>(Tamarix sp.)</i>			
Mesquite/ Ephemeral Wash Woodland	43,443.69	3.2%	Tree- deciduous	Mesquite <i>(Prosopis sp.)</i> Desert star vine <i>(Brandegea bigelovii)</i> Cat's claw acacia <i>(Acacia greggii)</i> Blue palo verde <i>(Parkinsonia florida)</i> , Ironwood <i>(Olneya tesota)</i> Saltcedar <i>(Tamarix sp.)</i>	Various	Various	Various
Agriculture	1,765.84	0.13%					
Urban	1,872.77	0.13%					
Water	8,198.58	0.6%					
	1,358,389.1 4	100%					

Brown 1982.

Table C-2: Submerged and Aquatic Plants of Lake Havasu and Lower Colorado River

Type	Scientific Name	Common name	Origin
Submerged aquatic species	<i>Ceratophyllum demersum</i>	Coon's tail	Native
	<i>Chara</i> sp.	Muskgrass	Native
	<i>Potamogeton</i> sp.	Pondweed	Native
	<i>Najas marina</i>	Spiny naiad	Native
	<i>Myriophyllum</i> sp.	Watermilfoil	Non-Native
Emergent	<i>Typha</i> sp.	Cattail	Native
	<i>Hydrocotyle</i> sp.	Pennywort	Native
	<i>Juncus</i> sp.	Rush	Native
	<i>Scirpus olneyi</i>	Salt marsh sedge	Native
	<i>Rorippa</i> sp.	Watercress	Native
	<i>Ruppia</i> sp.	Widgeon grass	Native
Floating	<i>Lemna</i> sp.	Duckweed	Native

Minckly pers comm.; Blair pers comm., 2005.

Table C-3: Plants Possibly Found in the LHFO Boundary

Family Name	Scientific Name	Common Name	Classification
Algae			
CHARACEAE	<i>Nitella hyaline</i>	Muskgrass	
Green Algae			
Ferns and Fern Allies			
DRYOPTERIDACEAE	<i>Woodsia oregano</i>	Oregon woodsia	Perennial herb
Wood Fern			
EQUISETACEAE	<i>Equisetum hyemale</i>	Common scouringrush	
Horsetail			
	<i>Equisetum funstonii</i>	California horsetail	
PTERIDACEAE	<i>Adiantum capillus-veneris</i>	Venus hair fern, Maidenhair fern	Perennial herb
Brake			
	<i>Cheilanthes covillei</i>	Coville's lipfern	Perennial herb
	<i>Cheilanthes parryi</i>	Parry's cloakfern	Perennial herb
	<i>Pallaea mucronata</i> var. <i>californica</i>	Birdsfoot fern	Perennial
	<i>Pentagramma triangularis</i>	Goldback fern	Perennial herb

Family Name	Scientific Name	Common Name	Classification
Gymnosperms			
CUPRESSACEAE Cypress	<i>Juniperus californica</i>	California juniper	Tree
PINACEAE Pine	<i>Pinus monophylla</i>	Singleleaf pinyon pine	Tree
EPHEDRACEAE Ephedra	<i>Ephedra faciculata</i>	Mohave ephedra	Shrub
	<i>Ephedra funereal</i>	Death Valley ephedra	Shrub
	<i>Ephedra nevadensis</i>	Nevada Mormon Tea	Shrub
	<i>Ephedra torreyana</i>	Torrey ephedra	Shrub
Angiosperms (Dicots)			
AZIOECEAE Carpetweed	<i>Sesuvium verrucosum</i>	Western sea purslane	Perennial herb
	<i>Trianthema portuacastrum</i>	Horse purslane	Annual
AMARANTHACEAE Amaranth	<i>Amaranthus blitoides</i>	Prostrate pigweed	Annual
	<i>Amaranthus fimbriants</i>	Fringed amaranth	Annual
	<i>Amaranthus retroflexus</i>	Red root pigweed	Annual
	<i>Tidestromia lanuginose</i>	Espanta vaqueros	Annual
	<i>Tidestromia oblongifolia</i>	Honeysweet	Perennial herb
APIACEAE Carrot, Parsley	<i>Bowlesia incana</i>	Bowlesia, Pennywort	Annual
	<i>Cymopteris purpurascens</i>	Widewing spring parsley	Perennial herb
	<i>Hydrocotyle verticillata</i>	Water (whorled) pennywort	Perennial herb
	<i>Lomatium foeniculaceum</i>	Desert parsley	Perennial herb
	<i>Lomatium parryi</i>	Parrys lomatium	Perennial herb
	<i>Yabea microcarpa</i>	California hedge parsley	Annual
	APOCYNACEAE Dogbane	<i>Amsonia tomentosa</i>	Woolly amsonia
	<i>Apocynum cannabinum</i>	Indian hemp	Perennial herb
ASCLEPIADACEAE Milkweed	<i>Asclepia erosa</i>	Desert milkweed	Perennial herb
	<i>Asclepia subulata</i>	Rush milkweed	Shrub
	<i>Asclepia albicans</i>	White-stemmed milkweed	Perennial

Family Name	Scientific Name	Common Name	Classification
	<i>Asclepias subverticillata</i>	Whorled milkweed	Perennial herb
	<i>Cynanchum utahense</i>	Swallowwort	Perennial herb
	<i>Sarcostemma hirtellum</i>	Trailing milkweed	Perennial vine
	<i>Sarcostemma heterophyllum</i>	Climbing milkweed	Perennial vine
ASTERACEAE	<i>Acamptopappus sphaerocephalus</i>	Goldenhead	Shrub
Sunflower	<i>Acourtia wrightii</i>	Wrights perezia	Shrub
	<i>Adenophyllum cooperi</i>	Coopers glandweed	Perennial
	<i>Adenophyllum porophylloides</i>	San Diego dyssodia	Perennial herb
	<i>Ambrosia acanthicarpa</i>	Sand bursage, Sandbur	Annual
	<i>Ambrosia ambrosiodes</i>	Ambrosia leaved burbrush	Shrub
	<i>Ambrosia dumosa</i>	White bursage	Shrub
	<i>Ambrosia eriocentra</i>	Woolly bursage	Shrub
	<i>Amphipappus fremontii</i>	Chaffbrush	Shrub
	<i>Anisocoma acaulis</i>	Scalebud	Annual
	<i>Artemisia carruthii</i>	Carruths wormwood	Perennial herb
	<i>Artemisia ludoviciana</i>	Western mugwort	Perennial herb
	<i>Aster eatonii</i>	Eaton aster	Perennial herb
	<i>Aster exilis</i>	Slender aster	Annual
	<i>Aster tephrodes</i>	Ash-colored aster	Biennial
	<i>Atrichoseris pltyphylla</i>	Gravel ghost, Parachute Plant	Annual
	<i>Baccharis brachyphylla</i>	Shortleaf seepwillow	Shrub
	<i>Baccharis emoryi</i>	Emory's seepwillow	Shrub
	<i>Baccharis salicifolia</i>	Sticky seepwillow	Shrub
	<i>Baccharis sarothroides</i>	Broom baccharis	Shrub
	<i>Baccharis sergiloides</i>	Squaw waterweed, desert baccharis	Shrub
	<i>Baccharis vimenea</i>	Mulefat	Shrub
	<i>Baileya multiradiata</i>	Desert marigold	Perennial herb
	<i>Baileya pleniradiata</i>	Woolly desert marigold	Annual
	<i>Bebbia juncea</i>	Sweetbbush	Shrub
	<i>Brickellia arguta</i>	Spiny brickellbush	Shrub
	<i>Brickellia atractyloides</i>	Spiny brickellbush	Shrub
	<i>Brickellia californica</i>	California brickellbush	Shrub
	<i>Brickellia desertorum</i>	Desert brickellbush	Shrub

Family Name	Scientific Name	Common Name	Classification
	<i>Brickellia incana</i>	Woolly brickellbush	Shrub
	<i>Brickellia longifolia</i>	Willowleaf brickellbush	Shrub
	<i>Brickellia oblongifolia</i>	Mohave brickellbush	Perennial herb
	<i>Calycoseris parryi</i>	Yellow tackstem, Perrys tackstem	Annual
	<i>Calycoseris wrightii</i>	White tackstem	Annual
	<i>Chaenactis carphoclinia</i>	Pebble pincushion	Annual
	<i>Chaenactis fremontii</i>	Fremonts pincushion, Desert pincushion	Annual
	<i>Chaenactis macrantha</i>	Mojave pincushion	Annual
	<i>Chaenactis stevioides</i>	Esteves pincushion, Desert pincushion	Annual
	<i>Chloracantha spinosa</i>	Mexican devilweed	Subshrub
	<i>Chrysopsis villosa</i>	Golden aster	Perennial herb
	<i>Cirsium arizonicum</i>	Arizona thistle	Biennial
	<i>Cirsium mohavense</i>	Mojave thistle	Biennial
	<i>Cirsium neomexicanum</i>	New Mexico thistle	Biennial
	<i>Cirsium wheeleri</i>	Wheeler's Thistle	Perennial herb
	<i>Conyza canadensis</i>	Horseweed	Annual
	<i>Conyza coulteri</i>	Coulters horseweed	Annual
	<i>Crepis intermedia</i>	Grays hawksbeard	Perennial herb
	<i>Dicoria canescens</i>	Dune dicoria, desert dicoria, Grays sandplant, bug seed	Annual
	<i>Eclipta prostrate</i>	Wormbane	Annual
	<i>Encelia farinose</i>	Brittlebush	Shrub/Common
	<i>Encelia frutescens</i>	Bush encelia, rayless encelia	Shrub
	<i>Encelia virginensis</i>	Virgin encelia	Shrub
	<i>Enceliopsis argophylla</i>	Sunray	Perennial herb
	<i>Ericameria cooperi</i>	Cooper's goldenbrush	Shrub
	<i>Ericameria cuneata</i>	Wedgeleaf goldenbrush	Shrub
	<i>Ericameria laricifolia</i>	Turpentinebrush	Shrub
	<i>Ericameria linearifolia</i>	Mohave goldenbrush	Shrub
	<i>Ericameria nana</i>	Dwarf goldenbrush	Shrub
	<i>Ericameria nauseosus</i>	Rubber rabbitbrush	Shrub
	<i>Ericameria paniculatus</i>	Mohave rabbitbrush	Shrub
	<i>Ericameria teretifolius</i>	Needleleaf rabbitbrush	Shrub
	<i>Erigeron concinnus</i>	Elegant fleabane	Perennial herb

Family Name	Scientific Name	Common Name	Classification
	<i>Erigeron lobatus</i>	Lobeleaf fleabane	Annual
	<i>Eriophyllum lanosum</i>	White woolly daisy	Annual
	<i>Eriophyllum wallacei</i>	Woolly daisy, wallace daisy	Annual
	<i>Eupatorium herbaceum</i>	White thoroughwort	Perennial herb
	<i>Filago californica</i>	Fluffweed	Annual
	<i>Filago depressa</i>	Little fluffweed	Annual
	<i>Geraea canescens</i>	Desert sunflower	Annual
	<i>Glyptopleura marginata</i>	Crustweed	Annual
	<i>Gnaphalium palustre</i>	Lowland everlasting	Annual
	<i>Gnaphalium stramineum</i>	Yellow everlasting	Biennial
	<i>Gnaphalium wrightii</i>	Wrights everlasting	Perennial herb
	<i>Gutierrezia microcephala</i>	Matchweed	Shrub
	<i>Gutierrezia sarothrae</i>	Snakeweed	Shrub
	<i>Helianthus annuus</i>	Common sunflower	Annual
	<i>Helianthus anomalus</i>	Sand sunflower	Annual
	<i>Heterotheca psammophila</i>	Camphorweed, Sand golden aster	Annual/Biennial
	<i>Hymenoclea salsola</i>	Cheesebush	Shrub
	<i>Hymenoxys richardsonii</i>	Colorado rubberplant	Perennial herb
	<i>Isocoma acradenia</i>	Alkali goldenbush	Shrub
	<i>Iva axillaries</i>	Poverty weed	Perennial herb
	<i>Lactuca tatarica</i>	Blue lettuce	Perennial herb
	<i>Layia glandulosa</i>	White layia	Annual
	<i>Machaeranthera arida</i>	Silver Lake daisy	Annual
	<i>Machaeranthera asteroides</i>	Emorys aster	Perennial herb
	<i>Machaeranthera canescens</i>	Thickleaf aster	Biennial
	<i>Machaeranthera pinnatifida</i>	Spiny goldenbush	Perennial herb
	<i>Malacothrix clevelandii</i>	Cleveland desert dandelion	Annual
	<i>Malacothrix coulteri</i>	Snakeshead	Annual
	<i>Malacothrix glabrata</i>	Desert dandelion	Annual
	<i>Malacothrix sonchoides</i>	Yellow saucers	Annual
	<i>Monoptilon bellidiforme</i>	Desert star	Annual
	<i>Monoptilon belioides</i>	Mohave Desert star	Annual

Family Name	Scientific Name	Common Name	Classification
	<i>Palafoxia arida</i>	Spanish needle	Annual
	<i>Pectis papposa</i>	Chinchweed	Annual
	<i>Perityle congesta</i>	Compact rockdaisy	Perennial herb
	<i>Perityle emoryi</i>	Rockdaisy	Annual
	<i>Perityle megalcephala</i>	Largehead rockdaisy	Perennial
	<i>Peucephyllum schottii</i>	Pygmy cedar, desert fir	Shrub
	<i>Pleurocoronis pluriseta</i>	Arrowleaf	Shrub
	<i>Pluchea odorata</i>	Saltmarsh fleabane	Shrub
	<i>Pluchea sericea</i>	Arrowweed	Shrub
	<i>Porophyllum gracile</i>	Odora	Subshrub
	<i>Prenanthea exigua</i>	Prenanthea	Annual
	<i>Psathyrotes annua</i>	Mealy rosettes	Annual
	<i>Psathyrotes pilifera</i>	Piliferous turtleback	Annual
	<i>Psathyrotes ramosissima</i>	Turtleback	Annual
	<i>Psilostrophe cooperi</i>	Paperflower	Shrub
	<i>Rafinesquia californica</i>	California chicory	Annual
	<i>Rafinesquia neomexicana</i>	Desert chicory	Annual
	<i>Senecio flaccidus</i>	Groundsel	Perennial herb
	<i>Senecio mohavensis</i>	Mohave groundsel	Annual
	<i>Senecio multilobatus</i>	Vinta groundsel	Perennial herb
	<i>Solidago confines</i>	Southern goldenrod	Perennial herb
	<i>Sonchus asper</i>	Prickly sowthistle	Annual
	<i>Sonchus oleraceus</i>	Common sowthistle	Annual
	<i>Stephanomeria pauciflora</i>	Wire lettuce	Perennial herb
	<i>Stephanomeria thurberi</i>	Thurbers wire lettuce	Perennial
	<i>Stylocline intertexta</i>	Morefield neststraw	Annual
	<i>Stylocline micropoides</i>	Desert neststraw	Annual
	<i>Stylocline psilocarphoides</i>	Pecks neststraw	Annual
	<i>Taraxacum officinale</i>	Dandelion	Perennial herb
	<i>Tetradymia canescens</i>	Horshbrush	Shrub
	<i>Tetradymia stenolepis</i>	Mojave horsebush	Shrub
	<i>Thymophylla pentachaeta</i>	Scale glandbush	Low shrub

Family Name	Scientific Name	Common Name	Classification
	<i>Trichoptilium incisum</i>	Yellowheads	Perennial herb
	<i>Trixis californica</i>	Trixis	Shrub
	<i>Uropappus lindleyi</i>	Silver stars, silver puffs	Annual
	<i>Viguiera parishii</i>	Goldeneye	Shrub
	<i>Xanthium strumarium</i>	Cocklebur	Annual
	<i>Xylorhiza tortifolia</i>	Desert aster	Shrub
BIGNONIACEAE	<i>Chilopsis linearis</i>	Desert willow	Shrub/Tree
Bignonia			
BORAGINACEAE	<i>Amsinckia eastwoodiae</i>	Tarweed fiddleneck	Annual
Forget-Me-Not			
	<i>Amsinckia menziesii</i>	Ranchers fireweed	Annual
	<i>Amsinckia tessellate</i>	Rough fiddleneck	Annual
	<i>Cryptantha angustifolia</i>	Narrowleaf cryptantha	Annual
	<i>Cryptantha barbiger</i>	Bearded cryptantha	Annual
	<i>Cryptantha cinerea</i>	Bownut cryptantha	Perennial herb
	<i>Cryptantha circumscissa</i>	Opening cryptantha	Annual
	<i>Cryptantha decipiens</i>	Beguiling cryptantha	Annual
	<i>Cryptantha dumetorum</i>	Greenes cryptantha	Annual
	<i>Cryptantha holoptera</i>	Winged cryptantha	Annual
	<i>Cryptantha maritime</i>	Guadalupe cryptantha, white-hared forget-me-not	Annual
	<i>Cryptantha micratha</i>	Redroot cryptantha	Annual
	<i>Cryptantha muricata</i>	Prickly cryptantha	Annual
	<i>Cryptantha nevadensis</i>	Nevada cryptantha	Annual
	<i>Cryptantha pterocarya</i>	Wingnut cryptantha	Annual
	<i>Cryptantha racemosa</i>	Baja cryptantha	Annual
	<i>Cryptantha recurvata</i>	Recurved cryptantha	Annual
	<i>Cryptantha utahensis</i>	Scented cryptantha	Annual
	<i>Cryptantha virginensis</i>	Virgin River cryptantha	Biennial/Perennial herb
	<i>Heliotropium convolvulaceum</i>	False morning glory	Annual
	<i>Heliotropium curassavicum</i>	Heliotrope	Perennial herb
	<i>Lappula occidentalis</i>	Western stickseed	Annual
	<i>Pectocarya heterocarpa</i>	Unequal combseed	Annual
	<i>Pectocarya platycarpa</i>	Flattened combseed	Annual

Family Name	Scientific Name	Common Name	Classification
	<i>Pectocarya recurvata</i>	Bent combseed	Annual
	<i>Pectocarya setosa</i>	Saucer combseed	Annual
	<i>Plagiobothrys arizonicus</i>	Arizona popcornflower	Annual
	<i>Plagiobothrys jonesii</i>	Jones popcornflower	Annual
	<i>Plagiobothrys leptocladus</i>	Hairy popcornflower	Annual
	<i>Tiquilia canescens</i>	Woody tiquilia	Perennial
	<i>Tiquilia latior</i>	Matted tiquilia	Perennial
	<i>Tiquilia palmeri</i>	Palmers tiquilia	Perennial herb
	<i>Tiquilia plicata</i>	Pleated tiquilia, Crinkle mats, Plicate codenia	Perennial
BRASSICACEAE	<i>Arabis glaucovalula</i>	Mustard	Perennial herb
Mustard	<i>Arabis gracilipes</i>	Rockcress	Perennial herb
	<i>Arabis perennans</i>	Common rockcress	Perennial herb
	<i>Arabis pulchra</i>	Princess rockcress	Perennial herb
	<i>Brassica juncea</i>	Indian mustard	Annual
	<i>Brassica tournefortii</i>	Sahara mustard	Annual
	<i>Capsella bursa-pastoris</i>	Shephards purse	Annual
	<i>Caulanthus cooperi</i>	Coopers wild cabbage	Annual
	<i>Descurainia obtuse</i>	Desert tansymustard	Annual
	<i>Descurainia pinnata</i>	Pinnate tansymustard	Annual
	<i>Descurainia Sophia</i>	Flixweed	Annual
	<i>Dithyrea californica</i>	Spectaclepod	Annual
	<i>Draba cuneifolia</i>	Wedgeleaf	Annual
	<i>Erysimum capitatum</i>	Wallflower	Perennial herb
	<i>Erysimum repandum</i>	Spreading wallflower	Annual
	<i>Guillenia lasiophylla</i>	California mustard	Annual
	<i>Lepidium densiflorum</i>	Densecress	Annual
	<i>Lepidium dictyotum</i>	Alkali peppergrass	Annual
	<i>Lepidium fremontii</i>	Desert alyssum	Shrub
	<i>Lepidium lasiocarpum</i>	Peppergrass	Annual
	<i>Lepidium montanum</i>	Mountain pepperplant	Perennial herb
	<i>Lesquerella tenella</i>	Beadpod	Annual
	<i>Lobularia maritime</i>	Sweet alyssum	Perennial herb
	<i>Malcolmia Africana</i>	African malcolmia	Annual

Family Name	Scientific Name	Common Name	Classification
	<i>Physaria newberryi</i>	Newberrys twinpod	Perennial herb
	<i>Rorippa nasturtium-aquaticum</i>	Watercress	Perennial
	<i>Sinapis arvensis</i>	Charlock	Annual
	<i>Sisymbrium altissimum</i>	Tumble mustard	Annual
	<i>Sisymbrium irio</i>	London rocket	Annual
	<i>Stanleya pinnata</i>	Princes plume	Perennial
	<i>Streptanthella longirostris</i>	Longbeak twistflower	Annual
	<i>Thelypodium integrifolium</i>	Tall thelypody	Biennial
	<i>Thelypodium wrightii</i>	Wrights thelypody	Annual
	<i>Thlaspi arvense</i>	Pennycress, fanweed	Annual/Biennial
	<i>Thysanocarpus curvipes</i>	Lacepod, fringe pod	Annual
BUDDLEJACEAE	<i>Buddleja utahensis</i>	Panamint butterflybush	Shrub
Buddleja			
CACTACEAE	<i>Echinocactus polycephalus</i>	Cottontop cactus	Perennial
Cactus			
	<i>Echinocereus engelmannii</i>	Hedgehog cactus	Perennial
	<i>Echinocereus fasciculatus</i>	Arizona hedgehog	Perennial
	<i>Ferocactus cylindraceus</i>	Barrel cactus	Perennial
	<i>Mammillaria grahamii</i>	Millers fishhook	Perennial
	<i>Mammillaria tetrancistra</i>	Fishhook cactus, pincushion cactus	Perennial
	<i>Opuntia acanthocarpa</i>	Buckhorn cholla	Perennial
	<i>Opuntia basilaris</i>	Bakersfield cactus	Perennial
	<i>Opuntia bigelovii</i>	Teddybear cholla, jumpling cholla	Perennial
	<i>Opuntia chlorotica</i>	Pancake pricklypear	Perennial
	<i>Opuntia echinocarpa</i>	Silver cholla	Perennial
	<i>Opuntia erinacea</i>	Old man pricklypear, Mojave pricklypear	Perennial
	<i>Opuntia parishii</i> Orc.	Devil cholla, club cholla	Perennial
	<i>Opuntia polyacantha</i>	Central pricklypear, rufus-spine pricklypear	Perennial
	<i>Opuntia ramosissima</i>	Diamond cholla, pencil cholla	Perennial
	<i>Sclerocactus johnsonii</i>	Pigmy barrel cactus	Perennial

Family Name	Scientific Name	Common Name	Classification
CAMPANULACEAE	<i>Lobelia cardinalis</i>	Cardinal flower	Perennial
Bellflower			
	<i>Nemacladus glanduliferus</i>	Slender threadplant	Annual
	<i>Nemacladus sigmoideus</i>	Curved threadplant	Annual
CAPPARACEAE	<i>Wislizenia refracta</i>	Jackass clover	Annual
Caper			
CAPRIFOLIACEAE			Subshrub
Honeysuckle			
CARYOPHYLLACEAE	<i>Achronychia cooperi</i>	Frostmat	Annual
Pink			
	<i>Arenaria macradenia</i>	Shrubby sandwort, Desert sandwort	Subshrub
	<i>Scopulophila rixfordii</i>	Rixfords rockwort	Perennial
	<i>Silene antirrhina</i>	Annual catchfly	Annual
	<i>Spergularia marina</i>	Salt sandspurrey	Annual
	<i>Stellearia nitens</i>	Shining chickweed	Annual
CELASTRACEAE	<i>Mortonia utahensis</i>	Mortonia	Shrub
Staff tree			
CHENOPODIACEAE	<i>Allenrolfea occidentalis</i>	Pickleweed	
Goosefoot			
	<i>Atriplex canescens</i>	Fourwing saltbush	Shrub
	<i>Atriplex confertifolia</i>	Shadscale	Shrub
	<i>Atriplex elegans</i>	Wheelscale	Annual
	<i>Atriplex hymenelytra</i>	Desert holly	Shrub
	<i>Atriplex lentiformis</i>	Quailbrush	Shrub
	<i>Atriplex linearis</i>	Narrow-leaved saltbush	
	<i>Atriplex semibaccata</i>	Australian saltbush	Perennial
	<i>Bassia hyssopifolia</i>	Bassi, Fourhorn smotherweed	Annual
	<i>Chenopodium album</i>	Lambs quarters, pigweed	Annual
	<i>Chenopodium berlandieri</i>	Berlandieris pigweed, pitseed goosefoot	Annual
	<i>Chenopodium fremontii</i>	Fremonts goosefoot	Annual
	<i>Corispermum villosum</i>	Bugseed	Annual
	<i>Grayia spinosa</i>	Hopsage	Shrub
	<i>Kochia scoparia</i>	Summer cypress	Annual
	<i>Krascheninnikovia lanata</i>	Winterfat	Shrub

Family Name	Scientific Name	Common Name	Classification
	<i>Suaeda moquinii</i>	Seepbush Iodine weed	Perennial herb
CONVOLVULACEAE	<i>Convolvulus arvensis</i>	Bindweed	Perennial herb
Morning glory			
	<i>Cuscuta denticulate</i>	Desert dodder	
CRASSULACEAE	<i>Dudleya pulverulenta</i>	Arizona liveforever, Chalk liveforever	
Stonecrop			
CROSSOSOMATACEAE	<i>Crossosoma bigelovii</i>	Greasewood	Shrub
Crossosoma			
	<i>Glossopetalon spinescens</i>	Nevada greasewood	Shrub
CUCURBITACEAE	<i>Cucurbita palmate</i>	Coyote melon, palmate leaved gourd	Perennial vine
Gourd			
	<i>Marah fabaceus</i>	Manroot	Perennial vine
	<i>Brandegea begelovii</i>	Desert star vine	Perennial vine
CUSCUTACEAE	<i>Cuscuta californica</i>	California dodder	Annual vine/Parasitic
Dodder			
	<i>Cuscuta denticulate</i>	Desert dodder	Annual/Parasitic
	<i>Cuscuta pentagona</i>	Field dodder	Annual vine/Parasitic
ELAEAGNACEAE	<i>Elaeagnus angustifolia</i>	Russian olive	Tree
Oleaster			
EUPORBIACEAE	<i>Chamaesyce albomarginata</i>	Sandmat, rattlesnake weed	Perennial herb
Spurge			
	<i>Chamaesyce micromera</i>	Desert spurge	Annual
	<i>Chamaesyce ocellata</i>	Valley spurge	Annual
	<i>Chamaesyce parishii</i>	Parishs spurge	Perennial herb
	<i>Chamaesyce ploycarpa</i>	Smallseed sandmat	Perennial herb
	<i>Croton californicus</i>	Sand croton	Shrub
	<i>Ditaxis neomexicana</i>	New Mexico ditaxis	Annual
	<i>Euphorbia incise</i>	Mojave spurge	Perennial herb
	<i>Stillingia linearifolia</i>	Narrowleaf stillingia	Perennial herb
	<i>Stillingia spinulosa</i>	Spiny stillingia	Perennial herb
	<i>Tetracoccus hallii</i>	Halls tetracoccus	Shrub
FABACEAE	<i>Acacia greggii</i>	Catclaw acacia	Shrub
Legume			
	<i>Astragalus acutirostris</i>	Sharpkeeled milkvetch	Annual
	<i>Astragalus calycosus</i>	Scapose milkvetch	Perennial herb
	<i>Astragalus geyeri</i>	Threecorner milkvetch	Annual

Family Name	Scientific Name	Common Name	Classification
	<i>Astragalus layneae</i>	Layne milkvetch	Perennial herb
	<i>Astragalus lentiginosus</i>	Freckled milkvetch	Annual/Perennial
	<i>Astragalus mokiacensis</i>	Mokiak milkvetch	Perennial
	<i>Astragalus newberryi</i>	Newberry milkvetch	Perennial herb
	<i>Astragalus nutallianus</i>	Smallflower milkvetch	Perennial
	<i>Astragalus praelongus</i>	Stinking milkvetch	Perennial herb
	<i>Astragalus preussii</i>	Desert milkvetch	Perennial
	<i>Astragalus sabulonum</i>	Gravel milkvetch	Annual
	<i>Astragalus tephroedes</i>	Ashen milkvetch	Perennial herb
	<i>Parkinsonia floridum</i>	Blue Paloverde	Tree
	<i>Parkinsonia microphyllum</i>	Foothills Paloverde	Tree
	<i>Dalea mollis</i>	Silk Dalea	Annual
	<i>Dalea mollissima</i>	Silky prairieclover	Annual
	<i>Dalea searlsiae</i>	Searls prairieclover	Perennial herb
	<i>Lotus humistratus</i>	Low trefoil	Annual
	<i>Lotus rigidus</i>	Bush trefoil, Deervetch	Shrub
	<i>Lotus salsuginosus</i>	Humble trefoil	Annual
	<i>Lotus strigosus</i>	Desert birdfoot trefoil	Annual
	<i>Lupinus arizonicus</i>	Arizona lupine	Annual
	<i>Lupinus concinnus</i>	Bajada lupine, Elegant lupine	Annual
	<i>Lupinus flavoculatus</i>	Yelloweye lupine	Annual
	<i>Lupinus shockleyi</i>	Desert lupine	Annual
	<i>Lupinus sparsiflorus</i>	Mojave lupine, Narrow leaf lupine	Annual
	<i>Marina parryi</i>	Parrys indigobush	Perennial herb
	<i>Medicago lupulina</i>	Black medick, Yellow trefoil	Annual
	<i>Medicago polymorpha</i>	California burclover	Annual
	<i>Medicago sativa</i>	Alfalfa	Perennial herb
	<i>Melilotus alba</i>	White sweetclover	Annual
	<i>Melilotus indicus</i>	Sourclover	Annual
	<i>Melilotus officinalis</i>	Yellow sweetclover	Annual
	<i>Olneya tesota</i>	Ironwood	Tree
	<i>Parkinsonia aculeate</i>	Mexican paloverde	Tree
	<i>Pediomelum castoreum</i>	Beaver dam breadroot	Perennial herb
	<i>Prosopis glandulosa</i>	Honey mesquite	Tree
	<i>Prosopis pubescens</i>	Screwbean mesquite	Tree

Family Name	Scientific Name	Common Name	Classification
	<i>Psorothamnus fremontii</i>	Indigobush	Shrub
	<i>Psorothamnus spinosus</i>	Smoketree	Tree
	<i>Senna armata</i>	Spiny senna	Shrub
	<i>Senna covesii</i>	Coues cassia	Subshrub
	<i>Sesbania macrocarpa</i>	Colorado River hemp	
FAGACEAE	<i>Quercus turbinella</i>	Shrub live oak	Shrub/Tree
Oak			
FOUQUIERIAEAE	<i>Fouquieria splendens</i>	Ocotillo	Shrub
Ocotillo			
GARRYACEAE	<i>Garrya flavescens</i>	Silk tassel	Annual
Silk Tassel			
GENTIANACEAE	<i>Centaurium calycosum</i>	Centaury	Annual
Gentian			
	<i>Eustoma exaltatum</i>	Alkali chalice	
GERANIACEAE	<i>Erodium cicutarium</i>	Filaree	Annual
Geranium			
	<i>Erodium texanum</i>	Crane's bill	Annual/biennial
HYDROPHYLLACEAE	<i>Emmenanthe penduliflora</i>	Whispering bells	Annual
Waterleaf			
	<i>Eriodictyon angustifolium</i>	Yerba santa	Shrub
	<i>Eucrypta chrysanthemifolia</i>	Common eucrypta	Annual
	<i>Eucrypta micrantha</i>	Desert eucrypta	Annual
	<i>Nama demissum</i>	Purplemat	Annual
	<i>Nama hispidum</i>	Hairy nama	Annual
	<i>Nama pusillum</i>	Small leaf nama	Annual
	<i>Nemophila menziesii</i>	Baby blue-eyes	Annual
	<i>Phacelia affinis</i>	Ally phacelia	Annual
	<i>Phacelia anelsonii</i>	Aven Nelsons phacelia	Annual
	<i>Phacelia cicutaria</i>	Caterpillar phacelia	Annual
	<i>Phacelia crenulata</i>	Fairy phacelia	Annual
	<i>Phacelia crenulata</i>	Wild heliotrope, Notchleaf phacelia	Annual
	<i>Phacelia cryptantha</i>	Cryptanth phacelia	Annual
	<i>Phacelia distans</i>	Common phacelia	Annual
	<i>Phacelia fremontii</i>	Yellow throats, Fremonts phacelia	Annual

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	<i>Phacelia glechomaefolia</i>	Canyon phacelia	Annual
	<i>Phacelia ivesiana</i>	Ives phacelia	Annual
	<i>Phacelia lemmonii</i>	Lemmons phacelia	Annual
	<i>Phacelia neglecta</i>	Neglected phacelia	Annual
	<i>Phacelia palmeri</i>	Palmers phacelia	Biennial
	<i>Phacelia parishii</i>	Parish phacelia	Annual
	<i>Phacelia pedicellata</i>	Specter phacelia	Annual
	<i>Phacelia perityloides</i>	Panamint phacelia	Perennial herb
	<i>Phacelia pulchella</i>	Gooddings phacelia	Annual
	<i>Phacelia rotundifolia</i>	Roundleaf phacelia	Annual
	<i>Phacelia vallis-mortae</i>	Death Valley phacelia	Annual
	<i>Pholistoma auritum</i>	Desert fiestaflower	Annual
	<i>Pholistoma membranaceum</i>	White fiestaflower	Annual
	<i>Tricardia watsonii</i>	Three hearts	Perennial herb
KRAMERIACEAE			
Rhatany	<i>Krameria ercta</i>	Rhatany, Pima rhatany, Purple heather	Shrub
	<i>Krameria grayi</i>	White rhatany	Shrub
LAMIACEAE			
Mint	<i>Hyptis emoryi</i>	Desert lavender	Shrub
	<i>Monardella linoides</i>	Monardella	Perennial herb
	<i>Salazaria mexicana</i>	Bladdersage, Paperbag plant	Shrub
	<i>Salvia coumbariae</i>	Chia	Annual
	<i>Salvia dorrii</i>	Desert sage	Shrub
	<i>Salvia mohavensis</i>	Mohave sage	Shrub
LENNOACEAE			
Lennoa	<i>Pholisma arenarium</i>	Scaly-stemmed Sand Food	
	<i>Pholisma sonora</i>	Sand Food	
LOASACEAE			
Loasa, Stickleleaf	<i>Eucnide urens</i>	Rocknettle	Subshrub
	<i>Mentzelia affinia</i>	Yellow comet	Annual
	<i>Mentzelia albicaulis</i>	Whitestem blazingstar	Annual
	<i>Mentzelia integra</i>	Virgin stickleaf	Perennial
	<i>Mentzelia involucrate</i>	Whitebract stickleaf	Annual
	<i>Mentzelia jonesii</i>	Jones stickleaf	Annual

Family Name	Scientific Name	Common Name	Classification
	<i>Mentzelia nitens</i>	Venus blazingstar	Annual
	<i>Mentzelia oreophila</i>	Darlingtons stickleaf	Perennial herb
	<i>Mentzelia pumila</i>	Wyoming stickleaf	Biennial
	<i>Mentzelia tricuspis</i>	Blazingstar	Annual
	<i>Mentzelia veatchiana</i>	Veatch stickleaf	Annual
	<i>Petalonyx parryi</i>	Parrys sandpaper plant	Shrub
	<i>Petalonyx thurberi</i>	Thurbers sandpaper plant	Shrub
LYTHRACEAE Loosestrife	<i>Lythrum californicum</i>	Common loosestrife	Perennial herb/Subshrub
	<i>Ammania coccinea</i>	Ammania	
MALVACEAE Mallow	<i>Eremalche exilis</i>	White mallow	Annual
	<i>Eremalche rotundifolia</i>	Desert fivespot	Annual
	<i>Hibiscus denudatus</i>	Desert hibiscus	Perennial herb
	<i>Malvella leprosa</i>	Alkali mallow	Perennial herb
	<i>Sphaeralcea ambigua</i>	Desert mallow, Globemallow	Perennial herb
	<i>Sphaeralcea angustifolia</i>	Narrowleaf desert mallow	Perennial herb
	<i>Sphaeralcea emoryii</i>	Emorys globemallow	Annual
NYCTAGINACEAE Four o'clock	<i>Abronia fragrans</i>	Fragrant sandverbena	Perennial herb
	<i>Abronia villosa</i>	Sand verbena	Annual
	<i>Allionia incarnate</i>	Windmills	Annual
	<i>Boerhavia coccinea</i>	Red/Scarlet spiderling	Perennial herb
	<i>Boerhavia intermedia</i>	Jones spiderling	Annual
	<i>Boerhavia triquestra</i>	Watsons spiderling	Annual
	<i>Boerhavia wrightii</i>	Wrights boerhaavia, Wright spiderling	Annual
	<i>Mirabilis bigelovii</i>	Desert four o'clock	Perennial herb
	<i>Mirabilis multiflora</i>	Giant four o'clock	Perennial herb
	<i>Tripterocalyx micranthus</i>	Sandpuffs	Annual
OLEACEAE Olive	<i>Forestiera pubescens</i>	Desert olive	Shrub
	<i>Menodora scabra</i>	Rough menodora	Perennial herb
	<i>Menodora spinescens</i>	Spiny menodora	Shrub

Family Name	Scientific Name	Common Name	Classification
ONAGRACEAE	<i>Camissonia boothii</i>	Booths primrose	Annual
Evening Primrose			
	<i>Camissonia brevipes</i>	Sundrop, Suncup	Annual
	<i>Camissonia californica</i>	California primrose	Annual
	<i>Camissonia chamaenerioides</i>	Slenderpod camissonia	Annual
	<i>Camissonia claviformis</i>	Browneyed primrose	Annual
	<i>Camissonia exilis</i>	Meager camissonia	Annual
	<i>Camissonia multijuga</i>	Manylobe primrose	Annual
	<i>Camissonia pallida</i>	Pale camissonia	Annual
	<i>Camissonia refracta</i>	Narrow leaf primrose, Refract desert primrose, Decurved camissonia	Annual
	<i>Camissonia walkeri</i>	Walkers camissonia	Annual
	<i>Gaura coccinea</i>	Scarlet gaura, Wild honeysuckly	Perennial herb
	<i>Gaura gracilis</i>	Slender gaura	Perennial herb
	<i>Oenothera albicaulis</i>	Whitestem evening primrose	Annual
	<i>Oenothera caespitosa</i>	Fragrant evening primrose	Perennial herb
	<i>Oenothera cardiophylla</i>	Long-tubed primrose	
	<i>Oenothera californica</i>	Watsons evening primrose	Perennial herb
	<i>Oenothera cavernae</i>	Munzs evening primrose	Perennial herb
	<i>Oenothera deltoids</i>	Birdcage dune primrose	Annual
	<i>Oenothera pallida</i>	Pale evening primrose	Annual/Perennial herb
	<i>Oenothera primiveris</i>	Spring evening primrose	Annual
OROBANCHACEAE	<i>Orobanche cooperi</i>	Broomrape	Perennial herb/Parasitic
Broomrape			
	<i>Orobanche ludoviciana</i>	Manyflower cancerroot	Perennial herb/Parasitic
PAPAVERACEAE	<i>Arctomecon californica</i>	Las Vegas bearpoppy	Perennial herb
Poppy			
	<i>Argemone corymbosa</i>	San Rafael pricklypoppy	Perennial
	<i>Argemone munita</i>	Pricklypoppy	Perennial herb
	<i>Argemone platycera</i>	Pricklypoppy	Perennial herb
	<i>Eschscholzia californica</i>	California poppy	Annual/Perennial
	<i>Eschscholzia glyptosperma</i>	Desert goldpoppy	Annual

Family Name	Scientific Name	Common Name	Classification
	<i>Eschscholzia minutiflora</i>	Little goldpoppy	Annual
PHILADELPHACEAE Mock Orange	<i>Philadelphus lewisii</i>	Mock Orange	
PLANTAGINACEAE Plantain	<i>Plantago major</i>	Common plantain	Perennial herb
	<i>Plantago ovata</i> Forsskal	Woolly plantain, Island plantain	Annual
	<i>Plantago patagonica</i>	Purshes plantain	Annual
	<i>Plantago insularis</i>	Mousetail plantain	Annual
PLUMBAGINACEAE Leadwort	<i>Limonium californicum</i>	Western marsh rosemary, Sea lavender	Shrub
POLEMONIACEAE Phlox	<i>Eriastrum diffusum</i>	Spreading woollystar	Annual
	<i>Eriastrum eremicum</i>	Mojave woollystar	Annual
	<i>Gilia cana</i>	Desert gilia	Annual
	<i>Gilia filiformis</i>	Threadstem gilia	Annual
	<i>Gilia hutchinsifolia</i>	Pale gilia	Annual
	<i>Gilia latifolia</i>	Broadleaf gilia	Annual
	<i>Gilia leptomeria</i>	Great basin gilia, Lobeleaf gilia	Annual
	<i>Gilia micromeria</i>	Sand gilia	Annual
	<i>Gilia ophthalmoides</i>	Eyelike gilia	Annual
	<i>Gilia scopulorum</i>	Rock gilia	Annual
	<i>Gilia sinuate</i>	Wavy gilia	Annual
	<i>Gilia setosissima</i>	Prickly gilia	Annual
	<i>Gilia stellata</i>	Star gilia	Annual
	<i>Gilia transmontana</i>	Transmontane gilia	Annual
	<i>Ipomopsis arizonica</i>	Arizona skyrocket	Biennial
	<i>Ipomopsis polycladon</i>	Spreading skyrocket	Annual
	<i>Langloisia setosissima</i>	Lilac sunbonnet	Annual
	<i>Langloisia setosissima</i>	Mojave langloisia, Bristly langloisia	Annual
	<i>Leptodactylon pungens</i>	Granite phlox	Shrub
	<i>Linanthus arenicola</i>	Sand linanthus	Annual
	<i>Linanthus aureus</i>	Golden linanthus, Desert gold	Annual
	<i>Linanthus aureus</i>	White desert gold	Annual
	<i>Linanthus bigelovii</i>	Bigelows linanthus	Annual
	<i>Linanthus demissus</i>	Humble gilia, Low linanthus	Annual

Family Name	Scientific Name	Common Name	Classification
	<i>Linanthus jonesii</i>	Jones linanthus	Annual
	<i>Loeseliastrum schottii</i>	Schotts calico	Annual
POLYGALACEAE	<i>Polygala subspinosa</i>	Cushion milkwort, Spiny milkwort	Subshrub
Milkwort			
POLYGONACEAE	<i>Chorizanthe brevicornu</i>	Brittle spineflower	Annual
Buckwheat			
	<i>Chorizanthe corrugate</i>	Wrinkled sunflower	Annual
	<i>Chorizanthe rigida</i>	Spiny herb	Annual
	<i>Eriogonum brachypodium</i>	Parrys buckwheat	Annual
	<i>Eriogonum cernuum</i>	Nodding buckwheat	Annual
	<i>Eriogonum deflexum</i>	Skeleton buckwheat	Annual
	<i>Eriogonum fasciculatum</i>	California buckwheat	Shrub
	<i>Eriogonum heermannii</i>	Heermanns buckwheat	Shrub
	<i>Eriogonum heermannii</i>	Limestone buckwheat	Shrub
	<i>Eriogonum inflatum</i>	Desert trumpet	Perennial herb
	<i>Eriogonum insigne</i>	Unique buckwheat	Annual
	<i>Eriogonum maculatum</i>	Spotted buckwheat	Annual
	<i>Eriogonum microthecum</i>	Slender buckwheat	Subshrub
	<i>Eriogonum nidularium</i>	Birdnest buckwheat	Annual
	<i>Eriogonum palmerianum</i>	Palmers buckwheat	Annual
	<i>Eriogonum plumatella</i>	Flattop buckwheat	Perennial herb
	<i>Eriogonum pusillum</i>	Yellow turban	Annual
	<i>Eriogonum reniforme</i>	Kidneyleaf buckwheat	Annual
	<i>Eriogonum saxatile</i>	Rock buckwheat	Perennial herb
	<i>Eriogonum thomasi</i>	Thomas buckwheat	Annual
	<i>Eriogonum trichopes</i>	Little trumpet	Annual
	<i>Eriogonum viscidulum</i>	Sticky buckwheat	Annual
	<i>Eriogonum wrightii</i>	Wrights buckwheat	Shrub
	<i>Oxytheca perfoliata</i>	Oxytheca, Saucerplant	Annual
	<i>Polygonum hydropiperoides</i>	Smartweed	Annual
	<i>Polygonum aviculare</i>	Knotweed, Chivalrygrass, Dishwatergrass	Annual
	<i>Polygonum lapathifolium</i>	Willowweed	Annual

Family Name	Scientific Name	Common Name	Classification
	<i>Pterostegia drymarioides</i>	Woodland pterostegia	Annual
	<i>Rumex hymenosepalus</i>	Wild rhubarb	Perennial herb
	<i>Rumex violascens</i>	Mexican dock	Annual/Biennial
	<i>Rumex salicifolius</i>	Willow dock	Annual/Biennial
PORTULACACEAE Purslane	<i>Calyptidium monandrum</i>	Pussypaws	Annual
	<i>Claytonia perfoliata</i>	Miners lettuce	Annual
PRIMULACEAE Primrose	<i>Androsace elongate</i>	Rock jasmine	Annual
	<i>Samolus parviflorus</i>	Water pimpernel	Perennial herb
RANUNCULACEAE Buttercup	<i>Anemone tuberosa</i>	Desert windflower	Perennial herb
	<i>Delphinium parishii</i>	Parishes larkspur, Desert larkspur	Tuberous perennial
	<i>Delphinium scaposum</i>	Larkspur	Tuberous perennial
	<i>Myosurus cupulatus</i>	Arizona mousetail	Annual
RESEDACEAE Mignonette	<i>Oligomeris linifolia</i>	Oligomeris	Annual
RHAMNACEAE Buckthorn	<i>Ceanothus greggii</i>	Greggs ceanothus, Buckbrush	Shrub
	<i>Rhamnus ilicifolia</i>	Hollyleaf redberry	Shrub
	<i>Ziziphus obtusifolia</i>	Graythorn	Shrub
ROSACEAE- Rose	<i>Holodiscus microphyllus</i>	Small leaf spray	Shrub
	<i>Prunus fasciculata</i>	Desert almond	Shrub
	<i>Purshia stansburiana</i>	Cliffrose	Shrub
	<i>Purshia tridentata</i>	Mohave antelopebush	Shrub
RUBIACEAE Madder, Coffee	<i>Galium aparine</i>	Goosegrass	Annual
	<i>Galium stellatum</i>	Star bedstraw, Crevice bedstraw	Shrub
RUTACEAE Rue, Citrus	<i>Thamnosma montana</i>	Tupentine broom, Desert rue	Shrub
SALICACEAE Willow family	<i>Populus fremontii</i>	Cottonwood Tree	Tree
	<i>Salix exigua</i>	Coyote willow, Sandbar willow	Shrub/Tree
	<i>Salix gooddingii</i>	Gooddings willow	Tree
SANTALACEAE Sandalwood	<i>Anemopsis californica</i>	Yerba mansa	Perennial herb

Family Name	Scientific Name	Common Name	Classification
URACEAE			
Lizardtail			
SAXIFRAGACEAE			
Saxifrage			
SCROPHULARIACEAE	<i>Antirrhinum filipes</i>	Twining snapdragon	Annual
Snapdragon, Figwort			
	<i>Castilleja angustifolia</i>	Desert paintbrush	Perennial herb
	<i>Castilleja chromora</i>	Paintbrush	Annual
	<i>Castilleja exerta</i>	Purple owl's clover	Annual
	<i>Castilleja minor ssp. spiralis</i>	Paintbrush	Annual
	<i>Kekiella antirrhinoides</i>	Bush beartongue	Shrub
	<i>Maurandya antirrhiniflora</i>	Violet twining snapdragon	Perennial herb
	<i>Mimulus bigelovii</i>	Desert monkeyflower, Bigelow monkeyflower	Annual
	<i>Mimulus cardinalis</i>	Crimson monkeyflower	Perennial
	<i>Mimulus guttatus</i>	Monkeyflower	Perennial
	<i>Mimulus parryi</i>	Parrys monkeyflower	Annual
	<i>Mimulus pilosus</i>	Downy monkeyflower	Annual
	<i>Mimulus rubellus</i>	Reddish monkeyflower	Annual
	<i>Mimulus suksdorfii</i>	Suksdorf's monkeyflower	Annual
	<i>Mohavea breviflora</i>	Lesser Mohavea	Annual
	<i>Mohavea confertiflora</i>	Ghostflower	Annual
	<i>Orthocarpus purpurascens</i>	Common owl clover	
	<i>Penstemon caespitosus</i>	Painted beardtongue	Perennial herb
	<i>Penstemon palmeri</i>	Palmer's penstemon	Perennial herb
	<i>Penstemon pseudospectabilis</i>	Penstemon	Perennial herb
SIMAROUBACEAE			
Quassia, Simarouba			
SOLANACEAE	<i>Datura wrightii</i>	Sacred datura, jimsonweed	Annual/Perennial
Nightshade			
	<i>Lycium andersonii</i>	Anderson's wolfberry	Shrub
	<i>Lycium cooperi</i>	Coopers wolfberry	Shrub
	<i>Lycium pallidum</i>	Pale wolfberry	Shrub
	<i>Lycium parishii</i>	Parish's desert thorn	Shrub

Family Name	Scientific Name	Common Name	Classification
	<i>Lycium torreyi</i>	Torreys desert thorn	Shrub
	<i>Nicotiana glauca</i>	Tree tobacco	Tree
	<i>Nicotiana obtusifolia</i>	Desert tobacco	Perennial herb
	<i>Petunia parviflora</i>	Streamside petunia	Annual
	<i>Physalis crassifolia</i>	Thickleaf groundcherry	Perennial herb
	<i>Physalis hederifolia</i>	Ivyleaf groundcherry	Perennial herb
	<i>Physalis lobata</i>	Lobed groundcherry	Perennial
	<i>Solanum elaeagnifolium</i>	Silver nightshade	Perennial herb
TAMARICACEAE	<i>Tamarix aphylla</i>	Athel	Tree
Tamarisk			
	<i>Tamarix ramosissima</i>	Saltcedar	Shrub/Tree
ULMACEAE			
Elm			
URTICACEAE	<i>Parietaria hespara</i>	Pellitory	Annual
Nettle			
	<i>Parietaria penslvanica</i>	Hammerwort	Annual
VERBENACEAE	<i>Aloysia wrightii</i>	Oreganillo	Shrub
Vervain			
	<i>Verbena bracteata</i>	Protrate vervain	Annual/Perennial herb
	<i>Verbena gooddingii</i>	Gooddings vervain	Perennial herb
	<i>Lippia lanceolata</i>	Frog Fruit	
	<i>Lippia nodiflora</i>	Garden lippia	
VIOLACEAE	<i>Ocalis sp</i>	Wood sorrel	
Violet			
VISCACEAE	<i>Phoradendron californica</i>	Desert mistletoe	Perennial/Parasitic
Mistletoe			
	<i>Phoradendrom juniperinum</i>	Juniper mistletoe	Perennial/Parasitic
VITACEAE	<i>Vitis arizonica</i>	Canyon grape	Perennial vine
Grape			
ZYGOPHYLLACEAE	<i>Fagonia laevis</i>	Fagonia	Perennial herb
Caltrop, Tree-of-Life			
	<i>Kallstroemia californica</i>	Yellow kallstroemia	Annual
	<i>Larrea tridentate</i>	Creosotebush	Shrub
	<i>Tribulus terrestris</i>	Puncturevine, Goathead	Annual

Family Name	Scientific Name	Common Name	Classification
Monocots			
ARECACEAE	<i>Phoenix dactylifera</i>	Date palm	Tree
Palm			
	<i>Washingtonia filifera</i>	Desert fan palm, California fan palm	Tree
CYPERACEAE	<i>Carex obtusata</i>	Blunt sedge	Perennial herb
Sedge			
	<i>Carex occidentalis</i>	Western sedge	Perennial
	<i>Cladium californicum</i>	Sawgrass	Perennial herb
	<i>Cyperus esculentas</i>	Yellow nut Sedge	
	<i>Cyperus rotundus</i>	Purple nut sedge	
	<i>Cyperus laevigatus</i>	Umbrella sedge	Perennial herb
	<i>Cyperus odoratus</i>	Fragrant sedge	Annual
	<i>Eleocharis macrostachya</i>	Spikerush	Perennial
	<i>Eleocharis montevidensis</i>	Spikerush	Perennial herb
	<i>Eleocharis parishii</i>	Parishs spikerush	Perennial herb
	<i>Eleocharis rostellata</i>	Torreys spikerush	Perennial herb
	<i>Scirpus acutus</i>	Tule	Perennial
	<i>Scirpus americanus</i>	American bulrush	Perennial herb
	<i>Scirpus californicus</i>	California bulrush	Perennial herb
	<i>Scirpus maritimus</i>	Alkali bulrush	Perennial
	<i>Scirpus pungens</i>	Common threesquare	Perennial
	<i>Scirpus robustus</i>	Robust bulrush	Perennial herb
HYDROCHARITACEAE	<i>Elodea canadensis</i>	Common waterweed	Perennial/Aquatic
Waterweed			
	<i>Najas marina</i>	Spiny naiad	Annual/Aquatic
JUNCACEAE	<i>Juncus acutus</i>	Spiny rush	Perennial herb
Rush			
	<i>Juncus arcticus</i>	Wiregrass	Perennial herb
	<i>Juncus bufonius</i>	Toadrush	Annual
	<i>Juncus cooperi</i>	Coopers rush	Perennial
	<i>Juncus effuses</i>	Soft rush	Perennial herb
	<i>Juncus mexicanus</i>	Mexican rush	Perennial herb
	<i>Juncus nevadensis</i>	Nevada rush	Perennial
	<i>Juncus nodosus</i>	Knotted rush	Perennial herb

Family Name	Scientific Name	Common Name	Classification
LILIACEAE Lily	<i>Juncus tenuis</i>	Path rush, Poverty rush	Perennial herb
	<i>Juncus torreyi</i>	Torreys rush	Perennial herb
	<i>Juncus xiphioides</i>	Irisleaf rush	Perennial herb
	<i>Allium bisceptrum</i>	Palmers onion	Perennial herb
	<i>Allium Parishii</i>	Parishii onion	Perennial herb
	<i>Allium macropetalum</i>		Perennial herb
	<i>Androstephium breviflorum</i>	Funnel lily	Perennial herb
	<i>Calochortus flexuosus</i>	Weakstem mariposa	Perennial herb
	<i>Calochortus kennedyi</i>	Desert marisposa	Perennial herb
	<i>Dichelostemma capitatum</i>	Bluedicks	Perennial herb
	<i>Hesperocallis undulate</i>	Ajo lily, Desert lily	Perennial herb
	<i>Nolina bigelovii</i>	Beargrass	Shrub
	<i>Yucca angustissima</i>	Narrowleaf yucca	Shrub
	<i>Yucca brevifolia</i>	Joshua tree	Tree
	<i>Yucca schidigera</i>	Mohave yucca	Shrub/Tree
ORCHIDACEAE Orchid	<i>Epipactis gigantean</i>	Stream orchid	Perennial herb
POACEAE Grass	<i>Achnatherum aridum</i>	Mormon needlegrass	Perennial
	<i>Achnatherum coronatum</i>	Needlegrass	Perennial
	<i>Achnatherum hymenoides</i>	Ricegrass	Perennial
	<i>Achnatherum speciosum</i>	Desert needlegrass	Perennial
	<i>Agropyron trachycaulum</i>	Slender wheatgrass	Perennial
	<i>Andropogon gerardii</i>	Big bluestem	Perennial
	<i>Aristida adscensionis</i>	Sixweeks threeawn	Annual
	<i>Aristida arizonica</i>	Arizona threeawn	Perennial herb
	<i>Aristida purpurea</i>	Purple threeawn	Perennial herb
	<i>Bothriochloa barbinodis</i>	Cane bluestem	Perennial
	<i>Bouteloua aristidoides</i>	Needle grama	Annual
	<i>Bouteloua barbata</i>	Sixweeks grama	Annual
	<i>Bouteloua eriopoda</i>	Black grama	Perennial
	<i>Bouteloua trifida</i>	Red grama	Perennial

Family Name	Scientific Name	Common Name	Classification
	<i>Bromus arizonicus</i>	Brome grass	Annual
	<i>Bromus carinatus</i>	Mountain brome	Perennial herb
	<i>Bromus catharticus</i>	Rescuegrass	Perennial herb
	<i>Bromus inermis</i>	Smooth brome	Perennial herb
	<i>Bromus madritensis</i>	Red brome	Annual
	<i>Bromus tectorum</i>	Cheatgrass	Annual
	<i>Bromus trinii</i>	Chilean chess	Annual
	<i>Chloris virgata</i>	Fingergrass	Annual
	<i>Crypsis schoenoides</i>	Swampgrass	Annual
	<i>Cynodon dactylon</i>	Bermudagrass	Perennial
	<i>Desmazeria rigida</i>	Desmazeria	Annual
	<i>Digitaria sanguinalis</i>	Crabgrass	Annual
	<i>Distichlis spicata</i>	Saltgrass	Perennial herb
	<i>Echinochloa crus-galli</i>	Barnyard grass	Annual
	<i>Elymus multisetus</i>	Big squirreltail	Perennial
	<i>Elymus smithii</i>	Western wheatgrass	Perennial
	<i>Eragrostis lutescens</i>	Yellow lovegrass	Annual
	<i>Eragrostis pectinacea</i>	Tufted lovegrass	Annual
	<i>Erioneuron pulchellum</i>	Fluffgrass	Perennial
	<i>Hordeum jubatum</i>	Foxtail barley	Perennial herb
	<i>Hordeum marinum</i>	Mediterranean barley	Annual
	<i>Leptochloa fascicularis</i>	Bearded sprangletop	Annual
	<i>Leptochloa uninervia</i>	Mexican sprangletop	Annual
	<i>Lolium multiflorum</i>	Italian ryegrass	Annual
	<i>Lolium perenne</i>	Perennial ryegrass	Perennial herb
	<i>Muhlenbergia asperifolia</i>	Alkali muhly	Annual/Perennial
	<i>Muhlenbergia microsperma</i>	Littleseed muhly	Annual/Perennial
	<i>Muhlenbergia porteri</i>	Bush muhly	Perennial
	<i>Muhlenbergia richardsonis</i>	Mat muhly	Perennial
	<i>Panicum capillare</i>	Witchgrass	Annual
	<i>Phragmites australis</i>	Common reed	Perennial
	<i>Pleuraphis rigida</i>	Big galleta grass	Perennial
	<i>Poa bigelovii</i>	Bluegrass	Annual

Family Name	Scientific Name	Common Name	Classification
	<i>Poa fendleriana</i>	Mutton grass	Perennial
	<i>Setaria glauca</i>	Yellow bristlegrass	Annual
	<i>Sporobolus airoides</i>	Alkali sacaton	Perennial
	<i>Sporobolus cryptandrus</i>	Sand dropseed	Perennial
	<i>Sporobolus flexuosus</i>	Mesa dropseed	Perennial
	<i>Tridens muticus</i>	Slim tridens	Perennial herb
	<i>Vulpia microstachys</i>	Small fescue	Annual
	<i>Vulpia octoflora</i>	Sixweeks fescue	Annual
POTAMOGETONACEAE	<i>Potamogeton crispus</i>	Crispateleaf pondweed	Perennial/Aquatic
Pondweed			
	<i>Potamogeton latifolius</i>	Nevada pondweed	Perennial/Aquatic
	<i>Potamogeton pectinatus</i>	Fennel leaf pondweed	Perennial/Aquatic
	<i>Ruppia maritime</i>	Ditchgrass	Perennial/Aquatic
TYPHACEAE	<i>Typha angustifolia</i>	Narrowleaf cattail	Perennial
Cattail			
	<i>Typha domingensis</i>	Southern cattail	Perennial
ZANNICHAELLIACEAE	<i>Zannichellia palustris</i>	Horned pondweed	Perennial/Aquatic
Horned pondweed			

Epple 1995; Blair pers comm.

Wildlife Species

Table C-4: Fish Species Found Within LHFO

Lake Havasu	Lower Colorado River	Bill Williams River (Below Alamo Dam)	Common Name	Scientific Name	Origin
Yes	Yes	No	Bonytail Chub	<i>Gila elgans</i>	Native
Yes	Yes	No	Flannelmouth Sucker	<i>Catostomus latipinnis</i>	Native
Yes	Yes	No	Razorback Sucker	<i>Xyrauchen texanus</i>	Native
Yes	Yes	Yes	Black Crappie	<i>Pomoxis nigromacalatus</i>	Non-Native
Yes	Yes	Yes	Bluegill	<i>Lepomis macrochirus</i>	Non-Native
Yes	Yes	No	Brown Bullhead	<i>Ictalurus nebulosis</i>	Non-Native
Yes	Yes	Yes	Channel Catfish	<i>Ictalurus punctatus</i>	Non-Native
Yes	Yes	Yes	Common Carp	<i>Cyprinus carpio</i>	Non-Native

Lake Havasu	Lower Colorado River	Bill Williams River (Below Alamo Dam)	Common Name	Scientific Name	Origin
Yes	Yes	No	Flathead Catfish	<i>Pylodictis olivaris</i>	Non-Native
Yes	Yes	Yes	Golden Shiner	<i>Notemigonus crysoleucas</i>	Non-Native
Yes	Yes	Yes	Goldfish	<i>Carassius auratus</i>	Non-Native
Yes	Yes	Yes	Green Sunfish	<i>Lepomis cyanellus</i>	Non-Native
Yes	Yes	Yes	Largemouth Bass	<i>Micropterus salmoides</i>	Non-Native
Yes	Yes	Yes	Mosquitofish	<i>Gambusia affinis</i>	Non-Native
Yes	Yes	No	Rainbow Trout	<i>Oncorhynchus mykiss</i>	Non-Native
No	No	Yes	Red Shiner	<i>Cyprinella lutrensis</i>	Non-Native
Yes	Yes	Yes	Redear Sunfish	<i>Lepomis microlophus</i>	Non-Native
Yes	Yes	No	Redside Shiner	<i>Richardsonius balteatus</i>	Non-Native
Yes	Yes	No	Smallmouth Bass	<i>Micropterus dolomieu</i>	Non-Native
Yes	Yes	No	Striped Bass	<i>Morone saxatilis</i>	Non-Native
Yes	Yes	Yes	Threadfin Shad	<i>Dorosoma petenense</i>	Non-Native
Yes	Yes	Yes	Tilapia	<i>Tilapia spp.</i>	Non-Native
Yes	Yes	No	Warmouth	<i>Lepomis gulosus</i>	Non-Native
Yes	Yes	No	Yellow Bullhead	<i>Ictalurus natalis</i>	Non-Native

Minckly pers comm.; Jacobson pers comm.

Table C-5: Amphibians and Reptiles Potentially Found Within LHFO

Order	Family Name	Common Name	Scientific Name
Testudines	Testudinidae	Sonoran Desert Tortoise	<i>Gopherus agassizii</i> (Sonoran population)
	Kinosternidae	Sonoran Mud Turtle	<i>Kinosternon sonoriense</i>
	Emydidae	Red-eared Slider	<i>Pseudemys scripta</i>
	Trionychidae	Spiny Softshell	<i>Trionyx spiniferus</i>
Squamata	Teiidae	Gila Spotted Whiptail	<i>Aspidoscelis flagellicaudus</i>
		Pai Striped Whiptail	<i>Aspidoscelis pai</i>
		Tiger Striped Whiptail	<i>Aspidoscelis tigris</i>
		Plateau Striped Whiptail	<i>Aspidoscelis velox</i>
		Zebra-tailed Lizard	<i>Callisaurus draconoides</i>
	Crotaphytidae	Western Banded Gecko	<i>Coleonyx variegates</i>
		Greater Earless Lizard	<i>Cophosaurus texanus</i>
		Great Basin Collared Lizard	<i>Crotaphytus bicinctores</i>
		Western Collared Lizard	<i>Crotaphytus collaris</i>

Order	Family Name	Common Name	Scientific Name
	Iguanidae	Desert Iguana	<i>Dipsosaurus dorsalis</i>
	Scincidae	Arizona Skink	<i>Eumeces gilberti arizonensis</i>
		Great Plains Skink	<i>Eumeces obsoletus</i>
		Leopard Lizard	<i>Gambelia wislizenii</i>
	Helodermatidae	Banded Gila Monster	<i>Heloderma suspectum cinctum</i>
		Common Lesser Earless Lizard	<i>Holbrookia maculate</i>
		Greater Short-horned Lizard	<i>Phrynosoma hernandesi</i>
		Desert Horned Lizard	<i>Phrynosoma platyrhinus</i>
		Regal Horned Lizard	<i>Phrynosoma solare</i>
	Iguanidae	Chuckwalla	<i>Sauromalus ater</i>
		Clark's Spiny Lizard	<i>Sceloporous clarkia</i>
		Desert Spiny Lizard	<i>Sceloporous magister</i>
		Plateau Lizard	<i>Sceloporous tristichus</i>
		Somoran Desert Fringe-toed Lizard	<i>Uma notata</i>
		Mohave Fringe-toed Lizard	<i>Uma scoparia</i>
		Long-tailed Brush Lizard	<i>Urosaurus graciosus</i>
		Ornate Tree Lizard	<i>Urosaurus ornatus</i>
		Side-blotched Lizard	<i>Uta stansburiana</i>
		Arizona Night Lizard	<i>Xantusia arizonae</i>
		Desert Night Lizard	<i>Xantusia vigilis</i>
		Glossy Snake	<i>Ariona elegans</i>
	Boidae	Desert Rosy Boa	<i>Charina trivirgata gracia</i>
		Western Shovel-nosed Snake	<i>Chionactis occipitalis</i>
		Western Diamondback	<i>Crotalus atrox</i>
		Speckled Rattlesnake	<i>Crotalus mitchellii</i>
		Black-tailed Rattlesnake	<i>Crotalus molossus</i>
		Sidewinder Rattlesnake	<i>Crotalus cerastes</i>
		Mojave Rattlesnake	<i>Crotalus scutulatus</i>
		Ring-necked Snake	<i>Diadophus punctatus</i>
		Night Snake	<i>Hypsiglena torquata</i>
		California Kingsnake	<i>Lampropeltis getulus</i>
		Arizona Mountain Kingsnake	<i>Lampropeltis pyromelana pyromelana</i>
		Western Blind Snake	<i>Leptotyphiops humilis</i>
		Coachwhip	<i>Masticophis flagellum</i>
		Striped Whipsnake	<i>Masticophis taeniatus</i>

Order	Family Name	Common Name	Scientific Name
		Spotted Leaf-nosed Snake	<i>Phyllorhynchus decurtatus</i>
		Western Coral Snake	<i>Micruroides euryxanthus</i>
		Gopher Snake	<i>Pituophis melanoleucus</i>
		Long-nosed Snake	<i>Rhinocheilus lecontei</i>
		Western Patch-nosed Snake	<i>Salvadora hexalepis</i>
		Western Ground Snake	<i>Sonora semiannulata</i>
		Smith's Black-headed Snake	<i>Tantilla hobartsmithi</i>
		Checkered Garter Snake	<i>Thamnophis marcianus</i>
		Western Lyre Snake	<i>Trimorphodon biscutatus</i>
Anura	Bufonidae	Sonoran Desert Toad	<i>Bufo alvarius</i>
		Great Plains Toad	<i>Bufo cognatus</i>
		Arizona Toad	<i>Bufo microscaphus</i>
		Red-spotted Toad	<i>Bufo punctatus</i>
		Woodhouse's Toad	<i>Bufo woodhousei</i>
		Couch's Spadefoot Toad	<i>Scaphiopus couchi</i>
		Colorado River Toad	<i>Bufo alvarius</i>
	Hylidae	Canyon Treefrog	<i>Hyla arenicolor</i>
		Pacific Treefrog	<i>Hyla regilla</i>
		Arizona Treefrog	<i>Hyla wrightorum</i>
	Ranidae	Lowland Leopard Frog	<i>Rana yavapaiensis</i>
		Bullfrog	<i>Rana catesbeiana</i>
Caudata	Ambystomatidae	Tiger Salamander	<i>Ambystoma tigrinum</i>

Table C-6: Mammals Found Within LHFO

Order	Family Name	Common Name	Scientific Name	Residence
Insectivora	Soricidae	Desert Shrew	<i>Notiosorex crawfordi</i>	permanent
Chiroptera	Phyllostomatidae	California Leaf-nosed Bat	<i>Macrotus californicus</i>	permanent
		Vespertilionidae	Pallid Bat	<i>Antrozous pallidus</i>
		Townsend's Big-eared Bat	<i>Corynorhinus townsendii</i>	permanent
		Big Brown Bat	<i>Eptesicus</i>	permanent
		Hoary Bat	<i>Eptesicus fuscus</i>	migratory/winter
		Western Yellow Bat	<i>Lasiurus cinereus</i>	permanent
		Western Red Bat	<i>Lasiurus blossevellii</i>	migratory/winter
			California Myotis	<i>Myotis californicus</i>

Order	Family Name	Common Name	Scientific Name	Residence
		Occult Little Brown Bat	<i>Myotis occultus</i> (= <i>lucifigus</i>)	permanent
		Small-footed Myotis	<i>Myotis ciliolabrum</i> (= <i>leibii</i> = <i>subulatus</i>)	permanent migratory/winter
		Fringed Myotis	<i>Myotis thysanoides</i>	permanent
		Cave Myotis	<i>Myotis velifer</i>	permanent
		Yuma Myotis	<i>Myotis yumanesis</i>	permanent
		Western Pipistrelle	<i>Pipistrellus hesperus</i>	permanent
		Spotted Bat	<i>Euderma maculatum</i>	
		Allen's Big-eared Bat	<i>Idionycteris (Plecotis)</i> <i>phylotis</i>	permanent migratory
	Molossidae	Western Matiff Bat	<i>Eumops perotis</i>	permanent
		Pocketed Free-tailed Bat	<i>Nyctinomops</i> <i>fermosus</i>	permanent
		Mexican Free-tail Bat	<i>Tadarida brasillensis</i>	Permanent/ migratory
		Big Free-tail Bat	<i>Nyctinomops macrotis</i>	migratory
Lagomorpha	Leporidae	Desert Cottontail	<i>Sylvilagus auduboni</i>	permanent
		Eastern Cottontail	<i>Sylvilagus floridanus</i>	permanent
		Black-tailed Jackrabbit	<i>Lepus californicus</i>	permanent
Rodentia	Sciuridae	Harris's Antelope Ground Squirrel	<i>Ammospermophilus</i> <i>harrisii</i>	permanent
		White-tailed Antelope Ground Squirrel	<i>Ammospermophilus</i> <i>leucurus</i>	permanent
		Round-tailed Ground Squirrel	<i>Spermophilus tereticaudus</i>	permanent
		Rock Squirrel	<i>Spermophilus variegatus</i>	permanent
		Cliff Chipmunk	<i>Eutamias dorsalis</i>	permanent
		Tassel-eared Squirrel	<i>Sciurus aberti</i>	permanent
Rodentia	Castoridae	Beaver	<i>Castor Canadensis</i>	permanent
	Cricetidae	Cactus Mouse	<i>Peromyscus eremicus</i>	permanent
		Canyon Mouse	<i>Peromyscus crinitus</i>	permanent
		Deer Mouse	<i>Peromyscus maniculatus</i>	permanent
		White-footed Mouse	<i>Peromyscus leucopus</i>	permanent
		Brush Mouse	<i>Peromyscus boylii</i>	permanent
		Pinyon Mouse	<i>Peromyscus truei</i>	permanent
		White-throated Wood Rat	<i>Neotoma albigula</i>	permanent
		Desert Wood Rat	<i>Neotoma lepida</i>	permanent

Order	Family Name	Common Name	Scientific Name	Residence
		Stephen's Wood Rat	<i>Neotoma stephensi</i>	permanent
		Mexican Wood Rat (3 isolated populations)	<i>Neotoma mexicans</i>	permanent
		Southern Grasshopper Mouse	<i>Onychomys torridus</i>	permanent
		Muskrat	<i>Ondatra zibethicus</i>	permanent
		Arizona Cotton Rat	<i>Sigmodon arizonae</i>	permanent
		Hispid Cotton Rat	<i>Sigmodon hispidus</i>	permanent
		Western Harvest Mouse	<i>Reithrodontomys megalotis</i>	permanent
	Muridae	House Mouse	<i>Mus musculus</i>	permanent
	Heteromyidae	Arizona Pocket Mouse	<i>Perognathus amplus</i>	permanent
		Longtail Pocket Mouse	<i>Perognathus formosus</i>	permanent
		Desert Pocket Mouse	<i>Chaetodipus penicillatus</i>	permanent
		Rock Pocket Mouse	<i>Chaetodipus intermedius</i>	permanent
		Bailey's Pocket Mouse	<i>Perognathus baileyi</i>	permanent
		Little Pocket Mouse	<i>Perognathus longimembris</i>	permanent
		Hispid Pocket Mouse	<i>Perognathus hispidus</i>	permanent
		Spiny Pocket Mouse	<i>Chaetodipus californicus</i>	permanent
		Merriam's Kangaroo Rat	<i>Dipodomys merriami</i>	permanent
		Desert Kangaroo Rat	<i>Dipodomys deserti</i>	permanent
		Ord's Kangaroo Rat	<i>Dipodomys ordii</i>	permanent
		Chisel-toothed Kangaroo Rat	<i>Dipodomys microps</i>	permanent
		Geomyidae	Botta's Pocket Gopher	<i>Thomomys bottae</i>
	Erethizontidae	Porcupine	<i>Erethizon dorsatum</i>	permanent
Carnivore	Canidae	Coyote	<i>Canis latrans</i>	permanent
		Gray Fox	<i>Urocyon cinereoargenteus</i>	permanent
		Kit Fox	<i>Vulpes macrotis</i>	permanent
	Procyonidae	Raccoon	<i>Procyon lotor</i>	permanent
		Ringtail	<i>Bassariscus astutus</i>	permanent
	Mustelidae	Western Spotted Skunk	<i>Spilogale gracilis</i>	permanent
		Striped Skunk	<i>Mephitis mephitis</i>	permanent
		Hognosed Skunk	<i>Conepatus leuconotus</i>	permanent
		Badger	<i>Taxidea taxus</i>	permanent
		River Otter	<i>Lutra canadensis</i>	permanent

Order	Family Name	Common Name	Scientific Name	Residence
	Felidae	Mountain Lion	<i>Felis concolor (browni)</i>	permanent
		Bobcat	<i>Felis rufus</i>	permanent
Artiodactyla	Tayassuidae	Collared Peccary	<i>Tayassu tajacu</i>	permanent
	Suidae	Domestic Pig	<i>Sus scrofa</i>	permanent
	Cervidae	Mule Deer	<i>Odocoileus hemionus</i>	permanent
		Elk	<i>Cervis elaphus</i>	permanent
	Antilocapridae	Pronghorn	<i>Antilocapra Americana</i>	extirpated
	Bovidae	Bighorn Sheep	<i>Ovis Canadensis</i>	permanent
Perysiodactyla	Equidae	Burro	<i>Equuas asinus</i>	permanent

Adams 2003; Burt and Grossenheider 1980; National Audubon Society 1979; Blair pers comm.

Table C-7: Birds within LHFO Boundary

Family	Species	Abundance	Residency	Nesting Species	MTBA
Loons	Pacific Loon	Rare	Winter		yes
	Common Loon	Rare	Winter		yes
	Red-throated Loon	Accidental/Vagrant	Winter		yes
Grebes	Pied-Billed Grebe	Common/Abundant	Year-round	yes	yes
	Horned Grebe	Rare	Winter		yes
	Eared Grebe	Common/Abundant	Year-round		yes
	Red-necked Grebe	Accidental/Vagrant	Year-round		yes
	Western Grebe	Common/Abundant	Year-round	yes	yes
	Clark's Grebe	Common/Abundant	Year-round	yes	yes
	Least Grebe	Accidental/Vagrant	Winter	yes	yes
Shearwaters/Petrels	Black-vented Shearwater	Accidental/Vagrant	Transient/Migrant		yes
	Black Strom Petrel	Accidental/Vagrant	Transient/Migrant		yes
	Least Strom Petrel	Accidental/Vagrant	Transient/Migrant		yes
Boobies	Blue-footed Booby	Accidental/Vagrant	Transient/Migrant		yes
	Brown Booby	Accidental/Vagrant	Transient/Migrant		yes
Pelicans	American White Pelican	Uncommon	Year-round		yes
	Brown Pelican	Accidental/Vagrant	Transient/Migrant		yes
Cormorants	Double-crested Cormorant	Common/Abundant	Year-round	yes	yes
	Olivaceous Cormorant	Accidental/Vagrant	Transient/Migrant		yes
Frigatebirds	Magnificent Frigatebird	Accidental/Vagrant	Transient/Migrant		yes
Tropicbirds	Red-billed Tropicbird	Accidental/Vagrant	Transient/Migrant		yes

Family	Species	Abundance	Residency	Nesting Species	MTBA
Herons/Egrets /Bitterns	American Bittern	Rare	Winter	yes	yes
	Least Bittern	Uncommon	Year-round	yes	yes
	Great Egret	Common/Abundant	Year-round	yes	yes
	Snowy Egret	Common/Abundant	Year-round	yes	yes
	Cattle Egret	Accidental/Vagrant	Year-round	yes	yes
	Reddish Egret	Accidental/Vagrant	Winter		yes
	Great Blue Heron	Common/Abundant	Year-round	yes	yes
	Green Heron	Uncommon	Year-round	yes	yes
	Black-crowned Night Heron	Common/Abundant	Year-round	yes	yes
	Tri-colored Heron	Accidental/Vagrant	Transient/Migrant		yes
Ibises/Spoonbills	White-faced Ibis	Uncommon	Year-round		yes
	White Ibis	Accidental/Vagrant	Spring		yes
	Roseate Spoonbill	Accidental/Vagrant	Winter		yes
Storks	Wood Stork	Rare	Summer		yes
Swans/Geese /Ducks	Brant	Accidental/Vagrant	Winter		yes
	Black Bellied Whistling Duck	Accidental/Vagrant	Winter		yes
	Fulvous Whistling Duck	Rare	Summer		yes
	Tundra Swan	Rare	Winter		yes
	White-fronted Goose	Rare	Winter		yes
	Snow Goose	Uncommon	Winter		yes
	Ross' Goose	Accidental/Vagrant	Winter		yes
	Canada Goose	Common/Abundant	Winter		yes
	Wood Duck	Rare	Winter		yes
	Green-wing Teal	Common/Abundant	Winter		yes
	Blue-wing Teal	Uncommon	Transient/Migrant		yes
	Cinnamon Teal	Common/Abundant	Year-round	yes	yes
	Mallard	Common/Abundant	Winter		yes
	Northern Pintail	Common/Abundant	Winter		yes
	Northern Shoveler	Common/Abundant	Winter		yes
	Gadwall	Common/Abundant	Winter	yes	yes
	American Wigeon	Common/Abundant	Winter		yes
Canvasback	Rare	Winter		yes	

Family	Species	Abundance	Residency	Nesting Species	MTBA
	Redhead	Common/Abundant	Winter	yes	yes
	Ring-necked Duck	Common/Abundant	Winter		yes
	Greater Scaup	Rare	Winter		yes
	Lesser Scaup	Common/Abundant	Winter		yes
	Common Goldeneye	Common/Abundant	Winter		yes
	Barrow's Goldeneye	Accidental/Vagrant	Winter		yes
	Hooded Merganser	Rare	Winter		yes
	Common Merganser	Common/Abundant	Winter		yes
	Red-breasted Merganser	Rare	Winter		yes
	Ruddy Duck	Common/Abundant	Winter	yes	yes
	Black Scoter	Accidental/Vagrant	Year-round		yes
	Surf Scoter	Accidental/Vagrant	Winter		yes
	Long-tailed Duck	Accidental/Vagrant	Winter		yes
	Bufflehead	Common/Abundant	Winter		yes
Vultures	California Condor	Accidental/Vagrant	Transient/Migrant		yes
	Turkey Vulture	Common/Abundant	Year-round	yes	yes
	Black Vulture	Accidental/Vagrant	Transient/Migrant		yes
Hawks/Eagles /Kites	Osprey	Common/Abundant	Year-round	yes	yes
	White-tailed Kite	Accidental/Vagrant	Winter		yes
	Bald Eagle	Uncommon	Winter		yes
	Golden Eagle	Uncommon	Year-round		yes
	Northern Harrier	Uncommon	Winter	yes	yes
	Sharp-shinned Hawk	Uncommon	Winter		yes
	Cooper's Hawk	Uncommon	Year-round	yes	yes
	Common Black Hawk	Accidental/Vagrant	Transient/Migrant		yes
	Swainson's Hawk	Uncommon	Transient/Migrant		yes
	Zone-tailed Hawk	Rare	Summer		yes
	Red-tailed Hawk	Common/Abundant	Year-round	yes	yes
	Ferruginous Hawk	Accidental/Vagrant	Transient/Migrant		yes
	Rough-legged Hawk	Rare	Winter		yes
	Norther Goshawk	Accidental/Vagrant	Winter		yes
	Harris' Hawk	Accidental/Vagrant	Year-round	yes	yes
	Red Shouldered Hawk	Accidental/Vagrant	Year-round	yes	yes
Falcons/Caracaras	Crested Caracara	Accidental/Vagrant	Transient/Migrant		yes

Family	Species	Abundance	Residency	Nesting Species	MTBA
	American Kestrel	Common/Abundant	Year-round	yes	yes
	Merlin	Uncommon	Winter		yes
	Peregrine Falcon	Rare	Year-round	yes	yes
	Aplomado Falcon	Accidental/Vagrant	Transient/Migrant		yes
	Prairie Falcon	Rare	Year-round	yes	yes
Pheasants/Quail	Gambel's Quail	Common/Abundant	Year-round	yes	yes
Rails/Gallinules /Coots	Black Rail	Uncommon	Year-round	yes	yes
	Yuma Clapper Rail	Uncommon	Year-round	yes	yes
	Virginia Rail	Uncommon	Year-round	yes	yes
	Sora	Uncommon	Winter	yes	yes
	Common Moorhen	Common/Abundant	Year-round	yes	yes
	American Coot	Common/Abundant	Year-round	yes	yes
Oystercatchers	American Oystercatcher	Accidental/Vagrant	Transient/Migrant		yes
Cranes	Sandhill Crane	Uncommon	Winter		yes
Plovers	Black-bellied Plover	Uncommon	Transient/Migrant		yes
	Snowy Plover	Rare	Transient/Migrant		yes
	Semipalmated Plover	Uncommon	Transient/Migrant		yes
	Killdeer	Common/Abundant	Year-round	yes	yes
	Mountain Plover	Accidental/Vagrant	Transient/Migrant		yes
	Wilson's Plover	Accidental/Vagrant	Transient/Migrant		yes
Avocets/Stilts	American Avocet	Uncommon	Transient/Migrant		yes
	Black-necked Stilt	Uncommon	Year-round	yes	yes
Sandpipers/Allies	Greater Yellowlegs	Uncommon	Year-round		yes
	Lesser Yellowlegs	Uncommon	Transient/Migrant		yes
	Solitary Sandpiper	Uncommon	Winter		yes
	Upland Sandpiper	Accidental/Vagrant	Transient/Migrant		yes
	Willet	Uncommon	Transient/Migrant		yes
	Spotted Sandpiper	Uncommon	Winter		yes
	Whimbrel	Accidental/Vagrant	Spring		yes
	Long-bill Curlew	Uncommon	Winter		yes
	Marbled Godwit	Uncommon	Transient/Migrant		yes
	Red Knot	Rare	Transient/Migrant		yes
	Sanderling	Rare	Transient/Migrant		yes
	Western Sandpiper	Uncommon	Year-round		yes

Family	Species	Abundance	Residency	Nesting Species	MTBA
	Least Sandpiper	Common/Abundant	Year-round		yes
	Baird's Sandpiper	Uncommon	Summer		yes
	Pectoral Sandpiper	Uncommon	Summer		yes
	Dunlin	Rare	Winter		yes
	Short-billed Dowitcher	Uncommon	Transient/Migrant		yes
	Wandering Tattler	Accidental/Vagrant	Winter		yes
	Wilson's Snipe	Rare	Spring		yes
	Long-bill Dowitcher	Common/Abundant	Winter		yes
	Wilson's Phalarope	Uncommon	Transient/Migrant		yes
	Red Phalarope	Rare	Transient/Migrant		yes
	Red-necked Phalarope	Uncommon	Transient/Migrant		yes
Gulls/Terns /Allies	Franklin's Gull	Rare	Transient/Migrant		yes
	Bonaparte's Gull	Rare	Winter		yes
	Ring-billed Gull	Common/Abundant	Winter		yes
	California Gull	Uncommon	Winter		yes
	Heerman's Gull	Accidental/Vagrant	Transient/Migrant		yes
	Herring Gull	Rare	Transient/Migrant		yes
	Glaucous-winged Gull	Accidental/Vagrant	Transient/Migrant		yes
	Sabine's Gull	Rare	Transient/Migrant		yes
	Caspian Tern	Uncommon	Transient/Migrant		yes
	Common Tern	Uncommon	Transient/Migrant		yes
	Forster's Tern	Uncommon	Transient/Migrant		yes
	Least Tern	Rare	Transient/Migrant		yes
	Black Tern	Uncommon	Transient/Migrant		yes
	Royal Tern	Accidental/Vagrant	Year-round		yes
	Elegant Tern	Accidental/Vagrant	Year-round		yes
	Gull-billed Tern	Accidental/Vagrant	Spring		yes
	Parasitic Jaeger	Accidental/Vagrant	Winter		yes
	Black Skimmer	Accidental/Vagrant	Transient/Migrant		yes
Pigeons/Doves	Rock Dove	Common/Abundant	Year-round	yes	
	White-winged Dove	Common/Abundant	Summer	yes	yes
	Mourning Dove	Common/Abundant	Year-round	yes	yes
	Inca Dove	Uncommon	Year-round	yes	yes
	Common Ground Dove	Rare	Year-round	yes	yes

Family	Species	Abundance	Residency	Nesting Species	MTBA
	Ruddy Ground Dove	Accidental/Vagrant	Transient/Migrant		yes
	Band-tailed Pigeon	Accidental/Vagrant	Summer		
	Eurasian Collared Dove	Accidental/Vagrant	Year-round	yes	
Cuckoos/Roadrunners	Yellow-billed Cuckoo	Rare	Spring	yes	yes
	Greater Roadrunner	Common/Abundant	Year-round	yes	yes
Owls	Barn Owl	Uncommon	Year-round	yes	yes
	Western Screech Owl	Uncommon	Year-round	yes	yes
	Great Horned Owl	Uncommon	Year-round	yes	yes
	Elf Owl	Uncommon	Spring		yes
	Flammulated Owl	Accidental/Vagrant	Spring		yes
	Burrowing Owl	Uncommon	Year-round	yes	yes
	Long-eared Owl	Rare	Winter		yes
	Short-eared Owl	Accidental/Vagrant	Winter		yes
	Northern Saw-Whet Owl	Accidental/Vagrant	Winter		yes
Nightjars	Lesser Nighthawk	Common/Abundant	Year-round	yes	yes
	Common Poorwill	Uncommon	Year-round	yes	yes
Swifts	White-throated Swift	Common/Abundant	Year-round	yes	yes
	Vaux's Swift	Uncommon	Transient/Migrant		yes
Hummingbirds	Black-chinned Hummingbird	Common/Abundant		yes	yes
			Year-round		
	Anna's Hummingbird	Common/Abundant	Year-round	yes	yes
	Broad-tailed Hummingbird	Accidental/Vagrant	Transient/Migrant		yes
	Calliope Hummingbird	Accidental/Vagrant	Spring-fall Transient		yes
	Costa's Hummingbird	Common/Abundant	Year-round	yes	yes
	Rufous Hummingbird	Uncommon	Transient/Migrant		yes
	Allen's Hummingbird	Rare	Transient/Migrant		yes
	Broad-billed Hummingbird	Accidental/Vagrant	Transient/Migrant		yes
Kingfishers	Belted Kingfisher	Uncommon	Winter		yes
Woodpeckers	Lewis' Woodpecker	Accidental/Vagrant	Winter		yes
	Gila Woodpecker	Common/Abundant	Year-round	yes	yes
	Williamson's Sapsucker	Accidental/Vagrant	Transient/Migrant		yes
	Red-naped Sapsucker	Uncommon	Winter		yes
	Yellow-bellied Sapsucker	Rare	Winter		yes
	Ladder-backed Woodpecker	Common/Abundant	Year-round	yes	yes

Family	Species	Abundance	Residency	Nesting Species	MTBA	
Tyrant flycatchers	Gilded Flicker	Uncommon	Year-round	yes	yes	
	Northern Flicker	Common/Abundant	Winter		yes	
	Red-headed Woodpecker	Accidental/Vagrant	Winter		yes	
	Acorn Woodpecker	Accidental/Vagrant	Transient/Migrant		yes	
	Western Wood-Pewee	Common/Abundant	Summer-winter		yes	
	Greater Pewee	Accidental/Vagrant	Transient/Migrant		yes	
	Olive-sided Flycatcher	Uncommon	Transient/Migrant		yes	
	Willow Flycatcher	Uncommon	Spring	yes	yes	
	Hammond's Flycatcher	Uncommon	Transient/Migrant		yes	
	Dusky Flycatcher	Uncommon	Migrant		yes	
	Gray Flycatcher	Uncommon	Transient/Migrant		yes	
	Pacific-slope Flycatcher	Uncommon	Transient/Migrant		yes	
	Cordilleran Flycatcher	Accidental/Vagrant	Transient/Migrant		yes	
	Black Phoebe	Common/Abundant	Year-round	yes	yes	
	Say's Phoebe	Common/Abundant	Year-round	yes	yes	
	Eastern Phoebe	Accidental/Vagrant	Spring		yes	
	Vermillion Flycatcher	Uncommon	Year-round	yes	yes	
	Ash-throated Flycatcher	Common/Abundant	Spring	yes	yes	
	Brown-crested Flycatcher	Rare	Summer	yes	yes	
	Larks	Eastern Kingbird	Accidental/Vagrant	Transient/Migrant		yes
Western Kingbird		Common/Abundant	Spring	yes	yes	
Cassin's Kingbird		Accidental/Vagrant	Transient/Migrant		yes	
Thick-billed Kingbird		Accidental/Vagrant	Transient/Migrant		yes	
Tropical Kingbird		Accidental/Vagrant	Spring		yes	
Swallows		Horned Lark	Common/Abundant	Year-round	yes	yes
		Purple Martin	Rare	Transient/Migrant		yes
		Tree Swallow	Common/Abundant	Winter		yes
	Violet-Green Swallow	Uncommon	Transient/Migrant		yes	
	No. Rough-winged Swallow	Common/Abundant	Year-round	yes	yes	
	Bank Swallow	Uncommon	Transient/Migrant		yes	
	Cliff Swallow	Common/Abundant	Summer	yes	yes	
Jays/Crows /Ravens	Barn Swallow	Common/Abundant	Transient/Migrant		yes	
	Western Scrub Jay	Uncommon	Year-round		yes	
	Pinyon Jay	Accidental/Vagrant	Transient/Migrant		yes	

Family	Species	Abundance	Residency	Nesting Species	MTBA
	Stellar's Jay	Rare	Winter		yes
	Clark's Nutcracker	Accidental/Vagrant	Winter		yes
	American Crow	Uncommon	Winter		yes
	Common Raven	Common/Abundant	Year-round	yes	yes
Chickadees/Titmice /Bushtits/Verdins	Mountain Chickadee	Accidental/Vagrant	Transient/Migrant		yes
	Bridled Titmouse	Accidental/Vagrant	Transient/Migrant		yes
	Verdin	Common/Abundant	Year-round	yes	yes
	Bushtit	Rare	Winter		yes
Nuthatches/Creepers	Red-breasted Nuthatch	Rare	Transient/Migrant		yes
	White-breasted Nuthatch	Accidental/Vagrant	Winter		yes
	Brown Creeper	Rare	Winter		yes
Wrens	Cactus Wren	Common/Abundant	Year-round	yes	yes
	Rock Wren	Common/Abundant	Year-round	yes	yes
	Canyon Wren	Common/Abundant	Year-round	yes	yes
	Bewick's Wren	Uncommon	Year-round		yes
	House Wren	Common/Abundant	Spring		yes
	Winter Wren	Rare	Winter		yes
	Marsh Wren	Common/Abundant	Year-round	yes	yes
Kinglets/Gnatcatchers	Golden-crowned Kinglet	Rare	Winter		yes
	Ruby-crowned Kinglet	Common/Abundant	Winter		yes
	Blue-gray Gnatcatcher	Uncommon	Spring	yes	yes
	Black-tailed Gnatcatcher	Common/Abundant	Year-round	yes	yes
Thrushes/Allies	Western Bluebird	Uncommon	Winter		yes
	Mountain Bluebird	Uncommon	Winter		yes
	Townsend's Solitaire	Uncommon	Spring		yes
	Swainson's Thrush	Uncommon	Spring		yes
	Hermit Thrush	Uncommon	Spring		yes
	American Robin	Uncommon	Winter		yes
	Varied Thrush	Accidental/Vagrant	Winter		yes
Mockingbirds/Thrashers /Allies	Northern Mockingbird	Common/Abundant	Year-round	yes	yes
	Sage Thrasher	Uncommon	Spring		yes
	Bendire's Thrasher	Rare	Winter	yes	yes
	Curve-billed Thrasher	Rare	Year-round	yes	yes

Family	Species	Abundance	Residency	Nesting Species	MTBA
	Crissal Thrasher	Common/Abundant	Year-round	yes	yes
	Le Conte's Thrasher	Uncommon	Spring	yes	yes
	Gray Catbird	Accidental/Vagrant	Winter		yes
	Brown Thrasher	Accidental/Vagrant	Winter		yes
Pipits	American Pipit	Common/Abundant	Winter		yes
	Sprague's Pipit	Accidental/Vagrant	Winter		yes
Waxwings	Cedar Waxwing	Uncommon	Winter		yes
Silky flycatchers	Phainopepla	Common/Abundant	Year-round	yes	yes
Shrikes	Loggerhead Shrike	Common/Abundant	Year-round	yes	yes
Starlings	European Starling	Common/Abundant	Year-round	yes	
Vireos	Yellow-throated Vireo	Accidental/Vagrant	Transient/Migrant		yes
	Bell's Vireo	Uncommon	Year-round	yes	yes
	Gray Vireo	Rare	Transient/Migrant		yes
	Cassin's Vireo	Common	Winter		yes
	Blue-headed Vireo	Accidental/Vagrant	Transient/Migrant		yes
	Plumbeous Vireo	Uncommon	Migrant		yes
	Warbling Vireo	Common/Abundant	Transient/Migrant		yes
	Hutton's Vireo	Rare	Winter		yes
	Philadelphia Vireo	Accidental/Vagrant	Winter		yes
	Red-eyed Vireo	Accidental/Vagrant	Spring		yes
Wood Warblers	Orange-crowned Warbler	Common/Abundant	Winter		yes
	Nashville Warbler	Uncommon	Spring		yes
	Virginia's Warbler	Rare	Transient/Migrant		yes
	Lucy's Warbler	Uncommon	Spring	yes	yes
	Yellow Warbler	Uncommon	Spring	yes	yes
	Yellow-rumped Warbler	Common/Abundant	Fall-Spring		yes
	Black-throated Gray Warbler	Uncommon	Winter		yes
	Black-throated Blue Warbler	Accidental/Vagrant	Winter		yes
	Townsend's Warbler	Uncommon	Spring		yes
	Hermit Warbler	Uncommon	Spring		yes
	Black-and-White Warbler	Rare	Winter		yes
	Palm Warbler	Accidental/Vagrant	Winter		yes
	Blackpoll Warbler	Accidental/Vagrant	Summer		yes
	Prothonotary Warbler	Accidental/Vagrant	Winter		yes
	Wilson's Warbler	Common/Abundant	Transient/Migrant		yes

Family	Species	Abundance	Residency	Nesting Species	MTBA
	MacGillivray's Warbler	Common/Abundant	Spring		yes
	American Redstart	Rare	Winter		yes
	Painted Redstart	Accidental/Vagrant	Winter		yes
	Common Yellowthroat	Common/Abundant	Year-round	yes	yes
	Northern Waterthrush	Accidental/Vagrant	Summer		yes
	Louisiana Waterthrush	Accidental/Vagrant	Transient/Migrant		yes
	Yellow-breasted Chat	Common/Abundant	Spring	yes	yes
	Northern Parula	Accidental/Vagrant	Winter		yes
	Ovenbird	Accidental/Vagrant	Transient/Migrant		yes
	Golden-winged Warbler	Accidental/Vagrant	Transient/Migrant		yes
	Blue-winged Warbler	Accidental/Vagrant	Transient/Migrant		yes
	Worm-eating Warbler	Accidental/Vagrant	Transient/Migrant		yes
	Hooded Warbler	Accidental/Vagrant	Transient/Migrant		yes
Tanagers	Summer Tanager	Uncommon	Summer	yes	yes
	Western Tanager	Common/Abundant	Transient/Migrant		yes
	Hepatic Tanager	Uncommon	Summer		yes
Cardinals/Grosbeaks /Allies	Northern Cardinal	Uncommon	Year-round		yes
	Pyrrhuloxia	Accidental/Vagrant	Transient/Migrant		yes
	Rose-breasted Grosbeak	Common	Winter		yes
	Black-headed Grosbeak	Common/Abundant	Spring	yes	yes
	Blue Grosbeak	Common/Abundant	Spring	yes	yes
	Lazuli Bunting	Rare	Summer		yes
	Indigo Bunting	Accidental/Vagrant	Transient/Migrant		yes
	Varied Bunting	Accidental/Vagrant	Transient/Migrant		yes
Sparrows/Towhee /Allies	Rufous-crowned Sparrow	Rare	Year-round		yes
	White-throated Sparrow	Rare	Winter		yes
	Green-tailed Towhee	Uncommon	Winter		yes
	Spotted Towhee	Uncommon	Winter		yes
	Canyon Towhee	Common/Abundant	Year-round	yes	yes
	Abert's Towhee	Common/Abundant	Year-round	yes	yes
	Chipping Sparrow	Uncommon	Year-round		yes
	Brewer's Sparrow	Uncommon	Winter		yes
	Black-chinned Sparrow	Accidental/Vagrant	Winter		yes

Family	Species	Abundance	Residency	Nesting Species	MTBA
	Vesper Sparrow	Uncommon	Winter		yes
	Cassin's Sparrow	Uncommon	Winter		yes
	Lark Sparrow	Uncommon	Year-round		yes
	Black-throated Sparrow	Common/Abundant	Year-round	yes	yes
	Sage Sparrow	Uncommon	Winter		yes
	Lark Bunting	Rare	Transient/Migrant		yes
	Savannah Sparrow	Uncommon	Winter		yes
	Grasshopper Sparrow	Accidental/Vagrant	Winter		yes
	Fox Sparrow	Rare	Winter		yes
	Song Sparrow	Common/Abundant	Year-round	yes	yes
	Lincoln's Sparrow	Uncommon	Winter		yes
	Swamp Sparrow	Uncommon	Spring		yes
	Golden-crowned Sparrow	Rare	Winter		yes
	White-crowned Sparrow	Common/Abundant	Winter		yes
	Dark-eyed Junco	Uncommon	Winter		yes
	Lapland Longspur	Rare	Winter		yes
	Chestnut-collared Longspur	Rare	Winter		yes
	McCown's Longspur	Accidental/Vagrant	Transient/Migrant		yes
Blackbirds/Orioles	Red-winged Blackbird	Common/Abundant	Year-round	yes	yes
	Western Meadowlark	Uncommon	Year-round	yes	yes
	Yellow-headed Blackbird	Uncommon	Summer	yes	yes
	Bobolink	Accidental/Vagrant	Transient/Migrant		yes
	Brewer's Blackbird	Common/Abundant	Winter		yes
	Rusty Blackbird	Rare	Winter		yes
	Great-tailed Grackle	Common/Abundant	Year-round	yes	yes
	Brown-headed Cowbird	Common/Abundant	Year-round	yes	yes
	Bronzed Cowbird	Accidental/Vagrant	Summer		yes
	Dickeissel	Accidental/Vagrant	Transient/Migrant		yes
	Hooded Oriole	Uncommon	Spring	yes	yes
	Bullock's Oriole	Uncommon	Summer	yes	yes
	Scott's Oriole	Accidental/Vagrant	Summer	yes	yes
Finches/Allies	Red Crossbill	Accidental/Vagrant	Transient/Migrant		yes
	House Finch	Common/Abundant	Year-round	yes	yes
	Purple Finch	Rare	Winter		yes
	Cassin's Finch	Rare	Winter		yes

Family	Species	Abundance	Residency	Nesting Species	MTBA
	Evening Grosbeak	Rare	Transient/Migrant		yes
	Lazuli Bunting	Accidental/Vagrant	Transient/Migrant		yes
	Painted Bunting	Accidental/Vagrant	Transient/Migrant		yes
	Pine Siskin	Rare	Winter		yes
	Lesser Goldfinch	Uncommon	Year-round	yes	yes
	Lawrence's Goldfinch	Rare	Transient/Migrant		yes
	American Goldfinch	Uncommon	Winter		yes
Old World Sparrows	House Sparrow	Uncommon	Year-round	yes	yes

Peterson 1990; Sibley 2003; Rosenberg et. al 1991; Blair pers comm.

Invasive Species

Table C-8: List of Federal Regulated and Restricted Invasive Species

Common Name	Scientific Name	Within LHFO Boundary
Terrestrial Plants		
Autumn olive	<i>Elaeagnus umbellata</i>	
Chinese tallow	<i>Sapium sebiferum</i>	
Downy brome	<i>Bromus tectorum</i>	yes
Garlic mustard	<i>Alliaria petiolata</i>	
Japanese honeysuckle	<i>Lonicera japonica</i>	
Japanese knotweed	<i>Polygonum cupidatum</i>	
Kudzu	<i>Pueraria montana var. lobata</i>	
Leafy spurge	<i>Euphorbia esula</i>	
Mile-a-minute weed	<i>Polygonum perfoliatum</i>	
Multiflora rose	<i>Rosa multiflora</i>	
Musk thistle	<i>Carduus nutans</i>	yes
Russian knapweed	<i>Acroptilon repens</i>	yes
Russian olive	<i>Elaeagnus angustifolia</i>	
Saltcedar	<i>Tamarix spp.</i>	yes
Scotch broom	<i>Cytisus scoparius</i>	
Scotch thistle	<i>Onopordum acanthium</i>	yes
Spotted knapweed	<i>Centaurea maculosa</i>	yes
Tree-of-heaven	<i>Ailanthus altissima</i>	

Common Name	Scientific Name	Within LHFO Boundary
Yellow star thistle	<i>Centaurea solstitialis</i>	yes
Terrestrial Animals		
Africanized honeybee	<i>Apis mellifera scutellata</i>	yes
Asian long-horned beetle	<i>Anoplophora glabrispennis</i>	
Asian tiger mosquito	<i>Aedes albopictus</i>	
Brown tree snake	<i>Boiga irregularis</i>	
Cane toad	<i>Bufo marinus</i>	
Cactus moth	<i>Cactoblastis cactorum</i>	
Emerald ash borer	<i>Agrilus planipennis</i>	
European gypsy moth	<i>Lymantria dispar</i>	
European starling	<i>Sturnus vulgaris</i>	yes
Formosan subterranean termite	<i>Coptotermes formosaurus</i>	
Glassy-winged sharpshooter	<i>Homalodisca coagulate</i>	
Hemlock woolly adelgid	<i>Adelges tsugae</i>	
Pink hibiscus mealybug	<i>Maconellicoccus hirsutus</i>	
Red imported fire ant	<i>Solenopsis invicta</i>	
Russian wheat aphid	<i>Diuraphis noxia</i>	
Wild Boar	<i>Sus scrofa</i>	yes
Aquatic and Wetland Plants		
Brazilian waterweed	<i>Egeria densa</i>	
Caulerpa, Mediterranean clone	<i>Caulerpa taxifolia</i>	
Common reed	<i>Phragmites australis</i>	yes
Eurasian water-milfoil	<i>Myriophyllum spicatum</i>	yes
Giant hogweed	<i>Heracleum mantegazzianum</i>	
Giant-reed	<i>Arundo donax</i>	yes
Giant salvinia	<i>Salvinia molesta</i>	yes
Hydrilla	<i>Hydrilla verticillata</i>	
Melaleuca	<i>Melaleuca quinquenervia</i>	
Purple loosestrife	<i>Lythrum salicaria</i>	
Water chestnut	<i>Trapa natans</i>	
Water hyacinth	<i>Eichhornia crassipes</i>	
Aquatic and Wetland Animals		
Alewife	<i>Alosa pseudoharengus</i>	
Asian swamp eel	<i>Monopterus albus</i>	
Bullfrog	<i>Rana catesbeiana</i>	yes

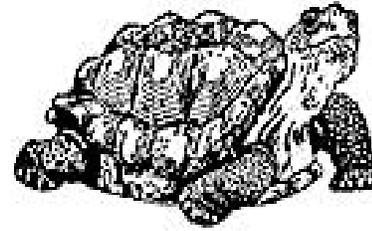
Common Name	Scientific Name	Within LHFO Boundary
Eurasian ruffe	<i>Gymnocephalus cernuus</i>	
European green crab	<i>Carcinus maenas</i>	
Flathead catfish	<i>Pylodictus olivaris</i>	yes
Northern Snakehead	<i>Channa argus</i>	
Nutria	<i>Myocastor coypus</i>	
Round goby	<i>Negobius melanostomus</i>	
Sea lamprey	<i>Petromyzon marinus</i>	
Veined rapa whelk	<i>Rapana venosa</i>	
Zebra mussel	<i>Dreissena polymorpha</i>	Yes
Microbes		
Exotic Newcastle Disease	<i>Paramyxovirus</i>	
Fowlpox	<i>Avipoxvirus</i>	
Plum Pox	<i>Potviruses: Potyviridae</i>	
Soybean Rust	<i>Phakopsora pachyrhizi/Phakopsora meibomia</i>	
Sudden Oak Death	<i>Phytophthora ramorum</i>	
West Nile Virus	<i>Flavivirus</i>	
Whirling Disease	<i>Myxobolus cerebralis</i>	

Table C-9: Arizona Regulated and Restricted Weeds

Common name	Scientific name	State Designation	Within LHFO Boundary
Southern sandbur	<i>Cenchrus echinatus</i>	Regulated	
Field sandbur	<i>Cenchrus incertus</i>	Regulated	
Field bindweed	<i>Convolvulus arvensis</i>	Restricted	
Burclover	<i>Medicago polymorpha</i>	Restricted	
Common purslane	<i>Portulaca oleracea</i>	Restricted	
Puncturevine	<i>Tribulus terrestris</i>	Restricted	yes
Russian knapweed	<i>Acroptilon repens</i>	Restricted	yes
Jointed goatgrass	<i>Aegilops cylindrica</i>	Restricted	
Camelthorn	<i>Alhagi maurorum</i>	Restricted	yes
Globed-podded hoary cress (Whitetop)	<i>Cardaria draba</i>	Restricted	
Diffuse knapweed	<i>Centaurea diffusa</i>	Restricted	yes
Spotted knapweed	<i>Centaurea maculosa</i>	Restricted	
Yellow starthistle	<i>Centaurea solstitialis</i>	Restricted	yes

Common name	Scientific name	State Designation	Within LHFO Boundary
Dodder	<i>Cuscuta</i> spp.	Restricted	yes
Floating water hyacinth	<i>Eichhornia crassipes</i>	Restricted	
Quackgrass	<i>Elymus repens</i>	Restricted	
Halogeton	<i>Halogeton glomeratus</i>	Restricted	yes
Texas blueweed	<i>Helianthus ciliaris</i>	Restricted	
Three-lobed morning glory	<i>Ipomoea triloba</i>	Restricted	
Dalmation toadflax	<i>Linaria dalmatica</i>	Restricted	
Scotch thistle	<i>Onopordum acanthium</i>	Restricted	yes

Desert Tortoise Habitat



The goals and criteria for the *Three Categories of Desert Tortoise Habitat Areas* are listed in the following table. The criteria are ranked by importance to the categorization process, with Criterion I being the most important.

Table C-10: Goals and Criteria for Three Categories of Desert Tortoise Habitat Areas

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

Appendix D

Water Resources: Springs/Wells/Reservoirs/Water Catchments

The following list shows all known desert water sources and developments beyond those perennial waters of the Colorado or Bill Williams Rivers. The list also shows if the water source is developed for beneficial consumptive uses by wildlife, livestock, or other purposes of public benefit.

Name	Developed
Arrastra Canyon (Mohave Mtn. #5)	Yes
Arrastra Well	No
Arrastra Well (772)	Yes
Arrowweed Spring	No
Aubrey Hills Catchment (892)	Yes
Aubrey Hills Tunnel	Yes
Betty Lou (845)	Yes
Big Falls Dam	Yes
Bill Williams Spring	No
Blacksmith Canyon Catchment	Yes
Blacksmith Canyon Spring	Yes
Black Tank	Yes
Bouse Hills (928)	Yes
Box Spring	No
Bristol Spring	No
Buckskin Jump-off / Mesa #3 (918)	Yes
Buckskin Mesa #4 (943)	Yes
Buckskin Mtn. 1 (628)	Yes
Buckskin Mtn. 2 (629)	Yes
Buckskin Tunnel	Yes
Bermuda Spring	No
Burnt Spring	No
Burro Canyon / Mohave Mtn. #2 (771)	Yes
Burro Canyon / Mohave Mtn. #4	Yes
Burro Spring/Well	No
California Catchment 1	Yes
California Catchment 2	Yes
C.A.P. Tank	Yes
Catasaurus Catchment	Yes
Cattail Cove (900)	Yes
Cayuga Tank (807)	Yes
Centennial Wash (I) (441)	Yes
Centennial Wash (II) (442)	Yes
Chino Spring	No
Chris's Hideout Well	Yes

Name	Developed
Cienega Springs	Yes
Conley Reservoir	Yes
Cottonwood Spring	No
Crossman Peak (Mohave Mtn. #2) (739)	Yes
Dripping Springs	Yes
Dry Tank	Yes
Earth Tank	Yes
Flag Spring	No
Goat Spring	Yes
Gold Spring	Yes
Granite Wash 1 (929)	Yes
Granite Wash 2 (930)	Yes
Granite Wash 3	Yes
Granite Wash 4	Yes
Granite Wash Big Horn Sheep Catchment	Yes
Granite Wash Pothole	Yes
Grapevine Canyon Spring	No
Grapevine Springs	No
Gravel Pit (913)	Yes
Hancock Reservoir	Yes
Hancock Stock Tank	Yes
Harcuvar #1 (597)	Yes
Harcuvar #11	Yes
Harcuvar #2	Yes
Harcuvar #3	Yes
Harcuvar #6	Yes
Harcuvar #9	Yes
Harcuvar Big Horn Sheep #6	Yes
Harcuvar Deer #2	Yes
Harcuvar Deer #3	Yes
Harcuvar Mtns. #1	Yes
Hargus Cabin Spring	Yes
Harquar Tank (932)	Yes
Havasu Spring	No
Highway 95 – Red Cliff	Yes
Horse Corral (Mohave Mtn. #1) (670)	Yes
Ibex Peak I (958)	Yes
Ibex Peak II	Yes
Jackpot Spring	No
Jasmine	Yes
Jasmine Apron	Yes
Jupiter Spring	Yes
Lamb Spring (573)	Yes
Leroy	Yes
Lake Mine	Yes
Little Black Mtn. #1	Yes
Little Black Mtn. #2	Yes
Little Black Mtn. #3	Yes
Little Buckskin Mtn. #1 (935)	Yes

Name	Developed
Little Buckskin Mtn. #2	Yes
Little Buckskin Mtn. #3	Yes
Little Buckskin Mtn. Mule Deer Catchment	Yes
Lower West Side Reservoir	Yes
Midway (970)	Yes
Midway Spring	No
Miller Reservoir	Yes
Miller Well (1027)	Yes
Miller Well Apron	Yes
Mississippi Spring	Yes
Mohave Mtn. #3 (abandoned)	Yes
Mohave Springs	Yes
Muse Reservoir	Yes
N. Plomosa	Yes
New Well Tank	Yes
No Name Canyon (774)	Yes
No Name Canyon (Mohave Mtn. #6)	Yes
Onetto Spring	No
Oro Tank	Yes
Orosco Tank	Yes
Osborne Tank	Yes
Paloma Wash Catchment	Yes
Phoenix Trust Reservoir	Yes
Piedras Blancas (1032)	Yes
Planet Peak Apron	Yes
Planet Peak Tank	Yes
Planet Peak Tunnel	Yes
Plomosa Mtn. #2 (521)	Yes
Portal Inlet (931)	Yes
Ram Mtn. Apron	Yes
Ram Mtn. Tanks	Yes
Red Cliffs (996)	Yes
Refuge Boundary	Yes
Refuge Boundary (Mohave Mtn. #7) (777)	Yes
Reily	Yes
Roadside Tank	Yes
Scott's Well	Yes
Screwbean Spring	Yes
Secret Pass Spring	No
Seep Spring	No
Shancy Spring	No
Short Spring	No
Section 26 Tank	Yes
Silver Creek Spring	No
Skull Mtn.	Yes
Smith Peak (957)	Yes
Smith Peak Catchment	Yes
Socorro Peak (934)	Yes
Socorro Catchment	Yes

Name	Developed
South Needles Tank/Pothole (980)	Yes
Spring & Improvement	Yes
Standard Wash Catchment	Yes
Standard Wash (892)	Yes
Summit Spring	No
Swansea	No
Tank Pass (963)	Yes
Tinajas dos Picos	Yes
Tortoise Tank	Yes
Tule Spring	Yes
Tunnel Spring	No
Upper West Side Reservoir	Yes
Winchester Tank Reservoir	Yes
Whiskey Spring	No

This list is based on available data sources, including the Rangeland Improvement Project System and GIS data sources, and may not be complete.

Cultural Resources: Basic Goals, Objectives, Allocations, and Actions

Goal 1: Preserve and protect significant cultural resources and ensure that they are available for appropriate uses by present and future generations.

Objectives

- Allocate sites to cultural resource use categories, in accordance with BLM Manual 8110, to achieve the corresponding desired future conditions. Use categories include scientific use, conservation for future use, traditional use, public use, experimental use, and discharged from management.
- Implement physical protection measures at sites.
- Retain significant resources in public ownership.
- Acquire significant resources for protection and management under public ownership.
- Identify significant cultural landscapes and associated use allocations.
- Preserve sites that represent the range of time periods, cultural traditions, and functional types within the planning area.
- Consult with Indian tribes to identify places of traditional importance and access needs, and to evaluate and determine site use allocations and protection priorities.
- Encourage and permit scientific research to include non-invasive archaeological methods and the documentation of oral histories and oral traditions.
- Provide opportunities for cultural heritage tourism and associated partnerships.
- Develop and maintain an active program of public education on the nature and values of cultural resources and the need to preserve them. Direct educational efforts toward a variety of age groups and audiences. Disseminate the results of scientific research to the public in an understandable format.
- Involve local communities in cultural resource protection and public education projects.

Allocations and Management Actions

- Identify priority areas for cultural resource management based on the relative importance and sensitivity of known and anticipated cultural properties.
Management actions: these areas will be assigned a higher priority for inventory, scientific research, condition monitoring, and the implementation of protection measures and use restrictions. They will also receive relatively high priority for National Register nomination, retention in federal ownership, and acquisition of in-holdings or properties of high significance on adjacent lands.
- Identify alternative sites and areas for varying intensities of public use.
- Continue to maintain sites that have been developed for interpretive uses.
- Work with the recreation program to incorporate sites allocated to public use into systems of recreational trails, routes, and Back Country Byways.
- Conduct ethnohistoric studies of selected areas to identify places of traditional cultural importance, tribal concerns, tribal needs for access and natural resource use, and protective measures.

Goal 2: Seek to reduce imminent threats and resolve potential conflicts, from natural or human-caused deterioration, or from other resource uses.

Objectives

- Work with BLM staff and land use applicants to develop project designs that avoid adverse impacts to significant cultural resources.
- Work with geologists to ensure that abandoned mine closures do not unnecessarily cause damage to cultural resources.
- Identify and protect historic structures and other fire-sensitive sites in areas designated for fuels treatment programs.
- Reduce the impacts of motorized and non-motorized recreational activities, including recreational prospecting, on archaeological sites.
- Reduce the impacts of commercial recreational activities and events, while providing opportunities for public enjoyment and education.
- In considering applications for leases under the Recreation & Public Purposes Act, identify and analyze NEPA alternatives that do not contain significant cultural resources.
- Review proposed grazing permit renewals to evaluate areas of livestock congregation where grazing activities are causing damage to significant sites, and take action to protect the sites.
- Maintain the visual integrity of cultural landscapes and settings of significant sites.

Allocations and Management Actions

- Conduct cultural resources inventories to identify significant resources, imminent threats, and potential conflicts with other resource uses (see Goal 3).
- Ensure that holders of special recreation permits monitor the condition of archaeological sites to which they are permitted to take visitors, and that they offer appropriate educational information about resource conservation.
- Establish limitations, restrictions, or stipulations to ensure that commercial tour operators do not damage cultural resources.
- Prohibit commercial tours to selected areas in order to protect cultural resources. Such areas may be allocated to a category of “conservation for future use.”
- Prohibit geocaching activities on archaeological sites.
- Limit vehicle traffic to designated routes or, if needed, close selected routes to vehicles or reroute to reduce physical damage or limit access to significant archaeological sites.
- Restrict livestock grazing where this activity is causing significant damage to sites.
- In evaluating alternative locations for leases granted under the Recreation & Public Purposes Act, assign preference to areas that do not contain significant cultural resources, or to areas managed as open space with limited access. If leases are granted in areas that contain significant cultural resources, it is preferable to mitigate adverse effects through scientific data recovery rather than patent restrictions or reversionary clauses.
- Establish a policy that prohibits scientific and public uses of sites from disturbing Native American human remains and associated objects.

Goal 3: Identify priority geographic areas for new field inventory, based upon a probability for unrecorded significant resources.

Objectives

- Conduct field inventories to identify significant cultural resources in order to determine threats and effective protection measures, and to allocate sites to appropriate uses.

Allocations and Management Actions

- Define priority areas for field inventories.
- Identify cultural landscapes and traditional cultural properties that may require protection or special management.
- Coordinate with adjacent Field Offices on priority inventories.

- ❑ Harcuvar Mountains: The Harcuvar Mountains contain a variety of significant archaeological sites, including prehistoric camps, stone tool manufacturing sites, and petroglyphs. Unusual sites include rockshelters, pictographs, and occurrences of minerals and crystals. These sites have the potential to yield important information about prehistoric occupation of the area, particularly during the period between A.D. 700 and 1000. There may also be sites associated with transportation, commerce, and military activities during the 1800s.
- ❑ Harquahala Mountains: This mountain range, a major zone of occupation by the historic Yavapai tribe, contains significant prehistoric sites including habitation camps, milling areas, and rock art. The significance of the cultural resources is consistent with a recommendation by wildlife biologists to establish an ACEC that includes the entire area of the range managed by PFO.

Land Use Allocation for Cultural Resources

Table E-1. Allocation of LHFO Cultural Sites

Approved RMP	
Conservation (28)	
Intaglio (3)	
Dough Boy	Desert Unit
Osborne Snake, etc	Desert Unit
Feathered Serpent	Desert Unit
Rock Art (10)	
Empire	Colorado River Unit
Arrastre Canyon	Desert Unit
Burro Canyon	Desert Unit
Hwy 60	Desert Unit
AhVilla	Colorado River Unit
Harcuvar Pictograph sites	Desert Unit
Harquar Tank	Desert Unit
Mississippi Spr	Bill Williams Unit
Kegley Lynch	Desert Unit
Bison	Desert Unit
Habitation (13)	
Osborne Wash	Desert Unit
Mohave Mesa	Desert Unit
Black Tank	Desert Unit
Screwbean	Desert Unit

Table E-1. Allocation of LHFO Cultural Sites

Bowman's Wash	Colorado River Unit
Beale's Wagon Road	Colorado River Unit
M:9:16 (ASM)	Bill Williams Unit
Bluebird	Colorado River Unit
Colorado River Nature Center	Colorado River Unit
Bouse Well	Desert Unit
Owl Cliff's shelter	Desert Unit
Centennial Wash	Bill Williams Unit
Mineral Wash	Desert Unit
Historic (2)	
Harquahala Mining	Desert Unit
Bonanza & Incline	Desert Unit
Traditional (7)	
Intaglio (5)	
Beale Slough	Colorado River Unit
Thunderbird	Desert Unit
Rattlesnake	Desert Unit
Topock Maze	Colorado River Unit
Park Moabi	Colorado River Unit
Petroglyph	
Stateline Glyph	Colorado River Unit
Complex	
Creation Site Area	Colorado River Unit
Public (8)	
Camp Bouse	Desert Unit
A&P RR	Colorado River Unit
Culling's Well	Desert Unit
Hardy Toll Rd	Colorado River Unit
Schwanbeck's	Colorado River Unit
Swansea	Bill Williams Unit
McGuffie Cabin	Bill Williams Unit
Hargus Cabin	Desert Unit

Special Cultural Resource Management Area

Special Cultural Resource Management Areas contain 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 Special Cultural Resource Management Area 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 should not be subjected to invasive studies or other uses that would threaten their present condition. Instead prescriptions should focus on conserving such sites for the future.

Management prescriptions for a single Special Cultural Resource Management Area 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 resource 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.

Definition of Use Categories

SCIENTIFIC USE: This category applies to any cultural property determined to be available for consideration as the subject of scientific or historical study at the present time, using currently available research techniques. Study indicates methods that would result in the property's physical alteration or destruction. This category applies almost entirely to prehistoric and historic archaeological properties, where this method of use is generally archaeological excavation, controlled surface collection, and/or controlled recordation (data recovery). Recommendation to allocate individual properties to this use

must be based on documentation of the kinds of data the property is thought to contain and the data's importance for pursuing specific research topics.

CONSERVATION FOR FUTURE USE: This category is reserved for any unusual cultural resource that, because of scarcity, a research importance, cultural importance, architectural interest, or comparable reasons, is not currently appropriate for consideration as the subject of scientific or historical study that would result in its physical alteration. A cultural property or location included in this category is considered worthy of segregation from all other land or resource uses, including cultural resource uses, that would threaten the maintenance of the present condition or setting, as pertinent, and it will remain in this category until specific provisions are met in the future. A cultural resource will be separated and protected from other non-compatible land uses and preserved in place because a) that particular site type is scarce or unique, b) its information potential cannot be realized through available archaeological methods, or c) it represents an outstanding example of a particular site type.

TRADITIONAL USE: This category is to be applied to any cultural resource that is perceived by a specified social and/or cultural group as having attributes that contribute to maintaining the heritage or existence of that group. This use category signifies that the cultural resource is to be managed in a way that takes those attributes into account, as applicable.

PUBLIC USE: A cultural property is eligible for consideration as an interpretive exhibit-in-place, a subject of supervised participation in scientific or historical study, a subject of unsupervised collecting under permit or related educational and recreational uses by members of the general public.

EXPERIMENTAL USE: This category may be applied to a cultural property judged well-suited for controlled experimental study, to be conducted by BLM or others concerned with the techniques of managing cultural properties, which would result in the property's alteration, possibly including loss of integrity and destruction of physical elements. Committing cultural properties or the data they contain to loss must be justified in terms of specific information that would be gained and how it would aid in the management of other cultural properties. Experimental study should aim toward understanding the kinds and rates of natural or human-caused deterioration, testing the effectiveness of protection measures, or developing new research or interpretation methods and similar kinds of practical management information.

DISCHARGED FROM MANAGEMENT: This category is assigned to cultural properties that have no remaining identifiable use. Most often these are prehistoric and historic archaeological properties, such as small surface scatters of artifacts or debris, whose limited research potential is effectively exhausted as soon as they have been documented. Also, more complex archaeological properties that have had their salient information collected and preserved through mitigation or research may be discharged from management, as should cultural properties destroyed by any natural event or human activity. Properties discharged from management remain in the inventory, but they are removed from further management attention and do not constrain other land uses.

Paleontological Resources

Paleontology is the study of flora and fauna (vertebrate and invertebrate) from past geological eras. Paleontological resources are fossils, or recognizable remains of past life, which have been preserved through various processes. The most typical process involves deposition of the organism in sediment which has either preserved the form of the organic material through replacement of the organic material by sediment, or through preservation of the form of the organism by impression in sediment. In some dry climates, preservation of organic material may occur.

Significant fossil sites on BLM-managed land in Lake Havasu Field Office include the Golden Shores Mammoth site, the Bouse Formation and the Chemehuevi Formation.

Appendix F

Vegetation Treatments (Including Fire)

Treatment Methods

Several treatment methods and Standard Operating Procedures would be used in a vegetation treatment program. BLM policies and guidance for public land treatments would be followed in implementing all treatment methods. Many guidelines are provided in manual Section 1740, BLM Arizona's Standards for Rangeland Health, Programmatic documents such as BLM's *Final Environmental Impact Statement, Vegetation Treatment on BLM Lands in Thirteen Western States (May 1991)*, and other general and specific program policy, procedures, and standards pertinent to implementation of renewable resource improvements.

In Arizona, BLM manages designated Wilderness Areas, Wilderness Study Areas, and areas managed for wilderness characteristics that are identified in an approved land use plan. Guidelines and operating procedures for fire management activities in Wilderness Areas are provided in BLM Manual 8560, *Management of Designated Wilderness Areas*, and in Wilderness Management Plans where completed for specific Wilderness Areas (Table 3.9).

Fire management guidance for Wilderness Study Areas is provided in BLM Manual 8550, *Interim Management Policy and Guidelines for Lands under Wilderness Review*. Approved land use plans specify fire management procedures for areas identified in the land use plan to be managed for wilderness characteristics.

The following manual, chemical, mechanical, biological and fire treatment methods would be used for all alternatives.

Manual

Hand-operated power tools and hand tools are used in manual vegetation treatment to cut, clear, or prune herbaceous and woody species. In manual treatments, workers would cut plants above ground level; pull, grub, or dig out plant root systems to prevent subsequent sprouting and regrowth; scalp at ground level or remove competing plants around desired vegetation; or place mulch around desired vegetation to limit the growth of competing vegetation. Hand tools such as the handsaw, axe, shovel, rake, machete, grubbing hoe, mattock (combination of axe and grubbing hoe), brush hook, and hand clippers are used in manual treatments.

Axes, shovels, grubbing hoes, and mattocks can dig up and cut below the surface to remove the main root of plants such as prickly pear and mesquite that have roots that can quickly resprout in response to surface cutting or clearing. Workers also may use power tools such as chain saws and power brush saws.

Mechanical

Mechanical methods of vegetation treatment employ several different types of equipment to suppress, inhibit, or control herbaceous and woody vegetation (Vallentine 1980). The goal of mechanical treatments is to kill or reduce the cover of undesirable vegetation and thus encourage the growth of desirable plants. BLM uses wheel tractors, crawler-type tractors, mowers, or specially designed vehicles with attached implements for mechanical vegetation treatments. The use of mechanical equipment to reduce fuel hazards will be conducted in accordance with BLM established procedures. Reseeding after a mechanical treatment has been applied is important to help insure that desirable plants become established on the site and not weedy species. The mechanical treatment and reseeded should occur at a time to best control the undesirable vegetation and encourage the establishment of desirable vegetation. The best mechanical method for treating undesired plants in a particular location depends on the following factors:

1. Characteristics of the undesired species present such as plant density stem size, woodiness, brittleness, and resprouting ability.
2. Need for seedbed preparation, revegetation, and improvement of water infiltration rates.
3. Topography and terrain.
4. Soil characteristics such as type, depth, amount and size of rocks, erosion potential, and susceptibility to compaction.
5. Climatic and seasonal conditions.
6. Potential cost of improvement as compared to expected results.

Bulldozing consists of a wheeled or crawler tractor with a heavy, hydraulically controlled blade. Vegetation is pushed over, uprooted, and then left in windrows or piles. Bulldozing is best adapted to removing scattered stands of large brush or trees.

Several different kinds of blades are available, depending of the type of vegetation and goals of the project. The disadvantage of bulldozing is soil disturbance and damage to non-target plant species.

Disk plowing in its various forms can be used for removing shallow-rooted herbaceous and woody plants. Disk plows should be used only where all of the vegetation is intended to be killed. Several different kinds of plows are specific for certain types of vegetation. In addition to killing vegetation, disk plowing is effective in loosening the soil surface to prepare it for seeding and to improve the rate of water infiltration. The disadvantage of disk plowing is that it may be expensive and usually kills all plant species. Also, plowing is usually not practicable on steep slopes (greater than a 35% to 45% slope) or rocky soil. Plant species that sprout from roots may survive.

Chaining and cabling is accomplished by dragging heavy anchor chains or steel cables hooked behind to tractors in a U-shape, half circle, or J-shaped manner. This method is effective on rocky soils and steep slopes and is best used to control non-sprouting woody vegetation such as small trees and shrubs. However, desirable shrubs may be damaged in the process. Herbaceous vegetation is normally not injured by this control method. This control method is cost effective as large areas can be readily treated. The chains or cables also scarify the soil surface in anticipation of seeding desirable species. The disadvantage is that weedy herbaceous vegetation can survive this treatment.

Various tractor attachments are used for mowing, beating, crushing, chopping, or shredding vegetation, depending on the nature of the plant stand and goals of the project. The advantage in using this type of equipment is that selective plants may be targeted to achieve specific goals. For example, mowing is effective in reducing plant height to a desirable condition, and it usually does not kill vegetation. Mowing is more effective on herbaceous than woody vegetation. On the other hand, a rolling cutter can kill woody non-sprouting vegetation by breaking stems at ground level but leave herbaceous vegetation intact. Mowing, beating, crushing, chopping, or shredding usually does not disturb soil. Rocky soil and steep slopes may limit this use of this equipment.

Debris management after a mechanical control treatment application is critical in fuels reduction projects. Vegetation material that is left onsite will dry and may become more hazardous than before the treatment. Herbaceous material is usually not a problem because it will decompose relatively fast depending on soil moisture, ambient humidity, and temperature. Woody vegetation should be piled and burned under acceptable fire management practices.

Biological

Biological methods of vegetation treatment could employ grazing by cattle, sheep, or goats, but would not include the use of invertebrates or microorganisms. BLM would use cattle, sheep, or goats only when grazing would have no effect on listed, proposed, or candidate species. The use of grazing as a biological control agent would be conducted in accordance with BLM procedures in the *Use of Biological Control Agents of Pests on Public Lands* (BLM 1990). Grazing by cattle, sheep, or goats would be used as biological control methods under all alternatives, although at the present these methods can control only a few plant species.

Gradually, biological methods using cattle, sheep, or goats would avoid erosion hazard areas, areas of compactable soils, riparian areas susceptible to bank damage, and steep erodible slopes.

Biological control using cattle, sheep, or goats would be applied to treatment areas for short periods. When considering the use of grazing animals as an effective biological control measure, several factors will be taken into consideration including the following:

1. Target plant species present.
2. Size of the infestation of target plant species.
3. Other plant species present.

4. Stage of growth of both target and other plant species.
5. Palatability of all plant species present.
6. Selectivity of all plant species present by the grazing animal species that is being considered for use as a biological control agent.
7. The availability of that grazing animal within the treatment site area.
8. Type of management program that is logical and realistic for the specific treatment site.

These factors would be some of the options taken when developing the individual treatment for a specific site.

Although discussed as biological agents, cattle, sheep, and goats are not truly biological agents but are domestic animals used to control only the top growth of certain noxious weeds. The following are some advantages of using domestic animals, mainly sheep or goats, for noxious weed control:

1. They use weeds as a food source.
2. Following a brief adjustment period, they sometimes consume as much as 50 percent of their daily diet of this species.
3. Average daily gains of offspring grazing certain weed-infested pastures can sometimes be significantly higher than average daily gains of offspring grazing grass pastures.
4. Sheep or goats can be used in combination with herbicides.

Some of the disadvantages of using domestic animals are as follows:

1. They also use nontarget plants as food sources.
2. The use of domestic animals, like sheep or goats, requires a herder or temporary fencing.
3. The animals may be killed by predators such as coyotes.
4. Heavy grazing of some weed species, such as leafy spurge, tends to loosen the stools of the grazing animals.
5. Most weed species are less palatable than desirable vegetation and would cause overgrazing.
6. They may accelerate movement of nonnative plants through seed ingestion and excretion.
7. Domestic livestock may transmit parasites and/or pathogens to resident native wildlife species.

Prescribed Burning

Prescribed burning is the planned application of fire to wildland fuels in their natural or modified state, under specific conditions of fuels, weather, and other variables to allow the fire to remain in a predetermined area and to achieve site-specific fire and resource management objectives.

Management objectives of prescribed burning include the control of certain species; enhancement of growth, reproduction, or vigor of certain species; management of fuel loads; and maintenance of vegetation community types that best meet multiple-use management objectives. Treatments would be implemented in accordance with BLM procedures in *Fire Planning* (BLM 1987c), *Prescribed Fire Management* (BLM 1988b), and *Fire Training and Qualifications* (BLM 1987d).

Prior to conducting a prescribed burn, a written plan must be prepared that takes into consideration existing conditions (e.g., amount of fuel, fuel moisture, temperatures, terrain, weather forecasts, and other factors) and identifies people responsible for overseeing the fire.

Natural fire that is allowed to burn also needs to be carefully monitored to ensure that it does not threaten communities, other values to be protected, and ecosystems. This monitoring may require special expertise such as the fire use management teams that have been developed to support the overall fire management program. Planning and implementation for a specific prescribed fire project entails the following four phases:

- Phase 1: Information/Assessment Phase includes identifying the area to be treated, inventory and assessment of site-specific conditions (e.g., live and dead vegetation densities, dead down woody fuels loadings, and soil types), analysis of historic and current fire management, and identification of resource objectives from RMP and NEPA analysis and compliance.
- Phase 2: The Prescribed Fire Plan Development Phase includes developing the site-specific prescribed fire plan to BLM Standards, reviewing of the plan, and obtaining plan approval from local BLM field office administrators.
- Phase 3: Implementation includes igniting the fire according to the plan's prescribed parameters and preparing the prescribed fire boundary area to ensure that the fire remains within the prescribed boundaries. Site preparation may be in the form of fire line construction and improving roads and wildlife and stock trails by limbing trees and clearing debris.
- Phase 4: Monitoring and Evaluation includes assessment and long-term monitoring of the fire treatment to ensure the prescribed fire has met the objectives of the approved prescribed fire plan. BLM fire monitoring policy is described in the BLM prescribed Fire Management Handbook, October 2003, Chapter 2 and Appendix 7. This policy applies to prescribed fire and wildland fire use.

Appropriate Management Response

The appropriate management response concept represents a range of available management responses to wildland fires. Responses range from full fire suppression to managing fires for resource benefits (fire use). Management responses applied to a fire will be identified in the FMP and will be based on objectives derived from the land use allocations, relative risk to resources, the public and fire fighters, potential complexity, and the ability to defend management boundaries. Any wildland fire can be aggressively suppressed, and any fire that occurs in an area designated for fire use can be managed for resource benefits if it meets the prescribed criteria from an approved fire management plan.

Chemical

BLM would use EPA-approved herbicides in accordance with EPA's Endangered Species Pesticide Program covered in BLM's Vegetation Treatment on BLM Lands in Thirteen Western States FEIS (May 1991) and further limited to those approved for use by the Arizona Record of Decision (Page 3, ROD, July 1991). These herbicides are Atrazine; Bromacil; Bromacil + Diuron; Chlorsulfuron; Clopyralid; 2,4-D, Dicamba; Dicamba + 2,4-D; Diuron; Glyphosate; Glyphosate + 2,4-D; Hexazinone; Imazapyr; Mefluidide; Metsulfuron Methyl; Picloram; Picloram + 2,4-D; Simazine; Sulfometuron Methyl; Tebuthiuron; and Triclopyr. Treatments will follow Standard Operating Procedures) on pages 1-19 through 1-32 and project design features on pages 1-33 through 1-37 of the FEIS.

Additionally, the project design features buffer strips as described on page 10 of the ROD. Buffer strips would be used adjacent to dwellings, domestic water sources, agriculture land, streams, lakes, and ponds. A minimum buffer strip 100 feet wide will be provided for aerial application, 25 feet wide for vehicle application, and 10 feet wide for hand application. Any deviations must be in accordance with the label for the herbicide. Herbicides will be wiped on individual plants within 10 feet of water where application is critical. These buffer strips would also be used to protect listed, proposed, and candidate species. BLM will work closely with the FWS to ensure that herbicide applications do not affect listed or proposed threatened or endangered species on a project-level basis. If adverse effects are anticipated during informal consultation, then BLM will formally consult on these projects. If FWS develops herbicide guidance for particular species that improves protection beyond the current BLM design features, BLM will consider and incorporate that guidance as it consults with the FWS on a project-level basis. The chemicals can be applied by many different methods, and the selected technique depends on a number of variables:

1. Treatment objective (removal or reduction).
2. Accessibility, topography, and size of the treatment area.
3. Characteristics of the target species and the desired vegetation.
4. Location of sensitive areas in the immediate vicinity (potential environmental impacts).
5. Anticipated costs and equipment limitations.

6. Meteorological and vegetative conditions of the treatment area at the time of treatment.

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

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

The chemicals would be applied aerially with helicopters or fixed-wing aircraft or on the ground using vehicles or manual application devices. Helicopters are more expensive to use than fixed-wing aircraft, but they are more maneuverable and effective in areas with irregular terrain and in treating specific target vegetation in areas with many vegetation types. Manual applications are used only for treating small areas or those inaccessible by vehicle.

The typical and maximum application rates of each chemical would vary, depending on the program area being treated.

Fire Suppression Actions

The following constraints to fire suppression actions are common to all alternatives:

- Suppression tactics are utilized that limit damage or disturbance to the habitat and landscape. No heavy equipment (such as dozers) is used, unless approved by the Field Office Manager.
- Use of fire retardants or chemicals adjacent to waterways will be accomplished in accordance to the Environmental Guidelines for Delivery of Retardant or Foam near Waterways (Interagency Standards for Fire and Aviation Operations pages 8–13).
- All known cultural resources are protected from disturbance.
- In Wilderness Areas, Wilderness Study Areas, and areas being managed for wilderness characteristics according to LUPs, when suppression actions are required, minimum impact suppression tactics (Interagency Standards for Fire and Aviation Operations, 2003) would be utilized and coordinated with Wilderness Area management objectives and guidelines.
- The general and species-specific Conservation Measures from the Proposed Arizona Statewide Land Use Plan Amendment for Fire, Fuels, and Air Quality, March 2004 are listed in this appendix and will be implemented to the extent possible to minimize adverse effects to federally listed, proposed, or candidate species occurring within the action area.
- For fire suppression activities, a protocol for consultation has been developed as a part of the Biological Opinion (BO). This programmatic consultation contains conservation measures and prescriptions for use in fire suppression activities.

Emergency consultation should be needed in the future only if suppression actions fall outside of these prescriptions/measures. The BO should outline coordination needs for emergency response actions that may affect a listed/proposed species and/or critical habitat.

The following protocol applies:

BLM will contact the appropriate USFWS biologist as soon as practical once a wildfire starts and a determination is made that a federally protected species and/or its habitat could be affected by the fire and/or fire suppression activities. USFWS will work with BLM during the emergency response to apply the appropriate Conservation Measures. If Conservation Measures cannot be applied during the suppression activities, BLM would consult after the fact on any suppression actions that may have affected a federally protected species or its habitat. If Conservation Measures are adhered to, then BLM will report on the actions taken and effects to the species and its habitat following the fire, but no further consultation on that incident should be required.

Proposed Conservation Measures for Arizona BLM Statewide LUP Amendment and EA for Fire, Fuels, and Air Quality Management

This section is organized by program area. Each of the decisions is coded to reflect the primary resource that is affected. These codes correspond to those presented in the Arizona Statewide Land Use Plan Amendment for Fire, Fuels, and Air Quality Management (AZLUP 2003).

Wildland Fire Suppression	(FS)
Fuels Treatments	(FT)
Rehabilitation and Restoration	(RR)
Conservation Measures for Fire	(RA)
Management Activities in Riparian and Aquatic Habitats	
Species Specific Conservation Measures	
Amphibians	(AM)
Birds	
Cactus ferruginous pygmy-owl	(FP)
California brown pelican	(BP)
California Condor	(CC)
Northern aplomado falcon	(AF)
Southwestern willow flycatcher	(WF)
Yuma clapper rail	(CR)
Bald eagle	(BE)
Mexican spotted owl	(SO)
Yellow-billed cuckoo	(YC)
Fish	(FI)
Bonytail chub	(BC)
Desert pupfish	(DP)
Gila topminnow	(GT)
Razorback sucker	(RS)
Virgin River chub	(VC)
Woundfin	(WM)
Little Colorado spinedace	(LS)
Loach minnow	(LM)
Gila chub	(GC)
Flowering Plants	PL)
Huachuca Water Umbel	(WU)
Kearney's Blue Star	(KB)
Mammals	
Black-footed ferret	(BF)
Hualapai Mexican vole	(HV)
Jaguar	(JA)
Lesser long-nosed bat	(LB)
Mexican gray wolf	(GW)
Black-tailed prairie dog	(PD)
Reptiles	

Desert tortoise (DT)
New Mexico ridgenose rattlesnake (RN)

1. Conservation Measures for Fire Management Activities

1.1 Wildland Fire Suppression (FS)

The following Conservation Measures will be implemented during fire suppression operations unless firefighter or public safety, or the protection of property, improvements, or natural resources, render them infeasible during a particular operation. Each Conservation Measure has been given an alphanumeric designation for organizational purposes (e.g., FS-1). Necessary modifications of the Conservation Measures or impacts to federally protected species and habitat during fire suppression operations will be documented by the Resource Advisor, and coordinated with the USFWS.

- FS-1 Protect known locations of habitat occupied by federally listed species. Minimum Impact Suppression Tactics (MIST) will be followed in all areas with known federally protected species or habitat [Appendix U, *Interagency Standards for Fire and Aviation Operations 2003*, or updates].
- FS-2 Resource Advisors will be designated to coordinate natural resource concerns, including federally protected species. They will also serve as a field contact representative (FCR) responsible for coordination with the USFWS. Duties will include identifying protective measures endorsed by the Field Office Manager, and delivering these measures to the Incident Commander; surveying prospective campsites, aircraft landing and fueling sites; and performing other duties necessary to ensure adverse effects to federally protected species and their habitats are minimized. On-the-ground monitors will be designated and used when fire suppression activities occur within identified occupied or suitable habitat for federally protected species.
- FS-3 All personnel on the fire (firefighters and support personnel) will be briefed and educated by Resource Advisors or designated supervisors about listed species and the importance of minimizing impacts to individuals and their habitats. All personnel will be informed of the conservation measures designed to minimize or eliminate take of the species present. This information is best identified in the incident objectives.
- FS-4 Permanent road construction will not be permitted during fire suppression activities in habitat occupied by federally protected species. Construction of temporary roads is approved only if necessary for safety or the protection of property or resources, including federally protected species habitat. Temporary road construction should be coordinated with the USFWS, through the Resource Advisor.
- FS-5 Crew camps, equipment staging areas, and aircraft landing and fueling areas should be located outside of listed species habitats, and preferably in locations that are disturbed. If camps must be located in listed species habitat, the

Resource Advisor will be consulted to ensure habitat damage and other effects to listed species are minimized and documented. The Resource Advisor should also consider the potential for indirect effects to listed species or their habitat from the siting of camps and staging areas (*e.g.*, if an area is within the water flow pattern, there may be indirect effects to aquatic habitat or species located off-site).

- FS-6 All fire management protocols to protect federally protected species will be coordinated with local fire suppression agencies that conduct fire suppression on BLM-administered lands to ensure that the agency knows how to minimize impacts to federally protected species in the area.
- FS-7 The effectiveness of fire suppression activities and Conservation Measures for federally protected species should be evaluated after a fire, when practical, and the results shared with the USFWS, AZGFD, and/or CDFG. Revise future fire suppression plans and tactical applications as needed and as practical.

1.2 Fuels Treatments (prescribed burning and other fuels management) (FT)

The following Conservation Measures **are mandatory** when implementing wildland fire use, prescribed fires, and the proposed vegetation treatments (mechanical, chemical, biological):

- FT-1 Biologists will be involved in the development of prescribed burn plans and vegetation treatment plans to minimize effects to federally protected species and their habitats within, adjacent to, and downstream from proposed project sites. Biologists will consider the protection of seasonal and spatial needs of federally protected species (*e.g.*, avoiding or protecting important use areas or structures and maintaining adequate patches of key habitat components) during project planning and implementation.
- FT-2 MIST will be followed in all areas with known federally protected species or habitats.
- FT-3 Pre-project surveys and clearances (biological evaluations/assessments) for federally protected species will be required for each project site before implementation. All applicable Conservation Measures will be applied to areas with unsurveyed suitable habitat for federally protected species, until a survey has been conducted by qualified personnel to clear the area for the treatment activity.
- FT-4 Use of motorized vehicles during prescribed burns or other fuels treatment activities in suitable or occupied habitat will be restricted, to the extent feasible, to existing roads, trails, washes, and temporary fuelbreaks or site-access routes. If off-road travel is deemed necessary, any cross-country travel paths will be surveyed prior to use and will be closed and rehabilitated after the prescribed burn or fuels treatment project is completed.
- FT-5 As part of the mandatory fire briefing held prior to prescribed burning, all personnel (firefighters and support personnel) will be briefed and educated by

Resource Advisors or designated supervisors about listed species and the importance of minimizing impacts to individuals and their habitats. All personnel will be informed of the Conservation Measures designed to minimize or eliminate take of the species present.

1.3 Rehabilitation and Restoration (RR)

- RR-1 When rehabilitating important areas for federally listed species that have been damaged by fire or other fuels treatments, the biologist will give careful consideration to minimizing short-term and long-term impacts. Someone who is familiar with fire impacts and the needs of the affected species will contribute to rehabilitation plan development. Appropriate timing of rehabilitation and spatial needs of federally listed species will be addressed in rehabilitation plans.
- RR-2 Seed from regionally native or sterile non-native species of grasses and herbaceous vegetation will be used in areas where reseeding is necessary following ground disturbance to stabilize soils and prevent erosion by both wind and water.
- RR-3 Sediment traps or other erosion control methods will be used to reduce or eliminate influx of ash and sediment into aquatic systems.
- RR-4 Use of motorized vehicles during rehabilitation or restoration activities in suitable or occupied habitat will be restricted, to the extent feasible, to existing roads, trails, or washes, and to temporary access roads or fuelbreaks created to enable the fire suppression, prescribed burn, or fuels treatment activities to occur. If off-road travel is deemed necessary, any cross-country travel paths will be surveyed prior to use and will be closed and rehabilitated after rehabilitation or restoration activities are completed.
- RR-5 All temporary roads, vehicle tracks, skid trails, and off-road vehicle (ORV) trails resulting from fire suppression and the proposed fire management activities will be rehabilitated (water bars, etc.), and will be closed or made impassible for future use.
- RR-6 Burned area emergency rehabilitation (BAER) activities and long-term restoration activities should be monitored, and the results provided to the USFWS and AZGFD. Section 7 consultation for BAER activities will be conducted independently, if necessary.
- RR-7 (Recommended) Develop public education plans that discourage or restrict fires and fire-prone recreation uses during high fire-risk periods. Develop brochures, signs, and other interpretive materials to educate recreationists about the ecological role of fires, and the potential dangers of accidental fires.

2. Conservation Measures For Fire Management Activities In Riparian and Aquatic Habitats (RA)

2.1 Wildland Fire Suppression and Rehabilitation

The following Conservation Measures will be implemented during fire suppression operations in riparian, wetland, or aquatic habitats, unless firefighter or public safety, or the protection of property, improvements, or natural resources, render them infeasible during a particular operation. Necessary modifications of the Conservation Measures or impacts to federally protected species and habitat during fire suppression operations will be documented by the Resource Advisor, and coordinated with the USFWS. The BLM's 1987 policy statement on riparian area management defines a riparian area as "an area of land directly influenced by permanent water. It has visible vegetation or physical characteristics reflective of permanent water influence. Lakeshores and streambanks are typical riparian areas. Excluded are such sites as ephemeral streams or washes that do not exhibit the presence of vegetation dependent upon free water in the soil."

- RA-1 During wildfire suppression, apply MIST within riparian areas. Fire suppression actions in riparian areas should be prioritized to minimize damage to stands of native vegetation from wildfire or suppression operations. To the extent possible, retain large, downed woody materials and snags that are not a hazard to firefighters.
- RA-2 Fire suppression and rehabilitation in riparian corridors will be coordinated with the Resource Advisor or qualified biologist approved by BLM.
- RA-3 Site-specific implementation plans that include project areas with federally protected aquatic or riparian-obligate species will specify fire management objectives and wildland fire suppression guidance, taking into account the special concerns related to these species.
- RA-4 In riparian areas, use natural barriers or openings in riparian vegetation where possible as the easiest, safest method to manage a riparian wildfire. Where possible and practical, use wet firebreaks in sandy overflow channels rather than constructing firelines by hand or with heavy equipment.
- RA-5 Construction or development of a crossing for motorized vehicles across a perennial stream will not be permitted, unless an established road already exists or where dry, intermittent sections occur.
- RA-6 Avoid the use of fire retardants or chemical foams in riparian habitats or within 300 feet of aquatic habitats, particularly sites occupied by federally protected species. Apply operational guidelines as stated in the Interagency Standards for Fire and Fire Aviation Operations 2003 (or updates), "Environmental Guidelines for Delivery of Retardant or Foam Near Waterways," Chapter 8 (pp. 8-13 through 8-15).
- RA-7 Priority for placement of fire camps, fire staging areas, and aircraft landing or refueling sites will be outside riparian areas or river/stream corridors.

- RA-8 When using water from sources supporting federally protected species, care must be taken to ensure adverse impacts to these species are minimized or prevented. Unused water from fire abatement activities will not be dumped in sites occupied by federally protected aquatic species to avoid introducing non-native species, diseases, or parasites.
- RA-9 If water is drafted from a stock tank or other body of water for fire suppression, it will not be refilled with water from another tank, lakes, or other water sources that may support non-native fishes, bullfrogs, crayfish, or salamanders.
- RA-10 Use of containment systems for portable pumps to avoid fuel spills in riparian or aquatic systems will be required.
- RA-11 (Recommended) Develop and implement restoration plans for affected riparian or aquatic areas, including long-term monitoring, to document changes in conditions in the riparian zone and watershed that maintain flood regimes and reduce fire susceptibility. Monitor stream water quality and riparian ecosystem health to determine effects of wildfire and fire management activities. Coordinate efforts and results with the USFWS, AZGFD, and/or CDFG.

2.2 Fuels Treatments (prescribed fire; mechanical, chemical, and biological treatments)

The following Conservation Measures **are mandatory** when implementing wildland fires use, prescribed fires, and the proposed vegetation treatments (mechanical, chemical, biological) within riparian, wetland, or aquatic habitats.

- RA-12 All Conservation Measures for wildland fire suppression (RA-1 to RA-11, Section 2.1) also apply to fuels treatment activities (prescribed fire; mechanical, chemical, and biological treatments) in riparian, wetland, and aquatic habitats.
- RA-13 Fire management treatments within or adjacent to riparian and aquatic habitats will be designed to provide long-term benefits to aquatic and riparian resources by reducing threats associated with dewatering and surface disturbance, or by improving the condition of the watershed and enhancing watershed function.
- RA-14 For priority fire/fuels management areas (e.g., WUIs) with federally protected species or designated critical habitat downstream, BLM biologists and other resource specialists, as appropriate, in coordination with USFWS, AZGFD, and/or CDFG will determine:
- A) The number of acres and the number of projects or phases of projects to occur within one watershed per year.
 - B) An appropriately-sized buffer adjacent to perennial streams in order to minimize soil and ash from entering the stream.
 - C) Where livestock grazing occurs in areas that have been burned, specialists will determine when grazing can be resumed. Such

deferments from grazing will only occur when necessary to protect streams from increased ash or sediment flow into streams.¹

If agreement cannot be reached or treatment will not meet fuel reduction objectives, BLM will re-initiate consultation.

3. Species Specific Conservation Measures

In addition to the general Conservation Measures listed in **Sections 1.0 and 2.0**, the following species-specific Conservation Measures will be applied during wildfire suppression to the extent possible, and will be required during fuels treatment activities (wildland fire use, prescribed fire, vegetation treatments). Necessary modifications of the Conservation Measures or impacts to federally protected species and habitat during fire suppression operations will be documented by the Resource Advisor, and coordinated with the USFWS.

3.1 Amphibians [Chiricahua leopard frog (FT); Relict leopard frog (FC)]

- AM-1 Implement the Conservation Measures for Fire Management Activities in Riparian and Aquatic Habitats (Section 2.0).
- AM-2 For fire management sites with habitat for the Chiricahua leopard frog, unsurveyed sites will be considered occupied unless surveyed prior to project implementation.
- AM-3 Install sediment traps, as determined by a Resource Advisor or qualified biologist approved by BLM, upstream of tanks and ponds occupied by Chiricahua leopard frogs in order to minimize the amount of ash and sediment entering the water. Consultation with a qualified biologist during the planning phase will aid in determining sediment trap installation requirements (see Conservation Measures FT-1 and FT-3).

¹ The Interagency Burned Area Emergency Stabilization and Rehabilitation Handbook, Exhibit 4-2, BLM supplemental guidance, page 5 of 9 (<http://www.fws.gov/fire/rehab/index.htm>) establishes the following policy for livestock exclusion following burns:

Exclusion of livestock is critical for the recovery of burned vegetation or establishment and maintenance of new seedlings and use of these areas should not be permitted until the vegetation recovers or is established. Both re-vegetated and, burned but not re-vegetated areas will be closed to livestock grazing for at least two growing seasons following the season in which the wildfire occurred to promote recovery of burned perennial plants and/or facilitate the establishment of seeded species. Livestock permittees must be informed of the closure early during the plan preparation process, and livestock closures will be made a condition or term on the grazing license or permit through the issuance of grazing decision (see 43 CFR 4160). Livestock closures for less than two growing seasons may be justified on a case-by-case basis based on sound resource data and experience. Livestock management following seedling establishment and/ or burned area recovery should maintain both non-native and/or native species to meet land use (including Standards for Rangeland Health and Guidelines for Grazing Management) or activity plan objectives.

Our authority to make these types of changes is in the regulations at 43 CFR 4110.3-3(b).

- AM-4 All personnel performing fire management activities at any creek crossing will be informed of the potential presence of Chiricahua leopard frogs, their status, and the need to perform their duties to avoid impacts to the frog and its habitat.
- AM-5 Except as needed in emergency situations to abate immediate fire threat or loss of life or property, no water will be drafted for fire suppression from bodies of water known to be occupied by the Chiricahua leopard frog.

3.2 Birds

3.2.1 Cactus ferruginous pygmy-owl (FE, Proposed CH)

- FP-1 Treatment of riparian habitat, Sonoran desert/desertscrub, or mesquite-invaded grasslands under 4,000 feet in elevation that may support nesting cactus ferruginous pygmy owls will only occur during the non-nesting season of August 1 to January 31, unless pre-project surveys indicate the area does not support pygmy-owls or mitigation plans approved by the USFWS have alleviated negative consequences.
- FP-2 Develop mitigation plans in coordination with the USFWS for fuels treatment projects (prescribed fire; vegetation treatments) that may adversely affect cactus ferruginous pygmy-owls or their habitat. Mitigation plans for prescribed fire shall limit to the extent practicable the possibility that fire would spread to riparian habitats. Mitigation plans will be approved by the USFWS.
- FP-3 (Recommended) To the extent possible, maintain habitat features necessary to support breeding populations of the pygmy-owl within their historic range and review ongoing fire management activities for effects on essential habitat features needed by cactus ferruginous pygmy-owls. Modify activities, where necessary, to sustain the overall suitability of the habitat for the owls. Priority will be given to activities in or near occupied or recently (w/in the last 10 years) occupied habitat.

3.2.2 California brown pelican (FE)

- BP-1 Implement the Conservation Measures for Fire Management Activities in Riparian and Aquatic Habitats (Section 2.0).

3.2.3 California Condor (FE; 10(j) species)

The following Conservation Measures apply to BLM-administered lands within the designated 10(j) area for California condors:

- CC-1 All helicopter dip tanks will be covered when not in use.
- CC-2 Any presence of condors in the project area will be recorded and reported immediately to the Resource Advisor.

- CC-3 If condors arrive at any area of human activity associated with fire suppression or fuels treatment projects (wildland fire use, prescribed fire, vegetation treatments), the birds will be avoided. The assigned Resource Advisor or a qualified wildlife biologist approved by BLM will be notified, and only permitted personnel will haze the birds from the area.
- CC-4 All camp areas will be kept free from trash.
- CC-5 Aircraft use along the Vermilion Cliffs or sites where condors are attempting to breed or roost will be minimized.
- CC-6 The Resource Advisor will contact the Peregrine Fund daily (at 520-606-5155 or 520-380-4667) to check on locations of condors during fire suppression or fuels treatment activities involving aviation. This information will be communicated to the Incident Commander and aviation personnel.
- CC-7 If any fire retardant chemicals must be used in areas where condors are in the vicinity (see CC-6), the application area will be surveyed and any contaminated carcasses will be removed as soon as practical to prevent them from becoming condor food sources.
- CC-8 Aircraft will remain 400 meters from condors in the air or on the ground unless safety concerns override this restriction. If airborne condors approach aircraft, aircraft will give up airspace to the extent possible, as long as this action does not jeopardize safety.
- CC-9 Smoke from wildland fire use and prescribed fire projects will be managed to minimize negative effects to condor breeding. A potential wildland fire use event will not be initiated, or an existing event will be modified or terminated, to prevent or stop significant amounts of smoke, or smoke that will remain in place for an extended period of time, or chronic smoke events, from occurring in area(s) where condors are attempting to breed.
- CC-10 BLM will adhere to the air quality standards set by the Arizona Department of Environmental Quality.

3.2.4 Northern aplomado falcon (FE)

- AF-1 If aplomado falcons are reestablished or are discovered on public lands, and they nest in a fuels management project area, BLM will implement temporary closures to human access and project implementation (wildland fire use, prescribed burning, vegetation treatments) within ½ mile of nest sites during the breeding season. Wildland fire use and prescribed burning will be conducted in a manner to ensure nest sites are more than ½ mile from downwind smoke effects.

3.2.5 Southwestern willow flycatcher (FE)

- WF-1 Implement the Conservation Measures for Fire Management Activities in Riparian and Aquatic Habitats (Section 2.0).

- WF-2 Except where fires are active in occupied habitat, minimize unnecessary low-level helicopter flights during the breeding season (April 1-September 30). Approach bucket dip sites at a 90-degree direction to rivers to minimize flight time over the river corridor and occupied riparian habitats. Locate landing sites for helicopters at least ¼ mile from occupied sites to avoid impacts to willow flycatchers and their habitat.
- WF-3 Minimize use of chainsaws or bulldozers to construct firelines through occupied or suitable habitat except where necessary to reduce the overall acreage of occupied habitat or other important habitat areas that would otherwise be burned.
- WF-4 Implement activities to reduce hazardous fuels or improve riparian habitats (prescribed burning or vegetation treatments) within occupied or unsurveyed suitable habitat for southwestern willow flycatchers only during the non-breeding season (October 1 to March 31).
- WF-5 Avoid developing access roads that would result in fragmentation or a reduction in habitat quality. Close and rehabilitate all roads that were necessary for project implementation (see RR-5).
- WF-6 Prescribed burning will only be allowed within ½ mile of occupied or unsurveyed suitable habitat when weather conditions allow smoke to disperse away from the habitat when birds may be present (breeding season of April 1 through September 30).
- WF-7 Vegetation treatment projects adjacent to occupied or unsurveyed suitable habitat will only be conducted when willow flycatchers are not present (October 1 through March 31).

3.2.6 Yuma clapper rail (FE)

- CR-1 Implement the Conservation Measures for Fire Management Activities in Riparian and Aquatic Habitats (Section 2.0).
- CR-2 Any prescribed fire or vegetation treatment project in occupied or suitable marsh habitat would only occur between September 1 and March 15 to avoid the Yuma clapper rail breeding and molting seasons.
- CR-3 Mechanical removal of overstory habitat (Tamarisk) could occur as early as August 15, after the breeding season for Yuma clapper rails.
- CR-4 Herbicide application would not occur in Yuma clapper rail habitat and drift-inhibiting agents would be used to assure that the herbicide does not enter adjacent marsh areas.

3.2.7 Bald eagle (FT)

- BE-1 No human activity within ½ mile of known bald eagle nest sites between December 1 and June 30.

- BE-2 No tree cutting within ¼ mile of known nest trees.
- BE-3 No human activity within ¼ mile of known bald eagle winter roost areas between October 15 and April 15.
- BE-4 No tree cutting within the area immediately around winter roost sites as determined by BLM biologists.
- BE-5 No helicopter or aircraft activity or aerial retardant application within ½ mile of bald eagle nest sites between December 1 and June 30 or winter roost sites between October 15 and April 15.
- BE-6 Conduct prescribed burn activities outside of nesting season in a manner to ensure nest and winter roost sites are more than ½ mile from downwind smoke effects.
- BE-7 Provide reasonable protective measures so fire prescription or fuels treatment will not consume dominant, large trees as identified by the Resource Advisor or qualified biologist approved by BLM within ½ mile of known nests and roosts of bald eagles. Pre-treatment efforts should provide reasonable protection of identified nesting and roosting trees (see Conservation Measure FT-4).

3.2.8 Mexican spotted owl (FT, CH)

- SO-1 BLM wildlife biologists will be involved early in the decision-making process for fuels management treatments (appropriately managed wildfires, prescribed fires, vegetation treatments) that are planned within suitable habitat or designated critical habitat for Mexican spotted owls (MSO).
- SO-2 Suitable habitat and designated critical habitat for MSO will be surveyed prior to implementing prescribed fire or vegetation treatment activities on BLM-administered lands to determine MSO presence and breeding status. These fire management activities will only be implemented within suitable or critical habitat if birds are not present. If a spotted owl is discovered during these surveys, BLM will notify the USFWS to reinitiate consultation and will determine any additional Conservation Measures necessary to minimize or eliminate impacts to the owl.
- SO-3 If a MSO is discovered during fire suppression or fuels treatment activities (wildland fire use, prescribed fire, vegetation treatments), the Resource Advisor or a qualified wildlife biologist will document the find and assess potential harm to the owl and advise the Incident Commander or project crew boss of methods to prevent harm. The information will include for each owl the location, date, and time of observation and the general condition of the owl. The Resource Advisor or biologist will contact the appropriate USFWS office, and BLM will reinitiate consultation for the fire suppression or project activities.
- SO-4 Within MSO critical habitat designated on BLM-administered lands:

- A) To minimize negative effects on the primary constituent elements of critical habitat, appropriately managed wildfires, and prescribed fires will be managed primarily as low-intensity fires, with only scattered high-intensity patches. The BLM's objective will be to limit mortality of trees greater than 18 inches dbh to less than 5 percent, occasionally up to 10 percent, within critical habitat.
- B) If fireline construction is necessary during fire suppression, appropriately managed wildfires, or prescribed fires, BLM will minimize the cutting of trees and snags larger than 18 inches dbh, and no trees or snags larger than 24 inches dbh will be cut unless absolutely necessary for safety reasons.
- C) For mechanical vegetation treatments within critical habitat, BLM will minimize the cutting of trees and snags larger than 18 inches dbh, and no trees or snags larger than 24 inches dbh will be cut unless absolutely necessary for safety reasons.
- D) Critical habitat disturbed during fire suppression or fuels treatment activities, such as fire lines, crew camps, and staging areas, will be rehabilitated to prevent their use by vehicles or hikers. Fire line rehabilitation will include pulling soil, duff, litter, woody debris, and rocks back onto the line to bring it up to grade and to make it blend in with the surrounding area. Such rehabilitation will be inspected one year after the event to ensure effectiveness.

SO-5 The following measures will be followed in suitable habitat (occupied or unoccupied) whenever consistent with objectives to reduce hazardous fuels:

Emphasize a mix of size and age classes of trees. The mix should include large mature trees, vertical diversity, and other structural and floristic characteristics that typify natural forest conditions.

SO-6 The effects of fire suppression and fuels treatment activities on MSO and their habitat, and the effectiveness of these Conservation Measures, will be assessed after each fire event or fuels treatment project by the Resource Advisor or local biologist to allow evaluation of these guidelines and to allow the USFWS to track the species environmental baseline. Prescriptions for appropriately managed wildfires, prescribed fires, and vegetation treatments will be adjusted, if necessary.

3.2.9 Yellow-billed cuckoo (FC)

YC-1 Implement the Conservation Measures for Fire Management Activities in Riparian and Aquatic Habitats (Section 2.0).

3.3 Fish

The following Conservation Measure will be implemented for all federally protected fish species that may be affected by the Proposed Action during fire suppression to the extent

possible, and are mandatory for wildland fire use, prescribed fire, and vegetation treatment activities:

- FI-1 BLM will cooperate with other agencies to develop emergency protocols to decrease the impacts of fire suppression and fuels treatment activities on federally listed fish species. Emergency protocols will include appropriate agency contacts, a list of facilities that can hold fish, sources of equipment needed (e.g., sampling gear, trucks) and how to address human health and safety issues.

In addition to implementing FI-1, the following species-specific Conservation Measures will also apply:

3.3.1 Bonytail chub (FE, CH)

- BC-1 Implement the Conservation Measures for Fire Management Activities in Riparian and Aquatic Habitats (Section 2.0) to eliminate adverse effects from fire management activities to available spawning habitat along shorelines (i.e., occupied reaches and critical habitat).

3.3.2 Desert pupfish (FE, CH)

- DP-1 Implement the Conservation Measures for Fire Management Activities in Riparian and Aquatic Habitats (Section 2.0) for occupied reaches and critical habitat.
- DP-2 Conduct prescribed burns such that no more than one-half of the watershed of each desert pupfish site is burned in a two-year period (excluding buffers to the streams and/or spring habitats) and repeat treatments at greater than two-year intervals.
- DP-3 Monitor, where practical, for fish kill immediately following the first runoff event after prescribed fires in watersheds containing desert pupfish.
- DP-4 When considering which creek crossings to use for fire management activities, avoid crossings that are known to be occupied by desert pupfish.

3.3.3 Gila topminnow (FE)

- GT-1 Implement the Conservation Measures for Fire Management Activities in Riparian and Aquatic Habitats (Section 2.0).
- GT-2 Conduct prescribed burns such that no more than one-half of the watershed of each gila topminnow natural or reintroduction site is burned in a two-year period (excluding buffers to the streams and/or spring habitats) and repeat treatments at greater than two-year intervals.
- GT-3 Monitor for fish kill, where practical, immediately following the first runoff event after prescribed fires in the watersheds containing gila topminnows.

- GT-4 When considering which creek crossings to use for fire management activities, avoid crossings that are known to be occupied by Gila topminnow, when possible.
- GT-5 Develop mitigation plans in coordination with the USFWS for each fuels management project (prescribed fire; vegetation treatments) that may adversely affect the gila topminnow. Mitigation plans for prescribed fire will limit to the extent practicable the possibility that fire would spread to riparian habitats. Mitigation plans will be approved by the USFWS.
- GT-6 (Recommended) Cooperate with the USFWS and AZGFD to identify site-specific measures, such as prescribed fires in grassland vegetation types to improve watershed conditions (e.g., in the Cienega Creek watershed), to protect populations of gila topminnow from other resource program impacts.

3.3.4 Razorback sucker (FE, CH)

- RS-1 Implement the Conservation Measures for Fire Management Activities in Riparian and Aquatic Habitats (Section 2.0) to minimize adverse effects from fire management activities to available spawning habitat along shorelines (i.e., occupied sites and critical habitat).
- RS-2 Project boundaries for fire management activities will avoid or protect sensitive habitats of the razorback sucker.

3.3.5 Virgin River chub (FE, CH)

- VC-1 Implement the Conservation Measures for Fire Management Activities in Riparian and Aquatic Habitats (Section 2.0) for the stretch of the Virgin River within Arizona.

3.3.6 Woundfin (FE, CH; Future 10(j) populations)

- WM-1 Implement the Conservation Measures for Fire Management Activities in Riparian and Aquatic Habitats (Section 2.0) for the stretch of the Virgin River within Arizona.

3.3.7 Little Colorado spinedace (FT, CH)

- LS-1 Implement the Conservation Measures for Fire Management Activities in Riparian and Aquatic Habitats (Section 2.0) to minimize adverse effects from fire management activities on BLM-lands to occupied reaches and critical habitat on adjacent lands.

3.3.8 Loach minnow (FT, CH); Spikedace (FT, CH)

- LM-1 Implement the Conservation Measures for Fire Management Activities in Riparian and Aquatic Habitats (Section 2.0) for occupied reaches and critical habitat.

- LM-2 All reasonable efforts shall be made to minimize disturbance within the wetted areas of Aravaipa Creek or tributary channels.
- LM-3 No heavy equipment will be used off-road during wildfire suppression and fuels treatment projects within the wetted areas of Aravaipa Creek.
- LM-4 All reasonable efforts will be made to ensure that no pollutants, retardants, or chemicals associated with wildfire suppression and fuels treatment projects or activities enter surface waters of reaches occupied by these two fish species.
- LM-5 Develop mitigation plans in coordination with the USFWS for each fuels management project (prescribed fire; vegetation treatments) that may adversely affect the loach minnow and spikedace. Mitigation plans for prescribed fire will limit to the extent practicable the possibility that fire would spread to riparian habitats. Mitigation plans will be approved by the USFWS.
- LM-6 (Recommended) Cooperate with the USFWS and AZGFD to identify site-specific measures, such as prescribed fires in grassland vegetation types to improve watershed conditions (e.g., in the Aravaipa Creek watershed), to protect populations of loach minnow and spikedace from other resource program impacts.

3.3.9 Gila chub (PE, Proposed CH)

- GC-1 Implement the Conservation Measures for Fire Management Activities in Riparian and Aquatic Habitats (Section 2.0) for occupied reaches and proposed critical habitat.
- GC-2 When considering which creek crossings to use for fire management activities, avoid crossings that are known to be occupied by Gila chub, when possible.
- GC-3 (Recommended) Cooperate with the USFWS and AZGFD to identify site-specific measures, such as prescribed fires in grassland vegetation types to improve watershed conditions (e.g., in the Cienega Creek watershed), to protect populations of gila chub from other resource program impacts.

3.4 Flowering Plants

The following Conservation Measures for known locations and unsurveyed habitat of all federally protected plant species within the planning area will be implemented during fire suppression to the extent possible, and are mandatory for wildland fire use, prescribed fire and vegetation treatment activities:

- PL-1 Known locations and potential habitat for plant populations will be mapped to facilitate planning for wildland fire use, prescribed fires, and vegetation treatments, and to ensure protection of these populations during fire suppression.
- PL-2 BLM will coordinate with FWS to delineate buffer areas around plant populations prior to prescribed fire and vegetation treatment activities. BLM will coordinate with USFWS during any emergency response and wildland fire use

activities to ensure protection of plant populations from fire and fire suppression activities.

- PL-3 During fire suppression, wildland fire use, and prescribed fire in habitat occupied by federally protected plant species, no staging of equipment or personnel will be permitted within 100 meters of identified individuals or populations, nor will off-road vehicles be allowed within the 100-meter buffer area, unless necessary for firefighter or public safety or the protection of property, improvements, or other resources (see FS-7). One of the primary threats to many of these plant species is trampling/crushing from personnel and vehicles.
- PL-4 No prescribed burning will be implemented within 100 meters of identified locations or unsurveyed suitable habitat for federally protected and sensitive plant populations unless specifically designed to maintain or improve the existing population.

There are no additional species-specific conservation measures for the following federally protected plant species: Arizona Cliffrose (*Purshia subintegra*), Brady pincushion cactus (*Pediocactus bradyi*), Holmgren Milk Vetch (*Astragalus homgreniorum*), Nichol Turk's Head Cactus (*Echinocactus horizonthalonius* var. *nicholii*), Peebles Navajo Cactus (*Pediocactus peeblesianus* var. *peeblesianus*), Pima Pineapple Cactus (*Coryphantha scheeri* var. *robustispina*), Jones Cycladenia (*Cycladenia humilis* var. *jonesii*), Siler Pincushion Cactus (*Pediocactus sileri*), Acuña Cactus (*Echinomastus erectocentrus* var. *acunensis*), Fickeisen Plains Cactus (*Pediocactus peeblesianus* var. *fickeiseniae*).

3.4.1 Huachuca Water Umbel (*Lilaeopsis schaffneriana* var. *recurva*) [FE, CH]

In addition to implementing **PL-1** through **PL-4**, the following species-specific Conservation Measures will also apply:

- WU-1 Implement the Conservation Measures for Fire Management Activities in Riparian and Aquatic Habitats (Section 2.0).
- WU-2 (Recommended) The BLM should fund additional surveys for the water umbel on BLM lands, and support research on the ecology of the species. Surveys may support the use of prescribed fire in areas not occupied by the Huachuca Water Umbel.

3.4.2 Kearney's Blue Star (*Amsonia kearneyana*) [FE]

In addition to implementing **PL-1** through **PL-4**, the following species-specific Conservation Measures will also apply:

- KB-1 No mechanical or chemical vegetation manipulation will be authorized by BLM, and no planting or seeding of nonnative plants will occur in the Brown Canyon watershed within the Baboquivari allotment.

- KB-2 Planning and management for wildfire suppression in the watershed of Brown Canyon will be coordinated with the USFWS.

3.5 Mammals

3.5.1 Black-footed ferret (FE, 10(j) species)

If black-footed ferrets are discovered or re-established on public lands, then the following Conservation Measures will apply:

- BF-1 No heavy equipment operation off of existing roads within ¼ mile of prairie dog towns having documented occurrence of black-footed ferrets.
- BF-2 No aerial retardant application within 300 feet of prairie dog towns having documented occurrence of black-footed ferrets.
- BF-3 No surface disturbance of prairie dog towns having documented occurrence of black-footed ferrets.
- BF-4 In Apache and Navajo counties, prairie dog complexes suitable for black-footed ferrets within ¼ mile of proposed project sites will either be surveyed prior to project implementation or will be protected using measures BF-1 through BF-3, as if ferrets were present.

3.5.2 Hualapai Mexican vole (FE)

- HV-1 All treatment areas will be surveyed for Hualapai Mexican vole occupancy prior to fuels management treatments (prescribed fire, vegetation treatments) in order to determine project modifications and/or avoidance and protection of occupied areas. Until surveyed, all potential vole habitat is considered occupied. Areas not considered suitable (e.g., areas dominated by thick pine needles and duff) will also be surveyed prior to treatment to protect existing snag habitat for potential future use by Mexican spotted owls.
- HV-2 Fuels management treatments (prescribed fire or vegetation treatments), construction of fire breaks, and/or staging areas for fire suppression or fuels management treatments will not be located within a vole use area. Occupied vole sites within proposed burn areas will be protected by firebreaks, precision ignition of fire around such sites, or total avoidance of the area. Fire plans will incorporate site-specific features (e.g., rock outcroppings, game trails, etc.), fire behavior, and professional judgment to determine the most appropriate method to protect occupied vole habitat. Additionally, monitoring of fuel moisture and use of the appropriate minimum impact suppression tactics will be used to reach the desired objective at each site.
- HV-3 To minimize impacts to Hualapai Mexican voles during the breeding season, prescribed burns and vegetation treatments in occupied or potential vole habitat will be implemented only between September 1 and March 15. Treatment in chaparral habitat will occur during the latter part of this time frame, in winter and/or early spring. These prescribed fires will follow the summer monsoon

period to encourage additional herbaceous growth. Post-monsoon burns would help avoid the dry conditions that could result in extremely hot fires that reduce the recruitment of grasses and forbs. Areas not considered suitable for Hualapai Mexican voles (e.g., dominated by thick pine needles and duff) may be burned prior to September 1, if surveyed prior to treatment.

- HV-4 Provide a 75- to 100-foot, minimum, unburned vegetation buffer between fuels treatment sites and riparian and dry wash areas to decrease erosion into and sedimentation of the occupied or potentially occupied vole habitat. Within ponderosa pine treatment sites, use of dry washes as a fire line may be appropriate and result in less disturbance than construction of a cup trench above the wash. Under such circumstances, BLM will prepare the wash as a fire line by raking duff and removing by hand dead branches and other debris.
- HV-5 The terms and conditions from the Pine Lake Wildland/Urban Interface Biological Opinion (BLM Kingman Field Office; Consultation No. 2-21-01-F-241) continue to apply to the Pine Lake project.

3.5.3 Jaguar (FE)

- JA-1 Implement the Conservation Measures for Fire Management Activities in Riparian and Aquatic Habitats (Section 2.0) to eliminate adverse effects to jaguars that may occur in dense riparian habitats on BLM-administered lands.
- JA-2 Maintain dense, low vegetation in major riparian or xero-riparian corridors on BLM-administered lands in identified locations south of Interstate 10 and Highway 86. Locations will be identified in site-specific fire management plans.

3.5.4 Lesser long-nosed bat (FE)

- LB-1 Instruct all crew bosses (wildfire suppression, wildland fire use, prescribed fire, and vegetation treatments) in the identification of agave and columnar cacti and the importance of their protection.
- LB-2 Prior to implementing any fuels treatment activities (prescribed fire, vegetation treatments), pre-project surveys will be conducted for paniculate agaves and saguaros that may be directly affected by fuels management activities.
- LB-3 Protect long-nosed bat forage plants -- saguaros and high concentrations of agaves -- from wildfire and fire suppression activities, and from modification by fuels treatment activities (prescribed fire, vegetation treatments), to the greatest extent possible. "Agave concentrations" are contiguous stands or concentrations of more than 20 plants per acre. Avoid driving over plants, piling slash on top of plants, and burning on or near plants. Staging areas for fire crews or helicopters will be located in disturbed sites, if possible.
- LB-4 No seeding/planting of nonnative plants will occur in any wildfire rehabilitation site or fuels treatment site with paniculate agaves or saguaros.

- LB-5 A mitigation plan will be developed by the Bureau in coordination with the USFWS for prescribed fires or fuels management projects (mechanical, chemical, biological treatments) within 0.5 mi of bat roosts or in areas that support paniculate agaves or saguaros. The mitigation plan will ensure that effects to bat roosts and forage plants are minimized and will include monitoring of effects to forage plants. The plan will be approved by the USFWS.
- LB-6 (Recommended) BLM personnel should examine concentrations of agaves (including shindagger – *A. schottii*) within each proposed fuels treatment area, and blackline or otherwise protect from treatments any significant concentrations of agaves that appear to be amidst fuel loads that could result in mortality greater than 20 percent (>50% for *A. schottii*). BLM personnel should use their best judgment, based on biological and fire expertise, to determine which significant agave stands are prone to mortality greater than 20 percent (>50% for *A. schottii*) (see Conservation Measures FT-1 and FT-3).
- LB-7 (Recommended) BLM should continue to support and cooperate in the investigations of agave relationships to livestock grazing, and of the effects of prescribed fire on paniculate agaves.

3.5.5 Mexican gray wolf (FE; 10(j) species)

If Mexican gray wolves are re-established on public lands, then the following Conservation Measures will apply:

- GW-1 No human disturbance associated with fire management activities will be within one mile of a den site from April 1 to June 30.
- GW-2 No human disturbance associated with fire management activities will be within one mile of known rendezvous sites from April 1 to June 30.

3.5.6 Ocelot (FE)

No species-specific Conservation Measures developed.

3.5.7 Sonoran pronghorn (FE)

No species-specific Conservation Measures developed.

3.5.8 Black-tailed prairie dog (FC)

If black-tailed prairie dogs are re-established on public lands, then the following Conservation Measures will apply:

- PD-1 No heavy equipment operation off of existing roads within ¼ mile of black-tailed prairie dog colonies.
- PD-2 No aerial retardant application within ¼ mile of black-tailed prairie dog colonies.
- PD-3 No surface disturbance of black-tailed prairie dog colonies.

3.6 Reptiles

3.6.1 Desert tortoise, Mojave population (FT)

- DT-1 Take appropriate action to suppress all wildfires in desert tortoise habitat, based on preplanned analysis and consistent with land management objectives, including threats to life and property. Full suppression activities will be initiated within key desert tortoise habitat areas identified in site-specific Fire Management Plans.
- DT-2 Suppress all wildfires in desert tortoise habitat with minimum surface disturbance, in accordance with the guidelines in Duck et al. (1995) and the 1995 programmatic biological opinion on fire suppression on the Arizona Strip (2-21-95-F-379).
- DT-3 Pre-position suppression forces in critical areas during periods of high fire dangers.
- DT-4 As soon as practical, all personnel involved in wildfire suppression (firefighters and support personnel) will be briefed and educated about desert tortoises and the importance of protecting habitat and minimizing take, particularly due to vehicle use. Fire crews will be briefed on the desert tortoise in accordance with Appendix II of Duck et al. (1995).
- DT-5 If wildfire or suppression activities cannot avoid disturbing a tortoise, the Resource Advisor or monitor will relocate the tortoise, if safety permits. The tortoise will be moved into the closest suitable habitat within two miles of the collection site that will ensure the animal is reasonably safe from death, injury, or collection associated with the wildfire or suppression activities. The qualified biologist will be allowed some discretion to ensure that survival of each relocated tortoise is likely. If the extent or direction of movement of a fire makes sites within two miles of the collection site unsuitable or hazardous to the tortoise or biologists attempting to access the area, the tortoise may be held until a suitable site can be found or habitat is safe to access and not in immediate danger of burning. The Resource Advisor will contact the USFWS Arizona Ecological Services Field Office (AESFO) as soon as possible concerning disposition of any animals held for future release. Desert tortoises will not be placed on lands outside the administration of the federal government without the written permission of the landowner. Handling procedures for tortoises, including temporary holding facilities and procedures, will adhere to protocols outlined in Desert Tortoise Council (1994).
- DT-6 Upon locating a dead, injured, or sick desert tortoise, initial notification must be made to the appropriate USFWS Law Enforcement Office within three working days of its finding. Written notification must be made within five calendar days and include the date, time, and location of the animal, a photograph, and any other pertinent information. The notification will be sent to the Law Enforcement Office with a copy to the AESFO.

- DT-7 Care must be taken in handling sick or injured animals to ensure effective treatment and care, and in handling dead specimens to preserve biological material in the best possible state. If possible, the remains of intact desert tortoises will be placed with educational or research institutions holding appropriate state and federal permits. If such institutions are not available, the information noted above will be obtained and the carcass left in place. Arrangements regarding proper disposition of potential museum specimens will be made with the institution prior to implementing the action. Injured animals should be transported to a qualified veterinarian by an authorized biologist. Should any treated desert tortoise survive, the USFWS should be contacted regarding final disposition of the animal.
- DT-8 The Resource Advisor or monitor(s) will maintain a record of all desert tortoises encountered during fire suppression activities. This information will include for each desert tortoise: 1) locations and dates of observation; 2) general condition and health, including injuries and state of healing, and whether animals voided their bladders; 3) location moved from and to; and 4) diagnostic markings (i.e., identification numbers of marked lateral scutes). No notching of scutes or replacement of fluids with a syringe is authorized.
- DT-9 Prior to moving a vehicle, personnel will inspect under the vehicle for tortoises. If a tortoise is found under the vehicle, the tortoise will be allowed to move away from the vehicle on its own accord, if possible. Otherwise an individual will move the tortoise to a safe locality in accordance with FS-2 and DT-5.
- DT-10 Off-highway vehicle activity will be restricted to the minimum necessary to suppress wildfires. Vehicles will be parked as close to roads as possible, and vehicles will use wide spots in roads or disturbed areas to turn around. Whenever possible, a biologist or crewperson trained to recognize tortoises and their shelter sites will precede any vehicle traveling off-road to direct the driver around tortoises and tortoise burrows. Whenever possible, local fire-fighting units should provide direction and leadership during off-road travel because of their expertise and knowledge of area sensitivities.
- DT-11 Fire-related vehicles will drive slow enough to ensure that tortoises on roads can be identified and avoided.
- DT-12 Fire crews or rehabilitation crews will, to the extent possible, obliterate off-road vehicle tracks made during fire suppression in tortoise habitat, especially those of tracked vehicles, to reduce future use.
- DT-13 To the maximum extent practical, campsites, aircraft landing/fueling sites, and equipment staging areas will be located outside of desert tortoise habitat or in previously disturbed areas. If such facilities are located in desert tortoise habitat, 100 percent of the site will be surveyed for desert tortoises by a qualified biologist approved by BLM, whenever feasible. Any tortoises found will be moved to a safe location in accordance with FS-2 and DT-5. All personnel located at these facilities will avoid disturbing active tortoise shelter sites.
- DT-14 Elevated predation by common ravens or other predators attributable to fire suppression activities will be reduced to the maximum extent possible. Work

areas, including campsites, landing/fueling sites, staging areas, etc. will be maintained in a sanitary condition at all times. Waste materials at those sites will be contained in a manner that will avoid attracting predators of desert tortoises. Waste materials will be disposed of at an appropriate waste disposal site. "Waste" means all discarded matter including, but not limited to, human waste, trash, garbage, refuse, oil drums, petroleum products, ashes, and equipment.

- DT-15 Backfiring operations are permitted where necessary in desert tortoise habitat. Burning out patches of identified habitat within or adjacent to burned areas is not permitted as a standard fire suppression measure unless necessary for firefighter or public safety or to protect property, improvements, or natural resources.
- DT-16 Use of foam or retardant is authorized within desert tortoise habitat.
- DT-17 Rehabilitation of vegetation in tortoise habitat will be considered, including seeding, planting of perennial species, etc.
- DT-18 Recovery of vegetation will be monitored, including establishing and monitoring paired plots, inside and outside burned areas in tortoise habitat. Recovery plans will be coordinated with the USFWS and AZGFD.
- DT-19 The effectiveness of wildfire suppression activities and desert tortoise Conservation Measures will be evaluated after a wildfire. Procedures will be revised as needed.

3.6.2 New Mexico ridgenose rattlesnake (FT)

- RN-1 To the extent possible, minimize surface disturbing activities from fire suppression and fuels treatment activities within New Mexico ridgenose rattlesnake habitat on BLM-administered lands in the southern Peloncillo Mountains, particularly during active periods for snakes (July through October).
- RN-2 Prior to using wildland fire for resource benefit, cool season (November through March) prescribed fire or other fuel treatments should be used to reduce unnatural fuel loads within suitable habitat to avoid catastrophic fires and loss of canopy cover.
- RN-3 All fires that occur outside of prescriptions that will result in low intensity, low severity burns will be fully suppressed within or near suitable New Mexico ridgenose rattlesnake habitat.

3.7 Conservation Agreement and Management Plan Species

3.7.1 Flat-tailed horned lizard

No species-specific Conservation Measures developed.

3.7.2 Paradine (Kaibab) plains cactus

Implement PL-1 and PL-2 to protect known locations during fire suppression to the extent possible and during the fuels treatment activities.

3.7.3 Virgin spinedace

Implement the Conservation Measures for Fire Management Activities in Riparian and Aquatic Habitats (Section 2.0) for the stretch of the Virgin River within Arizona.

3.7.4 Desert tortoise, Sonoran population

Implement the Conservation Measures for Desert Tortoise, Mojave population, as appropriate, for fire suppression and fuels treatment activities (prescribed fire, vegetation treatments), excluding requirements for notification to USFWS.

Reference

Duck, T.A., T.C. Esque, and T.J. Hughes. 1995. Fighting wildfire in desert tortoise habitat: Considerations for land managers. Proc. Desert Tortoise Counc. Symp. 1994:58-67.

Appendix G

Legal Descriptions of Lands Available for Disposal

Disposals

Table G-1. Lands Available for Disposal

	Legal Tract Gila & Salt River Meridian	Acres	Exchange	Sale	R&PP Patent
1.	T. 20 N., R. 22. W., Sec. 12, the public land east of AZ highway 95; approximately 258 acres	258	X	X	X
2. ^a	T.20 N., R 21 W., Sec. 8, S2S2SE	40	X	X	X
3. ^a	T. 19 N., R. 21 W., Sec. 20, SW1/4SW1/4NW1/4NW1/4; W1/2SW1/4 NW1/4; W1/2NE1/4SW1/4NW1/4; SE1/4NE1/4 SW1/4NW1/4; SE1/4SW1/4NW1/4; SW1/4SE1/4NW1/2; S1/2SE1/4SE1/4NW1/4; N1/2NW1/4NE1/4SW1/4; NE1/4NE1/4SW1/4; NE1/4SE1/4NE1/4SW1/4; NW1/4NW1/4SE1/4; NW1/4SW1/4NW1/4SE1/4	85	X	X	X
4.	T. 19 N., R. 21 W., sec 28, N2NE, SWNW, W2SW.	200	X	X	X
5. ^a	T. 19 N., R. 21 W., sec 29, S2N2, NWNWSW, E2W2SW, E2SW, SE.	450	X	X	X
6.	T. 19 N., R. 21 W., sec 33, W2W2.	160	X	X	X
7.	T. 18 N., R. 21 W., sec 4, lots, 3,4,S2NW,SW.	319.44	X	X	X
8.	T. 18 N., R. 21 W., sec 6, S2N2SWSE, S2SWSE, SESE	70	X	X	X
9.	T. 18 N., R. 21 W., Sec. 7, E2, N2NWNE, S2SWNE.	120	X	X	X
10. ^a	T. 18 N., R. 21 W., Sec. 7, SE1/4.	160	X	X	X
11. ^a	T. 18 N., R. 21 W., Sec. 8 W2	320	X	X	X
12. ^a	T. 18 N., R. 21 W., Sec. 17 W2	320	X	X	X
13. ^a	T. 18 N., R. 21 W., Sec. 18, E1/2	320	X	X	X
14. ^a	T. 18 N., R. 21 W., Sec. 20, E2	320	X	X	X
15. ^a	T. 18 N., R. 21 W., Sec. 29, NW, S2	480	X	X	X

	Legal Tract Gila & Salt River Meridian	Acres	Exchange	Sale	R&PP Patent
16. ^a	T. 17 N., R. 21 W., Sec. 4, lot 4, SWNW, W2SW.	159.52	X	X	X
17.	T. 17 N., R. 21 W., Sec. 5, lots 1, 2, S2NE, SENW, E2SW, SE	439.04	X	X	X
18. ^a	T. 17 N., R. 21 W., Sec. 9 W2	320	X	X	X
19. ^a	T. 16 N., R. 21 W., Sec. 10, NE	160	X	X	X
20. ^a	T. 16 N., R. 21 W., Sec. 22, E2E2	160	X	X	X
21. ^a	T. 16 N., R. 21 W., Sec. 24, N2SW, SE	240	X	X	X
22. ^a	T. 16 N., R. 21 W., Sec. 25, S2N2, S2.	480	X	X	X
23.	T. 16 1/2N., R. 20 1/2W., sec 24, lots, 1-4, S2N2, S2.	671.24	X	X	X
24.	T. 16 1/2N, R. 20 W., sec 20, lots, 1, 2, S2NE	176.36	X	X	X
25.	T. 16 1/2N., R. 19 W., Sec. 36, the public land south of Interstate I-40; approximately 54 acres	54.00	X	X	X
26.	T. 16 N., R. 21 W., Sec. 22, E2E2	160	X	X	X
27.	T. 16 N., R. 20.5 W., Sec. 10, lot 2	37.62	X	X	X
28.	T. 16 N., R. 20.5 W., Sec. 11, the public lands south of the railroad in the S2NW	25.6	X	X	X
29.	T. 16 N., R. 19 W., Sec. 2, All the public land south of I-40; approximately 124 acres	124	X	X	X
30.	T. 16 N., R. 19 W., sec 18, lots, 3,4, 7, 9, 11, 13, E2SW, SE.	396.28	X	X	X
31. ^a	T. 15 N., R. 19 W., Sec. 2, Lots 1-4, S2N2, S2.	637.2	X	X	X
32. ^a	T. 15 N., R. 19 W., Sec. 4, Lots 1-4, S2N2, S2.	637.68	X	X	X
33. ^a	T. 15 N., R. 19 W., Sec. 6, Lots 1-6, S2NE, SENW, E2SW, SE.	588.82	X	X	X
34. ^a	T. 15 N., R. 19 W., Sec. 8, All	640	X	X	X
35. ^a	T. 15 N., R. 19 W., Sec. 10. All	640	X	X	X
36.	T. 14 N., R. 20 W., Sec. 4, lots 1-4, S2NE, SENW, NENESW, W2NWSE, NWSWSE, E2SE.	398.12			X
37.	T. 14 N., R. 20 W., sec 5, S2SESENE, NENESE, S2SESESE	20	X	X	X
38.	T. 14 N., R. 20 W., sec 8, NENENE, W2NWNWNW.	15	X	X	X
39.	T. 14 N., R. 20 W., sec 9, NESENE, E2SWSWNE, E2NWSENE	17.5			X
40.	T. 14 N., R. 20 W., Sec. 10, N2, E2NWSW, E2NESWSW, E2SW, SE.	580			X
41.	T. 13 N., 20 W., Sec. 24, S2.	320			X
42.	T. 13 N., 19 W., Sec. 20, NWSE.	40			X

	Legal Tract Gila & Salt River Meridian	Acres	Exchange	Sale	R&PP Patent
43.	T 13 N., 19 W., Sec 27, NW, N2SW	240			X
44.	T. 11 N., R. 13 W., Sec. 36, S2SE.	80			X
45.	T. 10 N., R. 19 W., 13, S2.	320	X	X	X
46.	T. 10 N., R. 19 W., 26, S2.	320	X	X	X
47.	T. 10 N., R. 19 W., sec 34, lot 7, 8, S2NESE, SESE.	93.18	X	X	X
48.	T. 10 N., R. 19 W., sec 35, NENW	40	X	X	X
49.	T. 10 N., R. 13 W., Sec. 1, lots 1-3, S2NE, SENW.	440.83			X
50.	T. 10 N., R. 13 W., Sec. 2, SWSW.	40			X
51.	T. 10 N., R. 13 W., Sec. 11, N2NW, NWNE.	120			X
52.	T. 10 N., R. 13 W., Sec. 12, NWNW.	40			X
53.	T. 10 N., R. 12 W., Sec. 6, lots, 3-6, 11-14, E2SW.	356.87			X
54. ^a	T. 8 N., R. 19 W., Sec. 11, E2, E2W2.	480	X	X	X
55. ^a	T. 8 N., R. 19 W., Sec. 12, W2.	320	X	X	X
56. ^a	T. 8 N., R. 19 W., Sec. 13, W2.	320	X	X	X
57. ^a	T. 8 N., R. 19 W., Sec. 14, E2, E2W2, SWSW	520	X	X	X
58.	T. 8 N., R. 19 W., Sec. 15, SESE.	40			X
59.	T. 8 N., R. 19 W., Sec. 21, lot 1, E2, NENW, S2NW, S2.	478.07			X
60.	T. 8 N., R. 19 W., Sec. 22, N2NE, N2N2NW, SWSW, SESE.	160			X
61. ^a	T. 8 N., R. 19 W., Sec. 23, All	640	X	X	X
62. ^a	T. 8 N., R. 19 W., Sec. 24, W2	320	X	X	X
63. ^a	T. 8 N., R. 19 W., sec 25, W2	320	X	X	X
64.	T. 8 N., R. 19 W., sec 25, E2	320	X	X	X
65. ^a	T. 8 N., R. 19 W., Sec. 26, All	640	X	X	X
66. ^a	T. 8 N., R. 19 W., Sec. 27, NWNW, E2SE	120			X
67.	T. 8 N., R. 19 W., Sec. 28, NENE.	40			X
68.	T. 8 N., R. 19 W., sec 35, NE, SESE, SENW, S2.	490	X	X	X
69. ^a	T. 8 N., R. 19 W., sec 36, W2	320	X	X	X
70.	T. 8 N., R. 19 W., sec 36, E2	320	X	X	X
71. ^a	T. 7 N., R. 19 W., Sec. 3, lots 2-4, W2NE, S2NW, SW, W2SE.	479.89	X	X	X
72. ^a	T. 7 N., R. 19 W., Sec. 4, lots 1-4, S2N2, S2.	639.96	X	X	X
73. ^a	T. 7 N., R. 19 W., Sec. 9, All	640	X	X	X

	Legal Tract Gila & Salt River Meridian	Acres	Exchange	Sale	R&PP Patent
74. ^a	T. 7 N., R. 19 W., Sec. 10, W2E2, W2	480	X	X	X
75.	T. 7 N., R. 19 W., sec 11, All	640	X	X	X
76.	T. 7 N., R. 19 W., sec 14, All	640	X	X	X
77. ^a	T. 7 N., R. 17 W., Sec. 23, E2	320	X	X	X
78. ^a	T. 7 N., R. 17 W., Sec. 26, N2NE, S2SE.	80	X	X	X
79. ^a	T. 7 N., R. 17 W., Sec. 36, T. 7 N., R. 17 W., All the public land southwest of AZ highway 72; Approx. 350 acres	350	X	X	X
80.	T. 7 N., R. 16 W., sec 8, All	640			X
81.	T. 7 N., R. 16 W., sec 9, All	640			X
82.	T. 7 N., R. 15 W., sec 26, W2	320	X	X	X
83. ^a	T. 6 N., R. 16 W., Sec. 1, Lot 1	51.68	X	X	X
84.	T. 6 N., R. 15 W., Sec. 26, W2.	320	X	X	X
85.	T. 6 N., R. 13 W., sec 27, N2, SE	480	X	X	X
86.	T. 6 N., R. 12 W., sec 18, lots 1-4, NE, N2NW, NESW	554.24	X	X	X
87.	T. 6 N., R. 12 W., sec 24, All the public land north of highway US 60; approximately 423.48 acres	423.48	X	X	X
88.	T. 6 N., R. 12 W., sec 26, All	640	X	X	X
89.	T. 6 N., R. 12 W., sec 27, E2NE, SE	240	X	X	X
90. ^a	T. 5 N., R. 16 W., Sec. 4, Lots 1, 2, S1/2NE1/4, S1/2;	478.67	X	X	X
91. ^a	T. 5 N., R. 16 W., Sec. 5, SE;	160	X	X	X
92. ^a	T. 5 N., R. 16 W., Sec. 9, NE,	160	X	X	X
93.	T. 5 N., R. 16 W., Sec. 9, W2	320	X	X	X
94. ^a	T. 5 N., R. 16 W., Sec. 10, NW1/4.	160	X	X	X
95.	T. 5 N., R. 16 W., sec 16, All	640	X	X	X
96.	T. 5 N., R. 16 W., sec 17, E2NE, SWNE, W2, SE.	600	X	X	X
97.	T. 5 N., R. 15 W., sec 8, N2.	320	X	X	X
98.	T. 5 N., R. 15 W., sec 9, N2.	320	X	X	X
99.	T. 5 N., R. 15 W., sec 10, SW.	160	X	X	X
100.	T. 5 N., R. 15 W., sec 15, S2	320	X	X	X
101.	T. 5 N., R. 15 W., sec 16, All	640	X	X	X
102.	T. 5 N., R. 15 W., sec 17, All	640	X	X	X

Legal Tract Gila & Salt River Meridian		Acres	Exchange	Sale	R&PP Patent
103.	T. 5 N., R. 15 W., sec 18, lot 1, 2, NE, E2NW.	320.46	X	X	X
104.	T. 5 N., R. 15 W., sec 20, N2.	320	X	X	X
105.	T. 5 N., R. 15 W., sec 22, All	640	X	X	X
106.	T. 5 N., R. 15 W., sec 23, All	640	X	X	X
107.	T. 5 N., R. 15 W., sec 26, All	640	X	X	X
108.	T. 5 N., R. 15 W., sec 27, All	640	X	X	X
109.	T. 5 N., R. 15 W., sec 28, All	640	X	X	X
110.	T. 5 N., R. 15 W., sec 31, lots 1-4, E2, E2W2.	640.6	X	X	X
111.	T. 5 N., R. 15 W., sec 34, E2	320	X	X	X
112.	T. 5 N., R. 14 W., sec 32, All	640	X	X	X
113.	T. 5 N., R. 13 W., sec 7, lots 1-4,	157.16	X	X	X
114.	T. 5 N., R. 13 W., sec 23, NENE	40	X	X	X
115. ^a	T. 5 N., R. 12 W., Sec. 6, Lot 1	40.04	X	X	X
116.	T. 4 N. R.16 W., Sec. 1, lots 3, 4, S2NW, SW.	301.49	X	X	X
117.	T. 4 N. R.16 W., Sec. 2, lots 1-4, S2N2, S2.	601.66	X	X	X
118.	T. 4 N. R.16 W., Sec. 11, W2	320	X	X	X
119. ^a	T. 4 N. R.16 W., Sec. 14, E2	320	X	X	X
120.	T. 4 N. R.16 W., Sec. 15, E2E2, W2, SWSE	520	X	X	X
121.	T. 4 N. R.16 W., Sec. 16, NE	160	X	X	X
122. ^a	T. 4 N., R. 16 W., Sec. 24, E1/2.	320	X	X	X
123.	T. 4 N. R.16 W., Sec. 25, All	640	X	X	X
124. ^a	T. 4 N., R. 15 W., Sec. 30, Lots 3, 4, E1/2SW1/4;	154.56	X	X	X
125. ^a	T. 4 N., R. 15 W., Sec. 31, All the public land north of Interstate 10; approximately 499.9 acres	499.9	X	X	X
126. ^a	T. 4 N., R. 15 W., Sec. 32, All the public land north of Interstate 10; approximately 601.99 acres	601.66	X	X	X
127.	T. 4 N., R. 14 W., Sec. 4, lots 3, 4, S2NW	149.19	X	X	X
128.	T. 4 N. R.14 W., Sec. 5, lots 1-4, S2NE, S2NW.	297.08	X	X	X
129.	T. 4 N. R.14 W., Sec. 6, lots 3, 4, 5.	100.51	X	X	X
Legal Description San Bernardino Meridian		Acres	Exchange	Sale	R&PP
130.	T. 10 N., R. 22 E., Sec. 35, Lots 1,2, S2NE, SE.	309.27	X	X	X

	Legal Tract Gila & Salt River Meridian	Acres	Exchange	Sale	R&PP Patent
131.	T. 9 N., R22. E., Sec. 2, Lots 1, 2, S2NE, SE.	316.23	X	X	X
132.	T. 9 N., R22. E., Sec. 11, E2.	320	X	X	X
133.	T. 9 N., R22. E., Sec. 14, NE.	160	X	X	X
134.	T. 9 N., R22. E., Sec. 24, SENE, W2, NWSE, S2SE.	480	X	X	X
135.	T. 8 N., R. 23 E., sec 4, lots 3, 5, 6, 7, & 8, S1/2NW, SW, SWSE.	418.29	X	X	X
136. ^a	T. 8 N., R. 23 E., Sec. 27, the public land situated north and east of Interstate Highway 40; approximately 460 acres	460	X	X	X
137.	T. 4 1/2 N., R. 24 E., Sec. 36, portion of lot 1, lots 2-5, N2SW, NWSW	317.88	X	X	X
138.	T. 4 N., R. 24 E., Sec. 1.	640	X	X	X
139.	T. 4 N., R. 24 E., Sec. 12.	640	X	X	X

^a Land identified for disposal that meets the requirements of the Baca bill.

Special Ephemeral Rule

Published in the *Federal Register*, Vol. 33, No. 238, Saturday, December 7, 1968
(Livestock Grazing Ephemeral Range: Arizona, California, and Nevada).

In accordance with 43 CFR 4115.2-1 regarding special rules for grazing districts and pursuant to the receipt of recommendations of the State Directors for Arizona, California and Nevada and a factual showing of its necessity, a special rule for range designated as ephemeral is hereby approved.

Ephemeral (annual) ranges lie within the general southwest desert region extending primarily into southern Arizona, southern California, and southern Nevada and include portions of the Mohave, Sonoran, and Chihuahuan deserts. The region is characterized by desert type vegetation some of which may be classed as ephemeral only. Ephemeral range does not consistently produce forage, but periodically provides annual vegetation suitable for livestock grazing. In years of abundant moisture and other favorable climatic conditions a large amount of forage may be produced. Favorable years are highly unpredictable and the season is usually short lived. Ephemeral areas fall generally below the 3,200-foot contour and below the 8-inch precipitation isoline. A minor percentage of the total plant composition is made up of desirable perennial forage plants and potential to improve range condition and produce a dependable supply of forage by applying intensive management practices is lacking.

Because of the unique characteristics of ephemeral range the following special rule shall apply as follows:

- Applicable allotments or uses shall be formally designated by the District Manager as ephemeral range.
- An annual application by qualified licensees or permittees is not required unless grazing use is desired. On a year-to-year basis whenever forage exists or climatic conditions indicate the probability of an ephemeral forage crop, livestock grazing may be authorized upon application pursuant to any management requirements for the allotment.
- Use of base property (water base) during nonforage years is not feasible or economical and no use of base properties is required except during these periods when ephemeral forage is available and livestock grazing occurs.

Therefore:

- An annual application per 43 CFR 4115.2-1(c)(9), is not required unless grazing use is described.
- Grazing capacity per 43CFR 4115.2-1(c)(3) may be based on a reasonable potential for forage.
- Substantial use of grazing privileges per 43 CFR 4115(c)(10) is not required.
- A year round operation per 43 CFR 4115.2(c)(1) is not required.
- Substantial use of base property per 43 CFR 4115.2-1(c)(7) is not required.

This special rule shall immediately apply to the Phoenix, Safford, and Arizona Strip Districts in Arizona, the Bakersfield District in California, and the Las Vegas District in Nevada upon recommendation for adoption in that District by the respective District Advisory Board and concurrence by the State Director.

Criteria for Allotment Categorization

Table H-1. Criteria for Allotment Categorization

Criteria for Allotment Categorization	Categories		
	Maintain	Improve	Custodial
Resource Conditions	Meets Standard	No Meeting Standard	Not Applied
Resource Potential and Production	High Potential At Potential	High/Med Potential Not at Potential	Low Potential At Potential
Conflicts and/or Controversy	Some	High Conflicts and Controversy	None
Opportunities for positive economic return on public investment	Good	Good	Poor
Present Management Situation	Current Management is Satisfactory	Current Management is Non-Satisfactory	Management is not a factor

The assignment of all grazing allotments into a selective management category was made following established BLM program guidance. The three management categories are “Maintain,” “Improve,” and “Custodial.” Respective objectives are:

- Maintain current resource conditions.
- Improve current resource conditions.
- Manage existing resource values custodially.

The five standard criteria used by BLM in categorizing allotments are listed below.

1. Range condition.
2. Resource potential.
3. Resource use conflicts or controversy.
4. Opportunity for positive economic return on public investments.
5. Present management situation.

Allotments in the Improve Category exhibit vegetative and watershed conditions not meeting objectives and standards; potential resource production is high to moderate but production is below potential; use conflicts exist; and anticipated benefits from management changes would justify expenditure of public funds. Allotments in the Maintain Category exhibit vegetative and watershed conditions meeting objectives and standards; resource production is high and rangelands are producing near their potential; no critical use conflicts exist; existing management is maintaining objectives and standards, but some range developments could augment current management. Allotments in the Custodial Category exhibit vegetative and watershed conditions which may or may not meet objectives and standards; resource production potential is very low; few if any resource conflicts; and virtually no potential to respond to management changes.

Allotment categorization is used to establish priorities for distributing available funds and personnel during plan implementation to achieve cost-effective improvement of rangeland resources. Allotments may be moved from one category to another, as new information becomes available, resource conditions change, or management activities are implemented. Changes must be consistent with the category criteria, be supported by a document analysis showing the basis for the change, and must take an interdisciplinary approach and include public involvement.

Table H-2. Grazing Allotments
(see Map 19 in the Approved RMP)

No.	Allotment Name	Approved RMP	
		Available	Unavailable
00001	Alamo Crossing	19,508	0
03006	Babcock	22,649	0
00025	Crossman Peak	108,599	0
03034	Ganado	86,800	0
03038	Hancock	36,113	0
03040	Harcuvar	80,737	0
00045	Havasus Heights S	0	27,042
03048	Lamberson	24,710	0
03050	Leidig	33,582	0

Table H-2. Grazing Allotments
(see Map 19 in the Approved RMP)

No.	Allotment Name	Approved RMP	
		Available	Unavailable
03051	Loma Linda	32,951	0
03093	Muse	106,488	14,712
03059	Nine Mile	109,239	480
03061	Orosco	15,761	0
03067	Planet	186,045	0
03069	Primrose	97,298	0
03073	Salome	10,008	0
03070	Wagner	24,321	0
	Other FO Admin	213,731	1,697
	TOTALS	1,208,540	43,931

BLM's Priorities for Recreation and Visitors Services – Goals and Objectives

- Improve Access to Appropriate Recreational Opportunities on the Department of the Interior (DOI) Managed or Partnered Lands and Waters.
- Ensure a Quality Experience and Enjoyment of Natural and Cultural Resources on DOI managed or Partnered Lands and Waters.
- Provide for and Receive Fair Value in Recreation.

Special Recreation Permit Stipulations

Stipulations may be generated for activity-specific permits through the NEPA process leading up to a specific Special Recreation Permit (SRP). Below are examples of standard stipulations that may be applied to Permit.

Cultural Stipulations

1. Permittee shall comply with all state and federal laws relating to prehistoric or historic archaeological sites or artifacts. Actions other than those explicitly approved by the Bureau of Land Management which result in impacts upon archaeological resources, shall be subject to the judicial proceedings of the Archaeological Resources Protection Act of 1979, as amended, and the Federal Land Policy and Management Act of 1976. As property of the United States, no person may, without authorization, excavate, remove, damage, or otherwise alter or deface any historic or prehistoric site, artifact, or object of antiquity located on public lands.

Surface collection of artifacts (either historic or prehistoric) or fossils, by permittee or tour participants on or near any designated route is prohibited. The definition of an artifact is anything that has been made, used or modified by a human and is generally 50 years old or older. Permittee is required to inform all participants that collecting artifacts, theft, or vandalism of any cultural property is a violation of the above-mentioned federal and/or state laws.

Recreation Stipulations

1. By virtue of the permit, permittee is allowed to use public routes across public land while conducting a commercial recreation activity, consisting of a poker run type OHV public event.
2. All permitted designated routes remain open for public use; the permittee has no exclusive use of any public route.
3. All vehicle use is limited to the designated routes.
4. Permittee and all participants are prohibited from stopping at, or entering any and all known and unknown abandoned mine features.
5. All vehicle use will be conducted in a safe manner, reckless driving and/or excessive speed is a permit violation and is prohibited.
6. No overnight or camping use is associated with this permit.
7. The permittee is expected to be familiar with and to practice “Leave No Trace” and “Tread Lightly” land use ethics principles.
8. All trash and litter, as a result of the tour will be disposed of in a proper manner.
9. Violation of one or more of the listed stipulations is grounds to deny any future permit applications.

Wildlife, Desert Tortoise and Protected Plant Stipulations

1. Desert Tortoise. Care shall be taken not to disturb or destroy tortoises or their burrows. Handling, collecting, damaging, or destroying desert tortoises are prohibited by Arizona State Law. During all activity special care should be given to watch for and avoid any desert tortoise that may be present on a route or roadway.
2. Handling of Desert Tortoise. If a tortoise is endangered by any activity that activity shall cease until either the tortoise moves out of harm's way of its own accord, or until an authorized biologist is able to remove the tortoise to safety. Tortoises shall be handled only by a BLM authorized Wildlife Biologist, and shall be moved solely for the purpose of preventing death or injury. The authorized biologist shall be responsible for taking appropriate measures to ensure any desert tortoise relocated from the project site is not exposed to temperature extremes, which could be harmful to the animal.
3. Inspection under Vehicles. If a vehicle is left for any occasion the driver shall inspect underneath any parked vehicles immediately prior to moving. If a desert tortoise is beneath the vehicle, the authorized biologist shall move the tortoise from harm's way. Otherwise, the vehicle shall not be moved until the desert tortoise has left of its own accord.
4. Native Plants. State protected plant species (all cacti) shall not be disturbed, damaged, or destroyed without prior authorization from the BLM.

5. Migratory Birds. All migratory birds shall be observed from a distance. Any injured wildlife shall be reported to the Arizona Game & Fish Department (AZGFD) at (928) 342-0091.

Paintball Activities on Public Land

The following stipulations guiding paintball activities on public land include the following:

- Require SRPs for paintball activities with more than 15 participants, unless otherwise specified in special management areas.
- Require nontoxic, biodegradable, and water-soluble paintball capsules.
- Allow temporary obstacles or structures to be used but require them to be removed at the end of the visit to the public lands.
- Allow no mechanized or motorized cross-country travel to set up or remove structures.
- Prohibit the use of natural features, such as boulders and vegetation, as paintball targets.
- Require participants to pick up and remove from the area all items related to paintball activities, including capsules and any other trash.

Recreation Criteria

Vending on Public Lands

The following criteria would be applied to determine vending locations, with LHFO planning for those parties seeking permission to vend necessary and appropriate services or products:

- No vending would occur in any location that could impact threatened or endangered species, or negatively impact the natural resources.
- No vending would occur within limits or zone of authority, governed by any political entity (city, state, county), that otherwise refuses to approve vending therein.
- No vending would occur in a location which provided unfair or undue competition to legitimately permitted vendors of similar products or services located on land in the supporting communities.
- All vendors would have a BLM-assigned location. Vending operations would be subject to sign restrictions stipulated by BLM.
- Vendors would have to remain in their assigned location during vending operations.
- A self-contained restroom would be required.

The following criteria, if applicable, would be applied to determine to whom permits would be issued and how they would be administered:

- No vendor could operate for a period longer than stipulated in the permit, and the vendor would have to remove all materials at the end of each operation period. Operating periods would be consistent with traditional operating periods for the area the vendor is authorized to use.
- Permits would be issued on the basis of cost recovery of BLM expenses incurred, in the granting and administration of the permit, to ensure fair value is received.
- Permit applicants would have to secure and conform with all other necessary permits and requirements stipulated by all other involved political entities, including, but not limited to, a permit from the Arizona Department of Environmental Quality (ADEQ) with the necessary spill collection and containment plan.
- If it is determined to be necessary to protect resources or to ensure compliance with appropriate recreation opportunity spectrum classes identified for the area, exclusivity may be determined to be a reasonable and fair way to limit the number of permits available and therefore limit the impact on the natural resource.
- No permit may be subleased, transferred, or sold. Permits must be surrendered without compensation to BLM if the permittee is not able to be the primary person conducting or managing vending activities. No permittee has any right to renewal at the end of the permit term, preferential or otherwise.
- If the permittee violates any BLM rules or requirements related to the vending operation, or in the interests of the public health, safety, and welfare, the permit may be revoked with 30 days' written notice to the permittee without compensation of any kind.

The following additional criteria would be applied to determine vending locations on the water for those parties seeking permission to vend necessary and appropriate services or products:

- Vending would occur in locations where business activities can be conducted safely.
- No vending could occur within the Safety Zone of Bureau of Reclamation facilities.
- Approved vending locations could be set forth in a limited vending zone established by BLM, in conformance with these criteria and/or any other land use plan or allocation system developed by BLM and other agencies or political entities participating in the public administration and protection of Lake Havasu.

The following additional criteria would be applied if applicable to determine to whom permits would be issued for on-the-water vending and how they would be administered:

- Permit applicants would be required to secure appropriate licensing for all watercraft in use by their vending operation from the state department of motor vehicles.
- All watercraft in use would have to be U.S. Coast Guard-approved.
- A self-contained restroom would be required.
- The vendor would be required at the end of each annual operational period to remove the craft used from Lake Havasu.
- Additional stipulations based upon approved national policy may also be required.

Additional Competitive Use Race Courses

Additional competitive-use OHV course(s) would be established to meet the increasing public need if the following criteria are met:

- Basis of a demonstrated need as shown by public request and local community support.
- On existing and/or designated routes.
- Public lands adjacent (within 2 miles) to or encompassed by Parker 400 course are excluded from an additional course.
- Course would be outside areas listed for VRM Classes I, II and/or special designated areas such as but not limited to Areas of Critical Environmental Concern (ACEC), riparian wetlands, and cultural sites.
- Course would be outside Category I and II desert tortoise habitat and Wildlife Habitat Areas (WHAs).
- Compatibility with other ongoing resource uses.
- NEPA process would determine number of events and season of use on any proposed new courses.

Long Term Visitor Areas (LTVAs)

BLM would establish an LTVA and/or new camping area if the following criteria can be met:

- Basis of a demonstrated need as shown by existing dispersed camping use.
- Within approximately 10 miles of local community and with that community's support.
- Where natural terrain accommodates a minimum of 40 acres and would be no more than 640 acres. Adjacent land would be closed to dispersed 14-day camping.
- LTVA/camping area(s) would be required to be compatible with other potential and ongoing resource uses.
- Site would have to be in Visual Resource Management (VRM) Class III or IV areas.
- Site would be outside of Category I and II desert tortoise habitat and any WHA.
- Site would not be within areas having riparian vegetation and/or eligible cultural sites.

Prescribed Recreation Settings and the Recreation Opportunity Spectrum

BLM's goal of providing a satisfying leisure experience to visitors can be measured by participating in preferred activities in favorable environmental settings. Opportunities for

achieving satisfying experiences depend on natural elements such as vegetation, landscape and scenery, and conditions controlled by land management agencies, such as developed sites, roads, and regulations. The goal of recreation managers is to provide the opportunities to obtain such experiences by managing the natural setting and the activities within. The Recreation Opportunity Spectrum (ROS) is a planning tool that provides a framework to inventory or assess existing recreation opportunities/conditions. Reclassification of lands from what was inventoried occurred in response to alternative management goals. The plan allocates prescribed recreation settings that BLM will manage as the Desired Future Outcome for a specific location (see Map 20 in the Approved RMP). Because of water activities on Lake Havasu, the prescribed recreation settings combine terminology incorporated from both ROS and the Water Recreation Opportunity Spectrum (WROS).

The prescribed recreation settings have two key essentials, recreation factors and recreation settings or classes.

Recreation Factors

Seven elements provide the basis to monitor and delineate whether the prescribed recreational settings are being met. These factors describe the overall environment in which an activity occurs, and address how that environment influences the types of activities. For each person, the recreational experience depends on the setting and individual differences based on background, education, sex, age, and place of residence.

Access

Includes the mode of travel used within the area and influences both the level and type of recreational use an area receives.

Remoteness

Concerns the extent to which individuals perceive themselves removed from human activity. Vegetation or topographic variation can increase this sense of remoteness. Lack of remoteness is important for some recreational experiences.

Naturalness

Concerns the varying degrees of human modification of the environment, often described in terms of scenic quality influenced by the degree of change to the natural landscape.

Site Management

Refers to the level of site development. Lack of site modifications can facilitate feelings of self-reliance and naturalness, while highly developed facilities can enhance comfort and increase the opportunity to meet and interact with others.

Visitor Management

This includes both regulation and control of visitors as well as providing visitors with information and services. A continuum of visitor management can be described, ranging from subtle techniques, such as site design, to strict rules and regulations. In some recreational settings controls are expected and appropriate; in others, on-site controls detract from the desired experience.

Social Encounters

This involves the number and type of others met in the recreation area. Also measures the extent to which an area provides experiences for solitude or social interaction.

Visitor Impacts

The affects to natural resources such as soil, vegetation, air, water, and wildlife (even low levels of use) can produce measurable ecological impacts, and these impacts can influence the visitor's experience.

Recreation Settings/Classes

Based on the seven elements described above, six recreation settings/classes have been developed and are described in the table below. The setting/classes range from natural, low-use areas (resource-dependent recreational opportunities) to highly developed, intensive-use areas (facility/vehicle-dependent recreational opportunities). Each setting/class is defined in terms of three main components: the environmental setting, the potential activities, and the desired experience(s).

Table I-1. Recreation Settings/Classes

Opportunity class	Desired Experiences	Environmental Setting	Potential Activities
Primitive (P)	Opportunity for isolation from the sights and sounds of humans to feel a part of the natural environment. Challenge, adventure, risk, and self-reliance are important.	The remote area is managed to be essentially free from evidence of human restrictions and controls. Only facilities essential for resource protection are used.	Eco-adventure travel, non-motorized recreation, such as backpacking, equestrian use, hiking, climbing, rafting or canoeing, enjoyment of scenery or natural features, nature study, and photography.
Semi-primitive (SP)	Opportunity for high degree of interaction with the natural environment, moderate challenge and risk, use of outdoor skills.	Concentration of users is very low. On-site controls and restrictions may be present but are subtle. Facilities are provided only for the protection of resources value and the safety of users. Includes primitive trails for all type of users.	All activities listed previously plus remote camping, mountain biking, hunting, and fishing. Motorized vehicles observed infrequently. Motorized transportation used mostly to access non-motorized recreation opportunities.
Rural	Opportunity to relieve stress and to get away from built	Concentration of users is low, but often there is evidence of other area	Plus: disperse camping or from vehicles (car/boat camping)

Opportunity class	Desired Experiences	Environmental Setting	Potential Activities
Natural (RN)	environment is important, while prospect of using motorized equipment to explore natural environment is valued.	users present. Moderate level of management presence. Facilities are provided to help to manage use and limit contacts.	and auto touring includes off-highway vehicle use, four-wheel drive, dune buggy, dirt bike, and boating.
Rural Developed (RD)	About equal opportunities for association with other users and for isolation from sights and sounds of people. Opportunities for both motorized and non-motorized recreation are present.	Concentration of users is low to moderate with some facilities provided for moderate user convenience and comfort. On-site controls and restrictions offer a sense of safety and security.	Plus: Dispersed camping or using developed campsites with larger recreational vehicles, RV or trailers, water skiing, interpretive use.
Suburban (S)	Watching and meeting other visitors is expected and desired. Range of recreation experiences is sought from relaxation to physical exertion and from contemplation to thrills and challenges.	Substantially modified natural environment. Resource modification and use and practices are obvious. Concentration of users is often moderate to high. Developed sites, roads, and trails are designed for moderate to high use.	Plus: competitive games, spectator sports, bicycling, jogging, and developed resorts.
Urban (U)	Recreational activities with other individuals and groups are customary. Key part of the experience is socializing with family and friends. The natural environment and the use of outdoor skills secondary or unimportant.	Highly modified surroundings, although the background may have natural elements. Facilities developed for the convenience of a large number of people. Controls and restrictions are obvious and numerous. Often attractive to short time visitors, and may serve as staging area for travels to non-urban settings.	Plus: guided or facilitated recreational activities such as tour boat sightseeing, on site rental of recreational equipment.

Benefits-Based Management

Please see BLM Instruction Memorandum No. 2006-060 for internal guidance in this management approach, as well as Information Bulletin No. 2004 072 and *The BLM Priorities for Recreation and Visitor Services* (Bureau of Land Management 2004).

A benefits-based management approach focuses on the impacts or effects of a recreational activity rather than on the activity itself. It is common for park and recreation providers to concentrate only on the provision of activity opportunities. It is also easy to look back at the successful classes and programs of a previous year and to simply replicate that success as a de facto policy decision for future years. Facilities, staff abilities, and resource constraints also often determine what opportunities are offered. These decision-making processes focus on the provision of recreation activities and on the number of people who participate in them.

Benefits-based management is different. Rather than concentrating on the mechanics of providing the recreation opportunity, it explicitly defines the outcome of the experience.

In effect it shifts emphasis from the supply side to the demand side of recreation. But it goes beyond simple exhibited demand for park and recreation opportunities in that it looks at the needs of the people rather than just what they demand. That is to say, our customers' specific recreational wants are shaped by their awareness of the possibilities and the known outcomes of these options. But this knowledge may be limited. They might also temper their demands by their own realistic appraisal of the day-to-day constraints on their lives. But our clients do know their own needs. They can identify the problems and pressures in their lives, for which they would like some antidote. It is our job as professionals to find the activity and setting that provides them that antidote. This is the heart of the benefits-based management approach.

The shift from an activity-based management approach to a benefits-based approach has been echoed in the attention of research. Initial efforts were focused on counting the number of people and the number of activities, settings, and resources they would require and consume. As attention moved more to an experience-based approach, it was the quality of the experience rather than the quantity that was important. Under the Recreation Opportunity Spectrum planning framework, managers would concentrate on the provision of physical, social, and managerial conditions optimal for a particular type of recreational experience. A benefits-based approach goes a step further and looks at not just the psychological and experiential outcomes of the experience but also the flow of benefits to individuals, groups, communities and society in general (Borrie and Roggenbuck 1994).

Appendix J

Parker Dam

Parker Dam spans the Colorado River between the states of Arizona and California 17 miles northeast of the town of Parker, Arizona. The dam was constructed between 1934 and 1938 by the Department of Interior's United States Bureau of Reclamation. The construction of Parker Dam formed a reservoir, Lake Havasu, which is about 45 miles long and covers 29,390 acres. Lake Havasu may store as much as a total of 619,400 acre-feet of water, of which 28,600 acre-feet is dead storage to the maximum elevation of 650 feet. Parker Dam is the last dam on the Colorado River that has a significant storage capacity and is managed to release water for downstream requirements below Parker. Therefore, water releases downstream must be scheduled carefully to meet the requirements for irrigation and similar uses without waste. Releases are within the limits of flood control requirements for river regulation. These releases of water may cause minor fluctuations in the available storage.

Two other main purposes that Parker Dam achieves under normal lake fluctuations are to provide separate forebays from which water can be diverted by the Metropolitan Water District (MWD) and the Central Arizona Project (CAP). The water diverted by the MWD's Whitset Pumping Plant lifts water into the Colorado River Aqueduct and is eventually delivered to the Southern California area. The Whitset Pumping Plant is located 2 miles upstream from Parker Dam on the California side of Lake Havasu. The CAP's Mark Wilmer Pumping Plant is located 2 miles upstream from Parker Dam on the Arizona side of Lake Havasu. The water diverted by the Mark Wilmer pumping plant is lifted into the Hayden-Rhodes Aqueduct. The CAP began pumping water from Lake Havasu into the Hayden-Rhodes Aqueduct in 1985. It has a capacity for delivery to water users in central and southern Arizona.

Parker Dam is one of the deepest dams in the world: 73% of its structural height of 320 feet is below the original riverbed. About 85 feet of the dam is visible. The dam's superstructure rises another 62 feet above the roadway across the top of the dam. Parker Powerplant is located on the California side of the Colorado River immediately below the dam. It houses four hydroelectric generating units, each of which may produce 30,000 kilowatts of hydroelectric power. Four 22-foot-diameter penstocks carry as much as 5,500 cubic feet per second (cfs) each to feed the generating units. Fifty percent of the plant's power output is reserved for MWD's use to pump water along the Colorado River Aqueduct to the Pacific Coast. The Western Area Power Administration (WAPA) sells the power to the open marketplace. WAPA is a Department of Energy agency. Under an agreement between the Bureau of Reclamation and MWD, the latter agency financed essentially the entire cost of constructing Parker Dam.

Areas of Critical Environmental Concern

The objective of an Area of Critical Environmental Concern (ACEC) designation is to identify areas to protect and to prevent irreparable damage to important historic, cultural, and scenic values; fish or wildlife resources; other natural systems or processes; or to protect human life and safety from natural hazards. The ACEC designation indicates to the public that there are significant resources requiring special consideration within or on these public lands.

Bullhead Bajada Natural and Cultural

The ACEC encompasses portions of the Beale's Wagon Road (See Map 28 in the Approved RMP). Lt. Edward F. Beale, a naval officer in the service of the U.S. Army Topographical Corps, was ordered by the War Department to build a government-funded wagon road across the 35th Parallel. His secondary orders were to test the feasibility of the use of camels as pack animals in the Southwestern desert. Beale surveyed the wagon road in 1857 during the "Great Camel Experiment." He followed existing prehistoric trails and associated sites. The wagon road was constructed between 1857 and 1859. The site complex is eligible for the National Register of Historic Places (NRHP) and is of regional, if not national, importance.

The wagon road followed one of the strands of the Mojave Trail, a prehistoric trail system used by the Mojave people to access lands and resources between the Black Mountains and the Colorado River. The Mojave Trail continued west of the river into California and was used in travels to the coast on trading expeditions. Additional significant associated archaeological sites are located within the ACEC.

This area also contains some of the best tortoise habitat in the Black Mountains. Research by McLuckie et al (1999) and Glenn et al. (1990) indicates that desert tortoise in the southern Black Mountains are genetically grouped with the federally threatened Mojavean population west and north of the Colorado River. The western and eastern bajadas of Black Mountains, including the ACEC, provide habitat to the largest and most contiguous known population of desert tortoise in the entire Black Mountain ecosystem. The highest densities seem to occur in the bajadas versus the more protected and less developed steep and rock slopes.

Current development is having tremendous impacts on desert tortoise habitat in the southern Black Mountains. Particularly vulnerable are the western bajadas adjacent to Bullhead City and Ft. Mojave.

Beale Slough Riparian and Cultural

Lands surrounding Beale Slough (a finger of open water with associated marsh lands) in California comprise the proposed ACEC (See Map 28 in the Approved RMP). Important riparian habitat and significant cultural resources are located within the boundaries. Included within the boundaries are significant prehistoric sites eligible for inclusion on the NRHP and important riparian and native fish habitat. Interagency cooperation has recreated wildlife habitat for numerous species.

Crossman Peak Scenic

Akoke-humi, the Mojave name for Crossman Peak, has been identified as a significant place of traditional cultural importance and is included in oral traditions concerning creation of the Colorado River. In the 1987 YUMA RMP, much of this same area behind Lake Havasu City was recognized for special management by BLM allocating it as a Natural Scenic Area.

The ACEC will protect this natural scenic backdrop along with additional acreage to protect the cultural and other resource concerns (see Map 28 in the Approved RMP). Public land in this general area contains sacred mountain and sites eligible for inclusion on the NRHP including petroglyph sites. It also encompasses important wildlife habitat including Category II desert tortoise habitat, and sensitive bighorn sheep habitat. A large tract of public land in the southeast end of the ACEC exhibits a high degree of naturalness with little human modification of the landscape and opportunities for solitude and unconfined recreation.

Swansea Historic District

The ACEC encompasses the historic Swansea Townsite, which contains ruins of numerous structures and mining features, including associated shafts, adits, roads, railroad, and the Swansea pump station (see Map 28 in the Approved RMP). The historic archaeological district has been determined eligible for inclusion on the NRHP. Prospected in the 1880s, the copper mining town was established in 1908. The next 50 years saw a series of booms and busts. The mine became inactive in the early 1960s. The recreational use of the town never stopped.

The Swansea mining camp is located in La Paz County, approximately 35 miles southeast of Parker, Arizona. Physiographically, the area lies in what is referred to as the Basin and Range province. The biological environment of the site is typical of the northern portion of the Sonoran Desert ecosystem, containing saguaro, cholla, creosote, ocotillo, palo verde, and mesquite.

The camp is situated in a northeast-southwest trending valley bordered by the Rawhide Mountains to the north and the Buckskin Mountains to the south, and lies just south of the Bill Williams River. The mine and camp area rests on low undulating alluvial flats

dissected by washes. Material remains consist of the foundations and other structural remains of mine shafts, the processing plant, the mine haulage system, water and power conveyance systems, domestic and commercial buildings, tent foundations, wooden building ruins, two cemeteries, the Arizona and Swansea Railroad grade, depot, weigh scale, and repair buildings. Sheet refuse from mining and domestic uses, such as machine parts, slag, tin cans, bottles, and building materials, covers broad areas of the site. Topographically and visually, the site is dominated by Clara Peak, just to the south and east.

Three Rivers Riparian

The ACEC (see Map 28 in the Approved RMP) will protect riparian resources, scenic values, and threatened and endangered species habitat, specifically bald eagle aeries. This riparian habitat is extremely valuable for available year-round water, diversity of vegetation and crucial habitat for bird, fish, other wildlife, and insect populations. The riparian habitat provides both wintering and breeding habitat for the southwestern willow flycatcher, bald eagle, and peregrine falcons. The extensive riparian habitat with native cottonwood and willow trees provides outstanding scenic qualities with the free-flowing river, surrounding mountains, and cliff features offering solitude and water-based recreation opportunities.

Back Country Byways

BLM's 8375 – Byways Handbook lists four components to BLM's byway program:

- BLM Scenic Byways – scenic corridors along major secondary and primary highways.
- BLM Back Country Byways – corridors along back country routes that have high scenic, historic, archaeological, or other public interest values.
- All-American Roads – roads that travel through corridors offering such a stunning variety of interesting destinations that travelers from around the nation and world will seek them out.
- National Scenic Byways – described as roads that state and local officials consider so outstanding that they merit recognition at the national level.

Parker Dam Road

The byway was the 61st designated National Back Country Byway in the Nation. The Parker Dam Road is a paved road maintained by San Bernardino County, California, traveling along the California side of the Colorado River. The byway theme interprets the Colorado River as the “thread of life” connecting people, wildlife, and vegetation in the river canyon as well as the communities of Parker Dam, California, and Parker, Arizona. The byway connects the many developed recreation facilities, both commercial resorts and BLM campground and day use. The byway is used by recreational visitors to access 11 BLM-developed recreation sites and 11 concessions (see Map 27 in the Approved RMP). There are six developed wayside exhibits for the byway.

Parker – Bouse Swansea

This potential byway incorporates three county maintained roads: 13.16 miles of the paved Shea Road, 10.10 miles of the all-weather gravel Swansea Mine Road, and 18 miles of the all-weather gravel Swansea Road. Past the intersection of Swansea Mine and Swansea roads, the last 7 miles take the traveler into the Swansea Townsite. While this section of road is maintained by the county, the terrain encourages the use of high-clearance vehicles. Besides the townsite, this potential byway offers views of the Gibraltar Mountain and East Cactus Plain Wilderness Areas, remnants of ranching activities, the old Swansea railroad grade, the Central Arizona Project (CAP), and prehistoric sites. A kiosk has been installed on Shea Road and a bulletin board appears on Swansea Road near the CAP, and another kiosk has been installed at Swansea Townsite.

Plomosa

This potential byway is a paved county road that connects areas around Quartzite and Bouse, Arizona, a distance of about 18 miles. The potential byway offers views of the dramatic Plomosa Mountains and Sonoran Desert. The Bouse Fisherman intaglio is another reason the route is popular with winter visitors. There is a kiosk at the west end of the route near SR 95. The potential byway would be cooperatively managed by Lake Havasu Field Office and the Yuma Field Office.

Wild and Scenic Rivers

This appendix includes all management actions listed in the final *Arizona Statewide Wild and Scenic Rivers Legislative Environmental Impact Statement and Study Report/Record of Decision* (Bureau of Land Management 1994). Wild and Scenic River designation would require certain management actions be initiated in accordance with the *Bureau of Land Management Wild and Scenic River Manual* (MS 8351, August 19, 1952). The following would occur as a result of designation. In the event that wild and scenic river management actions overlap ongoing management actions, the more stringent would be applied.

- Construction of new roads, trails, or other provisions for overland motorized travel would be prohibited in wild segments 1 and 3 (4,164 acres).
- Water quality would be monitored in order to meet federal criteria or federally approved state standards in the entire study area, according to the Wild and Scenic Rivers Act.
- Patents would be restricted to the mineral estate on 486 acres of the study not in wilderness.
- Instream flow would be monitored to establish the minimum flow necessary to protect the outstandingly remarkable values.
- New right-of-way would be discouraged on 486 acres of the study area not in wilderness.

- The construction of dams, levees, hydropower facilities or major types of diversions would be prohibited on up to 15.9 riparian miles.

These actions were current and ongoing management actions from the KRMP, the YRMP, and the Bill Williams Riparian Management Area Plan. Congressional designation of the river segments would require writing a management plan within 3 years of official designation and the management actions listed below could be updated at that time.

1. The riparian zone would be recommended for withdrawal from mineral entry on 486 acres of the Three Rivers Riparian ACEC in Segment 2.
2. Mineral leasing with no surface occupancy would be allowed in the riparian zone on 486 acres of the Three Rivers Riparian ACEC in Segment 2.
3. BLM approval for plans of operations would be required for all mineral exploration and development activities above the level of casual use outside the riparian zone on 486 acres of the Three Rivers Riparian ACEC in Segment 2.
4. Mineral material disposal would be prohibited in the riparian zone on 486 acres of the Three Rivers Riparian Area of ACEC in Segment 2.
5. New mining claims and mineral leases would not be allowed in the riparian zone in Segment 2.
6. New major right-of-way would be confined to existing corridors on 486 acres in Segment 2.
7. BLM would acquire 524 acres of private land and 703 acres of state land on a willing-seller/willing-buyer or exchange basis in the Bill Williams River study area.
8. Road development would be prohibited on 486 acres within 0.5 mile of bald eagle nests.
9. Motorized travel is prohibited in the wilderness portions of Segment 1 and Segment 3.
10. OHV use in riparian zones would be limited to designated roads and trails on 486 acres of Segment 2 (Scenic).
11. Campground development would be restricted to areas outside the riparian zone and the 100-year floodplain on 486 acres in Segment 2.
12. The area within 0.5 mile of a falcon nest would be closed to any surface disturbance or intensive recreational activities (e.g., group camping) during the breeding season from March 1 to June 15 on 486 acres in Segment 2.
13. The portions of the study area in wilderness areas (4,164 acres) would be managed as a VRM Class I area. Management activities would be limited to those that preserve the characteristic landscape.
14. The non-wilderness portions of the study area (486 acres) would be managed as a VRM Class II area. Management activities would be limited to those that would repeat the basic line form, color, and texture found in the predominant natural features of the characteristic landscape.

15. Helicopter flights above the 486 acres in Segment 2 would be prohibited within 0.5 mile of active bald eagle nests during the breeding season.
16. Except for salvage operations, the removal of native plants would be prohibited on 486 acres in Segment 2.
17. A systematic program would be developed for removal of saltcedar on as much as 500 acres in Segment 2.
18. As many as 200 cottonwood and willow poles would be planted on as much as 100 acres in Segment 3.
19. A cultural resource specialist would review proposals for activities that could result in increased use or surface disturbance.
20. If sites were evaluated as eligible for listing in the NRHP, they would be avoided by the proposed activity.
21. If avoidance were not possible, impacts would be mitigated through a data recovery program developed in consultation with the State Historic Preservation Officer.
22. Protection measures (e.g., fencing or periodic patrolling) would be developed for selected cultural resources that have either great significance or a history of vandalism.
23. As many as five new upland water sources for use by livestock would be developed to improve riparian areas.
24. In accordance with the Bill Williams Riparian Management Area Plan, as much as 5 miles of fences, including enclosures, would be constructed to improve riparian areas.
25. Livestock would be removed when utilization exceeds 70% of cottonwood and willow seedlings and/or utilization of key herbaceous species exceeds 50%.
26. The wild burro population would be monitored and excess numbers would be removed.

AZ Route Inventories

Since 2000, BLM, four Arizona National Forests, and the Arizona State Land Department have cooperatively inventoried OHV routes throughout the state. Approximately 19,000 miles (14,500 BLM) have been inventoried for the land use planning efforts of the three respective agencies. A common data dictionary, approved by all agencies, is used to record each route along with important attributes (e.g., observed uses, route width/surface, camping areas, and major maintenance concerns). LHFO started inventorying routes in September 1990 as part of preparation for the Parker Strip Special Recreation Management Area Plan. The LHFO was the first Field Office to print an Arizona Access Guide (map) for a significant part of its management area in 1998. Three of the five LHFO Access Guides were completed by 2002. These guides were completed only after a route inventory of the area was completed using BLM staff or contractors. The Lake Havasu Field Office Travel Management Units or Inventory Maps are based on the Access Guide format, and each guide would be updated when the Travel Management Network Plan is completed.

LHFO Inventory

Lake Havasu Field Office completed its route inventory in 2004 and updated with additional routes identified through the DRMP/DEIS 2006 comment process. The Approved RMP has one 11×17 map representing the existing route inventory and an index for the travel management units or route inventory maps (see Maps 30 and 32 in the Approved RMP). Six travel management units/route inventory maps are printed at the 62.5K scale and are on the CD included with this Approved RMP: Bullhead, Lake Havasu, Cactus Plain, Alamo, Bouse, and Wenden.

Route Evaluation

AZ BLM has adapted the Route Evaluation Tree, designed by a California contractor (first used in the West Mohave Plan), for designating routes and developing its travel management networks. The Tree applies a standard analytical method to existing routes to determine whether they would be retained, closed, or rerouted. Commercial, recreation, and resource data are compiled for each route for this process. Most of BLM's roads and trails are user defined. The Tree process would allow each Field Office to eventually develop sustainable travel networks. Adjoining Forests and Arizona State

Lands are evaluating the Tree method to determine if they would apply it to their respective land units.

Proposed Route Evaluation Criteria

When using the Evaluation Tree BLM would analyze following detailed variables or criteria for each route and there by determine the value of said route in open, limited, or closed status. Additional criteria may be added through working with the public and BLM staff to complete the Travel Management Plan. The criteria would be noted in a database for each route. All routes would be analyzed during the route evaluation process, which would consider all uses and resources within the area. No use or resource would automatically predetermine a route decision.

COMMERCIAL, ADMINISTRATIVE, PRIVATE PROPERTY (CAPP) Issues:

- **Administrative Uses, such as:**
 - Aggregate Borrow Pit
 - Compliance/Enforcement Monitoring
 - Fire Suppression
 - Monitoring Site
 - Other
 - Predator Control
 - Resource Treatment
 - Training Area/Facility (e.g., Search and Rescue)
 - Weather Station
 - Weed Abatement
 - Wildlife Agency Facility
 - Wildlife Agency Monitoring
 - Wildlife Catchments
 - Wildlife Water / Guzzler
- **Commercial Ranching Facility, such as:**
 - Allotment Boundary Fence Line
 - Base Waters
 - Cattleguard
 - Corral
 - Fence Line (not allotment boundary)
 - Gate
 - Other
 - Pipeline
 - Ranch HQ
 - Ranch Shack
 - Salt Lick
 - Spring Development
 - Springs
 - Tank, Trough
 - Trailing Route
 - Water Catchments
 - Well
 - Windmill
 - Military Facility
 - Mining

- **Officially Recognized in Federal Planning Document and Maintained**
- **Connectivity**
Published in guidebook or on maps.
- **Private Property**
- **Tourism**
- **Utilities, such as**
 - Communication Site
 - Electrical Transmission / Powerline
 - Gas Pipeline
 - Irrigation Canal
 - Other
 - Telephone
 - Water Pipeline
 - Wind Energy

Similarly, under the Special Resources section, some categories may be broken down into greater detail while others may not. This is a short example.

RESOURCE ISSUES:

- **Known Cultural Site / Area / Polygon**
- **Area of Critical Environmental Concern (ACEC)**
- **T&E Species, Special Status Species, Sensitive Species, such as:**
 - Bighorn Sheep
 - Desert Tortoise
 - Ironwood
 - [Apply specifics for Planning Area wildlife and plants]
- **Within WHA**
- **Within identified Wildlife Movement Corridor**
- **Wilderness characteristics of an area.**
- **Within SRMA**
- **Within Wilderness or Wilderness Study Area**
- **Within potential Wild & Scenic River Area.**
- **Sensitive Habitat**
 - Riparian Habitat
 - Soils
 - Water
 - Air

PUBLIC USES ISSUES

- **4x4 (Standard Stock 4x4)**
- **Astronomy / Night Sky Concerns**
- **ATV Use**
- **Birding**
- **Boating/Access**
- **Camping –**
 - Developed
 - Primitive/Dispersed
 - Primitive/Extended Stay
 - Vehicle Based
- **Commercial Recreation Permit**
- **Cultural/Historical Sightseeing**

- **Dog Trials**
- **Dual Sport Touring**
- **Equestrian**
- **ERMA**
- **Fishing**
- **Geocaching**
- **Golf Carts (Modified)**
- **Hiking**
- **Hill-Climbing**
- **Hunting**
- **Long Term Visitor Area (LTVA)**
- **Motorcycle Trials**
- **Motorcycle Use**
- **Mountain Biking**
- **Mountain, Rock Climbing**
- **OHV**
- **Parking Area**
- **Permitted Equestrian**
- **Permitted Motorcycle / ATV**
- **Permitted Mountain Bike**
- **Public Safety**
- **Public Use Site Access / Interpretative Panel**
- **River and Stream Access / Put In-Out**
- **Rockhounding**
- **Shooting**
- **Special Recreation Permit**
- **Staging Area(s)**
- **SUV Touring**
- **Technical 4 WD**
- **Technical, Site Specific (Extreme/Rock Crawling Within a Specified Area, Not a Trail)**
- **Technical, Trail (Extreme/Rock Crawling Within Trails)**
- **Trailheads**
- **Train Spotting**
- **Vistas, Sightseeing, Photography**
- **Wilderness Access**
- **Wildlife Watching**
- **Other**

Route Evaluation Decision Tree® Main Features Include:

1. Logical, standardized, balanced, and repeatable approach to route designation.
2. Systematic questions to assess compliance with a variety of pertinent statutory requirements including:
 - Valid existing rights and other vested rights or permitted uses.
 - Degree of impact or degradation (including permanent impairment) to specially protected resources, such as species protected by the Federal Endangered Species Act (ESA) and cultural, historic, and scientific objects protected by the Historic Preservation and Antiquities Acts (e.g., Monument Proclamations, Section 106) and wilderness values as protected by the Wilderness Act.
 - Implementation of the Federal Land Policy & Management Act (FLPMA) and its charge to balance the public's need/desire for access to federal lands with resource protection through a philosophy of management for "multiple use." Such consideration includes recognizing the value of providing a range of recreational opportunities and treating those opportunities in accordance with FLPMA as a resource worthy of protection.
3. Systematic consideration of access opportunities and resource protection needs on both a narrowly focused route-by-route assessment, as well as a broad-based cumulative assessment of the total network's effect.
4. Systematic consideration of mitigation and/or limited designation as a means by which to ameliorate resource impacts. Designation options include a range from open to closed and a number of intermediate actions as a means by which to balance access needs and resource protection.
5. Systematic recording of data allowing for future retrieval and review/updating of decision information as needed (i.e., "decision pathways" are numerically coded).
6. Systematic ability to assess a route's final recommended designation status based upon the management goals of each individual alternative.

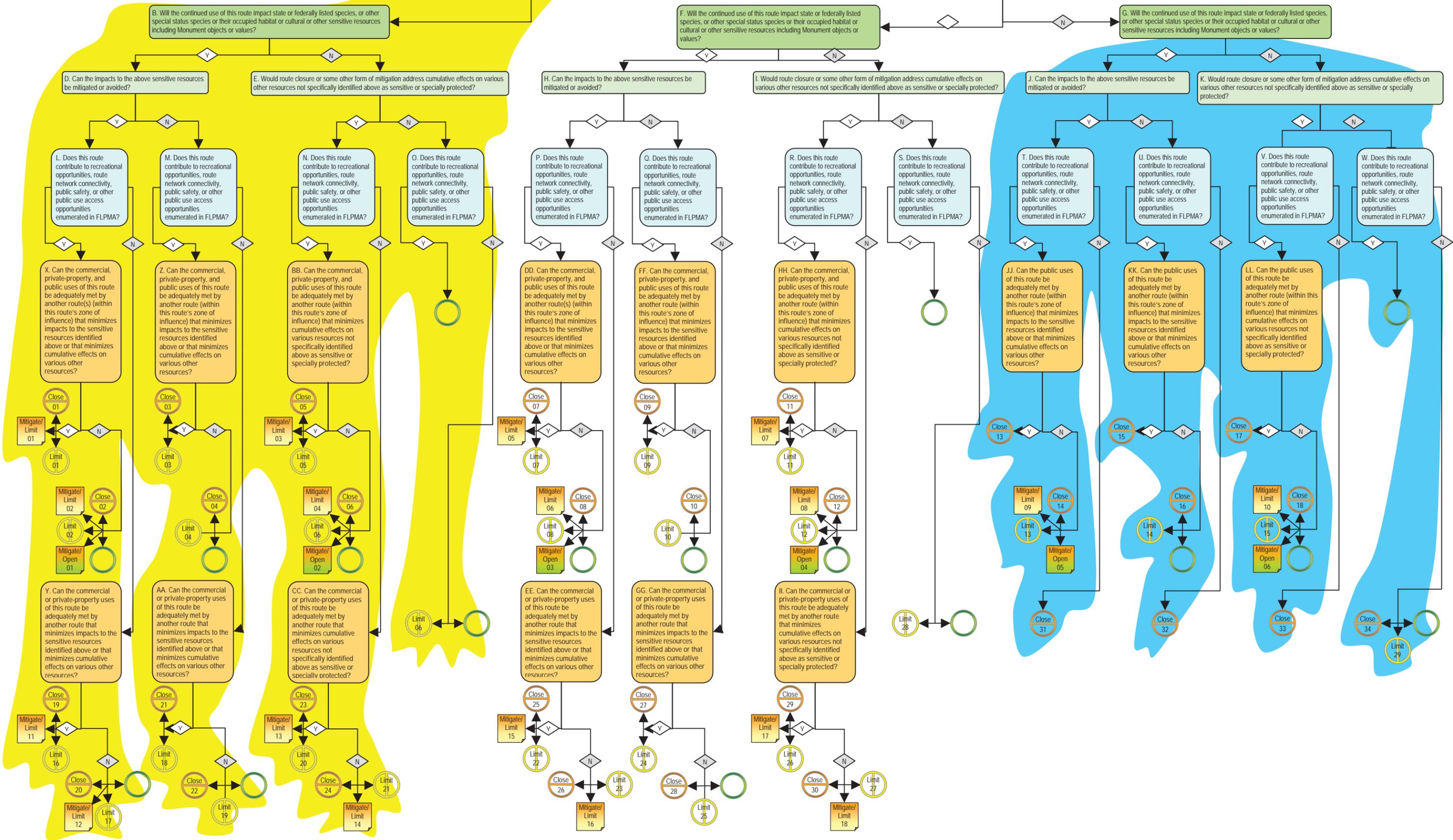
How does the Decision Tree® Work?

1. The region or management area in which the route is located is thoroughly evaluated. Resource protection, recreation, and commercial access concerns pertinent to route designation are identified. The patterns of these identified uses and concerns, as well as their trends, are also noted. Other related issues such as law enforcement, route maintenance, and user conflicts are further identified.
2. The desired future condition and management goals of each proposed alternative are identified and reviewed.
3. Each route is systematically numbered. This both allows for tracking the designation process and enables the public to make comment on specific routes.
4. Each route is then systematically assessed by sequentially answering the questions in the Decision Tree. This is done for each alternative. Specifically, the questions are assessed and answered in the context of the regional concerns identified in Step #1 and the management goals identified in Step #2 for each of the alternatives.
5. The determination of the final designation for each route under each alternative is dictated by addressing the management goals for that alternative.
6. The specific answers to each question for each route are recorded by the final coded answer.
7. Detailed information that may have been critical to the answer of any question(s) or in the determination of the final outcome is recorded as part of the individual route designation decision record.



Route Evaluation Tree

Route Decision Tree © ARS, Inc. 2002



A. Is the route:
A right-of-way via valid existing right,
Officially recognized or maintained,
A regional route that serves more than
one sub-region,
A principal means of connectivity
within a sub-region?

C. Does the route provide commercial or private-property access
(e.g., vested or prescriptive rights)?

B. Will the continued use of this route impact state or federally listed species, or other
special status species or their occupied habitat or cultural or other sensitive resources
including Monument objects or values?

F. Will the continued use of this route impact state or federally listed species, or other
special status species or their occupied habitat or cultural or other sensitive resources
including Monument objects or values?

G. Will the continued use of this route impact state or federally listed species, or other
special status species or their occupied habitat or cultural or other sensitive resources
including Monument objects or values?

D. Can the impacts to the above sensitive resources
be mitigated or avoided?

E. Would route closure or some other form of mitigation address cumulative effects on various
other resources not specifically identified above as sensitive or specially protected?

H. Can the impacts to the above sensitive resources be
mitigated or avoided?

I. Would route closure or some other form of mitigation address cumulative effects on various
other resources not specifically identified above as sensitive or specially protected?

J. Can the impacts to the above sensitive resources be
mitigated or avoided?

K. Would route closure or some other form of mitigation address cumulative effects on various
other resources not specifically identified above as sensitive or specially protected?

L. Does this route
contribute to recreational
opportunities, route
network connectivity,
public safety, or other
public use access
opportunities
enumerated in FLPMA?

M. Does this route
contribute to recreational
opportunities, route
network connectivity,
public safety, or other
public use access
opportunities
enumerated in FLPMA?

N. Does this route
contribute to recreational
opportunities, route
network connectivity,
public safety, or other
public use access
opportunities
enumerated in FLPMA?

O. Does this route
contribute to recreational
opportunities, route
network connectivity,
public safety, or other
public use access
opportunities
enumerated in FLPMA?

P. Does this route
contribute to recreational
opportunities, route
network connectivity,
public safety, or other
public use access
opportunities
enumerated in FLPMA?

Q. Does this route
contribute to recreational
opportunities, route
network connectivity,
public safety, or other
public use access
opportunities
enumerated in FLPMA?

R. Does this route
contribute to recreational
opportunities, route
network connectivity,
public safety, or other
public use access
opportunities
enumerated in FLPMA?

S. Does this route
contribute to recreational
opportunities, route
network connectivity,
public safety, or other
public use access
opportunities
enumerated in FLPMA?

T. Does this route
contribute to recreational
opportunities, route
network connectivity,
public safety, or other
public use access
opportunities
enumerated in FLPMA?

U. Does this route
contribute to recreational
opportunities, route
network connectivity,
public safety, or other
public use access
opportunities
enumerated in FLPMA?

V. Does this route
contribute to recreational
opportunities, route
network connectivity,
public safety, or other
public use access
opportunities
enumerated in FLPMA?

W. Does this route
contribute to recreational
opportunities, route
network connectivity,
public safety, or other
public use access
opportunities
enumerated in FLPMA?

X. Can the commercial,
private-property,
and public uses of this route
be adequately met by
another route(s) (within
this route's zone of
influence) that minimizes
impacts to the sensitive
resources identified
above or that minimizes
cumulative effects on
various other
resources?

Z. Can the commercial,
private-property,
and public uses of this route
be adequately met by
another route (within
this route's zone of
influence) that minimizes
impacts to the sensitive
resources identified
above or that minimizes
cumulative effects on
various other
resources?

BB. Can the commercial,
private-property,
and public uses of this route
be adequately met by
another route (within
this route's zone of
influence) that minimizes
cumulative effects on
various resources not
specifically identified
above as sensitive or
specially protected?

DD. Can the commercial,
private-property,
and public uses of this route
be adequately met by
another route(s) (within
this route's zone of
influence) that minimizes
impacts to the sensitive
resources identified
above or that minimizes
cumulative effects on
various other
resources?

FF. Can the commercial,
private-property,
and public uses of this route
be adequately met by
another route (within
this route's zone of
influence) that minimizes
impacts to the sensitive
resources identified
above or that minimizes
cumulative effects on
various other
resources?

HH. Can the commercial,
private-property,
and public uses of this route
be adequately met by
another route (within
this route's zone of
influence) that minimizes
cumulative effects on
various resources not
specifically identified
above as sensitive or
specially protected?

JJ. Can the public uses
of this route be
adequately met by
another route (within
this route's zone of
influence) that minimizes
impacts to the sensitive
resources identified
above or that minimizes
cumulative effects on
various other
resources?

KK. Can the public uses
of this route be
adequately met by
another route (within
this route's zone of
influence) that minimizes
impacts to the sensitive
resources identified
above or that minimizes
cumulative effects on
various other
resources?

LL. Can the public uses
of this route be
adequately met by
another route (within
this route's zone of
influence) that minimizes
cumulative effects on
various resources not
specifically identified
above as sensitive or
specially protected?

Y. Can the commercial
or private-property
uses of this route
be adequately met
by another route
that minimizes
impacts to the
sensitive resources
identified above
or that minimizes
cumulative effects
on various other
resources?

AA. Can the commercial
or private-property
uses of this route
be adequately met
by another route
that minimizes
impacts to the
sensitive resources
identified above
or that minimizes
cumulative effects
on various other
resources?

CC. Can the commercial
or private-property
uses of this route
be adequately met
by another route
that minimizes
cumulative effects
on various
resources not
specifically
identified above
as sensitive or
specially protected?

EE. Can the commercial
or private-property
uses of this route
be adequately met
by another route
that minimizes
impacts to the
sensitive resources
identified above
or that minimizes
cumulative effects
on various other
resources?

GG. Can the commercial
or private-property
uses of this route
be adequately met
by another route
that minimizes
impacts to the
sensitive resources
identified above
or that minimizes
cumulative effects
on various other
resources?

II. Can the commercial
or private-property
uses of this route
be adequately met
by another route
that minimizes
cumulative effects
on various
resources not
specifically
identified above
as sensitive or
specially protected?

Mitigate/
Limit 01

Mitigate/
Limit 02

Mitigate/
Limit 03

Mitigate/
Limit 04

Mitigate/
Limit 05

Mitigate/
Limit 06

Mitigate/
Limit 07

Mitigate/
Limit 08

Mitigate/
Limit 09

Mitigate/
Limit 10

Mitigate/
Open 01

Mitigate/
Open 02

Mitigate/
Open 03

Mitigate/
Open 04

Mitigate/
Open 05

Mitigate/
Open 06

Mitigate/
Open 07

Mitigate/
Open 08

Mitigate/
Open 09

Mitigate/
Open 10

Off-Highway Vehicle Mitigation - Examples

Nature of the conflict with routes and use of routes

Conflict –is underlined, under each identified issue: *Resource, Social, NLCS*

Typical mitigation measures—are specified best practices that respond to identified conflict

-Typical mitigation is in order of possible implementation, not all measures may be used and not all may be listed.

-Mitigation actions taken should be triggered as a result of monitoring and reaching identified thresholds.

-Monitoring should be done before, during and after mitigation measures are implemented to identify trends.

Resource issues:

The physical location of a route is degrading riparian condition

1. Relocate the route to avoid the area
2. Harden or raise the route above water level if route is necessary and unable to be relocated
3. Close the route if no suitable mitigation is possible and make a plan for reclamation

Human use associated with a route is degrading riparian condition

1. Place information signs to request positive behavior (ie use only when dry etc)
2. Harden and/or raise the route above water level or place barriers to keep vehicle and people on routes
3. Relocate the route to allow riparian condition to improve
4. Close the route if no suitable mitigation is possible and make a plan for reclamation

Human use associated with a route is degrading desired plant communities

1. Place signs to encourage vehicles and people to stay on routes
2. Conduct public outreach regarding noxious weeds and conserving vegetation
3. Fence the area or place barriers to manage people
4. Develop a program to improve desired plant community
5. Close the route and make a plan for reclamation

Human use associated with a route is degrading water quality

1. Review the situation to determine the source of degradation and monitor to determine severity
2. Place water control measures on the route
3. Take reasonable measure to further harden/stabilize the route
4. Reroute the route
5. Close the route if no suitable mitigation is possible

Human use on a route is determined to degrade a particular habitat

1. Request certain behavior from route users through signs and other information
2. Place limitations of use on the route (time/season of use, type of use, number of users, behavioral requirements)
3. Reroute the route
4. Replace habitat to offset problems caused by human use, some methods could be:
 - a. Augment food/water sources
 - b. Place barriers along route to protect specific habitat features

- c. Relocate or expand reproduction sites to be away from the route
5. Close route if no suitable mitigation is possible, make plan for reclamation

Human use associated with a route is determined to degrade a Special Status Species' habitat

1. Review management plans for the species and follow recommendations

Design mitigation plans to address:

- 1) Temporary conditions
 - 2) Seasonal conditions
 - 3) Year round conditions
2. Develop specific mitigation measures based on the site if species management plan is insufficient
 3. Close route if no suitable mitigation is possible, make a plan for reclamation

Human use associated with a route is determined to degrade Sonoran Desert Tortoise habitat

1. Physically relocate habitat disturbances and/or schedule permitted activities to occur during dormant periods
(Maintaining No-Net Loss habitat policy)
2. Engineer Tortoise fences and underpasses for Tortoise benefit
3. Acquire replacement habitat lands and funding for tortoise benefiting activities
4. Close unauthorized routes and make a plan for reclamation

Human use associated with a route is determined to degrade a Threatened and Endangered Species (T&E species)

1. Initiate consultation with Fish and Wildlife Service
2. Review recovery plan, implement mitigations as defined in plan
3. Close route if no suitable mitigation is possible, make a plan for reclamation

Dust caused on or near a route violates county, state or federal regulations

1. Determine a short term solution
 - a. Monitor situation and determine severity of the problem
 - b. Close the route or area temporarily to stop dust generation
 - c. Stabilize the route using a county approved method
 - d. Place signs requesting a certain behavior (ie no wheel spin, reduce speed)
2. Determine a long term solution
 - a. Change formal maintenance interval on route consistent with use level
 - b. Develop a localized outreach program
 - c. Implement new technology as part of an area wide plan
 - d. Close route if suitable dust control is not possible, make plan for reclamation

Human use associated with a route is causing unnatural erosion rates

1. Review the route to determine cause and monitor to determine severity
2. Place water control measures on the route
3. Take reasonable measure to further harden or stabilize the route
4. Reroute the route
5. Close the route if no suitable mitigation is possible

Social Issues:

Speed differential causes conflict between recreationists and/or local residents

1. Place signs to raise awareness of lawful uses of the area.
2. Monitor situation on the ground and request law enforcement support if necessary
3. Conduct public outreach in an attempt change behavior
4. Review terrain and improve sight distances if possible

5. Redesign traffic flow by separating uses or limit by type or time of use

Sound level causes conflict between recreationists and/or local residents

1. Place signs to raise awareness of sound issues
2. Monitor situation on the ground and request law enforcement support if necessary
3. Conduct public outreach in an attempt change behavior
4. Implement "Quiet Time" of use restrictions
5. Reroute traffic to minimize conflict
6. Place sound reducing barriers if applicable
7. Close route if no suitable mitigation is possible

A route causes unacceptable changes to the desired Recreation Opportunity Spectrum(ROS) setting (ex. unplanned OHV play areas, large party sites, dump sites, resource theft)

1. Investigate the cause and implement signage and law enforcement as necessary
2. Design mitigation plans to address:
 1. Short term conditions
 - a. Implement new signing and public outreach to explain desired setting
 - b. Implement temporary use restrictions(ex. No overnight camping)
 - c. Issue emergency closure order, address conditions during closure
 2. Long term conditions
 - a. Implement better signing and mapping protocols for this area
 - b. If no suitable mitigation is possible, amend RMP to close the area
 3. Close areas near the route contributing to the unacceptable changes such as unplanned OHV play areas, large party sites, dumping sites, resource theft etc

A proposed route is out of compliance with the Visual Resource Management(VRM) classification of the area

1. Evaluate the potential for and implement a method to make the route less noticeable such as landscaping.
2. If no suitable mitigation is possible, construction would not be allowed

A route causes unacceptable impacts to cultural or archeological resources

1. Stabilize the resource and begin data recovery
2. Fence one or both sides of the route to keep vehicles from pulling off the route onto a site
3. Interpret the resource to gain public support for protection
4. Work with AZ Site Stewards program for monitoring, increase law enforcement presence
5. Reroute the route to avoid further disturbance of the site
6. Close the route if no mitigation is possible, make a plan for reclamation

Human use on a route causes unacceptable impacts to a designated wilderness (ex. vehicle trespass)

1. Improve signage along wilderness boundary
2. Implement short sections of fence in problem areas
3. Use technology to gather information for more detailed action
4. Use volunteers and law enforcement to improve compliance along boundaries
5. Place time of use limits on the route to encourage lawful use (ie daytime use only)
6. Close the route if no mitigation is possible

Human use on a route outside wilderness causes unacceptable impacts to a designated wilderness (ex. vehicle trespass)

1. Improve signage along wilderness boundary
2. Secure funding and resources to rehabilitate areas attracting trespass
3. Implement short sections of fence in problem areas
4. Use technology such as remote cameras and infrared counters to gather data for more detailed action
5. Engage volunteers and law enforcement to improve compliance along boundaries

6. Place time of use limits on the route to encourage lawful use (ie special event use only)
7. Close the route if no mitigation is possible, make a plan for reclamation

Appendix M

Little Harquahala Herd Area Manageability Analysis

Based on the last census, no wild burros remain in the Little Harquahala Herd Area (HA). Management of the area would never be possible due to the amount of private lands within and adjacent to the HA. The Little Harquahala Herd Area is located directly south of Wenden, Arizona, on the south side of U.S. Highway 60. It is 65,893 acres in size and is composed of 51,961 acres of public land (79%), 11,767 acres of private land (18%), and 2,165 acres of Arizona state lands (3%). (See Maps 34 and 35 in the Approved RMP.)

The area was first identified as a herd area in the *Draft Lower Gila North Grazing Environmental Impact Statement* (1982), based on inventories conducted in 1976 and 1980 utilizing the Lincoln Index method. The area was designated as an HA in the *Final Lower Gila North Grazing Environmental Impact Statement* in September 1982.

The Arizona Game and Fish Department (AZGFD) and the Bureau of Land Management (BLM) jointly conducted surveys in 1999 using the Simultaneous Double-Count method. Analysis of that data indicates that no burros remain in the area. Burros within this herd area are dependent on forage and water produced on the privately owned agricultural fields located in the middle of the herd area.

No natural permanent water sources are present on public land within the HA. Other waters on public land in the area are those developed for livestock (one well, troughs, and earthen tanks). These waters are operational only during periods of active livestock use and therefore are not a dependable source of water throughout the year. Earthen tanks are generally accessible but contain water only during periods of plentiful precipitation.

Even without the limiting factors of private farmlands and lack of water, forage in the area would not support a herd larger than 50 burros. Although existing research regarding minimum population size varies, it is generally accepted that a population of fewer than 50 animals is not sufficient to maintain a genetically viable and healthy population over the long term.

Considering all factors, including limited water sources, sparse forageable vegetation resulting in the necessity of the animals to forage on privately owned farm lands, and the small number of animals, it is recommended that the Little Harquahala HA not be designated as a Herd Management Area (HMA).

Appendix N

**Lake Havasu Field Office
Resource Management Plan Priorities**

Lake Havasu Field Office Resource Management Plan *Priorities*

Workload: Achieving Desired Natural Resource Conditions

Strategic Outcome	Plan Outcome	Strategies to Accomplish Outcomes	Projects to Implement Strategies	Priority	Magnitude	
				Within		
Achieve Desired Landscape and Watershed Conditions	Upland Conditions	Collect & analyze information	Determine bighorn sheep lambing use and areas	High	High	
			Survey and monitor and map Sonortan DT populations and categorized habitat.	High		
			Health of the Land Assessments (prioritize by landscape)	High		
			AML inventory for clean water in tributaries -Bill Williams River (includes KFO)	High		
			Acquire completed soil survey for LaPaz and Mohave counties	Med		
		Complete plans	Travel management Plan Inventory to close and rehab trouble routes	High		
			Develop terrestrial SRMA and ACEC management plans	High		
		Manage resources & facilities	Maintain wildlife waters in coordination with AZGFD	Low		
			Develop all weather road surface on Partners Point Road	High		Med
			Develop, apply, and enforce health of land standards for recreation sites and concessions.	High		High
	Manage uses	Arizona native plant laws	High	Required		
		Develop and apply Best Management Practices to all easements and right of ways	Med			
	Provide direct services	-wildlife				
		-soil stability				
	Monitor effectiveness	Monitor OHV open areas for soil and veg stability	High			
		Monitor upland water supplies and secure rights/permits under proper authority	High	High		
		Monitor authorized ground disturbing activities for achievement of resource objectives	High			
		Crossman Peak ACEC - monitor the special plant community	Med			
		Monitor threatened Mohave DT populations	High	Required		
		Partnership/Community Relations	Participate in Natural Resource Conservation Districts.	Low		
		Sponsor or participate in interagency watershed advisory group to advise communities with development issues along the Colorado River corridor.	High			
	Restore & Maintain Riparian/Wetland Conditions	Collect & analyze information	Inventory wetland and riparian habitat	High		
			Create PFC	High		
			Inventory and monitor all natural seeps and springs within FO	High		
			Inventory and map special status plant assemblages	Med		
			Analyze wake affects along the shoreline	Med		
			Restore Needles, CRNC and Beal Slough Reveg Site	Med		
			Acquire and update MSCP riparian database as ongoing tool of riparian/wetland community evolution	High		
		Complete plans	Update riparian function determination on all LHFO resources	High		
		Manage resources & facilities	Maintenance of revegetation sites - Monkeyhead	High		
			Fuels reduction projects at reveg sites	High		
		Heron Island	Med			
		Develop DPC for concessions and aquatic oriented BLM Recreation sites	High			
		Plant and nurture shade trees in conjunction with boat in camp sites,	Med			
	Manage uses	Complete and implement interdisciplinary Lake Havasu SRMA	High			
	Provide direct services					

Lake Havasu Field Office Resource Management Plan *Priorities*

		Monitor effectiveness	Set-up and conduct survey and monitoring plots within reveg sites - Monkeyhead	High	required
		Partnership/Community Relations	Monitor wildlife movement and usage within washes	High	
			Monitor SWIFL according to BO for Alamo HMA	High	
			Monitor all riparian wetland treatments for resource objective achievement	High	
			Reveg sites with ACOE mitigation funds	Med	
			maintain coop in BWR steering group	High	
			Maintain LH Fisheries Partnership to assure health of aquatic biota	High	
			FWS for Volunteer & Havasu Springs @ Heron Island	Med	
			Coordinate with MSCP riparian interests	High	
Water Quality		Collect & analyze information	Perform bathymetry study of Lake Havasu bottom to include assessment of bio-mobile contaminants.	High	Required
		Complete plans	Refine understanding and extent of metals contamination in BWR	High	
			In coop with ADEQ, develop projects to reduce mercury concentrations from BWR.	High	
		Manage resources & facilities	Develop interagency water quality monitoring program for Colorado River	High	
			Maintain and monitor Lake Havasu fish habitat improvements.	High	
			Cooperate with COE, USCG, AzSLD, LHC, AzSP and others in determining water quality impacts to Colorado River from expanding water born recreation access development	Med	
		Manage uses	Assess and determine long term fish habitat improvement affects to water quality	Med	
Provide direct services	Develop coordinated creel survey for LH anglers	High			
Monitor effectiveness	Monitor clean water compliance on BLM authorized facilities in coop with State Agencies	High			
Partnership/Community Relations	Develop coordinated, interagency LH water quality monitoring	High			
Air Quality		Collect & analyze information	Monitor air quality impacts from special recreation permits on water and land	High	
		Complete plans			
		Manage resources & facilities	Monitor air quality associated with high use BLM facilities on land and water	High	
		Manage uses	Develop, install, and maintain a climate and atmospheric deposition monitoring station in a secure location in LHFO	High	
		Provide direct services			
Monitor effectiveness					
Partnership/Community Relations					
Visual Resources		Collect & analyze information	Maintain VRM inventory.	Med	
		Complete plans			
		Manage resources & facilities			
		Manage uses	Public Land Clean ups	Med	
		Provide direct services	Public Land Clean ups - Urban Areas	High	
		Monitor effectiveness	Monitor through project level analysis	Med	
Partnership/Community Relations	City of Lake Havasu, Keep Havasu Beautiful, Mohave County and others -education	High			
Wilderness Characteristics		Collect & analyze information			
		Complete plans			
		Manage resources & facilities			
		Manage uses	TMPs	High	
			route signage	High	
			appropriate level of route maintenance	High	
			Maintain existing facilities - kiosks	High	
	restore routes where appropriate and necessary	High			
	Acquire inholdings from willing sellers	Med			
	Vegetative treatments	Med			
Provide direct services	Allow grazing	High			

Lake Havasu Field Office Resource Management Plan Priorities

		Monitor effectiveness	Monitor route trespass Monitor existing leases	High High	
		Partnership/Community Relations			
Achieve Desired Biological Communities	Special Status Species	Collect & analyze information	Marsh Bird Survey Protocols-FWS Analyse fish habitat health and conditions in relation to recreational use Monitor special status fish -MOU	high high high	required
			SWIFL Monitoring for habitat quality and fuels reduction projects, Three Rivers ACEC	high	required
			MSCP species monitoring	high	required
			Identify and protect key habitats of T&E fish in Lake Havasu	high	required
			Monitor habitat suitability for T&E species associated with Colorado River and BWR.	high	required
		Complete plans	Participate in recovery for BTC and RZBK BAEA recovery efforts	high high	required required
			Complete design, and management plan for native species backwater projects on BLM.	Med	
		Manage resources & facilities	Assist in the management of the fish refugia including CRNC - MOU	high	
		Manage uses			
		Provide direct services			
	Monitor effectiveness	Monitor effectiveness of T&E reintroductions (fish) - BO Monitor current BTC critical habitat Fully engage LHFIP Partners to monitor survival success and species habitat preference of T&E fish stocking in LH	High High High	Required Required	
	Partnership/Community Relations		Public outreach and education for anglers for awareness of T&E	High	
			Assign full time BLM liason for CRD in MSCP Steering Committee	High	
			Stimulate angler participation and conservation	Low	
Wildlife	Collect & analyze information	Analyze usage of BUOW, Sonoran DT, Kit fox in Bullhead Bajada ACEC Fringe-toed lizard and pholisma survey and monitoring - Cacturs Plains and scattered sand dune areas Analyze affects to wildlife from OHV usage Collect baseline information of aquatic ecosystem response to recreational use Survey and map raptor nesting locations including BAEA and PEFA Analyze affects to shoreline usage Monitor fish populations -MOU Monitor and survey for breeding birds Monitor bat populations and movement	High High High High medium High High medium medium	required	
	Complete plans				
	Manage resources & facilities	Maintain public fishing access developments Maintenance of Partners Point Fisheries Facility	High High		
		Maintain artificial fish habitat - MOU Maintain wildlife waters in coordination with AZGFD Maintain gates and fences that protect wildlife resources	High Medium High	Required	
	Manage uses	Work with AZGFD, CDFG and other agencies in monitoring wildlife populations on BLM lands	High		
	Provide direct services	Constuct public fishing access MOU	High	Required	
	Monitor effectiveness	Monitor bat populations - Whipple Wash ACEC Monitor current artificial aquatic habitat Monitor wildlife water usage and condition of development Monitor movement and populations across wildlife corridors	High High High High		
	Partnership/Community Relations				

Lake Havasu Field Office Resource Management Plan Priorities

	Invasive Species Conditions	<p>Collect & analyze information</p> <p>Complete plans</p> <p>Manage resources & facilities</p> <p>Manage uses</p> <p>Provide direct services</p> <p>Monitor effectiveness</p> <p>Partnership/Community Relations</p>	<p>Determine and map the extent of noxious weed infestation within the field office</p> <p>Determine and map the extent of invasive weed infestation within the field office</p> <p>Identify weed prevention & eradication efforts</p> <p>Ensure the use of sheep free forage</p> <p>Encourage the use of native vegetation plantings</p> <p>Cooperate with all interests to educate and control noxious terrestrial and aquatic weeds</p> <p>Public outreach to educate on avoidance measures</p>	<p>High</p> <p>High</p> <p>High</p> <p>High</p> <p>High</p> <p>High</p> <p>High</p>	
	Unique Geological Features (Resoivor bottoms)	<p>Collect & analyze information</p> <p>Complete plans</p> <p>Manage resources & facilities</p> <p>Manage uses</p> <p>Provide direct services</p> <p>Monitor effectiveness</p> <p>Partnership/Community Relations</p>	<p>Define Lake Havasu bathymetry and high sediment contributors</p> <p>Identify areas of high salts, selenium, and metals within Colorado River and tributaries</p>	<p>High</p> <p>Med</p>	

Workload: Achieving Desired Heritage Resource Conditions

Strategic Outcome	Plan Outcome	Strategies to Accomplish Outcomes	Projects to Implement Strategies	Priority	Magnitude
				Within	
	Area Wide Landscape	Collect & analyze information	Identification of TCPs and other sensitive areas working with local tribes.	High	low
			Section 110 Surveys.	Required	
			Identify Traditional Names working with tribes	Medium	
			Identify gathering areas (plant, minerals, and other materials) with tribes	Medium	
			Oral History	Low	
			Evaluate sites identified for the NHRP	Medium	
		Complete plans	Inventory Paleo Resources	Medium	
			Develop site specific plans to manage Bullhead Bajada SCRMA in consultation with tribes.	Low (ACEC)	
			Develop site specific plans to manage Topcock-Needles SCRMA in consultation with tribes.	Low (ACEC)	
			Develop site specific plans to manage Black Peak SCRMA in consultation with tribes.	Medium	
			Develop site specific plans to manage Harcuvar Mountain East SCRMA in consultation with tribes.	Medium	
			Develop site specific plans to manage Hacuvar Mountain West SCRMA.	Medium	
Manage resources & facilities	Develop site specific plans to manage Swansea SCRMA.	Low (ACEC)			
	Develop an Interpretive Plan for sites and areas working closely with tribes.	Medium			
	Restore/mitigate damaged sites in consultation with tribes.	High	medium		
	Stablize Swansea Townsite	High	low		
	Stablize and restore historic, prehistoric properties, and paleo resources.	High	low		
	Nominate NRHP sites (consult and coordinate with tribes)	Medium	low		
Manage uses	Work with tribes to manage appropriate uses for sites identified for tradiional uses. Road closures, signage in sensitive areas e.g.	High	medium		
	Control access to cultural sites.	High	high		

Lake Havasu Field Office Resource Management Plan Priorities

Manage & Protect Cultural/Paleontological Resources		<p>Provide direct services</p> <p>Monitor effectiveness</p> <p>Partnership/Community Relations</p>	<p>Manage scientific research for cultural and paleo values.</p> <p>Issue field work authorizations</p> <p>Process ARPA permits</p> <p>Process ARPA violations</p> <p>Recruit and train volunteers and site stewards on site specific projects.</p> <p>Outreach to public with educational programs, brochures, and website.</p> <p>Monitor sensitive cultural and paleo resources.</p> <p>Consultation/coordination/outreach with tribes.</p> <p>Scope interest for Friends Groups</p> <p>Maintain Friends of Swansea</p> <p>Develop educational and interpretive materials with tribes.</p> <p>Develop Heritage Tourism Program</p> <p>Utilize AZ site steward program and cultural volunteer program to increase capacity.</p>	<p>Low</p> <p>Medium</p> <p>Medium</p> <p>High</p> <p>Medium</p> <p>Medium</p> <p>High</p> <p>High</p> <p>Low</p> <p>Medium</p> <p>Medium</p> <p>Medium</p> <p>Medium</p>	<p>low</p> <p>low</p> <p>medium</p>
	Area Specific (ACECs)	<p>Collect & analyze information</p> <p>Complete plans</p> <p>Manage resources & facilities</p> <p>Manage uses</p> <p>Provide direct services</p> <p>Monitor effectiveness</p> <p>Partnership/Community Relations</p>	<p>Conduct I10 survey</p> <p>Identify Traditional Names working with tribes</p> <p>Identify gathering areas (plant, minerals, and other materials) with tribes</p> <p>Oral History</p> <p>Identify historic and prehistoric trail systems in consultation with tribes</p> <p>Identify sacred sites/traditional use areas</p> <p>Evaluate sites identified for the NHRP</p> <p>Develop site specific plans to manage Bullhead Bajada Natural and Cultural ACEC in consultation with tribes.</p> <p>Develop site specific plans to manage Beale Slough Riparian and Cultural ACEC in consultation with tribes.</p> <p>Develop site specific plans to manage Crossman Peak Scenic ACEC in consultation with tribes.</p> <p>Develop site specific plans to manage Swansea Historic District ACEC.</p> <p>Develop site specific plans to manage Three Rivers Riparian ACEC.</p> <p>Recruit and train volunteers and site stewards on site specific projects.</p> <p>Outreach to public with educational programs, brochures, and website.</p> <p>Scope interest for Friends Groups</p> <p>Maintain Friends of Swansea</p> <p>Develop educational and interpretive materials with tribes.</p> <p>Develop Heritage Tourism Program</p> <p>Utilize AZ site steward program and cultural volunteer program to increase capacity.</p>	<p>Required</p> <p>Medium</p> <p>Medium</p> <p>Low</p> <p>Medium</p> <p>High</p> <p>Medium</p> <p>High 1</p> <p>High 2</p> <p>High 3</p> <p>Medium</p> <p>low</p> <p>High</p> <p>Medium</p> <p>High</p> <p>Low</p> <p>Medium</p> <p>Medium</p> <p>Medium</p> <p>Medium</p>	<p>low</p> <p>high</p> <p>high</p> <p>medium</p> <p>low</p> <p>medium</p>
	Wild & Scenic Rivers	<p>Collect & analyze information</p> <p>Complete plans</p> <p>Manage resources & facilities</p> <p>Manage uses</p>	<p>Evaluate Site for eligible listing in NRHP</p> <p>Inventory natural resources</p> <p>Upon designation, plan required(3 yrs)</p> <p>Install upto 5 miles of fences to improve riparian areas</p> <p>Removal of saltcedar on as much as 500 acres Cottonwood and willow poles would be planted on as much as 100 acre</p> <p>Complete Route Designation (TMP)</p> <p>Rehabilitate closed routes</p> <p>Withdrawal from mineral entry on 486 acres of the Three Rivers Riparian ACEC1 in Segment 2 Riparian Zone</p> <p>Acquire 524 acres of private land and 703 acres of state land.</p> <p>Remove Livestock when utilization exceed limits set in RMP& Wild Scenic River EIS</p>		

Lake Havasu Field Office Resource Management Plan Priorities

Manage & Protect Heritage Resources		<p>Provide direct services</p> <p>Monitor effectiveness</p> <p>Partnership/Community Relations</p>	<p>Develop up to five upland waters sources for use by livestock to improve riparian area</p> <p>Seasonal Close areas with 1/2 mile of falcon nest during breeding season March 1 to June 15 on 486 acres</p> <p>Outstanding remarkable values and river conditions</p> <p>Wild burro population and remove excess numbers.</p> <p>Monitor Water Levels/Flow conditions annually. Bill Williams Committee (USGS, USFWS, CORPS, AZGFD, other)</p>		
	National Scenic & Historic Trails	<p>Collect & analyze information</p> <p>Complete plans</p> <p>Manage resources & facilities</p> <p>Manage uses</p> <p>Provide direct services</p> <p>Monitor effectiveness</p> <p>Partnership/Community Relations</p>	<p>Nomination Package for Plomosa</p> <p>Nomination Package for Parker Swansea Bouse</p> <p>Update and Replace Interpretive Kiosk for Parker Dam</p> <p>Maintain Parking /Access for Parker Dam</p> <p>Establish Kiosk Locations for Plomosa</p> <p>Establish Kiosk Locations for Parker Swansea Bouse</p> <p>Publish Brochures for Parker Dam</p> <p>Create Interp/education material for Plomosa</p> <p>Create Interp/education material for Parker Swansea Bouse</p> <p>Traffic Counters/Informal Surveys for Parker Dam</p> <p>Traffic Counters/Informal Surveys for Plomosa</p> <p>Traffic Counters/Informal Surveys for Parker Swansea Bouse</p> <p>Parker Strip Concessions Ass. City of Parker, BOR for Parker Dam</p> <p>Bouse, YFO, AZG&F, LaPaz County for Plomosa</p> <p>Bouse, Parker, LaPaz County, Friends of Swansea for Parker Swansea Bouse</p>		
	Wildness and Wilderness Study Areas (WSAs)	<p>Collect & analyze information</p> <p>Complete plans</p> <p>Manage resources & facilities</p> <p>Manage uses</p> <p>Provide direct services</p> <p>Monitor effectiveness</p> <p>Partnership/Community Relations</p>	<p>Inventory natural and cultural resources</p> <p>Harcuvar Wilderness</p> <p>Rawhide/Swansea</p> <p>Work with NFO for Whipple, Chem. Dead mtns.</p> <p>Maintain Trailhead/vehicle Barriers/parking</p> <p>Mainain Boundaries (signing) every .25 mile on Roads</p> <p>Maintain Wildlife catchments</p> <p>Aquire Private Lands in Wilderness Areas</p> <p>Establish Trails (for safety and resource protection) maintenance and primitive campsites</p> <p>Wilderness Education materials/maps</p> <p>Anually Monitor each Wilderness for Condition</p> <p>AZ Wilderness Col., Sierra Club, Wilderness Soc.</p>		
	Wild Horse & Burros	<p>Collect & analyze information</p> <p>Complete plans</p> <p>Manage resources & facilities</p> <p>Manage uses</p> <p>Provide direct services</p> <p>Monitor effectiveness</p>	<p>Soil survey (KRMP)</p> <p>Ecological site inventory (KRMP)</p> <p>Reassess ephemeral perennial classifications</p> <p>BLM inventory /utilization & trend data</p> <p>Insure sufficient waters for wild horses (KRMP)</p> <p>Rangeland trend & utilization studies (KRMP)</p> <p>Allotment management plans (KRMP)</p> <p>Adjust stocking rate based on monitoring</p> <p>Provide forage on sustained yield basis.</p> <p>Maintain color diverse population (LGNMFP)</p> <p>Emergency/nuisance removals</p> <p>Adjust stocking rate based on monitoring</p> <p>Provide forage on sustained yield basis.</p> <p>Maintain color diverse population (LGNMFP)</p> <p>Achieve proper use of forage resources</p>	<p>Medium</p> <p>Medium</p> <p>Medium</p> <p>Medium</p> <p>Medium</p> <p>Medium</p> <p>Medium</p> <p>Medium</p> <p>Medium</p> <p>High (safety)</p> <p>Medium</p> <p>Medium</p> <p>Medium</p> <p>Medium</p>	<p>low</p>

Lake Havasu Field Office Resource Management Plan Priorities

			Monitor habitat	Medium	
			Evaluate data to assess current AML number	Medium	
		Partnership/Community Relations	Allocate forage based on analysis/public input	Medium	
			Coordinate w/AZGFD	Medium	

Workload: Addressing Anticipated Energy & Mineral Demands

Strategic Outcome	Plan Outcome	Strategies to Accomplish Outcomes	Projects to Implement Strategies	Priority	Magnitude
				Within	
Addressing Anticipated Demands for Energy	Oil & Gas	Collect & analyze information			
		Complete plans			
	Manage resources & facilities	Process Applications (Low Probability)	High	low	
	Manage uses	I & E & PV	High	low	
		Provide direct services			
		Monitor effectiveness			
		Partnership/Community Relations			
	Coal	Collect & analyze information			
		Complete plans			
		Manage resources & facilities			
		Manage uses			
		Provide direct services			
		Monitor effectiveness			
		Partnership/Community Relations			
	Renewables	Collect & analyze information			
		Complete plans			
		Manage resources & facilities	Process Applications (Low Probability)	high	low
		Manage uses			
		Provide direct services	Compliance Inspections	high	low
		Monitor effectiveness			
		Partnership/Community Relations			
	Right of Ways (ROWS)	Collect & analyze information			
		Complete plans			
		Manage resources & facilities	Process and issue ROWs	high	medium
		Manage uses			
		Provide direct services			
		Monitor effectiveness	Conduct compliance inspections	high	low
		Partnership/Community Relations			
Addressing Anticipated Demands for Minerals	Saleable	Collect & analyze information	Locate and Plan community pit(s)	low	high
		Complete plans			
		Manage resources & facilities	Issue Permits/contracts	High	medium
		Manage uses	Resolve Mineral Trespass	high	medium
		Provide direct services			
		Monitor effectiveness	I & E & PV	High	low
		Partnership/Community Relations			
	Locatable	Collect & analyze information	Jones Red Hills Validity Exam	Medium	High
		Complete plans	Chastain Site Validity Exam	High	High
		Manage resources & facilities	Process Mineral Withdrawal for Bullhead Bajada ACEC		
			Process Mineral Withdrawal for Swansea ACEC		
			Process Mineral Withdrawal for Three Rivers ACEC		
			Process Mineral Withdrawal for Incline Railway		
		Manage uses	Process mining notices, plans of operation, occupancy requests	High	medium
		Provide direct services	Resolve Occupancy Trespass	High	Low
		Monitor effectiveness			
		Partnership/Community Relations	I & E	High	low
	Leasables (not O & G)	Collect & analyze information			
		Complete plans			
		Manage resources & facilities			
		Manage uses	Process Applications (Low Probability)	Low	Mini

Lake Havasu Field Office Resource Management Plan Priorities

		Provide direct services Monitor effectiveness Partnership/Community Relations	I & E & PV	Low	Mini
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Workload: Addressing Anticipated Forest & Forage Demands

Strategic Outcome	Plan Outcome	Strategies to Accomplish Outcomes	Projects to Implement Strategies	Priority	Magnitude
				Within	
Addressing Anticipated Demands for Forage	Enhance Management of Livestock	Collect & analyze information Complete plans Manage resources & facilities Manage uses Provide direct services Monitor effectiveness Partnership/Community Relations	Soil survey (KRMP) Ecological site inventory (KRMP) Reassess ephemeral perennial classifications BLM inventory /utilization & trend data Rangeland trend & utilization studies (KRMP) Allotment management plans (KRMP) Adjust stocking rate based on monitoring Provide forage on sustained yield basis. Maintain color diverse population (LGNMFP) Emergency/nuisance removals Achieve proper use of forage resources Monitor habitat Evaluate data to assess current AML number Allocate forage based on analysis/public input Coordinate w/AZGFD	Medium Medium Medium Medium Medium Medium High (safety) Medium Medium Medium Medium	
	Restore & Conserve Rangelands	Collect & analyze information Complete plans Manage resources & facilities Manage uses Provide direct services Monitor effectiveness Partnership/Community Relations	Soil survey (KRMP) Ecological site inventory (KRMP) Assess grazing capacity BLM inventory /utilization & trend data Evaluate compliance w/AZ Land Health Standards Rangeland trend & utilization studies (KRMP) Allotment management plans (KRMP) Reassess ephemeral perennial classifications Adjust stocking rate based on monitoring Provide forage on sustained yield basis. Achieve proper use of forage resources Evaluate data to assess current AML number Allocate forage based on analysis/public input Coordinate w/AZGFD	Medium Medium Medium Medium High(LHFO/RMP) Medium Medium Medium Medium Medium Medium Medium Medium	
Addressing Anticipated Demands for Forest Products	Commercial sales	Collect & analyze information Complete plans Manage resources & facilities Manage uses Provide direct services Monitor effectiveness Partnership/Community Relations			
	Vegetative sales	Collect & analyze information Complete plans Manage resources & facilities Manage uses Provide direct services Monitor effectiveness Partnership/Community Relations			

Lake Havasu Field Office Resource Management Plan Priorities

Workload: Addressing Anticipated Recreation Demands

Strategic Outcome	Plan Outcome	Strategies to Accomplish Outcomes	Projects to Implement Strategies	Priority	Magnitude
				Within	
	Colorado River Nature Center (SRMA)	Collect & analyze information	Collect RMIS Use Data -Traffic Counter Data CMA/Recreation Area Management Plan	High	High
	Complete plans	-Nature trails (BHC Heritage Trail System) -Interp Plan	High		
Manage resources & facilities	Maintain existing facilities - post & cable, restroom, signage	Med			
Manage uses	Continue Reveg efforts LE Enforcement of OHV Restrictions Supplemental Rules	Low High High			
Provide direct services	Continue Interpretive Signage & Kiosk Information	Med			
Monitor effectiveness	Maintain ROS/VRM/WROS Settings based on management goals for desired conditions	High			
Partnership/Community Relations	AGFD & BHC Partnership Interpretation/wetlands Develop curriculum for local schools	High High Low	High		
	Lake Havasu (SRMA)	Collect & analyze information	Conduct Customer Surveys (5 yr rotation) -boating survey -visitor demand/preferences Shoreline Erosion Survey -water fluctuation -recreational impacts Soil Compaction Study Recreation Area Management Plan	High High High Med	Required
	Complete plans	-Shoreline trails -Desired Plant Communities/Health of Land Standards	High		
	Manage resources & facilities	Continue managing 87 shoreline fee sites, 6 public fishing sites, boat ramp, & 2 concession sites, 3 administrative work sites Continue maintaining 87 shoreline fee sites, 6 public fishing sites, boat ramp, & 3 administrative work sites Construct Shoreline Amenities Construct Partners Point Road & Seawall	High High High High		
	Manage uses	Develop & maintain additional public fishing site at Black Rock Cove Issue SRP's -vending -activities impact lake bottom and shoreline Visitor contacts & Compliance -regulations -fees -water-borne contact station Supplemental Rules	High High High High High High High		
	Rehab recreation use damage, maintain and place new visitor controls (signs, barriers) as needed to manage recreation, based on monitoring	High			
	Provide direct services	Increase Interpretive Signage & Kiosk Inform	High		

Lake Havasu Field Office Resource Management Plan Priorities

Provide Experience Appropriate for Zone	LHFO ERMA	Collect & analyze information	Volunteer Site Host Program	High		
		Complete plans				
		Manage resources & facilities				
		Manage uses	Issue SRP's -vending -guided trail Encourage Tread Lightly/Leave No Trace Uses LE Enforcement -OHV -Recreational Shooting -Dispersed Camping	Med High High		
		Provide direct services	Maintain signage/informational kiosks	Low		
	Monitor effectiveness	Monitor visitor use for intensity and resource impacts Maintain ROS/VRM Settings based on management goals for desired conditions	Low Med			
	Partnership/Community Relations					
	Havasu Urban (SRMA)	Collect & analyze information	Collect RMIS Use Data -Traffic Counter Data Develop Recreation Area Management Plan	High		
		Complete plans	-Urban Interface trails -motorized/non-motorized trails -infrastructure for open OHV area (post cable, signing, route designation)	High		
		Manage resources & facilities				
Manage uses		Supplemental Rules Visitor contacts & Compliance -regulations	High High			
Provide direct services		Issue SRP's -vending Increase Interpretive Signage & Kiosk Information Increase visitor contact by permanent employees for continuity -park rangers -LE	High High High High			
Monitor effectiveness		Maintain ROS/VRM Settings based on management goals for desired conditions Monitor visitor use for intensity and resource impacts	High High			
Partnership/Community Relations	Coordinate with City of Lake Havasu and Mohave County Volunteer Site Host Program	High Med				
Gibraltar (SRMA)	Collect & analyze information	Collect RMIS Use Data -Traffic Counter Data	High			
	Complete plans	Update Gibraltar Mountain IDP Plan (2001) Complete RAMP Shea Road/Osborne Wash Open OHV Area	Med High			
	Manage resources & facilities					
	Manage uses	Supplemental Rules Visitor contacts & Compliance -regulations	High Med			
	Provide direct services	Develop standard amenity fee sites Issue SRP's -vending -commercial/competitive events & activities Increase Interpretive Signage & Kiosk Inform	Med Med Med Med			

Lake Havasu Field Office Resource Management Plan Priorities

		<p>Monitor effectiveness</p> <p>Partnership/Community Relations</p>	<p>Increase visitor contact by permanent employees for continuity -park rangers -LE</p> <p>Maintain ROS/VRM Settings based on management goals for desired conditions</p> <p>Monitor visitor use for intensity and resource impacts</p> <p>Coordinate with La Paz County & AZGFD</p> <p>Volunteer Program - Open OHV Areas</p>	<p>Med</p> <p>High</p> <p>High</p> <p>High</p> <p>Low</p>	
	Swansea (SRMA)	<p>Collect & analyze information</p> <p>Complete plans</p> <p>Manage resources & facilities</p> <p>Manage uses</p> <p>Provide direct services</p> <p>Monitor effectiveness</p> <p>Partnership/Community Relations</p>	<p>Collect RMIS Use Data -Traffic Counter Data</p> <p>Complete RAMP</p> <p>Develop Fee Campsites</p> <p>Maintain day use/overnight camping facilities</p> <p>Supplemental Rules</p> <p>Visitor contacts & Compliance -regulations -fees</p> <p>Issue SRP's -interpretive touring</p> <p>Increase Interpretive Signage & Kiosk Inform</p> <p>Increase visitor contact by permanent employees for continuity -park rangers -LE</p> <p>Maintain ROS/VRM Settings based on management goals for desired conditions</p> <p>Monitor visitor use for intensity and resource impacts</p> <p>Coordinate with La Paz County & Site Steward (SHPO) Program</p> <p>Volunteer Program</p> <p>Develop curriculum for local schools</p>	<p>High</p> <p>High</p> <p>Med</p> <p>High</p> <p>High</p> <p>Med</p> <p>Low</p> <p>High</p> <p>High</p> <p>High</p> <p>High</p> <p>High</p> <p>Med</p> <p>Low</p>	
	Plamosa (SRMA)	<p>Collect & analyze information</p> <p>Complete plans</p> <p>Manage resources & facilities</p> <p>Manage uses</p> <p>Provide direct services</p> <p>Monitor effectiveness</p>	<p>Collect RMIS Use Data -Traffic Counter Data</p> <p>Update La Posa IDP Plan (1997)</p> <p>Develop RAMP - Bouse/Brenda Area -Dispersed Camping (Bouse Plain)</p> <p>Develop Backcounty By-way Plan</p> <p>Designate Routes</p> <p>Supplemental Rules</p> <p>Visitor contacts & Compliance -regulations</p> <p>Issue SRP's -commercial/competitive events & activities</p> <p>Increase Interpretive Signage & Kiosk Information -increased use -BCB</p> <p>Increase visitor contact by permanent employees for continuity -park rangers -LE</p> <p>Maintain ROS/VRM Settings based on management goals for desired conditions</p> <p>Monitor visitor use for intensity and resource impacts</p>	<p>Med</p> <p>Med</p> <p>Low</p> <p>Low</p> <p>High</p> <p>High</p> <p>Med</p> <p>High</p> <p>Med</p> <p>Med</p> <p>High</p> <p>High</p>	

Lake Havasu Field Office Resource Management Plan Priorities

		Partnership/Community Relations	Coordinate with La Paz County & AZGFD Coordinate with La Paz County, local communities & AZGFD for BCB	High Low	
Enhance Understanding and Awareness	On-site	Collect & analyze information Complete plans Manage resources & facilities Manage uses Provide direct services Monitor effectiveness Partnership/Community Relations			
	Off-site	Collect & analyze information Complete plans Manage resources & facilities Manage uses Provide direct services Monitor effectiveness Partnership/Community Relations			

Workload: Addressing Anticipated Direct Community Services

Strategic Outcome	Plan Outcome	Strategies to Accomplish Outcomes	Projects to Implement Strategies	Priority	Magnitude
				Within	
Travel Management	Manage Travel	Collect & analyze information	See Complete Plans		
		Complete plans	See Complete Plans		
		TMP by Travel Management Unit	high	high	
		Bullhead	high	high	
		Scope Criteria Issues	high	high	
		GIS Additional Criteria Data	high	high	
		Evaluate Routes	high	high	
		Publish Alternatives On WEB	high	high	
		Designate Routes	high	high	
		Bouse	high	high	
		Scope Criteria Issues	high	high	
		GIS Additional Criteria Data	high	high	
		Evaluate Routes	high	high	
	Publish Alternatives On WEB	high	high		
	Designate Routes	high	high		
	Alamo	high	high		
	Scope Criteria Issues	high	high		
	GIS Additional Criteria Data	high	high		
	Evaluate Routes	high	high		
	Publish Alternatives On WEB	high	high		
	Designate Routes	high	high		
	Havaus	high	high		
	Scope Criteria Issues	high	high		
	GIS Additional Criteria Data	high	high		
	Evaluate Routes	high	high		
	Publish Alternatives On WEB	high	high		
	Designate Routes	high	high		
	Cactus Plain	high	high		
	Scope Criteria Issues	high	high		
	GIS Additional Criteria Data	high	high		
	Evaluate Routes	high	high		
	Publish Alternatives On WEB	high	high		
	Designate Routes	high	high		
	Wenden	high	high		
	Scope Criteria Issues	high	high		
	GIS Additional Criteria Data	high	high		
	Evaluate Routes	high	high		
	Publish Alternatives On WEB	high	high		
	Designate Routes	high	high		
	Manage resources & facilities	Install entry Point Kiosks	high	medium	
		Aquire Legal Access (Easements)	medium	medium	

Lake Havasu Field Office Resource Management Plan Priorities

		Manage uses Provide direct services Monitor effectiveness Partnership/Community Relations	Establish Trailheads and Parking Access Sign Designated Routes Rehabilitate Closed and or trespass Routes route enhancement/maintenance Publish Access Maps Monitoring Teams/ law enforcement /resources Work with Cooperating Agencies Establish Grants from AZState Parks & CA Green Sticker Set up volunteer teams to help Sign and rehabilitate	low high high medium high medium medium high medium	high high low medium
	Manage Facilities	Collect & analyze information Complete plans Manage resources & facilities Manage uses Provide direct services Monitor effectiveness Partnership/Community Relations			
Enhance Land Use	Adjust Land Tenure	Collect & analyze information Complete plans Manage resources & facilities Manage uses Provide direct services Monitor effectiveness Partnership/Community Relations	Complete Plan Amendment -Laz Paz Co. Wastewater Treatment Plant Process R&PP Patents Bouse Community Park Process R&PP Patents LHC Landfill Process R&PP Patents MCC to LHC Process R&PP Patents Laz Paz Co. Wastewater Treatment Plant	high 1 medium 4 high 3 high 2 High 1	high low high high high
	Authorize Use	Collect & analyze information Complete plans Manage resources & facilities Manage uses Provide direct services Monitor effectiveness Partnership/Community Relations	Process Direct Sale Sec 12 BHC Renew 5 R&PP Leases La Paz Co. Transfer Stations Process R&PP Leases SARA Park Transfer Process R&PP Leases LHC Park (Armory Site) Process R&PP Leases Mohave Co.Kiwanis Process LUP Process and issue ROWs Conduct compliance inspections	high when arises high - annually high high high high high - ongoing high	medium low medium medium low medium medium low
	Resolve Unauthorized Use	Collect & analyze information Complete plans Manage resources & facilities Manage uses Provide direct services Monitor effectiveness Partnership/Community Relations	Crossman Peak Com Site	high	medium
	Provide for Public Safety and Security	Collect & analyze information Complete plans Manage resources & facilities Manage uses Provide direct services Monitor effectiveness Partnership/Community Relations			
		Collect & analyze information	Fuel Moisture Monitoring Fuel Loading Monitoring	low medium	

Lake Havasu Field Office Resource Management Plan Priorities

Protect Lives and Property	Manage Fire on the Wild & Urban Interface	Complete plans	Fire History (occurrence, severity, size, duration, etc.)	low
			Evaluate Fire Hazards in Colorado and Bill Williams Rivers	high
			Lake Havasu/Yuma Fire Management Plan (FY09)	high
		Manage resources & facilities	Lake Havasu/Yuma Fire Management Plan (FY12)	high
			Yearly projects are identified in NFPORS	high
		Manage uses	La Paz County CWPP (Community Wildland Prevention Plan) East	medium
			La Paz County CWPP (Community Wildland Prevention Plan) West	medium
		Provide direct services	Implement Fire Restrictions (as needed)	medium to high
			Monitor effectiveness	low
		Partnership/Community Relations	Monitor outcomes of fuel treatments	low
			Monitor Compliance with Fire Restrictions	low
			Public Contact/outreach presentations	low
			Develop and provide outreach materials to the public	low

**Lake Havasu Field Office
RMP IMPLEMENTATION & BUDGET STRATEGY**

LHFO PRIORITIES BY FY	On-Going	FY 07	FY08	FY09	FY10	BEYOND FY10
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1. BULLHEAD CITY/MOHAVE VALLEY LANDSCAPE UNIT

TMP			X			
SECTION 10/MSCP/SRMA	X					
BEALE SLOUGH SCRMA (TOPOCK/NEEDLES)			X			
BULLHEAD BAJADA ACEC/SCRMA				X		
NEEDLES REVEG	X		X			
SECTION 12	X		X			
LAND DISPOSAL – BHC AREA				X		
LAND DISPOSAL – NEEDLES AREA						X

2. LAKE HAVASU/PARKER STRIP LANDSCAPE UNIT

TMP				X	X	
CROSSMAN PEAK ACEC/HAVASU URBAN SRMA				X	X	
PARKER STRIP SRMA						X
FEE SITE/CONCESSION MGMT.	X					
ROCK HOUSE VISITOR CENTER	X					
STANDARD WASH SRMA (FY07 BPS-\$19K)			X			
Cultural/Bio Clearances						
LAKE HAVASU SRMA/AUBREY HILLS/CONTACT POINT	X					
Coordinated Lake/River Management Plan						
FISHERIES PROGRAM	X					
MCSP	X					
WATER QUALITY MONITORING INITIATIVE	X					
FACILITY MAINTENANCE	X					
LAND DISPOSALS						
R&PP	X					
SALES (2)					X	

3. BILL WILLIAMS/SWANSEA LANDSCAPE UNIT

TMP						X
SWANSEA ACEC/SCRMA/SRMA	X					
Planning						X
3 RIVERS ACEC						X
WILDERNESS AREAS						X
BILL WILLIAMS COORDINATION	X					
LAND DISPOSALS						
R&PP- Alamo						X
HEALTH OF THE LAND SURVEYS						X

**Lake Havasu Field Office
RMP IMPLEMENTATION & BUDGET STRATEGY**

LHFO PRIORITIES BY FY	On-Going	FY 07	FY08	FY09	FY10	BEYOND FY10
4. LA PAZ COUNTY LANDSCAPE UNIT						
TMP						X (FY11/12)
BLACK PEAK SCRMA						X
GIBALTAR SRMA						X
OSBORNE WASH OHV AREA						
Cultural/Bio Clearances			X			
PLAMOSA SRMA						X
HARCUVAR WEST/ EAST SCRMA						X
WILDERNESS AREAS						
Harcuvar		X				
EAST CACTUS PLAINS – SAND DUNES	X					
LAND SALES						X
OTHER LAND DISPOSALS - LA PAZ COUNTY R&PP				X		
Waste Water Treatment Plant/La Paz County R&PP		X				

MONITORING

Rangeland Health (every 5 years) Prior to 2010							
Riparian allotments			X	X			
Non-allotment lands			X	X	X	X	
Abandoned Mine Lands Inventory	X						
Recreation Monitoring (every 5 years) Prior to 2010	X						
Biologic Opinion Compliance	X						

Monitoring included in priorities above

Species Specific Survey and Habitat Monitoring:							
Endangered Species Monitoring							
Air Quality and Climate							
Open Areas							
Wilderness Monitoring							
Coordinated Lake/River Management Plan							
Activity Level Plans							
Cultural Resource Monitoring							

Coordinate w/other entities

Carrying/Visitor Capacity Study							
Abandoned Mine Lands Inventory (ADEQ)							

Appendix O
Plan Maintenance Roster

Lake Havasu Field Office RMP
Approved 2007
Maintenance Roster

Plan decision requiring maintenance:

Plan code and page number:

Reason(s) for maintenance:

Revised plan decision:

Signatures and Date:

Initiator

Planning and Environmental Coordinator (Review)

Field Manager (Approval)

Appendix P
Plan Monitoring Roster

Lake Havasu Field Office RMP
Approved 2007
Monitoring Roster

Portion of Plan Monitored:

Date(s):

Results:

Is any modification needed to adjust the plan?

If so, please explain.

Signatures and Date:

Initiator

Planning and Environmental Coordinator (Review)

Field Manager (Approval)