



United States Department of the Interior



BUREAU OF LAND MANAGEMENT
Arizona Strip Field Office
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St. George, Utah 84790
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In Reply Refer To:
AZ-010: 1610

February 2008

Dear Reader:

We are pleased to announce that after five years of hard work and collaborative effort, the Vermilion Cliffs National Monument Resource Management Plan (Approved Plan) is complete. This document represents the first management plan for the Monument and will provide guidance for the management of 279,566 acres of Bureau of Land Management (BLM)-administered lands in northern Arizona. These lands are within the Arizona Strip District in Coconino County, Arizona.

The attached Record of Decision (ROD) and Approved Plan have been prepared in accordance with the Federal Land Policy Management Act and the National Environmental Policy Act. The ROD/Approved Plan was sent to members of the public who requested a copy and to pertinent local, State, Federal, and Tribal governments. The ROD finalizes the proposed decisions presented in the Arizona Strip Proposed Plan/Final Environmental Impact Statement (FEIS) that was released on March 2, 2007 and subject to a 30-day protest period that ended on April 2, 2007. Seven protest letters were received and reviewed by the BLM Assistant Director for Renewable Resources and Planning in Washington, D.C. After careful consideration of all points raised in the protest letters, the Assistant Director concluded that the planning team and responsible decision makers followed all applicable laws, regulations, policies, and pertinent resource considerations in developing the Proposed Plan in the FEIS. Minor adjustments or points of clarification incorporated into the Approved Plan in response to issues raised during the protest process and final BLM review are discussed in the ROD under the sections entitled Modifications and Clarifications. The protest review did not result in any significant changes to the Proposed Plan.

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

Route designations are described and mapped as part of the travel management decisions included in the ROD/Approved Plan. Route designations are implementation level decisions. Therefore, an appeal opportunity under the Department of Interior's appeal regulations at 43 CFR Part 4 is being provided at this time for the route designations proposed within the Approved Plan.

Copies of the ROD and Approved Plan can be obtained on the web at https://www.blm.gov/az/LUP/strip/strip_plan.htm. Additional printed or CD copies may

be obtained at the address above or requested by email at Arizona_Strip@blm.gov or by phone at (435) 688-3200.

We greatly appreciate all who contributed to the completion of this Approved Plan, including other Federal agencies, Tribal governments, and State and local governments. This includes the ten Cooperating Agencies that worked with us over the years (Mohave and Coconino counties in Arizona, Washington and Kane counties in Utah, the Kaibab Paiute Tribe, the towns of Fredonia and Colorado City, Arizona Department of Transportation, Arizona Game and Fish Department, and the Federal Highway Administration). We also appreciate the extensive public involvement during this time by groups, organizations, and individuals. Public input informed and improved the planning process and we hope you will continue to work with us as we implement the decisions in this Approved Plan. If you need information or have questions, please contact us at (435) 688-3200.

Sincerely,



Linda Price
Monument Manager



Lorraine M. Christian
Arizona Strip Field Manager

VERMILION CLIFFS NATIONAL MONUMENT

APPROVED PLAN

RECORD OF DECISION

2008

TABLE OF CONTENTS

VERMILION CLIFFS NATIONAL MONUMENT RECORD OF DECISION 1
INTRODUCTION 1
PROTEST REVIEW RESULTS 1
THE DECISION 2
OVERVIEW OF THE ALTERNATIVES 3
 Alternative A: No Action..... 3
 Alternative B..... 4
 Alternative C..... 4
 Alternative D..... 4
 Alternative E: Proposed Plan 4
 Environmentally Preferable Alternative 5
LAND USE PLAN DECISIONS, IMPLEMENTATION DECISIONS, AND
ADMINISTRATIVE ACTIONS 6
 Land Use Plan Decisions 7
 Desired Future Conditions 7
 Special Designations 7
 Land Use Allocations (Allowable Uses)..... 7
 Management Actions 8
 Implementation Decisions 8
 Appeal Procedures for Implementation Decisions 9
 Administrative Actions 10
MODIFICATIONS AND CLARIFICATIONS 11
 Modifications 11
 Route Designations 12
 Clarifications 12
MANAGEMENT CONSIDERATIONS FOR SELECTING THE APPROVED PLAN 13
 Mitigation Measures 13
 Plan Monitoring 14
 Implementation Monitoring 14
 Effectiveness Monitoring..... 14
IMPLEMENTATION OF THE MANAGEMENT PLAN..... 15
CONSISTENCY REVIEW 15
PUBLIC INVOLVEMENT 16
TO OBTAIN A COPY OF THE MANAGEMENT PLAN 17

VERMILION CLIFFS NATIONAL MONUMENT RECORD OF DECISION

INTRODUCTION

The Arizona Strip District of the Bureau of Land Management (BLM) prepared this Record of Decision (ROD) on the Proposed Management Plan and Final Environmental Impact Statement (Proposed Plan/FEIS) for Vermilion Cliffs National Monument, which was published in January 2007. While the Proposed Plan/FEIS also addressed management of Grand Canyon-Parashant National Monument (both BLM and NPS-administered lands) and non-Monument public lands administered by the Arizona Strip Field Office, this ROD applies only to those decisions for management of Vermilion Cliffs National Monument, which will be referred to as the "Monument" throughout this document, as presented in the attached Approved Resource Management Plan (Approved Plan).

On November 9, 2000, Presidential Proclamation 7374 created the Monument to ensure protection of a wide variety of biological objects and a long and rich human history, which have been preserved by remoteness and limited travel corridors. The Monument also encompasses geological treasures, contains spectacular scenic vistas of the Paria Plateau and Paria Canyon, and offers visitors opportunities to experience solitude.

The Monument is located in northern Coconino County, Arizona, and contains 279,566 acres of BLM-administered lands, 13,438 acres of Arizona State Trust lands, and 683 acres of private land. The decisions in the Approved Plan only apply to the 279,566 acres of BLM-administered lands within the Monument.

The Approved Plan was described as Alternative E in the Proposed Plan/FEIS. This ROD provides a summary of protests received and clarifications made in response to protests, a brief summary of the decisions made and other alternatives considered (including a description of the environmentally preferable alternative), management considerations and rationale for the decisions, and an overview of public involvement in the planning process.

PROTEST REVIEW RESULTS

The BLM received seven protest letters during the 30-day protest period provided for the proposed land use plan decisions in the Proposed Plan/FEIS in accordance with 43 Code of Federal Regulations (CFR) Part 1610.5-2. The seven protesting parties are listed below:

1. Kade B. Ballard
2. Jarolyn and Collin Stout
3. The National Trust for Historic Preservation

4. Carolyn B. Shelley
5. Dr. William I. Boarman
6. Peter Bungart, Circa Cultural Consulting
7. The Arizona Wilderness Coalition, Center for Biological Diversity, Grand Canyon Wildlands Council, Sierra Club-Grand Canyon Chapter, and Wilderness Society

Some protesting parties voiced their concern over the protection of resources in the Monument. Some concerns were very general (i.e., the protection of Monument objects), while other concerns were over specific resources and their protection, including areas with wilderness characteristics and cultural resources. Some protesting parties voiced their concern about the impacts of a particular resource use on specific resources, such as the impacts of backcountry airstrips on soundscapes/natural quiet or the impacts of livestock grazing on cultural and biological resources (i.e., riparian areas, forest areas, bighorn sheep). Other protesting parties were concerned about the impacts on resource uses and wanted to see the lands in the Monument managed without impairment of the area's productivity. Finally, a number of protesting parties voiced their concern over the data and/or the analysis techniques used in the FEIS, making the following observations or suggestions:

- There is the need to take a hard look at direct, indirect, and cumulative impacts for wilderness characteristics and cultural resources.
- Baseline measurements of natural quiet/soundscapes are necessary for the impact analysis.
- The information used to analyze the impacts of backcountry airstrips on natural resources is inadequate.
- Baseline information used to analyze the impacts on cultural resources is inadequate.
- The range of alternatives is inadequate to provide protection to Monument objects.
- Comments from experts on the Draft EIS were not adequately responded to in the FEIS.

The BLM Director addressed all protests without making significant changes to the Proposed Plan though minor adjustments, corrections, and clarifications, as identified in the Modifications and Clarifications section below.

THE DECISION

The decision of the BLM is to approve the attached document as the Approved Plan for management of public lands in the Monument that are administered by the Arizona Strip Field Office (see Approved Plan). The Approved Plan replaces relevant decisions in the Arizona Strip Resource Management Plan (RMP; BLM 1992).

The Approved Plan was prepared under the authorities of the Federal Land Policy and Management Act (FLPMA) of 1976 in accordance with BLM planning regulations (43 CFR Part 1600) and the National Environmental Policy Act (NEPA) of 1969. The Approved Plan is nearly

identical to the Proposed Plan (Alternative E) presented in the Proposed Plan/FEIS. Management decisions and guidance for public lands within the Monument are presented in the Approved Plan attached to this ROD. All decisions covered by the ROD are either land use planning decisions that were protestable under the land use planning regulations (43 CFR Part 1610), or implementation decisions that are now appealable under the regulations listed below.

The Approved Plan emphasizes protection and restoration of the natural and cultural resources while still providing for resource use and enjoyment. Where appropriate, it proposes a combination of management actions including allowing natural processes to continue, applying more hands-on treatment methods, and protecting the remote settings that currently exist in the Monument. All decisions in the Approved Plan meet the purpose and significance of the Monument and comply with Presidential Proclamation 7374. The key components of the Approved Plan (Alternative E) are as follows:

- The Approved Plan responds to public comments to protect resources while still allowing use, especially near the communities.
- The Approved Plan provides the best means to accommodate the widest range of public and agency concerns over resources and resource uses.

OVERVIEW OF THE ALTERNATIVES

Five alternatives, including a No Action Alternative, were analyzed in detail in the Arizona Strip Draft Plan/EIS (2005). The alternatives were developed to address major planning issues identified through public scoping and to provide management direction for resource programs. Each alternative is comprised of a set of decisions representing a distinct concept for land management using a variety of land use planning decision types including desired future conditions, special designations, land use allocations, and management actions. These land use plan decisions provide management direction at a broad scale and guide future actions to govern the protection and use of the resources on BLM-administered lands on the Monument.

ALTERNATIVE A: NO ACTION

Alternative A is the No Action Alternative required by NEPA that represented continued management provided by the Arizona Strip RMP (BLM 1992, as amended). Alternative A also included the directives of Proclamation 7374 and the interim management policy issued pursuant to the proclamation (BLM Instruction Memorandum 2002-008), which provided temporary direction for management of the Monument until the Approved Plan could be completed. As such, Alternative A served as a baseline for comparison with the other alternatives.

Under the Arizona Strip RMP (BLM 1992, as amended), public lands were partitioned into Guidance Areas to protect resources and provide guidance for managing them. Guidance Areas were differentiated by special resource concerns, sensitivities, or characteristics, as identified below:

- **Guidance Area A** -These lands contained a wide variety of resources and values that required continued multiple-use management. Most of these lands did not contain unusual characteristics and were not subject to unusual demands requiring special management attention.
- **Guidance Area B** - These lands were identified by the public and the BLM as having unique resource values and special management needs including important scenic values, exceptional natural features, and fragile physical features. Reclamation would be very difficult after disturbances, which may lead to permanent scars on the landscape. With few exceptions, Area B lands were more remote than those in Area A.

ALTERNATIVE B

Alternative B placed an emphasis on minimal human use/influence, and proposed the fewest miles of open roads and trails. It focused on natural processes and other unobtrusive methods for ecosystem restoration, resource management, and scientific research; more protection and enhancement of remoteness and dispersed recreation; unstructured recreation opportunities; and the least amount of motorized recreation opportunities.

ALTERNATIVE C

Alternative C represented an attempt to balance resource protection and human use/influence. It proposed a moderate amount of open roads and trails; a mix of natural processes and “hands-on” techniques for ecosystem restoration, resource management, and scientific research; and a mix of motorized, non-motorized, dispersed, and structured recreation opportunities.

ALTERNATIVE D

Alternative D placed an emphasis on maximum appropriate human use/influence and the widest array of visitor experiences and opportunities. It included the most miles of open roads and trails (with the exception of Alternative A), and focused on “hands-on” techniques for ecosystem restoration, resource management, and scientific research. As such, it offered fewer remote settings and the most motorized and structured recreation opportunities compared to the other alternatives.

ALTERNATIVE E: PROPOSED PLAN

The BLM revised Alternative E (the Preferred Alternative) in the Arizona Strip Draft Plan/EIS by incorporating comments received during the 90-day public comment period, thus creating the Proposed Plan in the Proposed Plan/FEIS. Through modifications and clarifications in response to the protests received, the Proposed Plan is now the Approved Plan, which is attached to this ROD. In the most comprehensive manner, the Approved Plan is designed to respond to each of

the issues and management concerns recognized during the planning process. The BLM determined that the decisions presented under Alternative E (the Proposed Plan) provide an optimal balance between authorized resource use and the protection and long-term sustainability of sensitive resources and/or Monument objects within the Monument.

Alternative E, now the Approved Plan with the clarifications and modifications as described below, emphasizes minimal human influence and use in the more remote sections of the Monument and more human use/influence in the areas adjacent to local communities or in areas presently receiving such use/influence. It attempts to balance human use/influence with resource protection. Where appropriate, it will use a combination of management actions including allowing natural processes to continue, applying more hands-on treatment methods, and protecting the remote settings that currently exist in the Monument.

Environmentally Preferable Alternative

Alternative E, the Approved Plan, is considered by the BLM to be the environmentally 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 environmentally preferable alternative as the alternative that will promote the national environmental policy as expressed in Section 101 of NEPA. The six broad policy goals for all Federal plans, programs, and policies are listed below:

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.
6. Enhance the quality of renewable resources and approach the maximum attainable recycling of depletable resources.

In comparison with the other alternatives analyzed, Alternative E best meets the above NEPA goals for the future management of the Monument. It provides a high level of protection of natural and cultural resources, while providing for a wide range of beneficial uses of the environment. The No Action Alternative, Alternative A, would have allowed visitor use to increase to undesirable levels, thereby causing potential adverse impacts on the visitor experience and resource conditions. Alternative A also did not identify additional lands to be

managed to maintain wilderness characteristics. For these reasons, the No Action Alternative is not preferable from an environmental perspective.

Alternative B represented the alternative with the most “hands off” management. It has the fewest miles of access and designated routes, most acres of lands managed to maintain wilderness characteristics, and the least aggressive forms of treatment for noxious and invasive species. Although this alternative is the most “natural” management alternative, it does not provide for proactive visitor or resource management. Consequently, Alternative B was not selected as the environmentally preferable alternative because it does not achieve a balance between visitor use/access and protection of resources, nor does it involve restoration of natural processes and conditions.

Alternative C represented a better balance of visitor use and resource conditions, but did not recognize the unique nature of the Monument in terms of its accessibility and opportunities to provide a range of appropriate recreational experiences to Monument visitors. This alternative does not attain the widest range of beneficial uses of the environment without degradation.

Alternative D represented the alternative with the most “hands-on” management, maximum human use/influence, the most recreation opportunities, and the fewest acres managed to maintain wilderness characteristics. This alternative proposed extensive proactive restoration of species, which meant fewer acres restored via natural means, which would lead to more significant alterations to the primitive landscape. Alternative D provided a high range of visitor access and recreation opportunities, but fewer opportunities for primitive and remote experiences. For these reasons, this alternative did not achieve the balance between resource protection and resource use that permitted enhancement of resource conditions and visitor experience.

Alternative E (the Proposed Plan and now the Approved Plan) takes the best components of each of the four alternatives described below to ensure protection of Monument resources and values while providing a wide range of beneficial uses. This alternative acknowledges that the more isolated areas of the Monument would be managed to preserve their remoteness and maintain wilderness characteristics. At the same time, it provides appropriate access to areas of high use and along major travel corridors to ensure that a range of appropriate outdoor recreation is available. Overall, Alternative E best meets the requirements of Section 101 of NEPA and was thus selected as the environmentally preferable alternative by the BLM.

LAND USE PLAN DECISIONS, IMPLEMENTATION DECISIONS, AND ADMINISTRATIVE ACTIONS

The Approved Plan provides overall direction for management of all resources on BLM-administered land in the Monument. Many land use plan decisions are implemented or become effective upon publication of the ROD for the Approved Plan and may include desired future conditions, land use allocations (allowable uses) or designations, and special designations.

Land use plan decisions represent the desired outcomes and the actions needed to achieve them. Such decisions were attained using the planning process found in 43 CFR 1600 and guide future land management actions and subsequent site-specific implementation decisions. When presented to the public as proposed decisions, land use plan decisions can be protested to the BLM Director; however, they are not appealable to Interior Board of Land Appeals (IBLA).

Implementation decisions and management actions that require additional site-specific project planning, as funding becomes available, will require further environmental analysis. Some implementation decisions (e.g., route designations) are finalized with this ROD and thus require no further environmental analysis. Administrative actions are not land use planning or implementation decisions, but are a key component of the overall Plan because they describe the BLM's day-to-day actions to help meet desired future conditions. The BLM will continue to involve and collaborate with the public during implementation of the Approved Plan. Brief descriptions of the types of decisions are presented below.

LAND USE PLAN DECISIONS

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. Desired future conditions include legal mandates, numerous regulatory responsibilities, national policy, BLM state director guidance, and other resource or social needs. Land use plans are designed to most effectively meet these desired future conditions through land use allocations, special designations, or management actions.

Special Designations

Special designations include those that are designated by Congress for special protection, such as wilderness areas, wild and scenic rivers, or national historic or scenic trails (see the Approved Plan). 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, such as watchable wildlife viewing sites, are also considered special designations and can be made in the land use plan (see the Approved Plan).

Land Use Allocations (Allowable Uses)

Allowable, restricted, or prohibited use on public lands identify lands where uses are allowed (land use allocations), including any restrictions needed to meet goals and objectives. Areas may be identified to exclude specific uses in order to protect resource values. Land use allocations

have geographic boundaries and are represented by polygons on the maps in Chapter 2 of the Approved Plan. It is common for specific resource or use allocations to overlap with other resource or use allocations.

Management Actions

Management actions include stipulations, guidelines, best management practices, and design features that help guide day-to-day activities on public lands to meet desired future conditions. Management actions are categorized as actions to achieve desired outcomes, including actions to maintain, restore, or improve land health.

IMPLEMENTATION DECISIONS

Implementation decisions (or activity level decisions) are management actions tied to a specific location that take action to implement land use plan decisions. Implementation decisions generally constitute the BLM's final approval allowing on-the-ground actions to proceed and require appropriate site-specific planning and NEPA analysis. Such decisions may be incorporated into implementation plans (activity or project plans) or may exist as stand-alone decisions.

Unlike land use plan decisions, implementation decisions are not subject to protest under the planning regulations. Instead, implementation decisions are subject to various administrative remedies, particularly appeals to the IBLA (under 43 CFR 4.410). Where implementation decisions are made as part of the land use planning process, they are still subject to the appeals process or other administrative review as prescribed by the specific resource program regulations after the BLM resolves the protests to land use plan decisions and makes a decision to adopt the management plan. For example, the designation of a specific route is an implementation level decision, rather than a land use plan decision. Consequently, individual route designations are subject to a separate appeals process that is described below.

All route designations (i.e., routes designated as open, see attached Approved Plan) are finalized with this ROD and may be appealed at this time. Except for the route designations, the other implementation decisions identified in Chapter 2 of the Approved Plan will all require site-specific planning and further NEPA analysis before they are implemented. These implementation decisions are not appealable at this time, but will be appealable at the time they are finalized.

In making the route designation decisions, the BLM adhered to IM 2007-030 regarding compliance with Section 106 of the National Historic Preservation Act (NHPA), which requires the BLM to consider the potential for area, road, and trail designations to affect historic properties (sites eligible for or listed on the National Register of Historic Places). These potential adverse effects could result from designating new routes or opening new areas to OHV use; OHV use shifting, concentrating, or expanding travel onto other existing routes or into areas

likely to have historic properties; and the potential for cumulative effects. Under the Approved Plan, no new routes are designated open and no open OHV areas are designated in the Monument. The remaining potential impacts to historic properties in the Monument are direct impacts, indirect impacts, and cumulative effects from the use of the designated road system, including impacts resulting from the concentration of use created by the designated route system or continued impacts to specific historic sites by designating specific routes.

In order to determine the direct, indirect, and cumulative impacts to historic properties on the Monument, Arizona Strip District and Monument archaeologists and managers used all Class I (existing information) and Class III (intensive inventory) cultural resource information available. The archaeologists examined U.S. Geological Survey (USGS) topographic maps of the Monument to determine if any historic properties in the Monument would be impacted by use of designated routes. Two sites were found in the Monument (the Sentinel Site and West Bench Pueblo) that would continue to experience cultural resource impacts from use of existing routes. A field trip to both sites by management, staff, and Kaibab Paiute tribal members confirmed that use of potentially designated open routes would continue to impact both sites. The following recommendations were made and implemented as a result of this field visit:

1. The designated route that leads directly to the Sentinel Site was closed 5/8-mile south of the site and will not be designated open for public use or administrative use.
2. The designated route across West Bench Pueblo will be re-routed further east so that further vehicular traffic across this site ceases.
3. Within one year of the publication of this ROD, 27 cultural resource sites that may potentially be impacted by designated roads in the Monument will be verified in the field and any impacts mitigated, as necessary. The precise location and potential impacts to these cultural resource sites are unknown at this time because they were recorded in the 1970s when only 15 minute (1:62,500) USGS topographic maps were available for the area. In addition, site-recording techniques were not as precise as current methods. This field verification and mitigation of impacts from use of designated roads will occur within one year of. Ongoing inventories to comply with Sections 106 and 110 of the NHPA will also continue in the Monument.
4. No high potential designated route areas in the Monument are recommended for Class III cultural resource inventory to determine and mitigate impacts in compliance with IM 2007-030.

Appeal Procedures for Implementation Decisions

Any party adversely affected by an implementation decision may appeal within 30 days of receipt of this decision in accordance with the provisions of 43 CFR Part 4.4. The appeal must include a statement of reasons or file a separate statement of reasons within 30 days of filing the

appeal. The appeal must state if a stay of the decision is being requested in accordance with 43 CFR 4.21 and must be filed with the Arizona Strip Field Manager at the following address:

Arizona Strip Field Office
345 East Riverside Drive
St. George, UT 84790

A copy of the appeal, statement of reasons, and all other supporting documents shall be sent to the Regional Solicitor at the following address:

Lawrence J. Jensen, Regional Solicitor
U.S. Department of the Interior
6201 Federal Building
125 South State Street
Salt Lake City, Utah 84138-1180

If the statement of reasons is filed separately, it must be sent to the following address:

Interior Board of Land Appeals
Office of Hearings and Appeals
4015 Wilson Boulevard
Arlington, VA 22203

It is suggested that any appeal be sent certified mail, return receipt requested.

Request for Stay

Any party wishing to file a request for stay pending the outcome of an appeal of one or more implementation decisions must show sufficient justification based on the following standards under 43 CFR 4.21:

- The relative harm to the party if the stay is granted or denied
- The likelihood of the appellant's success on the merits of the stay
- The likelihood of immediate and irreparable harm if the stay is not granted
- Whether the public interest favors granting the stay

As noted above, the request for stay must be filed with the Arizona Strip Field Manager at the address listed above.

ADMINISTRATIVE ACTIONS

Although the BLM's intent and commitment to accomplish administrative actions may be addressed in EIS- or Environmental Assessment (EA)-level documents, such activities are not

management decisions at either the land use plan or implementation level. Administrative actions are day-to-day activities conducted by the BLM, often required by FLPMA, but 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 scientific research and studies.

MODIFICATIONS AND CLARIFICATIONS

Modifications and clarifications were made to the Approved Plan based on the review and resolution of the protest letters, as well as from internal review by the BLM. The agreed upon clarifications or modifications to the decisions are provided below.

MODIFICATIONS

The reference to mountain bikes on "existing routes" (FEIS, p. 2-172) has been changed in the Approved Plan to assure that the Recreation and Visitor Services desired future conditions properly aligns with the Travel Management direction. The desired future condition now reads (changes shown in strikethrough; see the desired future conditions under Recreation Management of the Recreation and Visitors Services section of the Approved Plan):

In Backways and Specialized TMAs, recreation opportunities associated with somewhat remote settings, such as exploring backcountry roads and trails, vehicle camping, hunting, sightseeing, mountain biking, recreation aviation, and picnicking will be maintained/enhanced ~~as well as mountain biking opportunities on existing routes~~, provided they will be compatible with the protection and enhancement of sensitive resource values and Monument objects, where appropriate.

In order to comply with the Monument Proclamation prohibiting motorized and mechanized vehicle use off road, the following revisions are made in Chapter 2 decisions regarding Travel Management:

- “Motorized and mechanized vehicle use would be limited to designated roads ~~and trails~~ on 203,859 acres on BLM land.” (FEIS, Table 2.15, Travel Management, Vermilion, p. 2-216)
- “All vehicular travel in the Monuments would be allowed only on roads ~~routes~~ designated as part of the transportation system. To protect Monument objects, no areas would be authorized for driving off these designated roads ~~routes (e.g., cross-country)~~ except for authorized administrative and emergency purposes.” (FEIS, Table 2.15, Travel Management, Vermilion, p. 2-218)
- “In areas designated as “limited” in National Monuments and along national trails, motorized and mechanized use would keep within the designated road ~~route~~ with reasonable use of the shoulder and immediate roadside, allowing for vehicle passage,

emergency stopping, or parking, unless otherwise posted.” (FEIS, Table 2.15, Travel Management, Vermilion, p. 2-218)

- “Trail construction (non-motorized **and non-mechanized only** [bolded text added]) would occur to support protection and/or enhancement of Monument objects, RMZ objectives or to resolve issues of public safety, user conflicts, or resource protection.” (FEIS Table 2.15, Travel Management, Vermilion, p. 2-224)
- “New permanent road ~~motorized route~~ construction would be the minimum necessary to achieve Plan provisions and to enhance recreation opportunities and benefits if protection and/or enhancement of Monument objects would be ensured.” (FEIS, Table 2.15, Travel Management, Vermilion, p. 2-226)

Route Designations

The following modifications were made to designated routes:

- The designated route through West Bench Pueblo was modified in the Approved Plan so that the northernmost connector V1014E through the pueblo is not designated open and the southern connector around the pueblo is designated open, thus avoiding the site.
- The northernmost 5/8 mile of designated route V1024A is closed to protect resources.

CLARIFICATIONS

As the result of protests and continued internal review, the BLM made clarifications in the Approved Plan and one clarification on the Summary of Impacts Table from the Proposed Plan/FEIS, which is noted in the following paragraph.

In the Recreation Section of the Proposed Plan/FEIS, the Summary of Impacts Table did not accurately convey the content of the Chapter 4 impact analysis. That analysis for Alternatives C and E stated, “The impacts to settings and opportunities would be the same as those described under Alternative B, but the degree of impact to both motorized and non-motorized recreation would be significantly less” (FEIS page 4-299). The summary table failed to “downsize” the potential impacts for Alternatives C and D from “major” to “minor to moderate.”

The ROD/Approved Plan contains appropriate mitigation measures designed to eliminate existing and/or avoid future adverse effects to Monument objects (see Chapter 3). Monitoring strategies (including indicators, protocols, and frequency) to address impacts to natural and cultural resources can be found in Chapter 3 of the attached Approved Plan.

The ROD/Approved Plan also contains more information on how the agency complied with IM 2007-030, including schedules for inventory and Section 106 compliance, in making route designation decisions regarding cultural resources (see previous discussion on page 9 and 10 of this ROD).

MANAGEMENT CONSIDERATIONS FOR SELECTING THE APPROVED PLAN

The alternatives described in the Draft Plan/EIS, in addition to the public comments and input provided throughout this planning process, were considered in preparing the Proposed Plan. The Proposed Plan depicted a combination of decisions from the five alternatives considered in the Draft Plan/EIS, with emphasis on the Preferred Alternative (Alternative E).

This same approach for managing the Monument was chosen as the Approved Plan because:

- a. It most effectively accomplishes the overall objectives of protecting Monument resources and values and facilitates appropriate research.
- b. It best addresses the diverse community and stakeholder concerns in a fair and equitable manner.
- c. It provides the most workable framework for future management of the Monument.

Among the attributes that led to this determination are provisions for protecting Monument resources (archaeological, historic, paleontological, geological, and biological), including special features such as special status species and riparian areas, while providing for visitor use in a manner consistent with protecting Monument resources and values.

The Approved Plan responds to increasing demands for recreation on BLM-administered lands while adhering to FLPMA's mandate for multiple use management and sustained yield of renewable resources. The Approved Plan is very similar to the Proposed Plan, containing only minor revisions and clarifications stemming from protests and internal review.

The Approved Plan responds to travel management and access issues by designating routes and identifying routes to be open, closed, or available for administrative use only. A travel management plan for the Monument will be completed within three years from the date of this ROD.

MITIGATION MEASURES

Measures to avoid or minimize environmental harm were built into the Approved Plan where practicable and appropriate. Many of the standard management provisions will minimize impacts when applied to activities proposed in the Monument. The Arizona Standards for Rangeland Health and Guidelines for Grazing Administration (BLM 1996) will be used as the base standards to assess the health of BLM-administered lands in the Monument. Best management practices will be used where applicable for a number of uses including livestock grazing, 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

As the Approved Plan is implemented, the BLM expects that new information gathered from field inventories and assessments, research, other agency studies, and other sources will update baseline data or support new management techniques and scientific principles. To the extent that such new information or actions address issues covered in the Approved Plan, the BLM will integrate the data through a process called plan maintenance or updating. This process includes the use of monitoring, which is the repeated measurement of activities and conditions over time with the implied purpose to use this information to adjust management, if necessary, to achieve or maintain resource objectives. Bureau of Land Management planning regulations (43 CFR Part 1610.4-9) call for monitoring RMPs on a continual basis and establishing intervals and standards based on the sensitivity of the resource to the decisions involved. CEQ regulations implementing NEPA state that agencies may provide for monitoring to assure that their decisions are carried out and should do so in important cases (40 CFR Part 1505.2(c)).

Plan implementation also includes the use of an adaptive management strategy. As part of this process, the BLM will review management actions and the Approved Plan periodically to determine whether the objectives set forth in this and other applicable planning documents are being met. Where they are not being met, the BLM will consider appropriate adjustments. Where the BLM considers taking or approving actions that would alter or not conform to overall direction of the Approved Plan, the BLM will prepare a plan amendment and environmental analysis in making its determinations and in seeking public comment.

There are two types of monitoring (implementation and effectiveness), which are described below.

Implementation Monitoring

Implementation monitoring, known by some agencies as compliance monitoring, is the most basic type of monitoring and simply determines whether planned activities have been implemented in the manner prescribed by the Approved Plan. As such, implementation 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 implementation will be evaluated and reported at a 5-year interval from the date of Plan approval. Aspects of effectiveness monitoring would also be addressed in the evaluation.

Effectiveness Monitoring

Effectiveness monitoring determines if the implementation of activities has achieved the desired future conditions (i.e., goals and objectives) set forth in the Approved Plan. Effectiveness monitoring asks the following question: "Was the specified activity successful in achieving the

objective?" Answering this question requires knowledge of the objectives established in the Approved Plan as well as indicators that can be measured. Indicators are established by technical specialists to address specific questions and avoid collection of unnecessary data. Success is measured against the benchmark of achieving the goals and objectives (i.e., desired future conditions) established by the Approved Plan, which may include regulated standards for resources such as endangered species, air, and water. The interval between these efforts will vary by resource and the expected rate of change, but effectiveness monitoring progress will generally be reported to the Monument manager on an annual basis. These reports will include trends and conclusions, when appropriate, and be incorporated into the five-year evaluation reports.

The BLM will monitor the Approved Plan to determine whether the objectives set forth in this document are being met and whether applying the land use plan direction is effective (see the Approved Plan). 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 Approved Plan as long as assumptions and impacts disclosed in the analysis remain valid and broad-scale goals and objectives are not changed (see the Approved Plan). Where the BLM considers taking or approving actions that will alter or not conform to overall direction of the Approved Plan, the BLM will prepare a plan amendment or revision and environmental analysis of appropriate scope.

IMPLEMENTATION OF THE MANAGEMENT PLAN

Implementation of the Approved Plan will begin upon publication of its Notice of Availability (NOA) in the *Federal Register*. Some decisions in the Approved Plan require immediate action and will be implemented upon publication of the ROD and Approved Plan. Other decisions will be implemented over a period of years. The rate of implementation is tied, in part, to BLM's budgeting process. Implementation of the Approved Plan will occur in accordance with the implementation and adaptive management framework described in Chapter 3 of the attached Approved Plan.

CONSISTENCY REVIEW

The Arizona Governor's Office did not identify any inconsistencies between the Proposed Plan/FEIS and state or local plans, policies, and programs following the 60-day Governor's Consistency Review of the Proposed Plan/Final EIS, which was initiated in January 2007 in accordance with planning regulations at 43 CFR Part 1610.3- 2(e).

Consistency of the Proposed Plan with other local, state, tribal, and federal plans and policies was also considered during the planning process. The Approved Plan is consistent with plans and policies of the BLM, other federal agencies, and state 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.

PUBLIC INVOLVEMENT

The planning process was initiated when the BLM published the Notice of Intent (NOI) to prepare an EIS on the management plan for the Monument in the *Federal Register* on April 24, 2002. The BLM hosted a series of public open houses in 2002 and 2003 to solicit public comment on the scoping issues and preliminary alternatives for the Draft Plan/EIS. The NOA of the Draft Plan/EIS was published on November 16, 2005. Another series of open house meetings were held to solicit public comment on the Draft Plan/EIS in January of 2006. The NOA for the Proposed Plan/FEIS was published on March 2, 2007, which opened the 30-day public protest period.

Before the NOI was published in 2002, a series of Community Based Partnership and Stewardship courses were held in northern Arizona and southern Utah in which the public provided early information and communication regarding the Monument.

The BLM is committed to providing opportunities for meaningful public participation in the planning process. Throughout the preparation of the Approved Plan, the BLM maintained an extensive public participation process aimed at providing frequent opportunities for interaction with the public through a variety of media. The general public, representatives of Indian Tribes, organizations, public interest groups, and federal, state, and local government agencies were invited to participate throughout the planning process. This participation included review of proposed planning criteria, issues, preliminary alternatives, the Draft Plan/EIS, and the Proposed Plan/FEIS. These groups and individuals were kept informed through public meetings; planning bulletins; web information; *Federal Register* notices; and distribution of preliminary alternatives, the Draft Plan/EIS, and the Proposed Plan/FEIS. The BLM responded to comment letters on the Draft Plan/EIS and considered public comment when preparing the Proposed Plan/FEIS. The BLM also considered protests on the Proposed Plan when developing the Approved Plan and this ROD.

Ten agencies, tribes, and communities requested Cooperating Agency status and assisted with the Arizona Strip planning effort, and included Coconino and Mohave counties, Arizona; Kane and Washington counties, Utah; the towns of Fredonia and Colorado City, Arizona; the Kaibab Paiute Tribe; the Arizona Department of Transportation, Arizona Game and Fish Department, and the Federal Highway Administration.

The Arizona Strip District Office also maintained a national mailing list of approximately 10,500 individuals, agencies, interest groups, and tribes who expressed interest in the planning process. The BLM mailed planning bulletins to those on the mailing list or notified those on the email list that the information was available on the Arizona BLM website in order to keep the public informed of project status and to solicit reviews and information. Public meetings were announced at least 15 days prior to the event in local news media and on the website. The BLM

participated in numerous meetings with cooperating agencies, other federal agencies, Indian tribes, state and local governments, and interested individuals and groups.

TO OBTAIN A COPY OF THE MANAGEMENT PLAN

Copies of the ROD and the Vermilion Cliffs National Monument Resource Management Plan are available on the Arizona Strip District website at www.blm.gov/az, or can be obtained by requesting a copy by telephone at (435) 688-3200 or by email at Arizona_Strip@blm.gov. A copy can also be obtained in person at the following address:

BLM Arizona Strip District Office
345 East Riverside Drive
St. George, Utah 84790

Monument and Field Manager Recommendations

Having considered a full range of alternatives, associated effects, and public input, we recommend adoption and implementation of the attached Vermilion Cliffs National Monument Resource Management Plan.



Linda Price
Monument Manager
Vermilion Cliffs National Monument

1/29/08
Date

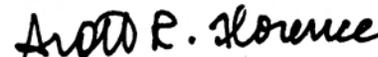


Lorraine M. Christian
Field Manager
Arizona Strip Field Office

1/29/08
Date

District Manager Concurrence

I concur with the adoption and implementation of the Vermilion Cliffs National Monument Resource Management Plan.

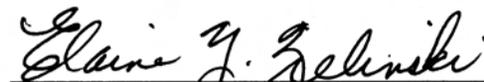


Scott R. Florence
District Manager
Arizona Strip District

1/29/08
Date

State Director Approval

In consideration of the foregoing, I approve the Vermilion Cliffs National Monument Resource Management Plan.



Elaine Y. Zielinski
Arizona State Director

1-29-08
Date

**U.S. Department of Interior
Bureau of Land Management**

VERMILION CLIFFS NATIONAL MONUMENT

RECORD OF DECISION APPROVED RESOURCE MANAGEMENT PLAN

COOPERATING AGENCIES:

**Arizona Department of Transportation
Arizona Game and Fish Department
Coconino County, Arizona
Federal Highways Administration
Kaibab Paiute Tribe
Kane County, Utah
Mohave County, Arizona
Town of Colorado City, Arizona
Town of Fredonia, Arizona
Washington County, Utah**

February 2008

TABLE OF CONTENTS

DEAR READER LETTER	Front of Document
RECORD OF DECISION	1
APPROVED PLAN	
CHAPTER 1: INTRODUCTION	
PURPOSE AND NEED FOR THE PLAN	1-1
PLANNING AREA AND MAP	1-2
ISSUES ADDRESSED	1-4
ISSUES USED TO DEVELOP ALTERNATIVES	1-4
ISSUES ADDRESSED IN OTHER PARTS OF THE EIS	1-7
ISSUES CONSIDERED BUT NOT FURTHER ANALYZED.....	1-8
PLANNING CRITERIA/LEGISLATIVE CONSTRAINTS	1-10
PLANNING PROCESS	1-12
RELATIONSHIP TO BLM AND NPS POLICIES, PLANS, AND PROGRAMS	1-13
COLLABORATION.....	1-15
ADMINISTRATION OF GRAZING WITHIN GLEN CANYON NRA	1-18
RELATED PLANS	1-18
OVERALL VISION	1-19
PURPOSE, SIGNIFICANCE AND MISSION STATEMENTS	1-19
CHAPTER 2: THE PLAN	
INTRODUCTION	2-1
MANAGEMENT UNITS	2-1
MANAGEMENT DECISIONS	2-4
LAND USE PLAN DECISIONS.....	2-5
IMPLEMENTATION DECISIONS	2-6
DECISION TABLES	2-6
AIR, WATER, AND SOILS.....	2-8
GEOLOGY AND PALEONTOLOGY	2-10
CAVE AND KARST RESOURCES.....	2-11
VEGETATION AND FIRE AND FUELS MANAGEMENT	2-12
FISH AND WILDLIFE	2-24
SPECIAL STATUS SPECIES.....	2-32
CULTURAL RESOURCES	2-44
VISUAL RESOURCES.....	2-46
SOUNDSCAPES	2-50
WILDERNESS CHARACTERISTICS	2-51
LANDS AND REALTY	2-54
LIVESTOCK GRAZING	2-56
MINERALS	2-57

RECREATION AND VISITOR SERVICES	2-59
INTERPRETATION AND ENVIRONMENTAL EDUCATION	2-67
TRAVEL MANAGEMENT	2-73
TRANSPORTATION FACILITIES	2-77
SPECIAL DESIGNATIONS	2-82
WILDERNESS	2-82
WILD AND SCENIC RIVERS	2-84
NATIONAL HISTORIC TRAIL	2-85
RESOURCE CONSERVATION AREA	2-87
PUBLIC HEALTH AND SAFETY	2-88
SCIENTIFIC RESEARCH	2-88
ADMINISTRATIVE ACTIONS	2-89
ENVIRONMENTAL ANALYSIS AND INTERRELATIONSHIPS	2-96
REQUIREMENTS FOR FURTHER ENVIRONMENTAL ANALYSIS	2-96
INTERRELATIONSHIPS	2-97
PUBLIC INVOLVEMENT	2-99
CHAPTER 3: IMPLEMENTATION	
IMPLEMENTATION SCHEDULE	3-1
MONITORING	3-1
ADAPTIVE MANAGEMENT	3-9

LIST OF TABLES

CHAPTER 2: THE PLAN

Table 2.1. Air, Water, and Soils (Watershed: WS).....	2-8
Table 2.2. Geology and Paleontology (GL).....	2-10
Cave and Karst Resources	2-11
Table 2.3. Vegetation and Fire and Fuels Management (VM, FM, RP)	2-12
Table 2.4. Fish and Wildlife (WF).....	2-24
Table 2.5. Special Status Species (TE).....	2-32
Table 2.6. Cultural Resources (CL)	2-44
Table 2.7. Visual Resources (VR)	2-46
Table 2.8. Soundscapes (SN).....	2-50
Table 2.9. Wilderness Characteristics (WC)	2-51
Table 2.10. Lands and Realty (LR).....	2-54
Table 2.11. Livestock Grazing (GM).....	2-56
Table 2.12. Minerals (MI).....	2-57
Table 2.13. Recreation & Visitor Services/Interpretation & Environmental Education (RR) ..	2-59
Table 2.14. Travel Management (TM)	2-73
Table 2.15. Special Designations (AC, WM, HT, WR)	2-82
Table 2.16. Public Health and Safety (HM)	2-88
Table 2.17. Scientific Research (SR).....	2-88

CHAPTER 3: IMPLEMENTATION

Table 3.1: Preliminary Monitoring Strategies.....	3-2
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LIST OF MAPS

CHAPTER 1: INTRODUCTION

Map 1.1. Vermilion Cliffs National Monument Location Map	1-3
--	-----

CHAPTER 2: THE PLAN

Map 2.1. Management Units.....	2-2
Map 2.2. Ecological Zones on the Vermilion Cliffs National Monument.....	2-22
Map 2.3. Wildland Fire Use Allocations	2-23
Map 2.4. Wildlife Habitat Areas.....	2-31
Map 2.5. Visual Resource Management	2-49
Map 2.6. Wilderness Characteristics.....	2-53
Map 2.7. Grazing Allotments.....	2-57
Map 2.8. Special Recreation Management Areas	2-68
Map 2.9. Recreation Management Zones	2-69
Map 2.10. Recreation Settings (Physical).....	2-70
Map 2.11. Recreation Settings (Social)	2-71
Map 2.12. Recreation Settings (Administrative)	2-72
Map 2.13. Travel Management Areas.....	2-79

Map 2.14. Off Highway Vehicle Area Designations 2-80
Map 2.15. Designated Transportation System Route Network 2-81
Map 2.16. Potential Wild and Scenic River (Paria River) 2-87

LIST OF APPENDICES

Appendix A: Vermilion Cliffs National Monument Proclamation..... A-1
Appendix B: U.S. Fish and Wildlife Service Consultation: Portions of the Biological
Opinion..... B-1
Appendix C: Arizona Standards and Guidelines for Livestock Grazing Management and
Rangeland Health Implementation Status..... C-1
Appendix D: Livestock Grazing Allotment Management Status D-1
Appendix E: Livestock Grazing Allotment Acres and Animal Unit Months by Land Status ...E-1
Appendix F: Vegetation Treatment Tools and Methods F-1
Appendix G: Conservation Measures for Special Status Species..... G-1
Appendix H: Visual Resource Management Classes and Objectives for Classes H-1
Appendix I: Reclamation Stipulations I-1
Appendix J: Recreation Management Areas J-1
Appendix K: Travel Management Areas, Transportation Plan Contents, and Appropriate Route
Construction and Maintenance Standards by Travel Management Area..... K-1
Appendix L: List of Preparers L-1

Glossary End of Document
References Cited..... End of Document
Index..... End of Document
Abbreviations and Acronyms End of Document

CHAPTER 1: INTRODUCTION

PURPOSE AND NEED FOR THE PLAN

Vermilion Cliffs National Monument (referred to as the "Monument" throughout this document) was established on November 9, 2000, when President William J. Clinton issued Presidential Proclamation 7374 (Appendix A) under the Antiquities Act of 1906 (34 Stat. 225, 16 USC 431). The Monument was created to protect an array of scientific, biological, geological, hydrological, cultural, and historical objects. These objects, both individually and collectively, in the context of the natural environments that support and protect them, are referred to as "Monument objects," "Monument resources," or "Monument values" throughout this document.

The designation of the Monument changed much of the management direction of the existing Arizona Strip District Resource Management Plan (RMP; Bureau of Land Management [BLM] 1992). An individual management plan was needed to protect Monument objects and the context that supports them, in a way that was consistent with Presidential Proclamation 7374. This management plan, the Vermilion Cliffs National Monument RMP (Approved Plan), is prepared by the Arizona Strip District of the BLM and is necessary to guide management actions for the Monument by providing a set of decisions outlining management and creating a framework for future planning and decision making.

Presidential Proclamation 7374 is the principal direction for managing the Monument. It clearly directs the BLM to manage the Monument for "the purposes of protecting the objects identified." All other considerations are secondary to that direction.

The Monument proclamation governs how the provisions of the Federal Land Policy and Management Act (FLPMA) of 1976 will be applied within the Monument. Under FLPMA, the BLM is directed to manage public lands on the basis of multiple use and "in a manner that will protect the quality of scenic, historic, ecological, environmental, air and atmospheric, water resources, and archaeological values." The term "multiple use" refers to the "harmonious and coordinated management of the various resources without permanent impairment of the productivity of the land and the quality of the environment." Multiple use involves managing an area for various benefits, recognizing that the establishment of land use priorities and exclusive uses in certain areas is necessary to ensure that multiple uses can occur harmoniously across a particular landscape.

The proclamation, FLPMA, the National Environmental Policy Act (NEPA) of 1969, and other mandates provided the direction for preparation of a management plan for the Monument. Within this guidance, many decisions remain about how best to protect Monument resources and address the major issues surrounding Monument management. Presidential Proclamation 7374 directed the Secretary of the Interior to prepare a plan in order to begin making those decisions.

This Approved Plan fulfills that directive by guiding management activities within the Monument and providing for the protection of Monument resources. It proposes to do so in a manner that creates opportunities for public discovery and education, sets a precedent for progressive public land stewardship, incorporates input from the scientific community and the public at large, and reflects the national significance of these resources.

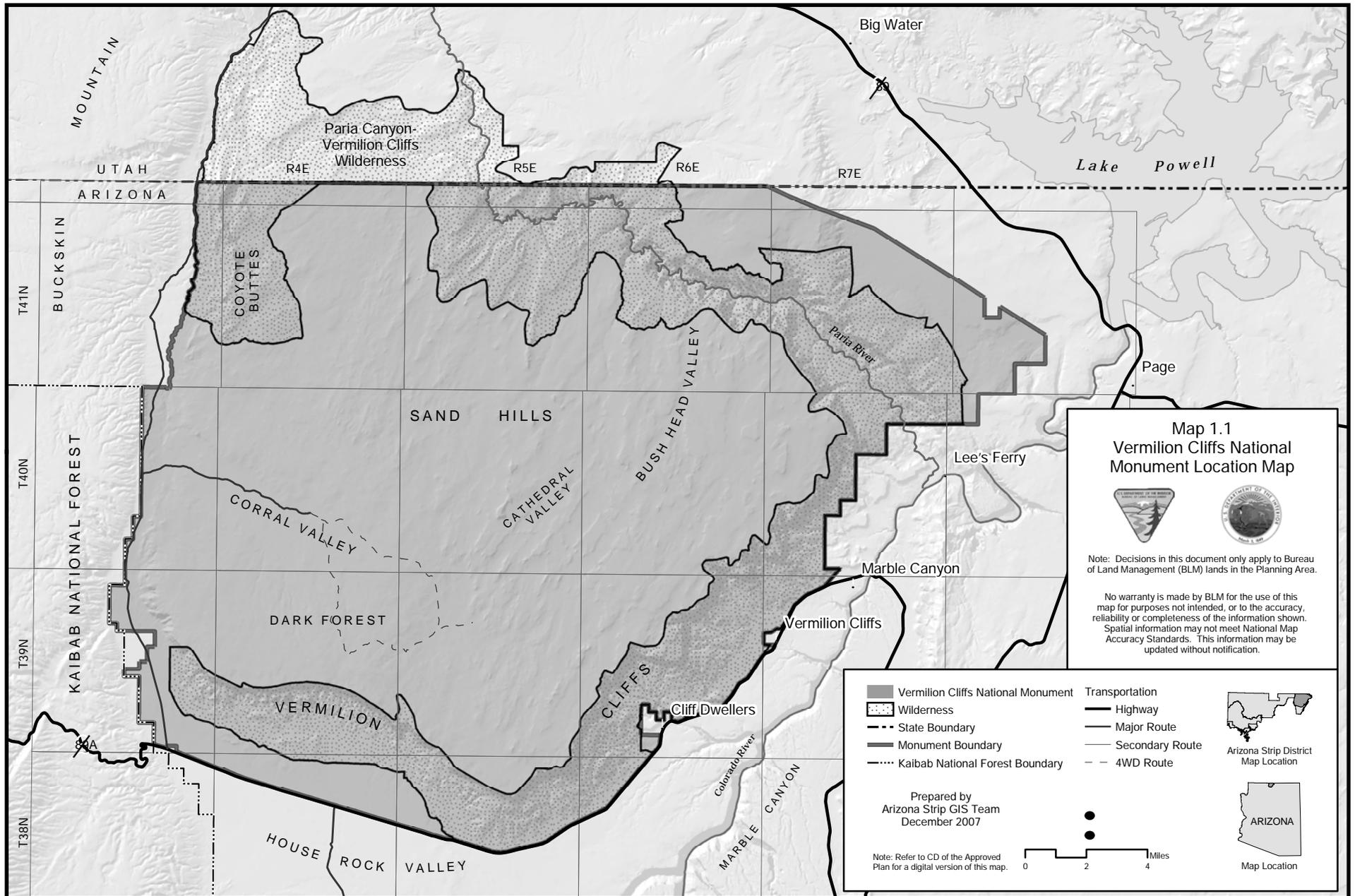
As mentioned above, the purpose of this Approved Plan is to provide both a set of decisions outlining management direction and to create a framework for future planning and decision making. Its scope is necessarily broad since it is a general framework document that will guide the overall management of activities within the Monument, as well as the use and protection of Monument resources. As in the case of any RMP, it is expected that there will be a future need for subsequent and more detailed planning, which will focus on specific geographic areas or management issues. Further NEPA documents will be written to analyze and implement decisions that are not fully addressed in this Approved Plan. In each subsequent activity plan and NEPA document, the BLM will include a description of the desired future conditions of the land, resources involved, an analysis of potential impacts, and an explanation regarding how the proposed activities, as well as reasonable alternatives, would contribute to attaining those conditions.

PLANNING AREA AND MAP

The Monument lies in northern Coconino County and encompasses 279,566 acres of BLM lands, 13,438 acres of Arizona State Trust lands, and 683 acres of private lands. This Approved Plan includes decisions only for BLM-administered lands in the Monument, which are depicted on Map 1.1.

The Monument is adjacent to portions of Grand Staircase-Escalante National Monument and the Kanab Field Office of the BLM in Utah to the north, borders Glen Canyon National Recreation Area (NRA) to the east and southeast, and borders Kaibab National Forest to the west. No communities exist within the Monument, although several small residential/commercial areas lie along the Monument boundary at the foot of the Vermilion Cliffs along U.S. Highway 89A in the vicinity of Marble Canyon. Other close communities include Page and Fredonia, Arizona, and Kanab and Big Water, Utah.

While U.S. Highway 89A provides excellent passage along the southern boundary of the Monument, much of the Monument's landscape of steep cliffs, deep canyons, and loose sand make vehicular entry deep into its boundary challenging. Spectacular scenic vistas are common from the rims of the Paria Plateau and visitors are offered a sense of isolation and remoteness in much of the area.



Map 1.1 Vermilion Cliffs National Monument Location Map

Congress designated approximately 89,598 acres within the Monument as the Paria Canyon-Vermilion Cliffs Wilderness in 1984. Another 22,365 acres of this designated wilderness are located outside the Monument in Utah. Portions of Glen Canyon NRA adjacent to the Monument are proposed for wilderness designation. The BLM has the administrative authority over livestock grazing and mineral exploration on Glen Canyon NRA lands, subject to Glen Canyon NRA policy and enabling legislation, as spelled out in interagency agreements and Memoranda of Understanding (MOUs) between the BLM and the National Park Service (NPS).

California condors, last observed wild in Arizona in 1924, were reintroduced to Arizona at a release site on top of the Vermilion Cliffs in 1996. Condor releases continue in the Monument, with approximately 50 condors currently residing in the region. The California Condor Recovery Plan (U.S. Fish and Wildlife Service [USFWS] 1996) cites an ultimate goal of 150 Condors in the area, including 15 reproductive pairs.

ISSUES ADDRESSED

Publication in the *Federal Register* of the Notice of Intent (NOI) to prepare a management plan and environmental impact statement (EIS) for the Monument on April 24, 2002, initiated a 90-day public scoping and comment period. Following this, the BLM published a newsletter and held 11 open houses in 2002 to encourage public input on the future management of the Monument. Ten cooperating agencies and a dozen other Federal and state agencies provided information and input into development of the Monument management plan. From all this input, the BLM developed four conceptual alternatives that were presented to the public via newsletters and five open houses. These preliminary alternative public meetings were held in 2003. A 90-day public comment period on the Draft Plan/EIS was initiated on December 16, 2005 followed by release of the Proposed Plan/Final EIS (FEIS) on March 2, 2007. Information from these meetings, the Cooperating Agencies and interested state and Federal agencies, and the public was then used to develop this Approved Plan.

ISSUES USED TO DEVELOP ALTERNATIVES

One of the most important outcomes of the scoping process was the identification of significant issues to be addressed in the Approved Plan. For planning purposes, an “issue” is defined as a matter of controversy, dispute, or general concern over resource management activities, the environment, or land uses. In essence, issues help determine what decisions were made and analyzed in the Proposed Plan/FEIS.

Based on the scoping comments received and their subsequent analysis and evaluation, five major planning issues were identified as being within the scope of this planning effort, which were then addressed and analyzed in the associated EIS. All of these issues centered on the larger question of just how much human activity should be allowed while still providing the

mandated level of resource protection. The five issues are presented below, followed by a short description of why each is significant and the management decisions that they required.

Issue 1: How will transportation and access be managed?

Transportation and access (i.e., travel management) emerged from the scoping process as the primary issue for the public, and is closely tied to the other issues addressed. Some people believed closing a number of routes and limiting vehicular access would provide the best protection of Monument values. Others thought all existing routes should remain open for recreational and resource uses.

The Monument proclamation specifically calls for a transportation plan to address road and needed travel management to protect Monument resources. The information on travel management presented in this Approved Plan will be used to develop a transportation plan for the Monument within three to five years after the Record of Decision (ROD) accompanying this Approved Plan has been signed. Route inventories of the Monument were completed and used as baseline data for trail and travel management planning.

Travel management implementation decisions and associated maps can be found in Chapter 2 and in Appendix K.

Issue 2: How will areas with wilderness characteristics be managed?

A number of individuals and groups voiced their concern for protecting areas with wilderness characteristics in the Monument. Many brought up the concept of additional wilderness designations during the public scoping period. Some felt that additional wilderness designations in the Monument would be the best way to protect resources, particularly those identified in the Monument proclamations. Others were not in favor of additional wilderness designations because they felt such actions would prevent the majority of visitors from accessing the remote sections of the Monument, especially those that enjoy motorized forms of recreation. Such arguments, however, are outside the scope of the EIS for this Approved Plan as only Congress has the authority to designate new wilderness areas.

The BLM historically has had the authority to inventory, assess, and recommend suitable public lands as wilderness study areas (WSAs); however, recent guidance clarified that this authority expired in 1991. With the passage of FLPMA in 1976, the BLM had 15 years to inventory and identify lands suitable for designation as wilderness by Congress. That inventory and review was completed in 1991 and submitted to Congress in 1993. Many of the WSAs identified Bureau-wide are still managed today under an Interim Management Policy (IMP). With the passage of the Arizona Wilderness Act of 1984, any WSAs in Arizona not included as part of a statutory wilderness by Congress were “released” by Congress from the IMP. The Monument contains no WSAs from that 15-year period.

In 2001, the BLM issued new policies in the Wilderness Inventory and Study Procedure Handbook (H-6310-1). The handbook reiterated the BLM's authority to inventory, assess, and designate public lands as WSAs. These lands would then be available at any time for Congress to consider for designation as wilderness areas. The state of Utah and others challenged the authority of the Department of the Interior (DOI)/BLM to designate and manage new (post 1993) WSAs as wildernesses, arguing that the BLM completed the wilderness suitability process for public lands with the submission of recommendations to Congress in 1993. In the ensuing Utah Wilderness Settlement (April 2003), the DOI/BLM agreed that FLPMA does not allow identification or protection of new WSAs after 1993. In 2003, the BLM formally rescinded the Wilderness Inventory and Study Procedures Handbook. Therefore, in this planning process, additional BLM lands cannot be considered or recommended for designation as WSAs.

In September 2003, the BLM provided new guidance in Instruction Memorandum (IM) 2003-274 and IM 2003-275, Change 1. Specifically, IM 2003-274, Implementation of the Settlement of Utah v. Norton Regarding Wilderness Study, applied the terms of the Utah Wilderness Settlement Bureau-wide. Additionally, IM 2003-275, Change 1, Consideration of Wilderness Characteristics in Land Use Plans, provides guidance for planners and the public for assessing areas that may exist in essentially natural condition, or landscapes where the opportunities to experience solitude or engage in primitive and unconfined recreation may be outstanding. IM 2003-275, Change 1, also provides guidance for making decisions about maintaining these values where they are reasonably present or have sufficient value and need, and are practical to manage. The "non-impairment standard" of FLPMA Section 603 and the BLM IMP for WSAs are not applied as measures to protect naturalness, solitude, and primitive recreation. Such decisions for areas managed for wilderness characteristics are discussed in Chapter 2.

Issue 3: How will Monument resources be protected?

The proclamation designating the Monument identified an array of scientific, natural, and historic objects to be protected. There are various ways of achieving this mandate, including maintenance of acceptable existing conditions, educating visitors, restricting access, setting research priorities, and restoring degraded environmental conditions. Decisions about which approaches were used are detailed in Chapter 2.

Issue 4: How will livestock grazing on the Monument be addressed?

The Monument proclamation states that laws, regulations, and policies followed by the BLM in issuing and administering livestock grazing permits or leases on all lands under its jurisdiction shall continue to apply with regard to the lands in the Monument.

The scoping process identified livestock grazing as an issue for a number of people. Comments ranged from eliminating all livestock grazing in the Monument to supporting all grazing

activities. Those in the middle supported eliminating livestock grazing only in environmentally sensitive areas.

All land uses, including livestock grazing, were incorporated into the concept of overall environmental health. Modifications to current grazing are detailed in Chapter 2.

Issue 5: How will people's recreation activities be managed?

Lands in the Monument are used for a variety of recreational activities, including exploring, sightseeing, hiking, backpacking, camping, hunting, off-highway vehicle use on designated routes, and mountain bike riding. Given growth projections for communities in the southwestern U.S. and the increased participation of people in recreation pursuits on public lands over time, ineffective management of visitor activities is recognized as potentially having profound environmental effects on Monument lands. These possible effects, along with potential user conflicts, make appropriate management of these activities crucial to protecting Monument resources.

During the scoping process, the public frequently referred to the important relationship between the remoteness of the Monument and the quality of visitor experiences. The Special Recreation Management Areas (SRMAs) and Recreation Management Zones (RMZs) in Chapter 2 of the Approved Plan detail how land managers decided where and what types of recreation-tourism markets should be targeted for more structured types of recreation opportunities. They also decided what kinds of custodial management are needed for unstructured, dispersed recreation found in the Extensive Recreation Management Areas (ERMAs).

Decisions, such as where and what kind of interpretation and signage to provide, how to minimize potential user conflicts, and what types of recreation settings should be maintained in specific areas, are important elements addressed in Chapter 2. For identified markets, Chapter 2 includes more specific decisions for various recreation management zones that address maintaining or enhancing the public benefits, experiences, and activities and settings each zone provides.

ISSUES ADDRESSED IN OTHER PARTS OF THE EIS

In addition to the five issues identified during public scoping, the planning team identified an additional management concern that also needed to be addressed to consider the local communities and human use in the Monument. This concern is presented below, and followed by a short description of why it is significant and the management decisions that support them.

Management concern: How will the human factors in the Monument be considered?

While the focus of management plans is on the area's natural and cultural resources and on the uses of these resources, the human or social factors must also be considered. While uninhabited, a number of small homes and businesses are located along the Monument boundary at the base of the Vermilion Cliffs along U.S. Highway 89A in the vicinity of Marble Canyon. These homes and businesses depend upon public lands for deriving certain economic, personal, family, community, and environmental benefits. Other communities including Page and Fredonia, Arizona, and Kanab and Big Water, Utah, are also closely connected to the public lands in the Monument.

Public safety is also a concern. Sections in Chapter 2 on health and safety; recreation; and air, soil, and water detail management approaches to assist with public safety.

Rapid population growth on private lands in the region will also affect the natural and cultural resources and future uses of the Monument. Decisions in Chapter 2 address actions necessary to maintain or protect the resources and uses in the Monument. Monitoring and adaptive management will assist the BLM in modifying some uses, if conditions exceed acceptable levels. Management approaches that will be used in the Monument to address rapid population growth are detailed in Chapter 2.

ISSUES CONSIDERED BUT NOT FURTHER ANALYZED

While all issues identified during the public scoping process were considered by the BLM, not all were further analyzed. These include issues that were beyond the scope of the EIS, mainly because they did not meet the purpose and need of the Approved Plan. Other issues were not further analyzed in this Approved Plan because they are addressed through administrative or policy action.

Issues Beyond the Scope of the EIS

The Council on Environmental Quality (CEQ) guidelines for implementing NEPA require Federal agencies to analyze all "reasonable" alternatives that substantially meet the purpose and need for this Approved Plan. The purpose of the Approved Plan is to provide for management of Vermilion Cliffs National Monument to meet the requirements of FLPMA and other laws and regulations. Because the Monument proclamation states that certain uses will not continue and other uses will continue, consistent with Federal laws and regulations, actions not complying with the proclamation do not meet the purpose and need for this Approved Plan and were, therefore, not included in alternatives that were analyzed during the planning process.

The following specific alternatives, or actions that could be components of alternatives, were suggested but not analyzed or carried forward because they did not fulfill the requirements and needs of this Approved Plan.

Recommendations for BLM Wilderness Study Areas

The Arizona Wilderness Coalition and members of the public provided recommendations on WSAs in the Monument. In addition, the planning team was working toward making recommendations for WSAs early in the planning process. However, guidance clarified that the BLM's authority to designate WSAs expired in 1993, resulting in the termination in any attempts to designate new WSAs. The BLM has, however, assessed wilderness characteristics (naturalness, solitude, and primitive recreation) on BLM lands in the Monument and proposed management actions regarding where, how, and to what extent these characteristics may be managed (see Chapter 2 and previous discussion in this chapter on pages 1-5 and 1-6).

The Arizona Wilderness Coalition also provided comments and proposed management prescriptions on areas managed to maintain wilderness characteristics. Including this information for these prescriptions would be contrary to BLM policy as outlined in BLM IM 2003-274 and IM 2003-275 and more recent guidance in IM AZ-2005-007 (guidelines for achieving consistency in ongoing and future Arizona Land Use Planning efforts).

No Livestock Grazing in the Monument

Proclamation 7374 for the Monument states, "Laws, regulations, and policies followed by the BLM in issuing and administering grazing permits or leases on all lands under its jurisdiction shall continue to apply with regard to the lands in the Monument." Based on this proclamation provision, a no-livestock grazing alternative would not meet the purpose and need of this Approved Plan, nor would it meet BLM's principle of multiple use and sustained yield (FLPMA Sec. 302 (a), see also FLPMA Sec. 102(7)) or provisions of the Taylor Grazing Act.

No Routes in the Monument

Some public comments proposed closing all routes in the Monument to protect Monument objects; however, the proclamation noted, "outstanding biological objects have been preserved by remoteness and limited travel corridors." The Secretary of Interior was thus able to recommend the area for Monument designation because of the remoteness, lack of easy road access, and condition of the resources to be protected. Closing all routes in the Monuments is thus not vital to protect Monument resources. The Secretary also directed the BLM to prepare a transportation plan for the Monument, which presupposes the need for maintaining at least some open roads. The need for access by the public and those holding valid existing rights and other existing authorizations further made the decision to close all roads unreasonable.

PLANNING CRITERIA/LEGISLATIVE CONSTRAINTS

Bureau of Land Management planning regulations (43 Code of Federal Regulations (CFR) 1610) require preparation of planning criteria to guide development of all RMPs. Planning criteria provide the principles that guide and direct the development of the Approved Plan and influence all aspects of the planning process, including inventory and data collection, alternative development, and impact analysis, as well as the selection of a preferred alternative, followed by the selection of the Proposed Plan and the final selection of the Approved Plan. In effect, planning criteria ensure the tailoring of plans to the identified issues and the avoidance of unnecessary data collection and analysis. The basis of determining planning criteria includes applicable laws, agency guidance, public comment, data analysis, professional judgment, and coordination with other Federal, state, and local governments and American Indian tribes.

The planning criteria used in developing the Approved Plan for the Monument are as follows:

- The Approved Plan was completed in compliance with FLPMA. Provisions of the Endangered Species Act, NEPA, the National Historic Preservation Act, the Clean Water Act, and other Federal laws and executive orders and management policy requirements were also met.
- The Approved Plan is consistent with Presidential Proclamation 7374, meeting the Monument's purpose, preserving its significance, and complementing its mission.
- This Approved Plan and associated ROD includes data and maps that provide information on the Monument.
- Valid existing management decisions from previous plans, if appropriate, were carried forward into this Approved Plan or will be carried forward into subsequent activity and/or implementation plans. Decisions from the following plans were considered and have been modified or amended, as appropriate: Arizona Strip RMP (BLM 1992) as amended, Paria Canyon-Vermilion Cliffs Wilderness Management Plan (BLM 1986), Habitat Management Plans, and the Arizona Strip Bighorn Sheep Management Plan (BLM and Arizona Game and Fish Department [AGFD] 2001).
- The Approved Plan is consistent with officially approved or adopted resource-related plans, policies, and programs of other Federal agencies, state and local governments, and Indian tribes so long as such plans, policies, and programs are consistent with the purposes, policies, and programs of Federal laws and regulations.

- Incidental take and reasonable and prudent measures with terms and conditions and conservation recommendations from the Final Biological Opinion (November 7, 2007) will be implemented.
- Cooperating agency status was encouraged for affected Federal, state, and local governments and Indian tribes. The environmental analysis input and proposals of the ten Cooperating Agencies was used to the maximum extent possible consistent with BLM responsibilities (43 CFR 1501.6 (a) (2)).
- An adaptive management approach will be followed to achieve desired outcomes. Monitoring outlined in the Approved Plan will be used to determine if desired outcomes at the land use plan level are being achieved. If not, implementation actions and/or allowable uses will be modified to achieve land use plan objectives.
- The Approved Plan emphasizes ecological restoration and preservation of natural and cultural resources. It identifies opportunities and priorities for research and monitoring related to the key resource values of the Monument.
- The statewide land health standards, established by the Arizona Resource Advisory Council and approved by the Secretary of Interior, will be used to evaluate all surface disturbing activities on public lands where the BLM administers grazing privileges.
- The Approved Plan does not identify any public lands for designation as WSAs. However, the BLM has identified lands that will be managed to maintain wilderness characteristics so that such lands remain in a natural condition and provide outstanding opportunities for solitude and primitive and unconfined types of recreation activities.
- Route inventories were completed for the Monument and were used as baseline data for travel management planning. All lands within the Monument were designated as either “limited” or “closed” to motorized and mechanized vehicle uses. Decisions concerning specific routes in “limited” areas resulted in a designated travel management network for the Monument.
- This Approved Plan directly involved American Indian tribal governments by providing strategies for the protection of recognized sacred and traditional uses and sites.
- The lifestyles of area residents including the activities of grazing, hunting, other resource uses, and recreation are recognized in the Approved Plan. Much of the Monument's historic value is connected with ranching operations, both past and present.

- The Approved Plan does not address Monument or statutory wilderness boundary adjustments.
- Any new visitor centers considered will be located outside the Monument and generally within existing communities.
- This Approved Plan sets forth a framework for managing recreation and commercial activities in order to produce a variety of beneficial outcomes gained through safe and enjoyable visitor experiences and activities that require appropriate natural and community landscapes.
- The Approved Plan used the Standards for Rangeland Health and Guidelines for Grazing Management to ensure appropriate grazing practices are followed to protect Monument values, watershed integrity, and habitats for plant and wildlife species on public lands.
- The Approved Plan considered public input, interests, and values; past and present uses of public land and adjacent land; public benefits of providing goods and services; environmental impacts; social and economic values; public safety; and ecosystem restoration.

PLANNING PROCESS

This Approved Plan was developed in conjunction with the Approved Plan for Grand Canyon-Parashant National Monument and the Approved RMP for the Arizona Strip Field Office. The overall planning process began in February 2001 when the BLM formed an interdisciplinary planning team based in St. George, Utah (see Appendix L for the list of preparers). Since the NPS manages a portion of Grand Canyon-Parashant National Monument, the NPS acted as a joint-lead agency with the BLM in writing the Approved Plan for that Monument. While the history of the planning process involves the other two planning areas (Grand Canyon-Parashant National Monument and the Arizona Strip Field Office), the discussion here focuses solely on the development of the Approved Plan for Vermilion Cliffs National Monument.

The interdisciplinary planning team for the creation of this Approved Plan was comprised of BLM staff, resource specialists, and Monument and District managers. The planning team met numerous times beginning in 2001 to gather background information, identify goals and objectives, examine resource issues, develop alternatives, and write/review the Draft Plan/EIS and Proposed Plan/EIS for this Approved Plan. In addition, a series of Community Based Partnership and Stewardship courses were held in northern Arizona and southern Utah in which the public provided early information and communication regarding the Monument. The NOI to prepare an EIS on the management plan for the Monument (as well as the other two planning areas) was published in the *Federal Register* on April 24, 2002. Following this, the BLM hosted

a series of public open houses in 2002 and 2003 to solicit public comment on the scoping issues and preliminary alternatives for the Draft Plan/EIS.

The Draft Plan/EIS presented a No Action Alternative (Alternative A) and four action alternatives (Alternatives B, C, D, and E). Alternative E was BLM's Preferred Alternative because it balanced human use/influence with resource protection. The Notice of Availability (NOA) of the Draft Plan/EIS was published on November 16, 2005, initiating a 90-day public review. The BLM also held a series of open house meetings to solicit public comment on the Draft Plan/EIS in January of 2006.

The Proposed Plan/FEIS, published in January 2007, responded to public comment and cooperative agency review of the Draft Plan/EIS through numerous revisions and modifications, as well as provided direct responses to comments. In this fashion, the agencies' Preferred Alternative in the Draft Plan/EIS was modified and presented as the Proposed Plan (Alternative E) in the Proposed Plan/FEIS. The NOA for the Proposed Plan/FEIS was published in the *Federal Register* on March 2, 2007, which opened the 30-day public protest period in accordance with 43 CFR Part 1610.5-2. The BLM received seven protest letters during this period. The BLM Director addressed all protests without making significant changes to the Proposed Plan; however, the protests received did lead to minor adjustments, corrections, and clarifications. This Approved Plan is one of three management plans that were developed from the Proposed Plan/FEIS that guides future management actions in their respective units.

RELATIONSHIP TO BLM AND NPS POLICIES, PLANS, AND PROGRAMS

This section describes the relationship of this Approved Plan to other BLM and NPS (Glen Canyon NRA) policies and programs, the role of collaboration efforts in the planning process, the consideration of related plans (state, local, and tribal), and policies and decisions that have affected the planning process.

Under NEPA, Federal agencies are mandated to prepare EISs for major Federal actions. This Approved Plan conforms to CEQ regulations for implementing NEPA requirements (40 CFR 1500-1508).

The BLM planning process, which is guided by NEPA, FLPMA, and the planning guidance contained in 43 CFR 1600, involves an interdisciplinary approach and provides opportunities for public involvement and interagency coordination.

Management plans ensure that the BLM manages public lands in accordance with the intent of Congress as stated in FLPMA, under the principles of multiple use and sustained yield. As required by FLPMA, public lands must be managed in a manner that:

- a) Protects the quality of scientific, scenic, historical, ecological, environmental, air and atmospheric, water, and cultural resources and values
- b) Where appropriate, preserves and protects certain public lands in their natural condition and provides food and habitat for fish and wildlife and domestic animals
- c) Provides for outdoor recreation and human occupancy and use by encouraging collaboration and public participation through the planning process.

In addition, public lands must be managed in a manner that recognizes the Nation's need for domestic sources for minerals, food, timber, and fiber from public lands.

In addition to the Federal mandates and guidelines mentioned above, the planning team considered a number of existing management plans, programmatic documents, and standards and guidelines in the preparation of this Approved Plan. These include the following:

Land Use Plans and Amendments

- Arizona Strip District RMP (BLM 1992)
- Arizona Statewide Land Use Plan Amendment for Fire, Fuels, and Air Quality Management Finding of No Significant Impact and Environmental Assessment (BLM 2003)

Legislative EIS

- Arizona Statewide Wild and Scenic Rivers Legislative EIS (BLM 1994, for the Paria River)

Activity (Implementation) Level Plans

- Vermilion Resource Area Implementation Plan for the Arizona Strip District Approved RMP (BLM 1992)
- Paria Canyon-Vermilion Cliffs Wilderness Management Plan (BLM 1987)
- Arizona Strip Desert Bighorn Sheep Management Plan (BLM and AGFD 2001)
- Southwestern Willow Flycatcher (*Empidonax traillii extimus*) Final Recovery Plan (USFWS 2002)
- Recovery Plan for the California Condor (USFWS 1996)
- Glen Canyon NRA Grazing Management Plan (NPS 1999)
- Glen Canyon NRA Minerals Management Plan (NPS 1980)

Programmatic NEPA Documents

- BLM Vegetation Treatment FEIS (BLM 1991)

Policy and Rules

- Arizona Standards for Rangeland Health and Guidelines for Grazing Administration (BLM 1997)

These documents were examined not only to assure appropriate integration and compliance, but also to identify information still appropriate for inclusion in the Approved Plan and/or decisions that are still valid and could be carried forward. Activity plans that have been tiered off these plans have also been considered in this planning effort.

COLLABORATION

A variety of Federal, state, county, local, and tribal groups played a vital role in this planning process by attending meetings, providing databases and general information, conducting peer reviews, and assisting with the development of the management alternatives presented in this Approved Plan.

Intergovernmental, interagency, and Tribal relationships

The CEQ requirements 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 USC 4331(a), 4332(2)). In support of this mandate, the BLM planning team invited a broad range of local, county, state, tribal, and Federal agencies to attend a series of meetings to develop MOUs 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 planning documents. Although they are time-limited documents, MOUs describe the roles and responsibilities of the BLM and the cooperating agencies during the planning process. Invitations to become formal cooperators were sent to more than 200 agencies, communities, and tribes.

Ten cooperating agencies worked with the BLM to provide verbal and/or written comments during the planning process, which helped to develop this Approved Plan. Six of the original ten cooperating agencies were concerned with the management of the resources and uses in the eastern Arizona Strip District, including Vermilion Cliffs National Monument, and provided planning information on various planning topics, including Geographic Information System data. The six entities that signed MOUs to be cooperating agencies with the BLM for this planning effort are listed below:

- Coconino County, Arizona
- Kane County, Utah
- Kaibab Paiute Tribe
- AGFD
- U.S. Federal Highway Administration
- Arizona Department of Transportation

In addition, representatives from other interested federal and state agencies and one tribe were provided planning information and were given the opportunity to comment on preliminary drafts of the FEIS and Approved Plan. Some attended the cooperating agency meetings and provided verbal and/or written comments. These entities were as follows:

- Arizona State Land Department
- NPS: Grand Canyon National Park, Glen Canyon NRA, Pipe Spring National Monument
- BLM: Kanab Field Office, Grand Staircase-Escalante National Monument
- Department of Defense, Air Force Regional Environmental Office, San Francisco, California
- USFWS, Arizona Ecological Services Field Office, Flagstaff and Phoenix, Arizona
- U.S. Forest Service (USFS); North Kaibab Ranger District, Kaibab National Forest
- Hopi Tribe

The planning team also initiated consultation with American Indian tribes and bands who have oral traditions and historical or cultural concerns relating to the Monument, or who are documented as having occupied or used portions of the Monument during prehistoric or historic times. In January 2002, the BLM initiated consultation with 14 tribes or bands. Of these, six tribes or bands, which include five bands within the Paiute Indian Tribe of Utah and six chapters within the Navajo Nation, use or have concerns regarding the resources of the Monument. All of the consulted tribes or bands currently live on or near the Monument or have historic ties to the area. Some continue to use the resources in the Monument. These tribes, bands, and chapters include:

- Hopi Tribe
- Kaibab Band of Paiutes
- Navajo Nation (Cameron, Coppermine, Bodaway/Gap, Tuba City, LeChee, and Coalmine Chapters)
- Paiute Indian Tribe of Utah (Indian Peak, Cedar, Shivwits, Koosharem, and Kanosh Band of Paiutes)
- Pueblo of Zuni
- San Juan Southern Paiute Tribe

Tribal members expressed concern for the natural and cultural resources on the Monument, access to and use of these resources, and management of these resources on public lands.

The Bureau of Applied Research and Anthropology at the University of Arizona in Tucson conducted a Southern Paiute ethnographic and place name study on the Arizona Strip in conjunction with this planning effort (Stoffle et al. 2004, 2005).

The BLM administers livestock grazing and minerals on Glen Canyon NRA, subject to Glen Canyon NRA policy and enabling legislation (see discussion below on administration of livestock grazing within the NRA). The planning team met several times with Glen Canyon NRA staff and received input from them regarding the management of livestock grazing, minerals, other natural and cultural resources, and specific route designations near Glen Canyon NRA boundaries.

Other Stakeholder Relationships

Various other groups also played a vital role in the planning process. Their participation was informal and infrequent. One of these groups, the Arizona Strip Alliance, was formed in the late 1990s in response to the early discussions regarding the establishment of the Monument on the Arizona Strip. Local communities, counties, and agency representatives from southern Utah and northern Arizona united in order to plan on a regional scale. Employees from BLM's planning team attended Alliance meetings and kept members up-to-date on current planning efforts.

The Arizona Wilderness Coalition, Grand Canyon Chapter of the Sierra Club, Wilderness Society, Grand Canyon Wildlands Council, and Grand Canyon Trust are other groups that played an important role in the planning process. Grand Canyon Trust acquired the Kane and Two Mile Ranches midway through the planning effort and provided recommendations on future management of livestock grazing and the natural and cultural resources in the Monument. These groups all provided major contributions in the development of this Approved Plan including public scoping comments recommending a transportation plan, additional WSAs, information on the effects of transportation systems on wildlife, and other planning and resource information and recommendations.

In order to address the specific needs of wildlife, fish, and special status plants and animals, a group of biologists and botanists met to develop specific guidance and direction to meet those needs for this Approved Plan. Team participants included staff from the AGFD, USFWS, North Kaibab Ranger District of the USFS, and Arizona Strip District BLM. Major contributions from this team included the development of a comprehensive resource assessment for wildlife and special status species, background information on the biology of a variety of species affected by the Approved Plan, and a set of proactive decisions. The team also provided comments and recommendations on the route designations, vegetation management, and other sections of the Approved Plan.

ADMINISTRATION OF GRAZING WITHIN GLEN CANYON NATIONAL RECREATION AREA

Glen Canyon NRA was established on October 27, 1972, under Public Law (P.L.) 92–593. In establishing Glen Canyon NRA, Congress directed that, “The administration of... grazing leases within the recreation area shall be by the BLM. The same policies followed by the BLM in issuing and administering... grazing leases on other lands under its jurisdiction shall be followed in regard to lands within the boundaries of the recreation area, subject to provisions of Section 3(a) and 4 of this Act.” The BLM administers grazing on the NRA subject to this enabling legislation and in accordance with the NRA General Management Plan, Grazing Management Plan, and interagency agreements, and MOUs. The Monument administers livestock grazing on three allotments that occur on public lands and within Glen Canyon NRA: the Ferry Swale, Wahweap, and Bunting Well allotments.

RELATED PLANS

Title II, Section 202 of FLPMA provides guidance for the BLM’s planning process to coordinate planning efforts with American Indian tribes, other Federal departments and agencies, and agencies of state and local governments. To accomplish these directives, the BLM has kept abreast of state and local plans, assured that consideration is given to such plans, and worked with these other entities to avoid inconsistencies among their various plans. Section 202 of FLPMA goes on to state in Subsection (c)(9) that “[L]and use plans of the Secretary under this section shall be consistent with state and local plans to the maximum extent he [sic] finds consistent with federal law and the purposes of this Act.”

In keeping with the above mandates, members of the planning team reviewed the Federal, county, and municipal plans listed below for consistency:

- Coconino County, Arizona, Comprehensive Plan (Coconino County 2003)
- Kane County, Utah, General Plan (Kane County 1998)
- Glen Canyon NRA RMP (NPS 1986)
- Glen Canyon NRA GMP (NPS 1979, reprinted 1991)
- Grand Canyon National Park GMP (NPS 1995)
- Colorado River Management Plan (NPS 2006)
- Grand Staircase Escalante National Monument Management Plan (BLM 2000)
- AGFD Strategic Plan (AGFD 2006)
- Paria Management Framework Plan (BLM 1981)

OVERALL VISION

A vision, as used in this context, is an ideal to strive for which is not quantifiable or set to a specific time frame. A goal is a statement of a desired outcome that often has quantifiable measures and established time frames for achievement.

The vision for the Monument is to retain, where it currently exists, the present natural and socially remote nature of the Monument while still allowing compatible human use to occur within “the place where the West stays wild.”

PURPOSE, SIGNIFICANCE AND MISSION STATEMENTS

Purpose, significance, and mission statements clarify the intent of the Monument proclamation and are used to shape the development of this Approved Plan. Purpose statements clarify why the Monument was set aside for special management. Significance statements address what makes the area unique, and mission statements reflect ideal conditions that managers should strive to attain.

Purpose

The Monument was set aside to retain for scientific inquiry, long-term preservation, and public use and enjoyment for present and future generations, well-preserved examples of scientific and historic objects of interest and to protect those objects from location or settlement and from unauthorized appropriation, injury, destruction, or removal. Those objects include:

- Sandstone slick rock, rolling plateaus, and brilliant cliffs with arches, amphitheaters, and massive walls
- Archaeological evidence displaying a long and rich human history spanning more than 12,000 years
- Historic resources, including evidence of early European exploration, ranches, homesteads, mines, and roads
- Remote and unspoiled landscape with limited travel corridors
- Cold desert flora and warm desert grassland
- Wildlife including California condors, bighorn sheep, pronghorn antelope, mountain lions, raptors, and fish
- The Paria River and widely scattered ephemeral water sources and springs

Significance

The geologic structure, stratigraphy, and erosional processes within the Monument have combined to create unique landforms of incredible shape, color, and beauty, which draw visitors from around the world.

The Monument contains irreplaceable archaeological resources of Archaic, Ancestral Puebloan, and Southern Paiute origin. These resources are significant because of their abundance, good condition, and scientific potential.

Historic resources, such as ranch structures and corrals, fences, water tanks, mines, and historic routes, exist in nearly their original context. They provide a unique opportunity for public interpretation and education of the historical and social significance of these early lifestyles.

The Monument is a remote and sparsely developed landscape. It supports ecological processes that provide opportunities to study functioning physical and natural systems.

The Monument provides a sense of solitude in natural settings that provide for rugged recreation opportunities.

Mission

The Monument is a model of land management for conserving natural, scientific, and historic resources within their broader ecological and social contexts. The goal of Monument management is to achieve the following:

1. Management decisions about resources and visitors are based on scientific information and monitoring.
2. The variety of natural and social settings are managed to preserve the remote and essentially unspoiled character of the landscape while providing opportunities for people, communities, and the environment to benefit from visitors experiencing adventure, beautiful vistas, retreat from the pressures of modern life, and a sense of discovery through a variety of appropriate and sustainable backcountry activities.
3. The public receives the information they need to have a safe and enjoyable experience.
4. A new, collaborative process provides clear direction for management.
5. Sustainable ranching operations and associated activities showcase the Monument's traditional lifestyles and enhance visitor experience.

6. New infrastructure is the minimum necessary and is of consistent quality to provide for visual enjoyment, public safety, and the protection of Monument values.
7. Management of habitats that support sustainable levels of a full range of native species, including predators, is emphasized. Recovery and protection of special status species is a primary focus.
8. The public understands and appreciates the purposes and significance of the Monument.

CHAPTER 2: THE PLAN

INTRODUCTION

This chapter describes desired future conditions (DFCs) and actions to fulfill the management direction discussed in Chapter 1. This chapter is arranged under the main headings of Management Units, Management Decisions, Decision Tables (the decisions), Administrative Actions, Environmental Analysis and Interrelationships, and Public Involvement. The management units described below were used to guide development of the management decisions made in Vermilion Cliffs National Monument (the Monument).

MANAGEMENT UNITS

Management units are geographic areas with similar resource management goals (See Map 2.1). Four management units (Community, Corridors, Back Roads, and Outback) guide land use plan decisions in specific geographic areas with similar landscapes, resources, and resource uses in the Monument.

The polygons that outline the location of the four management units are identical to the travel management areas (TMAs; see Map 2.13). The corresponding TMAs for each management unit are shown below in parentheses after the management unit name. Travel Management Areas, however, describe areas delineated for varying types of access, while management units are not land use allocations or decisions. This does not diminish their value as management tools as they assisted in better understanding the differing areas and associated uses and resources in the Monument.

Improvements (facilities or projects) associated with valid, existing rights and permitted uses can occur in any management unit, though the influence they have on the landscape character may vary greatly. Facilities include, but are not limited to transmission lines, communications facilities, and kiosks. Projects can include, but are not limited to corrals, catchments, pipelines, fences, wells, and troughs.

COMMUNITY MANAGEMENT UNIT (RURAL TRAVEL MANAGEMENT AREA)

No Monument lands are found in the Community Management Unit. A limited number of acres in the management unit can be found adjacent to the southeast boundary of the Monument within the Marble Canyon area and the Community Management Unit found in the Arizona Strip Field Office (FO) near this area. For management decisions in these lands adjacent to the Monument, see the Arizona Strip FO Resource Management Plan (Bureau of Land Management [BLM] 2008).

Map 2.1. Management Units

CORRIDORS MANAGEMENT UNIT (BACKWAYS TRAVEL MANAGEMENT AREA)

Lands within the Corridors Management Unit occur along major travel routes, providing, among other things, access to the Back Roads and Outback management units. They offer a variety of recreation opportunities, such as viewing scenery, riding motorcycles/off-highway vehicles (OHVs), vehicle touring, flying aircraft, hiking and walking, bicycling, horseback riding, camping, picnicking, hunting, studying nature, using interpretive services, and participating in compatible organized events. Such activities occur with a moderate frequency of interaction with other people. These areas also provide the most opportunities for short-term or day-use recreation activities related to vehicle touring.

Predominantly natural-appearing environments with moderate evidences of the sights and sounds and uses of others characterize the Corridors Management Unit. Some modifications to the landscape can occur, but not to the exclusion of the protection of visual, natural, and cultural resources and uses. Only 2 percent of Monument lands are in the Corridors Management Unit, mainly along House Rock Valley Road at the western edge of the Monument. In addition, lands along Highway 89 adjacent to the southern edge of the Monument are within this management unit.

BACK ROADS MANAGEMENT UNIT (SPECIALIZED TRAVEL MANAGEMENT AREA)

Lands within the Back Roads Management Unit provide a variety of dispersed recreation opportunities such as viewing scenery, riding motorcycles/OHVs, vehicle touring, hiking and walking, bicycling, horseback riding, camping, picnicking, hunting, studying nature, using interpretive services, and participating in compatible organized events. Such activities occur with low to moderate frequency of interaction with other people. While concentration of users would be low, evidence of other users would be relatively high.

Lands identified within the Back Roads Management Unit are characterized by predominantly natural or natural-appearing environments of moderate to large size with moderate probabilities of experiencing isolation from the sights and sounds of other people. These natural appearing landscapes and open spaces contribute to high-quality visitor experiences. Some modifications to the landscape could be expected, but would be tempered by the need to protect important resources. Approximately 33 percent of public lands in the Monument are within the Back Roads Management Unit.

OUTBACK MANAGEMENT UNIT (PRIMITIVE TRAVEL MANAGEMENT AREA)

Lands within the Outback Management Unit provide opportunities for undeveloped, primitive, and self-directed recreation opportunities such as viewing scenery, hiking and walking,

horseback riding, backpacking, hunting, studying nature, canyoneering, and rock climbing. The frequency of interaction with other people is low and evidence of other users is minimal.

Lands classified as within the Outback Management Unit are characterized by predominantly natural or natural-appearing environments of moderate to large size. The lowest level of landscape modifications is expected compared to the other management units. Remote settings, natural landscapes, solitude, and opportunities for primitive recreation are minimally impacted by human activity. Approximately 65 percent of public lands in the Monument are within the Outback Management Unit.

MANAGEMENT DECISIONS

This section of the Approved Plan presents the goals, DFCs, special designations, land use allocations, management actions, and implementation decisions established for public lands within the Monument.

Goals for the Monument include:

1. The variety of remote natural and social settings will be managed to preserve essentially natural appearing landscapes. Visitors will have the opportunity to experience adventure, beautiful vistas, retreat from the pressures of modern life, and a sense of discovery through a variety of appropriate and sustainable outdoor recreation activities and travel modes.
2. The proclamation for the Monument and its purpose, significance, and mission statements will guide management of the Monument. The National Monument is the dominant reservation for the public lands within the Monument.
3. The BLM will manage Monument lands for the benefit of local, regional, national, and international publics to provide recreational, scientific, commercial, social, and traditional uses while protecting the objects and context that supports them as required under the Antiquities Act and the proclamation.
4. The BLM will provide long-term protection and sustain the health and diversity of the public lands and resources that they manage for the use and enjoyment of present and future generations.
5. The BLM will work cooperatively with local, regional, state, county, and Federal agencies; tribes; communities; user groups; universities; researchers; and the interested public to achieve the above goals.

LAND USE PLAN DECISIONS

Land use plan decisions represent the desired outcomes and the actions needed to achieve them. Development of these decisions used the planning process found in 43 Code of Federal Regulations (CFR) 1600, which guide future land management actions and subsequent site-specific implementation decisions.

Many land use plan decisions are implemented or become effective upon approval of the management plan and may include DFCs, land use allocation, or designation decisions such as OHV-area designations. Management actions that require additional site-specific project planning as funding becomes available will require further environmental analysis. Decisions to implement site-specific projects are subject to administrative review at the time such decisions are made. The BLM will continue to involve and collaborate with the public during implementation of this Approved Plan.

Desired Future Conditions

Land use plans express DFCs 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, BLM state director guidance, and other resource or social needs. The allocations or designations, actions to achieve the DFCs, restrictions on uses, allowable uses, and special designations are the decisions that allow the BLM to work toward achieving the DFCs.

Special Designations

Special designations include those designated by Congress for special protection, such as wilderness areas or national historic or scenic trails. Such designations are not 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 ACECs, watchable wildlife viewing sites, etc.) are also considered special designations and can be made in the land use plan.

Allowable Uses (Land Use Allocations)

Allowable uses or land use allocations are land use plan decisions that set apart geographic areas for specific resources or uses, such as areas where wildland fire is not desired, lands available or not for livestock grazing, or where OHV-designated areas are necessary. Allocations have geographic boundaries and are represented by polygons on maps in the land use plan. The management of allocated resources is described through the decisions proposed later in this

chapter. It is common for specific resource or use allocations to overlap with other resource or use allocations.

Management Actions

Management actions set the framework that allows achievement of the DFCs. Management actions are categorized as actions to achieve desired outcomes, including actions to maintain, restore, or improve land health.

IMPLEMENTATION DECISIONS

Implementation decisions are management actions tied to a specific location. For the BLM, these are decisions that take action to implement land use plan decisions and are generally appealable to the Interior Board of Land Appeals (IBLA) under 43 CFR 4.410. Implementation or activity level decisions generally constitute BLM's final approval allowing on-the-ground actions to proceed. These types of decisions require appropriate site-specific planning and National Environmental Policy Act (NEPA) analysis. They may be incorporated into implementation plans (activity or project plans) or may exist as stand-alone decisions.

Unlike land use plan decisions, BLM implementation decisions are not subject to protest under the planning regulations. Instead, implementation decisions are subject to various administrative remedies, particularly appeals to the IBLA.

DECISION TABLES

The management decisions (DFCs, special designations [SDs], land use allocations [LAs], and management actions [MAs]) and implementation decisions (IMPLs) under the Approved Plan for the Monument are presented in the following decision tables (Tables 2.1 –2.17). Each decision is numbered and arranged by specific resources and resource uses, and assigned one of the following codes:

- CL = Cultural Resources
- FM = Wildland Fire/Fire and Fuels Management
- GL = Geology and Paleontology
- GM = Livestock Grazing
- HM = Public Health and Safety
- LR = Lands and Realty
- MI = Minerals
- RR = Recreation and Visitor Services/Interpretation and Environmental Education
- RP = Riparian Ecological Zone
- HT = National Historic Trail

- SN = Soundscapes
- SR = Scientific Research
- TE = Special Status Species
- TM = Travel Management
- VM = Vegetation
- VR = Visual Resources
- WC = Wilderness Characteristics
- WF = Wildlife and Fisheries
- WM = Wilderness
- WR = Wild and Scenic Rivers
- WS = Air, Water, and Soils

Area and length figures referenced in Tables 2.1 – 2.17 and throughout this document are based on the best available Geographic Information System (GIS) data at the time of publication. These figures are based on the Universal Transverse Mercator Zone 12 projection referencing the North American Datum of 1983. Analysis and calculation have been made on various GIS layers, which may or may not correspond to each other. Differences in area or length correlations between the various calculations in this document are due to minor discrepancies between GIS layers.

Acreage numbers provided for Vegetation and Fire and Fuels Management decisions were generated as actual acres treated or by specialists' projections based on available habitat. They are not GIS generated numbers.

TABLE 2.1. AIR, WATER, AND SOILS (WATERSHED: WS)	
Decision #	Decision Text
AIR MANAGEMENT	
A. DESIRED FUTURE CONDITIONS	
DFC-WS-01	Federal and State air quality standards will be maintained within the Monument.
B. MANAGEMENT ACTIONS	
MA-WS-01	Impacts to air quality will be prevented or reduced through the application of specific mitigation measures identified in activity level planning and NEPA review.
WATER MANAGEMENT	
A. DESIRED FUTURE CONDITIONS	
DFC-WS-02	All surface water will meet Arizona State water quality standards.
DFC-WS-03	Surface water availability at seeps and springs will be appropriate for the soil type, climate, and landform.
DFC-WS-04	Ecological functions and processes will be intact at all seeps and springs.
DFC-WS-05	Flowing water systems will provide continuous flowing water and associated riparian vegetative cover, where possible.
DFC-WS-06	The natural hydrologic functions of all watersheds will be intact.
B. MANAGEMENT ACTIONS	
MA-WS-02	Impacts to water quality will be prevented or reduced through the application of specific mitigation measures identified in activity level planning and NEPA review.
MA-WS-03	The BLM will file for water rights in accordance with State of Arizona water laws on available water sources for recreational use, wildlife, livestock, administrative uses, and in-stream flows, subject to funding/staffing constraints.
MA-WS-04	Natural values associated with floodplains and wetlands will be restored and preserved by avoiding floodplain occupancy and development. If development or occupancy is necessary, impacts will be mitigated through consulting and permitting with appropriate agencies.
MA-WS-05	The BLM will continue to work with appropriate state authorities to ensure that necessary water resources are available.

SOIL MANAGEMENT	
A. DESIRED FUTURE CONDITIONS	
DFC-WS-07	Soils will exhibit infiltration, permeability, and erosion rates appropriate for the soil type, climate, and landform.
DFC-WS-08	Physical soil crusts will show an increase in organic cover including cryptobiotic colonies, moving them towards being organic crusts.
B. MANAGEMENT ACTIONS	
MA-WS-06	<p>Surface disturbance and reclamation activities will proceed consistent with current permits and subject to the following:</p> <ul style="list-style-type: none"> • Arizona Standards for Rangeland Health will be followed to maintain or improve soil conditions. • Activities will be the minimum necessary to accomplish the task. • Reclamation will be required for road realignments. • Measures to stabilize soils and minimize surface water runoff will be required, both during project activities and following project completion. • Reclamation of all surface disturbances will be initiated during or immediately upon completion of the authorized project. Reclamation can include re-contouring the disturbed area to blend with the surrounding terrain, ripping compacted areas, replacement of topsoil, seeding, planting, and/or providing effective ground cover. • All temporary roads will be closed and reclaimed immediately upon completion of the project. Reclaimed roads can be barricaded or signed until reclamation objectives are achieved. • Facilities or improvements no longer necessary will be removed and the sites will be reclaimed, provided no historic properties are affected.
MA-WS-07	Restoration and reclamation actions will be consistent with vegetation management decisions for each Ecological Zone.
MA-WS-08	Emphasis for management of all grazing allotments in Watershed Condition Class IV is to reduce erosion and improve the watershed condition class. Evaluations will be completed through the Arizona Standards for Rangeland Health. More detailed assessments of watershed condition will be done in priority watersheds, subject to funding/staffing constraints in the watershed program.
MA-WS-09	All watersheds in the Monument will be priority for assessment, treatments, and/or restrictions on use to reduce erosion.

TABLE 2.2. GEOLOGY AND PALEONTOLOGY (GL)	
Decision #	Decision Text
A. DESIRED FUTURE CONDITIONS	
DFC-GL-01	Paleontological resources will be managed for their scientific, educational, and recreational values.
DFC-GL-02	Geological and paleontological Monument objects will be protected. These may include all vertebrate or uncommon invertebrate fossils or localities and relevant and highly visible geological features and formations.
B. LAND USE ALLOCATION	
LA-GL-01	<p>Areas will be classified according to their potential to contain vertebrate fossils or noteworthy occurrences of invertebrate or plant fossils. These Paleontological Sensitivity Classes are:</p> <ul style="list-style-type: none"> • 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.
C. MANAGEMENT ACTIONS	
MA-GL-01	The BLM will identify and protect significant fossils and allow for scientific research at paleontological sites, in accordance with permitting procedures.
MA-GL-02	Should paleontological resources be discovered within the Monument, the sites will be evaluated for sensitivity. The sites will then be classified and managed consistent with the land use allocation classifications described above in Table 2.3.
MA-GL-03	The collection of any objects in the Monument, including paleontological resources (such as fossils or track ways) or rock specimens is not authorized, except by permit for scientific research or use.
MA-GL-04	Prior to authorizing land uses in any Class 4 areas, a records search and paleontological survey and/or monitoring will be required so that impacts to vertebrate fossils and/or uncommon invertebrate fossils can be minimized or mitigated.
MA-GL-05	Adverse impacts to vertebrate and/or uncommon invertebrate paleontological resources will be mitigated.

CAVE AND KARST RESOURCES	
A. DESIRED FUTURE CONDITIONS	
DFC-GL-03	Significant cave and karst resources will be protected.
B. MANAGEMENT ACTIONS	
MA-GL-06	All caves and karst features are considered significant, if they meet the criteria defined in 43 CFR Part 37.
MA-GL-07	Cave and karst resources will be evaluated to determine proper and needed protective measures to ensure their continued viability. Protective measures can include restricting surface disturbing activities, limiting fire suppression, controlling visitor use, and restricting management actions.

TABLE 2.3. VEGETATION AND FIRE AND FUELS MANAGEMENT (VM, FM, RP)	
Decision #	Decision Text
ALL ECOLOGICAL ZONES (see Map 2.2)	
A. DESIRED FUTURE CONDITIONS	
DFC-VM-01	All watersheds will meet, or will be progressing towards meeting, the Standards for Rangeland Health (see Chapter 2 text and Appendix C).
DFC-VM-02	Native vegetative communities will be protected, including those considered Monument objects. A mosaic of native perennial and non-invasive annual vegetative communities will be present across the landscape with diversity of species, canopy, density, and age class reflecting its local ecological site potential and naturally occurring habitat conditions.
DFC-VM-03	Vegetative communities will provide sufficient plant cover and litter accumulation to protect soils from wind and water erosion and enhance nutrient cycling and productivity, even during drought years.
DFC-VM-04	Ecological processes and functions will be protected, enhanced, and/or restored by allowing tools that are necessary and appropriate to mitigate adverse impacts of allowable uses and undesirable disturbances, and contribute to meeting the Standards for Rangeland Health and enhance Monument values.
DFC-VM-05	Invasive plant species will be contained, controlled, or eliminated and native species restored to meet desired plant community objectives.
DFC-VM-06	Each vegetation community is maintained within its natural range of variation in plant composition, structure, and function.
Wildland Fire (see Map 2.3)	
DFC-FM-01	Loss of key ecosystem components to wildfire will be minimized.
DFC-FM-02	Fire return intervals and natural disturbances will be appropriate for the ecological site.
DFC-FM-03	Fire is recognized as a natural process in fire-adapted ecosystems and is used to achieve objectives for other resources.
DFC-FM-04	Fuels in Wildland-Urban Interface (WUI) areas are maintained at non-hazardous levels to provide for public and fire fighter safety.
DFC-FM-05	Prescribed fire activities comply with Federal and State air quality regulations.
DFC-FM-06	Fuel loads are maintained below levels that are considered to be hazardous.
B. LAND USE ALLOCATIONS	
Wildland Fire Use Areas	
LA-FM-01	In Wildland Fire Use: Areas Suitable for Wildland Fire Use for Resource Management Benefit where fuel loading is high and current conditions constrain the use of fire (prescribed fire and fire use), prevention and mitigation programs will be emphasized to reduce unwanted ignitions and use mechanical, manual, chemical, or biological treatments to reduce fuel loads and meet resource objectives. Where conditions allow, consistent with land use allocations, naturally ignited wildland fire, prescribed fire, and a combination of mechanical, manual, chemical, and biological treatments will be used to maintain non-hazardous fuel levels, reduce the hazardous effects of unplanned wildland fires, achieve DFCs, and meet resource objectives (See BLM Fire Amendment and Fire Management Plan and Map 2.3 for wildland fire use allocations).

TABLE 2.3. VEGETATION AND FIRE AND FUELS MANAGEMENT (VM, FM, RP)	
Decision #	Decision Text
	<u>Wildland Fire Use</u> areas include Riparian, Great Basin, Grassland, and Colorado Plateau Transition Ecological Zones, and WUI areas (depending on the surrounding vegetation, fuel loads, and other factors as determined in the BLM Fire Amendment and BLM Fire Management Plan). Wildland fire use in the riparian ecological zone will only be considered in areas where riparian restoration is planned, where fire use helps meet restoration objectives (e.g., reduce exotic vegetation), and where subsequent restoration work is implemented (e.g., planting native vegetation)
Non-Wildland Fire Use Areas (see Map 2.3)	
LA-FM-02	In <u>Non Wildland Fire Use: Areas Not Suitable for Wildland Fire Use for Resource Management Benefit</u> , programs to reduce unwanted ignitions will be implemented, and prevention, detection, and rapid suppression response techniques will be emphasized. Where fuel loading is high, mechanical, manual, chemical, or biological treatments and prescribed fire will be used to maintain non-hazardous levels of fuels and meet resource objectives. <u>Non Wildland Fire Use</u> areas will include WUI areas (depending on the surrounding vegetation, fuel loads, and other factors as determined in the BLM Fire Amendment and BLM Fire Management Plan).
Fire Suppression	
LA-FM-03	Appropriate Management Response (AMRs) for managing wildland fires will be used (as identified in the BLM Fire Amendment and the BLM Fire Management Plan). The AMR is based on firefighter and public safety and objectives and constraints derived from the fire management allocations (Wildland Fire Use, Non Wildland Fire Use), relative risk to natural and cultural resources, DFCs, fire management unit objectives, potential complexity, the ability to defend management boundaries, and costs of protection. AMRs will be used in areas classified as Wildland Fire Use and Non Wildland Fire Use.
LA-FM-04	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 will be based on the values to be protected, human health and safety, and costs of protection.
LA-FM-05	Education, enforcement, and fire prevention mitigation measures will continue to be provided to reduce unplanned human-caused fires.
LA-FM-06	Prescribed fire and fire use will be used in areas classified as Wildland Fire Use within designated wilderness to achieve DFCs and wilderness area management objectives described in the BLM's Fire Management Plan. Vegetation can also be treated manually if minimum tool requirements are met.
LA-FM-07	Minimum impact suppression tactics will be used in designated wilderness.
LA-FM-08	Conservation measures described in Appendix G will be implemented for all fire suppression, restoration and rehabilitation, fuels treatments, prescribed burning, and other fire related actions in special status species habitats.
LA-FM-09	Suppression tactics that limit damage or disturbance to sensitive vegetation, soils, and wildlife habitat will be used. The use of heavy equipment, such as dozers, will require approval from the authorized officer.

TABLE 2.3. VEGETATION AND FIRE AND FUELS MANAGEMENT (VM, FM, RP)	
Decision #	Decision Text
LA-FM-10	Prescribed fire and fire use can be used within designated wilderness areas where the areas have been classified as Wildland Fire Use to achieve DFCs and wilderness management objectives. Selection of vegetation treatment methods in designated wilderness will be consistent with minimum tool requirements and non-impairment standards (See decisions relating to Wilderness in Special Designations section).
C. MANAGEMENT ACTIONS	
Desired Plant Community Objectives	
MA-VM-01	Seasonal restrictions, temporary reductions, or elimination of authorized activities will be implemented in conjunction with vegetation treatment projects to protect sensitive resources and/or ensure attainment of Desired Plant Community (DPC) objectives.
Vegetative and Restoration Treatments	
MA-VM-02	Restoration and vegetation treatments will be authorized where protection of sensitive resources is ensured. Priority areas for restoration or vegetative treatment projects will be defined by ecological zone and major vegetation type and based on the following criteria: <ul style="list-style-type: none"> • To increase indigenous rare or uncommon species; • Where soil productivity has been reduced due to removal of soil organic matter or active erosion; • Where vegetative cover is inadequate to prevent soil erosion; • To improve habitat conditions for wildlife and/or special status species; • To restore degraded, drought-stricken, weed infested, or otherwise unhealthy areas; • To maintain previously treated areas; • To achieve DPC objectives; and • To meet activity plan objectives.
MA-VM-03	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 may be used where native species: <ul style="list-style-type: none"> • Are not available, • Are not economically feasible, • Cannot achieve DFCs, DPCs, or other ecological objectives as well as non-native species, and/or • Cannot compete with already established non-native species. Non-native forbs and perennial grasses can be used in preference to monocultures of non-native annuals.
MA-VM-04	The development of site-specific DPC objectives, in accordance with ecological site potential, will continue. DPC objectives will be achieved through vegetation treatments and management of resource uses. DPC objectives will be included in all appropriate activity plans, including AMPs.

TABLE 2.3. VEGETATION AND FIRE AND FUELS MANAGEMENT (VM, FM, RP)	
Decision #	Decision Text
MA-VM-05	Treatment methods and tools appropriate to the land use allocation and protection of Monument objects can be authorized to achieve DFCs and DPCs. Treatment methods can include, but are not limited to mechanical, chemical, biological and fire, or any combination thereof. Vegetation treatments and uses will be monitored as part of an adaptive management process. Seed priming and other enhancement techniques can be used to increase germination rates. Treatments will be designed so that they do not encourage an increase in any invasive species (See Appendix F for a list of potential methods and tools).
Sale or Use of Vegetation Products	
MA-VM-06	No areas are allocated to sustained yield timber harvest.
MA-VM-07	Fees or permits will not apply for the collection of pinyon pine seeds (pine nuts) for non-commercial, personal use.
MA-VM-08	Collection of listed, proposed, or candidate plant species is not authorized.
MA-VM-09	Fees may not apply for non-commercial, personal use quantities of items necessary for traditional, religious, or ceremonial purposes, such as herbals, medicines or traditional use items.
MA-VM-10	Gathering of dead and downed wood for campsite use is authorized in areas where campfires are allowed.
MA-VM-11	The Monument is closed to the sale of vegetative products.
MA-VM-12	The BLM will authorize limited harvest of posts and/or poles for on-site administrative purposes.
Salvage of Vegetation	
MA-VM-13	Salvage of vegetation that will be destroyed through surface disturbing activities may be authorized where doing so assists in achieving DPCs. Salvage and use will be allowed in the following priority (may require a permit from the State of Arizona): <ul style="list-style-type: none"> • Removal and maintenance for replanting during rehabilitation of the site being disturbed. • Removal and transplanting out of the area to be disturbed, especially to an area needing rehabilitation. • Removal and salvage by private individuals or to benefit the public (includes schools, churches, non-profit organizations).
Noxious Weeds	
MA-VM-14	Implementation of ongoing noxious weed and invasive species control actions will continue per national guidance and Weed Man. Area Plan. Integrated weed management will continue using available tools to control noxious weeds consistent with vegetation management decisions for each Ecological Zone as appropriate to the land use allocation and in order to protect resources and Monument values.
MA-VM-15	Certified weed-free feed, mulch, and seed is required for all permitted uses to limit the spread of noxious weeds and other undesirable species (See Livestock Grazing and Recreation and Visitor Services decisions).
MA-VM-16	Construction equipment, fire vehicles, and/or vehicles from outside the Monument used to implement authorized projects and/or uses are required to be cleaned (using air, low pressure/high volume, or high-pressure water) prior to initiating the project. BLM vehicles will also be cleaned after being used within any infested area. As national policy is developed, the more stringent will be implemented. Vehicles leaving the area and later returning to continue the project will require re-cleaning.

TABLE 2.3. VEGETATION AND FIRE AND FUELS MANAGEMENT (VM, FM, RP)	
Decision #	Decision Text
RIPARIAN ECOLOGICAL ZONE (see Map 2.2)	
A. DESIRED FUTURE CONDITIONS	
DFC-RP-01	Riparian areas will consist of a diversity of vertical and horizontal structures, vegetative age classes, and endemic species.
DFC-RP-02	Riparian areas will be protected, enhanced, and/or restored by allowing tools that are necessary and appropriate to mitigate adverse impacts of allowable uses and undesirable disturbances, and contribute to meeting the Arizona Standards for Rangeland Health, and enhance Monument objects and values.
DFC-RP-03	Ecological functions and processes will be intact with vegetative species composition and cover appropriate to the site.
DFC-RP-04	Where sites have the potential for over-story vegetation, the canopy cover of over-story and under-story vegetation will be at, or approaching, maximum density.
DFC-RP-05	All riparian areas, including Monument objects, will be in, or moving towards, proper functioning condition.
DFC-RP-06	All surface water will meet, or be improving towards, Arizona State water quality standards.
DFC-RP-07	Flowing water systems will provide contiguous water and associated riparian vegetative cover, where possible.
DFC-RP-08	Availability of surface water at seeps and springs will be appropriate for the soil type, climate, and landform and will support a diverse population of endemic plant and wildlife species.
DFC-RP-09	A sufficient quantity of water with safe access for wildlife will be available, where appropriate.
DFC-RP-10	Riparian communities will provide habitat for common species such as rush, cottonwood, willow, and yellow-breasted chat, as well as rare species such as southwestern willow (SW) flycatcher, common black hawk, Lucy's warbler, and speckled dace where consistent with site potential.
DFC-RP-11	Invasive plants and animals such as tamarisk, Russian olive, and brown-headed cowbird will be reduced or eliminated.
B. MANAGEMENT ACTIONS	
MA-RP-01	<p>Habitat conditions at priority riparian areas will be maintained or improved. A preliminary list of priority riparian areas is in Chapter 3, Table 3.8 of the Arizona Strip Proposed Plan/FEIS, and will be appended as new areas are identified. Priority riparian areas meet two or more of the following criteria:</p> <ul style="list-style-type: none"> • Federal land with water rights. • Ecologically and economically feasible of reaching DFCs. • All riparian areas > or = to 0.5 acres in size. • Presence of special status species. • Presence of surface water and/or saturated soil. • Presence of riparian species.

TABLE 2.3. VEGETATION AND FIRE AND FUELS MANAGEMENT (VM, FM, RP)	
Decision #	Decision Text
	<ul style="list-style-type: none"> Distance to adjacent riparian areas greater than three miles.
MA-RP-02	The Riparian Ecological Zone will be managed for a mixture of herbaceous and woody vegetation in accordance with BLM’s policies on native and non-native species.
MA-RP-03	Vegetation treatments can be used in the Riparian Ecological Zone to enhance vegetative diversity, restore native plant communities, maintain or increase wildlife habitat, and reduce or eliminate hazardous fuels. Treatment priority areas will be where riparian areas are non-functional, functioning at risk with a downward trend, or dominated by invasive plant species.
MA-RP-04	A combination of wildland fire, fire use, prescribed fire, chemical, mechanical, and biological treatment methods can be used as appropriate within land use allocations and areas managed to maintain wilderness characteristics.
MA-RP-05	Prior to conducting vegetation treatments in the Riparian Ecological Zone, the area’s ability to serve as habitat for special status species will be evaluated. Treatments will not be authorized in occupied, SW flycatcher habitat unless such treatments provide long-term benefits to the species or its habitat, reduce fire frequency or intensity, or provide replacement habitat of a higher quality than that removed.
MA-RP-06	Up to 1,560 acres of Riparian Ecological Zone will be treated over the life of this Approved Plan (approx. 100% of available habitat).
Wildland Fire	
MA-FM-01	Based on total acres burned by wildland fires from 1984-2003, no wildland fires are anticipated during the life of the Approved Plan. Because this ecological zone contains flammable fuels, wildland fires may occur during the life of the Approved Plan. It is unknown how proposed vegetation treatments would affect total acres burned by wildland fires.
MA-FM-02	No post-fire rehabilitation is anticipated. If wildland fires occur, post-fire rehabilitation may be implemented to meet DFCs.
C. IMPLEMENTATION DECISIONS	
Paria River Invasive Plant Species Removal	
IMPL-RP-01	Using a minimum requirement analysis, appropriate tools to remove invasive plants such as tamarisk and Russian olive along the Paria River for the purpose of restoring ecological conditions and functions and reducing fuel hazards can be used.
IMPL-RP-02	Prescribed fire will be used on large patches of invasive plants, and helicopters can be used. Hand application of herbicides will be used in addition to burning and/or cutting to remove invasive species. Using minimum tools, minimal control lines will be constructed that will be rehabilitated upon completion of burning. The area will be hand seeded, as needed.
GREAT BASIN ECOLOGICAL ZONE (SAGEBRUSH COMMUNITIES: VM, see Map 2.2)	
A. DESIRED FUTURE CONDITIONS	
DFC-VM-07	Sagebrush (primarily <i>Artemisia tridentata</i>) communities will consist of a healthy, diverse mosaic of different height and age structures with a thriving community of native grasses and forbs. Mosaics may include stands of young and old sagebrush, openings (ranging from bare ground to short or sparse vegetation to high-density grasslands), wet meadows, seeps, healthy streamside (riparian) vegetation, and other

TABLE 2.3. VEGETATION AND FIRE AND FUELS MANAGEMENT (VM, FM, RP)	
Decision #	Decision Text
	interspersed shrub and woodland habitats.
DFC-VM-08	There will be no net loss of total acres within sagebrush communities (i.e., long-term or permanent removal from the landscape). A no net loss objective will not preclude restoration, rehabilitation, or related management actions.
DFC-VM-09	Treatment objectives in sagebrush communities will focus on restoring natural disturbance processes, such as by using fire, increasing vegetative ground cover of native grasses and forbs, and removing invasive non-native plants.
DFC-VM-10	Existing stands of sagebrush will have a balance between shrub and perennial grass cover, for open to moderate shrub canopy cover (5 to 25%), and multiple height classes. This mosaic will include young, sparse stands to support Vesper Sparrows and Lark Sparrows, and older, dense stands to benefit Brewer's sparrows, sage sparrows, black-throated sparrows, gray flycatchers, and sage thrashers.
DFC-VM-11	Sagebrush communities will include small, grassy openings to support long-billed curlews and burrowing owls.
DFC-VM-12	Sagebrush communities will include large, continuous blocks (≥ 300 acres) of unfragmented sagebrush habitat, including mosaics of open to moderate shrub canopy cover (5 to 25%) and multiple age and height classes to benefit sage-dependent species.
DFC-VM-13	Sagebrush communities will include openings of short vegetation surrounded by sagebrush for ground foraging by sage thrashers, loggerhead shrikes, Brewer's sparrows, and sage sparrows.
DFC-VM-14	Sagebrush communities will include openings of short vegetation (2 to 8 in.) with wide visibility to provide breeding habitat for long-billed curlews, and burrowing owls.
DFC-VM-15	Sagebrush communities will include native grass and forb cover in balance with open to moderate (5 to 25%) shrub canopy cover and within ecological site potential. Perennial grass components will be at or above 10%. Native forb composition will be at or above 5%.
DFC-VM-16	Fragmentation of sagebrush habitat will be less than 50% of the treatment area.
B. MANAGEMENT ACTIONS	
MA-VM-17	Vegetation treatments can be used in the Great Basin Ecological Zone to enhance vegetative diversity, restore native plant communities, maintain or increase wildlife habitat, and reduce or eliminate hazardous fuels. Treatment priority areas will be where sagebrush canopy cover exceeds 20%, perennial grasses and forbs are less than 5%, and bare ground exceeds 40%.
MA-VM-18	A combination of wildland fire, fire use, prescribed fire, and chemical treatment methods will be used in preference to, but not to the exclusion of, other available tools in the Great Basin Ecological Zone sagebrush communities.
MA-VM-19	Up to 100,000 acres of sagebrush habitat can be treated over the life of this Plan (approx. 52% of available habitat).
Wildland Fire	
MA-FM-03	Based on total acres burned by wildland fires from 1984-2003, no wildland fires are anticipated during the life of the Plan. Because this ecological zone contains flammable fuels, wildland fires may occur during the life of the Plan. It is unknown how proposed vegetation treatments will affect total acres burned by wildland fires.

TABLE 2.3. VEGETATION AND FIRE AND FUELS MANAGEMENT (VM, FM, RP)	
Decision #	Decision Text
MA-FM-04	No post-fire rehabilitation is anticipated. If wildland fires occur, post-fire rehabilitation may be implemented to meet DFCs.
GREAT BASIN ECOLOGICAL ZONE (PINYON-JUNIPER COMMUNITY: VM, see Map 2.2)	
A. DESIRED FUTURE CONDITIONS	
DFC-VM-17	Healthy, diverse woodland communities will consist of a mosaic of trees, shrubs, grasses, and forbs. Mosaic patches can include stands of young and old pinyon-juniper, openings, wet meadows, seeps, and other interspersed shrub habitats. The communities will be composed of a variety of different height structures and age classes, with a thriving understory community of native grasses, forbs, and shrubs.
DFC-VM-18	To reduce the threat of catastrophic fire, ladder fuels and downed woody debris will be limited or not present. Woody debris will be present to stabilize soil and enhance vegetation recovery in restoration areas.
DFC-VM-19	Treatment objectives in the pinyon-juniper vegetation communities will focus on restoring the natural disturbance regime; increasing vegetative ground cover of native grasses, forbs, and shrubs; and removing non-native invasive species.
DFC-VM-20	Stands of pinyon-juniper will include a balance between tree, shrub, and perennial grass cover to support pinyon jay and mule deer. This mosaic will include stands of old growth pinyon-juniper to support juniper titmouse; large openings of grasses, forbs and shrubs to support mule deer and provide foraging habitat for raptors such as sharp-shinned hawk, northern goshawk, Coopers hawk, American kestrel, and red-tailed hawk; and areas of sparse to dense tree canopy cover to support pinyon jay (See Fish and Wildlife decisions).
DFC-VM-21	Individual old growth trees will be present and will be protected during treatment implementation.
B. MANAGEMENT ACTIONS	
MA-VM-20	Vegetation treatments can be used in the Great Basin Ecological Zone to enhance vegetative diversity, restore native plant communities, maintain or increase wildlife habitat, and reduce or eliminate hazardous fuels. Treatment priority areas will be where juniper canopy cover exceeds 40%, perennial grasses and forbs are less than 5%, and bare ground exceeds 50%.
MA-VM-21	Treatment preferences will use a combination of wildland fire, fire use, prescribed fire, mechanical, and chemical methods.
MA-VM-22	Up to 50,000 acres of pinyon-juniper habitat can be treated over the life of this Approved Plan (approx. 28% of available habitat).
Wildland Fire	
MA-FM-05	Based on total acres burned by wildland fires from 1984-2003, approximately 34 acres of wildland fires are anticipated during the life of the Approved Plan. Because the size of individual wildland fires and the number of annual fires can vary greatly, this estimate can be exceeded. It is unknown how proposed vegetation treatments would affect total acres burned by wildland fires.
MA-FM-06	Up 34 acres of post-fire rehabilitation are anticipated to meet DFCs. Additional post-fire rehabilitation may be implemented, if wildland fires and fire use exceed the estimated acreage.

COLORADO PLATEAU TRANSITION ECOLOGICAL ZONE (see Map 2.2)	
A. DESIRED FUTURE CONDITIONS	
DFC-VM-22	Endemic plant species and associated communities such as fourwing saltbush, shadscale, and black brush, will be present along with other shrubs, grasses, and forbs. These communities can include stands of young and old shrubs, sparse vegetation, scattered to larger expanses of fourwing and black brush.
DFC-VM-23	Endemic animal species such as House Rock Valley chisel-toothed kangaroo rat, peregrine falcon, and desert bighorn sheep will be present and thriving with more than adequate food, water, and cover resources.
DFC-VM-24	There will be no net loss in acres of Transition plant communities (i.e., long-term or permanent removal from the landscape). A no net loss objective will not preclude restoration, rehabilitation, or related management actions.
DFC-VM-25	Management of the Colorado Plateau Transition Ecological Zone plant communities will focus on removing invasive non-native plants, especially cheatgrass and red brome, and preventing habitat degradation.
B. MANAGEMENT ACTIONS	
MA-VM-23	Vegetation treatments can be used in the Colorado Plateau Ecological Zone to enhance vegetative diversity, restore native plant communities, maintain or increase wildlife habitat, and reduce or eliminate hazardous fuels. No treatment priority criteria will be established for this Ecological Zone.
MA-VM-24	All available treatment methods can be used, alone or in combination, to achieve DFCs as defined for adjacent ecological zones.
MA-VM-25	Up to 30,000 acres of Colorado Plateau Transition Ecological Zone can be treated over the life of this Approved Plan (approx. 23% of available habitat).
Wildland Fire	
MA-FM-07	Based on total acres burned by wildland fires from 1984-2003, approximately 17 acres of wildland fire are anticipated during the life of the Approved Plan. Because the size of individual wildland fires and the number of annual fires can vary greatly, this estimate can be exceeded. It is unknown how proposed vegetation treatments would affect total acres burned by wildland fires
MA-FM-08	Up to 17 acres of post-fire rehabilitation are anticipated to meet DFCs. Additional post-fire rehabilitation may be implemented if wildland fires and fire use exceed the estimated acreage.
PLAINS-GRASSLAND ECOLOGICAL ZONE (see Map 2.2)	
A. DESIRED FUTURE CONDITIONS	
DFC-VM-26	Endemic plant species and associated communities such as galleta, sand dropseed, Indian ricegrass, blue grama, black grama, needle and thread grass, four-wing saltbush, shadscale, winterfat, and Mormon tea will be present, along with other shrubs, grasses, and forbs.
DFC-VM-27	Endemic animal species such as pronghorn antelope, Cassin's sparrow, and Brewer's sparrow will be present and thriving with more than adequate food, water, and cover resources.

DFC-VM-28	Grassland plant communities will be managed for no net loss (i.e., long-term or permanent removal from the landscape).
DFC-VM-29	A no net loss objective will not preclude restoration, rehabilitation, or related management actions.
DFC-VM-30	The Plains-Grassland Ecological Zone habitats will include a mosaic of grassland and shrub communities, varying age structure, sparse vegetation, scattered to larger expanses of separate grassland or shrub communities, or various mixes of these communities.
B. MANAGEMENT ACTIONS	
MA-VM-26	Vegetation treatments can be used in the Plains-Grassland Ecological Zone to enhance vegetative diversity, restore native plant communities, maintain or increase wildlife habitat, and reduce or eliminate hazardous fuels. Treatment emphasis will be to reduce the proliferation of non-indigenous, annual plants and improve pronghorn antelope habitat consistent with site potential.
MA-VM-27	Use of prescribed fire is authorized where doing so benefits priority species or their habitat or reduces fire frequency or intensity by removing hazardous fuels, consistent with land use allocations and minimum tool requirement for designated wilderness.
MA-VM-28	Treatment priority areas in the Plains-Grassland Ecological Zone will be where grasses and forbs are less than 5% and bare ground exceeds 45%.
MA-VM-29	Mechanical, chemical, or biological treatment methods will be used in preference to, but not to the exclusion of, other available tools in the Plains-Grassland Ecological Zone.
MA-VM-30	Up to 10,000 acres of Plains-Grassland Ecological Zone can be treated over the life of this Approved Plan (approx. 15% of available habitat).
Wildland Fire	
MA-FM-09	Based on total acres burned by wildland fires from 1984-2003, approximately 4,496 acres of wildland fires are anticipated during the life of the Approved Plan. Because the size of individual wildland fires and the number of annual fires can vary greatly, this estimate can be exceeded. It is unknown how proposed vegetation treatments would affect total acres burned by wildland fires.
MA-FM-10	Up to 4,496 acres of post-fire rehabilitation are anticipated to meet DFCs. Additional post-fire rehabilitation may be implemented if wildland fires and fire use exceed the estimated acreage.

Map 2.2. Ecological Zones on the Vermilion Cliffs National Monument.

Map 2.3. Wildland Fire Use Allocations

TABLE 2.4. FISH AND WILDLIFE (WF)	
Decision #	Decision Text
GENERAL FISH AND WILDLIFE	
A. DESIRED FUTURE CONDITIONS	
DFC-WF-01	Ecological conditions will be within the range of natural variability and will be functional for dependant animal species.
DFC-WF-02	Native wildlife communities will be protected, including those species considered Monument objects. A complete range of diverse, healthy, and self-sustaining populations of native animal species will occupy all available suitable habitats.
DFC-WF-03	Forage, water, cover, and space will be available to wildlife of sufficient quantity and quality to support productive and diverse wildlife populations.
DFC-WF-04	All waters will be safely accessible to wildlife.
DFC-WF-05	Fences will be the minimum necessary for effective livestock control or other administrative purposes. Fences will be wildlife passable, consistent with the species found in the area.
DFC-WF-06	Habitat connectivity and wildlife movement between ecological zones will be maintained.
DFC-WF-07	Adverse impacts to wildlife and wildlife resources will be avoided or mitigated.
DFC-WF-08	Predators will be recognized as an important component of plant and animal communities.
DFC-WF-09	Human/wildlife conflicts will be avoided, resolved, or mitigated.
DFC-WF-10	Management of game and nongame species by Arizona Game and Fish Department (AGFD) will be consistent with AGFD Strategic Plans and other appropriate guidelines.
DFC-WF-11	The natural biological diversity of fish, wildlife, and plant species will be maintained or, where necessary and feasible, restored throughout the Monument. Habitats will be managed on an ecosystem basis, ensuring that all parts of the ecosystem and natural processes are functional.
B. MANAGEMENT ACTIONS	
Priority Species and Habitats	
MA-WF-01	<p>Management emphasis and priority will be given to priority species and habitats in conflict resolution. Priority species include the following:</p> <ul style="list-style-type: none"> • All special status wildlife species known or suspected to occur in the area. Special status species include those that are federally listed, proposed, or candidate species; species for which there is a signed conservation agreement or strategy; all species referenced in AGFD’s Wildlife Species of Concern in Arizona document; and species included on the Arizona BLM sensitive list, • All species of migratory birds known or suspected to occur within the Monument. • All game mammals including: mule deer, pronghorn antelope, desert bighorn sheep, mountain lion, and desert cottontail rabbit.

TABLE 2.4. FISH AND WILDLIFE (WF)	
Decision #	Decision Text
	<ul style="list-style-type: none"> • Game birds including Gambel’s quail, white-winged dove, mourning dove, band-tailed pigeon, chukar partridge, and waterfowl. • The following carnivores: kit fox, gray fox, and long-tailed weasels. <p>Priority habitats include the following:</p> <ul style="list-style-type: none"> • All aquatic and/or riparian areas, including springs, seeps, and man-made waters. These areas are important for all wildlife species, particularly native fish, and migratory birds. • All areas considered crucial mule deer winter range, including Buckskin Mountain (see Map 2.4). • All bighorn sheep habitat areas, including the Paria – Vermilion Cliffs habitat areas (see Map 2.4). • House Rock Valley - the only known habitat for an endemic kangaroo rat and includes several special status plant species.
MA-WF-02	Decisions and specific actions from this Approved Plan intended to benefit fish and wildlife resources will be implemented through the development and implementation of three interdisciplinary wildlife Habitat Management Plans (HMPs). These plans will be developed and maintained cooperatively with AGFD, U.S. Fish and Wildlife Service (USFWS), and other interested participants. HMP-area boundaries will follow AGFD Game Management Unit 12B. Implementation accomplishments will be monitored and reviewed annually and documented in HMP files. The HMPs will be amended or revised, as necessary, and will incorporate existing and new BLM and state strategies as applicable.
MA-WF-03	Activities that adversely affect breeding, feeding, or sheltering activities of priority wildlife species can be modified, mitigated, or otherwise restricted to minimize disturbance to the species.
MA-WF-04	Recreational collecting of animals or animal parts (e.g. antlers, skulls, feathers) in ecologically non-sensitive areas is allowed, assuming compliance with AGFD regulations.
MA-WF-05	Access to public lands with fish and wildlife hunting and viewing opportunities will be maintained as determined in the route evaluation/designation process. Access to public lands with sensitive wildlife and/or fisheries resources can be closed or limited, where determined necessary through monitoring of resource conditions.
Wildlife Transplants and Augmentations	
MA-WF-06	<p>Reintroductions, transplants, capture operations, and supplemental stockings (augmentations) of native wildlife populations into historic habitats will be carried out in collaboration with the AGFD and/or the USFWS where consistent with achieving DFCs, protection of Monument objects, and within applicable agencies policies. Restoration of native wildlife is for the following purposes:</p> <ul style="list-style-type: none"> • To maintain current populations, distributions, and genetic diversity; • To conserve or recover threatened or endangered species; and/or • To restore or enhance native populations, diversity, or distribution of special status species. <p>Species that may be reintroduced, transplanted, or augmented include but are not limited to the following: pronghorn antelope, mule deer, desert bighorn sheep, Merriam’s turkey, and special status species.</p>

TABLE 2.4. FISH AND WILDLIFE (WF)	
Decision #	Decision Text
Wildlife Enhancement Projects	
MA-WF-07	Construction of wildlife habitat improvement projects, including water developments and vegetation treatments, can be authorized to meet DFCs, assuming compliance with NEPA, the Endangered Species Act (ESA), the Monument proclamation, and other applicable laws, regulations, and policies. DPC objectives for wildlife will be incorporated into all habitat improvement projects including restoration and vegetation treatment projects. Specific projects will be listed in HMPs.
MA-WF-08	Existing vegetation treatment projects that benefit wildlife can be maintained.
MA-WF-09	Existing water developments will be modified to ensure wildlife have safe access to water. Existing water developments will be maintained to ensure reliability of the water. Maintenance of existing waters will generally take priority over new construction. Development of cooperative waters for livestock and wildlife will be encouraged where doing so benefits wildlife, is consistent with achieving DFCs, and is economically efficient.
MA-WF-10	Escape ramps will continue to be maintained and, where needed, installed at all waters accessible to wildlife to minimize drowning hazards.
Animal Damage Control	
MA-WF-11	No members of the pig family (Suidae) are authorized.
MA-WF-12	The Animal and Plant Health Inspection Service – Wildlife Services (APHIS-WS) will conduct predator control efforts in the Monument on an as needed basis. The BLM will request proactive control to benefit priority species, protect livestock, or enhance the success of planned wildlife transplants or augmentations.
Watchable Wildlife	
MA-WF-13	The condor release site will be identified, nominated, and managed as a Watchable Wildlife area.
MULE DEER	
A. DESIRED FUTURE CONDITIONS	
DFC-WF-12	Mule deer habitat will provide the necessary forage, water, and shelter components for healthy, self-sustaining populations within the range of natural variability.
DFC-WF-13	Mule deer populations will be at or near maximum levels sustainable for the habitat.
DFC-WF-14	Forage in crucial summer mule deer habitat will include at least 10% grasses and forbs composition by weight (CBW) and at least 30% palatable browse species CBW at all key areas, where consistent with site potential.
DFC-WF-15	Forage in crucial winter mule deer habitat will include at least 30% palatable browse species CBW at all key areas, where consistent with site potential.
DFC-WF-16	Mule deer habitat in pinyon-juniper woodland sites will include a healthy diverse mosaic of trees, shrubs, grasses, and forbs.

TABLE 2.4. FISH AND WILDLIFE (WF)	
Decision #	Decision Text
DFC-WF-17	Water sources within mule deer habitat will be safely accessible to deer and other wildlife.
DFC-WF-18	Water sources within mule deer habitat will be spaced no more than 3 miles apart.
DFC-WF-19	All fences in mule deer habitat will be deer passable.
B. MANAGEMENT ACTIONS	
MA-WF-14	Self-sustaining mule deer populations will be enhanced or maintained in Game Management Unit 12B. Initial or supplemental transplants can be authorized on a case-by-case basis. Existing habitat areas can be expanded and new habitat areas may be added where consistent with protection of Monument objects and management unit objectives.
MA-WF-15	Crucial summer mule deer habitat will be managed for at least 10% grasses and forbs and at least 30% palatable browse species CBW, where consistent with site potential. Crucial winter mule deer habitat will be managed to include at least 30% palatable browse species, where consistent with site potential. Palatable browse species will be maintained and enhanced through vegetation conversion. Palatable browse species can include, but is not limited to cliffrose, bitterbrush, ceanothus, four-wing saltbush, desert holly, Mormon tea, and mountain mahogany.
MA-WF-16	Mule deer will be managed for healthy, self-sustaining populations in accordance with population goals and objectives established in the AGFD Strategic Plan for the species.
MA-WF-17	An HMP will be developed and implemented for mule deer habitat in Game Management Units 12B, consistent with the AGFD Strategic Plan. Site-specific management actions will be included. The plan will be amended or revised, as necessary. Implementation accomplishments will be monitored annually.
PRONGHORN ANTELOPE	
A. DESIRED FUTURE CONDITIONS	
DFC-WF-20	Pronghorn habitat will provide the necessary forage, water, and shelter components for healthy, self-sustaining populations within the range of natural variability.
DFC-WF-21	Pronghorn antelope populations will be at or near maximum levels sustainable for the habitat.
DFC-WF-22	Forage composition in pronghorn antelope habitat will include at least 20% grasses and forbs, and 20% palatable shrub species CBW at all key areas, where consistent with site potential.
DFC-WF-23	Where consistent with site potential, the shrub component will be at least 15 inches tall at key fawning areas in pronghorn habitat to provide fawning cover.
DFC-WF-24	Water sources within pronghorn antelope habitat will be safely accessible to pronghorn and other wildlife.
DFC-WF-25	Water sources within pronghorn antelope habitat will be spaced no more than 3 miles apart.
DFC-WF-26	All fences in pronghorn antelope habitat will be pronghorn passable and necessary for effective range management or other administrative

TABLE 2.4. FISH AND WILDLIFE (WF)	
Decision #	Decision Text
	functions.
B. MANAGEMENT ACTIONS	
MA-WF-18	Self-sustaining pronghorn populations will be enhanced or maintained in Game Management Unit 12B. Initial or supplemental transplants can be authorized on a case-by-case basis. Existing habitat areas can be expanded and new habitat areas may be added where appropriate.
MA-WF-19	Pronghorn antelope will be managed for healthy, self-sustaining populations in accordance with population goals and objectives established in the AGFD Strategic Plan for the species.
MA-WF-20	The BLM will identify and map pronghorn fawning areas in the Monument. The BLM will implement actions to increase shrub height and density to enhance fawning cover, consistent with site potential.
MA-WF-21	Pronghorn habitat will be managed for at least 20% grasses and forbs and at least 20% palatable browse species CBW, where consistent with site potential.
MA-WF-22	Fences in pronghorn antelope habitat will be modified to ensure they are passable to pronghorn. Fences not necessary for range management or other administrative purposes will be removed.
MA-WF-23	An HMP for pronghorn antelope will be developed and implemented in Game Management Units 12B, 13A, and 13B consistent with the AGFD Strategic Plan. Site-specific management actions will be included. The plan will be amended or revised, as necessary. Implementation accomplishments will be monitored annually.
DESERT BIGHORN SHEEP	
A. DESIRED FUTURE CONDITIONS	
DFC-WF-27	Desert bighorn habitat will provide the necessary forage, water, and shelter components for healthy, self-sustaining populations within the range of natural variability.
DFC-WF-28	Desert bighorn sheep populations will be at or near maximum levels sustainable for the habitat.
DFC-WF-29	Forage in desert bighorn sheep habitat areas will include at least 20% grasses, 20% forbs, and 20% palatable shrub species CBW, where consistent with site potential.
DFC-WF-30	Water sources within bighorn sheep habitat areas will be safely accessible to bighorn and other wildlife.
DFC-WF-31	Water sources within bighorn sheep habitat will be spaced no more than 4 miles apart.
B. LAND USE ALLOCATION	
LA-WF-01	57,070 acres will be allocated as the Vermilion Cliffs Wildlife Habitat Management Area (WHA) for desert bighorn sheep (see Map 2.4).
C. MANAGEMENT ACTIONS	
MA-WF-24	Desert bighorn sheep will be managed for healthy, self-sustaining populations in accordance with population goals and objectives established in the AGFD Strategic Plan for this species.
MA-WF-25	Implementation of site-specific actions benefiting bighorn sheep will be continued by implementing the Arizona Strip Desert Bighorn

TABLE 2.4. FISH AND WILDLIFE (WF)	
Decision #	Decision Text
	Sheep Management Plan (BLM and AGFD 2001) insofar as it is consistent with this Approved Plan. The desert bighorn sheep management will be amended or revised as necessary. Implementation accomplishments will be monitored annually.
DESERT COTTONTAIL RABBIT	
A. DESIRED FUTURE CONDITIONS	
DFC-WF-32	Desert cottontail habitat will provide the necessary forage, water, and shelter components for healthy, self-sustaining populations within the range of natural variability.
DFC-WF-33	Desert cottontail rabbits will be present in sufficient quantity to provide an adequate prey base for raptors, carnivores, and other predatory species, as well as ample recreational opportunities for hunting and wildlife viewing.
B. MANAGEMENT ACTIONS	
MA-WF-26	Cottontails in the Monument will be managed for healthy, self-sustaining populations in accordance with population goals and objectives established in the AGFD Strategic Plan for this species.
MA-WF-27	Cottontail rabbit habitat will be maintained, monitored, and improved to ensure a healthy and diverse predator component throughout the habitat area.
MIGRATORY BIRDS	
A. DESIRED FUTURE CONDITIONS	
DFC-WF-34	Migratory bird habitats will provide the necessary forage, water, and shelter components for healthy, self-sustaining populations within the range of natural variability.
DFC-WF-35	Migratory birds that nest in the Monument will have resources of sufficient quantity and quality to provide for nesting sites and to fledge young successfully.
DFC-WF-36	Wintering populations of waterfowl will be sufficiently abundant to provide for recreational wildlife viewing and hunting opportunities.
B. MANAGEMENT ACTIONS	
MA-WF-28	Projects to enhance waterfowl populations through habitat manipulations will be developed and implemented. Opportunities to view waterfowl will be promoted.
MA-WF-29	Adverse effects to breeding bird populations caused by disturbances from authorized activities will be minimized through stipulations and other mitigation.
MA-WF-30	Migratory birds will be managed through implementation of Executive Order 13186. Additional restrictions on surface disturbing activities will be developed on a case-by-case basis through NEPA analysis.

GAME BIRDS	
A. DESIRED FUTURE CONDITIONS	
DFC-WF-37	Water sources within game bird habitats would be safely accessible by all wildlife.
B. MANAGEMENT ACTIONS	
MA-WF-31	Priority game bird species will include Gambel’s quail, white-winged dove, mourning dove, chukar partridge, and band-tailed pigeons.
MA-WF-32	No initial or supplemental transplants of chukar partridge will occur in the Monument.
MA-WF-33	Game bird populations will be managed for healthy, self-sustaining populations in accordance with population goals and objectives established in the AGFD Strategic Plan for these species.
MA-WF-34	An HMP for game birds will be developed and implemented in Game Management Unit 12B consistent with the AGFD Strategic Plan. Site-specific management actions will be included. The plan will be amended or revised, as necessary. Implementation accomplishments will be monitored annually.
CARNIVORES AND FURBEARERS	
A. DESIRED FUTURE CONDITIONS	
DFC-WF-38	Carnivore habitat will provide the necessary forage, water, and shelter components for healthy, self-sustaining populations within the range of natural variability.
DFC-WF-39	Opportunities for hunting, trapping, and viewing carnivores and furbearers such as coyote, bobcat, mountain lion, kit fox, gray fox, and others will continue to be provided.
B. MANAGEMENT ACTIONS	
MA-WF-35	Priority carnivore species include mountain lion, kit fox, gray fox, and long-tailed weasel.
MA-WF-36	The historical range and distribution of furbearers and predatory mammals will be maintained. Maximum recreational, economic, and aesthetic uses corresponding with existing populations is allowed.
MA-WF-37	Carnivores will be managed for healthy, self-sustaining populations in accordance with population goals and objectives established in the AGFD Strategic Plan for these species.

Map 2.4. Wildlife Habitat Areas

TABLE 2.5. SPECIAL STATUS SPECIES (TE)	
Decision #	Decision Text
ALL SPECIAL STATUS SPECIES	
A. DESIRED FUTURE CONDITIONS	
DFC-TE-01	All federally listed threatened or endangered species found in the Monument will be recovered.
DFC-TE-02	Management of discretionary activities in the Monument will not contribute to the need to list proposed, candidate, state, or BLM sensitive species, and will include conservation measures and stipulations benefiting special status species.
DFC-TE-03	The Monument will provide a block of remote, contiguous habitat that will serve as refugia for populations of special status species.
DFC-TE-04	There will be no net loss in the quality or quantity of special status species habitat throughout the Monument.
DFC-TE-05	The public will be well informed about of special status species in the Monument and the need for conservation.
B. MANAGEMENT ACTIONS	
MA-TE-01	<p>Priority for the application of management actions is:</p> <ul style="list-style-type: none"> • Species federally listed under the ESA as endangered or threatened, • Species proposed for Federal listing, • Species that are candidates for Federal listing, • Species included in the Wildlife Species of Concern in Arizona document, • Species for which a conservation strategy/agreement has been developed, and • Species included on the BLM Sensitive Species Lists.
MA-TE-02	Specific actions and direction for managing special status species will be guided by the use of interdisciplinary wildlife HMPs produced cooperatively with the AGFD, USFWS, and other interested participants. Implementation accomplishments will be monitored and reviewed annually and documented in HMP files. HMPs will be amended or revised as necessary to incorporate new information and adjust management.
MA-TE-03	Management of special status species will be consistent with biological opinions, recovery plans, conservation strategies, BLM policies, and the ESA, and consistent with achieving all DFCs, to the extent possible
MA-TE-04	<p>Reintroductions, transplants, and supplemental stockings (augmentations) of special status species populations will be carried out in collaboration with the AGFD and/or the USFWS for the following purposes:</p> <ul style="list-style-type: none"> • To maintain current populations, distributions, and genetic diversity; • To conserve or recover threatened or endangered species; and/or • To restore or enhance native populations, diversity, or distribution of special status species. <p>Species that may be reintroduced, transplanted, or augmented may include, but not be limited to, northern leopard frogs, relict leopard frogs, lowland leopard frogs, endemic springsnails, woundfin minnow, desert sucker, flannelmouth sucker, California condor, Yuma clapper rail, yellow-billed cuckoo, SW flycatcher, ferruginous hawk, northern goshawk, western burrowing owl, white-faced ibis, and</p>

TABLE 2.5. SPECIAL STATUS SPECIES (TE)	
Decision #	Decision Text
	House Rock Valley chisel-toothed kangaroo rat. These actions will be based on the best available scientific information. Introductions of non-endemic, special status animal species native to the region can be authorized, on a case-by-case basis in coordination with the AGFD, USFWS, counties, and adjacent landowners.
MA-TE-05	The BLM will continue to cooperate with the USFWS to ensure specific actions comply with the ESA. The BLM will continue to undertake active management programs to inventory, monitor, restore, and maintain listed species habitats, control detrimental non-native species, control detrimental public access, and re-establish extirpated populations as necessary to maintain the species and their habitats.
MA-TE-06	Where actions authorized or permitted by the BLM may adversely affect a listed or proposed species, or adversely modify designated or proposed critical habitat, the BLM will work cooperatively with the USFWS to resolve or mitigate these impacts through implementation of species-specific conservation measures (See Appendix G).
MA-TE-07	Where actions that occur within the Monument, but are not specifically authorized or permitted by the BLM, may result in death or injury of a listed or proposed species or adversely modify designated or proposed critical habitat, the BLM will work cooperatively with the USFWS, as well as county, state, and other Federal agencies, non-governmental organizations, and members of the public to reduce or eliminate the possibility of adverse effects in a timely and appropriate manner. The BLM can use planning, education programs, restrictions on season of use or number of users, area closures, law enforcement contact, or other vigorous compliance efforts to discourage activities that cause injury or mortality or degrade habitat of listed or proposed species.
Vegetation Management and Fire and Fuels	
MA-TE-08	Conservation measures described in Appendix G will be implemented for all vegetation management actions including restoration and rehabilitation, fuels treatments, prescribed burning, and other related actions in special status species habitats.
MA-TE-09	Collection of dead and down wood in special status species habitats is allowed for personal camp use only.
MA-TE-10	Conservation measures described in Appendix G. will be implemented for all fire suppression, restoration and rehabilitation, fuels treatments, prescribed burning, and other fire related actions in special status species habitats.
Grazing Management	
MA-TE-11	Season of use or other modifications to livestock grazing systems can be implemented to protect special status species (Specific implementation actions are discussed below for the species they benefit and in the Livestock Grazing Management section).
Recreation Management	
MA-TE-12	No new developed campgrounds will be authorized or constructed in listed or proposed special status species habitat.
MA-TE-13	The BLM can further limit or restrict any recreation activity or use that degrades any special status species habitat or may cause disturbance, injury, or mortality to the species.
Surface Disturbing Actions	
MA-TE-14	Prior to surface disturbing activity, a special status species review will be conducted by a qualified specialist.

TABLE 2.5. SPECIAL STATUS SPECIES (TE)	
Decision #	Decision Text
MA-TE-15	Special status species habitat surveys will be required whenever surface disturbances occur within an area of known or suspected occupancy by special status species.
SPECIAL STATUS PLANTS	
A. DESIRED FUTURE CONDITIONS	
DFC-TE-06	Populations of plants that are listed or proposed for Federal listing will be recovered.
DFC-TE-07	Populations of special status plant species will increase to stable, self-sustaining levels.
DFC-TE-08	There will be no net loss in the quality or quantity of special status species habitat throughout the Monument.
B. MANAGEMENT ACTIONS	
MA-TE-16	<ul style="list-style-type: none"> • Participation in conservation efforts for special status plant species will continue. • Special status plant habitat will be preserved, protected, and managed. • Monitoring efforts for special status plant populations within the Monument will continue. • A program of public conservation education and planning directed towards preservation of special status plant habitat will be carried out.
MA-TE-17	The BLM will develop and implement HMPs for special status species in cooperation with the AGFD and the USFWS. These HMPs would serve as the management plan for Vegetation Habitat Management Areas.
Recreation Management	
MA-TE-18	<ul style="list-style-type: none"> • Recreational activities that degrade special status plant habitats will be modified or relocated to minimize or eliminate adverse effects. • In listed plant habitats, hiking is allowed. Biking is allowed only on designated routes. Education programs and law enforcement contact will be used to minimize recreational activities that cause injury or mortality or degrade habitat of these species.
Travel Management	
MA-TE-19	<ul style="list-style-type: none"> • Vehicle use in special status plant habitats is limited to designated routes with reasonable use of the shoulder.
Grazing Management	
MA-TE-20	<ul style="list-style-type: none"> • Disturbance, injury, or mortality of special status plants resulting from grazing by livestock will be minimized or eliminated. Where grazing by livestock is leading to adverse effects, conservation measures will be implemented to reduce or mitigate loss of the plant species. Measures can include fencing, seasonal restrictions, or relocation of livestock developments. The need for implementation of conservation measures will be assessed on a case-by-case basis, typically at the time of the rangeland health assessment.
Vegetation Management	
MA-TE-21	<ul style="list-style-type: none"> • Restoration and vegetation treatments are not authorized in special status plant habitat, unless doing so provides benefits to the species. • The impact of herbicide/pesticide use on special status plant species will be determined. The use of harmful herbicides in areas where

TABLE 2.5. SPECIAL STATUS SPECIES (TE)	
Decision #	Decision Text
	<p>special status plants can be affected will be limited or eliminated.</p> <ul style="list-style-type: none"> • Conservation measures will be implemented for all vegetation management actions in special status plant habitats as described in Appendix G.
Surface Disturbing Activities	
MA-TE-22	<ul style="list-style-type: none"> • Impacts to special status plants and their habitats from surface disturbing activities will be reduced or eliminated. • Proposed actions will be evaluated to ensure that trampling or crushing of special status plants will be minimized or eliminated. The BLM will continue to coordinate with USFWS to delineate buffer areas around special status plant populations. Use restrictions can be developed to minimize or eliminate trampling and/or crushing of special status plants within buffer areas. • Conservation measures will be implemented for special status plants for all surface disturbing activities as described in Appendix G.
AMPHIBIANS AND AQUATIC INVERTEBRATES	
A. DESIRED FUTURE CONDITIONS	
DFC-TE-09	Essential habitats, important migration routes, required flows, and water quality will be protected and maintained in lentic and lotic systems in the Monument.
DFC-TE-10	No net loss will occur in the quality and quantity of suitable habitat for endemic amphibians and aquatic invertebrate species within the Monument.
DFC-TE-11	All biologically suitable perennial waters on public lands in the Monument will be occupied by thriving, self-sustaining populations of native, endemic amphibians and aquatic invertebrate species, as appropriate.
DFC-TE-12	Relict leopard frogs will be recovered and managed in accordance with the Conservation Agreement to maintain viable populations throughout their range.
B. MANAGEMENT ACTION	
MA-TE-23	Actions that degrade riparian habitat or reduce the potential of the area to support riparian vegetation will be modified, restricted, or prohibited.
SPECIAL STATUS RAPTORS (ALL SPECIAL STATUS RAPTORS)	
A. DESIRED FUTURE CONDITIONS	
DFC-TE-13	Special status raptor populations will be healthy and self-sustaining throughout their range.
DFC-TE-14	Habitat areas for special status raptors will provide sufficient forage and cover attributes to support thriving populations of the species.
DFC-TE-15	No net loss will occur in the quality and quantity of suitable habitat for special status raptors within the Monument.
DFC-TE-16	Potential roosting and nesting sites (for special status raptors) will be abundant.
DFC-TE-17	Riparian areas will be in proper functioning condition and be of sufficient quantity and quality to provide adequate foraging areas for bald

TABLE 2.5. SPECIAL STATUS SPECIES (TE)	
Decision #	Decision Text
	eagles, peregrine falcon, common black hawk, and other special status raptors.
DFC-TE-18	Rodent populations, as a prey base (for special status raptors), within the Monument will be abundant.
DFC-TE-19	Mexican spotted owls will be recovered and delisted.
DFC-TE-20	The experimental non-essential population of California condor will be at or above 150 individuals, viable, and stable to increasing in number.
DFC-TE-21	Peregrine falcon, ferruginous hawks, common black hawks, northern goshawks, and burrowing owls will be sufficiently abundant so that there will be no need to list these species.
B. MANAGEMENT ACTIONS	
MA-TE-24	<ul style="list-style-type: none"> • Priority special status raptors includes bald eagles, California condors, Mexican spotted owls, peregrine falcon, burrowing owls, ferruginous hawks, northern goshawks, and common black hawks. • Special status raptor habitats will be preserved, protected, and managed for population maintenance and expansion. • A policy of “no net loss” of special status raptor habitat will be maintained. • Occupied special status raptor habitats will be protected as a first priority. • The BLM and AGFD will determine population numbers, distribution, and trends of special status raptors. • The effects of pesticide and herbicide use on special status raptors in the Monument will be assessed.
Vegetation Management	
MA-TE-25	<ul style="list-style-type: none"> • Existing and potential habitat for special status raptor population continuance and expansion will be identified, protected, and improved. Land use practices and developments that alter the character of the habitat that make it suitable for special status raptors will be limited, modified, or relocated. • Suitable and potential habitats will be maintained and upgraded to ensure they remain attractive to special status raptors. • The use of harmful pesticides or herbicides will be reduced or eliminated within one mile of special status raptor use areas. If used, application will occur in a manner that avoids drift, according to directions (i.e. not broad applications). • Suitable habitats for special status raptors in the Monument will be maintained and increased. Suitable structural characteristics may be achieved through restoring, maintaining, enhancing, and creating habitat. • Suitable habitats will be managed so their suitable characteristics are not eliminated or degraded. Habitats will be managed for large, contiguous blocks, rather than for small fragmented areas. Connectivity to currently isolated suitable sites will be enhanced. Use of buffer zones between suitable and unsuitable areas will be encouraged.
Surface Disturbing Activities	
MA-TE-26	Actions that adversely affect special status raptors during their nesting period can be subject to stipulations, mitigation, or may not be approved.

Recreation Management	
MA-TE-27	<ul style="list-style-type: none"> • Impacts to special status raptors and/or their habitat from recreational activities will be reduced or eliminated. • The presence and intensity of allowable recreational activities within special status raptor habitats will be assessed. Seasonal closures of specifically designated recreation activities can be considered where appropriate.
SPECIAL STATUS RAPTORS (BALD EAGLE)	
Bald Eagle Habitat Management	
MA-TE-28	<ul style="list-style-type: none"> • Assistance will be provided in implementation of recovery tasks identified in the recovery plan. • Areas for construction of roost and perch poles in the Monument will be identified to replace natural roosts and perches lost by development or decay. • Patterns of movement for wintering eagles, including fledglings, immatures, and adults, will be determined. Food habits for bald eagles within the Monument will be determined.
Surface Disturbing Activities	
MA-TE-29	<ul style="list-style-type: none"> • The BLM can limit, modify, or relocate authorized and/or permitted activities within 0.5 miles of active bald eagle wintering roosts. • Projects and activities causing disturbance to roosting bald eagles shall be avoided from October 15 to April 15. • The BLM will implement conservation measures for protection of bald eagles as defined in Appendix G.
SPECIAL STATUS RAPTORS (MEXICAN SPOTTED OWL)	
Mexican Spotted Owl Habitat Management	
MA-TE-30	Active participation in the recovery of the Mexican spotted owl will continue. Assistance will be provided in implementation of recovery tasks identified in the recovery plan.
Vegetation Management	
MA-TE-31	Canyon and forest habitats with the potential to support Mexican spotted owl will be managed for maintenance or enhancement of the habitat attributes that make them suitable.
Surface Disturbing Activities	
MA-TE-32	<ul style="list-style-type: none"> • Land use practices and developments which alter the character of the habitat that make it suitable for Mexican Spotted Owls will be limited, modified, or relocated • The BLM will implement conservation measures for protection of Mexican spotted owl as defined in Appendix G.
SPECIAL STATUS RAPTORS (CALIFORNIA CONDOR)	
California Condor Habitat Management	
MA-TE-33	<ul style="list-style-type: none"> • The BLM will continue to actively participate in the recovery of the California condor. • The BLM will assist in implementation of recovery tasks identified in the recovery plan. • Restoration of California condor into historic habitats in northern Arizona will continue in cooperation with the Peregrine Fund, AGFD,

	<p>USFWS, California Condor Recovery Program, and others. Supplemental releases will be authorized.</p> <ul style="list-style-type: none"> • The population objective for California condor is to maintain a self-sustaining population with a positive growth rate of at least 150 individuals with at least 15 breeding pairs. Population objectives will be modified or changed in accordance with the recovery plan for the species. • The BLM will identify and, where possible, reduce or eliminate sources of lead contamination for condors within the Monument. The BLM will encourage voluntary use of non-lead ammunition in the Monument.
Vegetation Management	
MA-TE-34	<ul style="list-style-type: none"> • The protective measures for California condors that are contained in the July 2004 “Recommended Protection Measures for Pesticide Applications in the Southwest Region of the USFWS” when conducting chemical treatments will be implemented. • California condor foraging habitat will be maintained.
Surface Disturbing Activities	
MA-TE-35	<ul style="list-style-type: none"> • The BLM will implement conservation measures for protection of California condors as defined in Appendix G.
MA-TE-36	<ul style="list-style-type: none"> • Within the 10(j) area, the BLM will not restrict authorized and/or permitted activities solely for the benefit of California condors. Persons engaged in authorized or permitted actions that encounter a condor will be requested not to haze the birds, but to notify the BLM or the Peregrine Fund. Administrative or other actions implemented by the BLM can be subject to additional stipulations and conservation measures as described in Appendix G.
SPECIAL STATUS RAPTORS (PEREGRINE FALCON)	
Peregrine Falcon Habitat Management	
MA-TE-37	<ul style="list-style-type: none"> • Active participation will continue in the post-delisting recovery monitoring of peregrine falcons in the Monument. • Actions that adversely affect nesting peregrines between March 1 and August 1 can be subject to stipulations, mitigation, or may not be approved
Surface Disturbing Activities	
MA-TE-38	<ul style="list-style-type: none"> • Authorized actions, including construction projects, will be limited, modified, or relocated to areas more than 0.5 miles from known peregrine falcon during the active nesting season between April 15 and August 15. • The BLM will implement conservation measures for protection of peregrine falcon as defined in Appendix G.
RIPARIAN DEPENDENT SPECIAL STATUS BIRDS (ALL RIPARIAN-DEPENDENT SPECIAL STATUS BIRD SPECIES)	
A. DESIRED FUTURE CONDITIONS	
DFC-TE-22	No net loss will occur in the quality and quantity of suitable habitat for riparian-dependent special status bird species within the Monument.
DFC-TE-23	Occupied habitats will be protected as a first priority.
DFC-TE-24	Riparian areas will be in proper functioning condition and be of sufficient quantity and quality to provide adequate foraging areas for SW

	flycatcher, Yuma clapper rail, yellow-billed cuckoo, and other special status birds.
DFC-TE-25	SW flycatcher and Yuma Clapper Rail will be recovered and delisted.
DFC-TE-26	Riparian areas that can physically support SW flycatcher habitats due to floodplain width and gradient will attain the vegetation structure, plant species diversity, density, and canopy cover to be suitable habitat.
DFC-TE-27	Riparian vegetation will be sufficiently dense and structurally complex to minimize or eliminate the effects of flycatcher predators and preclude Brown-headed Cowbirds from finding SW flycatcher nests.
DFC-TE-28	Cattail and dense marsh habitats will be abundant and provide habitat for Yuma Clapper Rails.
DFC-TE-29	Cottonwood gallery forests will be abundant and provide habitat for yellow-billed cuckoos.
DFC-TE-30	Potential roosting and nesting sites for riparian dependent special status birds will be abundant.
B. MANAGEMENT ACTIONS	
Habitat Management	
MA-TE-39	<ul style="list-style-type: none"> • Protection from threats will be provided and sufficient habitat to assure maintenance of populations and/or habitats over time will be created/secured. • Water diversions and groundwater withdrawals will be managed to maintain streamside vegetation. • Impacts of pesticide use on riparian-dependent special status bird species' reproduction adjacent to riparian areas will be determined. • The BLM and AGFD will determine population numbers, distribution, and trends of riparian-dependent special status bird species. • The use of harmful pesticides adjacent to riparian areas will be limited or eliminated. If used, application would occur in a manner that avoids drift, according to directions (i.e. not broad applications).
Vegetation Management	
MA-TE-40	<ul style="list-style-type: none"> • Riparian areas will be managed to achieve and/or maintained in proper functioning condition in accordance with prescriptions described in the vegetation management section of this document. • Suitable nesting habitats for riparian-dependent special status bird species will be maintained or increased. Suitable structural characteristics may be achieved through restoring, maintaining, enhancing, and creating habitat. Management will aim for large, contiguous blocks of habitat rather than for small fragmented areas. Connectivity to currently isolated suitable sites will be enhanced. The use of buffer zones between riparian habitats and adjacent upland areas will be encouraged. Establishment of areas of slow/back waters will be promoted. • Regeneration of native vegetation in restoring riparian habitats will be promoted. Natural reaches of riparian habitat will be restored by restoring intervening degraded segments. • Occupied, suitable, and potential breeding habitat will be increased and improved. • Restoration of native riparian vegetation will continue in sites that have the potential to support future breeding habitat for riparian-dependent special status bird species. • Support will continue for applications for instream flow rights with the Arizona Department of Water Resources in rivers supporting

	<p>riparian-dependent species.</p> <ul style="list-style-type: none"> • Native riparian vegetation in floodplains or channels will be retained. • Protective measures for riparian-dependent special status bird species that are contained in the July 2004 “Recommended Protection Measures for Pesticide Applications in The Southwest Region of the USFWS” will be implemented when conducting chemical treatments. • The BLM will implement conservation measures for protection of riparian-dependent special status bird species as defined in Appendix G.
Grazing Management	
MA-TE-41	<ul style="list-style-type: none"> • Disturbance, injury, mortality, or other forms of take of riparian-dependent special status bird species resulting from grazing by livestock will be minimized or eliminated. • Grazing systems, strategies, and intensities for riparian recovery and maintenance will be investigated. • Direct effects of livestock grazing on SW flycatchers and their habitat will be investigated.
Lands and Realty	
MA-TE-42	<ul style="list-style-type: none"> • No acquired lands will have ground or surface water used or reserved for use by non-Federal interests after it is acquired by the government. All such existing uses must be terminated upon acquisition and all rights transferred to the Federal government.
Travel Management	
MA-TE-43	<ul style="list-style-type: none"> • Roads and trails used by OHVs within riparian areas, or areas with the potential to support riparian vegetation, will be closed and rehabilitated.
Surface Disturbing Activities	
MA-TE-44	<ul style="list-style-type: none"> • Where possible and practicable, physical stresses, such as high salinity or reduced stream flows that favor exotic plants, will be reduced or eliminated. Actions that do not allow for natural stream flow regimes including periodic flood events will not be authorized. • Direct impacts that topple or otherwise destroy nests of special status species will be reduced.
Recreation Management	
MA-TE-45	<ul style="list-style-type: none"> • Impacts to riparian-dependent special status bird species and/or their habitat from recreational activities will be reduced or eliminated. Recreation that degrades riparian habitat will be prohibited in riparian areas in the Monument. Restrictions can include: <ul style="list-style-type: none"> • Reducing or eliminating recreational fires. • Confining camping areas. • Locating recreational activity areas away from suitable or potential SW flycatcher habitat. • Minimizing trash, debris, and other attractants to scavengers, predators, and brown-headed cowbirds.

RIPARIAN-DEPENDENT SPECIAL STATUS BIRDS (SOUTHWESTERN WILLOW FLYCATCHER)	
Southwestern Willow Flycatcher Habitat Management	
MA-TE-46	<ul style="list-style-type: none"> • Active participation will continue in the recovery of the SW flycatcher. Assistance will be provided in the implementation of recovery tasks identified in the recovery plan. • The BLM will continue to identify and evaluate areas where concentrations of brown-headed cowbirds occur on public lands in the Monument. • The BLM will evaluate ways to reduce cowbird concentrations. • Cowbird management programs will be developed and implemented where parasitism rates are greater than 20%. Effectiveness of cowbird trapping at present locations will be evaluated by monitoring nests for parasitism and reproductive success. Reconsideration will be given to assessment of habitat quality or other threats if cowbird control measures do not increase number of breeding flycatchers.
Vegetation Management	
MA-TE-47	<ul style="list-style-type: none"> • Suitable flycatcher habitat shall be managed so that its suitable characteristics are not eliminated or degraded. Management will be for large, contiguous blocks of habitat rather than for small fragmented areas. Connectivity to currently isolated suitable sites will be enhanced. The use of buffer zones between riparian habitats and adjacent upland areas will be encouraged. Establishment of areas of slow/back waters will be promoted. • Potential habitat will be managed to achieve structural and vegetation characteristics necessary to support increasing numbers of breeding SW flycatcher pairs within 5-20 years. Potential flycatcher habitat shall be managed to allow natural regeneration (through natural processes) into suitable habitat as rapidly as possible. • The use vs. availability of invasive exotic species, such as tamarisk, by SW flycatcher at occupied nesting sites will be determined. • Native riparian vegetation will be retained in floodplains or channels. • At sites dominated by native riparian plant species, tamarisk will be retained in occupied flycatcher habitat and, where appropriate, in suitable but unoccupied habitat, unless there is a trend for steady increase of tamarisk. • The BLM will implement conservation measures for protection of SW flycatcher as defined in Appendix G.
Grazing Management	
MA-TE-48	<ul style="list-style-type: none"> • Livestock will be excluded from suitable flycatcher habitat (whether occupied or unoccupied) during the growing season (bud break to leaf drop). Un-surveyed suitable habitat shall be considered occupied. If livestock are excluded using fencing, fencing shall be inspected and maintained annually. • In potential habitat, it will be determined if livestock grazing is a major stressor or is otherwise preventing development of the habitat into suitable flycatcher habitat. Where this is the case, livestock grazing will be excluded from potential SW flycatcher nesting habitat during the growing season (bud-break to leaf drop).

RIPARIAN-DEPENDENT SPECIAL STATUS BIRDS (YUMA CLAPPER RAIL)	
Yuma Clapper Rail Habitat Management	
MA-TE-49	<ul style="list-style-type: none"> • Participation in the recovery of the Yuma clapper rail will continue. • Assistance will be provided in implementation of recovery tasks identified in the recovery plan.
Vegetation Management	
MA-TE-50	<ul style="list-style-type: none"> • Occupied Yuma clapper rail habitats will be protected as a first priority. • Fresh water marsh habitat suitable for Yuma clapper rail nesting will be maintained, enhanced, restored, and/or created. A mosaic of uneven aged marsh vegetation will be maintained. Mechanical manipulation will be avoided during the breeding season (April-June). • Management of potential habitat will be aimed at achieving structural and vegetation characteristics necessary to support increasing numbers of breeding Yuma clapper rails. Potential habitat shall be managed to allow natural regeneration (through natural processes) into suitable habitat as rapidly as possible. • Cattail marshes will be retained in occupied clapper rail habitat and, where appropriate, in suitable but unoccupied habitat.
Grazing Management	
MA-TE-51	<ul style="list-style-type: none"> • Disturbance, injury, mortality, or other forms of take of Yuma clapper rail resulting from grazing by livestock will be minimized or eliminated. • Livestock grazing will be excluded from occupied suitable Yuma clapper rail nesting habitat. • In potential habitat, it will be determined if livestock grazing is a major stressor or is otherwise preventing development of suitable clapper rail habitat. Where this is the case, livestock grazing will be excluded from potential clapper rail habitat during the growing season (bud-break to leaf drop).
RIPARIAN-DEPENDENT SPECIAL STATUS BIRDS (YELLOW-BILLED CUCKOO)	
Yellow-Billed Habitat Management	
MA-TE-52	<ul style="list-style-type: none"> • Participation in actions to prevent the need to list yellow-billed cuckoo will continue.
Vegetation Management	
MA-TE-53	<ul style="list-style-type: none"> • Mature cottonwood-willow gallery forest habitat suitable for yellow-billed cuckoo nesting will be maintained, enhanced, restored, and/or created. Large, contiguous blocks of habitat (>15 ha) will be managed in conjunction with removal of competing exotic species (i.e. salt cedar). The use of buffer zones between riparian habitats and adjacent development will be encouraged. Corridors between “islands” of suitable habitat will be established to allow natural dispersal and recolonization of historic habitats. • Potential habitat will be managed to achieve structural and vegetation characteristics necessary to support increasing numbers of breeding yellow-billed cuckoo. Potential habitat shall be managed to allow natural regeneration (through natural processes) into suitable habitat as rapidly as possible. • Retain mature cottonwood-willow gallery forests in yellow-billed cuckoo habitat.

Grazing Management	
MA-TE-54	<ul style="list-style-type: none">• Disturbance, injury, or mortality of yellow-billed cuckoo resulting from grazing by livestock will be minimized or eliminated.• Grazing impacts on cottonwood and willow seedlings in riparian systems will be closely monitored and grazing will be reduced or removed when seedlings are being impacted.
Recreation Management	
MA-TE-55	<ul style="list-style-type: none">• Intense and repeated human disturbance will be avoided at nesting areas from 15 May through 1 September.

TABLE 2.6. CULTURAL RESOURCES (CL)	
Decision #	Decision Text
ARCHAEOLOGICAL AND HISTORIC RESOURCES	
A. DESIRED FUTURE CONDITIONS	
DFC-CL-01	Significant cultural resources, including Monument objects, will be identified, conserved, protected, stabilized, or restored, and maintained in good or better condition to ensure they are available for appropriate uses by present and future generations.
DFC-CL-02	Imminent threats and potential conflicts from natural or human-caused deterioration or potential conflict with other resource uses will be reduced (Federal Land Policy Management Act [FLPMA] Sec. 103, National Historic Preservation Act [NHPA], Sections 106 and 110 (a) (2)) by ensuring that all land uses and resource uses initiated or authorized by the BLM comply with Section 106 of the NHPA in accordance with the BLM's National Cultural Resources Programmatic Agreement and Arizona Protocol.
DFC-CL-03	All sites will be managed according to the DFCs of their use allocation(s).
DFC-CL-04	Preservation/restoration will preserve existing original work and maintain it by restoration, replacement, or repair.
DFC-CL-05	All actions potentially impacting cultural resources will be assessed via compliance with Section 106 of the NHPA to achieve DFCs.
B. LAND USE ALLOCATIONS	
LA-CL-01	The following sites will continue to be managed for public use: <ul style="list-style-type: none"> • Honeymoon Trail • West Bench Pueblo • Dominguez/Escalante Trail
LA-CL-02	The following additional sites will be allocated to public use: <ul style="list-style-type: none"> • Maze Site • Old Spanish NHT • Sun Valley Mine
C. MANAGEMENT ACTIONS	
MA-CL-01	Historic structures that do not merit preservation because of minimal significance, advanced deterioration, or excessive cost will be recorded and allowed to deteriorate. Some removal of hazardous elements will be allowed for safety and to avoid an attractive nuisance.
MA-CL-02	Geocache sites are prohibited in cultural sites including, but not limited to, archaeological sites, alcoves, rock shelters, cultural landscapes, traditional cultural properties (TCPs), and historic sites.
D. IMPLEMENTATION DECISIONS	
IMPL-CL-01	Interpretation of and education about previous human occupation and use of the area will be accomplished using appropriate sites and methods.

TABLE 2.6. CULTURAL RESOURCES (CL)	
Decision #	Decision Text
IMPL-CL-02	Protective measures will be taken to preserve significant sites, such as monitoring through patrol, signing, fencing, data recovery to mitigate vandalism, and stabilizing undamaged deposits, and preserving at risk features such as standing walls or historic structures.
IMPL-CL-03	Development of West Bench Pueblo Public Use Site will be pursued and include stabilization and rerouting of the current road through the site, data recovery efforts, and construction of a trail, interpretive signs, and a small parking area for day use only.
IMPL-CL-04	“The Maze” Rock art site will be developed with a backcountry access trail and off-site interpretive signing.
IMPL-CL-05	The Sun Valley Mine Public Use Site will be developed for public use, including reconstruction of head frame, construction of a bat gate, and interpretive signing (See Fish and Wildlife decisions).
RESOURCES OF TRADITIONAL IMPORTANCE TO AMERICAN INDIANS	
A. DESIRED FUTURE CONDITIONS	
DFC-CL-06	Specific information on ancestral and traditional cultural places on the Monument will be protected to the extent allowable by law and, when appropriate, interpreted for the public.
DFC-CL-07	A good working relationship will be maintained with the Kaibab Paiutes, the Paiute Tribe of Utah, the Moapa Paiute Tribe, the Las Vegas Paiute Tribe, the San Juan Paiute Tribe, the Hopi Tribe, the Hualapai Tribe, the Havasupai Tribe, and the Navajo Nation, the latter being accomplished particularly through specific affected local chapters (Bodaway/Gap, Cameron, Coalmine, Coppermine, LeChee, and Tuba City).
DFC-CL-08	TCPs of importance, including Monument objects, and associated with American Indians whose cultural memory, traditions, and lives are closely associated with the Monument will be nominated to the National Register of Historic Places (NRHP).
DFC-CL-09	American Indians with cultural and historic ties to the Monument will have access to and use of sites allocated to traditional use, consistent with laws, regulations, and authorities.
B. MANAGEMENT ACTIONS	
MA-CL-03	Tribes will be consulted to determine limitations for use on sites allocated to Traditional Use areas.
MA-CL-04	Fees will not apply to American Indians for the collection of non-commercial, personal use quantities of herbals, medicines, traditional use items, or items necessary for traditional, religious, or ceremonial purposes.

TABLE 2.7. VISUAL RESOURCES (VR)	
Decision #	Decision Text
A. DESIRED FUTURE CONDITIONS	
DFC-VR-01	Public lands will be managed in a manner that will protect the quality of the scenic (visual) values of these lands. (43 U.S. Code [USC] 1701, Section 102 (a) (8))
DFC-VR-02	Esthetically pleasing surroundings will be assured for all Americans (43 USC 4321, Section 101 (b)).
DFC-VR-03	The region’s scenic beauty, open space landscapes, and other high-quality visual resources, including Monument objects, will be maintained within the Monument.
DFC-VR-04	The existing “footprint” of cultural landscapes (facilities, projects, and improvements) will generally be maintained.
DFC-VR-05	Dark night sky conditions that are affected primarily by natural light sources will be maintained.
DFC-VR-06	<p>There are four visual resource management (VRM) classes. The objectives for each class, which provide visual management standards for the design and development of future projects and for rehabilitation of existing projects in the Monument are as follows (See Appendix H: VRM Classes),</p> <p>Class 1 - The objective of this class is to preserve the existing character of the landscape. This class provides for natural ecological changes; however, it does not preclude very limited management activity. The level of change of the characteristic landscape should be very low and must not attract attention.</p> <p>Class 2 - 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.</p> <p>Class 3 - 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.</p> <p>Class 4 - 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 shall be made to minimize the impact of these activities through careful location, minimal disturbance, and repeating the basic elements.</p>
DFC-VR-07	Visual resources identified in the Monument proclamation, such as <i>stunning Paria River Canyon; spectacular escarpment; spectacular geology; brilliant cliffs, and colorful banding</i> will be protected
B. LAND USE ALLOCATION	
LA-VR-01	The following VRM classes will be designated to support management of the various other resources, such as designated wilderness, NHT segments, primary travel corridors, areas where wilderness characteristics are to be maintained, certain special recreation management

TABLE 2.7. VISUAL RESOURCES (VR)	
Decision #	Decision Text
	<p>areas, Great Western and Arizona Trail Corridors, and important watershed and wetland areas (see Map 2.5).</p> <p>Class I: 89,825 acres Class II: 203,851 acres Class III: 0 acres Class IV: 12 acres</p>
C. MANAGEMENT ACTIONS	
MA-VR-01	<ul style="list-style-type: none"> To the extent opportunities are practicable, extreme visual contrast created by past management practices or human activities will be minimized. Examples can include ROW amendments, mineral material sites, abandoned mines, and areas impacted by unauthorized off-road driving, etc. Basic criteria for “practicality” can include 1) location (is site in an area with high visual sensitivity and in a foreground/middleground distance zone as mapped in the visual resource inventory?), 2) feasibility (is it physically possible to achieve a desired level of restoration success, as measured by use of the contrast rating process?), and 3) cost (is the cost reasonable and is funding obtainable?).
New Projects and Activities	
MA-VR-02	Ecosystem restoration projects will ensure that visual impacts are minimized in the short term (5 years) and that VRM objectives in the project area are met in the long term (life of the project) when such projects are a) considered essential for public safety, achieving DFCs, or reducing hazardous fuels buildups and b) expected to be visually prominent.
MA-VR-03	<p>All new surface disturbing projects or activities, regardless of size or potential impact, will incorporate visual design considerations during project design as a reasonable attempt to meet the VRM class objectives for the area and minimize the visual impacts of the proposal. Visual design considerations will be incorporated by:</p> <ul style="list-style-type: none"> Using the VRM contrast rating process (required for proposed projects in highly sensitive areas, high impact projects, or for other projects where it appears to be the most effective design or assessment tool), or by Providing a brief narrative visual assessment for all other projects that require an environmental assessment (EA) or Environmental Impact Statement (EIS). <p>Measures to mitigate potential visual impacts could include the use of natural materials, screening, painting, project design, location, or restoration (See Appendix H; BLM Handbook H-8431-1, Visual Resource Contrast Rating; or online at http://www.blm.gov/nstc/VRM/8431.html, for information about the contrast rating process).</p>
Night Sky	
MA-VR-04	Permanent outdoor lighting in VRM Class I areas is not allowed.
MA-VR-05	Impacts to dark night skies will be prevented or reduced through the application of specific mitigation measures identified in activity level planning and NEPA review. These measures may include directing all light downward, using shielded lights, using only the minimum illumination necessary, using lamp types such as sodium lamps (less prone to atmospheric scattering), using circuit timers, and using motion sensors.

TABLE 2.7. VISUAL RESOURCES (VR)

Decision #	Decision Text
MA-VR-06	Any facilities authorized will use the best technology available to minimize light emissions.

Map 2.5. Visual Resource Management

TABLE 2.8. SOUNDSCAPES (SN)	
Decision #	Decision Text
A. DESIRED FUTURE CONDITION	
DFC-SN-01	Natural quiet and natural sounds will be preserved or restored, where practicable.
B. MANAGEMENT ACTION	
MA-SN-01	Under any Section 4(f) consultations with the Federal Aviation Administration (FAA), the BLM will recommend the protection or restoration of natural quiet in and above noise sensitive areas defined as all statutory wilderness areas, National Monuments, and all areas managed to maintain wilderness characteristics.

TABLE 2.9. WILDERNESS CHARACTERISTICS (WC)	
Decision #	Decision Text
A. DESIRED FUTURE CONDITIONS	
DFC-WC-01	The following wilderness characteristics will be maintained: <ul style="list-style-type: none"> • High Degree of Naturalness: Lands and resources affected primarily by the forces of nature and where the imprint of human activity is substantially unnoticeable. • Outstanding Opportunities for Solitude: When the sights, sounds, and evidence of other people are rare or infrequent and where visitors can be isolated, alone or secluded from others. • Outstanding Opportunities for Primitive and Unconfined Recreation: Where the use of the area will be through non-motorized, non-mechanical means, and where no or minimal developed recreation facilities are encountered.
DFC-WC-02	Areas where wilderness characteristics will be maintained will be ecologically sustainable and resilient to natural and human-caused disturbances.
DFC-WC-03	Wildlife populations and habitat are important aspects of the ecosystem and are an important component of naturalness.
DFC-WC-04	Wildlife management activities will be consistent with naturalness in areas having wilderness characteristics
B. LAND USE ALLOCATION	
LA-WC-01	Formal allocations are not made for areas where wilderness characteristics are to be maintained, nor are these acres designated as Wilderness Study Areas (WSAs) in this Approved Plan. Decisions to maintain wilderness characteristics apply to the following areas: 37,566 acres (see Map 2.6).
C. MANAGEMENT ACTIONS	
Visual Resource Management	
MA-WC-01	Any changes to the characteristic landscape must be low on 37,566 acres, can be moderate on 0 acres and high on 0 acres.
Land Tenure	
MA-WC-02	The BLM will retain lands in Federal ownership and seek to acquire non-Federal lands and interests in lands within the Monument, including areas managed to maintain wilderness characteristics (see Lands and Realty decisions).
Restoration	
MA-WC-03	Restoration, vegetation treatments, wildlife management projects, and other surface disturbing actions can be authorized in areas managed to maintain wilderness characteristics to achieve DFCs.
MA-WC-04	New projects or maintenance of existing projects that enhance wildlife habitat or other resources can be allowed, provided they can be designed to be substantially unnoticeable over time.
MA-WC-05	Natural processes will be primarily relied on to restore, over time, locations where human imprints are found. When natural process do not restore areas within a reasonable timeframe or when resource damage continues, a mix of chemical, biological, mechanical, and fire tools will be used consistent with DFCs of areas managed for wilderness characteristics.

TABLE 2.9. WILDERNESS CHARACTERISTICS (WC)	
Decision #	Decision Text
Fire Management	
MA-WC-06	Within areas managed to maintain wilderness characteristics, the BLM will use minimum impact suppression tactics (MIST) to manage fire. Fire management actions will be consistent with DFCs for wilderness characteristics described in the Fire Management Plan.
Motorized and Mechanized Uses	
MA-WC-07	Use of non-motorized, wheeled game carriers to retrieve game kills is allowed in areas managed to maintain wilderness characteristics.
Competitive Events	
MA-WC-08	Non-motorized competitive events can be authorized where wilderness characteristics are maintained provided they are consistent with achieving DFCs and, in the Monument, consistent with the proclamation.
Land Use Authorizations	
MA-WC-09	New ROWs will be discouraged within avoidance areas, which include areas managed to maintain wilderness characteristics. An exception can be granted for communication sites necessary for public safety where no other suitable sites are available. Existing land use authorizations (ROWs, permits, leases, etc.) will be administered within areas managed to maintain wilderness characteristics in accordance with the terms and conditions of the authorizations.

Map 2.6. Wilderness Characteristics

TABLE 2.10. LANDS AND REALTY (LR)	
Decision #	Decision Text
A. DESIRED FUTURE CONDITIONS	
DFC-LR-01	The lands and realty program will respond effectively to the needs of external customers (i.e., the public) and internal customers (i.e., BLM resource programs) for the use and enjoyment of current and future generations and for the protection and conservation of resources.
DFC-LR-02	All Federal lands within the Monument will be retained in accordance with the proclamation.
DFC-LR-03	Lands or interests in lands can be acquired to complement existing resource values and further/enhance the objectives of the proclamation/Monument.
B. MANAGEMENT ACTIONS	
Land Tenure Decisions	
<i>Acquisitions/Retentions</i>	
MA-LR-01	All BLM lands and interests in lands (including minerals) will be retained in Federal ownership within the Monument. Non-federally-administered lands and interests in lands (including legal access to landlocked public land) will be acquired within the Monument by BLM from willing sellers by purchase, exchange, or donation. Exchanges with the State of Arizona to acquire state land interests within the Monument will be pursued when the State is provided the authority. Interests in land include, but are not limited to, surface and subsurface rights, water rights, and easements for access, conservation, or other purposes.
MA-LR-02	BLM lands and interests in lands within the Monument will, upon acquisition, be reserved and/or managed as a part of the Monument, wilderness, etc., consistent with planning guidance and objectives.
MA-LR-03	In split estate situations a) where the surface estate is in Federal ownership and the mineral estate is in non-federal ownership, acquisition of the mineral estate will be pursued; and b) where the mineral estate is in Federal ownership and the surface estate is in non-federal ownership, acquisition of the surface estate would be pursued.
<i>Disposals</i>	
MA-LR-04	Land exchanges may be considered within the Monument where site-specific NEPA analysis determines the protective purposes of the Monument will be furthered.
Land Use Authorizations	
MA-LR-05	No new ROWs or ancillary public facilities shall be processed within the Monument, except for: a) ROWs pursuant to existing policies and practices such as, but not limited to, scientific monitoring stations, repeaters, utilities, water facilities, and access or other needs identified on private or state inholdings, public facilities, or administrative sites; and b) ROWs within the boundary of existing ROWs or designated ROW corridors. ROWs will only be authorized where site-specific NEPA analysis determines that the proposed action is consistent with protections required by the Monument proclamation and with DFCs described in this Approved Plan. Mitigation measures may include underground placement of linear ROWs along existing roads and special protection measures for archaeological resources, among others (See Special Status Species and Cultural Resources decisions).

TABLE 2.10. LANDS AND REALTY (LR)	
Decision #	Decision Text
MA-LR-06	New ROWs authorizing new physical facilities (new tower or building) at Fisher Point communication site will not be allowed. Upgrades to the facilities/site that do not change the existing footprint or esthetics of the site may be allowed on a case-by-case basis, if necessary, to allow additional uses in the existing facilities.
MA-LR-07	Minimum impact permits within the Monument will be evaluated and authorized on a case-by-case basis where site-specific NEPA analysis determines that impacts to the objects or values for which the Monument was designated would be negligible.
MA-LR-08	Existing ROWs in the Paria Canyon-Vermilion Cliffs Wilderness (i.e., exclusion areas) will be evaluated prior to expiration, and if still needed, will be authorized under 43 CFR 2920.
C. IMPLEMENTATION DECISIONS	
IMPL-LR-01	The Vermilion Cliffs Natural Area withdrawal will be recommended for revocation (70,437 acres).

TABLE 2.11. LIVESTOCK GRAZING (GM)	
Decision #	Decision Text
A. DESIRED FUTURE CONDITIONS	
DFC-GM-01	Healthy, sustainable rangeland ecosystems will be maintained or improved to meet Arizona’s Standards for Rangeland Health (1997; Appendix C), and produce a wide range of public values such as wildlife habitat, livestock forage, recreation opportunities, clean water, and functional watersheds.
DFC-GM-02	Livestock use and associated management practices will be conducted in a manner consistent with other resource 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.
DFC-GM-03	Monument values will be maintained, protected, and improved.
B. LAND USE ALLOCATIONS	
LA-GM-01	All allotments will continue to be classified as available for grazing by livestock under the principle of multiple use and sustained yield, except where specifically noted (see Map 2.7 at end of Table 2.11).
LA-GM-02	The River Pasture of the Lees Ferry Allotment is unavailable for livestock grazing, in order to eliminate conflicts between livestock grazing and recreation users.
C. MANAGEMENT ACTIONS	
MA-GM-01	Changes in kind of livestock to sheep or goats will not be authorized within nine miles of desert bighorn sheep habitat. Sheep and goats will not be authorized as pack stock within nine miles of desert bighorn sheep habitat.
MA-GM-02	Implementing the Arizona Standards for Rangeland Health will continue on all grazing allotments in accordance with established schedules and congressional requirements. The Arizona Standards for Rangeland Health and guidelines for grazing management will apply to all livestock grazing activities on BLM lands consistent with the appropriate enabling legislation. These guidelines address management practices at the grazing allotment management plan (AMP) level and are intended to maintain desirable conditions or improve undesirable rangeland conditions within reasonable time frames (See Appendix C).
MA-GM-03	The interdisciplinary allotment evaluation process will continue to be used to provide specific guidance and actions for managing livestock grazing. Existing AMPs and other activity plans will be consistent with achieving the DFCs and standards for rangeland health. They will contain the site-specific management objectives, as well as actions, methods, tools, and appropriate monitoring protocols.

MA-GM-04	Existing management practices and levels of use on grazing allotments will be reviewed and evaluated on a priority basis to determine if they meet or are making progress toward meeting the Arizona Standards for Rangeland Health. Appropriate and timely actions will be implemented to deal with those areas not meeting the standards.
MA-GM-05	The allotment management categorization process will continue to be used to define the level of management needed to properly administer livestock grazing according to management needs, resource conflicts, potential for improvement, and BLM funding/staffing constraints. The allotment categories are Custodial (C), managed custodially to protect resource conditions and values; Maintain (M), managed to maintain current satisfactory resource conditions and are actively managed to ensure that the condition of resource values do not decline; and Improve (I), actively managed to improve unsatisfactory resource conditions.
MA-GM-06	The category of grazing allotments will be changed as objectives are accomplished and/or conditions change. See Appendix D for current specific allotment category assignments, grazing systems, preference, etc.
MA-GM-07	Allowable use on key forage species is 50% on allotments with rotational grazing systems.
MA-GM-08	Any hay or other feed used in administering the livestock operation will be certified weed-free.

TABLE 2.12. MINERALS (MI)

Decision #	Decision Text
A. LAND USE ALLOCATIONS	
Salable Minerals	
LA-MI-01	The BLM will continue to use mineral materials from existing material sites, washes, arroyos, and stock tanks for road maintenance projects provided the use is consistent with plan objectives and protection of Monument objects.

Map 2.7. Grazing Allotments

TABLE 2.13. RECREATION & VISITOR SERVICES/INTERPRETATION & ENVIRONMENTAL EDUCATION (RR)	
Decision #	Decision Text
RECREATION & VISITOR SERVICES	
General Recreation	
A. DESIRED FUTURE CONDITIONS	
DFC-RR-01	Recreation and visitor services will be managed to provide varying levels of structured recreation opportunities that offer a range of specific benefits, activities, and experiences within outdoor settings (Special Recreation Management Areas (SRMAs; See Map 2.8).
DFC-RR-02	Information needed to plan, prepare, and choose safe, enjoyable, and appropriate uses of the Monument will be available to the public.
DFC-RR-03	The BLM will work to provide seamless service to the public and use their resources accordingly.
DFC-RR-04	Existing opportunities for visitors to enjoy sightseeing and viewing wildlife in the Backways TMAs will be maintained/enhanced.
DFC-RR-05	The excellent opportunities that exist to enjoy remote, rustic settings that provide moderate challenge and solitude in the Specialized TMAs will be maintained/enhanced.
DFC-RR-06	In Backways and Specialized TMAs, recreation opportunities associated with somewhat remote settings, such as exploring backcountry roads, vehicle camping, hunting, sightseeing, recreation aviation, and picnicking will be maintained/enhanced on existing roads, provided they will be compatible with the protection and enhancement of sensitive resource values and Monument objects, where appropriate.
DFC-RR-07	In the Primitive TMA, high quality recreation opportunities associated more with primitive recreation experience opportunities and non-motorized uses such as camping, sightseeing, hiking, horseback riding, and hunting, will be maintained/enhanced, provided they will be compatible with the protection and enhancement of sensitive resource values and Monument objects, where appropriate.
Recreation Management Areas	
DFC-RR-08	One type of Recreation Management Area (RMAs) is identified for the Monument: SRMAs.
DFC-RR-09	Each SRMA will target a distinct, primary recreation-tourism market as well as a corresponding and distinguishing recreation management strategy, such as Community, Destination, or Undeveloped (see Glossary). In identifying SRMAs and prescribing the management regime for each, a benefits-based management (BBM) approach will be utilized. BBM or “beneficial outcomes” focuses on the desired outcomes of recreation and leisure activities tied to experiences and benefits.
DFC-RR-10	Within each SRMA, one or more potential Recreation Management Zones (RMZs) have been identified, with each zone providing for a particular recreation niche (see Glossary) within the overall SRMA (See Map 2.8 for SRMAs and Map 2.9 for RMZs). Each RMZ is characterized by a description of its own DFCs in the form of outcomes (management objective(s), benefits, experiences, activities) and the setting prescriptions (physical, social, and administrative conditions; see Maps 2.10-2.12) required to produce the outcomes.
DFC-RR-11	The House Rock RMZ will be managed for: <ul style="list-style-type: none"> • Scenic backroads driving with access to interpretation, wildlife viewing, and hiking.

TABLE 2.13. RECREATION & VISITOR SERVICES/INTERPRETATION & ENVIRONMENTAL EDUCATION (RR)

Decision #	Decision Text
	<ul style="list-style-type: none"> • By the year 2010, manage this zone to produce opportunities for visitors to enjoy “back road” driving, roadside natural/cultural history interpretation, hiking, and wildlife viewing opportunities, providing no less than 75% of responding visitors and affected community residents at least a “moderate” realization of these benefits (i.e., 3.0 on a probability scale where 1=not at all, 2=somewhat, 3=moderate, 4=total realization), • Visiting scenic vistas, historic sites, interpretive exhibits, and wildlife, including California condors, driving for pleasure, and hiking • Enjoying access to environmental learning; savoring the natural landscape. • <i>Personal Benefits</i>: Improved sense of personal responsibility for acting responsible on public lands; improved appreciation of nature’s splendor; improved outdoor stewardship ethic. • <i>Household & Community Benefits</i>: Maintenance of community’s distinctive recreation-tourism market niche; enlarged sense of community dependency on public lands • <i>Environmental Benefits</i>: Greater protection of wildlife and plant habitat; increased awareness and protection of natural landscapes; improved soil, air, and water quality. <p>The RMZ will be managed to produce recreation opportunities in the following essential settings:</p> <ul style="list-style-type: none"> • <i>Physical Benefits</i>: Roded Natural, with regard to remoteness and Semi-Primitive Motorized to Roded Natural, with regard to naturalness and recreation facilities. • <i>Social Benefits</i>: Semi-Primitive Non-Motorized to Semi-Primitive Motorized, with regard to group size; Semi-Primitive Non-Motorized, with regard to contacts; and Semi-Primitive Motorized to Roded Natural, with regard to evidence of use. • <i>Administrative Benefits</i>: Semi-Primitive Motorized to Roded Natural, with regard to visitor services; Rural, with regard to mechanized/motorized use; and Roded Natural, with regard to management controls.
DFC-RR-12	<p>The primary strategy for the Sand Hills SRMA is to target a demonstrated undeveloped recreation-tourism market demand from local community and regional/national visitors for hunting opportunities, guided backcountry tours, hiking, viewing and appreciating wildland landscapes, and motorized/mechanized/non-mechanized exploring. This demand is supported by the area’s distinctive remote, rugged landscape, its vast size, and the largely open, undeveloped character of its recreation settings (see Maps 2.10 – 2.12). Regional and local recreation-tourism visitors value this area for the distinctive kinds of dispersed recreation it produces.</p>
DFC-RR-13	<p>The Uplands RMZ will be managed for:</p> <ul style="list-style-type: none"> • Self-directed motorized recreation with access to non-motorized opportunities. • By the year 2012, manage this zone to produce limited and sustainable motorized access for visitors to enjoy day-use adventure activities in natural, scenic landscapes along structured travel routes and areas, accessing non-motorized exploration and challenge recreation in an urban back-yard setting of colorful sandstone abutting the wilderness, providing no less than 75% of responding visitors and affected community residents at least a “moderate” realization of these benefits (i.e., 3.0 on a probability scale where 1=not at all, 2=somewhat, 3=moderate, 4= total realization).

TABLE 2.13. RECREATION & VISITOR SERVICES/INTERPRETATION & ENVIRONMENTAL EDUCATION (RR)

Decision #	Decision Text
	<ul style="list-style-type: none"> • Off-highway adventure driving and exploring. • Developing skills and abilities; enjoying going exploring on one’s own. • <i>Personal Benefits</i>: Enhanced sense of personal freedom, greater self-reliance, increased adaptability, greater environmental awareness and sensitivity, enlarged sense of personal accountability for acting responsibly on public lands, and a more outdoor-oriented lifestyle. • <i>Household & Community Benefits</i>: Heightened sense of satisfaction with one’s community, increased work productivity, and a greater community involvement in other land-use decisions. • <i>Environmental Benefits</i>: Improved understanding of one’s community’s dependence and impacts on public land. <p>The RMZ will be managed to produce recreation opportunities in the following essential settings:</p> <ul style="list-style-type: none"> • <i>Physical Benefits</i>: Semi-Primitive Non-Motorized to Roded Natural, with regard to remoteness and naturalness and Primitive to Semi-Primitive Non-Motorized, with regard to recreation facilities. • <i>Social Benefits</i>: Primitive to Roded Natural, with regard to group size; Primitive to Semi-Primitive Non-Motorized, with regard to contacts; and Semi-Primitive Motorized, with regard to evidence of use. • <i>Administrative Benefits</i>: Semi-Primitive Non-Motorized to Semi-Primitive Motorized, with regard to visitor services and management controls and Primitive to Roded Natural, with regard to mechanized/motorized use.
DFC-RR-14	<p>The Cliffs and Rims RMZ will be managed for:</p> <ul style="list-style-type: none"> • Self-directed, non-motorized access for remote, primitive adventure. • By the year 2012, manage this zone to produce opportunities for local/regional visitors to enjoy primitive-mode recreation adventure through natural-appearing shallow valleys and sandstone mesas, pinnacles, and slick rock erosion features, providing no less than 75% of responding visitors and affected community residents at least a “moderate” realization of these benefits (i.e., 3.0 on a probability scale where 1=not at all, 2=somewhat, 3=moderate, 4= total realization). Other management objectives will continue to be established through the Paria Canyon-Vermilion Cliffs Wilderness Management plan as amended by this Approved Plan. • Hiking, scrambling, hunting, and rock climbing. • Enjoying risk-taking adventure; enjoying strenuous physical exercise. • <i>Personal Benefits</i>: Improved outdoor recreation skills; improved muscle strength; improved cardiovascular health; improved teamwork and cooperation; a more holistic sense of wellness. • <i>Household & Community Benefits</i>: Better sense of place within one’s community. • <i>Economic Benefits</i>: Reduced health maintenance costs. <p>The RMZ will be managed to produce recreation opportunities in the following essential settings:</p> <ul style="list-style-type: none"> • <i>Physical Benefits</i>: Primitive to Roded Natural, with regard to remoteness; Primitive to Semi-Primitive Non-Motorized, with regard to naturalness; and Primitive to Semi-Primitive Motorized, with regard to recreation facilities.

TABLE 2.13. RECREATION & VISITOR SERVICES/INTERPRETATION & ENVIRONMENTAL EDUCATION (RR)

Decision #	Decision Text
	<ul style="list-style-type: none"> • <i>Social Benefits</i>: Semi-Primitive Non-Motorized, with regard to group size and evidence of use and Primitive to Semi-Primitive Non-Motorized, with regard to contacts. • <i>Administrative Benefits</i>: Semi-Primitive Non-Motorized, with regard to visitor services; Primitive to Semi-Primitive Non-Motorized, with regard to management controls; and Primitive, with regard to mechanized/motorized use.
DFC-RR-15	<p>The primary strategy for the Paria SRMA will be to target a demonstrated destination recreation-tourism market demand from community resident, regional, national and international visitors for viewing unique geology and enjoying world-class slot canyon backpacking and hiking. This demand is supported by the area’s distinctive landscape of spectacular geology and scenery, challenging terrain, and its connectivity to other world-class sites (Grand Staircase-Escalante National Monument, Glen Canyon NRA, and Kanab Field Office). Recreation-tourism visitors, ranging from local to international, highly value these public lands as recreation-tourism destinations.</p>
DFC-RR-16	<p>The Coyote Buttes RMZ will be managed for:</p> <ul style="list-style-type: none"> • International adventure tourism. • By the year 2008, manage this zone to produce opportunities for visitors to enjoy rugged, world-class, day-hiking adventure in a spectacular geologic showcase of colorful cliffs and eroded formations, while preserving its rustic character, providing no less than 75% of responding visitors and affected community residents at least a “moderate” realization of these benefits (i.e., 3.0 on a probability scale where 1=not at all, 2=somewhat, 3=moderate, 4= total realization). Other management objectives will continue to be established through the Paria Canyon-Vermilion Cliffs Wilderness Management Plan as amended by this Approved Plan. • Hiking and scrambling; viewing and photographing scenic vistas. • Enjoying the artistic expression of nature; escaping everyday responsibilities for a while. • <i>Personal Benefits</i>: Increased capacity for artistic expression; restored mind from unwanted stress; greater sensitivity to/awareness of outdoor aesthetics—nature’s art and elegance; • <i>Household & Community Benefits</i>: Improved physical fitness and health maintenance; maintenance of community’s distinctive recreation tourism market. • <i>Economic Benefits</i>: Reduced health maintenance costs. • <i>Environmental Benefits</i>: Increased awareness and protection of natural landscapes. <p>The RMZ will be managed to produce recreation opportunities in the following essential settings:</p> <ul style="list-style-type: none"> • <i>Physical Benefits</i>: Semi-Primitive Non-Motorized to Roaded Natural, with regard to remoteness; Primitive to Semi-Primitive Motorized, with regard to naturalness, Primitive to Roaded Natural, with regard to recreation facilities. • <i>Social Benefits</i>: Primitive to Semi-Primitive Non-Motorized with regard to group sizes and evidence of use and Primitive to Semi-Primitive Non-Motorized with regard to contacts. • <i>Administrative Benefits</i>: Primitive to Roaded Natural, with regard to visitor services and mechanized/motorized use and Semi-Primitive Motorized to Rural, with regard to management controls.

TABLE 2.13. RECREATION & VISITOR SERVICES/INTERPRETATION & ENVIRONMENTAL EDUCATION (RR)	
Decision #	Decision Text
DFC-RR-17	<p>The Paria Canyon RMZ will be managed for:</p> <ul style="list-style-type: none"> • World-class wilderness trekking adventure. • By the year 2009, manage this zone to produce opportunities for visitors to enjoy world-class, long-distance wilderness trekking in a spectacular geologic showcase of colorful, deep canyons, cliffs and narrow slots, while preserving its wilderness character, providing no less than 75% of responding visitors and affected community residents at least a “moderate” realization of these benefits (i.e., 3.0 on a probability scale where 1=not at all, 2=somewhat, 3=moderate, 4= total realization) • Other management objectives will continue to be established through the Paria Canyon-Vermilion Cliffs Wilderness Management Plan as amended by this Approved Plan. • Hiking, backpacking, viewing scenic vistas. • Enjoying risk-taking adventure; feeling good about solitude, being isolated, and independent. • <i>Personal Benefits</i>: Improved outdoor knowledge, skills, and self-confidence; enhanced sense of personal freedom and awareness; greater appreciation for one’s wildland/parkland heritage and how managers care for it; greater sense of independence. • <i>Household & Community Benefits</i>: Enlarged sense of community dependency on public lands. • <i>Environmental</i>: maintenance of distinctive recreation setting character. <p>The RMZ will be managed to produce recreation opportunities in the following essential settings:</p> <ul style="list-style-type: none"> • <i>Physical Benefits</i>: Primitive to Semi-Primitive Non-Motorized, with regard to naturalness and Primitive, with regard to recreation facilities and remoteness. • <i>Social Benefits</i>: Primitive to Semi-Primitive Motorized with regard to group size and Primitive to Semi-Primitive Non-Motorized with regard to contacts and evidence of use. • <i>Administrative Benefits</i>: Semi-Primitive Non-Motorized to Roaded Natural, with regard to visitor services; Semi-Primitive Non-Motorized to Rural, with regard to management controls; and Primitive, with regard to mechanized/motorized use (see Travel Management Section for decisions regarding access for administrative uses).
B. LAND USE ALLOCATION	
LA-RR-01	<p>The RMAs (both Special and Extensive), and accompanying RMZs (Map 2.9) within each SRMA (Map 2.8), are identified as follows (See Appendix J for more information about RMAs):</p> <p>Gateways SRMA: 814 acres (Also includes 2,246 acres in Arizona Strip FO)</p> <ul style="list-style-type: none"> • Vermilion Cliffs RMZ: 269 acres • House Rock RMZ: 545 acres <p>Sand Hills SRMA: 265,109 acres (Also includes 8,503 acres in Arizona Strip FO)</p> <ul style="list-style-type: none"> • Uplands RMZ: 197,031 acres • Cliffs & Rims RMZ: 68,078 acres

TABLE 2.13. RECREATION & VISITOR SERVICES/INTERPRETATION & ENVIRONMENTAL EDUCATION (RR)

Decision #	Decision Text
	<p>Paria SRMA: 27,741 acres (Also includes 1,413 acres in Arizona Strip FO)</p> <ul style="list-style-type: none"> • Coyote Buttes RMZ: 14,576 acres • Paria Canyon RMZ : 13,165 acres
C. MANAGEMENT ACTIONS	
Recreation Management Actions	
<i>Resources</i>	
MA-RR-01	To the extent practicable, the natural or “remote” settings in Specialized and Primitive TMAs will be restored and/or maintained using a combination of projects and natural processes as the need or opportunity arises.
MA-RR-02	Geocache sites will be relocated with help from local geocachers if, through monitoring, it is determined that important resources are at risk of unacceptable change due to use of the site.
<i>Signing and Recreation Facilities</i>	
MA-RR-03	Major visitor facilities (visitor center or contact stations) will be collaborative efforts with nearby communities.
MA-RR-04	Recreation facility development and maintenance will be limited in listed species and other sensitive habitats (see Special Status Species and Vegetation Management decisions).
MA-RR-05	<ul style="list-style-type: none"> • Within SRMAs, the levels and types of signing and recreation facility development will be guided by the individual RMZ objectives and the administrative and physical recreation settings components prescribed for each RMZ (see Appendix J, Physical Setting (Facilities) and Administrative Setting (Management Controls) for descriptions of settings components and Maps 2.10 - 2.12). • Where Extensive Recreation Management Areas (ERMAs) are allocated, the main emphasis areas for any signing and/or recreation facility placement will be in the Rural and Backways TMAs. • Generally, signing and recreation facility development in the ERMAs will be the minimum necessary to provide for public safety, reduce user conflicts, and protect resources.
MA-RR-06	Sign material and design will be unobtrusive in order to blend with local landscape settings and retain the natural and/or historic integrity of the site.
Recreation Marketing Actions	
<i>Promotion</i>	
MA-RR-07	Sensitive areas where increased visitation can create unacceptable changes or impacts to natural or cultural resources will not be publicly promoted. Public information will be provided only for those cultural sites designated for public use.

TABLE 2.13. RECREATION & VISITOR SERVICES/INTERPRETATION & ENVIRONMENTAL EDUCATION (RR)	
Decision #	Decision Text
Recreation Monitoring Actions	
<i>Inventory and Monitoring</i>	
MA-RR-08	A Limits of Acceptable Change (LAC) framework will be used to establish acceptable resource and social and managerial settings and conditions using appropriate indicators and standards.
Recreation Administration Actions	
<i>Visitor Limits and Regulations</i>	
MA-RR-09	Recreational activities can be limited or restricted in special status species and other sensitive habitats (see the Special Status Species and Vegetation Management decisions in this Approved Plan).
MA-RR-10	Visitor limits, supplemental rules, or restrictions will be based on LAC.
MA-RR-11	Management responses to unacceptable resource and/or social conditions will range from least restrictive methods (e.g., information and education) to most restrictive (e.g., visitor limits, supplemental rules, or restrictions). Where feasible, the least restrictive methods will be the first priority.
MA-RR-12	The current group sizes and visitor use limits in Paria Canyon, Buckskin Gulch, Wire Pass, and Coyote Buttes will continue, subject to adaptive management decisions deemed necessary through monitoring and evaluation of resource and social conditions. Current visitor use limits are 20 persons per day (cumulative from all access points), in each of the three sections of the Special Management Area: Paria Canyon, Coyote Buttes North, and Coyote Buttes South, or a total daily limit of 60. Maximum group size in Paria Canyon is 10, and in Coyote Buttes North and South, the limit is 6. Dogs are allowed in all areas, but are subject to applicable fees. Fees for all non-commercial permits are \$5 per person, per day. For visitors wishing to bring their dogs into the Paria Canyon/Coyote Buttes Special Management Area, the cost is \$5 per dog, per day.
MA-RR-13	No person or persons shall occupy one area within the Monument for longer than 14 consecutive days in any 28-day period; however, extensions beyond the 14-day length of stay can be authorized for permitted uses on a case-by-case basis. Any site on public land within 30 air miles constitutes the same area for the purpose of this rule. To protect resources, for public safety, or for other administrative purposes, an authorized officer may, by posting notification, close a given site to occupancy.
MA-RR-14	<ul style="list-style-type: none"> • Camping can be limited in listed species and other sensitive habitats (See Special Status Species and Vegetation Management decisions). • Camping can be restricted or limited to protect cultural and/ or natural resources through campsite monitoring and LAC.
MA-RR-15	Vehicle camping along designated routes is allowed only at existing sites where previous camping use is evident. However, existing sites that overlie or are causing significant impacts to sensitive resources will be closed and new sites can be made available in locations where resource impacts are lessened.
MA-RR-16	Non-motorized, dispersed camping is allowed subject to Trail and Travel Management decisions, except for the Coyote Buttes Fee Area.

TABLE 2.13. RECREATION & VISITOR SERVICES/INTERPRETATION & ENVIRONMENTAL EDUCATION (RR)

Decision #	Decision Text
MA-RR-17	Recreational shooting is allowed except where public health and safety is jeopardized and subject to state and local laws (See Special Status Species and Public Health sections for specific decisions). Voluntary use of non-lead ammunition is encouraged.
MA-RR-18	<ul style="list-style-type: none"> • Collection of antlers or other unregulated animal parts is allowed (See Travel Management for vehicular decisions, and Fish and Wildlife decisions, and Special Status Species decisions for animal parts). • Recreational collecting of Monument resources, such as rocks, mineral specimens, petrified wood, fossils, or plants is prohibited (See Travel Management for vehicular decisions and Vegetation Management decisions for collection of plants).
MA-RR-19	Collection of dead and down wood for campfires is allowed, subject to fire restrictions.
MA-RR-20	Recreational stock use can be limited in listed species and other sensitive habitats or in the vicinity of cultural properties (See Special Status Species, Fish and Wildlife, Vegetation Management, and Cultural Resources decisions).
MA-RR-21	Certified weed-free feed is required for all recreation stock use (See Vegetation Management decisions)
MA-RR-22	All recreational and commercial horseback riding and pack stock use will continue to be prohibited in Coyote Buttes.
MA-RR-23	Where geocaches are allowed, they can remain so long as acceptable resource and social conditions are maintained.
MA-RR-24	Geocache sites are prohibited in archaeological sites, alcoves, caves, rock shelters, threatened and endangered species habitat, and raptor nesting sites, or where identified Monument objects are at risk.
MA-RR-25	Commercial use of horses and pack stock will continue to be prohibited in Paria Canyon upstream from Bush Head Canyon.
<i>Permits and Fees</i>	
MA-RR-26	Visitor limits, regulations, or restrictions can be instituted and/or adjusted when monitoring of resource and social conditions indicate a trend toward unacceptable resource and social changes brought about by such use.
MA-RR-27	SRP application packages (application, operating plan, maps, etc.) will be considered for authorization on a case-by-case basis upon receipt of application. (See 43 CFR 2930 for requirements)
MA-RR-28	<ul style="list-style-type: none"> • The current special area permit and fee requirements for Paria Canyon, Buckskin Gulch, Wire Pass, and Coyote Buttes will continue, subject to adaptive management decisions deemed necessary through monitoring and evaluation of resource and social conditions. • Commercial SRPs will be considered on a case-by-case basis in Coyote Buttes North. A limit may be established as conditions dictate.
MA-RR-29	No motorized speed events are authorized in the Monument.
MA-RR-30	No competitive events are authorized in designated wilderness.
MA-RR-31	<ul style="list-style-type: none"> • Commercial, competitive, organized group/event, and special area permits may be authorized when such uses accomplish or are compatible with management objectives and other plan provisions. Commercial services in designated wilderness shall meet guidelines for commercial activities within wilderness. • Recreation activities requiring use authorization may be limited in listed species and other sensitive habitats (See Special Status Species and Vegetation Management decisions).

TABLE 2.13. RECREATION & VISITOR SERVICES/INTERPRETATION & ENVIRONMENTAL EDUCATION (RR)	
Decision #	Decision Text
INTERPRETATION & ENVIRONMENTAL EDUCATION	
A. DESIRED FUTURE CONDITIONS	
DFC-RR-18	The Monument’s interpretation and environmental education program will be grounded in: <ul style="list-style-type: none"> • The Monument’s natural and cultural resources, including Monument objects; • Themes related to the Monument’s purpose, significance, and mission statements; and • BLM’s mission and goals.
DFC-RR-19	The public will understand and appreciate the purposes and significance of the Monument and its resources for this and future generations.
DFC-RR-20	The public will understand the importance of natural and cultural resources in the Monument through interpretive, watchable wildlife, and other environmental education programs.
B. MANAGEMENT ACTIONS	
MA-RR-32	Outreach efforts will be established, such as field institutes or elder hostels, to focus on interpretive and environmental educational niches not previously addressed.
MA-RR-33	Visitors will be provided with environmental educational opportunities that are appropriate for each RMZ or for the ERMA, allowing them to enjoy the variety of challenges that are presented when visiting these areas.

Map 2.8. Special Recreation Management Areas

Map 2.9. Recreation Management Zones

Map 2.10. Recreation Settings (Physical)

Map 2.11. Recreation Settings (Social)

Map 2.12. Recreation Settings (Administrative)

TABLE 2.14. TRAVEL MANAGEMENT (TM)	
Decision #	Decision Text
A. DESIRED FUTURE CONDITIONS	
DFC-TM-01	The region’s remoteness, scenic beauty, open spaces, and Monument objects will be maintained by careful travel management.
DFC-TM-02	A variety of existing motorized, mechanized, and non-motorized trail and travel opportunities will be sustained, where needed, to meet public and administrative needs.
DFC-TM-03	Compatible traditional, current, and future use of the land will be sustained by establishing a transportation system that contributes to protection of sensitive resource, promotes dispersed recreation, and minimizes user conflicts.
DFC-TM-04	Public use, resource management, regulatory needs, and Monument objects will be considered through travel management planning, incorporating consideration of the effects of, and interactions among, all forms of travel including motorized, mechanized, non-motorized/non-mechanized, equestrian and other livestock, walking, mountain biking, and other travel modes.
Travel Management Areas (See Map 2.13)	
DFC-TM-05	<p><u>Backways TMA (see Map 2.13)</u></p> <ul style="list-style-type: none"> • Objectives: The Backways TMA will provide for a variety of motorized, non-motorized, and mechanical travel modes to serve existing and future recreational, traditional, casual, commercial, educational, and private needs, but not to the detriment or exclusion of the protection of resources. It will also supply the primary travel system that will provide public entry from communities to the more remote and semi-primitive TMAs. • Primary Travelers: The Backways TMA will serve the day-to-day needs of those with permits for the use of resources, such as grazing, as well as private, state, and other land ownership needs and a variety of local, state, and Federal agency resource management needs. It will also serve the motorized and non-motorized needs of local, regional, national, and international visitors engaged in activities such as viewing scenery, visiting cultural resources and interpretive sites, exploring by vehicle, camping, picnicking, hunting; studying nature, and participating in organized events. It will also provide the best opportunities for day-use recreation activities related to motor touring. • Setting Characteristics: Settings will be maintained within the Backways TMA that typically provide entry to more remote areas, interpretive developments, and administrative facilities in mostly natural-appearing areas with motorized and mechanized use.
DFC-TM-06	<p><u>Specialized TMA (see Map 2.13)</u></p> <ul style="list-style-type: none"> • Objectives: The Specialized TMA will provide for a variety of motorized, non-motorized, and mechanical travel modes to serve existing and future recreational, traditional, casual, commercial, and private needs in remote, rustic settings, but not to the detriment or exclusion of the protection of resources. It will also be characterized by low to moderate densities of improved roads and primitive roads that will provide public entry portals from Backways corridors to the more remote Primitive TMAs. • Primary Travelers: The Specialized TMA will serve the day-to-day needs of those with permits for the use of resources, such as grazing and mineral materials, as well as private, state, and other land ownership needs and a variety of local, state, and Federal agency resource

TABLE 2.14. TRAVEL MANAGEMENT (TM)													
Decision #	Decision Text												
	<p>management needs. It will also serve the motorized and non-motorized needs of primarily local, regional, and national visitors engaged in activities such as viewing scenery and cultural resources, exploring, camping, hiking, picnicking, hunting, gathering, and studying nature.</p> <ul style="list-style-type: none"> • Setting Characteristics: Settings will be maintained within the Specialized TMA that typically provide for motorized and mechanized entry to the most remote areas on lower standard, primitive roads with few and widely scattered, rustic developments in mostly natural-appearing areas. Rudimentary facilities can be present when necessary to protect resources or educate visitors. 												
DFC-TM-07	<p><u>Primitive TMA (see Map 2.13)</u></p> <ul style="list-style-type: none"> • Objectives: The Primitive TMA will provide for adequate, but limited motorized travel to serve existing and future traditional, casual, some commercial, private, and emergency needs and for non-motorized, non-mechanized travel to serve existing and future recreational needs in the most remote, rustic settings, for the enhancement and protection of important resource values. It will also range from large areas containing no routes to areas characterized by low densities of primitive roads that will provide entry to authorized management facilities for administrative users. • Primary Travelers: The Primitive TMA will serve the occasional needs of those with permits for the use of resources, such as grazing or research, as well as private, state, and other land ownership needs and a variety of local, state, and Federal agency resource management needs. It will also serve the non-motorized/non-mechanized needs of primarily local, regional, and national visitors engaged in activities such as viewing scenery and cultural resources, backcountry exploring, and hunting. • Setting Characteristics: Settings will be maintained within the Primitive TMA that provide for limited motorized entry for administrative users on a small number of primitive roads in the most remote areas. Few and widely scattered, rustic management facilities can be present in mostly natural-appearing areas where they will be necessary to protect and/or administer important resources. Remote settings, natural landscapes, solitude, and opportunities for primitive recreation will be minimally impacted by human activity. 												
B. LAND USE ALLOCATIONS													
LA-TM-01	<p>TMA's will not be formally allocated or designated. Per Land Use Planning Handbook, H-1601-1, TMA's will be delineated as follows (see Map 2.13):</p> <table border="0"> <tr> <td>• Rural</td> <td>0 ac.</td> <td>0%</td> </tr> <tr> <td>• Backways</td> <td>5,857 ac.</td> <td>2%</td> </tr> <tr> <td>• Specialized</td> <td>96,116 ac.</td> <td>33%</td> </tr> <tr> <td>• Primitive</td> <td>191,716 ac.</td> <td>65%</td> </tr> </table>	• Rural	0 ac.	0%	• Backways	5,857 ac.	2%	• Specialized	96,116 ac.	33%	• Primitive	191,716 ac.	65%
• Rural	0 ac.	0%											
• Backways	5,857 ac.	2%											
• Specialized	96,116 ac.	33%											
• Primitive	191,716 ac.	65%											
Off-Highway Vehicle													
LA-TM-02	<p>The following OHV area (polygons) designations (see Map 2.14), which are required land use plan decisions, are subject to valid existing rights and administrative purposes (see Glossary). Specific route designations are implementation level decisions and can be found below under Implementation Decisions, Route Designations, and on the Route Maps on the CD accompanying this Approved Plan.</p>												

TABLE 2.14. TRAVEL MANAGEMENT (TM)	
Decision #	Decision Text
	<ul style="list-style-type: none"> 89,598 acres will be closed to motorized and mechanized vehicle use, which includes designated wilderness. Motorized and mechanized vehicle use will be limited to designated roads on 203,863 acres (see Map 2.14).
C. MANAGEMENT ACTIONS	
Conditions of Use	
MA-TM-01	State of Arizona traffic law statutes will continue to apply to all motorized vehicle use on State, County, and BLM routes. Motor vehicle “registration requirement would not apply on lands under BLM jurisdiction to an all-terrain vehicle or an off-road recreational motor vehicle operating on a dirt road that is located in an unincorporated area of this state. For the purposes of this paragraph, “dirt road” means an unpaved or un-graveled road that is not maintained by this state or a city, town, or county of this state” (ARS 28-2153, D).
MA-TM-02	Motorized, mechanized, or non-motorized/non-mechanized use of routes that are designated as “limited” will be restricted to the specific users, seasons, or vehicle types as identified on a route-by-route evaluation and designation.
MA-TM-03	Motorized or mechanized use of administrative routes are subject to the terms of an appropriate authorization instrument, such as ROW, permit, lease, maintenance agreement, or transportation plan that specifies the authorized administrative user, routes, destinations, potential frequencies, and acceptable intensities maintenance (see Appendix K).
MA-TM-04	Motorized or mechanized use of administrative routes in “closed” areas are the minimum necessary for the administration of the area or the exercise of the right or permitted use (see Glossary for definition of “administrative routes”).
MA-TM-05	All vehicular travel in the Monument is allowed only on roads designated as part of the transportation system. To protect Monument objects, no areas are authorized for driving off these designated roads, except for authorized administrative and emergency purposes.
MA-TM-06	In areas along national trails, motorized use will keep within the designated road with reasonable use of the shoulder and immediate roadside, allowing for vehicle passage, emergency stopping, or parking, unless otherwise posted.
MA-TM-07	For roads that are designated open, management discretion to limit or close a route may be exercised where necessary through emergency closure to protect Monument objects.
MA-TM-08	Use of non-motorized, wheeled game carriers to retrieve kills is allowed in all areas of the Monument except designated wilderness.
MA-TM-09	Roads designated for motorized/mechanized vehicle use by administrative users only, allow only the minimum motorized or mechanized use necessary for the administration of the area or the exercise of the right or permitted use.
MA-TM-10	On roads within the wilderness boundary setback, visitors can park only on the road shoulder and immediate roadside, allowing for vehicle passage and emergency stopping, unless otherwise posted.
D. IMPLEMENTATION DECISIONS	
Route Designation	
IMPL-TM-01	Prior to the full implementation of route designations, bureau policy will be followed regarding compliance with the requirements of Section 106 of the NHPA.

TABLE 2.14. TRAVEL MANAGEMENT (TM)	
Decision #	Decision Text
IMPL-TM-02	<p>Routes will be designated as follows (See Designated Transportation System Map 2.15 and Route Evaluation Reports© and Sub-region Maps on CD version accompanying this Approved Plan):</p> <ul style="list-style-type: none"> • O: open to all users for motorized/mechanized travel (various special mitigating measures designed to ensure Monument objects or other sensitive or important resources are protected may apply. Route Evaluation Report© designations = O or MO) administrative use only (open to administrative motorized uses and non-motorized public uses; public mechanized use limits may vary. Route Evaluation Report© designations = L or ML) (see Glossary for definition of administrative users). • NM: open to all users for non-motorized uses only (such as, horseback, foot or mechanized vehicles; mechanized use limits may vary) (Route Evaluation Report© designations = ML) <p>O: 374 miles A: 74 miles NM: 6 miles</p>
Trail System Designation	
IMPL-TM-03	<ul style="list-style-type: none"> • State Trails System: Paria Canyon Trail will continue to be managed as an Arizona State Trail System component. • State Trails System: Old Arizona Road/Honeymoon Trail and Old Spanish Trail will continue to be managed as Arizona State Trail System components.
IMPL-TM-04	National Historic Trails: Old Spanish Trail will continue to be managed as a NHT.
Route Closures	
IMPL-TM-05	<p>Routes will be closed as follows (See Designated Transportation System Map 2.15 and Route Evaluation Reports© and Sub-region Maps on CD version accompanying this Approved Plan):</p> <ul style="list-style-type: none"> • C: closed to all motorized and mechanized use (with an objective of future natural and/or project rehabilitation. Route Evaluation Report© designations = C) <p>C: 116 miles</p>

TRANSPORTATION FACILITIES	
A. DESIRED FUTURE CONDITIONS	
DFC-TM-08	The building of new roads, or altering or upgrading of existing roads, will be minimized to the greatest extent possible, except as needed to protect natural and cultural resources on public lands or support achieving other resource management objectives identified in this Approved Plan.
Travel Management Areas	
DFC-TM-09	Transportation facilities that will be available, suitable, and appropriate in the Monument will vary by TMA.
B. MANAGEMENT ACTIONS	
Management of Transportation Facilities	
MA-TM-11	Installations/structures (e.g., unobtrusive barriers, gates, signs) on or along routes will be allowed when they are the minimum necessary to control unauthorized use and when consistent with TMA objectives.
MA-TM-12	Routes causing resource damage or with safety concerns can be rerouted and/or reclaimed. Minor rerouting of roads into areas where wilderness characteristics are maintained can be considered when it is determined that: 1) it resolves the concerns previously mentioned; 2) the road is an important travel link for public and administrative uses; 3) topography and engineering capabilities require consideration of such a reroute; and 4) public motorized and mechanized travel will remain on the road through the area. Rehabilitation of closed routes will only occur after completion of NEPA review and compliance with requirements of Section 106 of NHPA.
MA-TM-13	Newly constructed temporary routes (i.e. routes intended to serve a short-term purpose only,) will be reclaimed after termination of the specific need.
MA-TM-14	No new roads are allowed in the Paria Canyon-Vermilion Cliffs Wilderness (265,598 acres).
MA-TM-15	Routes where motorized/mechanized vehicle use is authorized for administrative use only may be designated as trails for non-motorized public use.
MA-TM-16	Trail construction (non-motorized and non-mechanized only) will occur to support protection and/or enhancement of Monument objects, RMZ objectives or to resolve issues of public safety, user conflicts, or resource protection.
MA-TM-17	<ul style="list-style-type: none"> • Existing material sites will continue to be used for BLM and county route maintenance needs. • New material sites will not be authorized

MA-TM-18	<p>Route maintenance will occur within standard widths based on route type. Widening, passing lanes, realignments, or travel surface upgrades can occur if:</p> <ul style="list-style-type: none"> • Protection and/or enhancement of Monument objects is ensured. • They are needed to achieve route standards. • They are consistent with Appendix K: Appropriate Route Construction and Maintenance Standards by TMA. <p>They are needed for public safety.</p>
MA-TM-19	<p>New permanent motorized road construction will be the minimum necessary to achieve Approved Plan provisions and to enhance recreation opportunities and benefits, if protection and/or enhancement of Monument objects is ensured.</p>
MA-TM-20	<p>A travel management plan will be developed and maintained that supports resource protection and uses identified in this Approved Plan.</p>
MA-TM-21	<ul style="list-style-type: none"> • Routes created by unauthorized use will be immediately obscured and rehabilitated. • Implementation plans will include outreach efforts to actively recruit service-oriented volunteers, organizations, and schools to assist with accomplishing appropriate implementation projects.
MA-TM-22	<p>New roads, once authorized and constructed, will become part of the designated transportation system; closed routes will be removed from the transportation system and plan.</p>

Map 2.13. Travel Management Areas

Map 2.14. Off Highway Vehicle Area Designations

Map 2.15. Designated Transportation System Route Network

TABLE 2.15. SPECIAL DESIGNATIONS (AC, WM, HT, WR)	
Decision #	Decision Text
CONGRESSIONALLY DESIGNATED WILDERNESS (WM)	
A. DESIRED FUTURE CONDITIONS	
Goals	
DFC-WM-01	The first and dominant goal will be to provide for the long-term protection and preservation of the areas' wilderness character under a principle of non-degradation. The areas' 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 remain unimpaired.
DFC-WM-02	The second goal will be to manage the wilderness areas for the use and enjoyment of visitors in a manner that leaves the areas unimpaired for future use and enjoyment as wilderness. The wilderness resource will be a dominant factor in all management decisions where a choice must be made between preservation of wilderness character and visitor use.
DFC-WM-03	The third goal will be to manage the areas using the minimum tools, equipment, and/or structures necessary to accomplish the objective successfully, safely, and economically. The chosen tools, equipment, or structures will be the ones that least degrade wilderness values temporarily or permanently. Management will seek to preserve spontaneity of use and as much freedom from regulation as possible.
DFC-WM-04	The fourth goal will be to manage non-conforming but accepted uses permitted by the Wilderness Act and subsequent laws in a manner that will prevent unnecessary or undue degradation of the areas' wilderness character. Nonconforming uses are the exception rather than the rule; therefore, emphasis will be placed on maintaining wilderness character.
Objectives	
DFC-WM-05	<p>The wilderness character of the Paria Canyon-Vermilion Cliffs Wilderness will be protected and enhanced. Wilderness character is defined by (from Section 2(c), Wilderness Act):</p> <ul style="list-style-type: none"> • Naturalness: An area that generally appears to have been affected primarily by the forces of nature, with the imprint of man's work substantially unnoticeable. • Outstanding Opportunities for Solitude: Superior or excellent condition favorable for avoiding the sights, sounds, and evidence of other people in the area or for attaining a state of being alone or remote from others. A lonely or secluded place. • Outstanding Opportunities for Primitive and Unconfined Recreation: Superior or excellent situations favorable for non-motorized, non-mechanical (except as provided by law), and undeveloped types of recreation activities. Provides dispersed, undeveloped recreation, either through the diversity in the number of primitive and unconfined recreational activities possible in the area or the outstanding quality of a singular opportunity. • Supplemental Values: Ecological, geological, or other features of scientific, educational, scenic, or historical value.

TABLE 2.15. SPECIAL DESIGNATIONS (AC, WM, HT, WR)	
Decision #	Decision Text
DFC-WM-06	The BLM wilderness area will be managed to be ecologically sustainable and resilient to natural and human-caused perturbations (See Vegetation and Fire and Fuels Management decisions). The BLM will strive to preserve or restore the natural quiet and natural sounds associated with the physical and biological resources of designated wilderness.
DFC-WM-07	Ecological DFCs will be adopted as objectives for wilderness areas. (See Vegetation and Fire and Fuels Management decisions).
B. MANAGEMENT ACTIONS	
Wilderness Management	
MA-WM-01	<ul style="list-style-type: none"> Lands within the Paria Canyon-Vermilion Cliffs Wilderness may be restored where ecological integrity is outside the range of natural variability and where compatible with wilderness objectives (See Table 2.3: Vegetation Management decisions). The Minimum Requirement Decision Guide (Arthur Carhart National Wilderness Training Center, most recent version) will be used by the BLM in all decisions, giving greatest weight to accomplishing objectives via natural processes and non-mechanized/non-motorized means. When fire is managed in the Paria Canyon-Vermilion Cliffs Wilderness, MIST will be used. Fire management actions will be consistent with the wilderness management objectives and guidelines described in the BLM's Fire Management Plan.
Wilderness Management Plans	
MA-WM-02	The existing Paria Canyon-Vermilion Cliffs Wilderness Management Plan will be evaluated and amended where necessary to conform to new management direction where appropriate, such as the Monument proclamation, DFCs, or listed species recovery plans.
Wilderness Restoration	
MA-WM-03	Prescribed fire and fire use may be used in areas classified as Wildland Fire Use within the Paria Canyon-Vermilion Cliffs Wilderness to achieve DFCs and wilderness area management objectives described the BLM's Fire Management Plan. Vegetation may also be treated manually.
MA-WM-04	Natural processes will be primarily relied on to restore areas of pre-existing human imprints the Paria Canyon-Vermilion Cliffs Wilderness. Where proactive restoration of wilderness conditions is desirable, the BLM will require conformance with BLM wilderness policy (BLM Manual 8560), and may require restoration plans to address restoration of pre-existing human impacts.
MA-WM-05	In conformance with BLM wilderness policy (BLM Manual 8560) for BLM wilderness areas, the best mix of manual, chemical, biological, or mechanical means, with fire and natural processes, will be determined in order to restore ecological functions and structure in wilderness.

WILD AND SCENIC RIVERS (WR)	
A. DESIRED FUTURE CONDITIONS	
Wild and Scenic Rivers Interim Management (see Map 2.16)	
DFC-WR-01	The viability of wild and scenic river candidates for congressional consideration will be ensured through effective interim management.
DFC-WR-02	<p>Until Congress acts to designate or release from further consideration rivers determined to be eligible and suitable through the previous RMP process and the subsequent Arizona Statewide Wild and Scenic Rivers LEIS, the following desired conditions will be maintained:</p> <ul style="list-style-type: none"> • Preservation of the stream’s free-flowing nature. • Preservation, protection, and, to the greatest extent practicable, enhancement of identified outstandingly remarkable values. <ul style="list-style-type: none"> ▪ Paria River: scenic, recreational, geologic, riparian, fish and wildlife, and cultural values. • Preservation of characteristics that establish the potential classifications as Wild, Scenic, or Recreational: <ul style="list-style-type: none"> ▪ Wild: free of impoundments, generally inaccessible except by trail, with shorelines essentially primitive and waters unpolluted. ▪ Scenic: free of impoundments and generally inaccessible except by trail. However, shoreline disturbance from highway construction is apparent at several points. • Recreational: several access points and noticeable human developments.
Potential Congressional Designation	
DFC-WR-03	If congressionally designated, water quality will be maintained or improved.
Congressional Release	
DFC-WR-04	Should the Paria River study area lands (see Map 2.16) not be included by Congress in the National Wild and Scenic Rivers System but instead be released from further consideration and/or interim management, those lands will be managed by the BLM using the goals, guidance and prescriptions described for the corresponding land use allocations.
B. SPECIAL DESIGNATION	
Wild and Scenic River suitability Recommendation	
SD-WR-01	The Paria River, including the portion through the Glen Canyon NRA to the confluence of the Colorado River, will continue to be tentatively classified as wild and scenic.
SD-WR-02	The entire 27-mile Paria River study area (BLM portion) will continue to be recommended for designation as wild.
SD-WR-03	The Paria River study area will continue to be determined as suitable for inclusion in the National Wild and Scenic Rivers System.
C. MANAGEMENT ACTIONS	
MA-WR-01	Implementation of the recommendations for Paria River will continue the protective status (interim management) associated with the eligibility findings defined in the Arizona Statewide Wild and Scenic Rivers Legislative EIS (1994) until Congress makes a decision about wild and scenic river designations.

MA-WR-02	Wild and scenic river designation will continue to require certain management actions to be initiated in connection with the designation of the Paria River study area as wild. Where wild and scenic river management actions overlap ongoing management actions, the more stringent action will be implemented.
Restrictions of Uses from a Potential Congressional Designation	
MA-WR-03	Developed campgrounds, interpretive centers, or administrative headquarters within the river corridor will continue to be prohibited. Simple comfort and convenience facilities may be permitted.
MA-WR-04	New transmission lines, natural gas lines, and water lines will continue to be prohibited.
MA-WR-05	Woodcutting will continue to not be permitted except when needed to clear trails, for visitor safety, or to control fire.
MA-WR-06	Livestock grazing will continue to be managed to protect outstandingly remarkable values within the area.
MA-WR-07	Instream flows will continue to be quantified and protected. An instream flow assessment will continue to be made in order to secure instream flow water rights for applicable outstandingly remarkable values.
MA-WR-08	No new flood control dams, levees, or other water works will be permitted.
MA-WR-09	Hydroelectric power facilities will continue to be prohibited.
MA-WR-10	All water supply dams and major diversions will continue to be prohibited.
MA-WR-11	Construction of new roads or trails for motorized travel will continue to be prohibited.
NATIONAL HISTORIC TRAIL (HT)	
A. DESIRED FUTURE CONDITIONS	
DFC-HT-01	<p>The following DFCs will apply to the Old Spanish National Historic Trail (NHT):</p> <ul style="list-style-type: none"> • Visitors seeking to experience the NHT will understand and appreciate the trail’s history and significance • Visitors will appreciate and respect the rights of landowners in the area. • High-potential NHT segments and historic sites will be protected from over-use, inappropriate use, and vandalism. • Scenic values related to historical resources will be protected. • The viability of NHT resources for comprehensive planning will be ensured through effective interim management. • Maximum protection of historic and prehistoric properties within the trail corridor will be provided. • The trail will be managed using the interim provisions of this Approved Plan until the Old Spanish NHT planning team produces a Comprehensive Management Plan/EIS.
B. MANAGEMENT ACTION	
Visitor Information and Education	
MA-HT-01	Trail resources (natural, cultural, and historical) will be identified, recorded, and protected on Federal land. The BLM will gather new information on known or additional high-potential historic sites and segments and cooperate with other Federal managers, trail associations, trail scholars, and state historic preservation offices (SHPOs) in adding, deleting, or modifying the list of sites and trail

	segments.
MA-HT-02	The following criteria, based on the NRHP and the National Trails System Act, will be used to begin to identify high-potential sites or high-potential route segment resources on public lands: <ul style="list-style-type: none"> • Significance to the trail (based on documentation and/or archeological research). • Integrity of the physical remains. • Integrity and quality of the setting including scenic quality and relative freedom from intrusion. • Opportunity for high-quality recreation evoking the historic trail experience. • Opportunity to interpret the primary period of trail use.
Resource Protection	
MA-HT-03	Where significant trail corridor segments and associated sites are documented, viewsheds, as observed from these areas, will be maintained.
MA-HT-04	When high potential trail sites and/or trail segments are documented, existing routes that may adversely affect these resources may be limited or closed.
MA-HT-05	Any changes to the characteristic landscape must be low in the Old Spanish NHT corridor on public lands (See Visual Resources decisions).
MA-HT-06	Recreational development of the trail will not occur prior to the development of the Comprehensive Management Plan/EIS.
Allowable Uses	
MA-HT-07	Valid existing rights and existing land use authorizations will be recognized on public lands.
RESOURCE CONSERVATION AREA	
A. LAND USE ALLOCATION	
LA-RC -01	The Canyons/Plateaus of the Paria RCA (293,688 acres) designation will be revoked because the Monument provides adequate protection of resources. A portion of this RCA falls within the Arizona Strip Field Office and will also be revoked (23,484 acres).

Map 2.16. Potential Wild and Scenic River (Paria River)

TABLE 2.16. PUBLIC HEALTH AND SAFETY (HM)	
Decision #	Decision Text
A. DESIRED FUTURE CONDITIONS	
DFC-HM-01	All hazardous or potentially hazardous sites and situations, including hazardous materials, hazardous or solid wastes, abandoned mine sites, abandoned well sites, and other potential hazards on public lands, will be mitigated or eliminated.
DFC-HM-02	The potential for intentional or accidental releases of hazardous materials or wastes and solid waste onto BLM lands will be minimized or eliminated.
B. MANAGEMENT ACTIONS	
MA-HM-01	Areas known to have hazardous materials, hazardous wastes, or solid wastes, including abandoned mine lands, will be remediated, restored, or corrected.
MA-HM-02	Responsible parties will be actively sought to reimburse hazardous materials cleanup costs.
MA-HM-03	Recreational shooting will be allowed within the context of the law.
MA-HM-04	Public access to abandoned mine and well sites will be controlled by providing warning signage and barriers, as appropriate.
MA-HM-05	As funding allows, abandoned mines will be identified and prioritized for remediation, restoration, or corrections as follows: <ul style="list-style-type: none"> • Those that are public safety hazards. • Those that may contain high levels of heavy metals in waste rock or tailings. • Those that may be degrading water quality.

TABLE 2.17. SCIENTIFIC RESEARCH (SR)	
Decision #	Decision Text
A. DESIRED FUTURE CONDITIONS	
DFC-SR-01	Approved scientific research will contribute to management of natural and cultural resources and achieving DFCs.
B. MANAGEMENT ACTIONS	
MA-SR-01	Permits will be required for approved scientific research to ensure compatibility and reporting of results.
MA-SR-02	The collection of any objects in the Monument is not authorized except by permit for scientific research or use.

ADMINISTRATIVE ACTIONS

Administrative actions are not management decisions at either the land use plan level or implementation level. Administrative actions do not require NEPA analysis or a written decision by a responsible official in order to be accomplished. Instead, administrative actions (and standard operating procedures) are day-to-day activities conducted by the BLM, often required by FLPMA, which outline the objectives, basic management policy, and program direction. Examples of administrative actions include mapping, surveying, inventorying, monitoring, and collecting information needed such as research and studies. Some specific administrative actions associated with the management of the Monument are listed below. This is, however, not a complete list of all standard operating procedures required by law or policy that the BLM will use in administering the resources and uses of the Monument.

Geology and Paleontology:

- Inventories for paleontological resources will continue.
- A sensitivity map for paleontological resources will be developed and screening for all projects against potential for the project to impact vertebrate fossils or noteworthy occurrences of invertebrate or plant fossils will be required.

Vegetation Management:

- Desired Plant Community Objectives
 - Ecological site inventories will be completed to determine site potentials and ecological conditions (See Appendix C for Arizona Standards and Guidelines).
- Vegetation and Restoration Treatments
 - Vegetation treatments and uses will be monitored as part of an adaptive management process. When new information from monitoring or other studies becomes available, practices and guidelines will be modified to incorporate best science available.

Fish and Wildlife (General)

- Benefits for dollars spent on managing and improving wildlife habitat on public lands will be maximized by continuing and expanding cooperative partnerships with AGFD, USFWS, and other interested groups.

Fish and Wildlife (Migratory Birds)

- Migratory bird populations will be monitored in cooperation with AGFD. Significant waterfowl habitat sites will be inventoried. Standardized surveys will be used to inventory breeding bird populations and evaluate existing habitat.

Fish and Wildlife (Carnivores and Furbearers)

- Carnivore and furbearer habitats will be monitored to ensure a healthy and diverse predator component throughout the Monument.

Fish and Wildlife (Native Fish)

- Monitoring native fish populations in the Paria River will continue in cooperation with USFWS and AGFD.
- Appropriate monitoring of all riparian areas within the Monument will continue, including greenline transects, riparian functionality assessments, etc.

Special Status Species (All Special Status Species)

- Public awareness of special status species will be increased through signs, educational media, and other outreach efforts to promote conservation of the species.
- Guidance criteria for assessing impacts to listed species from livestock grazing actions will be used as appropriate.
- To the extent practicable, inventory and monitoring of special status species will be conducted in accordance with accepted survey protocols.

Special Status Species (Special Status Plants)

- The BLM will continue to inventory and map known locations and potential habitat for special status plant populations to ensure protection of these populations and facilitate management.
- The BLM will continue appropriate monitoring of all special status plant species within the Monument.
- Public conservation education programs will be implemented to inform public of the value of conserving special status plant habitats and the rules and policies governing their protection.

Special Status Species (All Special Status Raptors)

- The BLM will continue to survey and/or monitor potential habitat for special status raptors within the Monument.
- The BLM will continue to maintain a database of raptor observations.
- The BLM will continue to identify roost locations.
- A program of public conservation education and planning directed towards preservation of special status raptor habitats will be carried out.

Special Status Species (Bald Eagle)

- Important foraging habitat of bald eagles within the Monument will be located and mapped.
- Bald eagle habitat assessments will be continued at least every third year.

- Bald eagle occurrence surveys will be continued at least every other year at all suitable habitat locations.

Special Status Species (Peregrine Falcon)

- The BLM will cooperate and assist with post-delisting monitoring efforts for peregrine falcon within the Monument.

Special Status Species (Riparian-Dependent Special Status Birds: Southwestern Willow Flycatcher)

- Identification and mapping of suitable and potential habitat areas for SW flycatchers will continue.
- Habitat conditions in suitable and potential SW flycatcher habitat will continue to be monitored at least every third year in order to determine best management of riparian areas.
- Appropriate monitoring of all riparian areas within the Monument, including greenline transects, riparian functionality assessments, etc., will continue.
- SW flycatcher occurrence surveys will continue at least every other year at all suitable habitat locations.
- Nest monitoring will continue to determine nesting success, parasitism rates, and predation rates.
- Baseline data on cowbird parasitism will be collected.
- Employees and public users will be educated about SW flycatchers.
- The BLM will continue to maintain a database of SW flycatcher observations.

Special Status Species (Riparian-Dependent Special Status Birds: Yellow-billed Cuckoo)

- The BLM will continue to maintain updated maps of yellow-billed cuckoo habitat in the Monument.
- Support and Participation for yellow-billed cuckoo survey and monitoring efforts on lands within the Monument will continue.
- Habitat conditions in yellow-billed cuckoo habitat will continue to be monitored in order to be able to determine how best to manage these riparian areas to protect this and other riparian dependent species.
- The BLM will continue to maintain a database of yellow-billed cuckoo observations.

Cultural Resources (Archaeological and Historic Resources)

- Non-destructive research proposals such as inventory, intensive site mapping, Historic American Building Survey/Historic American Engineering Record documentation of historic structures, cultural landscapes, and other significant historic properties, and scaled rock art recording will be pursued through interagency cooperation, grants, contracts, and other funding sources.
- The Arizona Site Steward Program, service groups, and other volunteers will be supported in order to monitor resource conditions, assist in resource protection, assist in project work, aid in effective land management, and to serve as advocates and stewards of BLM's mission to protect and conserve cultural resources.
- Proactive research, protection, and inventories with universities, avocational and service groups, site stewards, tribes, and communities will be used to gain a better understanding of cultural resources for present and future management and protection.
- Properties eligible for listing on the National Register of Historic Places (NRHP) will be nominated.
- Traditional Cultural Properties will be identified and associated socio-cultural values will be documented.
- Cooperative management agreements will be developed with the neighboring Federal agencies, local and regional American Indian tribes and communities, institutions of higher learning, and/or other agencies or groups to improve the efficiency and quality of site management.
- Scientific study to gain knowledge on the full array of cultural resources in the Monument will be allowed in order to fulfill regional research objectives and to fill regional data gaps identified in Altschul and Fairley (1989), when possible. Such studies can include ethnographic and oral histories, historic and landscape studies, archaeological studies, and ethnobotanical and environmental studies.
- Databases, maps, site, and inventory records will be maintained to current professional standards.
- Databases and finder guides that help to locate, use, and organize archives and museum collections will be established.
- Priority geographic and historic areas for new field inventory will include the Paria Canyon, Paria Plateau, House Rock Valley, wilderness areas, and areas with high concentrations of visitors.
- Geographic and archaeological scientific inventories will be continued based on imminent threats from natural or human-caused deterioration, potential conflict with other resource uses, and the probability for unrecorded significant resources.
- Archives and museum collections will be located, inventoried, and managed to ensure accessibility and use for research, documentation, and public interpretation.
- All implementation actions will be contingent upon the outcome of Sec 106 consultation with the Arizona SHPO and will not proceed until that process was completed.

Cultural Resources (Resources of Importance to American Indians)

- Tribes and individual members of tribes with cultural and historic ties to the Monument will be consulted, according to the provisions specified in Native American Grave Protection and Repatriation Act (NAGPRA), Archaeological Resources Protection Act (ARPA), NHPA, and pertinent Executive Orders.
- Mutually acceptable methods of protecting and preserving areas of sacred and traditional importance will be adopted.

Lands and Realty

- The BLM will attempt to locate the potentially responsible party to remove/clean up any unauthorized use, restore/rehabilitate the public lands back to their original condition, and pay the administrative costs incurred by the BLM to investigate the unauthorized use along with applicable rental/additional fees as provided by BLM Manual 9232 and H-9232-1. Where the potentially responsible party is not found, the BLM will conduct the removal/cleanup as funding allows. However, if the potentially responsible party were later identified, the BLM will seek reimbursement of the costs incurred.
- Existing withdrawals will continue for as long as needed or as statutorily/legislatively established/mandated, which include wilderness areas (89,598 acres) and power site reservation, reclamation, and public water reserve (approximately 8,184 acres).
- Land ownership adjustments will not be considered on withdrawn land unless or until the withdrawal has been modified or lifted. Lands that become un-encumbered through the withdrawal review process will then be subject to and managed in accordance with planning guidance and objectives.
- There are a number of favorable places throughout the Monument that are commonly known and consistently used for aircraft landing and departure activities that, through such casual use, have evolved into backcountry airstrips (the definition contained in Section 345 of Public Law 106-914, the Interior and Related Agencies Appropriation Act of 2001). In accordance with that law, any closure of an aircraft landing strip contemplated in the future, will require full public notice, consultation with local and State government officials and the FAA.
- Existing land use authorizations (ROWs, permits, leases, etc.) will be administered within the Monument, wilderness, and areas managed to maintain wilderness characteristics in accordance with the terms and conditions of the authorizations.
- Floodplain occupancy and development will be avoided and base floodplain (100-year) will be retained or protected.
- The BLM will work with Arizona Department of Transportation (ADOT) to facilitate continued maintenance of existing drainage structures/areas inside the Vermilion and wilderness areas on the north side of Highway 89A to channel flash floods into existing culverts as identified in the Final Wilderness Management Plan for the Paria Canyon-Vermilion Cliffs Wilderness (BLM 1986).

Recreation and Visitor Services

- Recreation Management Actions: Signing and Recreation Facilities
 - All recreation facilities and signs will be made consistent with the Americans with Disabilities Act of 1973, Rehabilitation Act of 1973, and the Architectural Barriers Act of 1968.
 - A sign plan for the Monument that addresses present and future needs involving road information, interpretation, and public safety will be written. The sign plan will be coordinated with the development of maps and access guides for the Arizona Strip FO.
 - Implementation plans will include outreach efforts to actively recruit service-oriented volunteers, organizations, and schools to assist with accomplishing appropriate implementation projects.
- Recreation Marketing Actions, Visitor Services and Information
 - Accurate information regarding recreation opportunities, interpretation of natural and human history, and specific rules and regulations pertaining to their use of BLM lands will be provided to visitors.
 - The Interagency Information Center and partnerships with cooperating associations will continue to be used to distribute resource information to the public.
 - The Interagency Information Center and outlying visitor contact facilities (not necessarily BLM) will sell or provide maps, resource brochures, and safety information so that visitors would have a safe and enjoyable experience. A web site will continue to be maintained for online inquiries.
- Recreation Administration Actions, Permits and Fees
 - Public input and coordination and consultation with affected Federal and State agencies will be sought prior to instituting any new permit or fee programs.
 - Annual training will be provided to SRP holders concerning appropriate use ethics, such as *Leave No Trace* and *Tread Lightly*.

Interpretation and Environmental Education

- Arizona Strip District and Monument staff will seek partnerships with other state and Federal agencies, educational institutions, and other organizations to enrich interpretation and environmental educational opportunities.
- Outreach programs will be developed through organizations, schools, and partnerships to build emotional, intellectual, and recreational ties with the area and its cultural and natural heritage.
- Education and outreach programs like *Tread Lightly* and *Leave No Trace* will continue to be supported.
- Monument and Arizona Strip District staff will remain informed of changing visitor demographics to better tailor interpretive media to visitor needs and desires.

- Comprehensive interpretive plans (CIPs) will be completed, creating a long-range vision and basis for decision-making related to interpretation and education of the Monument.
- The CIPs will address:
 - Interpretive goals, objectives, and associated management actions necessary for interpreting themes to target audiences.
 - Interpretive goals, objectives, and associated management actions necessary for meeting the needs of the public as identified in the Recreation Marketing Actions section of various RMZs within the SRMAs.
 - Interpretive publications that need to be developed for public use.
 - Outreach environmental education programs (interactive computer, workshop, and classroom) that need to be developed to enhance knowledge of natural and cultural resources and promote stewardship.
 - Partnerships with other state, national parks, educational institutions, and other organizations to enrich interpretation and environmental education opportunities that need to be developed.

Travel Management

- A route inventory database will be maintained using standard collection and information storage methods.
- The areas will be monitored to detect unauthorized route creation.

Transportation Facilities

- Maps and portal signing will be developed and installed to inform public land users of the preliminary route network.
- The BLM will actively recruit service-oriented volunteers, organizations, and schools to assist with accomplishing appropriate implementation projects

Special Designations (National Historic Trails)

- Scheduled site monitoring of significant sites and trail segments will be provided.
- The BLM and local partners will:
 - Provide a supply of existing interpretive and educational materials about the Old Spanish NHT and NHT system.
 - Provide, to the extent feasible, trip-planning and other information about the trail to support visitation to trail-related sites.
 - Work with the Old Spanish Trail Association to provide brochures at regional visitor centers and museums to promote education about the trail.

Public Health and Safety

- The Arizona Strip District Hazardous Material Response Plan will continue to be followed.
- Hazardous sites or locations that affect or can affect public health or safety will be inventoried and monitored.
- All authorized or permitted activities will adhere to hazardous materials regulations for storage, use, and disposal.

ENVIRONMENTAL ANALYSIS AND INTERRELATIONSHIPS

REQUIREMENTS FOR FURTHER ENVIRONMENTAL ANALYSIS

The land use plan decisions in this Approved Plan are to be implemented upon signing of the Record of Decision (ROD) and do not require any further environmental analysis or documentation. Land use plan decisions are the basis for every on-the-ground action the BLM undertakes. Land use plans are guiding documents that present land use plan decisions as well as implementation or activity level decisions and administrative actions. Management plans address resources and values to be protected, uses, and public health issues within the Monument and must be consistent with resource management objectives, activities of the area, the Monument proclamation, and environmental laws and regulations.

Implementation decisions in this Approved Plan may also be implemented upon signing of the ROD. However, whenever implementation or activity level plans (e.g., wilderness plans, HMPs, etc.) are prepared, additional environmental analysis and documentation would be required. Environmental analysis of site-specific projects at the watershed, project, or activity level may analyze specific proposed actions or management.

Site-specific environmental analyses and documentation (including the use of categorical exclusions and determinations of NEPA adequacy, where appropriate) may be prepared for one or more individual projects, in accordance with management objectives, DFCs, and decisions established in this Approved Plan. In addition, the BLM will ensure that the environmental review process includes evaluation of all critical elements. Cultural resources and threatened and endangered species will be identified and considered in accordance with Section 106 of the NHPA and Section 7 of the ESA, respectively.

Interdisciplinary impact analysis will be based this and other applicable environmental documents. The BLM may be required to draft a new EA or EIS, or supplement an existing EIS, if the analysis prepared for site-specific projects finds potential for significant impacts not already described in an existing EA or EIS.

Upon providing public notice of a decision, supporting environmental documentation will be sent to all affected parties and made available to others upon request. Decisions to implement site-specific projects are subject to administrative review at the time such decisions are made.

INTERRELATIONSHIPS

The BLM coordinates its management activities with the actions of related Federal and state agencies responsible for land or resource management. This Approved Plan includes participation by the BLM in Utah including Grand Staircase-Escalante National Monument and the Kanab Field Office, Kaibab National Forest (North Kaibab Ranger District), Grand Canyon National Park, Pipe Spring National Monument, Glen Canyon NRA, USFWS, Federal Highway Administration and ADOT, Kaibab Paiute Tribe, counties in Arizona and Utah, communities in Arizona and Utah, and state agencies including AGFD and Arizona State Land Department.

As part of the planning process, the BLM requested formal consultation with USFWS on potential impacts to federally listed, proposed, and candidate species and designated or proposed critical habitat. In April 2003, the BLM and USFWS finalized a Consultation Agreement to establish an effective and cooperative ESA Section 7 consultation process. The Agreement defines the process, products, actions, schedule, and expectations of the BLM and USFWS regarding project consultation. The Agreement also considered effects to, and management for, candidate species. A biological assessment (BA) was prepared and submitted to determine the effect of the Approved Plan on all relevant listed, proposed, and candidate species, and associated critical habitat. The biological opinion for this Approved Plan was completed on November 7, 2007, and resulted in a no jeopardy opinion from the USFWS. The Incidental Take, Reasonable and Prudent Measures with Terms and Conditions, and Conservation Recommendations from this biological opinion can be found in Appendix B in this Approved Plan.

This Approved Plan was also provided to the Arizona SHPO to comply with Section 106 of the NHPA. The BLM actions also comply with other Federal environmental legislation and land use plans, such as the Clean Air Act and Clean Water Act, and with applicable State and local government regulations, such as the Sikes Act (16 U.S. Code. 670 et seq., as amended). The Sikes Act 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 Approved Plan must conform to overall land use and management plan for the lands involved. The Approved Plan can 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 the appropriate state agencies in managing state-listed plant and animal species when the State has formally made such designations.

The BLM and AGFD work cooperatively to manage fish and wildlife within the Monument. The BLM is responsible for managing wildlife habitat on BLM lands and AGFD, through the authority of the Arizona Game and Fish Commission, has public trust responsibility to manage fish and wildlife. The BLM and AGFD revised the current Master MOU at the writing of the Proposed Plan/FEIS that established protocols directing the cooperative working relationship between the agencies. The MOU provides 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 the implementation of this Approved Plan. In addition, a separate MOU was signed giving AGFD cooperating agency status on BLM planning efforts in Arizona, including the efforts involved in preparation of this Approved Plan.

Any permit system or restriction of use or access will include coordination with other state and Federal entities that issue use permits on Federal lands to assure that authorized permittees have fair and reasonable access to their permitted activity. For example, should a permit system be implemented, the BLM will work in cooperation with AGFD to enable coordination of access for hunters with valid hunting licenses and permits for the affected hunting unit. Coordination with AGFD during development of management plans and enhancement of wildlife habitat, species diversity, riparian health, and other activities to achieve the optimum health of wildlife species and populations will continue. Administrative access may be allowed for AGFD staff for law enforcement, natural resource management, and other purposes. Arizona Game and Fish Department'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 AGFD and the BLM) for such purposes including, but not limited to law enforcement activities, wildlife water supplementation (i.e., water hauling and maintenance, repair, building, or rebuilding of wildlife waters), collar retrieval, capture and release of wildlife, habitat manipulation (e.g., forage enhancement, burning, vegetation clearing, and planting), fence construction (enclosures/exclosures), and research activities.

The Animal and Plant Health Inspection Service-Wildlife Services (APHIS-WS) and AGFD oversee animal damage control, predator management, control of exotic wildlife species, and feral, non-permitted livestock in the Monument. A 1995 MOU recognizes the legal authority of APHIS-WS to conduct wildlife damage management on public lands. The BLM acknowledges that authority and will continue close coordination with APHIS-WS and AGFD, as well as the USFWS, U.S. Forest Service North Kaibab Ranger District, Glen Canyon NRA, State Land Department, State Brand Inspector, and other affected agencies on animal damage control efforts within the Monument. Arizona Game and Fish Department predator management will continue under AGFD strategic plans as well as species management plans.

PUBLIC INVOLVEMENT

The BLM will continue to actively seek the views of the public using techniques such as news releases, mass mailings, and website postings to ask for participation and to inform the public of new and ongoing project proposals, site-specific planning, and opportunities and timeframes for comment. The public is encouraged to actively participate in implementing these decisions by doing the following:

- Requesting that their name be added to project or NEPA mailing lists by sending or calling in a request (via mail, phone, or email) to the following address/phone number:

Vermilion Cliffs National Monument
345 East Riverside Drive
St. George, UT 84790
(435) 688-3200
Email: Arizona_Strip@blm.gov

- Talking with a manager or staff member in person or by calling or emailing
- Monitoring the BLM website (www.az.blm.gov) or other websites for project proposals or information
- Attending public meetings and providing written comment on site-specific project proposals

The BLM will continue to coordinate and consult, both formally and informally, with various Federal and state agencies, Indian Tribes, local agencies, and officials and communities and groups interested and involved in the management of public lands in the Monument.

CHAPTER 3: IMPLEMENTATION

IMPLEMENTATION SCHEDULE

Land use plan decisions are generally implemented or become effective upon approval of the plan and signing of the Record of Decision. These decisions include the effective date of land health standards and desired future or resource condition decisions, land use allocation decisions, and all special designations.

Management actions in this Approved Plan that require additional site-specific project planning, as funding becomes available, will require further environmental analysis, completion of 106 compliance for cultural resources, and Section 7 consultation. Implementation-level decisions, with the exception of routes designated open for off-highway vehicle use, are also contingent upon further environmental analysis, Section 106 compliance, and Section 7 consultation. Decisions to implement site-specific projects will be subject to administrative review at the time such decisions are made.

The Bureau of Land Management (BLM) will continue to involve and collaborate with the public during implementation of this Approved Plan. Opportunities to become involved in plan implementation will include development of partnerships and community-based citizen working groups. The BLM invites citizens and user groups interested in the management of Vermilion Cliffs National Monument (the Monument) to become actively involved in the implementation of plan decisions. The BLM and citizens can collaboratively develop site-specific goals and objectives that mutually benefit public land resources, local communities, and the people who live, work, or recreate on public lands.

MONITORING

Monitoring of actions related to implementing land use plans is an important part of adaptive management. Tracking the progress of actions and measuring changes resulting from these activities is important in either determining success or the need for a different management approach.

Many activities and events are monitored on the Monument. For example, grazing utilization and vegetation trends are measured to support decisions on allotment Standards and Guideline evaluations. A more detailed preliminary monitoring strategy is included in Table 3.1.

TABLE 3.1: PRELIMINARY MONITORING STRATEGIES					
Location(s)	Issue/Objective	Indicator (what)	Protocol (how – methods)	Frequency (when)	*Trigger/Action
Soil, Water, and Air					
Monument-wide	Study the effects of continuing erosion that endanger floodplain soils and threaten meadow soils. Map out these areas	<ul style="list-style-type: none"> Gully, rill, and sheet erosion Vegetative cover Compaction 	<ul style="list-style-type: none"> Monitor erosion Monitor Vegetative cover Monitor impacts and gully progressions Collect and analyze sedimentation and erosion data 	<ul style="list-style-type: none"> On-going 	<ul style="list-style-type: none"> N/A
Wildfire burns and other select disturbed areas	Assess the effects of disturbance and reclamation	<ul style="list-style-type: none"> Erosion or stabilization Vegetative cover 	<ul style="list-style-type: none"> Visual inspection 	<ul style="list-style-type: none"> As needed 	<ul style="list-style-type: none"> Large wildfire Erosion and flooding
Forest & Woodlands					
Monument-wide	Management of Forest and Woodlands Restoration Projects (including other projects that attempt to or will change the character of overstory vegetation)	Number of acres monitored	<ul style="list-style-type: none"> Monitor stipulations Monitor contract/project adherence Monitor project effectiveness 	<ul style="list-style-type: none"> Ongoing Annually for selected sites and areas 	<ul style="list-style-type: none"> Terminate designated areas, designate new areas or boundaries, modify stipulations and or project implementation, limit permitted amounts, terminate contracts
Monument-wide	Management of Forest and Woodland Health	Number of acres monitored	<ul style="list-style-type: none"> Monitor overall forest and woodland health issues (insect, disease and stand density issues) 	<ul style="list-style-type: none"> Ongoing Annually for selected sites and areas As needed 	<ul style="list-style-type: none"> Determine appropriate management of problem issues.
Cultural Resources					
Designated road system	<ul style="list-style-type: none"> Off-road impacts Route proliferation Vandalism 	Visual site inspections for: <ul style="list-style-type: none"> Site integrity 	<ul style="list-style-type: none"> Monitor and report (Law Enforcement, Site Stewards, Staff, local rancher) 	<ul style="list-style-type: none"> Ongoing Annually for selected sites and 	<ul style="list-style-type: none"> Impacts/excavate, reroute, inventory Route closures

TABLE 3.1: PRELIMINARY MONITORING STRATEGIES					
Location(s)	Issue/Objective	Indicator (what)	Protocol (how – methods)	Frequency (when)	*Trigger/Action
	<ul style="list-style-type: none"> • Surface collection 	<ul style="list-style-type: none"> • Surface integrity 	<ul style="list-style-type: none"> • Educate Public • Class III surveys 	<ul style="list-style-type: none"> • areas • As needed 	
Standing structures and prehistoric intact features	Natural deterioration Vandalism	Visual site inspections for: <ul style="list-style-type: none"> • Site integrity • Structural integrity 	<ul style="list-style-type: none"> • Monitor (Staff and Site Stewards) 	<ul style="list-style-type: none"> • Annually for selected sites and areas • Ongoing 	<ul style="list-style-type: none"> • Destruction of standing features/ stabilization, restoration, allow deterioration • Record sites, assign to category
Monument-wide	Livestock grazing impacts to rock art, standing structures and features, rock shelters, caves, concentrations of cattle (trampling)	Visual site inspections for: <ul style="list-style-type: none"> • Site integrity • Surface integrity 	<ul style="list-style-type: none"> • Section 106 for new facilities • Monitor – Site Stewards and staff 	<ul style="list-style-type: none"> • As needed • Ongoing • Annually for selected sites and areas 	<ul style="list-style-type: none"> • Impacts/mitigation, record, inventory area
Caves and Karst Resources					
Monuments-wide	Monitor Visitor Use Impacts; Monitor for Natural Resource Degradation	<ul style="list-style-type: none"> • Graffiti • Trash • Trails • Damage to Speleotherms • Hazardous Materials • Digging in cave • Vandalism in cave 	<ul style="list-style-type: none"> • Monitor unacceptable impacts • Visual inspection • Set permanent photo documentation points • Photo document impacted areas • Create Visual Impact Evaluation System for caves, as deemed necessary 	<ul style="list-style-type: none"> • As needed • Ongoing • Annually for selected sites and areas 	<ul style="list-style-type: none"> • Restrict access • Clean, as necessary
Recreation					
SRMAs	Produce targeted recreation opportunities specific to each RMZ	Realization of targeted benefits for each RMZ.	<ul style="list-style-type: none"> • Visitor surveys • Focus groups 	<ul style="list-style-type: none"> • Every 5 years 	<ul style="list-style-type: none"> • Targeted recreation benefits not realized
SRMAs	Produce targeted recreation opportunities specific to each RMZ	Physical setting conditions, such as remoteness, naturalness, facilities	<ul style="list-style-type: none"> • Monitor “development creep” with regard to authorizing expansion of designated road systems and 	<ul style="list-style-type: none"> • For every project proposed in SRMAs 	<ul style="list-style-type: none"> • Targeted recreation benefits not realized

TABLE 3.1: PRELIMINARY MONITORING STRATEGIES					
Location(s)	Issue/Objective	Indicator (what)	Protocol (how – methods)	Frequency (when)	*Trigger/Action
			recreation facilities into settings targeted as more primitive; monitor lack of development in RMZs where development was targeted • Monitor landscape change via VRM		
SRMAs	Produce targeted recreation opportunities specific to each RMZ	Social setting conditions, such as group size, encounters with other users, and evidence of use	• Existing NAU protocols for evidence of use (rapid site inventory, human impact site monitoring) • Actual counts for group size and encounters	• Every 3-5 years for rapid site inventory • Every year - 2 years for human impact site monitoring, encounters and group size	• Targeted recreation benefits not realized
SRMAs	Produce targeted recreation opportunities specific to each RMZ	Administrative setting conditions, such as visitor services, management controls, mechanized use	• Monitor level of effort to provide visitor information and assistance appropriate to targeted settings • Monitor level of regulation, signing, and permitting applied as appropriate to targeted settings	• Project-by-project	• Targeted recreation benefits not realized
SRMAs, ERMA	National RMiS requirements	Number of visits, visitor days, etc.	• Traffic counters, visitor registers, Coyote Buttes/Paria Canyon database, Information Center counter, SRP post-use reports, direct counts	• Monthly for traffic and Information Center counters • Bi-monthly for visitor registers • Monthly for Coyote Buttes/Paria Canyon • Annually for SRPs	• Ongoing
Monument-wide	Authorizing recreation uses	Number of permits	• Counting commercial and competitive SRPs • Counting individual SRPs	• Monthly for RUPs • Post-use for commercial and competitive SRPs	• N/A

TABLE 3.1: PRELIMINARY MONITORING STRATEGIES					
Location(s)	Issue/Objective	Indicator (what)	Protocol (how – methods)	Frequency (when)	*Trigger/Action
				<ul style="list-style-type: none"> Monthly for individual SRPs 	
Monument-wide	Authorizing recreation uses	Number of permit violations	<ul style="list-style-type: none"> Monitor authorized activities for compliance with permit stipulations 	<ul style="list-style-type: none"> As needed 	<ul style="list-style-type: none"> N/A
Wilderness					
Statutory wildernesses	Preservation of wilderness character	Number of acres monitored	<ul style="list-style-type: none"> Patrol (foot or aerial) and staff report findings and recommendations NEPA process Existing NAU protocols for naturalness (rapid site inventory, human impact site monitoring) Actual counts for solitude 	<ul style="list-style-type: none"> Monthly patrol Project-by-project Every 3-5 years for rapid site inventory Every year to 2 years for human impact site monitoring and solitude 	<ul style="list-style-type: none"> N/A
Statutory wildernesses	Preservation of wilderness character	Number of wilderness boundary vehicle violations	<ul style="list-style-type: none"> Actual counts 	<ul style="list-style-type: none"> Ongoing 	<ul style="list-style-type: none"> N/A
Travel Management					
Designated road/trail system	Management of designated system	Number of roads/trails meeting targeted maintenance intensities	<ul style="list-style-type: none"> Road/trail condition assessments 	<ul style="list-style-type: none"> Annually on rotating basis 	<ul style="list-style-type: none"> N/A
Designated road/trail system	Management of designated system	Placement and retention of all signing	<ul style="list-style-type: none"> Road/trail condition assessments 	<ul style="list-style-type: none"> Annually on rotating basis 	<ul style="list-style-type: none"> N/A
Designated road/trail system	Management of designated system	Average daily traffic	<ul style="list-style-type: none"> Traffic counters on key roads/trails 	<ul style="list-style-type: none"> Monthly 	<ul style="list-style-type: none"> N/A
Designated road/trail system	Management of designated system	Number of illegal, off-system vehicle incursions	<ul style="list-style-type: none"> Visual inspections NAU protocols 	<ul style="list-style-type: none"> Ongoing Annually for selected rotating areas 	<ul style="list-style-type: none"> N/A

TABLE 3.1: PRELIMINARY MONITORING STRATEGIES					
Location(s)	Issue/Objective	Indicator (what)	Protocol (how – methods)	Frequency (when)	*Trigger/Action
National Scenic & Historic Trails					
Old Spanish NHT	Protection of significant sites/segments and retention of landscape character	Number of miles protected	<ul style="list-style-type: none"> • Visual inspection • VRM contrast rating 	<ul style="list-style-type: none"> • Annually for inspections • Project-by-project for VRM 	<ul style="list-style-type: none"> • N/A
Wild & Scenic Rivers					
Paria River	Free-flowing river	Recommended suitable river miles remaining free-flowing	<ul style="list-style-type: none"> • Other resource data • NEPA process 	<ul style="list-style-type: none"> • Project-by-project 	<ul style="list-style-type: none"> • N/A
Paria River	Protect identified outstandingly remarkable objects	Number of identified outstandingly remarkable values remaining intact	<ul style="list-style-type: none"> • Other resource data • NEPA process • Field surveys 	<ul style="list-style-type: none"> • Project-by-project • Every 5 years 	<ul style="list-style-type: none"> • N/A
Wilderness Characteristics					
Monument-wide	Maintenance of wilderness characteristics	Naturalness, outstanding opportunities for primitive recreation and solitude	<ul style="list-style-type: none"> • NEPA process • Existing NAU protocols for naturalness (rapid site inventory, human impact site monitoring) • Actual counts for solitude 	<ul style="list-style-type: none"> • Project-by-project • Every 3-5 years for rapid site inventory • Every year to 2 years for human impact site monitoring and solitude 	<ul style="list-style-type: none"> • N/A
Visual Resources					
Monument-wide	Management of targeted visual classes	Degree of contrast (landscape change) created	<ul style="list-style-type: none"> • VRM contrast rating 	<ul style="list-style-type: none"> • Project-by-project 	<ul style="list-style-type: none"> • N/A
Soundscapes					
Baseline inventory & selected site long-term monitoring on	Maintenance of natural ambient sound characteristics: audibility, intensity, duration, frequency	Change in natural ambient sound: audibility, duration	<ul style="list-style-type: none"> • Measure human-caused intrusions: loudness/intensity (dBA) • % Time above Ambient • % Time Audible • # of intrusions & duration 	<ul style="list-style-type: none"> • Every 3-5 years following initial baseline inventory • Project basis as needed 	<ul style="list-style-type: none"> • Modify activities under Monument authority • Seek relief from agencies with regulatory authority

TABLE 3.1: PRELIMINARY MONITORING STRATEGIES					
Location(s)	Issue/Objective	Indicator (what)	Protocol (how – methods)	Frequency (when)	*Trigger/Action
NPS lands					
T/E Species: Mexican Spotted Owl					
Canyon habitats	Assess potential MSO nesting sites based on suitable habitats identified by 2001 Willey model.	Document MSO nesting site suitability and presence or absence of MSO.	<ul style="list-style-type: none"> • Protocol established by MSO recovery team • 5-10 sites per year 	<ul style="list-style-type: none"> • Repeat annually 	<ul style="list-style-type: none"> • Contributes to range-wide recovery efforts and planning, could lead to RMP amendment
T/E Species: Southwestern Willow (SW) Flycatcher					
Riparian habitats	Assess all suitable and potential SW flycatcher nesting sites	Document SW flycatcher nesting site suitability and presence or absence of SW flycatchers	<ul style="list-style-type: none"> • Protocol established by SW flycatcher recovery team • 11 sites 	<ul style="list-style-type: none"> • Repeat every other year 	<ul style="list-style-type: none"> • Contributes to range-wide recovery efforts and recovery planning, could lead to RMP amendment
T/E Species: Peregrine Falcon					
Canyon eyrie sites	Assess specific nesting sites as assigned by AGFD and USFWS.	Document presence or absence of peregrine falcon.	<ul style="list-style-type: none"> • Protocol established by peregrine monitoring team • Up to 4 sites 	<ul style="list-style-type: none"> • Repeat every year 	<ul style="list-style-type: none"> • Contributes to range-wide recovery efforts and recovery planning, could lead to RMP amendment
T/E Species: Listed and Special Status Plants					
Monument-wide	To assess effects of management actions on populations of plants	Demography, counts, mortality, man-induced impacts	<ul style="list-style-type: none"> • Macroplots with tagged plants, macroplots, and transects using counts. 	<ul style="list-style-type: none"> • Annually for listed plants, 1-3 years for special status plants 	<ul style="list-style-type: none"> • Down trends (demographic or counts) caused by man induced impacts
Vegetation					
Monument-wide	Management of authorized uses	<ul style="list-style-type: none"> • Vegetative trend of key species • Precipitation 	<ul style="list-style-type: none"> • Permanent photo plots, and Frequency transects, dry weight rank • Rain Can & Remote Automated Weather Station 	<ul style="list-style-type: none"> • Every 4-8 years • Quarterly 	<ul style="list-style-type: none"> • Up or down trend of key or undesirable species • Meeting or not meeting desired plant

TABLE 3.1: PRELIMINARY MONITORING STRATEGIES					
Location(s)	Issue/Objective	Indicator (what)	Protocol (how – methods)	Frequency (when)	*Trigger/Action
					community objectives
Livestock grazing (BLM lands)					
Monument-wide	Management of livestock grazing	Vegetation utilization level	<ul style="list-style-type: none"> • Grazed class method 	<ul style="list-style-type: none"> • Annually in use pastures 	<ul style="list-style-type: none"> • Use levels in excess of 45%
Baseline inventory & selected site long-term monitoring on NPS lands under grazing permit	Prevent impairment (DO-12); Maintain ecologic integrity of soils and vegetation	Plant utilization; soil integrity; deviation from plant community ecological potential	<ul style="list-style-type: none"> • TBD through study; • In concert with BLM Arizona Standards and Guidelines for Livestock Grazing Management 	<ul style="list-style-type: none"> • TBD through research study 	<ul style="list-style-type: none"> • TBD through research study
Fire and Fuels Management					
Monument-wide	Assess the effects of fire	Prescribed fire Fire use	<ul style="list-style-type: none"> • Long term photo plots • Vegetation plots • Burn severity • Others as needed 	<ul style="list-style-type: none"> • Pre, during and post monitoring 	<ul style="list-style-type: none"> • Planning of ignition • Ignition
Monument-wide	Assess the effects of fire	Wildfire	<ul style="list-style-type: none"> • Long term photo plots • Vegetation plots • Burn severity • Others as needed 	<ul style="list-style-type: none"> • Mostly post monitoring 	<ul style="list-style-type: none"> • Ignition
*Trigger/Action – What would trigger an action/What the BLM would do if monitoring shows an undesirable direction or action.					

ADAPTIVE MANAGEMENT

Adaptive management is a decision process that promotes flexible decision making that can be adjusted in the face of uncertainties as outcomes from management actions and other events become better understood. Careful monitoring of these outcomes both advances scientific understanding and helps adjust policies or operations as part of an iterative learning process. Adaptive management also recognizes the importance of natural variability in contributing to ecological resilience and productivity. It is not a “trial and error” process; rather, it emphasizes learning while doing. Adaptive management does not represent an end in itself: it represents a means to more effective decisions and enhanced benefits. Its true measure is in how well it helps meet environmental, social, and economic goals, increases scientific knowledge, and reduces tensions among stakeholders (U.S. Department of the Interior [DOI] 2007).

Adaptive management involves ongoing, real-time learning and knowledge creation, both in a substantive sense and in terms of the adaptive process itself. Though it is commonly thought that an adaptive approach can produce results quickly at low cost, the opposite is more likely to be true. An initial investment of time and effort will increase the likelihood of better decision-making and resource stewardship in the future, but patience, flexibility, and support are needed over the life of an adaptive management project. For these reasons, it is important to carefully consider the potential use of an adaptive approach, and to engage in careful planning and evaluation when adaptive management is used (DOI 2007).

Adaptive management involves synthesizing existing knowledge, exploring alternative actions, and making explicit forecasts about their results. Management actions and monitoring programs are carefully designed to generate reliable feedback and clarify the reasons underlying results. Actions and objectives are then adjusted based on this feedback and improved understanding to continue to try to achieve the desired future conditions. In addition, decisions, actions, and results are carefully documented and communicated to others, so that knowledge gained through experience is passed on rather than lost when individuals move or leave the organization.

The Monument staff and management will involve interested stakeholders in implementing the decisions in this Approved Plan and commit to an adaptive management process that will work toward achieving the identified management objectives. Results from ongoing monitoring and assessment will be used to adjust and improve these management decisions.

**LIST OF APPENDICES
FOR VERMILION CLIFFS NATIONAL MONUMENT APPROVED PLAN**

APPENDIX A: VERMILION CLIFFS NATIONAL MONUMENT PROCLAMATION	A-1
APPENDIX B: U.S. FISH AND WILDLIFE SERVICE CONSULTATION: PORTIONS OF THE BIOLOGICAL OPINION.....	B-1
APPENDIX C: ARIZONA STANDARDS AND GUIDELINES FOR LIVESTOCK GRAZING MANAGEMENT.....	C-1
APPENDIX D: LIVESTOCK GRAZING ALLOTMENT MANAGEMENT STATUS	D-1
APPENDIX E: LIVESTOCK GRAZING ALLOTMENT ACRES AND ANIMAL UNIT MONTHS (AUMs) BY LAND STATUS	E-1
APPENDIX F: VEGETATION TREATMENT TOOLS AND METHODS.....	F-1
APPENDIX G: CONSERVATION MEASURES FOR SPECIAL STATUS SPECIES.....	G-1
APPENDIX H: VISUAL RESOURCE MANAGEMENT CLASSES AND OBJECTIVES FOR CLASSES.....	H-1
APPENDIX I: RECLAMATION STIPULATIONS	I-1
APPENDIX J: RECREATION MANAGEMENT AREAS.....	J-1
APPENDIX K: TRAVEL MANAGEMENT AREAS, TRANSPORTATION PLAN CONTENTS, AND APPROPRIATE ROUTE CONSTRUCTION AND MAINTENANCE STANDARDS BY TRAVEL MANAGEMENT AREA ..	K-1
APPENDIX L: LIST OF PREPARERS	L-1

APPENDIX A

**VERMILION CLIFFS NATIONAL MONUMENT
PROCLAMATION**

APPENDIX A: VERMILION CLIFFS NATIONAL MONUMENT PROCLAMATION

Establishment of the Vermilion Cliffs National Monument (#7374)

By the President of the United States of America

A Proclamation

Amid the sandstone slickrock, brilliant cliffs, and rolling sandy plateaus of the Vermilion Cliffs National Monument lie outstanding objects of scientific and historic interest. Despite its arid climate and rugged isolation, the monument contains a wide variety of biological objects and has a long and rich human history. Full of natural splendor and a sense of solitude, this area remains remote and unspoiled, qualities that are essential to the protection of the scientific and historic objects it contains.

The monument is a geological treasure. Its centerpiece is the majestic Paria Plateau, a grand terrace lying between two great geologic structures, the East Kaibab and the Echo Cliffs monoclines. The Vermilion Cliffs, which lie along the southern edge of the Paria Plateau, rise 3,000 feet in a spectacular escarpment capped with sandstone underlain by multicolored, actively eroding, dissected layers of shale and sandstone. The stunning Paria River Canyon winds along the east side of the plateau to the Colorado River. Erosion of the sedimentary rocks in this 2,500 foot deep canyon has produced a variety of geologic objects and associated landscape features such as amphitheaters, arches, and massive sandstone walls.

In the northwest portion of the monument lies Coyote Buttes, a geologically spectacular area where crossbeds of the Navajo Sandstone exhibit colorful banding in surreal hues of yellow, orange, pink, and red caused by the precipitation of manganese, iron, and other oxides. Thin veins or fins of calcite cut across the sandstone, adding another dimension to the landscape.

Humans have explored and lived on the plateau and surrounding canyons for thousands of years, since the earliest known hunters and gatherers crossed the area 12,000 or more years ago. Some of the earliest rock art in the Southwest can be found in the monument. High densities of Ancestral Puebloan sites can also be found, including remnants of large and small villages, some with intact standing walls, fieldhouses, trails, granaries, burials, and camps.

The monument was a crossroad for many historic expeditions. In 1776, the Dominguez-Escalante expedition of Spanish explorers traversed the monument in search of a safe crossing of the Colorado River. After a first attempt at crossing the Colorado near the mouth of the Paria River failed, the explorers traveled up the Paria Canyon in the monument until finding a steep hillside they could negotiate with horses. This took them out of the Paria Canyon to the east and up into the Ferry Swale area, after which they achieved their goal at the Crossing of the Fathers east of the monument. Antonio Armijo's 1829 Mexican trading expedition followed the Dominguez route on the way from Santa Fe to Los Angeles.

Later, Mormon exploring parties led by Jacob Hamblin crossed south of the Vermilion Cliffs on missionary expeditions to the Hopi villages. Mormon pioneer John D. Lee established Lee's Ferry on the

Colorado River just south of the monument in 1871. This paved the way for homesteads in the monument, still visible in remnants of historic ranch structures and associated objects that tell the stories of early settlement. The route taken by the Mormon explorers along the base of the Paria Plateau will later become known as the Old Arizona Road or Honeymoon Trail. After the temple in St. George, Utah was completed in 1877, the Honeymoon Trail was used by Mormon couples who had already been married by civil authorities in the Arizona settlements, but also made the arduous trip to St. George to have their marriages solemnized in the temple. The settlement of the monument area by Mormon pioneers overlapped with another historic exploration by John Wesley Powell, who passed through the monument during his scientific surveys of 1871.

The monument contains outstanding biological objects that have been preserved by remoteness and limited travel corridors. The monument's vegetation is a unique combination of cold desert flora and warm desert grassland, and includes one threatened species, Welsh's milkweed. This unusual plant, known only in Utah and Arizona, colonizes and stabilizes shifting sand dunes, but is crowded out once other vegetation encroaches.

Despite sporadic rainfall and widely scattered ephemeral water sources, the monument supports a variety of wildlife species. At least twenty species of raptors have been documented in the monument, as well as a variety of reptiles and amphibians. California condors have been reintroduced into the monument in an effort to establish another wild population of this highly endangered species. Desert bighorn sheep, pronghorn antelope, mountain lion, and other mammals roam the canyons and plateaus. The Paria River supports sensitive native fish, including the flannelmouth sucker and the speckled dace.

Section 2 of the Act of June 8, 1906 (34 Stat. 225, 16 U.S.C. 431) authorizes the President, in his discretion, to declare by public proclamation historic landmarks, historic and prehistoric structures, and other objects of historic or scientific interest that are situated upon the lands owned or controlled by the Government of the United States to be national monuments, and to reserve as a part thereof parcels of land, the limits of which in all cases shall be confined to the smallest area compatible with the proper care and management of the objects to be protected.

WHEREAS it appears that it will be in the public interest to reserve such lands as a national monument to be known as the Vermilion Cliffs National Monument:

NOW, THEREFORE, I, William J. Clinton, President of the United States of America, by the authority vested in me by section 2 of the Act of June 8, 1906 (34 Stat. 225, 16 U.S.C. 431), do proclaim that there are hereby set apart and reserved as the Vermilion Cliffs National Monument, for the purpose of protecting the objects identified above, all lands and interests in lands owned or controlled by the United States within the boundaries of the area described on the map entitled "Vermilion Cliffs National Monument" attached to and forming a part of this proclamation.

The Federal land and interests in land reserved consist of approximately 293,000 acres, which is the smallest area compatible with the proper care and management of the objects to be protected.

All Federal lands and interests in lands within the boundaries of this monument are hereby appropriated and withdrawn from all forms of entry, location, selection, sale, or leasing or other disposition under the public land laws, including but not limited to withdrawal from location, entry, and patent under the

mining laws, and from disposition under all laws relating to mineral and geothermal leasing, other than by exchange that furthers the protective purposes of the monument. For the purpose of protecting the objects identified above, the Secretary shall prohibit all motorized and mechanized vehicle use off road, except for emergency or authorized administrative purposes.

Lands and interests in lands within the proposed monument not owned by the United States shall be reserved as a part of the monument upon acquisition of title thereto by the United States.

The Secretary of the Interior shall manage the monument through the Bureau of Land Management, pursuant to applicable legal authorities, to implement the purposes of this proclamation.

The Secretary of the Interior shall prepare a transportation plan that addresses the actions, including road closures or travel restrictions, necessary to protect the objects identified in this proclamation.

The establishment of this monument is subject to valid existing rights.

Nothing in this proclamation shall be deemed to enlarge or diminish the jurisdiction of the State of Arizona with respect to fish and wildlife management.

This proclamation does not reserve water as a matter of Federal law.

Nothing in this reservation shall be construed as a relinquishment or reduction of any water use or rights reserved or appropriated by the United States on or before the date of this proclamation. The Secretary shall work with appropriate State authorities to ensure that any water resources needed for monument purposes are available. Laws, regulations, and policies followed by the Bureau of Land Management in issuing and administering grazing permits or leases on all lands under its jurisdiction shall continue to apply with regard to the lands in the monument.

Nothing in this proclamation shall be deemed to revoke any existing withdrawal, reservation, or appropriation; however, the national monument shall be the dominant reservation. Warning is hereby given to all unauthorized persons not to appropriate, injure, destroy, or remove any feature of this monument and not to locate or settle upon any of the lands thereof.

IN WITNESS WHEREOF, I have hereunto set my hand this ninth day of November, in the year of our Lord two thousand, and of the Independence of the United States of America the two hundred and twenty-fifth.

WILLIAM J. CLINTON

APPENDIX B

U.S. FISH AND WILDLIFE SERVICE CONSULTATION PORTIONS OF THE BIOLOGICAL OPINION

INCIDENTAL TAKE, REASONABLE AND PRUDENT MEASURES WITH TERMS AND CONDITIONS, AND CONSERVATION RECOMMENDATIONS

APPENDIX B: U.S. FISH AND WILDLIFE SERVICE CONSULTATION: PORTIONS OF THE BIOLOGICAL OPINION

INCIDENTAL TAKE, REASONABLE AND PRUDENT MEASURES WITH TERMS AND CONDITIONS, AND CONSERVATION RECOMMENDATIONS

The following are pages 105 through 118 from the Biological Opinion for the Arizona Strip Resource Management Plan, which includes Vermilion Cliffs National Monument, dated November 7, 2007 (refer to U. S. Fish and Wildlife Service [USUSFWS] document number AESO/SE [Arizona Ecological Services Office/Species Endangered], 22410-2002-F-0277-R1, 22410-2007-F-0463).

INCIDENTAL TAKE STATEMENT

Section 9 of the Endangered Species Act and Federal regulations pursuant to section 4(d) of the Act prohibit the take of endangered and threatened species, respectively, without special exemption. “Take” is defined as to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture or collect, or to attempt to engage in any such conduct. “Harm” is defined (50 CFR 17.3) to include significant habitat modification or degradation that results in death or injury to listed species by significantly impairing essential behavioral patterns, including breeding, feeding, or sheltering. “Harass” is defined (50 CFR 17.3) as intentional or negligent actions that create the likelihood of injury to listed species to such an extent as to significantly disrupt normal behavior patterns which include, but are not limited to, breeding, feeding or sheltering. “Incidental take” is defined as take that is incidental to, and not the purpose of, the carrying out of an otherwise lawful activity. Under the terms of section 7(b)(4) and section 7(o)(2), taking that is incidental to and not intended as part of the agency action is not considered to be prohibited taking under the Act provided that such taking is in compliance with the terms and conditions of this Incidental Take Statement.

AMOUNT OF EXTENT OF TAKE

We recognize that some flexibility is built into, and some uncertainty is inherent in, some of the conservation measures that are part of the proposed action. We included consideration of that flexibility and uncertainty into our analysis in determining the amount of incidental take that we anticipate for each species.

California Condor

This Amount or Extent of Take section applies to condors occurring on NPS-administered land within the Arizona Strip District within the California condor nonessential experimental

population, and Arizona Strip District land outside of the nonessential experimental population area.

Because condors that occur in the project area are known and are monitored, detecting any incidences of harm, harassment, injury, or death of individuals will be straightforward. However, because condors occur only rarely outside of the nonessential experimental population area, and because these areas are a considerable distance from nesting and roosting habitat, we do not anticipate that the proposed action will incidentally take any California condors.

Mexican Spotted Owl

As of the date of this biological opinion, most of the approximately 13,000 acres of Mexican Spotted Owl (MSO) canyon habitat on Bureau of Land Management (BLM) land in the project area have not been surveyed to protocol, and no MSO PACs have been designated. However, BLM considers the unsurveyed habitat to be occupied by MSO due to the presence of key habitat components in these areas that provide high-potential for nesting and roosting MSO to occupy the area. Based upon this information, we are reasonably certain MSO currently occur within the action area. As surveys are conducted over the life of the proposed action, MSO may be detected in the project area. The USUSFWS anticipates that incidental take of MSO may result from vegetation treatments (not including fuels management), noxious weed control, mineral development, and permitted recreation that may be authorized under the proposed action. We anticipate that the take of MSOs will be difficult to detect because finding a dead or impaired specimen is unlikely, especially due to the remote nature of most of the MSO habitat in the action area. However, the level of incidental take can be anticipated by the loss of key habitat components and long-term disturbance that may affect the reproductive success and survival of the MSO within the project area. We anticipate that four MSO (two pairs) associated with habitat the BLM considers to be occupied (Paria, Kanab, and Hack canyon areas) may be taken as a result of the proposed action. The incidental take is expected to be in the form of harm and harassment resulting from the disruption of breeding, feeding, and sheltering activities from mineral development, permitted recreation, vegetation treatments and management, and noxious weed control.

The USUSFWS completed a biological opinion on September 3, 2004 (02-21-03-F-0210) for a fire and fuels management program on BLM-administered lands within Arizona. That opinion issued an incidental take statement for MSO for fire suppression and fuels management activities. That programmatic opinion included incidental take that could occur from the fire management program as a result of this proposed action. The following Incidental Take Statement is carried forward from the 2004 opinion:

Fire Suppression, and Fire and Fuels Management Treatments

We anticipate that incidental take of MSO could occur as a result of fire suppression, wildland fire use, prescribed fire, and mechanical treatments. We anticipate that the take of MSOs will be difficult to detect because finding a dead or impaired specimen is unlikely, especially due to the remote nature of most of the MSO habitat in the action area. However, the level of incidental take can be anticipated by the loss of essential elements in the habitat and long-term disturbance that may affect the reproductive success and survival of the MSO within the project area. We anticipate that two MSO (one pair) could be taken as a result of the proposed action. The incidental take is expected to be in the form of harm and harassment resulting from:

1. Harm through long-term disturbance from actions in unsurveyed MSO habitat associated with the proposed action. Unknown MSO may be present during wildland fire use, mechanical treatments, prescribed fire and/or suppression actions, which may result in direct impacts to owls, disrupted reproduction and/or the ability of the habitat to provide for essential elements of survival for resident MSO.
2. Harm through the reduction of MSO nesting and roosting habitat due to temporary habitat loss that may result from mechanical thinning, prescribed or wildland fire, and/or fire suppression actions that result in the removal of MSO habitat components (multi-storied canopy, coarse woody debris, snags) to the extent that at least near-term survival of MSO within that habitat is not likely.
3. Harassment through the reduction of the habitat suitability for prey species, thus limiting the availability of prey for owls. Habitat suitability will be decreased through the loss of coarse woody debris and herbaceous vegetation following prescribed fires. These actions could impair the ability of MSO to survive and/or successfully raise young.

Southwestern Willow Flycatcher

The USUSFWS anticipates that Southwestern Willow Flycatchers (SWWFs) could be taken as a result of harm (habitat loss) and harassment (disturbance) due to recreation activities and/or vegetation treatments. The anticipated level of take is the failure of one nesting attempt every three years. The incidental take is expected to be in the form of harassment and/or harm due to nest failure or the inability to nest due to the loss of suitable habitat.

The USUSFWS completed a biological opinion on September 3, 2004 (file number 02-21-03-F-0210) for a fire and fuels management program on BLM-administered lands within Arizona. That opinion issued an incidental take statement for SWWF for fire suppression activities. That programmatic opinion included incidental take that could occur from fire suppression as a result of this proposed action. The following Incidental Take Statement is carried forward from the 2004 opinion.

Fire Suppression

The BLM has proposed fire suppression actions that, when wildfires occur, are expected to reduce the overall adverse effects to SWWF and their habitat. Although we are unable to determine where or when incidental take of SWWF could occur as a result of fire suppression actions, take as a result of these actions has occurred in the past. We anticipate that the take of SWWF will be difficult to detect because finding a dead or impaired specimen is unlikely. Survey data may not be available prior to a wildfire ignition; however, locations of existing territories on or adjacent to BLM land are known. The level of incidental take can be anticipated by the loss of essential elements in the habitat and long-term disturbance that may affect the reproductive success and survival of the SWWF within the project area. The average number of pairs per site within the Middle Gila/San Pedro Management Unit, where territories on BLM-administered land were found in 2004, is 5.2. Fire suppression actions within one habitat site will likely remove all habitats within the site and/or disturb all birds within the site. We anticipate that five pairs (ten SWWF) and their eggs and young could be taken as a result of the proposed action¹. The incidental take is expected to be in the form of harassment, harm, and mortality resulting from:

1. Harassment through long-term disturbance from fire suppression actions in occupied SWWF habitat associated with the proposed action. SWWF present during fire suppression actions will be directly impacted, resulting in disrupted reproduction, and/or loss of habitat that provides for the essential elements of survival.
2. Harm through the loss of SWWF nesting habitat due to temporary habitat loss that may result from backburning, bulldozing, aircraft use, and/or water drops during fire suppression that remove SWWF-habitat components (multi-storied canopy, dense vegetation) to the extent that the habitat patch is no longer suitable for nesting by SWWF.
3. Mortality of SWWF eggs or young in nests from fire suppression actions in occupied SWWF habitat.

Brady Pincushion Cactus, Holmgren Milk Vetch, Jones' Cycladenia, Siler Pincushion Cactus, Welsh's Milkweed

Sections 7(b)(4) and 7 (o)(2) of the Act do not apply to the incidental take of listed plant species. However, protection of listed plants is provided to the extent that the Act requires a Federal permit for removal or reduction to possession of threatened or endangered plants from areas under Federal jurisdiction, or for any act that will remove, cut, dig up, or damage or destroy endangered plants on any other area in knowing violation of any regulation of any State or in the

¹ This level of incidental take applies to BLM actions throughout Arizona as a result of fire suppression activities.

course of any violation of a State criminal trespass law. Neither incidental take authorization nor recovery permits are needed for implementation of the proposed action.

The USUSFWS will not refer the incidental take of any migratory bird or bald eagle for prosecution under the Migratory Bird Treaty Act of 1918, as amended (16 U.S.C. §§ 703-712), or the Bald and Golden Eagle Protection Act of 1940, as amended (16 U.S.C. §§ 668-668d), if such take is in compliance with the terms and conditions (including amount and/or number) specified herein.

EFFECT OF THE TAKE

In this biological opinion, we have determined that this level of anticipated take is not likely to result in jeopardy to these species or destruction or adverse modification of critical habitat.

REASONABLE AND PRUDENT MEASURES WITH TERMS AND CONDITIONS

In order to be exempt from the prohibitions of section 9 of the Act, BLM must comply with the following terms and conditions (lettered and Roman numeral items), which implement the reasonable and prudent measures (numbered items) and outline reporting/monitoring requirements. The terms and conditions are non-discretionary.

Mexican Spotted Owl

The following reasonable and prudent measure and terms and conditions are necessary and appropriate to minimize take of MSO.

1. The Arizona Strip District Office (ASDO) shall take measures to minimize effects to individuals from project activities.
 - A. BLM will work with us to proactively develop appropriate measures to protect individual MSO from the site-specific effects of the activities authorized by the proposed action.
2. BLM shall submit annual reports as described in Reporting Requirements, below.

Southwestern Willow Flycatcher

The following reasonable and prudent measures and terms and conditions are necessary and appropriate to minimize take of SWWF.

1. BLM shall minimize the site-specific effects on SWWF of activities authorized by the proposed action.

- A. BLM will rehabilitate all undesignated routes used by OHVs within riparian areas, or areas with the potential to support SWWF breeding habitat. This can include obliterating the beginnings and ends of undesignated routes so that the routes are not accessible or visible to the public.
 - B. BLM will monitor other recreational activities that contribute to degradation of habitat on BLM-administered lands along the Virgin River and Kanab Creek and take appropriate measures to minimize those activities or modify them to reduce habitat degradation.
2. BLM shall monitor the effects of incidental take and submit annual reports as described in Reporting Requirements, below.
 - A. ASDO shall provide information on survey status for each area of suitable habitat, including location, size, shape, and spacing of habitat areas; either the date(s) surveyed (according to current protocol) or indication that the area has not been surveyed, and any other available information.

Additionally, the following reasonable and prudent measure with terms and conditions are carried forward from the September 3, 2004 opinion (02-21-03-F-0210):

3. Minimize the effects of harassment, harm, and mortality to SWWFs.
 - A. In cooperation with us, and using guidance from the SWWF recovery plan, BLM shall incorporate the elements recommended for fire risk evaluation and planning into its Fire Management Plans for all current flycatcher breeding sites on or adjacent to BLM-administered lands. This planning effort shall be initiated prior to the 2006 wildfire season.
 - B. If additional sites become occupied over the life of the land use plan Amendment, BLM shall include them in the yearly Fire Management Plans in cooperation with us, prior to the next wildfire season.

REPORTING REQUIREMENTS

The BLM shall submit annual monitoring reports to the Arizona Ecological Services Field Office by February 1 beginning in year 2009. These reports shall briefly document for the previous calendar year the effectiveness of the terms and conditions and locations of listed species observed, and, if any are found dead, suspected cause of mortality. The report shall also summarize tasks accomplished under the conservation measures and terms and conditions. The report shall make recommendations for modifying or refining conservation measures and terms

and conditions to enhance listed species protection or reduce needless hardship on the BLM and its permittees.

Disposition of Dead or Injured Listed Species

Upon locating a dead, injured, or sick listed species initial notification must be made to the USUSFWS's Law Enforcement Office, 2450 W. Broadway Rd, Suite 113, Mesa, Arizona, 85202, telephone: 480/967-7900) within three working days of its finding. Written notification must be made within five calendar days and include the date, time, and location of the animal, a photograph if possible, and any other pertinent information. The notification shall be sent to the Law Enforcement Office with a copy to this office. Care must be taken in handling sick or injured animals to ensure effective treatment and care, and in handling dead specimens to preserve the biological material in the best possible state.

CONSERVATION RECOMMENDATIONS

Section 7(a)(1) of the Act directs Federal agencies to utilize their authorities to further the purposes of the Act by carrying out conservation programs for the benefit of endangered and threatened species. Conservation recommendations are discretionary agency activities to minimize or avoid adverse effects of a proposed action on listed species or critical habitat, to help implement recovery plans, or to develop information.

1. We recommend that BLM coordinate with us to develop specific management actions within ACECs to further protect special status species.
2. We recommend that BLM require implementation of conservation measures for California condors for all activities within the non-essential experimental population area, unless firefighter or public safety, or the protection of valuable property, improvements, or natural resources, render them infeasible during a particular operation.
3. We recommend that BLM continue to work with Arizona Game and Fish Department (AGFD) to educate and encourage hunters to use non-lead bullets when hunting game in condor habitat.
4. We recommend that BLM conduct comprehensive surveys for MSO in predicted MSO habitat according to current survey protocol.
5. We recommend that BLM develop environmental education and information materials on the SWWF and other riparian species and make these materials available to the public at the ASDO office in St. George, Utah.

6. We recommend that BLM work with us to proactively develop appropriate measures to protect listed plants from the effects of site-specific activities that will be implemented under the proposed action.
7. We recommend that BLM not dispose of land that contains occurrences, habitat, or potential habitat of listed plant species or other special status plant species.
8. We recommend that BLM actively pursue obtaining ownership of the habitat of listed and other sensitive plant species that exists on non-Federal lands in the project area. We recommend BLM work closely with us to identify and prioritize such lands.
9. We recommend new transportation routes in listed plant species habitat not be authorized. We also recommend that existing routes that are resulting in effects to the species be closed or routed away from the species.
10. We recommend installation of physical barriers or designation of parking areas that are necessary to keep vehicles from impacting listed plant species.
11. We recommend that range developments that attract and or concentrate cattle be located away from listed plant species habitat and occurrence.
12. We recommend installation of fences or development of other protective measures (e.g., herding) where cattle are attracted to concentrate in areas in listed plant species habitat.
13. We recommend developing or modifying listed plant species monitoring programs so that they are efficient and effective in achieving desired monitoring results.
14. We recommend conducting research to determine the actual effects of various actions on the plant community dynamics of listed plant species habitat.
15. We recommend that the BLM encourage seasonal restrictions (April 1 to September 30) on mining and other project operations within or adjacent to occupied SWWF breeding habitat, if these activities can disturb nesting birds. The need for this restriction will be assessed during the NEPA analysis and section 7 consultation conducted for the mining plan of operations.

In order for the USUSFWS to be kept informed of actions minimizing or avoiding adverse effects or benefiting listed species or their habitats, the USUSFWS requests notification of the implementation of any conservation recommendations.

APPENDIX C

**ARIZONA STANDARDS AND GUIDELINES FOR LIVESTOCK
GRAZING MANAGEMENT
AND
RANGELAND HEALTH IMPLEMENTATION STATUS**

APPENDIX C: ARIZONA STANDARDS AND GUIDELINES FOR LIVESTOCK GRAZING MANAGEMENT

INTRODUCTION

The Department of the Interior's final rule for Grazing Administration, issued on February 22, 1995, and effective August 21, 1995, requires that the Bureau of Land Management (BLM) State Directors develop State or regional standards and guidelines for grazing administration in consultation with BLM Resource Advisory Councils (RAC), other agencies and the public. The final rule provides that fallback standards and guidelines will be implemented, if State standards and guidelines are not developed by February 12, 1997. Arizona Standards and Guidelines and the final rule apply to grazing administration on public lands as indicated by the following quotation from the Federal Register, Volume 60, Number 35, page 9955 (1995).

"The fundamentals of rangeland health, guiding principles for standards and the fallback standards address ecological components that are affected by all uses of public rangelands, not just livestock grazing. However, the scope of this final rule, and therefore the fundamentals of rangeland health of §4180.1, and the standards and guidelines to be made effective under §4180.2, are limited to grazing administration."

Although the process of developing standards and guidelines applies to grazing administration, present rangeland health is the result of the interaction of many factors in addition to livestock grazing. Other contributing factors may include, but are not limited to, past land uses, land use restrictions, recreation, wildlife, rights-of-way, wild horses and burros, mining, fire, weather, and insects and disease.

With BLM's commitment to ecosystem and interdisciplinary resource management, the standards for rangeland health, as developed in this current process, will be incorporated into management goals and objectives. The standards and guidelines for rangeland health for grazing administration, however, are not the only considerations in resolving resource issues.

The following quotations from the Federal Register, Vol. 60, No. 35, page 9956, February 22, 1995, describe the purpose of standards and guidelines and their implementation:

"The guiding principles for standards and guidelines require that State or regional standards and guidelines address the basic components of healthy rangelands. The Department believes that by implementing grazing-related actions that are consistent with the fundamentals of §4180.1 and the guiding principles of §4180.2, the long-term health of public rangelands can be ensured.

Standards and guidelines will be implemented through terms and conditions of grazing permits, leases, and other authorizations, grazing-related portions of activity plans (including Allotment Management Plans), and through range improvement-related activities.

The Department anticipates that in most cases the standards and guidelines themselves will not be terms and conditions of various authorizations but that the terms and conditions will reflect the standards and guidelines.

The Department intends that assessments and corrective actions will be undertaken in priority order as determined by BLM.

"The Department will use a variety of data including monitoring records, assessments, and knowledge of the locale to assist in making the "significant progress" determination. It is anticipated that in many cases it will take numerous grazing seasons to determine direction and magnitude of trend. However, actions will be taken to establish significant progress toward conformance as soon as sufficient data are available to make informed changes in grazing practices."

FUNDAMENTALS AND DEFINITION OF RANGELAND HEALTH

The Grazing Administration Regulations, at §4180.1 (43 Code of Federal Regulation [CFR] 4180.1), Federal Register Vol. 60, No. 35, pg. 9970, direct that the authorized officer ensures that the following conditions of rangeland health exist:

(a) Watersheds are in, or are making significant progress toward, properly functioning physical condition, including their upland, riparian-wetland, and aquatic components; soil and plant conditions support infiltration, soil moisture storage, and the release of water that are in balance with climate and landform and maintain or improve water quality, water quantity, and timing and duration of flow.

(b) Ecological processes, including the hydrologic cycle, nutrient cycle, and energy flow, are maintained, or there is significant progress toward their attainment, in order to support healthy biotic populations and communities.

(c) Water quality complies with State water quality standards and achieves, or is making significant progress toward achieving, established BLM management objectives such as meeting wildlife needs.

(d) Habitats are, or are making significant progress toward being, restored or maintained for Federal threatened and endangered species, Federal Proposed, Category 1 and 2 Federal candidate and other special status species.

These fundamentals focus on sustaining productivity of a rangeland rather than its uses. Emphasizing the physical and biological functioning of ecosystems to determine rangeland health is consistent with the definition of rangeland health as proposed by the Committee on Rangeland Classification, Board of Agriculture, National Research Council (Rangeland Health, 1994, pg. 4 and 5). This Committee defined Rangeland Health ". . .as the degree to which the integrity of the soil and the ecological processes of rangeland ecosystems are sustained." This committee emphasized ". . .the degree of integrity of the soil and ecological processes that are most important in sustaining the capacity of rangelands to satisfy values and produce commodities." The Committee also recommended that "The determination of whether a rangeland is healthy, at risk, or unhealthy should be based on the evaluation of three criteria: degree of soil stability and watershed function, integrity of nutrient cycles and energy flow, and presence of functioning mechanisms" (Rangeland Health, 1994, pg. 97-98).

Standards describe conditions necessary to encourage proper functioning of ecological processes on specific ecological sites. An ecological site is the logical and practical ecosystem unit upon which to base an interpretation of rangeland health. Ecological site is defined as:

". . . a kind of land with specific physical characteristics which differs from other kinds of land in its ability to produce distinctive kinds and amounts of vegetation and in its response to management" (Journal of Range Management, 48:279, 1995). Ecological sites result from the interaction of climate, soils, and landform (slope, topographic position). The importance of this concept is that the "health" of different kinds of rangeland must be judged by standards specific to the potential of the ecological site. Acceptable erosion rates, water quality, productivity of plants and animals, and other features are different on each ecological site.

Since there is wide variation of ecological sites in Arizona, standards and guidelines covering these sites must be general. To make standards and guidelines too specific will reduce the ability of BLM and interested publics to select specific objectives, monitoring strategies, and grazing permit terms and conditions appropriate to specific landforms.

Ecological sites have the potential to support several different plant communities. Existing communities are the result of the combination of historical and recent uses and natural events. Management actions may be used to modify plant communities on a site. The desired plant community for a site is defined as follows: "Of the several plant communities that may occupy a site, the one that has been identified through a management plan to best meet the plan's objectives for the site. It must protect the site at a minimum" (Journal of Range Management, 48:279, 1995).

Fundamentals (a) and (b) define physical and biological components of rangeland health and are consistent with the definition of rangeland health as defined by the Committee on Rangeland Classification, Board on Agriculture, National Research Council, as discussed in the paragraph above. These fundamentals provide the basis for sustainable rangelands.

Fundamentals (c) and (d) emphasize compliance with existing laws and regulation and, therefore, define social and political components of rangeland health. Compliance with Fundamentals (c) and (d) is accomplished by managing to attain a specific plant community and associated wildlife species present on ecological sites. These desired plant communities are determined in the BLM planning process, or, where the desired plant community is not identified, a community may be selected that will meet the conditions of Fundamentals (a) and (b) and also adhere to laws and regulations. Arizona Standard 3 is written to comply with Fundamentals (c) and (d) and provide a logical combination of Standards and Guidelines for planning and management purposes.

STANDARD AND GUIDELINE DEFINITIONS

Standards are goals for the desired condition of the biological and physical components and characteristics of rangelands. Standards:

- (1) are measurable and attainable; and
- (2) comply with various Federal and State statutes, policies, and directives applicable to BLM Rangelands.

Guidelines are management approaches, methods, and practices that are intended to achieve a standard. Guidelines:

- (1) typically identify and prescribe methods of influencing or controlling specific public land uses;
- (2) are developed and applied consistent with the desired condition and within site capability; and
- (3) may be adjusted over time.

IMPLEMENTING STANDARDS AND GUIDELINES

The authorized officer will review existing permitted livestock use, allotment management plans, or other activity plans that identify terms and conditions for management on public land. Existing management practices and levels of use on grazing allotments will be reviewed and evaluated on a priority basis to determine if they meet, or are making significant progress toward meeting, the standards and are in conformance with the guidelines. The review will be interdisciplinary and conducted under existing rules which provide for cooperation, coordination, and consultation with affected individuals, federal, state, and local agencies, tribal governments, private landowners, and interested publics.

This review will use a variety of data, including monitoring records, assessments, and knowledge of the locale to assist in making the significant progress determination. Significance will be determined on a case-by-case basis, considering site potential, site condition, weather and financial commitment. It is anticipated there will be cases where numerous years will be needed to determine direction and magnitude of trend.

Upon completion of review, the authorized officer shall take appropriate action as soon as practicable but no later than the start of the next grazing year upon determining that the existing grazing management practices or level of use on public land are significant factors contributing to failure to achieve the standards and conform with the guidelines that are made effective under 43 CFR 4180.2. Appropriate action means implementing actions that will result in significant progress toward fulfillment of the standards and significant progress toward conformance with guidelines.

Livestock grazing will continue where significant progress toward meeting standards is being made. Additional activities and practices will not be needed on such allotments. Where new activities or practices are required to assure significant progress toward meeting standards, livestock grazing use can continue contingent upon determinations from monitoring data that the implemented actions are effective in making significant progress toward meeting the standards. In some cases, additional action may be needed as determined by monitoring data over time.

New plans will incorporate an interdisciplinary team approach (Arizona BLM Interdisciplinary Resource Management Handbook, April 1995). The terms and conditions for permitted grazing in these areas will be developed to comply with the goals and objectives of these plans, which will be consistent with the standards and guidelines.

ARIZONA STANDARDS AND GUIDELINES

Arizona Standards and Guidelines (S&G) for grazing administration were 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 guideline.

Standard 1: Upland Sites

Upland soils exhibit infiltration, permeability, and erosion rates that are appropriate to soil type, climate and landform (ecological site).

Criteria for meeting Standard 1:

Soil conditions support proper functioning of hydrologic, energy, and nutrient cycles. Many factors interact to maintain stable soils and healthy soil conditions, including appropriate amounts of vegetative cover, litter, and soil porosity and organic matter. Under proper functioning conditions, rates of soil loss and infiltration are consistent with the potential of the site.

Ground cover in the form of plants, litter or rock is present in pattern, kind, and amount sufficient to prevent accelerated erosion for the ecological site; or ground cover is increasing as determined by monitoring over an established period of time.

Signs of accelerated erosion 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, 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, land form, or large woody debris is present to dissipate stream energy associated with high water flows.

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

The checklist for riparian areas is in Technical Reference 1737-9 "Process for Assessing Proper Functioning Condition." The checklist for wetlands is in Technical Reference 1737-11 "Process for Assessing Proper Functioning Condition for Lentic Riparian-Wetland Areas." 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, wild horses and burros); and

monitoring is conducted during grazing to determine if objectives are being met.

3-6. Management practices will target those populations of noxious weeds that can be controlled or eliminated by approved methods.

3-7. Management practices to achieve desired plant communities will consider protection and conservation of known cultural resources, including historical sites, and prehistoric sites and plants of significance to Native American peoples.

STANDARDS AND GUIDELINES ON THE ARIZONA STRIP DISTRICT

The Standards were written by Arizona's Resource Advisory Council (RAC) in 1997. They were accepted and approved that same year by the Secretary of the Interior. The Guidelines apply only to authorized livestock grazing activities, the Standards apply to all programs and all authorized activities. Two teams implement the Standards on all grazing allotments on the Arizona Strip. The Interdisciplinary Assessment Team (IAT) is made up of resource specialists from the BLM, Arizona Game and Fish Department (AGFD), the Natural Resources Conservation Service and Mohave County Extension Agency. This team carries out the assessment. The Arizona Resource Advisory Council appointed a nine member Rangeland Resource Team (RRT), to be involved in the process from beginning to end.

- The RRT is constructed similar to the RAC with 3 representatives in each of 3 diverse groups:
 1. Commodities: Livestock Grazing, Mining, Commercial Recreation
 2. Non-Commodities: Wildlife, Environmental, Dispersed Recreation
 3. Local Area Interest: Public-at-large, Native American Interests, Elected Officials
- The RRT has 2 objectives:
 1. Ensure the Standards are consistently applied across allotment boundaries, and
 2. Ensure determinations are based on something..., monitoring data, professional opinion.

There is a list of members on both teams below.

Each year letters are sent to approximately 700 individuals notifying them which grazing allotments are to be evaluated in the upcoming fiscal year. The recipient is then instructed how to request designation as an "Interested Public" and be involved in the evaluation and decision making process.

BLM grazing regulations at 43 CFR 4100.0-5 state, “Interested public means an individual, group or organization that has **submitted a written request** to the authorized officer to be provided an opportunity to be involved in the decision making process for the management of livestock grazing on **specific grazing allotments** or has submitted written comments to the authorized officer regarding the management of livestock grazing on a specific allotment”(emphasis added).

The Arizona Strip District holds an issue-scoping meeting once a year, where all issues raised are documented as either relating, or not relating, to rangeland health. During the year each allotment with issues that relate to rangeland health is visited, after assembling all available information and monitoring data. Both teams visit sites representing each issue and the IAT determines, by consensus, whether the area is meeting standards. The interested public is invited to the scoping meetings and the field visits. If an area does not meet the standards, the cause is determined and recommendations are made to improve the situation. If the current livestock grazing practices are determined to be the cause of non-attainment, BLM regulations (43 CFR 4180.1) require the modification of the practices by the next grazing season.

The IAT then produces a report documenting the results of the evaluation. The S&G report is sent to the RAC, the RRT, State Agencies having lands or managing resources within the area, and the Interested Public. Any comments received are used in the preparation of an Environmental Assessment for renewing the ten-year grazing permit. A Grazing Decision is then issued to the Permittee, State Agencies having lands or managing resources within the area, and the Interested Public. This grazing decision outlines the terms and conditions of the grazing permit and may be protested or appealed by any or all recipients.

RANGELAND HEALTH IMPLEMENTATION STATUS

Standards for Rangeland Health Evaluation Results and Evaluation Schedule

Vermilion Cliffs National Monument (AZ120)

Allotment Name	Allotment Number	Evaluation Result or FY Scheduled
Bunting Well	04847	Meeting the Standards
Ferry Swale	05336	Meeting the Standards
Sand Hills	05328	Evaluation in Draft
Signature Rock	05350	Meeting the Standards
Wahweap	05340	Meeting the Standards

APPENDIX D

**LIVESTOCK GRAZING
ALLOTMENT MANAGEMENT STATUS**

APPENDIX D: LIVESTOCK GRAZING ALLOTMENT MANAGEMENT STATUS

Vermilion Cliffs National Monument

Allotment Name	Allotment Number	Management Status	AMP	Current Mgt
Bunting Well	04847	M	A	Deferred
Ferry Swale	05336	M	A	Deferred
Sand Hills	05328	I	A	Rest-Rotation
Signature Rock	05350	I	A	Fall Winter
Wahweap	05340	C		Season Long

ALLOTMENT CATEGORIZATION CRITERIA

Maintain (M)

- (a) Present range condition is satisfactory.
- (b) Allotments have high or moderate resource potential and are producing near their potential (or trend is moving in that direction.)
- (c) No serious resource-use conflicts/controversy exist.
- (d) Opportunities may exist for positive economic return from public investments.
- (e) Present management is satisfactory.
- (f) Other criteria appropriate to the Environmental Statement (ES) area.

Improve (I)

- (a) Present range condition is unsatisfactory.
- (b) Allotments have high to moderate resource production potential and are producing at low to moderate levels.
- (c) Serious resource-use conflicts/controversy exists.
- (d) Opportunities exist for positive economic return from public investments.
- (e) Present management appears unsatisfactory.
- (f) Other criteria appropriate to the ES area.

Custodial (C)

- (a) Present range condition is not a paramount factor.
- (b) Allotments have low resource production potential, and are producing near their potential.
- (c) Limited resource-use conflicts/controversy may exist.
- (d) Opportunities for positive economic return on public investment do not exist or are constrained by technological or economic factors.
- (e) Present management appears satisfactory or is the only logical practice under existing resource conditions or land ownership pattern.
- (f) Other criteria appropriate to the ES area.

APPENDIX E

LIVESTOCK GRAZING ALLOTMENT ACRES AND ANIMAL UNIT MONTHS (AUMs) BY LAND STATUS

APPENDIX E: LIVESTOCK GRAZING ALLOTMENT ACRES AND ANIMAL UNIT MONTHS (AUMS) BY LAND STATUS

Table E.1. Allotment Acres by Land Status for Vermilion Cliffs National Monument					
Allotment	Allotment Number	State Acres	Private Acres	Other Federal Acres	Public Acres
Bunting Well	04847	43,228	168	578	25,183
Ferry Swale	05336	4,584	0	16,994	18,200
Sand Hills	05328	11,727	260		186,082
Signature Rock	05350		840		3,840
Wahweap	05340			5,990	
Summary (5 detail records)		59,539	1,268	23,562	233,305

Table E.2 Allotment AUMs by Land Status for Vermilion Cliffs National Monument					
Allotment Name	Allotment Number	State AUMs	Private AUMs	Other Federal AUMs	Public AUMs
Bunting Well	4847	2,876	11	38	1,675
Ferry Swale	5336			849	828
Sand Hills	5328	1,320	24		15,081
Signature Rock	5350		52		382
Wahweap	5340			276	0
Summary (5 detail records)		4,196	87	1,163	17,966

Table E.3 Allotment AUMs By Land Status for Vermilion Cliffs National Monument					
Allotment Name	Allotment Number	State AUMs	Private AUMs	Other Federal AUMs	Public AUMs
Bunting Well	4847	3,280			1,320
Ferry Swale	5336			849	828
Sand Hills	5328	1,320	24		15,081
Signature Rock	5350		52		382
Wahweap	5340			276	0
Summary (10 detail records)		4,600	76	1,125	17,611

APPENDIX F

VEGETATION TREATMENT TOOLS AND METHODS

APPENDIX F: VEGETATION TREATMENT TOOLS AND METHODS

This appendix briefly describes a variety of vegetation treatment tools and methods that may be used in Bureau of Land Management (BLM)-administered lands of the Monument. Included are recommendations for uses of various tools and methods, as well as advantages and disadvantages of each.

Manual

In manual treatments, plants are cut at or above ground level; plant root systems are pulled or dug out to prevent subsequent sprouting and regrowth; or mulch is placed around desired vegetation to limit the growth of competing vegetation. Hand tools and hand-operated power tools are used in manual vegetation treatments to cut, clear, or prune herbaceous and woody species. Hand tools such as the handsaw, axe, shovel, rake, machete, grubbing hoe, mattock (combination of axe and grubbing hoe), brush hook, and hand clippers, etc. 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 with roots that can quickly resprout in response to surface cutting or clearing. Power tools, such as chain saws and power brush saws, are used to sever the main stem of woody vegetation at or near ground level.

The advantage of manual treatments is that they are species and individual plant specific, can be used in sensitive habitats, and can be used in areas inaccessible for mechanical treatments. The disadvantage is that they are labor intensive and, therefore, expensive.

Mechanical

Mechanical treatments are used to kill or reduce the cover of undesirable vegetation and thus encourage the growth of desirable vegetation. Several different types of mechanical equipment are effective in suppressing, inhibiting, or controlling herbaceous and woody vegetation (Vallentine 1980). Equipment could include wheeled or track type tractors, mowers, shredders, ATV's or specially designed vehicles with attached implements for mechanical vegetation treatments. 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 re-sprouting ability;
2. Need for seedbed preparation and/or re-vegetation,
3. Need to reduce erosion and improve effective ground cover,
4. Soil characteristics such as type, depth, amount and size of rocks, erosion potential, and susceptibility to compaction;
5. Climatic and seasonal conditions,
6. Topography and terrain,
7. Potential cost of project compared to expected results, and
8. Vegetation type.

Wheeled or crawler tractors can uproot and/or push vegetation over (bulldozing) with a heavy, hydraulic controlled blade. Vegetation is either left scattered or pushed into windrows or piles. There are several different kinds of blades available, depending of the type of vegetation and goals of the project. Bulldozing is most effective in removing scattered large brush or trees. Soil disturbance is a disadvantage of bulldozing.

Disk plowing in various forms can be used for removing shallow-rooted herbaceous and woody plants. Several different kinds of root 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 disadvantages of disk plowing are that it disturbs the soil and provides an opportunity for an increase in invasive non-native plants, it usually kills all species, and it may be expensive. Also, plowing is usually not practical on steep (greater than a 35% to 45% slope) or rocky slopes. Plant species that sprout from roots may survive.

Various tractor attachments are used for mowing, beating, crushing, chopping, or shredding vegetation depending on the nature of the vegetation and goals of the project. Mowing is effective in reducing plant height and usually does not kill vegetation. Mowing is more effective on herbaceous than woody vegetation. On the other hand, a rolling cutter may kill woody non-sprouting vegetation by breaking stems at ground level but leaving herbaceous vegetation. Generally, mowing, beating, crushing, chopping, or shredding disturbs the soil surface minimally. Rocky soil and steep slopes may limit use of this type of equipment. The advantage of using this type of equipment is that selective plants may be targeted to achieve specific goals.

Chaining and cabling are used to remove non-sprouting woody vegetation such as small trees and shrubs by pulling them over. Vegetation removal is accomplished by dragging heavy anchor chains or steel cables, hooked behind two tractors, in a U-shaped manner. Vegetation is either left scattered or pushed into windrows or piles. The chains or cables can also be used to prepare the soil surface for seeding desirable species and to cover seed with soil to improve germination. Although herbaceous vegetation is not normally injured during the treatment, desirable shrubs may be damaged. The disadvantage of this treatment is soil disturbance and that non-desirable “weedy” herbaceous vegetation can survive this treatment. This vegetation treatment method is cost effective as large areas can be readily treated.

Chemical

Until the Draft Programmatic EIS on Vegetation Treatments Using Herbicides on BLM Lands in 17 Western States (2005) is final, the BLM will use EPA-approved herbicides in accordance with EPA's Endangered Species Pesticide Program covered in the BLM's *Vegetation Treatment on BLM Lands in Thirteen Western States FEIS* (May 1991) and to those approved for use by the Arizona Record of Decision (ROD, Page 3, 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 as listed on pages 1-19 through 1-32 and project design features listed on pages 1-33 through 1-37 of the FEIS. Once the ROD for this RMP is signed, the BLM will adhere to the standards and guidelines for each approved herbicide set forth in the Programmatic EIS on *Vegetation Treatment on BLM Lands in Thirteen Western States*.

Herbicide applications are designed to minimize potential impacts on non-target plants and animals, while achieving the objective of the vegetation treatment project. 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 herbicides may be applied aerially with helicopters or fixed-wing aircraft, or on the ground using vehicles or manual application devices. Helicopters are more expensive than fixed-wing aircraft, but they are more effective in irregular terrain and in treating specific target vegetation in areas with many vegetation types. Manual applications are generally used for treating small areas or those inaccessible by vehicle.

The BLM will work closely with the U.S. Fish and Wildlife Service (USUSFWS) to ensure that herbicide applications will not affect listed or proposed threatened or endangered species on a project-level basis. If adverse effects are anticipated during informal consultation, then the BLM will formally consult on these projects. If the USUSFWS develops herbicide guidance for particular species that improves protection beyond the current BLM design features, the BLM will consider and incorporate that guidance as it consults with the USFWS on a project-level basis. In order to protect listed, proposed, and candidate species, buffer strips may be used.

Project design features may include buffer strips described in the *Vegetation Treatment on BLM Lands in Thirteen Western States Programmatic EIS* ROD (page 10), as follows: “Buffer strips will 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 for vehicle application and 10 feet for hand application. Any deviations must be in accordance with the label for the herbicide. Herbicides could be wiped on individual plants within 10 feet of water where application is critical.” It should be noted that the Draft Vegetation Management EIS contains herbicides approved for application over water, and therefore, buffer strips may not always be necessary, once that Programmatic Vegetation Management EIS is approved.

The chemicals can be applied by many different methods and the selected technique depends on a number of variables. Some of these are:

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; and
6. meteorological and vegetative conditions of the treatment area at the time of treatment.

The changes made here are not consistent with the format of the numbered items under the “Mechanical Section.” Chemical treatments are generally cost effective and can be species specific. The disadvantages are they are not always species specific and precautions may need to be taken to ensure attainment of treatment objectives.

Biological

Biological control (biocontrol) is the intentional use of living organisms to reduce the population of a pest. It may include the use of insects, nematodes, mite, plant pathogens, and vertebrates. The majority of the noxious weeds in the United States are introduced without their natural enemies. Biocontrol seeks to use some of the native land's biotic factors to suppress populations of these undesirable plants. (Biological Control of Weeds in the West, Western Society of Weed Management, 1996). The eventual impacts of a biocontrol agent on its target plant will be the result of the:

1. density of weeds compared to the density of the agent;
2. effect of the local biotic and abiotic conditions on the agent and on the weed;
3. plant's reproductive ability (seeds only or seeds and vegetative reproduction);
4. agent's ability to stress the plant each year and the plant's ability to maintain and replace root reserves;
5. plant's ability to recover from the effects of the biocontrol agent, and;
6. interactions of multiple biocontrol agents attacking a single weed species.

The changes made here are not consistent with the format of the numbered items under the "Mechanical Section."

The advantages of biocontrol:

1. Once a biocontrol agent becomes established it usually will reproduce, increase its numbers, and continue to attack the target organism, generally without additional costs to the land manager.
2. Biocontrol agents move to host plants anywhere within their climatic range, readily crossing ownership boundaries and some geographical barriers.
3. Approved biocontrol agents are selective – host weeds are attacked without damage to the surrounding vegetation.
4. Properly tested biocontrol agents are not a source of environmental contamination.

The disadvantages of biocontrol:

1. It often takes many years for the populations of the introduced agents to increase to levels that permanently decrease the pest plant population.
2. Some biocontrol agents may be subject to predators.
3. Environmental conditions (shade versus sun, low versus high rainfall, sandy versus clay soils) often exclude some biocontrol agents from certain locations.
4. Biocontrol agents usually do not eradicate weed populations.

Cattle, sheep, and goats are domestic animals that can be used as biological agents to control the top growth of certain noxious weeds. The use of grazing as a biological control agent will be conducted in accordance with BLM procedures in the Use of Biological Control Agents of Pests on Public Lands (BLM 1990). 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 targeted species.
3. Sheep or goats can be used in combination with herbicides.

Some of the disadvantages of using domestic animals are:

1. They also use non-target plants as food sources.
2. The use of domestic animals, like sheep or goats, requires a herder or temporary fencing.
3. The animals may be killed by predators such as coyotes.
4. Most weed species are less palatable than desirable vegetation.
5. They may accelerate movement of nonnative plants through seed ingestion and excretion.
6. They control few, if any, plant species.
7. Domestic livestock may transmit parasites and/or pathogens to resident native wildlife species.

Wildland Fire Use and Prescribed Fire

Wildland Fire Use

Wildland fire use is wildland fire used to protect, maintain, and enhance resources and, when possible, allowed to function in its natural ecological role. Use of fire will be based on approved Fire Management Plans and will follow specific prescriptions contained in operational plans.

The Interagency Standards for Fire and Fire Aviation Operations (2004) will be followed. It includes the following incident management guidance for wildland fire use:

1. Agencies may apply this strategy in managing wildland fires for resource benefit.
2. An approved Fire Management Plan (FMP) is required. This plan identifies specific resource and fire management objectives, a predefined geographic area, and prescriptive criteria that must be met.
3. A Wildland Fire Implementation Plan (WFIP) will be completed for all wildland fires that are managed for resource benefit. This is an operational plan for assessing, analyzing, and selecting strategies for wildland fire use. It is progressively developed and documents appropriate management responses for any wildland fire managed for resource benefits. The plan will be completed in compliance with the guidance found in the Wildland and Prescribed Fire Management Policy Implementation Procedures Reference Guide (August 1998).
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.

Prescribed Fire

Prescribed fire is the planned application of fire to vegetation, under specific conditions of fuels, weather, and other variables, to ensure the fire remains in a predetermined area and achieves site-specific resource management objectives. Prescribed fire treatments will 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 (amount of fuel, fuel moisture, temperatures, terrain, weather forecasts, etc.) and identifies people responsible for overseeing the fire.

Seeding

Following vegetation management treatments, seed may be applied. All seed will be tested and “state certified” free of weed seeds. Seed priming, covering, and other enhancement techniques may be used to increase germination rates. Seeding encourages development of a desired plant community, mitigates erosion, establishes effective ground cover, and/or encourages development of desirable wildlife habitat attributes. The disadvantages of seeding are that acquiring and applying seed is expensive and germination is not always successful.

APPENDIX G

CONSERVATION MEASURES FOR SPECIAL STATUS SPECIES

APPENDIX G: CONSERVATION MEASURES FOR SPECIAL STATUS SPECIES

The following Conservation Measures will be implemented as part of the proposed action for all management activities authorized. These Conservation Measures are intended to provide District-wide consistency in reducing or eliminating the effects of management actions on federally endangered, threatened, proposed, and candidate species, as well as species included on the Wildlife Species of Concern in Arizona and BLM Arizona Sensitive Species lists.

1.0 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 U.S. Fish and Wildlife Service (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.
- 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 and Arizona Game and Fish Department (AGFD). Revise future fire suppression plans and tactical applications as needed and as practical.

1.2 FUELS TREATMENTS, PRESCRIBED BURNING AND OTHER FUELS MANAGEMENT ACTIONS (FT)

The following Conservation Measures are mandatory when implementing wildland fire use, prescribed fires, and proposed vegetation treatments using mechanical, chemical, and/or biological treatment methods:

- FT-1** Biologists will be involved in the development of prescribed burn plans and vegetation treatment plans to minimize effects to federally protected species and their habitats within, adjacent to, and downstream from proposed project sites. Biologists will consider the protection of seasonal and spatial needs 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 fuel breaks 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 alien (non-native) species of grasses and herbaceous vegetation will be used in areas where reseeding is necessary following ground disturbance to stabilize soils and prevent erosion by both wind and water.
- RR-3** Sediment traps or other erosion control methods will be used to reduce or eliminate influx of ash and sediment into aquatic systems.
- RR-4** Use of motorized vehicles during rehabilitation or restoration activities in suitable or occupied habitat will be restricted, to the extent feasible, to existing roads, trails, or washes, and to temporary access roads or fuel breaks created 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 be rehabilitated (water bars, etc.), and be closed or made impassible for future use.
- RR-6** Burned area emergency rehabilitation (BAER) activities and long-term restoration activities should be monitored, and the results provided to the USFWS and AGFD. Section 7 consultation for BAER activities will be conducted independently, if necessary.
- RR-7 (Recommended)** Develop public education plans that discourage or restrict fires and fire-prone recreation uses during high fire-risk periods. Develop brochures, signs, and other interpretive materials to educate recreationists about the ecological role of fires, and the potential dangers of accidental fires.

1.4 CONSERVATION MEASURES FOR FIRE MANAGEMENT ACTIVITIES IN RIPARIAN AND AQUATIC HABITATS (RA)

The following Conservation Measures be implemented during fire suppression and fuels treatment operations in riparian, wetland, or aquatic habitats, unless firefighter or public safety, or the protection of property, improvements, or natural resources, render them infeasible during a particular operation. Fuels treatment activities include prescribed fire and mechanical, chemical, and/or biological vegetation treatments in riparian, wetland, and aquatic habitats. Necessary modifications of the Conservation Measures or impacts to federally protected species and habitat during fire suppression operations will be documented by the Resource Advisor, and coordinated with the USFWS.

- RA-1** During wildfire suppression, apply MIST within riparian areas. Fire suppression actions in riparian areas should be prioritized to minimize damage to stands of native vegetation from wildfire or suppression operations. To the extent possible, retain large, downed woody materials and snags that are not a hazard to firefighters.
- RA-2** Fire suppression and rehabilitation in riparian corridors will be coordinated with the Resource Advisor or qualified biologist approved by BLM.
- RA-3** Site-specific implementation plans that include project areas with federally protected aquatic or riparian-obligate species will specify fire management objectives and wildland fire suppression guidance, taking into account the special concerns related to these species.
- RA-4** In riparian areas, use natural barriers or openings in riparian vegetation where possible as the easiest, safest method to manage a riparian wildfire. Where possible and practical, use wet firebreaks in sandy overflow channels rather than constructing firelines by hand or with heavy equipment.
- RA-5** Construction or development of a crossing for motorized vehicles across a perennial stream will not be permitted, unless an established road already exists or where dry, intermittent sections occur.
- RA-6** Avoid the use of fire retardants or chemical foams in riparian habitats or within 300 feet of aquatic habitats, particularly sites occupied by federally protected species. Apply operational guidelines as stated in the *Interagency Standards for Fire and Fire Aviation Operations 2003 (or updates)*, “Environmental Guidelines for Delivery of Retardant or Foam Near Waterways.”
- RA-7** Priority for placement of fire camps, fire staging areas, and aircraft landing or refueling sites will be outside riparian areas or river/stream corridors.
- RA-8** When using water from sources supporting federally protected species, care must be taken to ensure adverse impacts to these species are minimized or prevented. Unused water from fire abatement activities will not be dumped in sites occupied by Federally protected aquatic species to avoid introducing non-native species, diseases, or parasites.

- RA-9** If water is drafted from a stock tank or other body of water for fire suppression, it 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 and AGFD.
- RA-12** Fire management treatments within or adjacent to riparian and aquatic habitats be designed to provide long-term benefits to aquatic and riparian resources by reducing threats associated with dewatering and surface disturbance, or by improving the condition of the watershed and enhancing watershed function.
- RA-13** For priority fire/fuels management areas (e.g., wildlife-urban interface (WUI) areas) with federally protected species or designated critical habitat downstream, BLM biologists and other resource specialists, as appropriate, in coordination with USFWS and AGFD, determine:
- A) The number of acres and the number of projects or phases of projects to occur within one watershed per year.
 - B) An appropriately-sized buffer adjacent to perennial streams in order to minimize soil and ash from entering the stream.
 - C) Where livestock grazing occurs in areas that have been burned, specialists will determine when grazing can be resumed. Such deferments from grazing will only occur when necessary to protect streams from increased ash or sediment flow into streams.²

If agreement cannot be reached or treatment will not meet fuel reduction objectives, BLM re-initiate consultation. Our authority to make these types of changes is in the regulations at 43 CFR 4110.3-3(b).

2.0 SPECIES SPECIFIC CONSERVATION MEASURES

In addition to the general Conservation Measures listed in **Section 1.0**, the following species-specific Conservation Measures will be applied to management actions in special status species habitats to the extent possible, and will be required during fuels and vegetation treatment activities. Necessary modifications of the Conservation Measures or impacts to federally

¹"Project" means any surface-disturbing activities proposed that may cause disturbance of desert tortoise habitat and/or death or injury of a desert tortoise, with the exception of grazing by livestock and activities associated with fire suppression.

protected species and habitat during implementation of management actions will be documented by the BLM or NPS biologist, and coordinated with the USFWS.

2.1 Reptiles (no conservation measures for reptiles occur within Vermilion Cliffs National Monument)

2.2 AMPHIBIANS (AM)

AM-1 Implement the Conservation Measures for Fire Management Activities in Riparian and Aquatic Habitats.

AM-2 All personnel performing fire management activities at any creek crossing will be informed of the potential presence of aquatic amphibians and the need to perform their duties to avoid impacts to the habitat.

2.3 BIRDS

2.3.1 California Condor (FE and 10J)

Conservation Measures for California Condor

CC-1. Management Guidance for Projects Constructed or Implemented by Authorized or Permitted Members of the Public within the 10(j) Area

CC-1.A. Immediately prior to the start of an authorized or permitted project, BLM/NPS will contact personnel monitoring California Condor locations and movements on the Arizona Strip to determine the locations and status of condors in or near the project area.

CC-1.B. BLM/NPS will request that permit holders notify the BLM/NPS wildlife team lead or condor biologist if California Condors visit the worksite while permitted activities are underway. BLM/NPS may encourage permit holders to modify, relocate, or delay project activities where adverse affects to condors may result.

CC-1.C. Where condor nesting activity is known within 0.5 miles of permitted or authorized activities that include operation of heavy machinery, BLM/NPS may encourage the operator to avoid use of the equipment during the active nesting season (February 1- November 30), or as long as the nest is viable.

CC-1.D. Where condors occur within 1.0 mile of permitted or authorized activities that include blasting, BLM/NPS will encourage that blasting be postponed until the condors leave the area or are hazed away by personnel permitted to haze condors. Where condor nesting activity is known within 1.0 mile of the project area, BLM/NPS encourages that blasting activity be delayed until after the active nesting season (February 1- November 30), or as long as the nest is viable. These dates may be modified based on the most current information regarding condor nesting.

- CC-2.** Management Guidance for Projects Constructed or Implemented by BLM/NPS Employees or Contractors Within the 10(j) Area AND For All BLM/NPS-Authorized Actions, Regardless of Proponent, Outside the 10(j) Area on the Arizona Strip.
- CC-2.A.** Immediately prior to the start of a permitted project, BLM/NPS will contact personnel monitoring California Condor locations and movement on the Arizona Strip to determine the locations and status of condors in or near the project area.
- CC-2.B.** Where California Condors visit a worksite while activities are underway, the on-site supervisor will notify the BLM/NPS wildlife team lead or condor biologist. Project workers and supervisors will be instructed to avoid interaction with condors. Project activities will be modified, relocated, or delayed if those activities could have adverse effects on condors. Operations will cease until the bird leaves on its own or until techniques are employed by permitted personnel that results in the individual condor leaving the area.
- CC-2.C.** Where condor nesting activity is known within 0.5 miles of activities that include operation of heavy machinery, BLM/NPS will direct the operator to cease equipment use during the active nesting season (February 1- November 30), or as long as the nest is viable. Where feasible and consistent with NEPA, BLM/NPS may relocate operations to a site greater than 0.5 miles from the condor nest site.
- CC-2.D.** Where condors occur within 1.0 miles of activities that include blasting, BLM/NPS will require that blasting be postponed until the condors leave the area or are hazed away by personnel permitted to haze condors. Where condor nesting activity is known within 1.0 miles of the project area, BLM/NPS will cease blasting during the active nesting season (February 1- November 30), or as long as the nest is viable. These dates may be modified based on the most current information regarding condor nesting.
- CC-3.** Management Guidance for All BLM/NPS-Authorized Actions, Regardless of Proponent or location Within the Planning Area.
- CC-3.A.** The project site will be cleaned up at the end of each day the work is being conducted (e.g., trash removed, scrap materials picked up) to minimize the likelihood of condors visiting the site. BLM/NPS staff may conduct site visits to the area to ensure adequate clean-up measures are taken.
- CC-3.B.** For projects where potential exists for leakage or spill of hazardous materials, a spill plan will be developed and implemented to prevent water contamination and potential poisoning of condors. The plan will include provisions for immediate clean up of any hazardous substance, and will define how each hazardous substance will be treated in case of leakage or spill. The plan will be reviewed by the BLM condor lead biologist to ensure condors are adequately addressed.
- CC-3.C** BLM/NPS will implement the protective measures for California Condors that are contained in the March 2004 “Recommended Protection Measures for Pesticide Applications in The Southwest Region of the USFWS.”
- CC-3.D.** Use of non-lead ammunition is strongly encouraged for activities involving the discharge of firearms.

- CC-4.** Management Guidance for All Actions Involving Use of Aircraft, Regardless of Proponent or location Within the Planning Area.
- CC-4.A.** Aircraft use along the Vermilion Cliffs, Paria Plateau, or any sites where condors are actively breeding or roosting will be minimized to the extent possible. Known active nest sites will be avoided.
- CC-4.B.** The BLM condor biologist or Wildlife Program Lead will contact the Peregrine Fund, as appropriate, immediately before operations involving aviation begin to check on possible locations of condors in the subject area.
- CC-4.C.** All BLM/NPS-authorized aviation personnel will be provided literature and/or instructed regarding condor concerns prior to conducting aerial operations.
- CC-4.D.** Aircraft will maintain and maximize safe flying separation distances 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. Aircraft will keep a minimum of 0.25 miles away from condors located on the ground.
- CC-5.** Management Guidance for Fire Suppression, Fire Use, Prescribed Fire, and Related Actions Within the Planning Area.
- CC-5.A.** 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-5.B.** Any presence of condors in the general area of an active fire will be reported immediately to the Resource Advisor, who will in turn advise the BLM condor biologist, as appropriate. The BLM condor biologist or the AZ Strip FO wildlife team lead will be the primary contacts with the USFWS and the Peregrine Fund when such contacts are needed regarding condor concerns.
- CC-5.C.** Fire dispatch will immediately notify the Peregrine Fund at either (208) 362-3811 or (928) 355-2270 whenever a fire or other event on the Paria Plateau is reported which may conceivably threaten the condor holding pens and facilities atop the Vermilion Cliffs.
- CC-5.D.** 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-5.E.** All District BLM/NPS fire personnel, including helicopter pilots, will be provided literature or instructed regarding condor concerns. Normally this will be done by the BLM condor biologist when the fire crews first come on and are trained on various subjects, including desert tortoise concerns. If additional pilots come on during the summer, fire dispatch will notify the BLM condor biologist (435 688-3224) so that they can also be briefed.

- CC-5.F.** All helicopter dip tanks containing water will be covered when not in use or personnel will be stationed nearby until a cover is in place.
- CC-5.G.** If any fire retardant chemicals must be used in areas where condors are in the vicinity, 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-5.H.** Smoke from prescribed fire projects will be prevented from negatively affecting condor holding pens and breeding, nesting, and chick rearing sites. A proposed prescribed fire will not be initiated, or an existing fire use event will be modified or terminated, in order 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 held or attempting to breed, nest, or rear chicks.
- CC-5.I.** BLM will adhere to the air quality standards set by the Arizona Department of Environmental Quality.
- CC-5.J.** All camp areas will be kept free from trash.

2.3.2 Southwestern willow flycatcher (FE)

Conservation Measures for Southwestern Willow Flycatcher

WF-1. Management Guidance for Fire Suppression and Related Actions

- WF-1.A.** Implement the Conservation Measures for Fire Management Activities in Riparian and Aquatic Habitats.
- WF-1.B.** Except where fires are active in occupied habitat, minimize unnecessary low-level helicopter flights during the breeding season (April 1 – September 30). Approach bucket dip sites at a 90-degree direction to rivers to minimize flight time over the river corridor and occupied riparian habitats. Locate landing sites for helicopters at least ¼ mile from occupied sites to avoid impacts to willow flycatchers and their habitat.
- WF-1.C.** Minimize use of chainsaws or bulldozers to construct firelines through occupied or suitable habitat except where necessary to reduce the overall acreage of occupied habitat or other important habitat areas that otherwise be burned.
- WF-1.D.** Implement activities to reduce hazardous fuels or improve riparian habitats (prescribed burning or vegetation treatments) within occupied or unsurveyed suitable habitat for southwestern willow flycatchers only during the non-breeding season (October 1 to March 31).
- WF-1.E.** Avoid developing access roads that result in fragmentation or a reduction in habitat quality. Close and rehabilitate all roads that were necessary for project implementation.
- WF-1.F.** Prescribed burning will only be allowed within 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 – September 30).

WF-1.G. Vegetation treatment projects adjacent to occupied or unsurveyed suitable habitat will only be conducted when willow flycatchers are not present (October 1 – March 31).

WF-1.H. Continue to implement the riparian fire management plan to minimize fire damage in riparian areas, especially those with suitable or potential flycatcher habitat.

2.3.3. Yuma clapper rail (FE)

Conservation Measures for Yuma Clapper Rail

CR-1. Management Guidance for Fire Suppression and Related Actions

CR-1.A. Implement the Conservation Measures for Fire Management Activities in Riparian and Aquatic Habitats.

CR-1.B. Any prescribed fire or vegetation treatment project in occupied or suitable marsh habitat only occur between September 1 and March 15 to avoid the Yuma clapper rail breeding and molting seasons.

CR-1.C. Mechanical removal of overstory habitat (e.g. tamarisk) could occur as early as August 15, after the breeding season for Yuma clapper rails.

CR-1.D. Herbicide application will not occur in Yuma clapper rail habitat and drift-inhibiting agents will be used to assure that the herbicide does not enter adjacent marsh areas.

CR-1.E. Evaluate past surveys for Yuma clapper rails as part of the planning for prescribed fire projects. Post-project surveys should also be conducted to document the re-growth of cattail habitats and occupancy by clapper rails.

CR-1.F. After fire suppression is completed in Yuma clapper rail habitat, review any available survey records of the burn site and record in the fire report the number of rails recorded from the vicinity during these surveys.

2.3.4. Bald eagle (FT)

Conservation Measures for Bald Eagle

BE-1. Management Guidance for Fire Suppression and Related Actions

BE-1.A. No human activity associated with fire management will be authorized within ½ mile of known bald eagle nest sites between December 1 and June 30.

BE-1.B. No tree cutting will be authorized within ¼ mile of known bald eagle nest trees.

BE-1.C. No human activity associated with fire management will be authorized within ¼ mile of known bald eagle winter roost areas between October 15 and April 15.

- BE-1.D.** No tree cutting will be authorized within the area immediately around winter roost sites as determined by BLM biologists.
- BE-1.E.** No helicopter or aircraft activity or aerial retardant application associated with fire management activities will be authorized 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-1.F.** Prescribed burn activities outside of nesting season will be conducted in a manner to ensure nest and winter roost sites are more than ½ mile from downwind smoke effects.
- BE-1.G.** 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.
- BE-1.H.** Prepare and implement BAER plans for burned areas that have the potential to cause future erosion problems in the watershed, riparian, or aquatic areas. Objectives of these plans, within watersheds containing bald eagle breeding areas and/or potential habitat, will be to reduce erosion and sedimentation into these habitats.

2.3.5 Mexican spotted owl (FT)

Conservation Measures for Mexican Spotted Owl

- SO-3.** Management Guidance for Grazing Management
 - SO-3.A.** Determine the effectiveness of current grazing standards and guidelines as they relate to the owl's needs, and devise grazing strategies that can benefit the owl and its prey.
 - SO-3.B.** Monitor grazing use by livestock to determine any changes in the relative composition of herbaceous and woody plants to maintain habitat for owls and their prey.
 - SO-3.C.** Minimize or eliminate disturbance, injury, mortality, or other forms of take of Mexican spotted owls resulting from grazing by livestock.
- SO-1.** Management Guidance for Fire Suppression and Related Actions
 - SO-1.A.** BLM wildlife biologists will be involved early in the decision-making process for fuels management treatments (wildland fire use, prescribed fires, vegetation treatments) that are planned within suitable habitat for Mexican spotted owls.
 - SO-1.B.** Suitable habitat for Mexican spotted owls will be surveyed prior to implementing prescribed fire or vegetation treatment activities on BLM-administered lands to determine if owls are present and their breeding status. These fire management activities will only be implemented within suitable habitat if birds are not present.

SO-1.C. If a spotted owl 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.

SO-1.D. The following measures will be followed in suitable habitat (occupied or unoccupied) whenever consistent with objectives to reduce hazardous fuels:

1. Incorporate natural variation, such as irregular tree spacing and various stand/patch sizes, into management prescriptions and attempt to mimic natural disturbance patterns.
2. Maintain all species of native vegetation in the landscape, including early seral species. To allow for variation in existing stand structures and provide species diversity, both uneven-aged and even-aged systems may be used as appropriate.
3. Allow natural canopy gap processes to occur, thus producing horizontal variation in stand structure.
4. Retain hardwoods, large down logs, large trees, and snags. 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-1.E. The effects of fire suppression and fuels treatment activities on Mexican spotted owls 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. Prescriptions for wildland fire use, prescribed fires, and vegetation treatments will be adjusted, if necessary.

2.3.6. Yellow-billed cuckoo (FC)

Conservation Measures for Yellow-billed Cuckoo

YC-1. Management Guidance for Fire Suppression and Related Actions

YC-1.A. Implement the Conservation Measures for Fire Management Activities in Riparian and Aquatic Habitats.

YC-1.B. Any prescribed fire or vegetation treatment project in occupied or suitable marsh habitat only occur between September 1 and March 15 to avoid adverse affects to breeding birds.

YC-1.C. Mechanical removal of overstory habitat (e.g. tamarisk) could occur as early as September 1, after the breeding season for yellow-billed cuckoos.

YC-1.D. Evaluate past surveys for yellow-billed cuckoos as part of the planning for prescribed fire projects. Post-project surveys should also be conducted to

document the re-growth of mature cottonwood-willow gallery forests and occupancy by cuckoos.

YC-1.E. After fire suppression is completed in yellow-billed cuckoo habitat, review any available survey records of the burn site and record in the fire report the number of cuckoos recorded from the vicinity during these surveys.

YC-1.F. Continue to implement the riparian fire management plan to minimize fire damage in riparian areas, especially those with suitable or potential flycatcher habitat.

2.3.7. Peregrine Falcon (BLM Sensitive)

Conservation Measures for Peregrine Falcon

Continue post-delisting recovery monitoring of selected peregrine falcon nest sites in cooperation with AGFD and USFWS. The monitoring plan calls for five sampling periods at three-year intervals throughout the life of this Approved Plan. Monitoring protocol requires a minimum of two, four-hour visits to a site unless a nest is located sooner.

PF-1. Management Guidance for Fire Suppression and Related Actions

PF-1.A. BLM wildlife biologists will be involved early in the decision-making process for fuels management treatments (wildland fire use, prescribed fires, vegetation treatments) that are planned within ½ mile of active nest sites of peregrine falcon.

PF-1.B. Prior to implementing prescribed fire or vegetation treatment activities on BLM-administered lands, areas within ½ mile of cliff faces that could contain suitable habitat for peregrine falcon will be surveyed. Fire management activities will only be implemented when peregrine falcons are not present.

PF-1.C. If a peregrine falcon 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, assess potential harm to the falcon, and advise the Incident Commander or project crew boss of methods to prevent harm.

2.4. VIRGIN RIVER FISHES (not in Vermilion Cliffs National Monument)

2.5. Flowering Plants

Conservation Measures for Special Status Plants

PL-1. Management Guidance for Fire Suppression and Related Actions

- PL-1.A.** 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-1.B.** Delineate buffer areas around plant populations prior to prescribed fire and vegetation treatment activities. Coordinate with the USFWS during any emergency response and wildland fire use activities to ensure protection of plant populations from fire and fire suppression activities.
- PL-1.C.** No staging of equipment or personnel will be permitted within 100 meters of identified individuals or populations of special status plant species during fire suppression, wildland fire use, or prescribed fire. Off-road vehicles will not be allowed within the 100-meter buffer area, unless necessary for firefighter or public safety or the protection of property, improvements, or other resources.
- PL-1.D.** No prescribed burning will be implemented within 100 meters of identified locations or unsurveyed suitable habitat of special status plant species unless specifically designed.

APPENDIX H

VISUAL RESOURCE MANAGEMENT CLASSES AND OBJECTIVES FOR CLASSES

APPENDIX H: VISUAL RESOURCE MANAGEMENT CLASSES AND OBJECTIVES FOR CLASSES

A. INTRODUCTION

The Visual Resource Management (VRM) system provides a means: to identify visual values; to establish objectives through the planning process for managing these values; and to provide timely inputs into proposed surface disturbing projects to ensure that these objectives are met. The objectives also provide visual management standards for the design and development of future projects and for rehabilitation of existing projects. Assigning values to visual resources produces information that, once passed through the VRM system, is to be used as a guide during project development. The Monument manager makes the decision on the amount of visual change that is acceptable for a project or activity proposal.

Following the update of the existing visual resource inventory to incorporate identified Monument scenic values and higher public sensitivity to those values, VRM classes were potentially designated for all Monument lands under all alternatives in the Arizona Strip Proposed Plan/FEIS. While VRM management classes may differ from VRM inventory classes, based on management priorities for land uses, the inventory did serve as the basis for considering and developing potential VRM designations. The potential for VRM classes to reflect and support resource allocation decisions significantly shaped the potential VRM designations in each alternative of the Proposed Plan/FEIS. If, for example, it was concluded that under the Plan resource allocation decisions that the "visual contrast rating scores will exceed the VRM class objectives" for a number of areas, the typical response will be to lower the VRM inventory rating for those areas to reflect the Plan's resource allocation decisions in those areas.

As VRM class designations are established upon the signing of the Record of Decision for the Approved Plan, it is the responsibility of the manager to ensure that visual impacts are minimized in all resource development activities including non-BLM initiated projects. Once established, VRM class designations are more than merely guidelines. Rather, having been developed through the planning process, meeting the objectives of each of the respective visual resource classes is as much a part of the Plan mandate as any other aspect of the resource allocation decisions made in the Approved Plan.

Since the overall VRM goal is to minimize visual impacts, mitigating measures should be prepared for all adverse contrasts that can be reduced, including the reduction of contrast in projects that have met the VRM objectives. This is done by incorporating visual design considerations into all surface disturbing projects regardless of size or potential impact. This does not mean that VRM will be used as a method to preclude all other resource development. It does mean that the visual values must be considered and those considerations documented in the decision-making process, and that if a proposed project or action is approved, a reasonable

attempt must be made to meet the VRM objectives for the area in question and to minimize the visual impacts of the proposal.

To facilitate incorporating visual design considerations into surface disturbing projects so as to assist management in the minimization of potential visual impacts, the contrast rating process is used as a visual design tool in project design and as a project assessment tool during environmental review. Contrast ratings are required for proposed projects in highly sensitive areas or high impact projects, but may also be used for other projects where it will appear to be the most effective design or assessment tool. A brief narrative visual assessment will be completed for all other projects that require an environmental assessment or environmental impact statement.

In its simplest form, the contrast rating process documents the existing form, line, color and texture aspects of landform, vegetation, and structures for a project area. It then documents the predicted form, line, color, and texture aspects the landform, vegetation and structures will display with the proposed project in place as observed from key observation points, such as overlooks or high-use travel corridors. The difference between the “before” and “after” represents the potential contrast produced by the project. If the overall level of contrast is within the standard or objective for the VRM class within which it lies, the project is considered to meet the VRM objective. If the contrast rating is outside the standard or objective, mitigation measures are considered and applied, in essence, redesigning the project to attempt to bring it into conformance with the VRM standard or objective. (For more information about contrast ratings, see BLM Handbook H-8431-1, Visual Resource Contrast Rating online at <http://www.blm.gov/nstc/VRM/8431.html>)

In applying the VRM Class objectives in the Approved Plan, the following general criteria were considered:

- Consider the overall management emphasis.
- 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 the least restrictive class that still achieves objectives to attain desired future conditions.

Setting VRM Class objectives that will make it difficult to achieve management activities or uses identified elsewhere within the Approved Plan was avoided during the designation process. VRM Class I was typically used only for those areas where congressional and administrative decisions have been or will be made to preserve a natural landscape.

VRM Class objectives are set by Bureau policy and the critical concepts are summarized below in Table H-1 (also see Visual Resources decisions in the Approved Plan):

Table H-1. VRM Class Objectives.	
VRM Class I	VRM Class II
Preserve existing character of the landscape	Retain existing character of the landscape
Natural ecological changes	Changes repeat the basic elements of form, line, color, and texture found in the predominant natural features of the characteristic landscape
Very limited management activity	Management activities may be seen
Level of Change- very low	Level of Change- low
Must not attract attention	Should not attract attention of casual observer
VRM Class III	VRM Class IV
Partially retain existing character of the landscape	Allow major modifications of existing character of the landscape
Changes should repeat the basic elements in the predominant natural features of the characteristic landscape	Make every attempt to minimize the impact of activities through careful location, minimal disturbance, and repeating the basic elements
(management activities not addressed)	Provide for management activities which require major modifications of existing landscape character
Level of Change- moderate	Level of Change- major
May attract attention but should not dominate the casual observer's view	May dominate the view and be the major focus of viewer attention

B. SPECIFIC CRITERIA FOR VRM CLASSES BY ALTERNATIVE

The following specific criteria are used to define VRM classes for the Monument and are reflected on the GIS maps and in the acreage numbers in the Approved Plan.

Class I

- Designated Wilderness (Paria Canyon-Vermilion Cliffs Wilderness)

Class II

- Vermilion Cliffs National Monument areas outside designated wilderness

Class III

- No Class III areas occur in Vermilion Cliffs National Monument

Class IV

- No Class IV areas occur in Vermilion Cliffs National Monument

APPENDIX I

RECLAMATION STIPULATIONS

APPENDIX I: RECLAMATION STIPULATIONS

Appendix I is a list of general requirements for preserving and protecting the special environmental and unique resource values of the Monument. These requirements will guide the formulation of specific stipulations, construction and/or operating standards, which will be applied to surface-disturbing activities. They are designed to provide public land users with a clear understanding of what constitutes prevention of unnecessary or undue degradation and what is required for reclamation. These requirements are supported by FLPMA and other environmental laws. Suitable site-specific stipulations regarding construction and reclamation and the prevention of unnecessary or undue degradation will be developed by the authorized officer and applied to each authorization. In order to minimize long-term impacts and ensure that sites are effectively reclaimed.

UNNECESSARY OR UNDUE DEGRADATION

1. All surface disturbance, including road construction and associated travel, shall be kept to the minimum necessary to accomplish the task. Road upgrade and realignment requests on BLM lands shall include plans for reclamation and a proposal for a post-operations final alignment.
2. All new temporary or existing upgraded roads on BLM lands may require mitigation to reduce the potential adverse impact of fugitive dust as specified by the authorized officer.
3. Where soil characteristics warrant, topsoil shall be stockpiled from a surface depth specified by the authorized officer.
4. All surface-disturbing activities on slopes greater than 15 percent shall include measures to stabilize soils and control surface water runoff.
5. During construction and operation of facilities or improvements, care shall be taken to minimize, to the extent practicable, impacts to the natural and human environments. This may be accomplished through the painting or screening of structures and facilities to blend with the surrounding environment; the suppression of dust and noise; the proper disposal of waste products; and provisions to safeguard public safety.
6. Coloration products may be required along travel corridors and in VRM Class II areas to reduce color contrast and restore the natural color balance.
7. Construction and reclamation activities shall be designed to minimize long-term impacts to natural lines, form, textures and color contrast. Reclamation methods shall avoid disturbing more area or exposing greater color contrast than resulted from the original operation.

8. All facilities or improvements that are no longer needed must be removed.
9. In order to protect the wildlife, the public or other important values and discourage unnecessary public contact with authorized activities, the authorized officer may require improvements or facilities to be fenced, gated and locked.
10. Mineral material disposal in VRM Class II areas shall not be allowed if reasonable alternative sources are available in other VRM classes. Any mineral material disposal sites authorized in VRM Class II shall not compromise the VRM class objectives.
11. All powerlines on BLM lands shall be constructed to minimize visual impacts. This may include burying them along existing roads in VRM Class II areas.
12. Applicants shall supply, at the discretion of the authorized officer, pertinent information regarding impacts from the proposal on surface and groundwater quality and quantity and anticipated impacts from 100-year, 24-hour storm events.
13. All forms of residential occupancy are discouraged on public lands within the Arizona Strip District. Exceptions may occur on BLM lands for the protection of public health and safety and the protection of private property. Residential occupancy not in conformance with applicable laws, Bureau guidelines and district policy will be subject to immediate trespass action by the Bureau.
14. Applicants may be required by the authorized officer to provide inventories for threatened or endangered plants and/or animals and cultural resources. All Inventories shall be performed to Bureau standards.
15. No surface disturbance shall be authorized which impacts any cultural sites prior to consultation with the State Historic Preservation Officer (SHPO) and threatened or endangered species prior to compliance with the Endangered Species Act.
16. No surface disturbance will be authorized which impacts any cultural property that is allocated to Conservation Use in an approved Cultural Resource Management Plan.

RECLAMATION

1. Reclamation of all surface disturbances must be initiated immediately upon completion of activities, unless otherwise approved by the authorized officer. Reclamation of disturbed areas shall, to the extent practicable, include contouring disturbances to blend with the surrounding terrain, replacement of topsoil, smoothing and blending the original surface colors to minimize impacts to visual resources, and seed the disturbed areas with a mix specified by the authorized officer.

2. All chemicals, trash, garbage or other foreign material must be removed completely from the project area by the applicant immediately upon completion of the project. All material must be properly disposed of in an approved disposal facility. Exceptions to this limitation shall be approved by the authorized officer.
3. At no time shall vehicle or equipment fluids be dumped on public lands. All accidental spills must be reported to BLM and be cleaned up immediately, using best available practices and requirements of the law. All spills of federally or state listed hazardous materials which exceed the reportable quantities shall be promptly reported to the appropriate state agency and the Arizona Strip District.
4. Disturbed areas, where soil and rainfall are adequate for anticipated success, shall be revegetated. In all VRM Class II areas, revegetation of native species shall be preferred. Rates and seed mixes shall be determined by the authorized officer.
5. Revegetation efforts must establish a stable biological groundcover equal to or exceeding that which occurred prior to disturbance. Mulching may be appropriate for conserving moisture and holding seed on-site thus improving the chances for successful establishment.
6. All unnecessary roads shall be reclaimed and closed immediately upon termination of the project. Recontouring all cut slopes to approximately the original contour shall be required. Reclaimed roads shall be barricaded or signed to protect them until reclamation is achieved. All existing roads that require upgrading shall be reclaimed to their original dimensions upon completion of the project. Exceptions must be approved in writing by the authorized officer.

APPENDIX J

RECREATION MANAGEMENT AREAS

APPENDIX J: RECREATION MANAGEMENT AREAS

OVERVIEW

Two types of Recreation Management Areas (RMAs) are identified in the Approved Plan: Special Recreation Management Areas (SRMAs) and Extensive Recreation Management Areas (ERMAs).

SPECIAL RECREATION MANAGEMENT AREAS

SRMAs are identified in the planning process as areas with a distinct primary recreation-tourism market (who are the targeted visitors and where do they come from) as well as a corresponding and distinguishing recreation management strategy; either Community, Destination, or Undeveloped. SRMAs will undergo further activity-level planning following the completion of the land use plan in either Recreation Area Management Plans (RAMP) and/or project plans.

In identifying SRMAs and prescribing the management regime for each, and to the extent feasible with the information on-hand, a benefits-based management (BBM) approach is used. BBM or “beneficial outcomes” planning focuses on the outcomes of recreation and leisure activities to determine how the experiences benefit the visitor and uses this information as the premise for the planning process. BBM focuses on “why” people visit an area and participate in a particular activity. Recent visitor surveys as well as public scoping comments and input from cooperating entities were used to develop the appropriate proposed recreation strategy for each SRMA.

Recreation Management Strategies

As stated previously, each SRMA identified will have a distinct, primary recreation-tourism market as well as a corresponding and distinguishing recreation management strategy. For each SRMA selected, that primary market-based strategy will be to manage for one of three possibilities:

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. They are produced by maintaining prescribed natural resource and/or community setting character and by structuring and implementing management, marketing, monitoring, and administrative actions accordingly.

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.

Undeveloped recreation-tourism market ~ national, regional, and/or local recreation-tourism visitors, communities, or other constituents who value public lands for the distinctive kinds of dispersed recreation produced by the vast size and largely open, undeveloped character of their recreation settings. Major investments in facilities are excluded within SRMAs where BLM’s strategy is to target demonstrated undeveloped recreation-tourism market demand. Here, recreation management actions are geared toward meeting primary recreation-tourism market demand to sustain distinctive recreation setting characteristics; however, major investments in visitor services are authorized both to sustain those distinctive setting characteristics and to maintain visitor freedom to choose where to go and what to do—all in response to demonstrated demand for undeveloped recreation.

While Destination and Community SRMAs are targeting for demands that may require major facilities and visitor assistance as stated above, Undeveloped SRMAs target for a demand that may requires primarily visitor services, not major facilities, to sustain distinctive settings and maintain the unstructured, freedom to choose activities appropriate in undeveloped settings. It should be noted that “visitor freedom to choose where to go and what to do” does not mean freedom from rules, regulations, travel restrictions, etc., but it refers to the visitors’ ability to choose from a variety of unstructured, dispersed recreation activities and locations, versus choosing more structured recreation opportunities tied to specific places and activities in the other two types of SRMAs.

RECREATION MANAGEMENT ZONES

Within each SRMA, one or more potential Recreation Management Zones (RMZs) were identified, with each zone providing a particular recreation niche within the larger targeted recreation-tourism market strategy. (See Maps 2.7, 2.16, 2.25, and 2.34 for SRMAs with RMZs in the Arizona Strip Proposed Plan/Final Environmental Impact Statement [FEIS]). Each RMZ was characterized by a description of its desired outcomes (management objective(s), benefits, experiences, activities) and setting prescriptions (physical, social, and administrative conditions required to produce the outcomes.[see Appendix 3.H, Recreation Opportunity Spectrum, in the Proposed Plan/FEIS]) Each RMZ within a SRMA is thus presented to show what the targeted activities will likely be, the potential experiences derived from participation, and the possible benefits to be realized. Additionally, an activity planning framework (see below) was described

that addresses basic but broad types of recreation actions (management, marketing, monitoring, and administration) that will be needed to achieve desired outcomes.

EXTENSIVE RECREATION MANAGEMENT AREAS

Areas not delineated as a SRMA are identified as one or more ERMA, which will primarily provide for the wide variety of dispersed recreation activities. Only a custodial level of management will be performed to address visitor health and safety, user conflicts and resource protection issues, and only project plans will be developed. Therefore, actions within ERMA are generally implemented directly from land use plan decisions. Land use plan decisions identified in the various sections of Chapter 2, Table 2.1, for Recreation and Visitor Services include recreation management objectives for all ERMA, while Table 2.4 includes custodial recreation management, marketing, monitoring, and administrative support actions.

ACTIVITY PLANNING FRAMEWORK

The activity planning framework is intended to outline the essential conditions or actions needed to begin implementing the management of new SRMA. This section addresses the framework for all actions to be taken by BLM and its collaborating community recreation-tourism providers who affect both recreation setting character and the kinds of recreation opportunities being produced in SRMA. The framework addresses recreation management, marketing, monitoring, and administrative support actions necessary to achieve the various explicitly stated recreation management objectives and setting prescriptions found in the tables below.

Unless the essential conditions or structure are met, neither management objectives nor prescribed recreation setting character can be achieved because implementing actions are the engine that makes everything happen. In other words, “What are the primary types of actions to which BLM and its collaborating providers must commit so that planned recreation management objectives and recreation setting prescriptions will, in fact, be achieved?” Much of this structure is found in the Chapter 2, Table 2.14a Recreation and Visitor Services under Part C, Actions to Achieve and Allowable Uses of the Proposed Plan/Final EIS. Additionally, the following content supplements the Chapter 2 content.

RECREATION-TOURISM SERVICE DELIVERY SYSTEM

To implement land use plan decisions within the SRMA, a recreation-tourism service delivery system must be in place and engaged. The delivery system is that combination of public lands and adjoining service communities, including local governments and service providing businesses through which recreation and visitor services are delivered for one or more Special Recreation Management Areas to both visitors and affected community residents. Because BLM is not the only provider of essential recreation and visitor services for the Planning Area, the

focus of the system must include other service providers within adjoining service communities upon whom visitors and community residents alike depend.

The recreation-tourism delivery system for the Monument SRMAs involves more than just programs and activities provided on public lands. In addition to the BLM, the Forest Service and National Park Service, local counties, such as Coconino County in Arizona and Kane County in Utah, as well as American Indian Tribes, such as the Southern Paiute and Navajo, also contribute to recreation-tourism delivery, primarily through the management of access to and through landscapes. State governments in Arizona and Utah also play important roles in various facets of recreation delivery, including the management of game and fish and recreation activities on state trust lands, creation and funding of grant programs that enhance OHV and non-motorized recreation opportunities, and providing state law concerning vehicle-related licensing.

For the Monument SRMAs, local communities such as Big Water and Kanab, Utah and Fredonia, Marble Canyon, and Page, Arizona, will continue to contribute to the delivery of recreation-tourism opportunities to local, regional, national, and international visitors and residents.

Non-government recreation providers also play an important role in delivering recreation-tourism outcomes. Many local and regional businesses provide for a variety of direct recreation opportunities in the areas identified as SRMAs that enable customers to realize specific recreation experience outcomes via numerous commercial and competitive activities or events. Many other private sector businesses also provide indirectly, or ‘off-site’, to the recreation-tourism delivery, such as local bike shops, OHV dealerships, outdoor equipment retailers, hotels, and restaurants. Taken all together, recreation-tourism opportunities on the Arizona Strip are influenced, guided, constrained, and managed by many providers.

In implementing land use plan decisions for SRMAs, collaborative efforts with other key providers will be essential to achieving desired outcomes. Various types of cooperating agreements will be developed to forge sustainable service partnerships with these providers. Additionally, other existing or new “opportunistic” partnerships with users, interest groups, and NGOs will be developed, restructured, expanded, or otherwise tailored to fit within these overarching agreements among all key affected providers.

IMPLEMENTATION OF ESSENTIAL ACTIONS

Following the completion of the land use plan, a RAMP could be developed for each SRMA through a public process. RAMP contents will address the variety of specific actions that the BLM and other key collaborating recreation-tourism providers within adjoining communities will undertake to achieve the production of recreation opportunities and resulting attainment of targeted experience and benefit outcomes.

Through the development of RAMPs for SRMAs, BLM will integrate and constrain all of the traditional recreation-related programs and initiatives (e.g., OHVs and transportation, rivers and trails, permits and fees, concessions management, accessibility, interpretation, facility management, VRM, etc.) to address only those essential functional actions required to achieve planned outcomes.

Implementing actions, whether in RAMPs, developed directly from the Approved Plan, or developed adaptively during implementation, will need to conform to the overall management framework established by the Plan. In other words, as sets of more specific management actions are developed during activity planning, each and every action will need to conform to the planning criteria, laws, regulations, policies, and planning allocations. Additionally specific management actions need to conform with State and local provider laws and policies that pertain to activities on public lands.

To better focus on achieving integration and balance of the essential implementation actions, the BLM will shift the operational framework from the more traditional approach of managing individual recreation programs as discrete objects to the following four functional areas of recreation and visitor services.

MANAGEMENT (of resources, visitors, and facilities [i.e., developed recreation sites, roads and trails, recreation concessions, etc.):

Many of the recreation programs listed above involve recreation management actions, but, in a benefits-based SRMA, only those actions which, produce targeted outputs (i.e., maintain or enhance settings) and facilitate the attainment of targeted outcomes will be considered essential. Planned management programs and actions for SRMAs will be constrained by the management framework of the Approved Plan, specifically the Recreation and Visitor Services section. Planned management programs and actions will be held accountable for how they impact recreation setting character and the ability of those settings to produce targeted recreation opportunities.

Additionally, planned travel management actions, including route designation actions, will be constrained by recreation management objectives and setting prescriptions, as well as other management objectives related to sensitive resources. Likewise, planned travel-related engineering construction and maintenance actions will be guided in part by Travel Management Area setting prescriptions (Appendix 2.S Travel Management Areas, Part C, Route Construction and Maintenance Standards) that are integrated with RMZ setting prescriptions.

MARKETING (including outreach, information and education, promotion, interpretation, environmental education, and other visitor services):

Marketing actions must support and compliment planned management actions. Marketing seeks to connect a customer with a product. In the case of managing for beneficial outcomes on public lands, marketing will connect the visitor with a desired setting and set of activities that will facilitate the realization of desired experiences and benefits.

As part of marketing, definitive information about recreation setting character and activity, experience, and benefit opportunities will be integrated into BLM's own information and other outreach media. The BLM will also work more closely with industry media through collaborative efforts to add definitive content to existing and planned industry outreach media and messages to ensure that promotional pieces match customers with the opportunities they seek rather than sell them what media wants. It will be essential that all entities involved with marketing, both BLM and industry media, know and understand:

- how each SRMA is targeting a specific recreation-tourism market and who that market is and where it is located;
- how each such market has one or more specific recreation niches that prescribe RMZ-specific recreation setting characteristics critical to the production of specific outcomes of activity, experience, and benefits; and
- what the ramifications of “off-target” promotional efforts can be; and
- that only the marketing tools (e.g., information, promotion, education, interpretation, etc.) that are best suited for each locale will be selected as implementing actions.

Monitoring (including social, environmental, and administrative indicators and standards (including outreach, information and education, promotion, interpretation, environmental education, and other visitor services):

Various monitoring frameworks will be available for BLM and its collaborating partners to implement specific planned monitoring actions. Monitoring recreation outcomes and prescribed recreation setting conditions is what will drive adaptive management. Monitoring will measure outcomes and settings indicators gauge if, when, and how to readjust management and marketing actions to achieve standards set for those indicators (i.e., monitoring indicators and standards will be extracted directly from the outcomes-based management objectives and setting prescriptions).

Limits of Acceptable Change (LAC) will be the primary framework used to clarify the identity of other indicators, inventory the indicators, evaluate data and set standards for the indicators, and monitor selected indicator sites over time to assess the condition and trend of various recreation settings. In addition to LAC, visitor satisfaction and preference surveys will be used to evaluate the success or failure achieving the objectives. BLM will use standard, approved

survey instruments while other providers may employ other methods to monitor conditions and achievement of objectives.

In implementing specific monitoring actions, BLM's collaborating providers will be encouraged to assist by providing visitor and community assessments. A monitoring plan will facilitate achieving the essential conditions needed for coordinated, integrated, efficient monitoring actions to occur.

ADMINISTRATIVE SUPPORT (regulations; permits and fees, including use restrictions where necessary and appropriate; recreation concessions; fiscal; data management; and customer liaison):

Administrative actions, such as those listed above, will be implemented only if they ensure that they:

- support rather than lead the management, marketing, and monitoring actions
- do not thwart the attainment of targeted experience and beneficial outcomes,
- fit within recreation setting prescriptions
- are all complementary and balanced with each other, and
- are limited to only those necessary to achieve all of the above.

APPENDIX K

TRAVEL MANAGEMENT AREAS, TRANSPORTATION PLAN CONTENTS, AND APPROPRIATE ROUTE CONSTRUCTION AND MAINTENANCE STANDARDS BY TRAVEL MANAGEMENT AREA

APPENDIX K: TRAVEL MANAGEMENT AREAS, TRANSPORTATION PLAN CONTENTS, AND APPROPRIATE ROUTE CONSTRUCTION AND MAINTENANCE STANDARDS BY TRAVEL MANAGEMENT AREA

TRAVEL MANAGEMENT AREAS

Comprehensive travel management planning addresses all resource use aspects (such as recreational, traditional, casual, agricultural, commercial, and educational) and accompanying modes and conditions of travel on the public lands. In the Approved Plan for this Monument, three Travel Management Areas (TMAs; polygons) are delineated. Acceptable modes of travel for each TMA are identified in the Approved Plan as Allowable Uses. In developing these areas, the following components were considered:

- a. Management units developed in the plan
- b. Consistency with all resource program goals and objectives;
- c. Primary travelers;
- d. Objectives for allowing travel in the area;
- e. Setting characteristics that are to be maintained (including recreation opportunity system and VRM settings); and
- f. Primary means of travel allowed to accomplish the objectives and to maintain the setting characteristics.

A transportation plan will be developed within 3-5 years of issuance of the ROD that will coordinate the implementation of the Travel Management and Transportation Facilities decisions over the life of the Plan. The potential contents of the transportation plan are shown below. The transportation plan will also include Appropriate Route Construction and Maintenance Standards by TMA, also shown below.

TRANSPORTATION PLAN CONTENTS

DESIGNATED TRAVEL MANAGEMENT SYSTEM

Implementation and management of the defined travel management network (a system of areas, roads and/or trails available for public use, and the specific limitations placed on use) will be documented in the transportation plan including, at a minimum, the following components:

- a. A map that displays and describes the intended use of the individual geographic units within the planning area and displays roads and trails for all travel modes.
- b. A listing of specific road types and designations such as Federal, state, county, and Tribal roads, BLM administered/maintained roads, and BLM public roads.
- c. A listing of roads in congressionally designated conservation units, Presidential conservation designations, and administrative conservation designations.
- d. Definitions and additional limitations for specific roads and trails (defined in 43 CFR 8340.0-5(g)).
- e. Criteria to add new roads or trails and to specify limitations.
- f. A set of guidelines for management, monitoring, and maintenance of the system.
- g. A set of indicators to guide future plan maintenance, amendments, or revisions related to travel management network.
- h. A list of needed easements and rights-of-way (to be issued to the BLM or others) to maintain the existing road and trail network providing public land access.
- i. A schedule for periodic review of travel management networks to ensure that current resource and travel management objectives are being met (see 43 CFR 8342.3).

Table K.1. Route Construction and Maintenance Standards							
Appropriate Route Construction and Maintenance Standards by TMA							
Asset Type ¹ and Access Vehicle Type	Route Type ²	Route Width ³ (ft)	Maintenance Intensity ⁴	Maintenance Frequency	Speed (mph)	Comments	Hiking, Equestrian, and Bicycle Types
Rural TMA							
State, Federal	Primary Paved, Secondary Paved	Varies	High standards		55-75	ADOT responsibility	
Road-all vehicle types	Primary Unpaved, Secondary Unpaved	14-28	3, 5	Annually	20-50	Mainly County and BLM routes	Native tread surface to nonnative tread for interpretive trails
Primitive Road-high clearance or 4X4	Tertiary	10 or two-track	1	As needed	10-15	Maintenance is typically as needed, site-specific	
Trail-hiking, biking, motorcycle or equestrian	Single Track	1.6	3	Annually	≤40 M ≤15 NM	Use generally year-round	
Non-system	Closed, Reclaiming, Abandoned	--	0	None	--	Routes to be closed and rehabilitated	
Backways TMA							
Road-all vehicle types	Primary Unpaved, Secondary Unpaved	14-20	3, 5	Annually	40-50	Mainly County and BLM/NPS routes	Native tread surface to nonnative tread for interpretive trails
Primitive Road-high clearance or 4X4	Tertiary	10 or two-track	1	As needed	5-15	Maintenance is typically as needed, site-specific	
Trail-hiking, biking, motorcycle or equestrian	Single Track	1.6	1, 3	As needed	≤40 M ≤15 NM	Use generally year-round	
Non-system		--	0	None	--	Routes to be closed and rehabilitated	
Specialized TMA							
Road-all vehicle types	Secondary Unpaved	14	3	Annually	20-30	Mainly BLM/NPS routes	Native tread surface, widths to be determined
Primitive Road-high clearance or 4X4	Tertiary	10 or two-track	1	As needed	5-15	Maintenance is typically as needed and/or site-specific	
Trail-hiking, biking, motorcycle or equestrian	Single Track	1.6	1, 3	As needed	≤40 M ≤15 NM	Use generally year-round	
Non-system	Closed, Reclaiming, Abandoned	--	0	None	--	Routes to be closed and rehabilitated	

Table K.1. Route Construction and Maintenance Standards							
Appropriate Route Construction and Maintenance Standards by TMA							
Asset Type ¹ and Access Vehicle Type	Route Type ²	Route Width ³ (ft)	Maintenance Intensity ⁴	Maintenance Frequency	Speed (mph)	Comments	Hiking, Equestrian, and Bicycle Types
Primitive TMA							
Primitive Road-high clearance or 4X4	Tertiary	10 or two-track	1	As needed	5-15	Administrative motorized use and open to non-motorized public use. Maintenance is typically as needed, site-specific	Native tread surface, widths to be determined
Trail-hiking or equestrian	Single Track	1.6	1, 3	As needed	≤40 M ≤15 NM	Use generally year-round	
Non-system	Closed, Reclaiming, Abandoned	--	0	None	--	Routes to be closed and rehabilitated	
<p>1. Asset type: From Instruction Memorandum No. 2006-173, Implementation of Roads and Trails Terminology Report: 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. Primitive Road: A linear route managed for use by four-wheel drive or high-clearance vehicles. These routes do not normally meet any BLM road design standards. Trail: A linear route managed for human-powered, stock, or off-highway vehicle forms of transportation or for historical or heritage values. Trails are not generally managed for use by four-wheel drive or high-clearance vehicles.</p> <p>2. Route Type: Derived from formal route inventory, which uses these standard types for inventory on BLM and U.S. Forest Service jurisdictions and for Arizona State Trust Lands.</p> <p>3. Route Width: Width of travel surface only. Does not include associated ditches, bridges, culverts, route cut and fill areas, etc.</p> <p>4. Route Maintenance Intensities :</p> <p>Level 0 - Maintenance Description: Existing routes that will no longer be maintained and no longer be declared a route. Routes identified as Level 0 are identified for removal from the Transportation System entirely. Maintenance Objectives: No planned annual maintenance; Meet identified environmental needs; No preventive maintenance or planned annual maintenance activities</p> <p>Level 1 - Maintenance Description: Routes where minimum (low intensity) maintenance is required to protect adjacent lands and resource values. These roads may be impassable for extended periods of time. Maintenance Objectives: Low (Minimal) maintenance intensity; Emphasis is given to maintaining drainage and runoff patterns as needed to protect adjacent lands. Grading, brushing, or slide removal is not performed unless route bed drainage is being adversely affected, causing erosion; Meet identified resource management objectives; Perform maintenance as necessary to protect adjacent lands and resource values; No</p>							

Table K.1. Route Construction and Maintenance Standards							
Appropriate Route Construction and Maintenance Standards by TMA							
Asset Type ¹ and Access Vehicle Type	Route Type ²	Route Width ³ (ft)	Maintenance Intensity ⁴	Maintenance Frequency	Speed (mph)	Comments	Hiking, Equestrian, and Bicycle Types
preventive maintenance; Planned maintenance activities limited to environmental and resource protection; Route surface and other physical features are not maintained for regular traffic							
Level 2 - RESERVED FOR POSSIBLE FUTURE USE							
Level 3 - Maintenance Description: Routes requiring moderate maintenance due to low volume use (e.g., seasonally or year-round for commercial, recreation, or administrative access). Maintenance Intensities may not provide year-round access but are intended to generally provide resources appropriate to keep the route in use for the majority of the year. Maintenance Objectives: Medium (Moderate) maintenance intensity; Drainage structures will be maintained as needed. Surface maintenance will be conducted to provide a reasonable level of riding comfort at prudent speeds for the route conditions and intended use. Brushing is conducted as needed to improve sight distance when appropriate for management uses. Landslides adversely affecting drainage receive high priority for removal; otherwise, they will be removed on a scheduled basis; Meet identified environmental needs; Generally maintained for year-round traffic; Perform annual maintenance necessary to protect adjacent lands and resource values; Perform preventive maintenance as required to generally keep the route in acceptable condition; Planned maintenance activities should include environmental and resource protection efforts, annual route surface; Route surface and other physical features are maintained for regular traffic							
Level 4 - RESERVED FOR POSSIBLE FUTURE USE							
Level 5 – Maintenance Description: Routes for high (Maximum) maintenance due to year-round needs, high volume traffic, or significant use. Also may include routes identified through management objectives as requiring high Intensities of maintenance or to be maintained open on a year-round basis. Maintenance Objectives: High (Maximum) maintenance intensity; The entire route will be maintained at least annually. Problems will be repaired as discovered. These routes may be closed or have limited access due to weather conditions but are generally intended for year-round use; Meet identified environmental needs; Generally maintained for year-round traffic; Perform annual maintenance necessary to protect adjacent lands and resource values; Perform preventive maintenance as required to generally keep the route in acceptable condition; Planned maintenance activities should include environmental and resource protection efforts, annual route surface; Route surface and other physical features are maintained for regular traffic							

APPENDIX L

LIST OF PREPARERS

APPENDIX L: LIST OF PREPARERS

Those responsible for the preparation of this Approved Plan are presented in the table below:

LIST OF PREPARERS					
Name	Title	Agency	Assignment	Education	Years of Expertise
Michelle Bailey	Recreation Planner	BLM	Recreation	B.S., Parks and Recreation Mgmt.	8 Years
Gloria Benson	Native American Coordinator	BLM	Cultural Resources (American Indian Resources)		26 years
Jonathan Boswell	GIS, GPS Consultant	GEO-MM&C	GIS Analysis and Data Development GPS Data Collection and Management Map/Graphics Development	A.A., General Studies	4 years
David Boyd	Public Affairs Specialist	BLM	Outreach, Editing, Scoping Report, Planning Bulletins, Technical Coordinator	B.S., Wildlife Biology M.A., Journalism	18 years
Hilary Boyd	Fire Ecologist	BLM	Fire Ecology (Occurrence, Risk)	B.S., Wildlife Biology M.S., Wildlife Science	11 years
Jeff Bradybaugh	Superintendent, Parashant	NPS	Management Overview, NPS Planning	M.S., Wildlife Science	25 years
Paula Branstner	Interpretive Specialist	NPS	Environmental Education and Interpretation	A.S., General Studies/ Occupational Therapy	19 years
Whit Bunting	Rangeland Management Specialist	BLM	Livestock Grazing, Vegetation (Rangelands)	B.S., Range Science	16 years
Todd Calico	GIS, GPS Consultant	TLC-GIS	GIS Analysis and Data Development GPS Data Collection and Management Map/Graphics Development	A.S., General Studies BIS., Natural Resources and Environmental Studies	6 Years
Lorraine Christian	Field Manager, Arizona Strip Field Office	BLM	Management Overview, Planning Overview	B.S., Wildlife and Fisheries Biology	22 years
Rody Cox	Geologist, Lead for Minerals Program and Paleontological Resources	BLM	Geology, Paleontology, Minerals (Leasable and Locatable Minerals, Mineral Materials)	B.A., Biology M.S., Geology	24 years
Dennis Curtis	Monument Manager, Parashant	BLM	Management Overview, Planning Overview	M.S., Geography	39 years
Tom Denniston	Wildlife Biologist	BLM	Wildlife Biology	B.S., Wildlife (Mgmt & Conservation)	3 years

LIST OF PREPARERS					
Name	Title	Agency	Assignment	Education	Years of Expertise
William Dickinson	Superintendent, Lake Mead NRA	NPS	Management Overview	B.A., Landscape Architecture	33 years
Timothy Duck	Ecologist	BLM	Forest Products, Ecozones, Ecology, Restoration	B.S., Ecology and Evolutionary Biology	26 years
Scott Florence	District Manager	BLM	Management Overview, Planning Overview	B.S. Range and Wildlife	31 years
Tom Folks	Recreation, Wilderness, Cultural Team Leader	BLM	Travel Management, Recreation, Visual Resources, Back Country Byways, National and Regional Trails, Wild and Scenic Rivers, Wilderness	B.S., Recreation Park Planning and Resource Management	31 years
Laurie Ford	Lands and Geological Sciences Team Lead	BLM	Management Overview, Lands and Realty, Utility and Communication Corridors		26 years
Becky Hammond	Manager, Arizona Strip FO	BLM	Management Overview, Geology	B.S., Geology M.S., Geology	20 years
Kathleen Harcksen	Assistant Manager Parashant	BLM	Management Overview, Vegetation (Forests and Woodlands, Riparian and Wetlands)	B.S., Natural Resource Management	32 years
Diana Hawks	Planning Coordinator	BLM	Planning Team Lead, Cultural Resources (Archaeological, Historic, and American Indian Resources), ACECs	B.S., Archaeology M.A., Archaeology	33 years
Michael Herder	Wildlife Team Leader	BLM	Fish and Wildlife, Special Status Species (Animals), ACECs, Management Overview	B.S., Wildlife Management B.A., Zoology M.A., Marine Biology	28 years
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Jim Holland	Management Assistant, Lake Mead NRA	NPS	Management Overview, Lands and Reality, Recreation, Planning Overview	B.S., Zoology & Botany M.S., Biology	29 years
Lee Hughes	Ecologist	BLM	Special Status Species (Plants), Vegetation (Riparian and Wetlands), ACECs	A.S., Forestry B.S., Fishery and Range Management	34 years
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LIST OF PREPARERS					
Name	Title	Agency	Assignment	Education	Years of Expertise
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Marisa Monger	GIS Specialist	BLM	GIS Data Development GIS Analysis Map/Graphics Development	B.A., Psychology	9 years
Kenneth Moore	Lead Natural Resource Specialist	BLM	Access, Vegetation (Forests and Woodlands), Forest Products, Restoration	B.S., Forest Management	38 years
Rosie Pepito	Cultural Resource Manager, Lake Mead NRA	NPS	Cultural Resources (Archaeological, Historical, and American Indian Resources)		21 years
Linda Price	Standards and Guides Team Leader, Vermilion Manager	BLM	Standards for Rangeland Health, Management Overview	B.S., Ecology	17 years
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Kathy Seegmiller	Information Technology Specialist	BLM	Comment Analysis Database Management		26 years
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Darla Sidles	Superintendent, Parashant	NPS	Lead Planner, Management Overview	B.A., Business Administration	21 years
Robert Smith	Hazmat, Soil, Water and Air Programs Lead	BLM	Air Quality, Water (Ground and Surface Water) Soil Resources, Health and Safety (Hazardous Materials)	B.S., Soil Science Graduate Certificate in Hazardous Waste Land Management	32 years
Richard Spotts	Environmental Coordinator	BLM	NEPA Compliance Review	B.A., Political Science J.D., Law	25 years
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LIST OF PREPARERS					
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Kent Turner	Resource Management Chief, Lake Mead NRA	NPS	Management overview	B.S., Biology	27 years
Ron Wadsworth	Lead Law Enforcement Officer	BLM	Public Safety (Crime), Law Enforcement	B.S., Wildlife Biology	22 years
L.D. Walker	Noxious Weed Coordinator	BLM	Vegetation (Noxious Weeds), Fish and Wildlife (Invasive Species), Wild Horses and Burros	B.S., Zoology	30 years
Gary Warshefski	Assistant Superintendent, Lake Mead NRA	NPS	Management overview	B.S., Forestry M.S., Public Administration	30 years
Les Weeks	Consultant, Route Evaluations	ARS, Inc	Transportation/Access	B.A., Ecosystems Analysis M.A., Biogeography	25 years
Aaron Wilkerson	Forester	BLM	Restoration, Forestry	B.S., Forestry	7 years
Ericka Wilkerson	Administrative Assistant	Contractor	Comment Analysis Document Preparation	B.S., Criminal Justice	12 years
Kari Yanskey	Botanist	NPS	Vegetation (Forests and Woodlands, Rangelands, Riparian and Wetlands), Special Status Species (Plants)	B.S., Biology	24 years

**GLOSSARY, REFERENCES CITED, INDEX, AND
ABBREVIATIONS AND ACRONYMS**

GLOSSARY

-A-

Activity Plan: A type of implementation plan (see Implementation plan); an activity plan usually describes multiple projects and applies best management practices to meet land use plan objectives. Examples of activity plans include interdisciplinary management plans, habitat management plans, recreation area management plans, and allotment management plans.

Administrative Use: Official use related to management and resources of the public lands by Federal, State or local governments or non-official use sanctioned by an appropriate authorization instrument, such as right-of-way, permit, lease, or maintenance agreement.

Administrative Route: routes that are limited to administrative (official or authorized) users only.

Administrative Purposes: administrative use functions involving regular maintenance or operation of facilities or programs.

Air Quality: Refers to standards for various classes of land as designated by the Clean Air Act of 1978.

Air Quality Standards: The allowable concentrations of air pollutants in the ambient (public outdoor) air. National ambient air quality standards are based on the air quality criteria and divided into primary standards (allowing an adequate margin of safety to protect the public health) and secondary standards (allowing an adequate margin of safety to protect the public welfare). Welfare is defined as including (but not limited to) effects on soils, water, crops, vegetation, human-made materials, animals, wildlife, weather, visibility, climate, and hazards to transportation, as well as effects on economic values and on personal comfort and well-being.

All -Terrain Vehicle (ATV): A wheeled or tracked vehicle, other than a snowmobile or work vehicle, designed primarily for recreational use or for the transportation of property or equipment exclusively on undeveloped road rights of way, marshland, open country or other unprepared surfaces.

Allotment: An area of land where one or more livestock operators graze their livestock. Allotments generally consist of BLM lands but may also include other federally managed, state owned, and private lands. An allotment may include one or more separate pastures. Livestock numbers and periods of use are specified for each allotment.

Allotment Management Plan: A written program of livestock grazing management, including supportive measures if required, designed to attain specific management goals in a grazing allotment.

Amendment: The process for considering or making changes in the terms, conditions, and decisions of approved RMPs or MFPs. Usually only one or two issues are considered that involve only a portion of the planning area.

Animal Unit Month (AUM): A standardized measurement of the amount of forage necessary for the sustenance of one cow unit or its equivalent for 1 month, approximately 800 pounds of forage.

Appeal: Application for review of an implementation decision by a higher administrative level.

Area of Critical Environmental Concern (ACEC): Areas within the public lands where special management attention is required to: (1) protect and prevent irreparable damage to important historic, cultural, or scenic values, fish and wildlife resources, or other natural systems or processes, or (2) protect life and safety from natural hazards.

Arroyo: A term applied in the arid and semiarid regions of the southwestern United States to the small, deep, flat-floored channel or gully of an intermittent stream usually with vertical or steeply cut banks of unconsolidated material at least 2 feet high; it is usually dry, but may be transformed into a temporary watercourse or short-lived torrent after heavy rainfall

Aspect: (1) the visual first impression of vegetation at a particular time or seen from a specific point. (2) The predominant direction of the slope of the land.

Assessment: The act of evaluating and interpreting data and information for a defined purpose.

Avoidance Areas: Areas with sensitive resource values where rights-of-way and Section 302 permits, leases, and easements would be strongly discouraged. Authorizations made in avoidance areas would have to be compatible with the purpose for which the area was designated and not otherwise feasible on lands outside the avoidance area.

-B-

Back Country Byways: A component of the national scenic byway system which focuses primarily on corridors along back country roads which 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.

Base Metal: A metal inferior in value to gold and silver, a term generally applied to the commercial metals such as copper and lead.

Beneficial Outcomes: Also referenced as “Recreation Benefits;” improved conditions, maintenance of desired conditions, prevention of worse conditions, and the realization of desired experiences.

Biological Assessment: The gathering and evaluation of information on proposed endangered and threatened species and critical habitat and proposed critical habitat. Required when a management action potentially conflicts with endangered or threatened species, the biological assessment is the way federal agencies enter into formal consultation with the Fish and Wildlife Service and describe a proposed action and the consequences to the species the action would affect.

Biotic Communities: The assemblage of native and exotic plants and of a particular site or landscape, including microorganisms, fungi, algae, vascular and herbaceous plants, invertebrates, and vertebrates. These assemblages and their biotic and abiotic relationships serve landscape and watershed functions by promoting soil properties supporting water infiltration, recycling and transfer, species survival, and sustainable population dynamics.

Biological Crusts (also known as microbiotic, microphytic, cryptogamic, or cryptobiotic crusts/soils): Biological communities that form a surface layer or thin crust on some soils. These communities consist of cyanobacteria (blue-green bacteria), microfungi, mosses, lichens, and green algae and perform many important functions, including fixing nitrogen and carbon, maintaining soil surface stability, and preventing erosion. These crusts are slow to recover after disturbance, requiring 40 years or more to recolonize small areas.

Browse: To browse (verb) is to graze a plant; also, browse (noun) is the tender shoots, twigs and leaves of trees and shrubs often used as food by livestock and wildlife.

-C-

Candidate species: Any species included in the *Federal Register* notice of review being considered for listing as threatened or endangered by the U.S. Fish and Wildlife Service.

Canopy: The uppermost layer consisting of the crowns of trees or shrubs in a forest or woodland.

Categorical Exclusion: A category of actions (identified in agency guidance) that do not individually or cumulatively have a significant effect on the human environment, and for which neither an environmental assessment nor an Environmental Impact Statement is required.

Cave Resource: Any naturally occurring void, cavity, recess, or system of interconnected passages beneath the surface of the earth or within a cliff or ledge, including any cave resource therein, that is large enough to permit

a person to enter, whether the entrance is excavated or naturally formed. Also included is any natural pit or sinkhole.

Channel: An open conduit either naturally or artificially created which periodically or continuously contains moving water or forms a connecting link between two bodies of water.

Clean Air Act: Federal legislation governing air pollution. Prevention of Significant Deterioration above legally established levels.

Closed: Generally denotes that an area is not available for a particular use or uses; refer to specific definitions found in law, regulations, or policy guidance for application to individual programs. For example, 43 CFR 8340.0-5 sets forth the specific meaning of “closed” as it relates to off-highway vehicle use, and 43 CFR 8364 defines “closed” as it relates to closure and restriction orders.

Closed OHV Area Designation: an area where off-road vehicle use is prohibited. Use of off-road vehicles in closed areas may be allowed for certain reasons; however, such use shall be made only with the approval of the authorized officer. (43 CFR 8340.0–5 (h))

Code of Federal Regulations (CFR): The official, legal tabulation or regulations directing federal government activities.

Collaboration : A cooperative process in which interested parties, often with widely varied interests, work together to seek solutions with broad support for managing public and other lands. This may or may not involve an agency as a cooperating agency.

Community: An assemblage of plant and animal populations in a common spatial arrangement.

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 structuring and implementing management, marketing, monitoring, and administrative actions accordingly.

Conformance: That a proposed action shall be specifically provided for in the land use plan or, if not specifically mentioned, shall be clearly consistent with the goals, objectives, or standards of the approved land use plan.

Conservation Agreement: A formal signed agreement between the U.S. Fish and Wildlife Service or National Marine Fisheries Service and other parties that implements specific actions, activities, or programs designed to eliminate or reduce threats or otherwise improve the status of a species. Conservation agreements can be developed at a State, regional, or national level and generally include multiple agencies at both the State and Federal level, as well as tribes. Depending on the types of commitments the BLM makes in a conservation agreement and the level of signatory authority, plan revisions or amendments may be required prior to signing the conservation agreement, or subsequently in order to implement the conservation agreement.

Conservation Strategy: A strategy outlining current activities or threats that are contributing to the decline of a species, along with the actions or strategies needed to reverse or eliminate such a decline or threats. Conservation strategies are generally developed for species of plants and animals that are designated as BLM Sensitive species or that have been determined by the Fish and Wildlife Service or National Marine Fisheries Service to be Federal candidates under the Endangered Species Act.

Consistency: The proposed land use plan does not conflict with officially approved plans, programs, and policies of tribes, other Federal agencies, and state, and local governments to the extent practical within Federal law, regulation, and policy.

Cooperating Agency: Assists the lead Federal agency in developing an Environmental Analysis or Environmental Impact Statement. The Council on Environmental Quality regulations implementing NEPA define a cooperating agency as any agency that has jurisdiction by law or special expertise for proposals covered by NEPA (40 CFR 1501.6). Any tribe or Federal, State, or local government jurisdiction with such qualifications may become a cooperating agency by agreement with the lead agency.

Corridor: A wide strip of land within which a proposed linear facility could be located.

Council on Environmental Quality (CEQ): An advisory council to the President of the United States established by the national Environmental Policy Act of 1969. It reviews Federal programs for their effect on the environment, conducts environmental studies, and advises the president on environmental matters.

Cover: Any form of environmental protection that helps an animal stay alive (mainly shelter from weather and concealment from predators).

Critical Habitat: An area occupied by a threatened or endangered species on which are found those physical and biological features (1) essential to the conservation of the species, and (2) which may require special management considerations or protection@.

Cultural Resources: Nonrenewable elements of the physical and human environment including archaeological remains (evidence of prehistoric or historic human activities) and sociocultural values traditionally held by ethnic groups (sacred places, traditionally used raw materials, etc.).

Cultural Site: Any location that includes prehistoric and/or historic evidence of human use, or that has important sociocultural value.

Cumulative Impact/Effect: The impact on the environment that results from the incremental impact of the action when added to other past, present, or reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time.

-D-

Designated Roads and Trails: Specific roads and trails identified by the BLM (or other agencies) where some type of motorized vehicle use is appropriate and allowed either seasonally or yearlong.

Desired Condition: Description of those factors that should exist within ecosystems both to maintain their survival and to meet social and economic needs.

Desired Future Condition: A type of land use plan decision that is a broad statements of desired outcomes for a use.

Desired Outcomes: A type of land use plan decision expressed as a goal or objective.

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.

Director (BLM Director): The national Director of the BLM.

Dispersed/Extensive Recreation: Recreation activities of an unstructured type that are not confined to specific locations such as recreation sites. Example of these activities may be hunting, fishing, off-road vehicle use, hiking, and sightseeing.

Diversity: The relative abundance of wildlife species, plant species, communities, habitats, or habitat features per unit of area.

Drainage: The removal of excess water from land by surface or subsurface flow.

-E-

Easement: A right afforded a person or agency to make limited use of another's real property for access or other purposes.

Ecological Integrity: A measure of the health of the entire area or community based on how much of the original physical, biological, and chemical components of the area remain intact.

Ecosystem: A complete, interacting system of living organisms and the land and water that make up their environment; the home places of all living things, including humans.

Ecological Zone: A zone in which similarities in ecological functions and conditions allow for the classification of large areas into ecological zones, or geographic areas that may be managed similarly. Ecological zones are primarily based on the geology, soils, hydrology, plants, and animals of the area. In many areas, there is a gradual gradient between ecological zones.

Emission: Effluent discharge into the atmosphere, usually specified by mass per unit time.

Endangered Species: A plant or animal species whose prospects for survival and reproduction are in immediate jeopardy, as designated by the Secretary of the Interior, and as is further defined by the Endangered Species Act.

Entry: An application to acquire title to public lands.

Environmental Assessment (EA): A concise public document that analyzes the environmental impacts of a proposed federal action and provides sufficient evidence to determine the level of significance of the impacts.

Environmental Impact Statement (EIS): A detailed written statement required by the National Environmental Policy Act when an agency proposes a major federal action significantly affecting the quality of the human environment.

Ephemeral Stream: A stream that flows only after rains or during snowmelt.

Erosion: The wearing away of the land surface by running water, wind, ice, or other geological agents.

Evaluation (plan evaluation): The process of reviewing the land use plan and the periodic plan monitoring reports to determine whether the land use plan decisions and NEPA analysis are still valid and whether the plan is being implemented.

Exclusion Area: Areas with sensitive resource values where rights-of-way and 302 permits, leases, and easements would not be authorized.

Exotic Plant/Vegetation: A plant species that is not native to the region in which it is found, whose introduction does or is likely to cause harm to the economy, environment, or human health. Executive Order 11987 more broadly defines "exotic" as any species not naturally occurring either presently or historically in an ecosystem in the United States.

Exploration: The work of investigating a mineral deposit to determine by geological surveys, geophysical surveys, geochemical surveys, boreholes, pits, and underground workings if it is feasible to mine.

Explicit Recreation Management Objective: Specifically targeted recreation activity, experience, and benefit opportunities (i.e., recreation opportunity outputs) and their attainment (i.e., recreation outcomes).

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.

-F-

Federal Land Policy and Management Act (FLPMA) of 1976: Public Law 94-579. October 21, 1976, often referred to as the BLM's Organic Act, which provides the majority of the BLM's legislated authority, direction, policy, and basic management guidance.

Federal Register: A daily publication which reports Presidential and Federal Agency documents.

Fire Management Plan: A strategic plan that defines a program to manage wildland and prescribed fires and documents the fire management program in the approved land use plan; the plan is supplemented by operational procedures such as preparedness plans, preplanned dispatch plans, prescribed fire plans, and prevention plans.

Fire Return Intervals: Time between consecutive wildland fires in a given area; fire frequency. Often described as the typical range of years between fires in a healthy, functioning ecosystem.

Floodplain: The relatively flat area or lowlands adjoining a body of standing or flowing water which has been or might be covered by floodwater.

Flow Regimes: Characteristics of stream discharge over time. The natural flow regime is the regime that occurred historically.

Forage: All browse and herbaceous foods available to grazing animals, which may be grazed or harvested for feeding.

Forb: Herbaceous plant that is not a grass, sedge, or rush.

Formation: A body of rock identified by lithic characteristics and stratigraphic position; it is prevailingly, but not necessarily tabular, and is mappable at the earth's surface or traceable in the subsurface.

Fossil: Mineralized or petrified form from a past geologic age, especially from previously living things.

Free-flowing River: Existing or flowing in a natural condition without impoundment, diversion, straightening, rip-rapping, or other modification of the waterway.

Fuel Loadings: The amount of fuel present expressed quantitatively in terms of weight of fuel per unit area. This may be available fuel (consumable fuel) or total fuel and is usually dry weight.

Fugitive Dust: Airborne particles emitted from any source other than through a stack or vent.

-G-

General Management Plan: NPS general planning document giving broad guidance to the NPS units, comparable to the BLM Resource Management Plan (RMP).

Geographic Information System (GIS): A system of computer hardware, software, data, people and applications that capture, store, edit, analyze, and graphically display a potentially wide array of geospatial information.

Geographic Positioning System (GPS): Method of precise location using satellites.

Goal: A broad statement of a desired outcome. Goals are usually not quantifiable and may not have established time frames for achievement.

Grazing System: The manipulation of livestock grazing to accomplish a desired result.

Ground Cover: Vegetation, mulch, litter, rock, etc.

Groundwater: Water contained in pore spaces of consolidated and unconsolidated surface material.

Guidelines: Actions or management practices that may be used to achieve desired outcomes, sometimes expressed as best management practices. Guidelines may be identified during the land use planning process, but they are not considered a land use plan decision unless the plan specifies that they are mandatory.

Gully: A channel formed in the soil surface by ephemeral running water, usually considered to be more than 1 foot deep.

Gully Erosion: The removal of soil by the forming of relatively large gullies or channels cut into the soil by concentrated surface runoff.

-H-

Habitat: A specific set of physical conditions that surround a species, group of species, or a large community. In wildlife management, the major constituents of habitat are considered to be food, water, cover, and living space.

Habitat Improvements: See Vegetation Treatments

Habitat Manipulation: See Vegetation Manipulation

Herbaceous: Pertaining to or characteristic of an herb (fleshy-stem plant) as distinguished from the woody tissue of shrubs and trees.

Historic: Period of human occupation defined when the written record appeared (usually at the time of Euroamerican colonization or expansion in the Western Hemisphere), based primarily upon European roots.

Historic Property: Historic or archaeological site which qualifies for listing on the National Register of Historic Places.

-I-

Igneous Rock: Rock, such as granite and basalt, which has solidified from a molten or partially molten state.

Impact: A modification of the existing environment caused by an action (such as construction or operation of facilities).

Impacts (or Effects): Environmental consequences (the scientific and analytical basis for comparison of alternatives) as a result of a proposed action. Effects may be either direct, which are caused by the action and occur at the same time and place, or indirect, which are caused by the action and are later in time or farther removed in distance, but are still reasonably foreseeable, or cumulative.

Implementation Decisions: Decisions that take action to implement land use plan decisions. They are generally appealable to Interior Board of Land Appeals (IBLA) under 43 CFR 4.410.

Implementation Plan: An area or site-specific plan written to implement decisions made in a land use plan. Implementation plans include both activity plans and project plans (they are types of implementation plans). Examples of implementation plans include interdisciplinary management plans, habitat management plans, and allotment management plans.**Increments:** Maximum allowable increases over legally established baseline concentrations of pollutants covered by the Prevention of Significant Deterioration provisions designated as Class I, II, and III areas.

Indian Tribe: Any American Indian group in the United States that the Secretary of the Interior recognizes as possessing tribal status (listed periodically in the Federal Register).

Indicator Species: A species of animal or plant whose presence is a fairly certain indication of a particular set of environmental conditions. Indicator species serve to show the effects of development actions on the environment.

Indirect Impacts: Secondary effects that occur in locations other than the initial action or later in time.

Inholding: Private or state administered land surrounded by Federally administered lands.

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

Infrastructure: The facilities, services, and equipment needed for a community to function including roads, sewers, water lines, police and fire protection, and schools.

Interdisciplinary Team: A group of individuals with different training, representing the physical sciences, social sciences, and environmental design arts, assembled to solve a problem or perform a task. The members of the team proceed to a solution with frequent interaction so that each discipline may provide insights to any stage of the problem and disciplines may combine to provide new solutions. The number and disciplines of the members preparing the plan vary with circumstances. A member may represent one or more discipline or Bureau program interest.

Interim Management Policy: Policy that guides management of existing Wilderness Study Areas. The policy balances the various uses of Wilderness Study Areas with the requirement to protect the lands wilderness values.

Interior Board of Land Appeals (IBLA): The Department of the Interior, Office of Hearings and Appeals board that acts for the Secretary of the Interior in responding to appeals of decisions on the use and disposition of public lands and resources. Because the Interior Board of Land Appeals acts for and on behalf of the Secretary of the Interior, its decisions usually represent the Department's final decision but are subject to the courts.

Invasive Species: With respect to a particular ecosystem, any animal or plant that is not native to that ecosystem whose introduction does or is likely to cause economic or environmental harm, or harm to human health.

Invertebrates: Animals without backbones or internal bony skeletons.

-J-

Jurisdiction: The legal right to control or regulate use of a transportation facility. Jurisdiction requires authority, but not necessarily ownership.

-K-

Karst: A region with underground drainage and many cavities, underlain by limestone in which erosion has formed sinkholes, fissures, caverns, and underground streams.

-L-

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 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 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 outlined in 43 CFR 1600, regardless of the scale at which the decisions were developed. The term includes both RMPs and MFPs.

Land Use Plan Decision: establishes desired outcomes and actions needed to achieve them. Decisions are reached using the BLM planning process in 43 CFR 1600. When they are presented to the public as proposed decisions, they can be protested to the BLM Director. They are not appealable to IBLA.

Lentic: Standing water habitats, as in lakes, ponds, bog, marshes, or meadows.

Limited Area: 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.

Limits of Acceptable Change (LAC): A framework for establishing acceptable and appropriate resource and social conditions in recreation settings. A system of management planning.

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

Livestock Operation: The management of a ranch or farm so that a significant portion of the income is derived from the production of livestock.

Location: The act of taking or appropriating a parcel of mineral land, including the posting of notices, the recording thereof when required, and marking the boundaries so they can be readily traced; also the claim acquired by an act of location.

Lotic: Running water habitats such as rivers, streams, and springs.

-M-

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. (Road or trail maintenance actions include a) signage, b) minor repairs: e.g. correction of drainage, erosion, or vegetation interference problems. Upon condition assessment performance, maintenance could also be construed as c) allowing road or trail to remain in present state for regular and continuous use.)

Management Decision: A decision made by the BLM or NPS to manage public lands. Management decisions include both land use plan decisions and implementation decisions.

Management Practices: Any actions or practices that improve or maintain basic soil and vegetation resources, and better manage livestock. Management practices typically consist of Rangeland Improvements AMPs that establish and grazing systems: seasons-of-use, utilization levels, stocking rate etc., which allows the achievement of standards in conformance with the guidelines.

Metamorphic Rock: Any rock derived from preexisting rocks by mineralogical, chemical, and structural changes, essentially in the solid state, in response to marked changes in temperature, pressure, shearing stress, and chemical environment at depth in the earth's crust.

Mineral: Any solid or fluid inorganic substance that can be extracted from the earth for profit.

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

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.

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) and development.

Minimize: To reduce the adverse impact of an operation to the lowest practical level.

Mitigation Measures: Methods or procedures that reduce or lessen the impacts of an action.

Monitoring: The periodic observation and orderly collection of data on 1) changing conditions of public land related to management actions and 2) the effects of implementing decisions.

Modification: A change in a Plan of Operations that requires some level of review by BLM because it exceeds what was described in the approved Plan of Operations.

Monitoring (plan monitoring): The process of tracking the implementation of land use plan decisions and collecting and assessing data/information necessary to evaluate the effectiveness of land use planning decisions.

Mosaic Pattern: The intermingling of plant communities and their successional stages in such a manner as to give the impression of an interwoven design.

Multiple Use: The management of the public lands and their various resource values so that they are used in the combination that will best meet the present and future needs of the American people; the use of some lands for less than all of the resources; a combination of balanced and diverse resource uses that takes into account the long term needs of future generations for renewable and nonrenewable resources, including but not limited to, recreation, range, timber, minerals, watershed, wildlife and fish, and natural scenic, scientific and historical values; and harmonious and coordinated management of the various resources without permanent impairment of the productivity of the lands and the quality of the environment with consideration being given to the relative values of the resources and not necessarily to the combination of uses that will give the greatest economic return or greatest unit output.

-N-

National Environmental Policy Act (NEPA) of 1969: An Act that encourages productive and enjoyable harmony between man and his environment and promotes efforts to prevent or eliminate damage to the environment and biosphere and stimulate the health and welfare of man; enriches the understanding or the ecological systems and natural resources important to the Nation, and establishes the Council on Environmental Quality.

National Register of Historic Places (NRHP): A register of districts, sites, buildings, structures, and objects, significant in American history, architecture, archaeology and culture, established by the National Historic Preservation Act of 1966 and maintained by the Secretary of the Interior.

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, historic, 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, Plant or Vegetation: A species that, with respect to a particular ecosystem, historically occurred or currently occurs in that ecosystem. Executive Order 11987 more broadly defines “native” as any species naturally occurring either presently or historically in any ecosystem of the United States.

Naturalness: For designated wilderness character: An area which generally appears to have been affected primarily by the forces of nature, with the imprint of man’s work substantially unnoticeable. (From Section 2(c),

Wilderness Act.) For wilderness characteristics: 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. 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.

Negligible Impact: Impact that is small in magnitude and importance and is difficult or impossible to quantify relative to those occurring naturally or due to other actions.

No Surface Disturbance: In general, this applies to an area where an activity is allowed so long as it does not disturb the surface.

Non-native: A species that is not a part of the original flora or fauna of the area in question (synonymous with introduced flora or fauna).

Non-Native Invasive Species: Species that were not components of pre-European settlement vegetative communities: which have been introduced, either deliberately or inadvertently; which have the capacity to aggressively invade new habitats, displacing and out-competing native species, and; whose introduction does or is likely to cause economic or environmental harm or harm to human health.

Noxious Weeds: A plant species designated by Federal or State law as generally possessing one or more of the following characteristics: aggressive and difficult to manage; parasitic; a carrier or host of serious insects or disease; or nonnative, new, or not common to the United States.

-O-

Objective: A description of a desired outcome for a resource. Objectives can be quantified and measured and, where possible, have established time frames for achievement.

Official Use: Use by an employee, agent, or designated representative of the Federal Government or one of its contractors, in the course of his employment, agency, or representation. Also, use by an employee of the State agency having lands or responsible for managing resources within the Planning Area after consultation, cooperation and coordination with the BLM and/or NPS.

Off-Highway Vehicle (OHV)(off-road vehicle): Any motorized vehicle capable of, or designed for, travel on or immediately over land, water, or other natural terrain, excluding: (1) any nonamphibious registered motorboat; (2) any military, fire, emergency, or law enforcement vehicle while being used for emergency purposes; (3) any vehicle whose use is expressly authorized by the authorized officer, or otherwise officially approved; (4) vehicles in official use; and (5) any combat or combat support vehicle when used for national defense (43 CFR 8340.0-5 (a)).

Off-target: Recreation actions that promote a different market than the specific targeted primary recreation-tourism market for a given SRMA and/or the specified recreation niche for a RMZ within an SRMA.

Open: Generally denotes that an area is available for a particular use or uses. Refer to specific program definitions found in law, regulations, or policy guidance for application to individual programs.

Open OHV Area Designation: An area where all types of vehicle use is permitted at all times, anywhere in the area subject to the operating regulations and vehicle standards set forth in subparts 8341 and 8342 of title 43 CFR. (43 CFR 8340.0-5 (f))

Outstanding Opportunities for Solitude: *For designated wilderness:* Superior or excellent condition favorable for avoiding the sights, sounds, and evidence of other people in the area or for attaining a state of being alone or remote from others. A lonely or secluded place. *For manage for wilderness characteristics:* when the sights,

sounds, and evidence of other people are rare or infrequent (and) where visitors can be isolated, alone or secluded from others.

Outstanding Opportunities for Primitive/Unconfined Recreation: *For designated wilderness:* Superior or excellent situations favorable for non-motorized, non-mechanical (except as provided by law), and undeveloped types of recreation activities. Provides dispersed, undeveloped recreation, either through the diversity in the number of primitive and unconfined recreational activities possible in the area or the outstanding quality of one opportunity. *For manage for wilderness characteristics:* where the use of the area is through non-motorized, non-mechanical means, and where no or minimal developed recreation facilities are encountered.

Overstory: The layer of foliage in a forest canopy.

-P-

Paleontological Resources (Fossils): The physical remains of plants and animals preserved in soils and sedimentary rock formations.

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

Patent: The instrument by which the Federal Government conveys title to the public lands.

Percentage of Use: Grazing use of current vegetation growth, usually expressed as a percentage of volume removed.

Perennial Stream: A stream that flows continuously during all seasons of the year.

Perennial Vegetation: Plants that have a life cycle of 3 or more years.

Period of Use: The time of livestock grazing on a range area based on type of vegetation or stage of vegetative growth.

Permitted Use: The forage allocated by, or under the guidance of, an applicable land use plan for livestock grazing in an allotment under a permit or lease; expressed in Animal Unit Months.

Plan: A document that contains a set of comprehensive, long range decisions concerning the use and management of Bureau and Park administered resources in a specific geographic area.

Plan of Operations: A plan for mining exploration and development that an operation must submit to BLM for approval when more than 5 acres a year will be disturbed or when an operator plans to work in an area of critical environmental concern or a wilderness area. A Plan of Operations must document in detail all actions that the operator plans to take from exploration through reclamation.

Planning Analysis: A process using appropriate resource data and NEPA analysis to provide a basis for decisions in areas not yet covered by an RMP.

Planning Area: A geographical area for which land use and resource management plans are developed and maintained.

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.

Population: Within a species, a distinct group of individuals that tend to mate only with members of the group. Because of generations of inbreeding, members of a population tend to have similar genetic characteristics.

Porosity: A rock, soil, or other material's property of containing interstices. Porosity is commonly expressed as a percentage of the bulk volume of a material occupied by interstices.

Potential Wild and Scenic River: A flowing body of water or estuary or a section, portion, or tributary thereof, including rivers, streams, creeks, runs, kills, rills, and small lakes.

Prehistoric: Refers to the period wherein American Indian cultural activities took place before written records and not yet influenced by contact with nonnative culture(s).

Prescribed Fire: The introduction of fire to an area under regulated conditions for specific management purposes.

Project Plan: Detailed survey and design plan.

Project Area: The area of land upon which an operator conducts mining operations, including the area needed for building or maintaining of roads, transmission lines, pipelines, or other means of access.

Project Plan: A type of implementation plan (see implementation plan). A project plan typically addresses individual projects or several related projects. Examples of project plans include prescribed burn plans, trail plans, and recreation site plans.

Protest: Application for review of a land use plan decision by a higher administrative level.

Public Land: Land or interest in land owned by the United States and administered by the Secretary of the Interior through the BLM without regard to how the United States acquired ownership, except lands located on the Outer Continental Shelf, and land held for the benefit of Indians, Aleuts, and Eskimos.

Public Use Site: Any cultural property found to be appropriate for use as an interpretive exhibit in place, or for related educational and recreational uses by member of the general public.

-Q-

Quarry: An open or surface working, usually for the extraction of stone, slate, limestone, etc.

-R-

Range Development: A structure, excavation, treatment or development to rehabilitate, protect, or improve public lands to advance range betterment.

Rangeland: Land used for grazing by livestock and big game animals on which vegetation is dominated by grasses, grass-like plants, forbs, or shrubs.

Range Improvements: Any activity or program, structural or nonstructural, on or relating to rangelands that is designed to improve forage production, change vegetation composition, control patterns of use, provide water, stabilize soil and water conditions, and enhance habitat for livestock, wildlife. Rangeland improvements include land treatments (e.g., chaining, seeding, burning, chemical, etc.), stockwater developments, fences, corrals, and trails etc.

Raptor: Bird of prey with sharp talons and strongly curved beaks such as hawks, owls, vultures, and eagles.

Reach: A specified length of a stream or channel.

Recharge Area: An area that absorbs water that eventually reaches the zone of saturation in one or more aquifers.

Reclamation: The process of stabilizing disturbed areas to protect both disturbed and adjacent undisturbed areas from unnecessary degradation and returning the disturbed area to a condition approximate or equal to that which existed prior to disturbance, or to a stable and productive condition compatible with the land use plan.

Record of Decision (ROD): A document signed by a responsible official recording a decision that was preceded by the preparing of an environmental impact statement.

Recreation Experiences: Psychological outcomes realized either by recreation-tourism participants as a direct result of their onsite leisure engagements and recreation-tourism activity participation or by non-participating community residents as a result of their interaction with visitors and guests within their community and/or interaction with the BLM and other public and private recreation-tourism providers and their actions.

Recreation Management Zones (RMZ): 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.

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 Opportunities: Favorable circumstances enabling visitor's engagement in a leisure activity to realize immediate psychological experiences and attain more lasting, value-added beneficial outcomes.

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 Setting Character Conditions: The distinguishing recreational qualities of any landscape, objectively defined along a continuum ranging from primitive to urban landscapes, expressed in terms of the nature of the component parts of its physical, social and administrative attributes. These recreational qualities can be both classified and mapped. This classification and mapping process should be based on variation that either exists (i.e., setting descriptions) or is desired (i.e., setting prescriptions) among component parts of the various physical, social, and administrative attributes of any landscape. The recreation opportunity spectrum is one of the existing tools for doing this.

Recreation Settings: The collective, distinguishing attributes of landscapes that influence, and 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 businesses, 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 use plans strategically identify primary recreation-tourism markets for each SRMA- destination, community, or undeveloped.

Recreation Use Permit: Recreation Use Permits (RUPs) are authorizations for the use of developed facilities which meet the fee criteria established by the Land and Water Conservation Fund Act (LWCFA) of 1964, as amended or subsequent authority. RUPs are issued to ensure that the people of the United States receive a fair and equitable return for the use of these facilities to help recover the cost of construction, operation, maintenance, administration, and management of the permits.

Rehabilitation: Effort undertaken to repair or improve damaged lands (such as from wildfire) unlikely to recover naturally to management approved conditions, utilizing native and or nonnative plant species to obtain a stable plant community that will protect the burned area from erosion and invasion by weeds.

Research Natural Area: An area where natural processes predominate and which is preserved for research and education. Research Natural Areas must meet the relevance and importance criteria of Areas of Critical Environmental Concern and are designated as Areas of Critical Environmental Concern.

Resource Advisory Council (RAC): A council established by the Secretary of the Interior to provide advice or recommendations to BLM management. In some states, provincial advisory councils (PACs) are functional equivalents of RACs.

Resource Management Plan (RMP): A land use plan as prescribed by the Federal Land Policy and Management Act which establishes, for a given area of land, land-use allocations, coordination guidelines for multiple-use, objectives and actions to be achieved.

Restoration: The process of returning ecological integrity to the area, and to obtain a plant community that is similar in appearance and function to the historic community.

Revision: The process of completely rewriting the land use plan due to changes in the planning area affecting major portions of the plan or the entire plan.

Right-of-way (ROW): A permit or an easement which authorizes the use of public lands for certain specified purposes, commonly for pipelines, roads, telephone lines, electric lines, reservoirs, etc.; also, the lands covered by such an easement or permit.

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.

Rill: A channel formed in the soil surface by ephemeral running water, usually considered to be less than 1 foot deep.

Riparian Area: A form of wetland transition between permanently saturated wetlands and upland areas. Riparian areas exhibit vegetation or physical characteristics that reflect the influence of permanent surface or subsurface water. Typical riparian areas include lands along, adjacent to, or contiguous with perennially and intermittently flowing rivers and streams, glacial potholes, and the shores of lakes and reservoirs with stable water levels. Excluded are ephemeral streams or washes that lack vegetation and depend on free water in the soil.

River Classification: The process whereby designated rivers are classified as wild, scenic and/or recreational according to criteria established in Section 2(b) of the Wild and Scenic Rivers Act.

River Designation: The process whereby rivers are added to the National Wild and Scenic Rivers System by an act of Congress or by administrative action of the Secretary of the Interior with regard to state-designated rivers under Section 2(a)(ii) of the Wild and Scenic Rivers Act.

River Eligibility: Qualification of a river for inclusion into the National Wild and Scenic Rivers System through the determination (professional judgment) that it is free-flowing and, with its adjacent land area, possesses at least one river-related value considered to be outstandingly remarkable.

River Suitability: Referring to a river's suitability for Congress to designate as a National Wild and Scenic River.

Riverine: A system of wetlands that includes all wetland and deep-water habitats contained within a channel that lacks trees, shrubs, persistent emergents, and emergent mosses or lichens.

Road: As used herein, a transportation facility used primarily by vehicles having four or more wheels, documented as such by the owner, and maintained* for regular and continuous use. (*See "maintenance" definition)

Rock Art: Petroglyphs or pictographs; rock incisions, carvings, or paintings placed on rocks.

Rock shelter: Naturally-formed recess in a rock formation which provided shelter to prehistoric occupants.

Rotation: A technique performed while cementing, whereby casing is rotated in the hole in order to move the cement slurry uniformly around the casing to eliminate channeling and provide an effective cement bond on the casing and formation walls.

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.

Route Designation: an implementation level decision that determines a designation status for an inventoried route, resulting from the use of the Route Evaluation Tree© in the land use planning process. One of five designations are possible:

- 1) **Close:** A route that is permanently closed to all use. Physical closure includes restoring (by natural or mechanical means) the travelway to the degree possible to blend with surrounding landscape, as well as installation of physical barriers and signing at the original departure point, if necessary.
- 2) **Mitigate Limit:** A route that is limited to use by certain parties or entities with valid, vested, or implied rights of access, or to certain vehicle types, seasons of use, etc., in concert with mitigation action(s) aimed at reducing/eliminating certain estimated impacts identified during the route designation process.
- 3) **Limit:** A route that is limited to use by certain parties or entities with valid, vested, or implied rights of access, or to certain vehicle types, seasons of use, etc.
- 4) **Mitigate Open:** A route that is open for all uses, in concert with mitigation action(s) aimed at monitoring/reducing/eliminating certain estimated impacts identified during the route designation process.
- 5) **Open:** A route that is open for all uses.

Runoff: The water that flows on the land surface from an area in response to rainfall or snowmelt.

-S-

Salable Minerals: Common variety minerals on the public lands, such as sand and gravel, which are used mainly for construction and are disposed of by sales or special permits to local governments.

Salinity: A measure of the mineral substances dissolved in water.

Scale: Refers to the geographic area and data resolution under examination in an assessment or planning effort.

Scenic Quality: Scenic quality is described as the visual appeal of an area. Scenery is classified as A, B, or C, with A being the highest scenic quality. The rating is based on seven key factors: landform, vegetation, water, color, adjacent scenery, scarcity, and cultural modifications.

Scoping: The process of identifying the range of issues, management concerns, preliminary alternatives, and other components of an environmental impact statement or land-use planning document. It involves both internal and public viewpoints.

Season-long Use: Grazing throughout the growing period, with little or no effort to control the amount of distribution of livestock use in area/pasture/allotments.

Seasonal Grazing: Grazing use throughout a specific season.

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.

Section 106 Compliance: The requirement of Section 106 of the National Historic Preservation Act that any project funded, licensed, permitted, or assisted by the Federal Government be reviewed for impacts to historic

properties and that the State Historic Preservation Officer and the Advisory Council on Historic Preservation be allowed to comment on a project.

Sediment: Soil, rock particles and organic or other debris carried from one place to another by wind, water or gravity.

Sedimentary Rock: Rock resulting from consolidation of loose sediment that has accumulated in layers.

Sedimentation: The process or action of depositing sediment.

Sensitive Species: All species that are under status review, have small or declining populations, live in unique habitats, or need special management. Sensitive species include threatened, endangered, and proposed species as classified by the Fish and Wildlife Service and National Marine Fisheries Service.

Seral: Pertaining to the successional stages of biotic communities.

Setting Character: The condition of any recreation system, objectively defined along a continuum ranging from primitive to urban in terms of variation of its component physical, social, and administrative attributes.

Shrub: A low, woody plant, usually with several stems, that may provide food and/or cover for animals.

Significant: An effect that is analyzed in the context of the proposed action to determine the degree or magnitude of importance of the effect, either beneficial or adverse. The degree of significance can be related to other actions with individually insignificant but cumulatively significant impacts.

Slope: The degree of deviation of a surface from the horizontal.

Soil Compaction: Increasing the soil bulk density, and concomitantly decreasing the soil porosity, by the application of mechanical compression forces to the soil.

Soil Productivity: The capacity of a soil to produce a plant or sequence of plants under a system of management.

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.

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: Special Recreation Permits (SRPs) are authorizations which allow for recreational uses of the public lands and related waters. They are issued as a means to control visitor use, protect recreational and natural resources, provide for the health and safety of visitors. Commercial SRPs are also issued as a mechanism to provide a fair return for the commercial recreational use of public lands.

Special Status Species: Includes proposed species, listed species, and candidate species under the ESA; State-listed species; and BLM State Director-design. sensitive species (BLM Manual 6840, Special Status Species Policy).

Species Composition: A term relating the relative abundance of one plant species to another using a common measurement; the proportion (percentage) of various species in relation to the total on a given area.

Species Diversity: The number, different kinds of, and relative abundances of species present in a given area.

Split Estate: Land whose surface rights and mineral rights are owned by different entities. Such a condition commonly occurs when surface rights are owned by the Federal Government and the mineral rights are privately or state owned.

Standard: A description of the physical and biological conditions or degree of function required for healthy, sustainable lands (e.g., land health standards). To be expressed as a desired outcome (goal).

Strategic Plan: A plan that establishes the overall direction for the BLM. This plan is guided by the requirements of the Government Performance and Results Act of 1993, covers a 5-year period, and is updated every 3 years. It is consistent with FLPMA and other laws affecting the public lands.

Structural Characteristics: The vegetative structure of a group of plants, vegetative structure is the form or appearance of a stand and can include plant size (height and diameter), arrangement of plants in the landscape in both the horizontal and vertical dimensions, stem density, percent cover, and other measures of biomass quantity.

Summer Range: Range that is grazed mainly during the summer growing season.

Surface Erosion: Erosion that removes materials from the surface of the land as distinguished from gully, or channel erosion.

Sustained Yield: Maintenance of an annual or regular periodic output of a renewable resource from public land consistent with the principles of multiple use.

-T-

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.’

Threatened Species: Any plant or animal species defined under the Endangered Species Act as likely to become endangered within the foreseeable future throughout all or a significant portion of its range; listings are published in the *Federal Register*.

Traditional Cultural Property (TCP): A tangible place important to a community today and has been important to that community for at least 50 years. It has integrity of location, design, setting, materials, workmanship, feeling, and association and has definable boundaries. Not all TCPs are eligible or listed on the National Register of Historic Places.

Trail (interagency definition): Linear route managed for human powered, stock, or OHV forms of recreation or for historic or heritage values. Trails are not generally managed for use by four wheel drive or high clearance vehicles.

Travel Management Areas (TMA): Polygons or delineated areas where a rational approach has been taken to classify areas open, closed, or limited, and have identified and/or designated network of roads, trails, ways, and other routes that provide for public access and travel across the planning area. All designated travel routes within travel management areas should have a clearly identified need and purpose as well as clearly defined activity types, modes of travel, and seasons or timeframes for allowable access or other limitations.

Travel Management Network: a system of areas, roads, trails, and/or ways that addresses all resource use aspects (recreational, traditional, casual, agricultural, industrial, educational etc.) and accompanying modes and conditions of travel on the public lands.

Treatment: Any management practice or procedure applied to a resource to achieve desired results.

-U-

Undeveloped Recreation-Tourism Market: National, regional, and/or local recreation-tourism visitors, communities, or other constituents who value public lands for the distinctive kinds of dispersed recreation produced by the vast size and largely open, undeveloped character of their recreation settings. Major investments in facilities are excluded within SRMAs where BLM's strategy is to target demonstrated undeveloped recreation-tourism market demand. Here, recreation management actions are geared toward meeting primary recreation-tourism market demand to sustain distinctive recreation setting characteristics; however, major investments in visitor services are authorized both to sustain those distinctive setting characteristics and to maintain visitor freedom to choose where to go and what to do in response to demonstrated demand for undeveloped recreation.

Uplands: Lands at higher elevations than alluvial plains or low stream terraces; all lands outside the riparian-wetland and aquatic zones.

Utilization (rangeland): The proportion of the current year's forage production that is consumed or destroyed by grazing animals. Utilization is usually expressed as a percentage.

-V-

Valid Existing Rights: Locatable mineral development rights that existed when the Federal Land Policy and Management Act was enacted on October 21, 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 in segregated lands requires BLM to conduct a validity examination and is called a 'valid existing rights' determination.

Vegetation Community: An assemblage of plant populations in a common spatial arrangement.

Vegetation Treatments: Land treatment projects undertaken to alter the existing vegetation communities, designed to improve the production of species desired.

Vegetation Manipulation: Altering existing vegetation communities to ensure production of the species desired.

Vegetation Type: A plant community with distinguishable characteristics described by dominant vegetation present.

Vegetation Habitat Management Area (VHA) – priority vegetation areas, riparian, previously defined habitat management areas, ESA conservation/recovery areas

Viable: Capable of sustaining a healthy and reproducing population over a long period of time.

Visitor Day: 12 visitor hours, which may be aggregated continuously, intermittently, or simultaneously by one or more people.

Visual Resource Management (VRM) Classes: Categories assigned to public lands based on scenic quality, sensitivity level, and distance zones. There are four classes. Each class has an objective which prescribes the amount of change allowed in the characteristic landscape.

Visual Resources: The visible physical features of a landscape (topography, water, vegetation, animals, structures, and other features) that constitute the scenery of an area.

Vital Signs: NPS standards and monitoring program to assess the condition of key natural resources and ecological processes on NPS lands in order to prevent or reverse resource degradation.

-W-

Water Quality: The chemical, physical, and biological characteristics of water with respect to its suitability for a particular use.

Water Table: The surface in a groundwater body where the water pressure is atmospheric. It is the level at which water stands in a well that penetrates the water body just far enough to hold standing water.

Watershed: All lands enclosed by a continuous hydrologic drainage divide that lay upslope from a specific point on a stream.

Wetlands: Areas that are inundated or saturated by surface or ground water often and long enough to support and under normal circumstances do support a prevalence of vegetation typically adapted to saturated soil conditions.

Wild Horses and Burros: All unbranded and unclaimed horses and burros using public lands as all or part of their habitat.

Wild River: Those rivers or sections of rivers free of impoundments and generally inaccessible except by trail, with watershed or shorelines essentially primitive and waters unpolluted. They represent vestiges of primitive America.

Wild, Scenic, or Recreational River: Three classes that is traditionally referred to as a “Wild and Scenic River.” Designated river segments are classified as wild, scenic and/or recreational, the segments cannot overlap.

Wilderness: A congressionally designated area of undeveloped federal land retaining its primeval character and influence, without permanent improvements or human habitation, that is protected and managed to preserve its natural conditions and that (1) generally appears to have been affected mainly by the forces of nature, with human imprints substantially unnoticeable; (2) has outstanding opportunities for solitude or a primitive and unconfined type of recreation; (3) has at least 5,000 acres or is large enough to make practical its preservation and use in an unimpaired condition; and (4) may also contain ecological, geological, or other features of scientific, educational, scenic, or historic value.

Wilderness Character: Key qualities of a designated wilderness or wilderness study area are listed in section 2(c) of the “Wilderness Act of 1964” and were used by BLM in its original wilderness inventory. Those qualities include size, naturalness, outstanding opportunities for solitude, and outstanding opportunities for primitive and unconfined type of recreation. Other qualities may include ecological, geological, or other features of scientific, educational, scenic, or historic value.

Wilderness Characteristics: Features of the land associated with the concept of wilderness that may be considered in land use planning when BLM determines that those characteristics are reasonably present, of sufficient value (condition, uniqueness, relevance, importance) and need (trend, risk), and are practical to manage.” (BLM I.M. 2003-275) These features are not part of designated wilderness areas (WA) or wilderness study areas (WSA).

Wilderness Study Area (WSA): A designation made during the official BLM wilderness review period and through the land use planning process of a roadless area found to have wilderness character as described in Section 2 (c) of the Wilderness Act of 1964.

Wildfire: A fire on wildlands not meeting management objectives and thus requiring a suppression response.

Wildland: An area in which development is essentially non-existent, except for roads, railroads, powerlines, and similar transportation facilities. Structures, if any, are widely scattered.

Wildland Fire: Any fire occurring on the wildlands, regardless of ignition source, damages, or benefits.

Wildland Fire Situation Analysis: A decision-making process that evaluates alternative management strategies against selected safety, environmental, social, economical, political, and resource management objectives as selection criteria.

Wildland Fire Use: Wildland fire used to protect, maintain, and enhance resources and, when possible, allowed to function in its natural ecological role. Use of fire will be based on approved Fire Management Plans and will follow specific prescriptions contained in operational plans.

Wildland-Urban Interface (WUI): Wildland-Urban Interface is the line, area, or zone where structures and other human developments meet or intermingle with undeveloped wildland or vegetative fuels.

Wildlife Habitat Management Areas (WHA): Bighorn sheep, antelope, priority wildlife areas, riparian, previously defined habitat man. areas, ESA conservation/recovery areas, desert tortoise, critical deer winter range, etc.

Winter Range: Range that is grazed during winter.

Withdrawal (Minerals): An action that restricts the use of public lands by removing them from the operation of some or all of the public land or mining laws.

Withdrawal (Water): The withholding of water from appropriation, usually to protect it for specific uses.

Woodland: A forest community occupied primarily by noncommercial species such as juniper, mountain mahogany, or quaking aspen; all western juniper forest lands are classified as woodlands, since juniper is classified as a noncommercial species.

REFERENCES CITED

- Altschul, Jeffrey H., and Helen C. Fairley. 1989. *Man, Models and Management: An Overview of the Archaeology of the Arizona Strip and the Management of its Cultural Resources*. Report prepared for USDA Forest Service and USDI Bureau of Land Management by Statistical Research, Plateau Archaeology, and Dames & Moore, Inc.
- Arizona Game and Fish Department. 2006. *Strategic Plan*.
- Bureau of Land Management, U.S. Department of the Interior. 1981. *Paria Management Framework Plan*. Arizona Strip Field Office, St. George, Utah.
- Bureau of Land Management, U.S. Department of the Interior. 1987b. *Paria Canyon-Vermilion Cliffs Wilderness Management Plan*. Arizona Strip Field Office, St. George, Utah.
- Bureau of Land Management, U.S. Department of the Interior. 1991a. *Final Environmental Impact Statement: Vegetation Treatment on BLM Lands in Thirteen Western States*.
- Bureau of Land Management, U. S. Department of the Interior. 1992a. *Proposed Arizona Strip District Resource Management Plan and Final Environmental Impact Statement*. Arizona Strip Field Office, St. George, Utah.
- Bureau of Land Management, U. S. Department of the Interior. 1992b. *Vermilion Resource Area Implementation Plan for the Arizona Strip District Approved Resource Management Plan*. Arizona Strip Field Office. St George, Utah.
- Bureau of Land Management, U.S. Department of the Interior. 1994. *Final Arizona Statewide Wild and Scenic Rivers LEIS*. Arizona State Office, Phoenix, Arizona.
- Bureau of Land Management, U.S. Department of the Interior. 1996. *Statewide Plan Amendment of Land Use Plans in Arizona for Implementation of Arizona Standards for Rangeland Health and Guidelines for Grazing Administration. Environmental Assessment*, Arizona State Office, Phoenix, Arizona.
- Bureau of Land Management, U.S. Department of the Interior. 2000. *Approved Management Plan/ROD Grand Staircase-Escalante National Monument*, Kanab, Utah.
- Bureau of Land Management, U. S. Department of the Interior. 2004a. *Proposed Arizona Statewide Land Use Plan Amendment for Fire, Fuels, and Air Quality Management: Finding of No Significant Impact and Environmental Assessment*. Arizona State Office, Phoenix, Arizona.
- Bureau of Land Management, U.S. Department of the Interior, and Arizona Game and Fish Department. 2001. *Arizona Strip Desert Bighorn Sheep Management Plan, as Amended*. Arizona Strip Field Office, St. George, Utah and AGFD, Flagstaff, Arizona.
- Coconino County. 2003. *Coconino County Comprehensive Plan*. Flagstaff, Arizona.
- Kane County. 1998. *Kane County, Utah General Plan*. Kanab, Utah.
- National Park Service, U.S. Department of the Interior. 1979b. *Proposed General Management Plan for Glen Canyon National Recreation Area, Arizona and Utah*. Page, Arizona.
- National Park Service, U.S. Department of the Interior. 1995a. *Grand Canyon National Park General Management Plan*. Grand Canyon National Park, Arizona.
- National Park Service, U.S. Department of the Interior. 2006. *ROD on the Final EIS: Colorado River Management Plan, Grand Canyon National Park*. Grand Canyon National Park, Arizona.

- Stoffle, Richard W., Fletcher P. Chmara-Huff, Kathleen A Van Vlack. 2004. *Initial Findings from the Arizona Strip Cultural Landscape and Place Name Study*. Ms. prepared for the Arizona Strip Field Office by the Bureau of Applied Research in Anthropology, University of Arizona, Tucson.
- U.S. Department of the Interior. 2007. *Adaptive Management: Technical Guide*.
- U S. Fish and Wildlife Service. 1996. *Recovery Plan for the California Condor*. Prepared by L.F. Kiff, R.I. Mesta, and M.P. Wallace. 3rd Revision April 1996. U.S.D.I. Fish and Wildlife Service, Portland, OR. 74pp.
- U S. Fish and Wildlife Service. 2002. *Southwestern Willow Flycatcher (Empidonax traillii extimus) Final Recovery Plan*. Prepared by the Southwestern Willow Flycatcher Recovery Team, Technical Subgroup. Albuquerque, NM.

INDEX

-A-

ACQUISITION: 2-40, 53

ADMINISTRATIVE ROUTES: 2-74

ALLOTMENT: 2-9, 55 to 57; 3-1; Appendices C, D, and E

AMERICAN INDIAN: 1-10 to 11, 16 to 17; 2-45, 92; Appendix J

ANIMAL UNIT MONTH (AUM): Appendix E

ANTELOPE: See **PRONGHORN ANTELOPE**

ARCHAEOLOGY: See **CULTURAL RESOURCES**

AREAS OF CRITICAL ENVIRONMENTAL CONCERN (ACEC): 2-5

ARIZONA DEPARTMENT OF TRANSPORTATION (ADOT): 1-16; 2-93, 97; Appendix K-3

ARIZONA GAME AND FISH DEPARTMENT (AGFD): 1-10, 14 to 15, 17 to 18; 2-24 to 25, 27 to 30, 32 to 34, 36 to 37; Appendices B, C, G

ARIZONA STANDARDS FOR RANGELAND HEALTH AND GUIDELINES FOR GRAZING

ADMINISTRATION (S&Gs): 1-14; 2-9, 12, 16, 55 to 56; Appendix C

ATV: See **OFF-HIGHWAY VEHICLE**

-B-

BIGHORN SHEEP: 1-10, 14, 19; 2-20, 24 to 25, 28, 55; Appendix A-2

BIOLOGICAL ASSESSMENT OR EVALUATION: See **BIOLOGICAL OPINION**

BIOLOGICAL OPINION: 1-11; 2-32, 99; Appendix B

BUCKSKIN: 2-25, 64 to 65

-C-

CALIFORNIA CONDOR: 1-10, 14, 19; 2-26, 32, 36 to 38, 58; Appendices A and B

CAMPING: 1-7; 2-3, 15, 33, 40, 58, 64 to 65, 72 to 73, 84

CAMPFIRES: 2-15, 65

CAVES: 2-11, 65; 3-3

CRITICAL HABITAT, DESIGNATED: Appendix B

CONSERVATION MEASURES: 1-11; 2- 14, 31 to 34, 36 to 40; Appendices B and G

COOPERATING AGENCY: 1-11, 15 to 16; 2-96

COYOTE BUTTES: 2-61, 62 to 64; 3-4; Appendix A

COYOTE BUTTES FEE AREA: 2-64

CULTURAL RESOURCES: 1-8, 11, 14, 16 to 17; 2-3, 6, 13, 43, 52, 62 to 65, 71 to 74, 87, 90, 94, 95; 3-1 to 2; Appendices A and C

CUMULATIVE IMPACTS: 1-2, 12

-D-

DECISION RECORD: See **RECORD OF DECISION**

DESIRED PLANT COMMUNITY: 2-12, 14, 87; 3-8

DESIGNATED ROADS AND TRAILS: 1-5, 7, 9, 19; 2-34, 64, 72 to 80, 97; Appendix K

DESIGNATED WILDERNESS AREA: See **WILDERNESS AREAS**

-E-

ENDANGERED SPECIES: Also see **SPECIAL STATUS SPECIES** 2-24 to 25, 31, 64, 95; Appendices B and G

EXOTIC SPECIES: 2-40 to 41

-F-

FEDERAL LAND POLICY MANAGEMENT ACT (FLPMA): 1-1, 5 to 6, 8 to 10, 13, 17 to 18; 2-43, 88; Appendix I
FEES: Also See RECREATION FEES 2-15, 44, 63 to 64, 92 to 93; Appendix J
FIRE MANAGEMENT: 2-13 to 14, 51, 82
FOSSILS: 2-10, 13, 65, 88
FUELWOOD: 2-15, 65, 84

-G-

GAME BIRDS: 2-25, 29 to 30
GEOLOGY: 2-6, 10, 46, 61, 89
GRAZING: See **LIVESTOCK GRAZING**
GROUP SIZE: 2-59 to 62, 64; 3-4

-H-

HABITAT MANAGEMENT AREA: 1-10; 2-28, 34
HOUSE ROCK VALLEY: 2-3, 19, 20, 25, 33, 91
HUNTING: 2-3 to 4, 25, 29 to 30, 59 to 60, 72 to 73, 97; Appendix B

-I-

IMPLEMENTATION PLAN: 1-10, 14; 2-6, 76, 93; Appendix F
INVASIVE SPECIES: 2-12, 15 to 18, 20, 41

-K-

KAIBAB PAIUTE TRIBE: 1-15 to 17; 2-45, 96

-L-

LAND TENURE: 2-50, 53
LIVESTOCK GRAZING: 1-4, 6 to 7, 9; 2-5 to 6, 33, 40, 42, 55 to 56, 85, 91; 3-3, 8; Appendices C, D, E, and G

-M-

MINERAL MATERIALS (sand and gravel): 2-72
MONITORING: 1-8, 11, 20; 2-25, 34, 38, 41, 45, 53, 55 to 56, 63 to 65, 88 to 90, 94, 98; 3-1, 2, 4 to 9; Appendix B
MULE DEER: 2-19, 24 to 27

-N-

NATIONAL ENVIRONMENTAL POLICY ACT (NEPA): 1-1 to 2, 8, 10, 13 to 15; 2-6, 8, 26, 29, 47, 53, 76, 88, 95, 97; Appendix B
NATIONAL HISTORIC PRESERVATION ACT OF 1966, AS AMENDED (NHPA): 1-10; 2-26, 44, 74, 76, 91, 95 to 96
NATIONAL HISTORIC TRAIL: See **Old Spanish National Historic Trail**
NATIONAL PARK SERVICE (NPS): 1-4, 12 to 14, 16, 18; 2-12, 16, 55 to 56; Appendix B
NATIONAL REGISTER OF HISTORIC PLACES (NRHP): 2-45, 85, 91
NATIVE SPECIES: 1-20; 2-12, 14 to 15, 17, 33; Appendices B and C
NIGHT SKIES: 2-47
NOISE: 2-49; Appendix I
NOXIOUS WEEDS: 2-15 to 16; Appendix C

-O-

OFF-HIGHWAY VEHICLE (OHV): 1-7; 2-3, 5, 40, 73; 3-1; Appendix B
OLD SPANISH NATIONAL HISTORIC TRAIL (NHT): 2-44, 75, 84 to 85, 94; 3-6
ORGANIZED GROUP ACTIVITY: 2-65
OUTFITTERS/GUIDES: 2-59

-P-

PACK ANIMALS: 2-55, 65
PALEONTOLOGY: 2-10, 88
PARIA RIVER/CANYON: 1-14, 19; 2-17, 46, 54, 60 to 65, 68, 75 to 76, 81 to 83, 85, 89; 3-1, 4, 6; Appendix A
PARIA FEE AREA: See **Coyote Buttes Fee Area**
PERMITS: 1-6, 9; 2- 8, 15, 52, 55, 65, 72 to 74, 87, 93, 97; 3-4; Appendix A
PLANT COMMUNITY: 2-12, 14, 88; 3-8; Appendix B
PREDATOR CONTROL: 2-26, 97
PRESCRIBED FIRE (BURNING): 2-12 to 14, 17 to 21, 82; 3-8; Appendix B
PROCLAMATION: 2-4, 27, 46, 51, 53, 82, 95; Appendix A
PRIMITIVE RECREATION: 1-6, 9; 2-50, 58, 73, 81; 3-6
PRONGHORN ANTELOPE: 1-19; 2-21, 24 to 28 ; Appendix A
PROPER FUNCTIONING CONDITION (RIPARIAN WETLAND AREAS): 2-24 to 25, 27 to 28; Appendix C

-R-

RANGELAND: 1-12, 14; 2-9, 12, 14, 16, 34, 55, 56; Appendix C
RAPTOR: 1-19; 2-29, 29, 35 to 38, 65, 89 to 90; Appendix A
RECORD OF DECISION (ROD): 1-1, 5, 10; 2-95; 3-1; Appendix F
RECREATION MANAGEMENT AREAS: 1-7; 2-46, 58 to 62, 67 Appendix J
RECREATION MANAGEMENT ZONES (RMZ): 1-7; 2-58 to 63, 66, 76, 94; Appendix J
RECREATION OPPORTUNITY SPECTRUM (ROS): 3-3 to 4; Appendix J
RECREATION SETTINGS: 1-7; 2-59, 62 to 63, 69 to 71; Appendix J
RIGHT-OF-WAY (ROW): 2-47, 53, 74, 92
RIPARIAN: 2-6, 8, 13, 16 to 18, 25, 35, 38 to 43, 83, 89, 90, 97; 3-7; Appendix B
ROAD: *See “maintenance” definition in Glossary above.
ROAD CLOSURE: 2-75; Appendix A
ROUTE: “Roads” and/or “trails” are considered routes.
ROUTE EVALUATION: 2-25, 74 to 75
ROUTE INVENTORY: 2-94; Appendix K

-S-

SCOPING: 1-4 to 8, 13, 17; Appendix C
SECTION 106 CONSULTATION: 2-44, 74, 76, 95 to 96; 3-1, 3
SECTION 7 CONSULTATION: 2-95 to 96; 3-1; Appendix B
SENSITIVE SPECIES: 2-32; Appendices B, C, and G
SOILS: 2-8 to 9, 12, 14, 17, 19; 3-2, 8; Appendix C
SOUNDSCAPES: 2-49; 3-6
SOUTHWESTERN WILLOW FLYCATCHER: 1-14; 2-16 to 17, 32, 39 to 42, 90; 3-7; Appendices B and G
SPECIAL RECREATION MANAGEMENT AREA (SRMA): 1-7; 2-47, 58 to 63, 94; Appendix J
SPECIAL RECREATION PERMIT (SRP): 2-65, 93
SPECIAL STATUS SPECIES: 1-17, 20; 2-14, 17, 24 to 25, 32 to 34, 40, 53, 63 to 65, 89 to 90; 3-7 to 11, Appendices B and G

STANDARDS AND GUIDELINES FOR RANGELAND HEALTH: See AZ Standards for Rangeland Health and Appendix C

SUN VALLEY MINE: 2-44 to 45

-T-

THREATENED SPECIES: See Special Status Species

TRAIL: 1-5; 2-5, 6, 40, 44 to 46, 64, 72, 75 to 76, 83 to 85, 94; 3-3, 5 to 6, 10; Appendix A

TRAVEL MANAGEMENT: 1-5, 11; 2-1, 3, 7, 34, 40, 62, 64 to 65, 72, 75 to 76, 78, 94; Appendix K

TRAVEL MANAGEMENT AREA (TMA): 2-1, 3, 72, 75, 78; Appendix K

-U-

U.S. FISH AND WILDLIFE SERVICE (USFWS): 1-4; 2-25, 32 to 35, 37 to 38, 40, 88 to 89, 97; Appendix B

-V-

VALID EXISTING RIGHTS: 1-9; 2-73, 85; Appendix A

VEGETATION HABITAT AREA: 2-34

VEGETATION TREATMENTS: 1-14; 2-14, 16 to 21, 26, 34, 50, and 88; Appendices C and F

VISITOR CENTER: 1-12; 2-63, 94

VISUAL RESOURCE MANAGEMENT (VRM): 2-46, 48, 50; Appendix H

-W-

WATCHABLE WILDLIFE: 2-5, 26, 66

WATER QUALITY: 2-8, 16, 35, 59, 83, 87; Appendix C

WEEDS: 2-15; Appendix C

WEST BENCH PUEBLO: 2-44 to 45

WILD AND SCENIC RIVERS: 1-14; 2-7, 82 to 83, 86; 3-6; Appendix L

WILDERNESS AREAS: 1-5 to 6; 2-5, 14, 49, 81 to 82, 91 to 92

WILDERNESS CHARACTERISTICS: 1-5 to 6, 9, 11; 2-7, 16, 46, 49 to 52, 62, 76, 81, 92

WILDLIFE HABITAT AREA (WHA): 2-31; Appendix F

WILDLIFE TRANSPLANTS: 2-25 to 26

WIRE PASS: 2-64 to 65

WITHDRAWAL: Also see MINERAL WITHDRAWAL Appendix A

-X,Y,Z-

ABBREVIATIONS AND ACRONYMS

A	Administrative Use
ACEC	Area of Critical Environmental Concern
ADOT	Arizona Department of Transportation
AGFD	Arizona Game and Fish Department
AMP	Allotment Management Plan
AMR	Appropriate Management Response
APHIS-WS	Animal and Plant Health Inspection Service - Wildlife Services (US Department of Agriculture)
ASDO	Arizona Strip District Office
ATV	All-Terrain Vehicle
AUM	Animal Unit Month
BA	Biological Assessment
BBM	Benefits-based Management
BAER	Burned Area Emergency Rehabilitation
BLM	United States Department of the Interior, Bureau of Land Management
C	Closed
CBW	Composition by Weight
CEQ	Council on Environmental Quality
CFR	Code of Federal Regulations
DFC	Desired Future Condition
DOI	Department of Interior
DPC	Desired Plant Composition
EA	Environmental Assessment
EIS	Environmental Impact Statement
EPA	United States Environmental Protection Agency
ERMA	Extensive Recreation Management Area
ESA	Endangered Species Act
FAA	United States Federal Aviation Administration
FCR	Field Contact Representative
FEIS	Final Environmental Impact Statement
FLPMA	Federal Land Policy and Management Act
FO	Field Office
GIS	Geographic Information System
GPS	Global Positioning System
HCP	Habitat Conservation Plan
HMP	Habitat Management Plan
IAT	Interdisciplinary Assessment Team
IBLA	Interior Board of Land Appeals
IM	Instruction Memorandum
IMP	Interim Management Policy
IPM	Integrated Pest Management
LAC	Limits of Acceptable Change
MIST	Minimum Impact Suppression Tactics
ML, L	Mitigate Limit, Limit
MO	Mitigate Open

Vermilion Cliffs National Monument
Approved Plan

Abbreviations and Acronyms

MOU	Memorandum of Understanding
MSO	Mexican Spotted Owl
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
NHT	National Historic Trail
NM	Non-motorized
NOA	Notice of Availability
NOI	Notice of Intent
NPS	United States Department of the Interior, National Park Service
NRA	National Recreation Area
NRHP	National Register of Historic Place
O	Open
OHV	Off-highway Vehicle
PL	Public Law
PLO	Public Land Office
RAC	Resource Advisory Council (BLM)
RAMP	Recreation Area Management Plan
RMA	Recreation Management Area
RMP	Resource Management Plan
RMZ	Recreation Management Zone
ROD	Record of Decision
ROW	Right-of-Way
R&PP	Recreation and Public Purposes
RRT	Rangeland Resource Team
SHPO	State Historic Preservation Office
S&G	Standards and Guides
SRMA	Special Recreation Management Area
SRP	Special Recreation Permit
SW	Southwestern
SWWF	Southwestern Willow Flycatcher
TCP	Traditional Cultural Property
TMA	Travel Management Area
USC	United States Code
USFWS <i>or</i> FWS	United States Department of the Interior, Fish and Wildlife Service
USFS	United States Department of Agriculture, Forest Service
VRM	Visual Resource Management
WFIP	Wildland Fire Implementation Plan
WHA	Wildlife Habitat Management Area
WMP	Wilderness Management Plan
WSA	Wilderness Study Area
W&SR	Wild and Scenic Rivers
WUI	Wildlife-Urban Interface