



Department of the Interior
Bureau of Land Management

Safford Field Office

January 1998

Gila Box Management Plan, Environmental Assessment and Decision Record



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

BLM/AZ/PL-98/004



United States Department of the Interior

BUREAU OF LAND MANAGEMENT

Safford District Office

711 14th Avenue

Safford, AZ 85546

(520) 348-4400



In reply refer to:

1619 (04227)

January 30, 1998

Dear Reader:

Enclosed you will find the Management Plan for the Gila Box Riparian National Conservation Area (RNCA). This Management Plan is based on public input, Advisory Committee recommendations, BLM staff analysis and recommendation, and laws that direct the management of the Gila Box RNCA and public lands in general.

It has been our pleasure to work with the public and Advisory Committee in the preparation of the Management Plan. Each time the public participates in our decision-making process, we become more aware of public needs and better able to serve those needs. We would like to thank all who have participated to date, and encourage your continued interest and enjoyment of this tremendous resource.

A Notice of Availability for this Decision will be published in the Federal Register. Within 30 days of this date, you have the right of appeal pursuant to 43 Code of Federal Regulations, Part 4. Please submit any appeal to William T. Civish, Safford Field Manager, 711 14th Avenue, Safford, Arizona 85546.

Sincerely,

Margaret L. Jensen
Program Manager for Resource
Use and Protection

**Gila Box Riparian
National Conservation Area
Management Plan,
Environmental Assessment,
Finding Of No Significant Impact,
and
Decision Record**

U.S. Department of the Interior
Bureau Of Land Management
Safford Field Office
Safford, Arizona

William T. Civish
Safford Field Manager

Table Of Contents

	Page
Introduction	1
Location and Setting	1
Public Participation	1
Planning Process Used	2
Constraints	4
Issues and Areas Of Concern	7
Consolidated Issues and Objectives	7
Category 1 - Riparian Area Management	8
Category 2 - Recreation and Transportation System	11
Category 3 - Cultural Resource Management	18
Category 4 - Fish, Wildlife, and T&E Species Management	22
Category 5 - Water Quality Management	28
Category 6 - Private Lands Within the RNCA and Eagle Creek Private Lands	29
Category 7 - City of Safford Water Supply System	30
Category 8 - Research and Education	31
Category 9 - Fire Management	31
Trust Resources	31
Environmental Assessment	32
Fonsi/Decision Record	57
Response to Comments	65
References	73
Appendix A - Summary of USFWS Biological Opinion on Grazing	75
Appendix B - Standards and Guidelines (Pages 6 Through 9)	77
Appendix C - Allotment Specific Livestock Management	81
Appendix D - Arizona Desert Wilderness Act of 1990	85
Appendix E - USFWS Biological Opinion on the Gila	89

Gila Box RNCA Management Plan

Introduction

The Arizona Desert Wilderness Act of 1990 (Public Law 101-628) designated the Gila Box Riparian National Conservation Area (RNCA) in order to conserve, protect, and enhance its riparian areas and associated resources, and the aquatic, wildlife, archaeological, paleontological, scientific, cultural, recreational, educational, scenic, and other resources and values of such areas. The law also required the BLM to develop a comprehensive management plan. To accomplish this task, the BLM began by preparing a Draft Gila Box Riparian National Conservation Area Interdisciplinary Activity Plan/Environmental Assessment. This document, the Gila Box Management Plan, sets the management direction for the RNCA for the next 15 years.

The management actions identified in this document were selected from the various alternatives analyzed in the Draft Interdisciplinary Activity Plan/Environmental Assessment (draft plan). With some additions and modifications in preparation of this final plan, the BLM carefully considered comments by the public at meetings and in correspondence, including public comments on the draft plan, comments from other local, state, and federal government agencies, Native American tribes, and the Gila Box Advisory Committee. Additionally, BLM staff analysis of the consequences of various alternative management actions, legal mandates of federal laws and executive orders, and the requirements of BLM policy played an integral part in the formulation of this final management plan.

Location and Setting

The Gila Box Riparian National Conservation Area is 180 miles east of Phoenix, Arizona, in Graham and Greenlee counties. The RNCA is located 12 miles east of the city of Safford and has approximately

21,767 acres of public land and 1,720 acres of private land within its designated boundary. A 15-mile segment of Bonita Creek and 23 miles of the Gila River, including the "Gila Box," are within the RNCA. Two other waterways, Eagle Creek and the San Francisco River, flow into the RNCA, for a total of four perennial waterways in the conservation area. This area consists of scenic, steep-walled desert canyons surrounding perennial rivers and creeks and one of the most significant riparian zones in the southwest.

The area surrounding the RNCA is largely unpopulated. The towns of Clifton and Morenci are eight miles north of the RNCA and have a population of approximately 4,000. Southwest of the RNCA lies the Safford Valley which includes the towns of Safford, Thatcher, and Pima which have a total population of approximately 20,000.

Public Participation

The Arizona Desert Wilderness Act of 1990 directed the BLM to develop the management plan with "full public participation." The public participation process started with the approval of the Gila Box Advisory Committee in September 1991. Soon thereafter, public scoping meetings were held in October and November in Safford, Clifton, and Tucson. These initial scoping meetings were held to identify the planning issues for the development of the Gila Box Interdisciplinary Activity Plan.

Following the initial scoping meetings, the Advisory Committee and planning team met 19 times during the period of October 1991 to November 1992 to develop the management plan. Each advisory committee meeting was open to the public and advertised in the Federal Register and local and regional papers to allow full public participation. Many comments and suggestions from the public were received at these advisory

committee meetings. In addition, four public meetings were held in the evening to allow for additional public participation in Tucson and Safford during the planning period.

In August 1993, the Gila Box Draft Plan/EA was released to the public followed by a comment period ending in December 1993. During the month of November 1993, open house meetings were held for the public to discuss the Draft Plan in Clifton, Tucson, Phoenix, and Safford. The Advisory Committee has met five times since the release of the Draft Plan.

The San Carlos Apache Tribe participated in the initial public scoping for the draft plan. Issues identified by the Tribe consisted of the boundary dispute between the Tribe and BLM, composition of the Advisory Committee for the RNCA, and the overall management of the RNCA. Six tribes were each contacted by letter and follow-up phone calls three times during preparation of the final plan: San Carlos Apache Tribe, White Mountain Apache Tribe, Gila River Indian Community, Salt River Pima-Maricopa Indian Community, Tohono O'odham Nation, and Ak-Chin Indian Community. No responses were received from any of the tribes. In addition, attempts were made to meet with the San Carlos Apache Tribal Council at eight of their Tribal Council meetings. The Council refused each time to meet with BLM representatives. No issues or concerns were identified by the tribes as a result of these contacts.

Planning Process Used

Three concepts were central in developing the Management Plan for the Gila Box RNCA. These three concepts were: to use an interdisciplinary approach, involve the public, and comply with all applicable laws.

The Gila Box RNCA planning team used an interdisciplinary approach in developing this management plan. It is an integrated plan addressing all of the various resource values. The Plan directs each resource program's on-the-ground management.

The planning approach included public involvement throughout the process. The Arizona Desert Wilderness Act of 1990 directed the BLM to use an Advisory Committee appointed by the Secretary of the Interior to assist in the preparation and implementation of the management plan. This seven member committee represented local, regional, and national interest groups. Two of the committee members were selected from the local counties, Graham and Greenlee, and one member was nominated by the Governor of Arizona. The remaining four committee members, from cities outside the local area, had expertise in specific resource disciplines related to the RNCA.

The following persons were appointed by the Secretary of the Interior as members of the Gila Box RNCA Advisory Committee and were instrumental in the development of this management plan.

1992 - 1995 Advisory Committee

Ms. Tanna Thornburg	Category: Riparian Ecology, Environmental Education, and Recreation
Dr. Richard H. (Pete) Hawkins	Category: Hydrology
Ms. Gail Peters	Category: Riparian Ecology, Recreation, Environmental Education, and Wildlife
Mr. Jeff Menges	Category: Representative of the Governor of Arizona.
Dr. Anne Woosley	Category: Cultural Resources
Mr. Fred Menzer	Category: Representative of the Greenlee County Board of Supervisors
Mr. Governor Hunt Aker (Mayor of Safford)	Category: Representative of the Graham County Board of Supervisors

1997 Advisory Committee

Mr. Dan Fischer	Category: Wildlife, Recreation
Dr. Richard H. (Pete) Hawkins	Category: Hydrology
Ms. Gayle Hartmann	Category: Wildlife, Recreation
Mr. Jeff Menges	Category: Representative of the Governor of Arizona
Mr. Steve Marlatt	Category: Wildlife, Environmental Education
Mr. Gary Jones	Category: Representative of the Greenlee County Board of Supervisors
Mr. Van Talley (Mayor of Safford)	Category: Representative of the Graham County Board of Supervisors

Three major laws guided development of the management plan: The Arizona Desert Wilderness Act of 1990 (Appendix A), the Federal Land and Policy Management Act, and the National Environmental Policy Act.

The planning process used was in conformance with the National Environmental Policy Act and the Council on Environmental Quality Regulations governing implementation of the Act (40CFR 1500). The National Environmental Policy Act of 1969, as amended in 1975, requires all federal agencies to analyze the environmental impacts of any proposed action affecting public land and/or resources, to involve the public in decision making, and to disclose environmental impacts to the public. The law also requires that the analysis be interdisciplinary, issue-driven, and site-specific, and that direct, indirect, and cumulative effects be analyzed.

The Arizona Desert Wilderness Act of 1990, also used as guidance for development of this plan, states: The BLM shall manage the conservation area in a manner that conserves, protects and enhances its resources and values, including the riparian and associated areas and the aquatic, wildlife, archaeological, paleontological, scientific, cultural, recreational, educational, scenic, and other resources and values pursuant to the Federal Land Policy and Management Act of 1976 (FLPMA).

The Federal Land Policy and Management Act of 1976 directs the BLM to manage public lands for multiple use. Multiple use is defined in FLPMA as:

The management of the public lands and their various resource values so that they are utilized in the combination that will best meet the present and future needs of the American people: making the most judicious use of the

lands for some or all of these resources or related services over areas large enough to provide sufficient latitude for periodic adjustments in use to conform to changing needs and conditions; 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 non-renewable 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 the greatest unit output.

Constraints

Constraining factors which, by law, policy, regulation, or circumstance, influence the Gila Box Riparian National Conservation Area Management Plan include the following:

1. Public Law 101-628 (Arizona Desert Wilderness Act of 1990), Title II, designated the Gila Box Riparian National Conservation Area and established specific guidelines for the development of this management plan. This public law directs the BLM to conserve, protect, and enhance the riparian and associated areas within the conservation area for aquatic, wildlife, archaeological, paleontological, scientific, cultural, recreational, educational, scenic, and other resources and values within the RNCA. The law also directs the BLM to report to Congress every five years on the condition of the resources within the RNCA boundary.
2. The Wild and Scenic Rivers Act of 1968 (PL-90-542) and BLM Manual 8351
3. The Safford District Resource Management Plan placed the entire RNCA into Visual Resource Management Class II. The objective of this class is to

require the BLM to evaluate rivers in the Safford District Resource Management Plan (RMP - Appendix 3 - p. 453) for possible inclusion in the National Wild and Scenic Rivers System. The Gila River (23 miles in RNCA), Bonita Creek (15 miles in RNCA) and the San Francisco River (1/8 mile in RNCA) were determined as "eligible" in the RMP and were tentatively classified as "wild," "scenic," or "recreational" according to specific criteria.

As part of a statewide effort, suitability assessment reports for these "eligible" river areas were completed in September 1993. Based on these recommendations, the impacts of designation or nondesignation of each river segment were analyzed in the Arizona Statewide Wild and Scenic River Final Legislative Environmental Impact Statement (December 1994). On May 29, 1996, the Assistant Secretary of Land and Minerals, concurring with BLM's Recommendation, signed a Record of Decision finding the following river areas suitable within the boundaries of the Gila Box Riparian National Conservation Area: 8.1 miles of Bonita Creek as "recreational," 23 miles of the Gila River (15.2 miles as "scenic" and 7.8 miles as "recreational"), and 1/8 mile of the lower San Francisco River as "recreational." On April 16, 1997, a legislative package was transmitted from the Assistant Secretary to Congress formally recommending these river segments as potential components of the National Wild and Scenic River System. These suitable river segments will remain under management prescriptions to protect their wild and scenic river character and values until Congress acts upon these recommendations.

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.

4. The National Historic Preservation Act of 1966, Section 106, directs all federal agencies to take into account effects of their undertakings on properties included in or eligible for the National Register of Historic Places. Section 110 of the Act requires federal agencies to inventory their lands to locate cultural properties including traditional cultural properties, nominate eligible properties to the National Register, and protect and preserve their sites.

Cultural resource inventories will be completed within the RNCA before a project plan is implemented. This inventory will consist of a review of existing cultural resource records and completion of a standard Class III field inventory. Mitigation plans will be prepared and implemented in cases where adverse impacts to National Register eligible cultural properties cannot be avoided. Plans may require data recovery, site stabilization, construction of barriers, or some other action to remove or lessen the adverse effects of an RNCA project or action. Consultation with the State Historic Preservation Officer will be carried out consistent with the national cultural resources Programmatic Agreement and Arizona Protocol. Coordination with Native American tribes and other interested parties will be completed.

5. The American Indian Religious Freedom Act of 1978 protects and preserves the

American Indians inherent right of freedom to believe, express, and exercise their traditional religions, including but not limited to access to religious sites, use and possession of sacred objects, and freedom to worship through ceremonial and traditional rites. Federal agencies are directed to ensure that their actions avoid unnecessary interference with Indian religious practices.

6. Secretarial Order No. 3175 - Departmental Responsibilities for Indian Trust Resources, November 8, 1993, requires federal agencies to recognize and fulfill their legal obligations to identify, protect, and conserve the trust resources of federally recognized Native American tribes and tribal members, and to consult with tribes on a government-to-government basis and with the Bureau of Indian Affairs whenever agency plans or actions affect tribal trust resources. Arizona BLM defines Indian trust resources as "legal interests in property held in trust by the United States for Indian tribes or individuals."
7. The Endangered Species Act requires the BLM to conserve (protect and recover) threatened and endangered species and the ecosystem on which they depend. The Endangered Species Act requires consultation with the U.S. Fish and Wildlife Service on actions authorized, funded, or carried out by a federal agency that may affect listed species to ensure that the action is not likely to jeopardize the continued existence of any listed or proposed species. The BLM must ensure that actions authorized on public lands do not contribute to the need to list any other special status species.
8. All management actions must be in conformance with the BLM's Safford District Office Resource Management Plan. As adopted into the Resource

Management Plan, permitted grazing within the RNCA (upland areas) will be managed in conformance with the Arizona Standards for Rangeland Health and Guidelines for Grazing Administration (Appendix A).

9. Implementation of any and all components of this plan will depend entirely upon availability of funding and staffing.
10. Executive Orders 11990 and 11988 will be followed. Executive Order 11990, Protection of Wetlands, requires federal agencies to take action to minimize the destruction, loss or degradation of wetlands. The BLM will also work to preserve and enhance the natural and beneficial values of wetlands. Executive Order 11988, Floodplain Management, states that federal agencies will take action to restore and preserve the natural and beneficial values served by floodplains.
11. Operators on mining claims within the RNCA may not limit access to adjacent lands or public use of the surface resources (of the claims) for recreation, unless such public use materially interferes with prospecting or mining activities. Any measures designated to limit public access must be approved by the Field Office Manager before being put into place. This includes blocking access routes, construction of fences, or placement of signs around the perimeter of the area of operation. This requirement applies to all operations conducted under a mining notice or an approved mining plan. The authority for this is derived from U.S. vs. Curtis-Nevada Inc., 611 F.2d 1277 (1980).

In addition the Arizona Desert Wilderness Act of 1990, as described further in Chapter 2, withdrew the RNCA from all

forms of mineral entry, except for valid existing rights.

- P. Water quality constraints are guided by the Arizona Administrative Code, Title 18, Chapter 11, Water Quality Boundaries and Standards. The BLM is bound by the Federal Land Policy and Management Act of 1976 and the Clean Water Act as amended in 1987, to manage water quality to meet federal and state standards. The state code requires the BLM to manage water quality in rivers and streams to prevent further degradation of existing water quality; meet or exceed the water quality standards associated with the designated beneficial uses assigned to each segment; and prevent degradation of the water quality in any stream designated as "Unique Waters," such as Bonita Creek.
13. The Uniform Federal Accessibility Standards (Americans with Disabilities Act) will be followed in the interim to allow for reasonable accommodation of disabled individuals at recreation developments and facilities until such time as new regulations become final.
14. Department of Interior Manual, Part 910, Section 1.6, states that fires occurring on Department of the Interior lands will be classified as wildfires or prescribed fires. Wildfires are defined as free-burning and unwanted fires requiring suppression actions. Wildfires may not be used to accomplish land use and resource management objectives. Only prescribed fire may be used for this purpose. Prescribed fires are defined as the application of fire to wildland fuels to achieve identified land use objectives. Prescribed fire requires a preapproved written plan defining area, limits, and conditions necessary to achieve land use objectives through the use of fire.

15. The City of Safford holds four rights-of-way located in Bonita Creek which are associated with the City's water collection system. Collectively, these rights-of-way extend from the mouth of Bonita Creek to the San Carlos Apache Reservation boundary. In addition, these same rights-of-way continue along portions of the Gila River. City-conducted maintenance of the water collection system may result in minor to extensive impacts on the resources of the RNCA. Due to the nature of City-held interests by virtue of these rights-of-way, the BLM holds minimal oversight and control over the maintenance efforts of the City. However, the BLM will actively seek opportunities to assist the City in its maintenance efforts in order to minimize the impacts to the resources of Bonita Creek.
16. Surface water available for consumptive use from the Gila River Basin is controlled by the water rights defined in the Gila Decree (1935). The Gila Decree apportioned the entire flow of the Gila River, leaving very little excess waters for other consumptive beneficial uses.

The City of Safford and surrounding communities obtain their municipal and domestic water supply from Bonita Creek within the RNCA. The City holds an existing water right for 3,240,000 gallons per day. Additional water rights within the RNCA are held by the BLM and permittees for livestock waters.

Because senior water rights are located within the RNCA and mainly downstream of the RNCA, any additional water rights for a particular stream segment can only be acquired for non-consumptive uses, usually known as instream flow water rights. The water cannot be diverted or removed from the stream; it remains in the channel for wildlife, fisheries, and recreational uses. These are the only

recognized beneficial uses under state water law for an instream flow water right.

Issues and Areas of Concern

The following issues were identified at scoping meetings, Advisory Committee meetings, and public open houses during the planning process. These issues and concerns represent a wide spectrum of needs from the public and were the basis for the development of the management plan.

- Issue No. 1 - Management of off-highway vehicles (OHVs)
- Issue No. 2 - Tourism potential for the State
- Issue No. 3 - Management of recreation facilities and campsites
- Issue No. 4 - Riparian vegetation
- Issue No. 5 - Water rights and water quality
- Issue No. 6 - Protection of wildlife and associated habitat
- Issue No. 7 - Livestock management within the RNCA boundary
- Issue No. 8 - Minerals management
- Issue No. 9 - Cultural resource management
- Issue No. 10 - Roads in the RNCA
- Issue No. 11 - Private lands within the RNCA
- Issue No. 12 - City of Safford water system in Bonita Creek
- Issue No. 13 - Access
- Issue No. 14 - Wild and scenic river suitability
- Issue No. 15 - Fire management
- Issue No. 16 - Research and education
- Issue No. 17 - Traditional lifeway values

Consolidated Issues and Objectives

The 17 issues above have been consolidated into and addressed under nine categories. Each category has a series of objectives which address the issues grouped under that category. These objectives provide

the framework for managing the resources to achieve the overall goals of the RNCA. Following each objective is the rationale explaining how the objective will address the issues pertaining to that category. A series of management actions follows the rationale. These management actions, when implemented, will achieve the intended objective. The final section of each category describes the monitoring techniques and their rationale.

Category 1 - Riparian Area Management

Objective No. 1

Achieve the following tree-to-sapling ratios for cottonwood, willow, and sycamore woody species within seven years following a major flood event. Ratios are defined for five segments of Bonita Creek and four segments of the Gila River which have been identified as geologically and hydrologically distinct.

Segment 1 - from the mouth upstream 3.8 miles to the City of Safford's infiltration gallery	1:1
Segment 2 - from the upstream end of Segment 1 upstream 2.1 miles to .5 miles before Bonita Creek intersects Lee Trail Road	1:1
Segment 3a - from the upstream end of Segment 2 upstream 0.9 miles to Jones Road	1:1
Segment 4a - from the upstream end of Segment 3a upstream 2 miles to the Hackberry Road	1:1
Segment 3b - from the upstream end of Segment 4a upstream 2.5 miles to the top of the Narrows	1:1
Segment 5 - from the upstream end of Segment 3b upstream 2.8 miles to just below the Christensen Road	1:2
Segment 4b - from the upstream end of Segment 5 upstream 0.9 miles to the Reservation boundary	1:1
Segment 6 - from the west boundary of the RNCA upstream 3.5 miles to the Deadman Canyon Road	1:2
Segment 7 - from the upstream end of Segment 6 upstream 10.5 miles to Eagle Creek	1:5
Segment 8 - from the upstream end of Segment 7 upstream 2.5 miles to the San Francisco River	1:1
Segment 9 - from the upstream end of Segment 8 upstream 6.5 miles to the east boundary of the RNCA	1:3

Objective No. 2

Achieve the following tree and sapling densities for cottonwood, willow, and

sycamore species on Bonita Creek within seven years following a major flood event.

Bonita Creek Density		
Segment	Trees	Saplings
1	30/acre	37/acre
2	12/acre	17/acre
3	19/acre	29/acre
4	17/acre	18/acre
5	6/acre	10/acre
Gila River Density		
Segment	Trees	Saplings
6	15/acre	30/acre
7	2/acre	10/acre
8	8/acre	10/acre
9	5/acre	15/acre

Rationale 1 & 2

The ratio of trees to saplings is a good indicator of a structurally diverse community. A healthy tree/sapling ratio indicates continued recruitment of seedlings and saplings which ensures a continual replacement of larger trees. Over time the seedlings of riparian trees will mature into different age classes and the desired ratio of trees to saplings will be achieved. When this occurs, the BLM will have greatly improved wildlife habitat and visual aesthetics.

The density of riparian trees is one of the best indicators to assess proper functioning condition. Riparian trees are a major contributor to bank and terrace development and stabilization.

Major flood events remove large amounts of vegetation, change channel size and location, create new sites for species regeneration, and remove and build terraces. They occur naturally in a functioning system, and may occur as one event or a series of smaller events. Years of extreme drought or major floods may slow the recovery of the natural process and increase the time for reaching these objectives.

Management Action No. 1

The BLM will initiate Memorandums of Understanding (MOUs) and collaborative management with agencies and individuals outside the RNCA who might have an effect on the present or future conservation or quality of the RNCA.

Management Action No. 2

Vehicle access to Bonita Creek will mainly be restricted to two stream crossing points; the riparian road will be limited to three short reaches totaling 2.0 miles.

Management Action No. 3

The BLM will apply for instream flow water rights on the Gila River, San Francisco River, Eagle Creek, and Bonita Creek for the stream segments which fall within the RNCA.

Management Action No. 4

Boulder placement and tree plantings will be used where necessary to prevent vehicular access to riparian roads which are closed.

Management Action No. 5

When high flows make it necessary to rebuild a stream crossing, it will be made perpendicular to the stream and bank material will be pushed away from the stream and back onto the roadbed.

Management Action No. 6

The reach of Bonita Creek Road between the confluence with the Gila River and Bullgap Road will be rehabilitated by berming the upstream and downstream end of downcut road sections.

Management Action No. 7

Livestock will be deferred from the riparian areas within the RNCA for the life of this plan. Administrative decisions will be issued to the affected permittees. There will be incidental livestock trespass from breeches in fencing due to high water, vandalism, or other natural or human causes. The BLM will work closely with livestock operators to remove livestock and repair fencing as quickly as possible when incidental trespasses occur. Riparian corridors may be used on a very limited bases to trail livestock as part of pasture rotations that are implemented to achieve RNCA management goals and objectives. Allotment-specific livestock action are contained in Appendix D.

Rationale

The purpose of initiating MOUs and collaborative management will be to promote a healthy watershed through cooperative ecosystem management which may cross or encompass a variety of political boundaries.

By closing and rehabilitating riparian roads, the BLM will greatly reduce one of the major causes of riparian vegetation loss. Improperly placed and maintained riparian roads frequently lead to severe erosion by channeling flood flows along these roads and eroding streambanks and terraces.

The BLM is pursuing instream flow water rights for Bonita Creek and the Gila River in

order to protect riparian/aquatic habitats and their associated values. This type of water right is non-consumptive and will provide water to downstream users and recharge aquifers.

The designation legislation for the Gila Box RNCA requires the BLM to manage the Gila Box in a manner that conserves, protects, and enhances riparian areas. Additionally, the follow-up report of the House of Representatives, Committee on Interior and Insular Affairs(101-405), stated that the management mandate of the legislation is intended to be as protective as possible of natural and cultural resources. Deferment of grazing best meets the mandate to "conserve, protect and enhance. and provides the best protection for natural and cultural resources.

The selected action in the Upper Gila-San Simon Grazing EIS called for the deferment of livestock grazing in critical riparian and aquatic habitats along Bonita Creek and the Gila River. The BLM has worked with permittees to remove livestock from the riparian corridors. Over the last 20 years, nine of 11 permittees have voluntarily agreed to this management approach. The vegetated riparian area of the Gila River totals only 635 acres and Bonita Creek only 160 acres. At 795 acres, these areas can provide only a small amount of forage for livestock. Deferment of livestock may require some reduction in cattle numbers but, would provide for the quickest and most desirable riparian vegetative response.

Deferment of livestock grazing within the riparian areas of the RNCA is also consistent with the U.S. Fish and Wildlife Service "Programmatic Biological Opinion for the Safford/Tucson Field Offices' Livestock Grazing Program, Southeastern Arizona." Terms and conditions issued in the Biological Opinion are non-discretionary and must be implemented by the BLM. For consistency, the BLM has incorporated the terms and conditions into the allotment-specific actions contained in Appendix D.

Monitoring

Tree-to-sapling ratios and density will be measured within each of the designated segments of Bonita Creek and the Gila River. Monitoring will be done on a three-year basis.

Channel cross-sections will be resurveyed every six years to track stream channel morphology, bank stability, and terrace erosion and development.

Streamflow will be monitored to determine whether flow amounts are sufficient to produce and sustain the potential natural plant community. The BLM will implement monitoring required by the U.S. Fish and Wildlife Service's "Programatic Biological Opinion for the Safford and Tucson Field Offices' Livestock Grazing Program, Southeastern Arizona."

Rationale

Monitoring will be conducted every three years to determine seedling survival and the continued growth into the sapling size class. The ratios should reflect a decrease of sapling numbers as they grow into trees. In order to compute these ratios, the number of saplings and trees will be counted along transects taken at existing cross-sections. These counts can be used during evaluation to determine if densities are increasing. This indicates an upward trend toward achieving proper functioning condition.

Extremes in flow amounts (flood or drought) may cause woody species germination or survival to be impeded or eliminated. Monitoring streamflow will determine if any seedling/sapling mortality is due to natural causes or from management activities within the RNCA.

Category 2 - Recreation and Transportation System Management

Objective No. 1

Provide a mix of 15 to 35 low to moderately developed access points or recreation **site** developments to meet diverse visitor needs and expectations within the RNCA in 15 years.

Objective No. 2

Achieve and maintain a desired social environment, emphasizing a closer balance between motorized (roaded) and non-motorized (unroaded) recreational opportunities to meet the needs of diverse RNCA visitors and riparian resource concerns.

Rationale

The BLM needs to enhance and balance the types of recreational opportunities offered in the RNCA, provide facilities for those segments of public currently unserved, provide better services, positively affect the local economy, and control site-specific recreation impacts.

As visitor use in the RNCA continues to increase to over 20,000 visitor use days annually, negative impacts to the natural and cultural resources continue to increase from their use, primarily because people are allowed to choose where, when, and how long they wish to recreate. All too often, the site a recreationist chooses is one that is critical to

many wildlife species or is sensitive to disturbance, such as riparian areas. With the increased visitor use to this RNCA and the mandate of congress to conserve, protect, and enhance the riparian areas and its associated resources and values, it has become imperative now to manage recreational visitors to comply with this mandate from Congress. Managing the recreational use of these visitors can be accomplished by constructing facilities, designating certain areas for specific recreational uses, charging fees, and requiring permits for recreational uses.

Management Actions

Recreation

Dispersed recreation will continue in the RNCA. These existing recreational uses include camping, backpacking, hiking, picnicking, recreational driving, fishing, hunting, horseback riding, water play, tubing, boating, bird watching, photography, nature study, and mountain biking. A limited amount of semi-developed and developed sites will be provided to facilitate, control or enhance some activities, and are listed in this plan. As a result of monitoring, some activities may need to be changed, enhanced, or eliminated in the future. Special Recreation Use Permits for outfitting and associated fees for commercial outfitting and guiding will continue to be issued on a case-by-case basis for all activities.

Recreation Fees

The Land and Water Conservation Fund Act authorizes the BLM to collect entrance or admission fees, daily use fees for certain facilities, and special recreation permit fees for commercial, competitive, or organized group activities in the Gila Box RNCA. Due primarily to the current level of visitor use and facilities, the multiple access points, and lack of fee collection staff and facilities, BLM has deferred entrance or admission fees implementation to date. Upon approval of the management plan, the BLM will develop specific strategies for using available

authorities to collect reasonable and feasible recreation fees in order to support management and maintenance of the RNCA. The strategy will generally phase in fees as facilities, visitor use, and management presence are increased. It is unlikely "entrance or admission fee" authority will be used for the entire RNCA, but it may be used for specific management areas. The evaluation will be conducted in FY98 and will be re-evaluated biennially.

Administrative Site

BLM will provide an administrative site and campground host site on the level terrace southwest of the **Kearny** Camp monument. This site will be located between the proposed campground and the **Serna** Cabin at the mouth of Bonita Creek.

Information and Education

An interpretive brochure and river guide will be developed for the RNCA. Site or activity-specific brochures may be developed when there is a significant need or demand. The BLM will also provide educational programs as requested.

Cooperative Agreements

Cooperative agreements will be pursued with the City of Safford, Graham County, and Greenlee County with the intent of coordinating road maintenance and improvement of the transportation system within the boundaries of the RNCA. Where fences cross the Gila River, the BLM will work with grazing permittees to develop modified fences which river floaters can safely pass.

Boating on the Gila River

A moratorium restricting new commercial river outfitting companies from applying for Special Recreation Use Permits on the Gila River is hereby set at no more than five outfitting companies. Presently, there are three commercial outfitting companies permitted on this stretch of the Gila River. Permit allocations for commercial and private

river boating use will not be made until use levels reach 80 persons on the Gila River from the put in at the Old Safford Bridge to Bonita Creek. This means when river monitoring shows more than 80 persons in the canyon between the put in and Bonita Creek, a permit and fee for use of the river will be instituted. This does not mean 80 launches a day. A permit and fee system could be instituted prior to reaching the threshold of 80 persons in the canyon if monitoring indicates resource damage is occurring.

When the daily use reaches 80 persons within the 20-mile stretch of the Gila River mentioned above (based on monitoring), a permit allocation system will be implemented. A carrying capacity for the river will be determined and the use (permits) split evenly between commercial (50%) and private boaters (50%). Commercial outfitters will be permitted until five companies are permitted and the private boaters will be permitted initially on a first-come, first-served basis then, if needed later, by a lottery system. Commercial outfitters will be issued permits for a term of five years.

River boating use from the confluence of Bonita Creek and the Gila River to the take-out point at Dry Canyon would remain open for use with no restrictions on numbers of use. It is recognized that this three-mile stretch of the river is primarily used by the public for tubing and general water play since it is readily accessible from several points by vehicles.

Information such as the number of people per party, private vs. commercial trip, types of watercraft used, duration of float, number of boats, reported encounters, lunch and camp sites, resource impacts including campfires and sanitation and other factors will be collected during monitoring. Special regulations such as fire pans, sanitation methods or other factors may be instituted as necessary during the life of the plan, for commercial and private boaters.

No motorized watercraft will be allowed on the Gila River within the boundaries of the RNCA.

Wild and Scenic Rivers

As part of a statewide effort, suitability assessment reports for BLM Arizona "eligible" river areas were completed in September 1993. Based on these recommendations, the impacts of designation or non-designation of each river segment were analyzed in the Arizona Statewide Wild and Scenic River Final Legislative Environmental Impact Statement (December 1994). On May 29, 1996, the Assistant Secretary of Land and Minerals, concurring with BLM's recommendation, signed a Record of Decision finding the following river areas suitable within the boundaries of the Gila Box Riparian National Conservation Area:

The northern 8.1 miles of Bonita Creek have been found suitable for designation with a recommended "recreational" classification. The Safford District Resource Management Plan identified fish and wildlife habitat values, riparian, water quality, recreational and cultural resources as outstandingly remarkable values.

All 23 miles of the Gila River within boundaries of the RNCA have been found suitable for designation with 15.2 miles recommended for "scenic" classification and two segments (one on each end of the scenic segment) totalling 7.8 miles recommended for "recreational" classification. The Safford District Resource Management Plan identified scenic, fish and wildlife habitat, recreation, geologic, historical and cultural resources, and hydrological values as outstandingly remarkable values.

On April 16, 1997, a legislative package was transmitted from the Assistant Secretary to Congress, formally recommending these river segments as potential components of the National Wild and Scenic River System. These suitable river segments will remain under management prescriptions to protect their wild and scenic river character and values until Congress acts upon these recommendations.

Campgrounds (2)

Both campgrounds, when constructed, will be self-service pay station fee sites. Fees will be charged for overnight use for each campsite in each campground.

Owl Canyon - Develop a 10-unit campground on the north bench above the Gila River near Owl Canyon. Facilities will include tables, grills, a toilet, and an informational kiosk.

River View - Develop a 15-unit campground 1/2 mile downstream from the confluence of Bonita Creek and the Gila River primarily for tent and vehicle-based camping. The campground will be located just above the river on the bench on the north side of the Gila River. Coordinate with the City of Safford to develop water at the campground. Facilities available will include toilets, tables, grills, group areas, parking areas, and an informational kiosk.

Picnic Areas (4)

When the above campgrounds are constructed, nearby designated picnic areas (listed below) will be changed to day use only so that the BLM may accommodate and manage increased visitor use in these more easily accessible and desirable areas. Day use picnic areas will remain free of charge and no fees collected.

Dry Canyon - Develop a small picnic area at the existing graveled parking area. Facilities will include tables, upright grills, a toilet, and informational signs.

Spring Canyon - Retain the existing picnic area and install upright grills.

Serna Cabin - Construct a parking area near the mouth of Bonita Creek and develop a picnic area with signs, tables, upright grills, and a toilet.

Old Safford Road Bridge - Upgrade the existing picnic area on the north side of the Gila River and add two more picnic tables.

Boat Access Facilities (2)

Old Safford Road Bridge - Retain the existing boat launch on the south side of the Gila River. Priority use for this area will be

for boaters to launch their boats. The area will still be available for day use unless problems arise with congestion of the area during launching of boats. No overnight use will be permitted because of congestion with launching of boats.

Dry Canyon - Retain the existing graveled parking area for boaters to park their vehicles while rafting the Gila River. Maintain the beach access road 200 feet east of the parking area for access to the Gila River for day use and as a boat take-out area.

Trails (2)

Old Safford-Morenci Trail - Maintain and mark the trail from its west trailhead to Bonita Creek.

Camel Back - Develop a trailhead and parking area, and maintain the existing trail to the Gila River.

Interpretive Sites (1)

Gila Box Watchable Wildlife Area - Construct a watchable wildlife viewing deck on the west rim above and north of the Serna Cabin Picnic Area for birdwatching and environmental education.

Overlook and Parking Areas (5)

Orange Cliff Overlook - Upgrade the existing road to a developed overlook just above the Orange Cliff on the Gila River. Tables, benches, and a fence will be constructed at the overlook.

Goat Road Parking - Develop a parking area just above the rocky rim of Bonita Creek on Goat Road. Hikers can leave their vehicles there while hiking Bonita Creek. Provide tables and an informational kiosk.

Lee Trail Parking - Utilize the existing parking area at the bottom of Lee Trail where hikers can leave their vehicles while hiking up Bonita Creek. Provide tables and an informational kiosk.

Christensen Place Parking - Develop a trail head and parking area north of the private land. Use Bonita Creek as the route to the Pueblo Devol cliff dwelling.

Red Knolls Parking - Develop a parking area on the bench above the last turn in the road before the bottom.

Information Kiosks (3)

Solomon Pass Entry Point - Place an information kiosk near the entry monument.

Kearny Camp Road Entry Point - Place an information kiosk near the entry monument, provide tables, and construct a fence.

Old Safford Road Bridge - Place an information kiosk at the Owl Creek Campground.

Transportation System

This section covers road network priorities and maintenance levels for the entire RNCA and related outlying areas, including roads in the upland areas and riparian road segments.

As required by The Arizona Desert Wilderness Act of 1990 (Public Law 101-628), the use of motorized vehicles within the RNCA will be **confined** to designated roads only (see map enclosed for road designations). The area outside any designated road will be closed to motorized vehicle travel. The Gila River corridor within the RNCA boundaries will not have a designated road within it, therefore this corridor will be closed to all motorized vehicles.

The Arizona Desert Wilderness Act of 1990, Public Law 101-628, states:

The Secretary shall allow only such uses of the conservation area as the Secretary finds will further the purposes for which the conservation area is established. Except where needed for administrative purposes or to respond to an emergency, use of motorized vehicles in the conservation area shall be permitted only on roads specifically designated for such use as part of the management plan...

Therefore, all motorized vehicles (trucks, cars, sand rails, ATVs) will only use the following designated road network within the RNCA boundaries. Off-road vehicle use is

prohibited within the boundaries of the RNCA. This includes the entire river corridor and associated riparian areas of the Gila River. For a detailed look at vehicle access, see the enclosed map.

Designated Road Network

Public Vehicle Access to Bonita Creek
West Side of Bonita Creek

Kearny Camp Road (Sanchez junction to confluence of Bonita Creek and Gila River)

West Bonita Rim Road

Segment 1 - Kearny Camp Road to Solomon Pass Road

Segment 2 - Solomon Pass Road to Salt Trap Road

Solomon Pass Road (Solomon Pass Road to Lee Trail Road)

Salt Trap Road

Segment 1 - Solomon Pass Road to Red Knolls Road

Segment 2 - Red Knolls Road to Johnny Creek Road

Red Knolls Road (Salt Trap Junction to **Bonita** Creek)

Lee Trail (Solomon Pass junction to Bonita Creek)

East Side of Bonita Creek

East Bonita Rim Road

Segment 1 - Bullgap Road to Jones Junction

Segment 2 Jones Road To Christensen Place

Hackberry Road (East Bonita Rim Road to Bonita Creek)

Riparian Roads in Bonita Creek

City Pipeline Road upstream to the City of Safford's picnic area (approx. 1.50 miles)

City Pipeline Road downstream to the Bullgap Road (approx. .25 miles)

Red Knolls Road to Hackberry Road
(approx. .25 miles)

Point Access to Bonita Creek
Jones Road to Bonita Creek
Lee Trail Road To Bonita Creek

Public Vehicle Access to the Gila River
South Side of the Gila River

Melendrez Farm Road (San Jose Road to City
Pipeline crossing)

Deadman Canyon Road (Black Hills Back
Country Byway to the Gila River)

Black Canyon Road (Deadman Canyon Road
to Gila River)

Black Hills Back Country Byway (Highway
191 to Highway 191)

Crossings of the Gila River
Old Safford Bridge Road on the Black Hills
Back Country Byway

Point Access to the Gila River
Dry Canyon Road
Spring Canyon Road
Riverview Campground Road
Melendrez Farm Road
Deadman Canyon Road
Black Canyon Road

Public Vehicle Access to the **Boundary** of the
RNCA
North Side of the Gila River

Bullgap Road (Bonita Creek to Bullgap
and White Mesa)

Orange Cliff Road (**Bullgap** Road to
Orange Cliff)

Gillard Hot Springs Road (Black Hills Back
Country Byway to the north boundary of the
RNCA)

South Side of the Gila River

Wire Corral Mesa Road (Black Hills Back
Country Byway to 1/4 mile south of the south
side boundary of the RNCA)

George Hill Road (Wire Corral Mesa Road to
the south side boundary of the RNCA)

Signing

Locations for information and directional
signs along the road network will be
identified. The BLM will purchase and
replace signs, as necessary, and ensure
consistency in sign design, materials, and
size.

Cattleguards

The BLM will place and maintain
cattleguards on a priority basis where traffic
volume or range considerations warrant.

Scheduled and Corrective Maintenance

Priorities for scheduled and corrective
maintenance will be planned, but may vary
each year, based on traffic volume, resource
needs and funding.

Rationale

These recreation management actions will
provide additional facilities and opportunities,
enhance existing facilities for safer more
enjoyable experiences, control physical
impacts, and offer variety and balance in the
activities offered and available in the RNCA.
As stated previously, additional facilities such
as picnic areas, parking areas, and
campgrounds are needed to accommodate the
increased recreational use of certain popular
areas within the RNCA to reduce the impact
from visitors on the natural and cultural
resources. In areas where recreational use is
dense, such as the west end of the RNCA
(near the confluence of Bonita Creek and the
Gila River, Spring Canyon, and Dry Canyon),
visitors must be managed into designated
areas to avoid indiscriminate overuse of these
popular areas.

Initially, fees will be charged at the campgrounds soon to be constructed. The areas where these campgrounds will be constructed have been chosen as a result of increased use in those areas and to control late-night unacceptable use. Although there will be a nominal charge at these campgrounds for overnight use of a campsite, it has been documented from nearby similar sites that the late-night groups that have exhibited unacceptable behavior are unwilling to pay the fee and consequently are displaced, and more family-oriented groups replace them as visitors. We have chosen, at this time, no fees for entry into the RNCA primarily because of the multiple access areas into the RNCA, but also to allow for traditional users who have used the area free for day use for many years. The same rationale was used, at this time, to decide not to charge fees at day use picnic areas.

Roads in the riparian area, especially in Bonita Creek, can cause water to be channelized in the road during moderate flood events and cause the loss of soil on the riparian terraces which consequently reduces riparian vegetation. In addition, vehicle use in the riparian area with its associated noise, creek crossings, and motion will disturb various wildlife species. However, there is a need to allow vehicle traffic in the riparian area in order to cross Bonita Creek to access public lands on the east side of Bonita Creek and to access some traditional vehicle-based recreation areas within the RNCA.

The roads chosen to be designated in the final management plan in Bonita Creek were chosen because they had the least negative impact to the natural and cultural resources while still allowing some vehicle access to traditional vehicle-based recreation areas within the RNCA, and to allow for the only access to the uplands on the east side of Bonita Creek. The number of miles of riparian roads within Bonita Creek has been reduced from 15 miles to approximately two miles.

No road was designated in the Gila River floodplain or riparian area for vehicle use,

primarily because of the language in the House of Representatives Report concerning the designation of the Gila Box RNCA. The language from that report concerning roads in the Gila River is:

The Committee also notes the language in Section 4(d)(2) of the bill requiring use of motorized vehicles to be permitted only on roads specifically designated for their use. ORV use in the river bottoms of the area has been a longstanding controversy. The language of this section is clearly intended to terminate this activity in the conservation area and keep all motorized access limited only to those parts of the conservation area where such use will not conflict with the primary mandate to conserve, protect and enhance the area's resources and values.

Although the language above was the primary reason for not designating a road in the Gila River floodplain, additional resource and management concerns were expressed from the majority of the interdisciplinary team in designating a road in the Gila River. One, how would the BLM designate a road in an ever-changing floodplain? Would we mark the road every time a moderate flood washed the designated road away or would we designate the entire floodplain in the Gila River a road? Two, could we expect the vehicles to stay on the designated road the entire 23 miles of the Gila River and not venture off into sensitive riparian areas, and could this be enforced? Three, there was some concern vehicles crossing the river may have some impact to threatened and endangered native fish. Four, noise from the vehicles would have a negative impact on wildlife utilizing the Gila River corridor within the RNCA. Given these management questions and resource concerns, coupled with the House of Representatives language on the issue, the majority of the interdisciplinary team felt that a road should not be designated in the Gila River floodplain or riparian area.

All existing roads not designated by this management plan will be closed by either rehabilitating the road to a natural state or blocking the road by means of boulders,

gates, tree plantings, or other means that will eliminate the use of motorized vehicles on those roads not designated.

Monitoring

Traffic and trail counters will be placed at strategic locations zone to record the number of vehicle or non-motorized entries. The counters will be read regularly and at key times to track levels of visitor use by holiday, weekend, season or event.

Registration stations will be set up for river floaters at the put-in and take-out points. Information will be collected on a voluntary basis and spot-checked with visual observation during peak use weekends or weekdays. Commercial use information will be submitted by outfitters as required.

Activities at dispersed and developed recreation sites will be recorded, including the numbers of people and any associated impacts.

Rationale

Recreation use monitoring will indicate the amount of overall use in the RNCA. The data will provide feedback to the BLM so that

recreation sites or programs can be modified as necessary to better accommodate visitor use or reverse trends before they reach unacceptable levels of physical or social impact. Specifically if visitor use is causing resource damage at any recreation facility beyond typical use impacts action will be taken to ~~correct~~ the visitor use problem. In addition if visitors are causing resource damage in areas away from recreation facilities action will be taken to mitigate the resource damage or the site closed to recreational use.

Category 3 - Cultural Resource Management

The BLM manages cultural resources (cultural properties and traditional lifeway values) through use allocation. Use categories consist of scientific use, public use, traditional use, experimental use, and conservation for future use. Cultural properties are managed to preserve and realize these uses.

The following cultural resource properties are hereby allocated to Scientific Use: AZ W:14:6(ASM), AZ W:14:7(ASM); AZ W:14:8(ASM); AZ CC:2:2(BLM); AZ CC:2:3(BLM); AZ CC:2:8(BLM); AZ CC:2:56(BLM); AZ CC:2:140(ASM); AZ CC:2:141(ASM); AZ CC:2:142(ASM); AZ CC:2:143(ASM); AZ CC:3:4(BLM); AZ CC:3:5(BLM); AZ CC:3:6(BLM); AZ CC:3:7(BLM); AZ CC:3:8(BLM); AZ CC:3:14(BLM); AZ CC:3:21(BLM); AZ CC:3:23(BLM); AZ CC:3:24(BLM); AZ CC:3:35(BLM); AZ CC:3:36(BLM); AZ CC:3:37(BLM); AZ CC:3:52(BLM); AZ CC:3:53(BLM); AZ CC:3:67(BLM); AZ CC:3:52(ASM); AZ CC:3:64(ASM).

The following cultural resource properties are hereby allocated to Public Use: AZ CC:3:31(BLM); AZ CC:3:38(BLM); AZ CC:3:63(BLM).

The following cultural resource property is hereby allocated to Discharged Use: AZ CC:3:20(BLM).

The following cultural resource properties are hereby allocated to both Scientific Use and Public Use: AZ W:14:4(BLM); AZ W:14:18(BLM); AZ W:14:5(ASM); AZ CC:2:1(BLM); AZ CC:2:11(BLM); AZ CC:2:57(BLM).

The following cultural resource property is hereby allocated to Scientific Use, Public Use, and Management Use: AZ ~~CC:3:56(BLM)~~

Thirteen issues identified by the public and BLM during project scoping and review of the draft management plan pertain to the management of cultural resources. These issues and concerns have been consolidated into two issues:

1. Need to protect, inventory, and enhance cultural resources within the RNCA.
2. Which cultural sites should be made available to public use through interpretation and other means, and which

cultural sites should be reserved for scientific use?

Two cultural resource management objectives have been set to address these issues, and management actions have been identified to accomplish each objective.

Objective No. 1

Identify and protect the RNCA's cultural resources by conducting a minimum of six inventories, scientific studies, or preservation actions during the life of the plan.

Management Actions

The management actions to be implemented to meet this objective are described below in rough order of decreasing importance.

1. **Monitoring:** BLM personnel and Arizona Site Stewards will patrol the RNCA to check the integrity of known cultural properties. Because visitor use is expected to be the source of most of the detrimental disturbance to cultural resources, areas with the highest visitation will be patrolled most frequently and patrols will be more frequent during periods of heavier use.
2. **Old Lady Gay Cabin:** The site is allocated to scientific and public use. Architectural stabilization of this historic cabin on Bonita Creek will be completed to preserve its scientific and public use values. The stabilization work was initiated in 1996 and is continuing. The site will be patrolled by staff archaeologists. The site will be interpreted to the public and scientific studies are planned (see Action No. 1 under Cultural Resource Objective 2).
3. **Stabilization:** Preservation management actions will be developed and implemented to maintain the most important fragile sites at current levels of structural integrity. These actions will implement the RNCA portion of the Gila Resource Area's Cultural Resource Management Plan (CRMP) for Sites With Standing Architecture.
4. **Pueblo Devol:** The site is allocated to scientific and public use in the Standing Architecture CRMP. The Cultural Resource Project Plan (CRPP) for the management of this cliff dwelling complex will be implemented following revisions to scale down the public use actions. The plan prescribes mitigative excavation, architectural stabilization, and public interpretation. The first two of these actions have been completed. The site will be protected and preserved by patrolling the site and by completing stabilization actions as needs are identified. See Action 2 under Cultural Resource Objective 2 for a description of the planned public interpretation actions.
5. **Mimbres Site:** This prehistoric Mimbres Mogollon village near the River View Campground will be patrolled frequently to closely monitor disturbance from recreationists and looters. If collecting and digging become serious enough to threaten the site's eligibility for listing in the National Register of Historic Places, the site will be fenced with chain link or excavated by a professional contractor.
6. **Serna Cabin:** This historic cabin, also known as the Bonita Creek Stone Cabin, has been restored and an interpretive sign installed. The site, located at the mouth of Bonita Creek, was allocated to scientific and public use in the standing structures CRMP. The cabin will be protected by conducting regular patrols by the Arizona Site Stewards and the Field Office Ranger. Maintenance work will be conducted on the cabin as needs are identified through monitoring. In the future, the site may be used as a visitor contact station for the RNCA or be used in some other capacity.

7. **Records Search:** Existing data on the RNCA's cultural resources will be retrieved from BLM and other organization's libraries and records files. GIS maps and files may be created with data from the AZSITE computer data base. This existing data will be used in management and planning, including the planning of field inventories.
8. **Inventory:** A field inventory of the RNCA will be completed to collect the base data required to meet the BLM's management obligations and resource management objectives. The level of inventory and schedule for completion will be based on availability of funds. The inventory will be completed in stages.
9. **Inaccessible Site Recording:** It is expected that rare or exotic cultural resources occur in the RNCA in especially hard-to-reach places on cliff walls. Persons with technical climbing or caving expertise will be enlisted to locate and record cliff dwellings, caves and rock shelters in the RNCA.
10. **Public Information and Education:** In addition to providing information to the public through the on-site interpretation of cultural properties and other actions described in this section, BLM will disperse information through brochures, tours, ranger contacts, news releases, special events, and other means. The objective of these activities will be to educate the public on the cultural history of the RNCA, explain the value of cultural resources, instill a public land conservation ethic, and solicit participation in preserving this cultural heritage.
11. **Plumed Serpent:** This rare prehistoric polychrome pictograph site is on property owned by the City of Safford. It is increasingly weathered and subject to visitation. Although the site has been recorded by Dr. Wesley Jernigan, its high

scientific importance and high potential for uncontrolled public use requires that the site be closely managed. The BLM will work with the City to manage and protect the site.

12. **Cooperative Agreements:** Cooperative agreements with non-federal land owners will be sought to foster partnerships in the collaborative management of cultural properties located in the RNCA (primarily those properties situated on non-federal land). Such partners are the City of Safford, Greenlee County, Phelps Dodge Mining Company, and individual land owners. These agreements may be specific to cultural resource management or may be multiple resource/multiple use agreements.

Rationale

These actions will identify and preserve the RNCA's cultural resources. They provide for the preservation of these values while allowing scientific and public use of select resources to meet the public demand. Preservation actions are designed to maintain resources in their present condition to preserve their values. The inventories and studies will be oriented toward identifying the resources and values present in the RNCA and toward meeting regional research objectives and expanding BLM's knowledge in each of the historic themes discussed in the draft management plan. Acquisition of this knowledge, combined with increased knowledge of the processes involved in previous land use, should be of value to present and future scientists, land managers, and the public. Such increased knowledge should also contribute to the interpretation of cultural and other resources to the public and to the education of the public on the value of these resources. Accomplishing this objective will contribute to meeting Safford District Resource Management Plan objectives and objectives of activity plans and BLM program initiatives.

Monitoring

The number of preservation actions, inventories, and scientific studies completed in the RNCA in a year will be monitored. Monitoring will be completed annually by staff archaeologists. The monitoring will be conducted as part of BLM's end-of-year budget review. Funding to conduct or support activities in subsequent years will be requested during the annual budget preparation process.

Objective No. 2

Enhance the RNCA's cultural resource scientific and public use values by promoting research, conducting a minimum of two research projects, and developing a minimum of three interpretive sites within the life of the plan.

Management Actions

1. Old Lady Gay Cabin: The site is allocated to scientific and public use. Scientific studies will be conducted consisting of the excavation of the site as part of the Chinese study described in Action 8 below. The site will be interpreted to the public through the placement of interpretive signs at the site. See Action 2 under Objective 1 above for protection/preservation plans.
2. Pueblo Devol: The site is allocated to scientific and public use. No specific scientific studies are planned beyond the mitigative excavations that have been completed. BLM will permit studies as discussed below under Action 3a). Public interpretation will consist of on-site interpretive signs and guided tours. Promoting visitation through improved access, construction of visitor facilities, and advertising through brochures and other media will not be completed, due to BLM's lack of resources to manage this fragile site under conditions of increased visitor use. See Action 4 under Cultural Resource Objective 1 for a description of protection/preservation action.
3. Research: BLM will promote scientific research in the RNCA through the following actions, listed in order of increasing involvement of BLM personnel and financial resources.
 - a) Permit Activities: Individuals or groups wanting to conduct scientific studies will be allowed to do so providing they are qualified and the objectives and conditions of the RNCA management plan are met.
 - b) Solicit Activities: BLM will seek out potential researchers and encourage their interest in the RNCA. Examples include placing notices in the newsletters of government agencies, consulting firms, professional societies and amateur societies; and contacting professionals, organizations, and universities.
 - c) Fund Activities: The BLM will provide financial ~~and/or~~ logistical support (pending availability) for research activities deemed consistent with the Safford District Resource Management Plan and this management plan.
 - d) Conduct Activities: BLM personnel will, on an occasional basis, direct and coordinate scientific research programs (including management actions described in this plan).
4. Eagle Creek Village: BLM will explore avenues for working with Phelps Dodge, Inc., the site's owner, to record and interpret this prehistoric village to the public. If the BLM acquires the property, the same management action will be completed. Public interpretation will consist of on-site interpretive signs.
5. Gila River/Old Safford Bridge: The historic bridge on the old Safford-Clifton Road (now the Black Hills Back Country Byway) located on the Gila River near the east end of the RNCA, will be interpreted to the public by including interpretive messages in the information provided at

the kiosk at the Owl Canyon Campground.

6. **Serna Cabin:** The cabin was allocated to scientific and public use in the Standing Structures CRMP. No scientific studies are planned beyond the mitigative excavations and research which occurred for the restoration project or the research that was conducted in the Bonita Creek ethnoecology study. A more permanent interpretive sign will be placed at the site. See Action 6 under Cultural Resource Objective 1 above for information on site protection/preservation.
7. **Ethnoecology Study:** An ethnoecology study may be completed on the Gila River arm of the RNCA. Such a study has been completed for Bonita Creek. The study would consist of conducting archival and library research and conducting interviews to gather data and make interpretations on the historic use of the area and the environmental changes that resulted. A major component of the study would be to identify traditional cultural places and traditional lifeway values (Native American, Hispanic, and other).
8. **Chinese Study:** Four historic sites on Bonita Creek may be test-excavated to determine if Chinese settlers lived at or built the sites' structures. The sites are: AZ W:14:5 (ASM) - Old Lady Gay Cabin; AZ W:14:6 (ASM) - Chinaman's Place; AZ W:14:9 (ASM) - Moore Place; and AZ W:14:12(ASM). Two of the sites are on public land and are allocated to scientific use. Two of the sites are presently on private land; the BLM would work with the land owner to complete this action.

Rationale

Meeting this objective will address public concerns and BLM program initiatives to provide research, recreational and educational opportunities to the public. The goal is to

increase our knowledge of the area's prehistoric and historic past and to educate the public on the value of preserving their cultural heritage, strengthen people's sense of personal responsibility for the stewardship of America's cultural heritage, and ultimately to preserve our cultural heritage values. The actions will implement BLM program initiatives (Adventures in the Past, Heritage Education, and Recreation 2000). These actions will also contribute to implementing the Safford District Resource Management Plan and cultural resource activity plans.

Monitoring

The number of research projects and number of sites developed for public interpretation in the RNCA will be monitored by the staff archaeologists and recreation planners to ensure that research was promoted and an average of one site is developed every two years. Monitoring will be completed as part of the BLM's end-of-year analysis and during the preparation of the annual budget.

Category 4 - Fish, Wildlife, and T&E Species Management

Objective No. 1

Maintain and/or enhance populations of threatened, endangered, and other priority species identified in the Safford District Resource Management Plan. Where appropriate, consider socioeconomic and other information and population goals in species recovery plans. Population objectives will be established in conjunction with the Arizona Game and Fish Department and U.S. Fish and Wildlife Service. Population numbers will be developed, pending input from other agencies necessary to set those numbers, and incorporated into the plan at the time of the five-year report to Congress on the RNCA.

T&E and Special Status Species Objectives Table

Species Population Objective	Listed Species
Peregrine Falcon	To be determined from recovery plan and 1993 addendum
Bald Eagle (wintering)	3 to 5 birds in the RNCA
Razorback Sucker	To be determined (no recovery plan)
Southwestern Willow Flycatcher	To be determined (no recovery plan)
Cactus Ferruginous Pygmy-Owl	To be determined (no recovery plan)
Arizona Hedgehog Cactus	To be determined (no recovery plan)
Candidate Species	
Southwest Cave Myotis	To be determine
Western Mastiff Bat	To be determined
Goshawk (wintering)	To be determined
Southwest Toad	To be determined
Lowland Leopard Toad	To be determined
Gila Chub	Segment 1 - 150 adults/mile Segments 3 and 5 - 185 adults/mile
RMP Priority Species	
Bighorn Sheep	200 sheep in the RNCA
Javelina	To be determined
Mountain Lion	To be determined
Black Bear	To be determined
Western Yellow-Billed Cuckoo	To be determined
Common Black-hawk	Maintain 10 existing pairs in RNCA
Wild Turkey	To be determined
Montezuma Quail	To be determined

Neotropical Migratory Bird Objectives Table

Plant community	Number of Bird Species	Number of Individuals
Mature mesquite bosque	30-38	400-670
Mature mesquite bosque with mature mixed broadleaf riparian forest	40-49	500-1000
Mature mesquite bosque with mature and young mixed broadleaf forest	40-46	300-700

Rationale

The Endangered Species Act is a law that requires **BLM** to conserve and recover listed populations, and prevent other species from becoming listed. RMP goals established management priorities for species and groups of species in the District. Wildlife 2000 plans, including those for special status fishes, upland game birds, desert bighorn sheep, and raptors, set species-specific objectives for the **BLM** in the Gila Box RNCA.

The legal constraints of the Endangered Species Act require federal agencies to protect listed and proposed wildlife and plants and their habitats. Other laws may direct the **BLM** to manage towards other goals on public lands.

Population status is known for only a few species or groups. Other species have not been inventoried; all that is known is that they are present. The above population goals may be adjusted based on new habitat information, better monitoring data, or different objectives in other plans.

Management Action 1

The **BLM** will monitor populations and habitats of threatened and endangered species, plus other priority species identified in the Safford District **RMP**, for special management concerns. Frequency of monitoring will vary with the species or group of species.

Baseline Monitoring (5 sites): Wildlife species presence and their habitats will be monitored and compared to historical records.

This effort will be repeated at the end of this 15-year plan in order to compare changes that have occurred in different portions of the RNCA that were managed differently. All riparian communities will be sampled with priority species receiving special effort. Because few activities are permitted, there will be few variables for comparison at the end of the planning period other than natural habitat variations.

Breeding Bird Surveys (5 locations)

Breeding birds are sensitive to change in habitat and can be excluded from areas of disturbance. Several portions of the RNCA with different levels of recreation use will be monitored throughout the planning period to detect changes in avian use that result from changes in habitat or levels of human activity. Specialists will look for changes in avian use that resulted from changes in habitat or other human activity. Mesquite bosques and broadleaf riparian tree communities will be compared over time. Results will be incorporated into plan updates or revisions. The limited activities allow a monitoring system that focuses primarily on plant communities and single management variables and a simple study design can be used.

Migratory Bird Surveys (5 locations)

Baseline data will be collected on migratory birds using the riparian habitat in the RNCA. The variable diameter plot method

will be used during the breeding season in mesquite bosques, mixed riparian forest, and mixed forest communities. This effort will be repeated at the end of the planning effort to compare changes to determine if changes are necessary in its future management.

Aquatic Habitat Inventory and Monitoring

An inventory of aquatic habitat will provide a baseline for defining future trends in bank stability and aquatic habitat diversity and quality. Monitoring of aquatic habitat will be repeated periodically. A large array of resource protection measures are available. Proactive efforts for native fishes not only require natural processes to occur unimpeded, but also require changing past management actions that interfere with habitat potential.

This is specially true in lower Bonita Creek. Intensive population estimate surveys for Gila chub will be conducted in permanent representative (key) areas of the creek in order to determine population stability and viability in the upper and lower reaches of this creek. The other species in Bonita Creek and the Gila River fishery will be inventoried; permanent monitoring stations will be established in representative (key) reaches for annual monitoring of fish population trends. All fish monitoring activities will be coordinated with AGFD Region 5.

Fish Inventory and Monitoring

An extensive, cooperative inventory of the fishery will provide valuable trend data as well as new baseline for current management. Monitoring of fishery trends will be conducted twice over the life of this plan. This will provide an abbreviated version of baseline inventory of fish abundance in cooperation with AGFD. The monitoring will use key sites located during the initial inventory for long-term comparisons.

Razorback Sucker Monitoring

Razorback suckers will not be monitored annually due to the findings of recent intensive surveys aimed at detecting their

presence. The population of this fish in Bonita Creek is either completely extirpated or at such low levels as to be undetectable at this time. However, razorback suckers will be surveyed during the above mentioned general cooperative fisheries inventory.

Rationale

The condition of the riparian area is expected to improve as a result of changes in the management of the RNCA. The populations of most priority species will benefit from the proposed action. Rates of improvement and numerical change of individual species may vary depending on the habitat requirements and permitted activities.

Management Action 2

Enhancement of wildlife habitat can be conducted where the natural ecological processes may be slow or may have been set back by historical or ongoing activities.

Tree Plantings for Raptors (91 trees)

Large dormant poles of native trees will be planted in areas where there are insufficient existing trees for black-hawks, ferruginous pygmy-owls, bald eagles and ospreys. Sites are in areas where the natural processes are too slow, or at sites impacted by historic or ongoing activities that reduce natural regeneration and tree survival.

Native Shrubs

Native plants including shrubs, trees, and vines, may be planted or seeded to speed the rate of habitat recovery. Only plants native to and growing in the Gila watershed will be used.

Owl Nest Boxes

Nest boxes for the federally listed cactus *ferruginous* pygmy-owl may be considered for placement on trees in unoccupied but potential habitat along Bonita Creek and the Gila River. This would require Section 7 consultation with U.S. Fish and Wildlife

Service. Potential habitat for the pygmy-owl would be mature mesquite bosques with scattered cottonwood trees. Previous efforts attracted other owl species and showed some potential for this species.

Non-Native Plants

Non-native plants may be **controlled** where they interfere with natural ecological processes. Special emphasis will be placed on salt cedar. Where the natural process of flooding and native plant competition fail to remove these non-native plants, other means of removal may become necessary. Methods will be in compliance with the Vegetation Manipulation Environmental Impact Statement (July 1991).

Rationale

The riparian areas of the RNCA are expected to improve throughout the life of the plan. Flooding is part of this natural process but, because of past management practices, can slow this natural recovery. Other activities, historic or ongoing, may have set back or slowed this process also. Habitat enhancement can speed this natural ecological recovery process.

Management Action 3

The biodiversity of the RNCA can be enhanced or augmented with the reintroduction of native fish and wildlife or the control of non-native ones.

Priority Wildlife - Reintroductions

Where monitoring identifies suitable habitat, or as habitat develops naturally or artificially during the life of this plan, the BLM may, in conjunction with AGFD and USFWS, evaluate and conduct recovery efforts for native wildlife species.

Non-Native Wildlife

Exotic wildlife may be controlled where it interferes with natural processes. All species control efforts will be in cooperation with

Arizona Game and Fish Department and the U.S. Fish and Wildlife Service.

Native Fish Reintroduction

The BLM, in cooperation with AGFD and USFWS, will determine the suitability of existing habitat for the range of extension or reintroduction of 10 native species. Species for analysis include razorback sucker, bonytail chub, Colorado squawfish, roundtail chub, flannelmouth sucker, woundfin minnow, spikedace, **loach** minnow, desert pupfish and Gila topminnow. Inventory and analysis may vary between groups of fish (e.g. big river fishes, stream fish, spring/marsh fish). Physical habitat data will facilitate production of a prioritized list of fish to introduce into the waters of the Gila Box RNCA. However, any final list will also take other data and factors into account (e.g. predatory exotics, hydrologic extremes, socio-political incompatibility).

Prior to reintroduction or augmentation of a native fish, there will be a cooperative interagency agreement between the BLM, AGFD, and USFWS. Because the BLM manages its land under a multiple use mandate and has prior agreements with other users, including the City of Safford for the water system, reintroduction agreements will resolve conflicts prior to release of any federally listed species.

In order to evaluate the success and future needs of any fish reintroduced to the area, a cooperative monitoring program with AGFD will be developed. The objective is to gain information that shows levels of population size and habitat use by various life stages of the species of concern. This information could be used to develop an improved reintroduction program for native fish.

Rationale

Augmentation of existing populations of fish and wildlife or the reintroduction of native ones can aid in their recovery. The control of non-native species that are hindering the process of natural recovery of

the native species can also enhance or speed their recovery.

Management Action 4

Non-native fish frequently invade the lower portion of Bonita Creek. Constructing a permanent barrier to upstream migration of detrimental non-native fishes will provide security for the native fish in Bonita Creek. A feasibility study of a barrier will be conducted. If the study finds that a barrier of minimal dimensions (less than eight feet tall) will be effective and not detract substantially from visual resources, wild and scenic river management, and other values related to the RNCA as described by Congress and fully analyzed under the NEPA process, then a barrier structure will be constructed.

Rationale

Arizona's native fish have been heavily impacted by the introduction and spread of non-native fishes (Minckley and Deacon 1991, Minckley 1968, Miller 1961). Bonita Creek still supports five native fish species that are at risk from non-natives that come from the Gila River. It has been shown that native fishes are relatively flood resistant, and non-native fishes are not (Meffe and Minckley 1987). Thus, the self-cleansing action of floods in Bonita Creek will remove exotic fish, while a barrier will prevent post-flood reinvasion. The result is anticipated to be the complete loss of some non-native species and drastic reductions of those that do persist.

Management Action 5

No off-channel pools will be built for razorback sucker population augmentation in either the Gila River or Bonita Creek. No razorback suckers have been detected in the RNCA and pools would pose a risk to aquatic and riparian habitat function and processes. The proper placement and construction of these pools would be cost prohibitive.

Rationale

A complicated effort such as this will require an interagency strategy that addresses use of off-channel pools for propagation of fish as one component of a strategy that also addresses habitat suitability and non-native fish control, as well as other interrelated issues and environmental limitations.

Management Action 6

A water system that will provide an avenue for attaining long-term security for fish, leopard frogs, and other organisms may be analyzed jointly by the BLM and the City of Safford. Budget limitations may prohibit this level of investigation.

Rationale

Water withdrawal during drought years may stress aquatic organisms by reducing the available water. Infrequent severe droughts may change the fish community composition and species distribution, and may eliminate some fish populations.

Management Action 7

A public information program focused on the 15 native fish in the Gila River will be developed. This will be presented to communities, organizations and local schools. This activity will be coordinated with cooperating agencies and organizations (e.g. AGFD, USFWS).

Rationale

An educated public can be more sensitive to maintenance or enhancement of the RNCA and its resources.

Management Action 8

There are opportunities for research on wildlife, habitat, and effects of different management strategies on species over time. The BLM will evaluate proposals to ensure that they are compatible with other objectives in the RNCA. The BLM will actively

encourage research activities by qualified personnel.

Rationale

Research can supplement or enhance the management of the RNCA. It can provide needed data and evaluate management techniques.

Category 5 - Water Quality Management

Objective 1

Protect the Gila Box RNCA and the Bonita Creek Unique Water designation by ensuring that water quality is not degraded.

Rationale

The Clean Water Act calls for the restoration and maintenance of the chemical, physical, and biological integrity of the nation's waters. This will ensure that water quality is not impaired and that the water will fully support the uses for which it has been designated (fish and wildlife, full body contact, agriculture, drinking water).

Management Action No. 1

Implementation of all management actions listed under the riparian area management objective and the social objective restrictions listed under recreation management actions will help achieve this objective.

Management Action No. 2

A spill containment structure which will contain 110% of the on-site diesel will be constructed for all diesel pump systems within the RNCA. All gas and oil will be stored in the uplands, out of the canyon bottoms. All empty gas and oil containers will be disposed of properly.

Management Action No. 3

The septic system at Lee Trail will be replaced by a portable septic system. The long-term objective will be to remove the cabin from the canyon bottom and move the operations headquarters to the uplands.

Rationale

Riparian vegetation plays a primary role in water quality functions, such as retaining and stabilizing suspended sediments or providing organic input to water. It also can play a secondary role, such as the assimilation and temporary biological storage of nutrients and some metals.

The social restrictions on numbers of vehicles, people, and boats which can use the RNCA at any time will reduce water quality impacts.

Road closures and road improvements within the riparian area will reduce the amount of sediment reaching the stream from concentrated runoff from road beds. Defining public use levels and deferring livestock use provides protection from coliform pollution.

Water quality will be protected by spill containment structures which will prevent gas or oil from contaminating soil **and/or** migrating to flowing surface water. The portable septic unit will allow contaminants to be removed from the RNCA.

Monitoring

Macroinvertebrate samples will be taken annually at three sites on Bonita Creek and five sites on the Gila River.

Rationale

Sampling sites will be located so that upstream- downstream monitoring of management activities can be assessed. The biota integrate stresses over time and provide an ecological measure of changing environmental conditions. The biological communities present will reflect the results of Water quality management.

Category 6 - Private Lands Within the RNCA and Eagle Creek Private Lands

Objective No. 1

Acquire private lands located within the boundaries of the RNCA.

Rationale

By acquiring the privately owned lands within the boundaries of the RNCA, BLM would be able to more effectively implement its management objectives designed for the RNCA. Potential uses of the private lands that are adverse to the purpose of the RNCA or that may impact the surrounding RNCA would be eliminated. Such land acquisitions are authorized by Public Law 101-628 that established the Gila Box RNCA and are consistent with the Safford District Resource Management Plan.

Management Action

BLM will acquire, if they become available, the private lands within the RNCA through exchange, purchase or donation. Upon acquisition, these lands will automatically become part of the RNCA. Land exchange will be the preferred means of acquisition. A conservation easement can be acquired as an alternative to fee acquisition.

Objective No. 2

Acquire private lands within the Eagle Creek riparian area south from the point known as the Phelps Dodge pump station to the confluence of Eagle Creek with the Gila River.

Rationale

Public Law 101-628 requires the BLM to discuss the possibility of including additional lands in the conservation area. This would

include lands not in federal ownership that are next to the RNCA boundary and within the area extending two miles on either side of the centerline of Eagle Creek. The area begins where Eagle Creek crosses the southern boundary of the Apache National Forest and ends at the confluence of Eagle Creek with the Gila River (approximately 23 miles of riparian habitat).

Eagle Creek is one of the three perennial drainages that join the Gila River within the RNCA boundary. It is the presence of four perennial rivers and creeks in a desert environment that resulted in the recognition of the area's national values as an RNCA. Because Eagle Creek is almost entirely privately owned, Congress identified the need for a formal evaluation and recommendation before any lands could be acquired and added to the RNCA. Any acquisition would need to be from a willing offerer.

Eagle Creek is hydrologically divided by the Phelps Dodge pump station. Water from Black River is piped into Eagle Creek and flows to the pump station from where it is lifted to the Morenci mine. Use of the channel as part of the mining operation greatly limits the creek's value as part of a nationally designated natural area. For that reason, BLM does not recommend the 11-mile segment from the forest boundary to the pump station for acquisition.

Resources recognized by Congress in 1990 for the RNCA were reviewed for their presence in Eagle Creek. Overall, the resources in the lower portion of Eagle Creek are of high quality. Many values for which the RNCA was established are present in Eagle Creek while others are different and will be unique to the RNCA, if added. The 12 miles from the pump station to the Gila River contain the following resources:

1. Perennial flow producing 22,000 acre-feet per year of high quality water.
2. Riparian vegetation including mixed broadleaf and mesquite forest types.

3. Wildlife and fish including federally endangered peregrine falcon and federal candidate round-tail chub, as well as black-hawk, Rocky Mountain bighorn sheep, and a large colony of Mexican free-tailed bats.
4. Very high scenic values including cliffs, rock spires, caves, riparian vegetation, and the perennial creek.
5. Cultural properties include a prehistoric village and rock art. Eagle Creek is the site of several historic events and numerous buildings such as abandoned homes and even a school.
6. Recreational use has been low because the canyon and creek have been privately owned but included hiking, OHV use, horseback riding, hunting, and photography. Usage will probably stay relatively low due to the isolation and poor road.
7. The canyon has been the site of previous research on fish and bats, and is the site of proposed cultural investigations.

The acquisition of private lands within the Eagle Creek riparian area is authorized by Public Law 101-628 that established the Gila Box RNCA and is consistent with the Safford District Resource Management Plan.

Management Action

BLM will acquire, if they become available, the private lands within the Eagle Creek riparian area south from the point known as the Phelps Dodge pump station to the confluence of Eagle Creek with the Gila River through exchange, purchase, or donation. The boundaries of the RNCA will be expanded and BLM will manage those lands consistent with this plan. Land

exchange will be the preferred means of acquisition. A conservation easement can be acquired as an alternative to fee acquisition.

Category 7 - City of Safford water supply system in Bonita Creek

The City of Safford has been granted rights-of-way to construct, operate, and maintain a water collection and distribution system within the Gila Box RNCA.

Objective 1

Work cooperatively with the City of Safford to provide for their management needs relating to the water system while reducing potential adverse impacts to the resources of the RNCA.

Rationale

By working closely with the City in their management efforts of the water system, the City and BLM will be better informed of each other's management needs. Such information, coupled with cooperation, can effectively reduce impacts to resources that may result from operation and maintenance of the system.

Management Action

The BLM will work cooperatively and seek the cooperation of the City in an effort to support the management goals of the Gila Box along with the management needs of the City and the effective operation of the public water supply system.

Category 8 - Research and Education

Objective 1

Allow research and provide education opportunities.

Rationale

By **authorizing** appropriate research, BLM will be assisted in the implementation of the management plan and **man**agement of the resources.

Management Action

BLM will authorize appropriate research, including research concerning the environmental, biological, hydrologic, cultural, and other characteristics, resources, and values of the conservation area.

Category 9 - Fire Management

Objective 1

Improve and protect the resources of the RNCA by effectively managing both prescribed fire and wildfire.

Rationale

Through the planned and effective use of natural and prescribed fire, coupled with using the most appropriate response for wildfire, the resources of the RNCA will be protected and enhanced.

Management Action

BLM will develop and implement a prescribed and natural fire plan for the RNCA commensurate with the Fire Management Plan for the **Safford/Tucson** Fire Management Zone.

Trust Resources

BLM has complied with it's federal trust responsibility, per Secretarial Order No. 3175, in it's preparation of the Gila Box management plan/environmental assessment. Compliance was accomplished through the completion of consultations with all interested Indian tribes and through the analysis of impacts to trust resources. The only trust resource present in the NCA is water. Potential impacts to water rights, water quantity and water quality were analyzed in the water resources sections of the draft environmental assessment and management actions affecting water are presented in the **final** management plan. The impact analysis concluded that management of the NCA under the management plan would have a beneficial effect on the water resources.

Environmental Assessment

EA No. AZ-040-08-03

Gila Box Riparian National Conservation Area Management Plan

Prepared by
U. S. Department of the Interior
Bureau of Land Management
Safford Field Office
Safford, Arizona

Conformance with Applicable Land Use Plan

The Gila Box Riparian National Conservation Area Management Plan (Management Plan) is subject to the following land use plan:

Name of Plan

Safford District Resource Management Plan

Date Approved

Partial Records of Decision I & II, September 1992 and July 1994. Land Tenure Amendment, September 1994.

This plan is in conformance with the applicable land use plan:

Check One

Yes No

Remarks

The Management Plan is also in conformance with the laws regulations and executive orders identified in the constraints section of the attached plan. This includes Public Law 101-628, the Arizona Desert Wilderness Act of 1990.

Introduction

The Arizona Desert Wilderness Act of 1990 (Public Law 101-628) designated the Gila Box Riparian National Conservation Area (RNCA) to conserve, protect, and enhance its riparian areas and associated resources, and the aquatic, wildlife, archaeological, paleontological, scientific, cultural, recreational, educational, scenic, and other resources and values of such areas. The law also required the BLM to develop a comprehensive Management Plan for the RNCA.

To accomplish this task, the BLM began by preparing a Draft Gila Box Riparian National Conservation Area Interdisciplinary

Activity **Plan/Environmental Assessment** (AZ-040-03-02) (Draft **Plan/EA**). This plan presented five alternatives (Preferred Alternative, Alternatives One, Two, Three [No Action], and Four) and analyzed the associated environmental impacts of each. The five alternatives presented management scenarios for the RNCA that ranged from extremely protective (Alternative 1) to those that allowed more use and development of the area (Alternative 4). All five alternatives, with the exception of the No Action Alternative, were considered to meet the legal requirements for management of the RNCA. The Draft **Plan/EA** was released for public review and comment in August 1993.

In considering public comments, the recommendations of the Advisory Council, and input from BLM resource specialists, it was determined that none of the original five alternatives would independently serve as an appropriate Management Plan. It was determined that an appropriate Management Plan could be developed from a combination of management actions found in the five previously analyzed alternatives with some additions and modifications. Thus, the Management Plan, analyzed in this environmental assessment, is a combination of management actions found in five alternatives of the Draft **Plan/EA** with some additions and modifications.

This environmental assessment is provided as a supplement to the Draft **Plan/EA** for the purpose of analyzing the environmental impacts of the Management Plan's new arrangement of management actions. It incorporates the entire Draft **Plan/EA** by reference.

Purpose/Need For Proposed Action

The purpose of the Management Plan is to provide for appropriate management of the Gila Box Riparian National Conservation Area for the next 15 years.

The need for this plan is clearly stated in Title II, Section 201 (g) of the Arizona Desert Wilderness Act of 1990. ". . . the Secretary shall develop a comprehensive management plan for the long-term management of the conservation area. . ."

Description of Proposed Action and Alternatives

The Management Plan is found in the attached document titled the Gila Box Riparian National Conservation Area Management Plan. This Management Plan

describes goals, objectives, management actions, rationale and monitoring for the Gila Box RNCA. The actions found in the Management Plan were taken from the five alternatives analyzed in the Draft Plan/EA with some additions and modifications. Alternatives to the Management Plan considered in this environmental assessment are found on pages 33-73 in Chapter 2 of the Draft Plan/EA. Chapter 2 of the Draft Plan/EA is incorporated into this environmental assessment by reference. See Table 2.1 for a summary of the management actions considered in the Draft Plan/EA and this Management Plan.

Table 2.1 Comparison of Management Actions by Alternative

Summary of Livestock Management Actions Common to All Alternatives

1. Upland areas will be managed within the constraints of the RNCA and managed within current pastures.
2. The feasibility of relocating pumps and converting them to solar power will be addressed.

Activity	Alt 1	Alt 2	Alt 3	Alt 4	Preferred Alternative	Mgmt. Plan
Grazing						
Riparian Grazing (mi.)	0	28	28	19	19	0
Upland Grazing	Yes	Yes	Yes	Yes	Yes	Yes
Grazing Decisions	7	5	0	4	2	7
Grazing Agreements	0	2	0	3	3	2
Allotment Boundary Adjustments	2	2	0	0	0	4
New Allotment Management Plans	5	6	2	7	7	6
Miles Of New Water Pipeline	16.5	19.5	6.0	14.5	17.5	22
New Water Storage Tanks	11	11	5	8	9	12

Activity	Alt 1	Alt 2	Alt 3	Alt 4	Preferred Alternative	Mgmt. Plan
Miles Of New Fence	30	20	1	12	12	30
New Water Points	0	5	5	5	5	0
New Water Gaps	8	13	12	13	11	8
New Wells	1	1	1	1	1	1

Table 2.1 Comparison of Management Actions by Alternative (Continued)

Summary of Transportation Management Actions Common to All Alternatives

1. Identify and place information and directional signs along the road network.
2. Place and maintain cattleguards on a priority basis where traffic volume or range considerations warrant.
3. Roads receiving scheduled and corrective maintenance:

a. Kearny Camp Road	e. Red Knolls Road	i. Bullgap Road
b. West Bonita Rim Road	f. Lee Trail	j. Black Hills Back Cntry. Byway
c. Solomon Pass Road	g. East Bonita Rim Road	k. Malendrez Farm Road
d. Salt Trap Road	h. Hackberry Road	l. Christensen Road
4. Roads to receive a major upgrade: **Kearny** Camp Road

Activity	Alt 1	Alt 2	Alt 3	Alt 4	Preferred Alternative	Mgmt. Plan
Transportation System						
Additional Roads Maintained						
Gillard Hot Springs	Yes	Yes	Yes	Yes	Yes	No
Deadman Canyon	Yes	Yes	Yes	Yes	Yes	No
Wire Corral Mesa	Yes	Yes	Yes	Yes	Yes	No
George Hill	Yes	Yes	Yes	Yes	Yes	No
Subia	Yes	Yes	Yes	Yes	Yes	Yes
Brushy Canyon	No	Yes	No	Yes	Yes	No
Jones	No	Yes	Yes	Yes	Yes	Yes
Orange Cliff	No	Yes	No	Yes	Yes	Yes

Activity	Alt 1	Alt 2	Alt 3	Alt 4	Preferred Alternative	Mgmt. Plan
Black Canyon	No	Yes	No	Yes	Yes	No
Bonita Creek Riparian (mi)*4		5	15	7	6	2
Additional Major Road Upgrades						
West Bonita Rim (seg 1)	Yes	Yes	No	Yes	Yes	No
Solomon Pass	Yes	Yes	No	Yes	Yes	No
Byway (center 4 miles)	Yes	Yes	Yes	Yes	Yes	No
Bullgap (first 3 miles)	No	Yes	No	Yes	Yes	No
Wire Corral Mesa	No	No	No	Yes	Yes	No
Orange Cliff Loop	No	Yes	No	Yes	Yes	No
Deadman Canyon	No	Yes	No	Yes	Yes	No
New Road Construction						
West Bonita Rim	No	No	No	Yes	Yes	No
Gila Box	No	No	No	Yes	Yes	No
Goat Trail	No	Yes	No	No	No	Yes
Wire Corral Mesa Ext.	No	No	No	Yes	Yes	No
Transportation Summary						
Riparian Roads (mi. designated)						
Public Use	0.5	2.0	38.0	18.0	3.2	2.0
Administrative Use	4.5	5.0	0.0	4.0	4.0	*0.0
Roads Maintained	17	21	18	21	21	15
Road Upgrades	4	7	2	8	8	1
New Roads	0	1	0	3	3	1

* Administrative use of unmaintained riparian roads will be decided on a case-by-case basis as allowed in Sec. 201(d)(2) of the Arizona Desert Wilderness Act of 1990, Public Law 101-628. The City of Safford is also expected to maintain approximately 1.5 miles of riparian road in Bonita Creek for administrative access to their water collection system. This road is located on a pre-FLPMA right-of-way granted to the City.

Table 2.1 Comparison of Management Actions by Alternative (Continued)

Summary of Recreation Management Actions Common to All Alternatives

1. Off-Highway-Vehicle Designation - Implement designated roads, mark routes and provide maps and Federal Register notice.
2. Information and Education - Interpretive plan, brochures, guide, logo, programs and emphasis on the Leave No Trace program.
3. Cooperative Agreements - Develop agreements with the city of Safford, landowners, Phelps Dodge, Graham County and Greenlee County regarding recreation use.
4. Back Country Byway Program - Nominate new byways to the national system. Incorporate RNCA information into Black Hills Back Country Byway interpretation.
5. Tree Planting for Watchable Wildlife - Plant large native trees to increase the quality and quantity of wildlife habitat.

Activity	Alt 1	Alt 2	Alt 3	Alt 4	Preferred Alternative	Mgmt. Plan
Recreation Facilities						
Campgrounds	1	2	0	3	3	2
Picnic Areas	4	6	4	7	8	4
Boat Access	2	2	2	2	2	2
Sand Rail Access	0	0	1	1	1	0
Corrals	0	1	0	1	1	0
Trails	2	2	1	3	3	2
Interpretation	1	1	1	1	1	1
Overlooks	1	3	0	7	7	1
Parking Areas	4	5	0	6	6	4
Kiosks	3	3	3	3	3	3
Sema Cabin Admin Site	Yes	Yes	Yes	Yes	Yes	*No
Hire Recreation Tech	Yes	Yes	Yes	Yes	Yes	No
Visitor Preferences and Perceptions Study	Yes	Yes	Yes	Yes	Yes	No
Commercial Use Permits on Gila River	3	3	3	3	3	5

* Riverview Campground host site will serve as the administrative site.

Table 2.1 Comparison of Management Actions by Alternative (Continued)

Summary of Cultural Resources Management Actions Common to All Alternatives

1. Promote research and education on cultural resources.
2. Inventory and monitor cultural resources.
3. Develop public information and education on cultural resources through on-site interpretation, brochures, and tours.
4. Complete a records search for existing data on the RNCA's cultural resources from BLM and other organizations' libraries and records files.
5. Enlist technical expert climbing or caving volunteers to visit and record inaccessible site recordings of cliff dwellings, caves and rock shelters in the RNCA.
6. Develop and implement preservation actions for stabilizing the fragile cultural sites.
7. Implement the Cultural Resource Project Plan for the Pueblo Devol Cliff Dwelling. This includes preliminary excavations, architectural stabilization by the National Park Service, and development of a program to interpret the site for RNCA visitors.
8. Record, stabilize and interpret the Old Lady Gay Cabin to preserve and realize its scientific and public use values.
9. Preserve the Plumed Serpent site for scientific use.
10. Test-excavate four historic sites on Bonita Creek to determine if Chinese settlers lived at or built the site's structures (Chinese Study).
11. Interpret the Gila River Bridge on the old Safford/Morenci Road.
12. Interpret the Serna Cabin historic site for the public.
13. Develop cooperative agreements with non-federal land owners to provide partnerships in the cooperative management of cultural properties located on non-public land within the RNCA.

Activity	Alt 1	Alt 2	Alt 3	Alt 4	Preferred Alternative	Mgmt. Plan
Cultural Resources						
Inventory RNCA (class)	II	II	II	III	III	II
Eagle Creek Village	Yes	Yes	No	Yes	Yes	Yes
NCA Ethnoecology Study	Yes	Yes	No	Yes	Yes	Yes
Safford-Morenci Trail Improvement	Yes	Yes	Yes	Yes	Yes	No
Gillard Hot Springs Interpretation	Yes	Yes	Yes	Yes	Yes	No

Table 2.1 Comparison of Management Actions by Alternative (Continued)

Summary of Wildlife Management Actions Common to All Alternatives

1. In all alternatives there are opportunities for research on wildlife, habitat, and effects of different management strategies on species over time.
2. Nest boxes for the federally proposed ferruginous pygmy owl may be attached to trees in unoccupied but potential habitat along Bonita Creek and the Gila River.
3. Non-native plants may be controlled where they interfere with natural ecological processes.
4. Exotic wildlife may be controlled where they interfere with natural processes.
5. Where monitoring identifies suitable habitat the BLM may conduct recovery efforts for native wildlife species.

Activity	Alt 1	Alt 2	Alt 3	Alt 4	Preferred Alternative	Mgmt. Plan
Wildlife Management Monitoring Sites						
Priority Species (includes T&E)	5	9	0	11	9	5
Breeding Birds	5	9	1	11	10	5
Migratory Birds Surveys	5	9	0	11	10	5
Bald Eagles (winter)	No	No	Yes	No	No	No
Breeding Raptors	No	No	Yes	No	No	No
Inventories						
Bighorn Sheep (habitat)	No	No	Yes	No	No	No
Monitoring						
Wildlife Habitat (riparian)	No	No	Yes	No	No	Yes
Plantings						
Large Trees (raptors)	91	155	0	215	215	91
Shrubs & Vines (wildlife)	Yes	Yes	No	Yes	Yes	Yes
Exclosures						
Bonita Creek	0	4	1	4	3	0
Gila River	0	0	2	3	2	0

Table 2.1 Comparison of Management Actions by Alternative (Continued)

Summary of Fishery Management Actions Common to All Alternatives

1. Inventory and monitor aquatic habitat in Bonita Creek and Gila River.
2. Inventory and monitor fishery in cooperation with AGFD in Bonita Creek and Gila River.
3. Evaluate the fishery habitat for reintroduction of native fish in cooperation with AGFD and USFWS. Reintroductions may include habitat manipulation. Re-introductions will not impair the City of Safford's water supply system.
4. Develop a public outreach program to educate the public on native fish.

Activity	Alt I				Preferred Mgmt. Alternative Plan	
	Yes	No	No	No	No	*Yes
Fishery Management						
Bonita Creek Fish Barrier	Yes	No	No	No	No	*Yes
Off-Channel Pools for Razorback Sucker	Yes	Yes	Yes	Yes	Yes	No
Annual Monitoring for Razorback Sucker (Bonita)	Yes	Yes	Yes	Yes	Yes	No
Bonita Creek Flow Regime Evaluation	Yes	No	No	No	No	Yes
Exotic Fish Control in the Gila River	Yes	No	No	No	No	No
Macroinvertebrate Monitoring Sites	8	12	0	16	12	8

* Depends on the outcome of the specified feasibility study.

Table 2.1 Comparison of Management Actions by Alternative (Continued)

Summary of Soil and Water Management Actions Common to All Alternatives

1. Apply for instream flow water rights on portions of Bonita Creek, Gila River, and San Francisco River.
2. Baseline inventory of the RNCA would include cross sections, bank stability assessment, vegetation transects, and aerial photography.
3. Memorandum of Understanding would be developed with other agencies and individuals to support the goals and objectives of the specific alternatives.

Activity	Alt 1	Alt 2	Alt 3	Alt 4	Preferred Alternative	Mgmt. Plan
Road Management						
Disked And Seeded (mi.)	2	2	5	3	3	0
Improvements (mi.)	0.7	0.0	4.0	2.0	2.0	2.0
Rerouting (mi.)	0.5	0.5	3.0	1.5	1.5	0.0
Road Bed Filling and Berming (mi.)	1.0	1.0	4.0	2.0	2.0	0.5
Bank Protection (mi.)	0.04	0.03	1.5	1.5	0.04	0.0
Crossing Improvements #	3	8	36	11	9	3
Closures #	10	7	2	7	7	5
Gates for Admin. Access #	7	3	0	2	3	0
Bonita Creek Riparian Road Rehabilitation						
Bull Gap to City Access Road	Yes	No	No	Yes	Yes	No
Gila River to Bull Gap	No	No	No	No	No	Yes

Activity	Alt 1	Alt 2	Alt 3	Alt 4	Preferred Alternative	Mgmt. Plan
Other Actions						
Stabilize Headcut near Old Safford Bridge	Yes	No	Yes	Yes	Yes	
Upgrade Lee Trail Ranch House Septic System	No	Yes	No	Yes	Yes	*Yes
Relocate Lee Trail Ranch House	Yes	No	No	No	No	Yes

* Replace with portable toilet.

Activity	Alt 1	Alt 2	Alt 3	Alt 4	Preferred Alternative	Mgmt. Plan
Management Zone Acres						
Zone A	1,272	989	None	447	989	None
Zone B	19,477	12,222	None	10,559	12,222	None
Zone C	1,048	8,556	None	10,721	8,556	None

Affected Environment

A description of the affected environment is found in Chapter 3, pages 75-96 of the Draft **Plan/EA**. This section of the Draft **Plan/EA** is incorporated by reference into this environmental assessment.

Environmental, Social and Economic Consequences

This section assesses the environmental, social and economic consequences (impacts), both positive and negative, from implementation of the Management Plan. The format for discussing the environmental

impacts is identical to that found in Chapter 4 of the Draft **Plan/EA**. Analysis of the alternatives considered in the Draft **Plan/EA** are incorporated in their entirety into this EA. For the purpose of brevity, this EA will list only the environmental impacts for future management and cumulative impacts as would occur as a result of implementing the Management Plan. The narrative description of activities and how each of those activities affect the resource, the past (pre-1970) environmental impacts of those activities on the resource being analyzed, and the environmental impacts from present management on that resource are found in Chapter 4 of the Draft **Plan/EA** and are incorporated by reference into this EA.

Environmental Assessment Checklist

- A. EA No. AZ-040-08-03
- B. The following checklist is to be completed by persons submitting data for inclusion into the EA. Those submitting input are EA Team Members.

Critical Elements	Affected		Major Issues	Affected	
	YES	NO		YES	NO
Subject Input by	YES	NO	Subject Input By	YES	NO
ACECS			Access		
Air Quality *			Engineering		X
Cultural Res *	X		Hydrology		
Flood Plains *	X		Land Use		
Haz. Materials *			Outdoor Rec.		
Nat.Amer.Rel. *			Paleontology		X
Prime/Unique Farmland			Range		
Solid Waste *			Soils/Geology		
T&E Animal *	X		Vegetation		
T&E Plant *	X		Water Rights		
VRM *	X		Wildlife		
Water Quality *	X		Other		
Wetland/Riparian *	X		Livestock Mgmt.		
Wilderness *		X	Native Fish		X
Wild & Scenic River *	X		Minerals		

* Critical Elements Required by Federal Laws.

Management Plan Environmental Impacts

Soil and Water Resources

Reducing the miles of road in the riparian area from 38 miles to two miles results in a high positive impact. In addition to these two miles of road, the City of Safford is expected to maintain 1.5 miles of riparian road in Bonita Creek to provide continuing access to their water supply system. Continued maintenance of this City road is expected to have low negative impacts. Due to the limited number, low positive impacts will accrue from improving maintenance procedures for stream crossings.

Eliminating the road on a 1/4 mile segment between the Kearny Camp Road at the mouth of Bonita Creek and the Bullgap Road and rehabilitation of the riparian area along this reach will result in a high positive impact on this unstable portion of the creek.

The recreational trailhead and parking area located upstream from the Christensen Place will have a low negative impact. The negative impacts to soil and water due to recreation will be low because most recreation management actions are proposed for the uplands.

There will be a high positive impact from eliminating grazing and sand rails in riparian areas.

Construction of diesel fuel spill containment structures and replacement of the septic system at Lee Trail will result in a

moderate positive impact to water quality.

This Management Plan is expected to have a high positive impact on soil and water resources.

Soil and Water Resources Cumulative Impacts

The watersheds surrounding the Riparian National Conservation Area serve as the frame of reference for evaluating the cumulative impacts of the past, present and foreseeable management actions impacts on soil and water resources. Land uses such as grazing, homesteading, woodcutting, and recreation combined with road construction and maintenance have had major impacts on the soil and water resources of the conservation area. Impacts from these activities were much more extensive in the past and have been decreasing in the area since the 1930s. The impacts associated with roads are the exception and continue to have identifiable impacts.

The present management of the area combined with the RNCA Management Plan point to more intensive management of activities that impact soil and water resources. The result of these identified management actions will be to further decrease the effects of many activities and leads to the conclusion that impacts to soil and water resources will continue to decrease from all activities except recreation. Increased recreation developments and visitation may lead to some increases in impacts from this specific activity. However, the combined impacts from the entire array of activities in the Gila Box RNCA Management Plan are expected to continue decreasing.

Upland Vegetation

The management plan for the upland is a continuation of current management practices with some modifications. These are implementation of grazing systems, some new range improvement construction, road construction and continued **improvement** in road maintenance methods, and authorization

for the use of prescribed natural fire and prescribed burning. The future of the mining operation will be determined by a validity examination. Recreation use will continue, with the addition of campgrounds and horse use facilities.

The impacts to upland vegetation under the Management Plan will be moderate positive impacts. The dominant positive impact will be predominantly achieved by allowing fire to take its natural role in the system.

Upland Vegetation Cumulative Impacts

Cumulative impacts to upland vegetation is assessed within the boundary of the Bonita Creek watershed downstream of the San Carlos Apache Reservation and the Gila River watershed downstream of the conservation area boundary. In the past the primary impacts to this resource came from grazing, woodcutting, cessation of natural fire and the introduction of exotic species. Other activities such as mining, range and recreation developments and road building had less important, intense, site- specific effects. The past impacts were extensive yet did not lead to the permanent loss of any species known to have grown in the area.

Present management has reduced or stopped impacts from grazing and woodcutting. These actions have lead to good to excellent range condition on the vast majority of the uplands. Roads, developments, exotic species and suppression of natural fire continue to have impacts on the extent and relative composition of upland vegetation. Future management will continue or accelerate improvements seen under current management.

A major improvement is expected from the reintroduction of natural fire regimes. Minor increased impacts will be found around the increased number of range and recreation developments in the uplands. Exotic species and recreational and range developments may continue to have some impacts on plant

communities in the area. Cumulative impacts to upland vegetation will continue to be reduced.

Riparian Vegetation

Designated roads in riparian areas are reduced to two miles for public access in Bonita Creek. This reduction in designated riparian roads is expected to have a high positive impact. An additional 1.5 miles of riparian road will be maintained by the City of Safford in Bonita Creek. City road maintenance will result in a low negative impact.

There will be some initial erosion and loss of riparian plants where abandoned roads are not stabilized along much of Bonita Creek. However, based on BLM experience with post-flood recovery rates, abandoned segments will naturally stabilize within two years. The abandoned stretches of roads along Bonita Creek that will rehabilitate naturally, and with some management effort, will result in a moderate positive effect. Improved engineering at creek crossings along designated roads will lessen some of the negative effect caused by maintaining a cleared route through the riparian zone. Erosion control efforts can reduce but not negate the added risk to riparian vegetation along maintained roads in Bonita Creek.

Deferral of livestock grazing in the riparian zone will result in a high positive impact. More riparian vegetation will accumulate because there will be no livestock feeding on grasses, shrubs, vines and trees.

Recreational impacts are closely associated with road placement. Much of the vegetation loss results from the clearing necessary for road maintenance to permit driving to sites. Through route selection, improved maintenance standards, and plantings, the losses should be minimal. Environmental education, increased law enforcement, and recreation site stabilization will further reduce effects.

Prohibiting OHV use within the Gila River will have a low positive impact on riparian conditions, based on current use

levels. Overall, the Management Plan will result in a high positive impact to riparian vegetation.

Riparian Vegetation Cumulative Impacts

Cumulative impacts to the riparian vegetation of the conservation area from human activities has generally decreased since the 1930s when farming on riparian terraces ceased. Although grazing, road building and maintenance continue to have impacts today, they are markedly reduced.

These areas have been the focus of increased BLM management attention as their function in stream channel stabilization, erosion control, water quality improvement and wildlife habitat were recognized. Elimination of grazing and sand rails will greatly reduce impacts to riparian areas. Recent laws such as the Arizona Desert Wilderness Act of 1990 provide additional direction for reducing impacts to these areas. Future designation of Bonita Creek and/or the Gila River as a wild, scenic or recreational river would exert more pressure to decrease impacts on riparian vegetation. Cumulative impacts to riparian vegetation from the Management Plan are positive.

Wildlife

Soil, Water and Air actions will reduce erosion where designated roads cross the Bonita Creek channel thereby reducing the loss of vegetation. The program will not be able to eliminate the continued erosion risk on the designated roads, and roaded areas will remain barren. Little direct riparian revegetation will be conducted, and most improvement in riparian habitat will occur from changes made in other activities. Overall, these activities will create a low positive impact.

The Transportation Plan results in designation of two of the 15 original miles of maintained roads in Bonita Creek. In addition, the City of Safford will maintain approximately 1.5 miles of riparian roads for

access to their water system. Because of the reduction in maintained roads from 15 to 3.5 miles, more acreage will grow riparian vegetation and there will be fewer nick points in the streambanks for erosion to get started. The limited transportation system with the active management of designated roads will produce high positive **impacts** to wildlife species and habitats.

The closure of the Gila River to OHV traffic will have moderate positive effect upon the current habitat condition. However, the improved facilities for more river floaters and increased use during the months waterfowl and bald eagles are present is a low negative impact. Visitor education efforts and increased law enforcement in the RNCA will help reduce the potential for vandalism of habitat and poaching of protected species, mitigating some of the effects of additional people.

The absence of cattle in the riparian areas will result in more biomass accumulation of perennial plants. Also, there will be the fewest disturbances to wildlife by cattle. Any trailing of cattle would be disruptive to wildlife and will interfere with regeneration of trees creating a low adverse impact. There may be some mitigation if the route can be selected to avoid key habitat. Removal of water gaps, old corrals, line shacks and other facilities will reduce hazards to wildlife, habitat for exotic species, and will increase the potential area for native vegetation and dependent wildlife species. This will provide the greatest opportunity for species diversity and larger population size.

The limited public vehicle access will limit disturbances to wildlife, and will increase the presence of more secretive species. This is especially important in the upstream area of Bonita Creek where the best wildlife habitat in the RNCA is located. Riparian sections where roads are open for public vehicles will have more frequent disturbance to sensitive wildlife. Most recreation development will be in uplands and human concentrations will occur only at the mouth of Bonita Creek and the city picnic

area. The increased environmental education will offset the increased number of recreationists in the developed areas. Overall this will produce low positive impacts to wildlife.

A high positive benefit to wildlife is expected from implementation of this Management Plan.

Wildlife Cumulative Impacts

Impacts to wildlife are closely associated with impacts to riparian vegetation. Many of the management actions that benefit or destroy vegetation also affect wildlife. Past activities such as farming, hunting and grazing had negative effects on wildlife populations. Recent management of the area has successfully addressed some of these problems. Eroded terraces with the associated loss of vegetation continues to impact wildlife populations. This Management Plan benefits wildlife to the greatest extent by reducing these impacts through restriction of roads and grazing, and by controlling human activities. The designation of the Gila River and/or Bonita Creek as a wild, scenic or recreational river will have both positive and negative impacts. Positive effects will come from the further reduction of activities that remove vegetation. Negative impacts will develop from the increased visitation often associated with wild and scenic river designation. Cumulative impacts to wildlife are positive under this Management Plan.

Fish

In this Management Plan, the length of designated maintained road in the riparian zone in Bonita Creek is reduced to two miles. An additional 1.5 miles of riparian road in Bonita Creek is expected to be maintained by the City for administrative access to their water system. These reductions in maintained road in Bonita Creek, from 15 miles to 3.5 miles, combined with the retirement of an unstable segment and crossings near the

Bullgap Road translates to a high positive impact to aquatic habitat. Most roads coming down from the uplands will have point access located above the riparian zone. This will substantially lessen adverse impacts due to road maintenance and recreation. Reducing road access will reduce sedimentation and have a small positive impact. However, several road crossings and segments have poor stability and will need improved placement and maintenance to increase bank and terrace stability and moderately benefit the fishery resources.

Livestock grazing in riparian zones in both Bonita Creek and the Gila River will be deferred for the life of the plan. This will reduce the risk of stream bank destabilization from trampling and localized heavy forage utilization. Increased riparian development in Bonita Creek and the Gila River can be expected, and this will increase the aquatic habitat diversity, which would include formation of off-channel pools and backwaters in the Gila River. Livestock trailing through Bonita Creek in some of the best fish habitat, which is located from above the Narrows to the reservation boundary, may have an adverse affect on aquatic habitat and fish species (e.g. Gila chub and razorback sucker). Solar pumps will, where feasible, replace gas pumps that supply water to the upland water system which will reduce incidental water quality degradation from accidental spills. A high beneficial impact to aquatic habitat will occur from this Management Plan.

Restricting exotic fish migration from the Gila River into the lower portion of Bonita Creek with a barrier will be beneficial for the native fish community. Construction of this barrier will depend on the outcome of a feasibility study identified in the Management Plan.

In the most popular recreation areas along Bonita Creek, the public alters fish habitat by damming wading pools with stones. Wading, swimming and walking up and down the creek probably displace fishes (e.g. Gila chub and, perhaps, razorback sucker) sensitive to

frequent disturbance. These activities have an adverse impact of unknown extent. Most recreational developments and uses will result in small scale vegetation damage on banks and terraces resulting in low negative impacts to fish habitat and water quality. Under this Management Plan, off-road-vehicle use of the Gila River will be removed, resulting in moderate beneficial impacts to the fishery resources.

Habitat improvement for the existing razorback sucker population is expected to have a positive impact on this species. Habitat evaluation related to endangered species recovery efforts will have a beneficial impact as well.

Implementation of the Management Plan is expected to have high overall positive impacts on native fish populations

Fish Cumulative Impacts

Cumulative impacts to fish are evaluated within the boundaries of the conservation area. Impacts to fish are closely associated with impacts to riparian vegetation and many of the management actions that benefit or impact vegetation also affect fish. The cumulative impacts to fish are very similar to those described in the wildlife section and all alternatives except the No Action Alternative have a positive impact on the fish and their habitat.

Cultural Resources

Road closures, corrective maintenance, improvement, rerouting, and rehabilitation of roads are expected to have a highly positive impact on cultural resources. Routine scheduled maintenance of roads is expected to have a low negative impact overall, as at present, for such work can increase visitor numbers. Improved access is of the greatest concern in upper Bonita Creek and at the creek's mouth. Negative impacts in these sensitive areas are expected to be moderately negative. Upgrading Kearny Camp Road leading to the Bonita Creek mouth area combined with nearby recreational

developments will have moderately negative effects, especially at the highly significant Mimbres Village site. Several roads in upper and middle Bonita Creek are planned for designation. Two of these roads are expected to have a moderately negative impact: Christensen Road and West Bonita rim to city maintenance yard road. These will access the RNCA's highest value cultural resources, which include the plumed serpent pictograph site, Pueblo Devol cliff dwellings, the majority of the RNCA's other cliff dwellings, and historic farm houses and fields.

The overall transportation impacts are expected to be at a low negative level which would be **much** less than the current situation, primarily because most of the roads in the Bonita Creek canyon bottom will be closed. Improved access and increased visitor use will be beneficial at sites proposed for development as interpretive sites. It is anticipated that the enlightenment of the public at these sites will carry over and result in a preservation ethic which could contribute to the preservation of cultural resources throughout the region.

Soil and water management actions are expected to have a moderately positive effect on the cultural resources. The planned actions should result in a decrease in erosion and loss of stream terraces. As the majority of cultural sites are on terraces, this should clearly benefit cultural resources.

Overall, wildlife management actions are expected to have a low negative impact on cultural resources. Specific projects which could result in low negative effects are the planting of large trees on stream and river terraces. The stabilization of terraces expected to result from the tree plantings could preserve the terraces. This would be a positive impact on the cultural properties present.

The overall effect of recreation enhancement actions on cultural resources is expected to be moderately negative. Of most concern is the expected rise in the number of people visiting areas of high cultural resource value resulting from recreational development and improved access. Developments expected

to create the greatest impacts are as follows. River View Campground, and Serna Cabin Picnic Area. These developments are located on the north side of the Gila River and west side of Bonita Creek near the mouth of Bonita Creek. Significant and fragile sites such as the Mimbres Village are located nearby and would be seriously damaged by any digging, artifact collecting, or visitor traffic occurring. The Owl Canyon Campground is planned for a location occupied by a prehistoric artifact scatter. This site will be documented and partially excavated to mitigate impacts resulting from the campground. The proposed trail head near the Christensen Place in upper Bonita Creek is expected to increase visitor use at Pueblo Devol. This Cliff Dwelling is one of the most significant and fragile cultural sites in the Safford Field Office area. Impacts to these sensitive resources will be monitored and will be mitigated as necessary through fencing, excavation, or stabilization. It is also anticipated that these impacts will be partially offset by the positive effects of site interpretation and other public education actions.

The planned livestock management actions are expected to have a moderately positive impact on the cultural resources. The deferment of grazing in the canyon bottoms should have a highly beneficial effect on cultural properties in those locations. This effect may be slightly offset by impacts from the construction of fences and water facilities planned for implementing the deferment, but affected cultural sites can generally be avoided and those that cannot will receive mitigative treatment.

The Management Plan is expected to have an overall low positive impact on cultural resources in the Gila Box RNCA.

Cultural Resources Cumulative Impacts

Cumulative impacts to cultural resources are evaluated within the boundaries of the RNCA. Management actions that promote stability of the riparian areas and reduce

access generally benefit these resources. Management actions that cause instability, increase access or disturb new sites generally have negative effects on these resources. Actions aimed at informing and educating the public on the value of cultural resources and the need to preserve them result in positive impacts. Some actions, for example recreational development, can have short-term adverse effects from construction and increased visitor use, and long-term cumulative effects from the associated public interpretation and heritage education actions.

Past impacts from activities in the area including grazing, looting and defacement of cultural properties has been intense at specific locations such as Pueblo Devol and the Mimbres Village even with limited access. However, the impact to the cultural resources of the area as a whole has been low.

The existing array of management actions that guide management of the area today are judged to have low negative impacts.

Future management of the area as defined in the Management Plan is expected to have positive effects on the integrity of the cultural resources. In spite of the fact that some activities will continue, for example grazing, and resulting impacts will continue, the deferment of grazing in canyon bottoms will result in impacts that are less severe than at present. The resulting cumulative effect is therefore positive, as it is an improvement over the existing situation. Recreational development and the resultant improvement of access to these areas and increased visitor use are expected to have short term adverse impacts to the cultural resources in the area, but the cumulative impacts in the long term will be partially mitigated by the increased awareness of the value of cultural resources generated by the educational efforts completed as part of this development, and mitigated by fencing or excavation when necessary. The cumulative effect of streambank and terrace stabilization resulting from grazing deferment, tree planting, and soil and water actions, will be a highly

positive one in spite of short term adverse impacts which can usually be avoided or mitigated.

Lands

The Arizona Desert Wilderness Act designated the Gila Box Riparian National Conservation Area. The purpose is to protect, conserve and enhance the riparian and associated areas as well as many other resources. This language in the law will restrict some of the traditional and potential land uses in the area, independent of the alternative selected.

Applications for uses of public lands within the RNCA will be considered on a case-by-case basis, much the same way as they are presently considered. However, when making a decision on these applications, the proposal will be evaluated for compliance with the Management Plan.

Under the Management Plan a number of riparian roads will be closed to public access. To compensate for this, many of the upland roads providing access to the conservation area will be upgraded. Any new roads requested by the public will require designation as required by the Arizona Desert Wilderness Act which will, in turn, require a plan amendment. The required designation process will make authorization of a new road more difficult.

All rights in the public lands existing prior to establishment of the RNCA are recognized and protected. Primarily these rights consist of the rights-of-way listed in Chapter 3. A cooperative agreement negotiated between The BLM and the city of Safford regarding the management of these rights-of-way could define the potential impacts to resources. One provision of this agreement could be to restrict the use of portions of these rights-of-way to employees or agents of the City for maintenance of the City's facilities and for BLM administrative purposes.

Authorizations for new land uses within the RNCA under the Management Plan will

be significantly limited as compared to the present situation. This limitation would result in a low negative impact to the lands program.

Lands Cumulative Impacts

Within the boundaries of the conservation area, cumulative impacts to the lands program can be characterized as increasing over time. In the past, the consideration and approval of new projects or land uses was relatively simple. As more laws with specific management guidelines are brought to bear on the area, the authorization of use applications becomes more complex. The potential future designation of Bonita Creek and the Gila River as wild, scenic or recreational rivers under the Wild and Scenic Rivers Act may add yet another layer of complexity. The cumulative impacts to the lands program are considered negative under the increased restrictions of the Management Plan.

Recreation - Facility Development

Nineteen site-specific locations have been selected for development. Thirteen areas of existing use would receive attention, while six new recreation sites are proposed. This alternative could attract a low to moderate level of visitor use and provide low to moderate facility-based recreation opportunity and economic benefits from tourism. Physical site control would disperse use, eliminate user conflicts, and prevent expansion to a low to moderate degree over the entire RNCA.

Road upgrades and construction will result in a low to moderate increase in visitor use, recreation opportunity and economic benefits.

Impacts from threatened and endangered species and habitat management would have a low to moderate negative affect.

There would be a positive impact from no livestock grazing in the **riparian** areas, since

livestock grazing in the riparian areas will be curtailed. Most of the recreation facility locations will be excluded from livestock grazing and reduce impacts from livestock which cause driving hazards, excrement, unpleasant odors, facility destruction and livestock occupation of key areas within the facility sites.

The 1/4 mile boundary on each side suitable wild and scenic river segments may require adjustment of some proposed recreation developments to protect outstandingly remarkable values of those river segments.

The Management Plan is expected to have an overall low positive impact on recreation facility development.

Recreation - Facility Development Cumulative Impacts

Cumulative impacts to facility based recreation is assessed within the boundaries of the RNCA. In the past, recreational facilities were limited to three partially developed sites. Access was limited to roads developed and maintained for livestock or water system management. In most areas, livestock conflicted with recreation use. Future management will have a positive impact on facility based recreation. The nineteen developments under the Management Plan will result in a substantial increase in opportunities. Access to these sites is provided along improved upland roads and livestock conflicts are further reduced. Designation of Bonita Creek and/or the Gila River as wild, scenic or recreational may have some impacts on the development of recreation sites. The designation of Bonita Creek and the Gila River as critical habitat for the razorback sucker may have additional impacts. Despite constraints imposed by these possible designations the cumulative impacts to facility-based recreation is positive.

Recreation - Dispersed Motorized Visitation

Two of 15 miles of the Bonita Creek riparian road would be open to visitors for vehicular travel. This equates to an 85 percent reduction in linear driving opportunity and associated vehicle-based recreation opportunities, shifting driving use to the uplands. Two popular car-camping sites in upper Bonita Creek will be only partially retained, which is a low negative social impact. Physical and social impacts will become concentrated within the two available miles of riparian road, and could be considered seasonally high. An overall moderate increase in visitation to the area is projected over time despite some displacement of traditional visitors. Contact with other vehicle-based parties will be seasonally high, a generally undesirable condition.

The mouth of Bonita Creek will be the most frequently visited area within the Bonita Creek corridor. Here visitor use and negative social impacts are expected to be seasonally moderate.

None of the 23 miles of the Gila River corridor would be open to vehicular travel by sand rails. This equates to a 100 percent reduction in linear driving opportunity, and associated seasonal sand-rail-based activities, such as fishing and picnicking. Approximately 20 to 30 sand rail enthusiasts in the region would be displaced. This is considered a high negative social impact to this traditional activity and related activities.

Impacts from threatened and endangered species and habitat management would be low to moderately negative.

The Management Plan is expected to have an overall low negative impact on dispersed motorized visitation opportunities.

Recreation - Dispersed Motorized Visitation Cumulative Impacts

Cumulative impacts to vehicle-based recreation are considered in the region of southeastern Arizona. In the past, vehicular use of the RNCA was totally unregulated. Vehicular recreation occurred the entire length of Bonita Creek and the Gila River at low levels. Threatened and endangered species management did not constrain these activities. The lack of systematic road maintenance reduced opportunities following flood events.

Future impacts to vehicle-based recreation will be negative because the number of miles of roads have been reduced and access limited. The impacts to sand rail and four-wheel-drive use is negative. Regionally, these opportunities occurred in many stream canyons in the area that are now restricted. Aravaipa Canyon, San Pedro River, and Hot Springs Canyon are three examples. The loss of opportunity for this activity in Bonita Creek and the Gila River has a negative regional impact to this activity. However, a relatively small number of people (20-30) use this opportunity.

Recreation - Dispersed Non-Motorized Visitation

In Bonita Creek, a ten-mile segment of creek will offer a virtually unroaded corridor containing one half mile of total road due to crossings, point access or short reaches of riparian road. This will result in a moderate positive social impact for visitors participating in non-motorized activities.

In the Gila River, 23 miles of **non motorized** use opportunity would be created in a currently unmodified, natural environment. This will result in a high positive impact for non-motorized users

because motorized vehicle use from sand rails and **ATVs** will be curtailed and restricted from utilizing this corridor.

Impacts from livestock grazing will be moderately positive because of the curtailment of livestock grazing in the riparian area and the reduction of excrement, unpleasant odors, trail destruction, water quality deterioration, and cattle occupation of key sites within the area.

The Management Plan is expected to have an overall moderate positive impact on non-motorized visitation opportunities.

Recreation- Dispersed Non-Motorized Visitation Cumulative Impacts

Non-motorized recreation in the RNCA is estimated to have been extremely low in the past. Factors that limit these recreation opportunities are encounters with vehicle-based recreation and the modified environment a road creates.

Future management will increase opportunities for a quality non-motorized recreation experience by reducing the number of roads in the RNCA and vehicular access along the riparian areas.

Minerals

The Management Plan would have little if any impact on mining activities associated with the Dorothy B claims. This is because of the non-discretionary rights associated with federal mining claims, and the 1872 Mining Law.

Minerals Cumulative Impacts

Cumulative impacts to the minerals program is assessed on a regional basis. In the past, few restrictions were placed on mining in the area. However, there has been little development of minerals within the RNCA. The Dorothy B mining claim is the only

exception. The Arizona Desert Wilderness Act closed the RNCA to mineral entry which would be an impact if mineral resources exist in the area. However, studies of the area indicate low potential for the existence of commercial quantities of minerals. The withdrawal of the RNCA from mineral entry and a validity exam of the Dorothy B claim will have little if any impact on the minerals industry in Arizona.

Socio-Economic

The socio-economic impacts resulting from the Management Plan are the same as those listed in the Draft **Plan/EA**, Chapter 4. Therefore, the Socio-Economic section found in Chapter 4 of the Draft Plan/EA is incorporated into this EA by reference.

Livestock Management

The impacts to livestock use resulting from the Management Plan are grouped into two categories.

1. Manageability - changes in livestock handling, lack of necessary facilities to manage livestock, new range improvement construction, range improvement maintenance, more intensive grazing systems, increased regulation, constraints for threatened and endangered species management and water quality management, loss of vehicle access to allotments, increased operating cost, increased conflicts with the public and increased vandalism to facilities.

2. Grazing preference - the number of livestock authorized to graze on an allotment. (Impacts are described by allotment)

Johnny Creek -4615

There will be negative impacts to the livestock use of this allotment. There will be an increased livestock handling cost to keep livestock out of Bonita Creek. There will be a moderate increase in maintenance cost. The

allottee will not have physical access to his private land because no roads will be maintained to the private land at the mouth of Johnny Creek. Approximately 0.75 of a mile of creek bottom will be transferred to the Bonita Creek allotment in order to implement this alternative. The AUMs lost by the removal of use from Bonita Creek are small and will be absorbed by other portions of the allotment.

Bonita Creek - 4616

There will be negative impacts to the livestock management of this allotment. The manageability of the allotment will be greatly reduced. The only vehicle crossings of Bonita Creek will be on Bull Gap and Hackberry Spring roads. This will severely disrupt the management by limiting access. Manageability will also be reduced due to limited use of the creek bottom to move livestock between pastures. The cost of operation will increase due to the increased fencing maintenance, pumping costs, capital improvements, added expense for trucking livestock (if possible) and **increased** livestock handling costs. The AUMs associated with Bonita Creek and a portion of Midnight Canyon pasture may result in an animal unit reduction to grazing preference.

Bullgap - 4617

There will be some negative impacts to the livestock management of the allotment. The full time use of the current water points will be replaced by developing upland water sources. The AUMs lost are minor and can be absorbed by other portions of the allotment.

There will also be positive impacts to the livestock operation on this allotment. Conflicts with the public and vandalism will be reduced by not having livestock in Bonita Creek and the Gila River. Livestock handling will be reduced by not having livestock in Bonita Creek and the Gila River.

Turtle Mountain - 4618

The implementation of the plan will not significantly impact this allotment.

Twin C - 4021

There will be some negative impacts to the livestock use of the allotment. There will be an increased livestock handling cost to keep livestock out of the river. The loss of the river as a water source will be offset by upland water development. And there will be an increase in maintenance cost for new fencing. There will be an increase in conflict with the public because of improved access on the allotment and to the river. The AUMs lost are minor and will be absorbed by other portions of the allotment.

County Line - 4022

The implementation of the plan will not significantly impact this allotment.

Zorilla - 4011

The implementation of the plan will not significantly impact this allotment.

Gila - 4014

There will be negative impacts to the livestock use of the allotment. The manageability of the allotment will be greatly reduced by the loss of the river as a travel way. The added cost of operation due to increase capital cost for improvements, added maintenance cost, and increased livestock handling costs will reduce the manageability of the allotment. Maintenance of water gap fencing across the river to secure livestock on private land will continue to conflict with river recreation.

Smuggler - 4010

The implementation of the plan will not significantly impact this allotment.

Morenci - 4003

There will be negative impacts to this allotment. The manageability of the allotment will be reduced by increasing the fence and watergap maintenance needs. The livestock handling costs would be increased to keep the livestock out of the river. Even under the best fencing plan there could be livestock in the river at times. A regularly scheduled roundup will have to be done to keep the river free of livestock.

Summary of the Livestock Improvements

Livestock management on the upland areas within the RNCA will be managed consistent with the Arizona Standards for Rangeland Health and Guidelines for Grazing Administration. To provide effective exclusion of livestock from the riparian areas, the following range improvements will be implemented:

Miles of Fencing	30
Number of Water Gaps	8
Number of Wells	1
Miles of Pipeline	22
Number of Storage Tanks	12

Implementation of the Management Plan is expected to have low negative impacts on livestock management in the Gila Box RNCA.

Cumulative Impacts

Cumulative impacts to livestock operations in the RNCA primarily involve the cost-benefit ratio associated with more intensive management of livestock. This assessment involves the increased level of productivity balanced against the cost of that production. Cumulative impacts to livestock operations in the area can be characterized by increasingly intensive management which require investments of time, money and labor balanced by range developments and grazing systems.

See Table 4.1 on the following page for a comparison of environmental impacts resulting from implementation of the Management Plan and alternatives considered in the Draft Plan/EA.

Table 4.1 Comparative Environmental Impacts of Alternatives

Resource	Alt 1	Alt 2	Alt 3	Alt 4	Preferred Alternative	Mgmt. Plan
Soil & Water	high Positive +++	mod Positive ++	high Negative ---	low Positive +	low Positive +	high Positive +++
Upland Veg	low Positive +	low Positive +	low Positive +	low Positive +	low Positive +	mod Positive ++
Riparian Veg	high Positive +++	mod Positive ++	mod Negative --	low Positive +	low Positive +++	high Positive +++
Wildlife	high Positive +++	mod Positive ++	low Negative -	low Positive +	low Positive +	high Positive +++
Fish	high Positive +++	mod Positive ++	mod Negative ++	low Positive +	mod Positive ++	high Positive +++
Cultural	mod Positive +	low Positive +	low Negative +	low Positive +	low Positive +	low Positive +
Lands	mod Negative --	low Negative -	mod Positive ++	low Positive +	low Negative -	low Negative -
Recreation Facilities	low Positive +	low Positive +	low Negative -	mod Positive ++	mod Positive ++	low Positive +
Motorized Recreation	mod Negative --	low Negative -	high Positive +++	mod Positive ++	low Positive +	low Negative -
Non-Motorized Recreation	high Positive +++	low Positive +	high Negative ---	low Positive +	mod Positive ++	mod Positive +++
Grazing	mod Negative --	low Negative -	mod Positive ++	low Positive +	low Positive +	mod Negative --
Minerals	low Negative -	low Negative -	low Negative -	low Negative -	low Negative -	low Negative -

Mitigation and Residual Impacts

All mitigation measures have been incorporated into the Management Plan.

Persons/Agencies Consulted

A description of the persons and agencies consulted is found in Chapter 5 of the Draft

Plan/EA on pages 137-139. New additions to the Management Plan planning team include:

Tim Goodman, Range Specialist
Ben Robles, Wildlife Biologist
Scott Evans, Realty Specialist

Preparer(s): Scott Evans
Date: 12/8/97

Finding Of No Significant Impact/ Decision Record

Introduction

The Management Plan for the Gila Box Riparian National Conservation Area, presented in the attached document and analyzed in EA AZ-040-08-03, has been created by selecting management actions from the five alternatives analyzed in the Draft Gila Box Riparian National Conservation Area Interdisciplinary Activity Plan/Environmental Assessment (Draft **Plan/EA**), released in August 1993, with some additions and modifications. The Draft Plan/EA, AZ-040-03-20 has been incorporated by reference into the attached environmental assessment AZ-040-08-03.

The Management Plan adopted all management proposals developed by the Gila Box interdisciplinary team which were unanimously supported by the Gila Box Advisory Committee at their September 25, 1996, meeting. These proposals were originally taken from the Preferred Alternative of the Draft **Plan/EA**, re-analyzed by the BLM interdisciplinary team members in the context of public comments, modified and presented to the Advisory Committee for their approval. These management actions for soil and water resources, wildlife, fish, cultural resources, the transportation system, recreation (excluding sand rail use), and livestock management (excluding riparian grazing), along with the corresponding rationale statements, are described in the attached Management Plan on pages 1-43.

Both Advisory Committees which participated in the planning process for the Gila Box struggled with the sand rail use and riparian grazing issues. Neither Advisory Committee was able to develop a consensus recommendation for the BLM regarding how to proceed on these two issues. Therefore, the BLM interdisciplinary team took a second look at both issues, in the context of the law,

the House Report, public comment, diverse Advisory Committee concerns, and observed/anticipated resource impacts, and developed the final recommendations for the BLM on these issues. Management actions for riparian grazing and sand rail use of the river corridors are also included in the Management Plan.

The resulting Management Plan is in conformance with the Safford District Resource Management Plan, as approved in partial records of decisions I & II, dated September 1992 and July 1994, as amended in September 1994. The Management Plan is also in conformance with the Arizona Standards for Rangeland Health and Guidelines for Grazing Administration dated April 28, 1997; the Upper Gila-San Simon Grazing EIS dated 1979; and the U. S. Fish and Wildlife Service "Programmatic Biological Opinion for the **Safford/Tucson** Field Offices' Livestock Grazing Program, Southeastern Arizona," dated September 26, 1997, as well as all laws and regulations identified in the Constraints section on pages 5-9 of the Management Plan. This includes management guidance provided by Title II of the Arizona Desert Wilderness Act of 1990, Public Law 101-628.

Decision

This Decision Record approves the Management Plan for the Gila Box Riparian National Conservation Area from date of signature for 15 years. It is the decision of the Safford Field Manager of the Bureau of Land Management to authorize implementation of the Management Plan for the Gila Box Riparian National Conservation Area as presented in the attached document and analyzed in Environmental Assessment AZ-040-08-03. The Management Plan was assembled from management actions

contained in the five alternatives analyzed in the Draft Plan with some additions and modifications. The Management Plan was selected after the BLM interdisciplinary planning team considered and analyzed issues and concerns raised by the public during the comment period on Draft ~~Plan~~/EA. The decision is consistent with all existing legal guidance and land use planning decisions that apply to the Gila Box RNCA.

Finding of No Significant Impact

Based on the analysis of the five alternatives considered in the Draft ~~Plan~~/EA AZ-040-30-20, the analysis of the Management Plan contained in Environmental Assessment AZ-040-08-03, and consideration of the context and intensity of the identified impacts, I have determined that the environmental impacts of the Management Plan for the Gila Box Riparian National Conservation Area are not expected to be significant and an environmental impact statement is not required.

Rationale

It is the judgement of the BLM that the management actions selected for inclusion in the Management Plan best meet the mandates for management of the Gila Box Riparian National Conservation Area (RNCA) found in the Arizona Desert Wilderness Act of 1990, the House Report that accompanied the Act, the BLM Riparian Management Policy, the Programmatic Biological Opinion for the Safford and Tucson Field Offices' Livestock Grazing Program (2-21-96-F-160), as well as land use planning decisions found in the Upper Gila-San Simon Grazing EIS and Safford District Resource Management Plan. The Gila Box RNCA Management Plan provides for appropriate use of the Gila Box RNCA while providing high levels of protection for the riparian, area and the associated resources and values. Applicable portions of the Arizona Desert Wilderness Act

require management of the Gila Box RNCA ". . . to conserve, protect and enhance the riparian and associated areas. . . and the aquatic, wildlife, archaeological, paleontological, scientific, cultural, recreational, educational, scenic and other resources and values . . ."

Summary of Management Actions Addressing Controversial Issues

Management actions adopted in the Management Plan that address some of the more controversial issues in the Gila Box RNCA include the transportation system, riparian grazing, and sand rail use of the Gila River floodplain. The management actions adopted by the BLM to address these issues are discussed in the following sections. A more complete summary of management actions adopted in the Management Plan are presented in Table 2.1 in the attached Environmental Assessment, AZ-040-08-03.

Transportation System

The BLM's intent is to provide improved four-wheel-drive access on all upland and riparian roads designated in the plan for public access. In several cases (Red Knolls Road, Hackberry Road and Christensen Road), existing access is hazardous and needs to be improved to protect the health and safety of the public as well as employees.

The Management Plan designates 15 roads in the upland areas of the RNCA to provide public access to areas of the RNCA and provide sufficient access for administrative needs of The BLM, the City of Safford and livestock operators. The designated riparian road network is reduced to two miles of riparian road in Bonita Creek and no riparian road in the floodplain of the Gila River. Additional riparian roads in Bonita Creek are expected to be maintained

by the City of Safford on their pre-FLPMA right-of-way.

The Management Plan designates and maintains two miles of riparian road in Bonita Creek for public access. The designated Bonita Creek riparian road extends from the City access road south to Bullgap Road, from the City access road north to the City maintenance yard and across Bonita Creek at the Red Knolls-Hackberry crossing. The City of Safford is expected to maintain an additional 1.5 miles of riparian road in Bonita Creek, for administrative access, from the City maintenance yard north to their water collection system. The entire riparian road in Bonita Creek is located on a pre-FLPMA right-of-way held by the City of Safford. This right-of-way is considered a valid existing right within the RNCA.

Although the BLM is not designating a road in Bonita Creek between Lee Trail and Jones Road, the BLM will provide administrative access at a minimal maintenance standard until such time as the designated upland road network can be maintained to the above-described safe access standard.

No riparian road is designated within the floodplain of the Gila River. Administrative access necessary for servicing water pumps supplying water to livestock in the uplands will be considered by the The BLM on a case-by-case basis along one mile of unmaintained ways in the Gila River floodplain. Administrative use of unmaintained riparian roads will be decided on a case-by-case basis as allowed in Sec. 201(d)(2) of the Arizona Desert Wilderness Act of 1990, Public Law 101-628.

Riparian Livestock Grazing

Livestock grazing of the riparian areas will be deferred for the life of the Gila Box Plan. Administrative decisions will be issued to the affected permittees. Riparian corridors may be used on a very limited basis to trail livestock as part of pasture rotations that are

implemented to achieve RNCA management goals and objectives.

Rationale

1. The Gila Box Interdisciplinary Team concluded that a "no riparian grazing" scenario best meets the management mandate for the Gila Box RNCA contained in the Arizona Desert Wilderness Act of 1990, to ". . . conserve, protect and enhance the riparian and associated areas . . . and the aquatic, wildlife, archaeological, paleontological, scientific, cultural, recreational, educational, scenic and other resources and values. . . The management plan . . . shall include provisions designed to assure protection of the resources and values . . ." The House Report which accompanies the legislation stated "This mandate is intended to be as protective as possible of the natural and cultural resources . . . The Committee intends for the BLM to work cooperatively with local permittees to ensure that careful attention be paid to control the entry of livestock into the canyon bottoms by developing and maintaining livestock watering facilities in upland areas and the erection of fences where appropriate and feasible."

2. The Federal Land Management and Policy Act (FLPMA) directs the BLM to manage the public lands under the principles of multiple use and sustained yield unless otherwise specified by law. According to FLPMA, multiple use is defined as managing the resources. . . so that they are utilized in the combination that will best meet the present and future needs of the American people; making the most judicious use of the public lands for some or all of the resources . . . the use of some land for less than all of the resources . . . 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 the greatest unit output." Less than 1% of the land managed by the BLM in the continental United States is classified as riparian land; the

Gila Box RNCA contains approximately 635 acres of riparian vegetation in the Gila River and approximately 160 acres of riparian vegetation in Bonita Creek. The BLM believes these lands are far more valuable to the citizens of the United States for values and uses other than livestock grazing.

3. The BLM has managed the riparian areas of the Gila Box RNCA for the past 20 years with the long-term objective of managing livestock out of the river corridors. The BLM has provided thousands of dollars towards fencing and water developments to achieve that objective. Nine of the 11 grazing permittees whose allotments border these riparian areas have cooperatively agreed to refrain from grazing these riparian areas, because of limited forage base and difficulties of managing livestock in this terrain. Only two permittees are currently permitted to graze livestock in the riparian areas of the Gila Box RNCA. The reduction in grazing AUMs as a result of this decision, are slight; it is estimated that these allotments may be reduced by approximately two dozen head of livestock as a result of this decision.

4. One of the major objectives in the Gila Box RNCA is to facilitate regeneration of native riparian vegetation communities between major flood events. The BLM cannot change the pattern of flood events through management. However, the BLM has observed that the riparian areas with the greatest vegetation mass suffer the least in the minor and moderate flood events. Heavily vegetated riparian areas are more resilient to ecologic damage from low and moderate flood events. Maximum vegetative growth in riparian areas between flood events is achieved through removal of livestock from these areas.

5. The BLM's Riparian Wetland Initiative for the 90's contains a two-part goal for riparian area management: to restore riparian areas so that 75% are in proper functioning condition by 1997, and to achieve

an advanced ecologic status. Although portions of the riparian areas are in proper functioning condition, the BLM believes none of them are in an advanced ecologic state. This can be achieved most quickly in the Gila Box RNCA riparian areas by removing livestock use. The Bonita Creek riparian corridor and a reach of the Gila River between the Old Safford Road bridge downstream to the boundary of the Subia allotment are currently in proper functioning condition (PFC). Although these portions are found to be in PFC, the BLM cannot attribute the condition of these reaches solely to the management of livestock grazing.

There has also been considerable discussion whether proper functioning condition should be used to measure the BLM's riparian standard in the Gila Box RNCA, since Arizona's Standards for Rangeland Health and Guidelines for Grazing Administration specify only proper functioning condition as a minimum criteria for rangeland health. The BLM believes that proper functioning condition is not the only criteria which should be met for riparian condition in the Gila Box RNCA. PFC does not take into consideration the impacts riparian livestock grazing has on the wildlife, recreation and cultural values of the Gila Box RNCA. The BLM does not believe riparian livestock grazing furthers the wildlife, recreation, and archaeological purposes for which the RNCA was designated.

6. Deferral of livestock grazing from the Gila Box RNCA riparian areas is in conformance with decisions in the Upper Gila-San Simon Grazing EIS as carried forward in the Safford District Resource Management Plan. The decision is also consistent with the U. S. Fish and Wildlife Service "Programmatic Biological Opinion for the Safford/Tucson Field Offices' Livestock Grazing Program, Southeastern Arizona", dated September 30, 1997.

7. In National Wildlife Federation et. al vs. BLM et al., December 20, 1993, (UT-06-

91-1), the BLM is directed to make a determination whether or not livestock grazing in a specific area is in the best public interest. Using the six criteria in this legal decision, the BLM has determined that livestock grazing in the riparian areas of the Gila Box RNCA is not in the best public interest.

Sand Rail Use of the Gila River Corridor

The BLM will not designate a road in the bottom of the Gila River, therefore sand rail use of the Gila River floodplain is prohibited.

Rationale

1. The Gila Box Interdisciplinary Team concluded that a "no road designation in the Gila River" scenario best meets the management mandate for the Gila Box RNCA contained in the Arizona Desert Wilderness Act of 1990, which is "to . . . conserve, protect and enhance the riparian and associated areas . . . and the aquatic, wildlife, archaeological, paleontological, scientific, cultural, recreational, educational, scenic and other resources and values . . ." and to " . . . allow only such uses as . . . will further the purposes for which the conservation area is established." The law continues: "Except where needed for administrative purposes or to respond to an emergency, use of motorized vehicles in the conservation area shall be permitted only on roads specifically designated for such use as part of the management plan. . . The management plan . . . shall include provisions designed to assure protection of the resources and values . . ." The House Report which accompanies the legislation states, "ORV use in the river bottoms of the area has been a longstanding controversy. The language of this section is clearly intended to terminate this activity in the conservation area and keep all motorized access limited only to those parts of the conservation area where such use will not conflict with the primary mandate to

conserve, protect and enhance the area's resources and values." Even the BLM's internal memo from the Washington Office interprets, "The House instruction amounts to an unequivocal ban on ORV use in river bottoms."

2. As was previously discussed in the grazing decision rationale, the Federal Land Management and Policy Act directs the BLM to manage the public lands under the principles of multiple use and sustained yield unless otherwise specified by law. FLPMA defines multiple use as managing the resources " . . . so that they are utilized in the combination that will best meet the present and future needs of the American people; making the most judicious use of the public lands for some or all of the resources . . . the use of some land for less than all of the resources . . . 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 the greatest unit output." Less than 1% of the land managed by the BLM in the continental United States is classified as riparian land; the Gila Box RNCA contains approximately 635 acres of riparian vegetation in the Gila River and approximately 160 acres of riparian vegetation in Bonita Creek. In the seven years since designation of the Gila Box RNCA, levels of motorized vehicle use and resulting impacts to vegetation in the riparian corridors of the RNCA have been increasing; motorized vehicles are denuding riparian areas at the mouth of Bonita Creek and at the east end of the RNCA at the Old Safford Road bridge on the Black Hills Backcountry Byway.

The BLM estimates approximately two dozen local families use sand rails for recreation in the Gila River corridor, and a growing number of other four-wheel-drive enthusiasts are expanding their activities into the Gila Box RNCA river corridors. The interdisciplinary team did discern a lesser degree of impact from sand rails as compared to other four-wheel-drive vehicles in the river

corridor itself, but felt allowing some types of vehicles and not others would result in de facto discrimination and could possibly violate the President's Executive Order on Environmental Justice. In summary, the BLM believes these lands are far more valuable to the citizens of the United States for values and uses other than motorized vehicle travel and recreation.

3. There has been some discussion of using the method termed "proper functioning condition" (PFC) as the criteria for evaluating impacts and determining whether or not sand rail use is appropriate for the Gila River corridor. The BLM finds that PFC does not address noise impacts to wildlife, impacts to spawning fish, or conflicts between recreational uses, all of which are expected from motorized vehicle use in the Gila River corridor. Therefore, the criteria establishing PFC is not adequate for determining whether or not motorized vehicle use should be allowed.

4. With new technological advances in river-running equipment, it is now possible for river floaters to travel the Gila River corridor 12 months a year. The potential for conflict between motorized and non-motorized recreational users is high, and the BLM finds these uses to be largely incompatible. Resource impacts are lower from river floaters, and significantly more floaters than motorized vehicle operators use the river corridor. The BLM has received increasing complaints regarding conflicts between these user groups. The BLM anticipates that the boating use of the river will increase significantly in the near future.

5. The interdisciplinary team has not been able to develop a satisfactory method with which to monitor resource impacts of sand rails on native fish, riparian vegetation, or wildlife and birds in the river bottoms of the Gila Box RNCA. Both advisory committees as well as other agency

representatives expressed concern regarding the availability of scientific techniques suitable for monitoring such impacts. Sand rail use is known to occur during native fish spawning periods, and the use corridor coincides with those areas most likely to be used for egg deposition by spawning native fish. The cost of monitoring for this activity would certainly be beyond current BLM budgets and anticipated future funding levels for the Gila Box RNCA. The noise from motorized vehicle use clearly disturbs birds within the riparian corridor, but the BLM finds the effects of that disturbance impossible to quantify given currently accepted scientific techniques. Given this analysis, the BLM finds that the mandate to "... be as protective as possible of the natural and cultural resources . . ." and to "... allow only those uses which further the purposes for which the area was designated" requires the BLM to terminate motor vehicle use of the Gila River corridor.

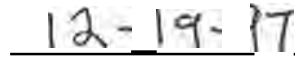
6. The law directs the BLM to allow motorized vehicle use only on designated roads within the Gila Box RNCA. In order to designate a road in the Gila River corridor, road marking would be required. During even minor flood events, these markers would likely be removed. The BLM would have to immediately redesignate a road, almost as the water recedes, in order for motorized vehicle use to be consistent with the legal mandate of the law. The manageability of this situation was questioned by staff, who were concerned that motorized vehicle use could occur prior to remarking of the road corridor in the river bottom and thus technically violate the mandate in the law. The only other method to designate a road in the Gila River corridor would be to designate the entire canyon bottom as the road, which was unacceptable to the team because of associated resource impacts which would result from unrestricted motorized use. These methods of road designation were not acceptable to the BLM because of the intensity of management

required and the ambiguity of road location at certain times following high water events.

7. The decision is consistent with the Safford District Resource Management Plan, which limits motor vehicle use to designated roads.

Handwritten signature of William F. Grisel in cursive script, underlined.

Safford Field Manager

Handwritten date 12-19-17, underlined.

Date

Response To Comments

Water Rights

A few commenters stated that BLM acquisition of instream flow water rights must not impact agricultural and/or mining and/or domestic needs.

Because instream water rights are not consumptive rights, they ensure that water is retained in the river system. This water is still available for use by entities which hold downstream water rights. Therefore, BLM acquisition of instream flow water rights is not expected to impact agricultural, mining, or domestic needs.

Water Quality

Comments by the ADEQ to protect water quality were included as a constraint in the plan.

It is BLM policy to protect water quality by implementing Best Management Practices which reduce the impacts of land management actions. The BLM is bound by FLPMA and the Clean Water Act to manage water quality to meet federal and state standards. The Arizona State Code requires the BLM to prevent further degradation of existing water quality and prevent degradation of the water quality of Unique Waters such as Bonita Creek.

Riparian Objectives

Some commenters felt the riparian objectives are not sufficient.

The tree/sapling ratios and densities in objective 1 are not intended to reflect the potential age class distributions or densities of riparian areas within the Gila Box RNCA. The objectives were set based on what can realistically be achieved during the life of the plan. These objectives will be reviewed and adjusted in subsequent years as the plan is extended or amended and on the basis of new information, monitoring, and research results.

It is not possible for areas which currently have little or no established riparian vegetation to achieve a late seral stage in the next two decades. Late seral is not a realistic and perhaps not even a desirable objective for all riparian areas. The presence of a variety of seral stages reflects the impact of climatic conditions and the frequency and intensity of flood events. Because streams are dynamic systems in which disturbance plays a vital role, a variety of seral stages along the length of a stream is expected and allows for the greatest diversity of vegetation and animals.

Riparian Assessment

One commenter felt that the criteria for Proper Functioning Condition (PFC) should include more parameters.

The criteria for assessing PFC does include parameters relating to streambank and channel condition as well as the ability to withstand flood damage. The vegetative component of the PFC checklist contains a streambank stability assessment which includes evaluation of the streambank's capability to withstand high flow events. The erosion component of the checklist includes an assessment of channel characteristics, condition, and stability.

General Wildlife

Commenters were concerned that owl boxes for cactus ferruginous pygmy-owls and the planting of riparian trees were temporary solutions.

BLM realizes that these actions are not permanent solutions, but they will be useful while tree habitat is getting established.

Natural regeneration of trees will take time, even with the elimination of livestock grazing in the stream bottoms, setbacks can occur because of high water events in these streams.

Threatened & Endangered Species

Commenters on this were concerned about the BLM managing T&E species for their protection or enhancement.

We are required by law to conserve T&E species and to consult with Fish and Wildlife Service on actions which may impact these species.

Native Fish Protection and Enhancement

Several commenters were concerned with the protection of native fish and their important habitat in the RNCA, and the options and management actions to accomplish this.

Native fish species are of concern to the BLM and we realize that the condition of the watershed and the riparian vegetation around their aquatic habitat is very important. We are working to protect or improve these habitats. All the different options and management actions for their improvement or protection cannot be addressed in detail in this document, but will be described in depth when the specific action goes through the NEPA process. The BLM realizes that fish monitoring is an important tool for the management of fish populations, but because of budget constraints and manpower, cannot accomplish this on an annual basis.

Predatory Fish Control

Several commenters were interested in predator fish control.

This will be evaluated in cooperation with the Arizona Game and Fish Department (AGFD) and the U.S. Fish and Wildlife Service (USFWS) to determine its feasibility and effectiveness. The management of fish and wildlife is under the jurisdiction of AGFD and the management of fish and wildlife habitat on public land is the responsibility of the BLM.

Fish Monitoring

Some comments addressed the need for fish monitoring.

The BLM realizes that fish monitoring is an important tool for the management of fish population, but because of budget and personnel constraints, monitoring may not be feasible on an annual basis.

Specific Responses For Wildlife, T&E, and Fish

There were many comments that were considered statements not requiring a response and a few that could be answered with a small change in the wording of the draft [plan/EA](#).

Such changes were made in cases where the new wording did not significantly vary from the intent of the original wording found in the draft [plan/EA](#).

A few comments dealt with specific issues which did not require a change or response in the document.

Those comments are answered here as follows:

75-12

Reintroduction of extirpated native fauna.

Response

This is one of the management actions common to all alternatives on page 34 of the Draft [Plan/EA](#).

80-13

Reintroduction of beaver into Bonita Creek.

Response

Beaver are already present in Bonita Creek and have been for many years.

70-11

Effects of non-native fish control on native fish in upper Bonita Creek.

Response

Native fish in the upper part of Bonita Creek are well protected from the non-native fish in the lower part of Bonita Creek and the Gila River. The City of Safford water collection system in the creek provides a good barrier to non-natives.

36-11, 53-23, 54-43, 70-7, 70-8, 70-9

Fish barrier.

Response

If a fish barrier for Bonita Creek is found to be practical, it will, at that time be analyzed in accordance with NEPA, ESA, Wild and Scenic Rivers Act, and other mandates, as required, before being constructed.

69-8

Balancing the needs of fish and eagles and other fish-eating birds.

Response

We cannot discuss in this document the specific biology and the ecological interactions and interrelationships of all the species present in the Gila Box RNCA.

Cultural Resource Inventory and Excavation

Several commenters recommended that the BLM conduct more inventories, excavations and studies than were prescribed in the draft plan.

Most of these recommendations are good ideas, e.g., excavate the Eagle Creek village and conduct an intensive inventory of the RNCA. Those not included in the final plan were omitted because of the lack of funding and staff expected during the life of the plan. One recommendation was to excavate the Dorothy B site. We are not sure what site the commenter was referring to, as there are two prehistoric sites on the Dorothy B mineral claims. One is a very sparse scatter of chipped stone tools. We have no plans to conduct

excavations at this site. The other site is the site we call the Mimbres Site. The potential excavation of this site is one of the management plan's actions.

Cultural Resource Protection

Several comments addressed concerns about cultural resource protection.

All recommendations to protect cultural sites were included in the final plan. These recommendations were:

- protect sites from construction/maintenance (this is required by law so it is not necessary to have it as a management action)
- protect sensitive sites from improved or direct public access (recommendation was followed when designing transportation plan and site interpretation actions)
- protect the **Serna** Cabin.

Traditional Cultural Properties and Traditional Lifeway Values

Several commenters disagreed with the statement in the draft **plan/EA** that no Traditional Cultural Properties (TCPs) had been identified in the RNCA.

In the draft, BLM was referring to a specific property type as defined by the National Park Service for use in listing sites in the National Register of Historic Places. A Traditional Cultural Property, according to the National Park Service, is "a cultural property that may be eligible for inclusion in the National Register because of its association with cultural practices or beliefs of a living community that (a) are rooted in that community's history, and (b) are important in maintaining the continuing cultural identity of the community." Our failure to define the term resulted in much confusion and disagreement by the reviewers. One reviewer stated that the BLM needs more inventory to

identify TCPs. Identification of TCPs and Traditional Lifeway Values is a major component of the ethnoecology study prescribed in the final plan. Using a broader definition of traditional lifeway values and traditional uses, it is not denied that such values and uses exist in the RNCA.

San Carlos Apache Reservation Boundary

Comments have been received from the San Carlos Apache Tribe stating their view that portions of the NCA are within the area claimed by the Tribe, and that the Gila Box planning effort should not continue until the boundary dispute is settled.

It is BLM's view that the boundary issue is outside the scope of the Gila Box planning process and should be settled in a separate process. Consequently, the issue was not discussed or analyzed in the Draft plan and environmental assessment and is not addressed in the final management plan and environmental assessment.

Traditional Lifeways

Commenters suggested that sand riling, grazing, mining, and recreation are traditional lifeways or uses and that these uses should be allowed to continue. One commenter recommended that sand riling should not be considered a traditional lifeway value or use.

The final plan prohibits off-road travel by motorized vehicles, including sand rails. Grazing will continue to be allowed in the uplands but not in the riparian canyon bottoms. The RNCA was withdrawn from mineral entry by the legislation designating the RNCA. Recreation will be enhanced by the construction of several recreation facilities. All these management actions were included in the final plan in an attempt to follow as closely as possible the requirements stated in the designation legislation.

Grazing Comments

There was a wide diversity of public comments on livestock grazing; these ranged

from complete livestock exclusion to no change in livestock use.

Numerous respondents offered suggestions on how livestock should be managed within the riparian areas of the RNCA. These suggestions included season of use, monitoring, utilization levels, allotment boundary adjustments, and fencing recommendations. These well-founded suggestions, if implemented, would achieve the management goals with varying degrees of success.

The BLM decision to defer livestock grazing from riparian areas within the RNCA for the life of the plan will allow the quickest and most desired vegetative response. The decision best meets the Congressional mandate to "conserve, protect and enhance" the riparian areas. The decision is in compliance with and follows the management prescriptions found in the BLM Upper Gila-San Simon Grazing EIS, as was carried forward in the Safford District Resource Management Plan. The decision is also consistent with the "Programmatic Biological Opinion for the Safford/Tucson Field Offices' Livestock Grazing Program, Southeastern Arizona" issued by the U.S. Fish and Wildlife Service.

Management Zones

A variety of comments were received discussing the pros and cons of management zones as presented in the Draft **Plan/EA**.

The original planning process to be used for the development of the draft management plan was the "Limits of Acceptable Change" (LAC) planning process. This process proved to be incompatible with the complex management issues for the Gila Box RNCA. In addition this LAC planning process seem to work better with a area that was already in good ecological condition rather than areas that were in less than good ecological condition and needing improvement. However, the management zone concept used in the LAC process was carried forward into the draft management plan because the interdisciplinary team felt the zoning concept

would be easier for the public to understand how the BLM was trying to balance the resource and social management issues within the Gila Box RNCA.

Consequently, comments received from the public varied from liking the management zone concept to one of confusion and total disagreement with the concept. In addition, some of the interdisciplinary team found that the management zone concept duplicated or confused the understanding of the goals and objectives of the draft management plan. Therefore, the interdisciplinary team decided to drop the management zone **concept** and just use the traditional goals and objectives planning process.

Roads

Many varying and polarized comments were received concerning the amount and location of roads to be designated within the RNCA.

The driving force for designating roads within the RNCA was the interpretation of the intent of the legislation that created the Gila Box Riparian National Conservation Area. It is well understood by the interdisciplinary team that the legislation could be interpreted in many ways, but the team nevertheless has made its determination for designation of roads based on social and resource needs as it relates to conserving, protecting, and enhancing the **riparian** and associated areas.

The Arizona Desert Wilderness Act of 1990, Public Law 101-628, Title II - Designation of the Gila Box Riparian National Conservation Area, Sec 201, Designation and Management (d)(2), states that:

The Secretary shall allow only such uses of the conservation area as the Secretary finds will further the purposes for which the conservation area is established. Except where needed for administrative purpose or to respond to an emergency, use of motorized vehicles in the conservation area shall be permitted only on roads specifically designated for such use as part of the management plan.

The purposes for which the Gila Box

Riparian National Conservation Area was designated can be found in the legislation referenced above and is stated below.

Purposes.—In order to conserve, protect, and enhance the riparian and associated areas described in subsection (b) and the aquatic, wildlife, archaeological, paleontological, scientific, cultural, recreational, educational, scenic, and other resources and values of such areas, there is hereby established the Gila Box Riparian National Conservation Area.

As stated in the draft management plan, roads in the riparian area, especially in Bonita Creek, can cause water to be channelized in the road during moderate flood events and cause the loss of soil on the riparian terraces, which consequently reduces riparian vegetation. In addition, vehicle use in the **riparian** area with its associated noise, creek crossings, and motion will disturb various wildlife species. However, there is a need to allow vehicle traffic in the riparian area in order to cross Bonita Creek to access public lands on the east side of Bonita Creek and to access some traditional vehicle-based recreation areas within the RNCA.

The roads chosen to be designated in the final management plan in Bonita Creek were chosen because they had the least negative impact to the natural and cultural resources while still allowing some vehicular access to traditional vehicle-based recreation areas within the RNCA, and to allow for the only access to the uplands on the east side of Bonita Creek. The number of miles of riparian roads within Bonita Creek has been reduced from 15 miles to approximately two miles. The city is expected to maintain an additional 1.5 miles for administrative access to water system.

No road was designated in the Gila River floodplain or riparian area for vehicle use, primarily because of the **language** in the House of Representatives Report concerning the designation of the Gila Box RNCA. The language from that report concerning roads in the Gila River states:

The Committee also notes the language in Section 4(d)(2) of the bill requiring use of motorized vehicles to be permitted only on

roads specifically designated for their use. ORV use in the river bottoms of the area has been a longstanding controversy. The language of this section is clearly intended to terminate this activity in the conservation area and keep all motorized access limited only to those parts of the conservation area where such use will not conflict with the primary mandate to conserve, protect and enhance the area's resources and values.

Although the language above was the primary reason for not designating a road in the Gila River floodplain, additional resource and management concerns were expressed from the majority of the interdisciplinary team in designating a road in the Gila River. One, how would the BLM designate a road in an ever- changing floodplain? Would staff mark the road every time a moderate flood washed the designated road away or would the BLM designate the entire floodplain in the Gila River a road? Two, could the BLM expect the vehicles to stay on the designated road the entire 23 miles of the Gila River and not venture off into sensitive riparian areas, and could this be enforced? Three, there was some concern that vehicles crossing the river may have some impact to threatened and endangered native fish. Four, noise from the vehicles would have a negative impact on wildlife utilizing the Gila River corridor within the RNCA. Five, should the BLM limit vehicle use to just sand rails since they seem to have the least impact to resources, and not allow four-wheel drive or ATV use? If the BLM did limit vehicle use to sand rails, would this be perceived by the ATV and four-wheel-drive users as discriminating against them? Six, increasing use by ATVs and four-wheel-drive vehicles at the Old Safford Bridge and the mouth of Bonita Creek was negatively impacting the riparian area and this persuaded the interdisciplinary team to eliminate all vehicle use in riparian areas except for use on designated roads. Given these management questions and resource concerns, coupled with the House of Representatives language on the issue, the majority of the interdisciplinary team felt that

a road should not be designated in the Gila River floodplain or riparian area.

All existing roads not designated by this management plan will be closed by either rehabilitating the road to a natural state or blocking the road by means of boulders, gates, tree plantings, or other means which will eliminate the use of motorized vehicles on those roads not designated.

Recreation Facility Development

Once again, we received just about every imaginable combination of comments concerning recreation development within the RNCA, from no development to one of emphasizing recreation development to stimulate tourism for the local economy.

As visitor use in the RNCA continues to increase to over 20,000 visitor use days annually, negative impacts to the natural and cultural resources continues to increase from their use, primarily because people are allowed to choose where, when, and how long they wish to recreate. All too often, the site a recreationist chooses is one that is critical to many wildlife species or is sensitive to disturbance, such as riparian areas. With the increased visitor use to this RNCA and mandate of Congress to conserve, protect, and enhance the riparian areas and associated resources and values, it has become imperative now to manage recreational visitors to comply with this mandate from Congress. Therefore, sites for recreational facility development, where possible, have been located away from the riparian area to reduce the negative impact from recreationists on riparian area resources. In addition the number of recreation facility developments has been reduced approximately 30 percent from the draft Preferred Alternative, specifically in response to many commenters who felt recreational developments had been over emphasized in the draft plan. This reduction in facility development combined with locating facilities, where possible, away from the riparian area and with the reduction

in riparian roads, will, in the interdisciplinary team's view best represent the mandate from Congress to conserve, protect, and enhance the riparian and associated resources, of which recreation is mentioned as one of those resources.

Where recreation facilities are located near or in riparian areas, actions will be taken to minimize the impact from vehicles and people on the riparian resources. Some of these actions will include parking areas with barricades to keep vehicles from driving through the riparian areas, trails from upland sites which will make it easier for visitors to gain access to the riparian areas, and educational and interpretive signs to remind visitors of the importance to protect these sensitive riparian areas.

Land Acquisition

Several comments discussed the acquisition of private lands within the RNCA, Eagle Creek riparian area, and surrounding lands.

BLM will acquire, if they become available, the private lands within the RNCA through exchange, purchase, or donation. Land exchange will be the preferred means of acquisition. A conservation easement can be acquired as an alternative to fee acquisition. Lands are exchanged and conservation easements are purchased based on fair market value. In the event the City of Safford relinquishes any of its Recreation and Public Purposes Act patents along Bonita Creek, those lands will, by law, automatically be included within and managed as part of the RNCA. Land acquisitions are authorized by Public Law 101-628, which established the Gila Box Riparian National Conservation Area, and are consistent with the Safford District Resource Management Plan.

The BLM is authorized by Public Law 101-628 to expand the borders of the RNCA to include lands acquired in the Eagle Creek riparian area. At this time, there is not an opportunity to acquire lands with high resource values in Eagle Creek. If these lands

become available for acquisition in the future and are acquired by BLM, the boundary of the RNCA will be expanded to include these lands.

Adequacy of the Environmental Assessment

Twenty comment letters contained questions concerning the legal adequacy of various elements of the draft plan and environmental assessment. These comments questioned the adequacy of the draft plan and EA in; 1)meeting legal requirements for management of the RNCA; 2)addressing a sufficient range of alternatives or specific alternatives; and 3)containing sufficient analysis from which to make a reasonable decision.

The legal requirements for management of the Gila Box Riparian National Conservation Area (RNCA) are presented on pages 7 and 8, in the constraints section of the draft plan and EA. These requirements are considered constraints because, individually and as a whole, they serve to limit what is considered to be the full range of potential multiple uses generally considered acceptable on other BLM-managed public lands under the Federal Land Policy and Management Act (FLPMA). However, these constraints do not conflict with basic management direction provided in FLPMA. The definition of multiple use found in FLPMA allows the BLM to consider and select, within constraints imposed by other laws, regulations, and policy, individual uses or combinations of uses that best meet the existing and future needs of the American people on any particular parcel of the public land. There are 16 separate references to laws, BLM plans authorized by law, or valid existing rights that were considered in formulating the alternative management scenarios presented in the draft plan. These references included the Arizona Desert Wilderness Act of 1990, which provides

specific management guidance for the Gila Box RNCA.

As with all legal guidance, these laws are subject to different interpretations by individuals and groups. In the process of producing the plan and EA, the BLM has considered a wide range of **comments** that advance various interpretations of the legal guidance for management of the RNCA. The five alternatives presented in the draft plan were considered, by BLM, to reasonably satisfy management requirements provided by the various interpretations of the legal guidance applicable to the RNCA.

In the draft plan and EA, BLM presented five alternatives for management of the RNCA, including the "no action" alternative. These alternatives presented management scenarios that ranged from use- and development-oriented to very restrictive and protective of resource values. The range of alternatives, presented in the draft plan and EA, were considered by the BLM to contain the full spectrum of reasonable management alternatives for the Gila Box RNCA. Specific suggestions to consider additional alternatives or specific additional elements in alternatives were considered by the BLM and either found to be; 1) within the range of the existing alternatives or; 2) not substantially different from an existing alternative or elements contained in an existing alternative. Therefore, BLM does not believe that

additional alternatives need to be considered and analyzed. However, the BLM will consider and may select elements from any of the five alternatives for inclusion in the final plan.

The BLM utilized the best available information in analyzing impacts of the preferred action and alternatives on the resources and issues relating to the Gila Box RNCA. The depth and degree of detail presented in the analysis, in some cases, varies from issue to issue and resource to resource. This variation corresponds to our current level of understanding of the cause-and-effect relationship between various land uses, managed by the BLM, and the resource impacts they cause. It is also dependent on the quantity and quality of the land use and resource information available for use in the analysis. Despite this unavoidable variation, BLM believes that the analysis presented in the draft EA is sufficient in scope, detail, and depth to compare the environmental impacts of the alternatives under consideration and make a reasoned decision in approving a final plan for the Gila Box RNCA.

The BLM considers the draft plan and EA sufficient in all aspects to meet the content and procedural requirements of NEPA as presented in the BLM NEPA Handbook H-1790-1 and all BLM activity- level planning guidance.

References

- U.S.D.I. Bureau of Land Management (BLM)
1997 Arizona Standards for Rangeland Health and Guidelines for Grazing Administration. **USDI BLM**.
- 1993 Riparian Area Management; Process for Assessing Proper Functioning Condition. Denver, Colorado: **USDI BLM** 51 pp.
- 1993 Draft Gila Box Riparian National Conservation Area Interdisciplinary Activity Plan: Environmental Assessment. Safford, Arizona: **USDI BLM**. 174 pp.
- 1991 Safford District Resource Management Plan (RMP): Final Environmental Impact Statement. Safford, Arizona: **USDI BLM**. 504 p.
- 1978 Upper Gila-San Simon Grazing Environmental Statement. Safford District: **USDI BLM**. 539 p.
- U.S. Fish and Wildlife Service (USFWS)
1997 Programmatic Biological Opinion for the **Safford/Tucson** Field Offices' Livestock Grazing Program, Southeastern Arizona. September 26, 1997 Phoenix, Arizona: **USDI USFWS**. 353 pp.

Appendix A - USFWS Biological Opinion On Grazing

2-21-96-F-160

Summary

Programmatic Biological Opinion For The Safford And Tucson Field Offices' Livestock Grazing Program, Southeastern Arizona.

Date of Opinion

September 26, 1997

Action Agency

Bureau of Land Management, Safford Field Office, Safford, Arizona

Project

The Safford and Tucson Field Offices of the Bureau of Land Management propose to authorize livestock grazing on 288 allotments and leases, comprising 1,588,258 acres and averaging 145,537 annual animal unit months of use through December 31, 2006. Allotments occur in portions of Greenlee, Graham, Pinal, Cochise, and Pima counties, Arizona. The Bureau's grazing program is defined programmatically based on applicable law, regulations, policies, objectives, standards, guidelines, and decisions as set forth in various planning documents.

Listed/Proposed Species and Critical Habitat Affected

Kearney's blue star, *Amsonia kearneyana*; Pima pineapple cactus, *Coryphantha scheeri* var. *robustispina*; Nichol's turk's head cactus, *Echinocactus horizontalonius* var. *nicholii*; Arizona hedgehog cactus, *Echinocereus triglochidiatus* var. *arizonicus*; Huachuca water umbel, *Lilaeopsis schaffneriana* var.

recurva; desert pupfish, *Cyprinodon macularis*; spikedace, *Meda fulgida*; Gila topminnow, *Poeciliopsis occidentalis occidentalis*; loach minnow, *Tiaroga cobitis*; razorback sucker, *Xyrauchen texanus*, (with critical habitat); southwestern willow flycatcher, *Empidonax traillii extimus*, (with critical habitat); cactus ferruginous pygmy-owl, *Glaucidium brasilianum cactorum*; lesser long-nosed bat, *Leptonycteris curasoae yerbabuena*; jaguar, *Panthera onca*; and New Mexico ridge-nosed rattlesnake, *Crotalus willardi obscurus*.

Biological Opinion

The Service determined that the proposed action is not likely to jeopardize the continued existence of the listed species affected, and is not likely to result in destruction or adverse modification of designated or proposed critical habitat. The Biological Opinion addresses all aspects of the Safford and Tucson Field Offices' grazing program to the project level. The opinion also includes concurrences that the proposed action may affect but is not likely to adversely affect the beautiful shiner, *Cyprinella formosa*; Yaqui chub, *Gila purpurea*; Yaqui catfish, *Ictalura pricei*; Yaqui topminnow, *Poeciliopsis occidentalis sonoriensis*; American peregrine falcon, *Falco peregrinus anatum*; northern aplomado falcon, *Falco femoralis septentrionalis*; bald eagle, *Haliaeetus leucocephalus*; and Mexican spotted owl, *Strix occidentalis lucida*.

Incidental Take Statement

Level of Take Anticipated

One or more forms of take is anticipated for each of the animal species.

Reasonable and Prudent Measures

The Biological Opinion presents a range of measures for reducing incidental take. In many cases, the most important measures are adopted from options within the Bureau's proposed action. Implementation of these measures through the terms and conditions are mandatory.

Terms & Conditions

Mandatory terms and conditions are included for all animal species to implement the reasonable and prudent measures. They

include a variety of measures to reduce incidental take, such as modifying actions that result in take of individual animals, education of project personnel, preconstruction surveys, and monitoring of take and habitat loss.

Conservation Recommendations

Conservation measures are recommended for all listed species. Suggested measures include recovery tasks, clarification of a species range or distribution, further studies into the effects of livestock grazing, and other related matters.

Appendix B - Arizona Standards for Rangeland Health and Guidelines For Grazing Administration

Arizona Standards and Guidelines

Arizona Standards for Rangeland Health and Guidelines for Grazing Administration, known as Arizona Standards and Guidelines, have been developed through a collaborative process involving the Bureau of Land Management's State Standards and Guidelines Team and the Arizona Resource Advisory Council (RAC). Together, through meetings, conference calls, correspondence, and open houses with the public, the BLM State Team and RAC prepared Standards and Guidelines to address the minimum requirements outlined in the grazing regulations. The Standards and Guidelines, criteria for meeting Standards, and indicators are an integrated document that conforms to the fundamentals of rangeland health and the requirements of the regulations when taken as a whole.

Upland sites, riparian-wetland areas, and desired resource conditions are each addressed by a standard and associated guidelines.

Standard 1: Upland Sites

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

Criteria for Meeting Standard 1

Soil conditions support proper functioning of hydrologic, energy, and nutrient cycles. Many factors interact to maintain stable soils and healthy soil conditions, including appropriate amounts of vegetative cover, litter, and soil porosity and

organic matter. Under 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)
- rock

Signs of erosion

- flow pattern
- gullies
- rills
- plant pedestaling

Exceptions and exemptions (where applicable):

- none

Guidelines

1-1. Management activities will maintain or promote ground cover that will provide for infiltration, permeability, soil moisture storage, and soil stability appropriate for the ecological sites within management units. The ground cover should maintain soil organisms and plants and animals to support the hydrologic and nutrient cycles, and energy

flow. Ground cover and signs of erosion are surrogate measures for hydrologic and nutrient cycles and energy flow.

1-2. When grazing practices alone are not likely to restore areas of low infiltration or permeability, land management treatments may be designed and implemented to attain improvement.

Standard 2: Riparian-Wetland Sites

Riparian-wetland areas are in properly functioning condition.

Criteria for Meeting Standard 2

Stream channel morphology and functions are appropriate for proper functioning condition for existing climate, landform, and channel reach characteristics. Riparian-wetland areas are functioning properly when adequate vegetation, 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 ensure 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 which 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.

Appendix C - Allotment-Specific Livestock Management

Livestock grazing in riparian areas associated with the following allotments will be deferred. This is consistent with the terms and conditions issued by the U.S. Fish and Wildlife Service in the "Programmatic Biological Opinion for the Safford/Tucson Field Offices' Livestock Grazing Program, Southeastern Arizona." The following is a description of specific management actions by allotment.

Johnny Creek - 4615

No livestock use will be permitted in the riparian area along Bonita Creek. This will

require administrative decisions, and may require boundary adjustments and a revised allotment management plan. With the removal of livestock from the riparian area, new upland fencing and road improvements may be required within the RNCA. New upland water developments will be planned outside the RNCA. The allotment will have only one existing pump on the creek, located at Red Knolls, to pump water to the uplands. Reequipping the Red Knolls system with a solar pump will be considered.

Specific Management Actions	
Number of water storage tanks	1
Miles of fence	4
Number of water gaps	3
Number of water wells (outside RNCA)	1

Bonita Creek - 4616

There will be no livestock use within the riparian areas along Bonita Creek and the Gila River. Grazing will be discontinued on approximately 1,900 acres of upland (Midnight Pasture) until fencing is constructed that will exclude livestock from Bonita Creek. Management actions will include administrative decisions and may include boundary adjustments, adjustments in animal numbers, and revisions of the allotment management plan. In addition, upland water developments, fencing, cattle guards and road improvements will be required. The grazing system will be a one-herd, eight-pasture deferred-rotation grazing system with a 12-month grazing cycle on the uplands. Livestock trailing along Bonita Creek to move cattle between pastures will be

conducted so that:

- 1) the fewest number of cattle are present for the shortest possible period of time in the riparian/aquatic areas
- 2) the shortest route across the river is taken
- 3) trailing across riparian areas is conducted as infrequently as possible
- 4) trailing is conducted when bankline soil moisture is relatively low, whenever possible
- 5) trailing is conducted in the winter months whenever possible
- 6) trailing is limited to the shortest routes possible not to exceed 1.5 miles of the creek.

The three existing pumps Lee Trail, Hackberry and Christensen (private land) along the creek on this allotment will remain

to provide water to the uplands. Access to the pumps will be as follows: Lee Trail to the Lee Trail pump, access to Hackberry pump and

Christensen pump will be off of the East Bonita Rim road by way of Bull Gap road.

Specific Management Actions	
Miles of water pipeline	8
Number of water storage tanks	6
Miles of fence	12

Bull Gap Allotment - 4617

There will be no livestock use within the riparian areas along Bonita Creek and the Gila River. Administrative decisions will be issued excluding livestock from these areas.

Upland water would be required to replace water rights lost because of the lose of Bonita Creek and the Gila River. Access to the allotment will remain across Bonita Creek.

Specific Management Actions	
Miles of water pipeline (outside RNCA)	8
Number of water storage tanks (outside RNCA)	1
Miles of fence	2

Turtle Mountain Allotment - 4618

This allotment does not include any riparian habitat within the RNCA. The

allotment boundary fence will have to be maintained to prevent cattle from drifting into the Gila River.

Specific Management Actions	
Miles of fence (outside RNCA)	1

Twin C Allotment - 4021

There will be no livestock use within the riparian areas along the Gila River. An administrative decision will be issued to discontinue Gila River corridor grazing. Construction and installation of fences,

cattleguards and upland water developments will be necessary. The allotment will have only the one existing pump on the river, located near the mouth of Deadman Canyon, to pump water to the uplands.

Specific Management Actions	
Miles of water pipeline	2
Number of water storage tanks	
Miles of fence	3

County Line Allotment - 4022

This allotment does not include any riparian habitat within the RNCA. Uplands management is described in the introduction.

Smuggler Allotment - 4010

There will be no livestock use in the riparian areas along the Gila River. An administrative decision will be issued discontinuing use along the river. The river is currently fenced and waters are in place on the uplands, therefore, no range improvements will be required. There is an existing pump located one mile west of the Old Safford Bridge. This pump is the primary water supply to two allotments, Zorilla and County Line. Access for major repairs or maintenance will be by administrative access down the Gila River from the bridge. Trailing through riparian areas will be limited to moving cattle across the Gila River between the Smuggler and Zorilla allotments no more than twice a year. Trailing will be conducted so that:

1. the fewest number of cattle are present for the shortest possible period of time in riparian/aquatic areas
2. the shortest route across the river is taken
3. trailing across riparian/aquatic areas is conducted as infrequently as possible
4. trailing is conducted when bankline soil moisture is relatively low, whenever possible
5. trailing is conducted in the winter months whenever possible.

Zorilla Allotment - 4011

Livestock on this allotment have very limited access to the Gila River due to topography. Approximately a quarter mile of

fence is needed to exclude livestock. Trailing through riparian areas will be limited to moving cattle across the Gila River between the Smuggler and Zorilla allotments no more than twice a year. Trailing will be conducted so that:

1. the fewest number of cattle are present for the shortest period of time possible in riparian/aquatic areas
2. the shortest route across the river is taken
3. trailing across riparian/aquatic areas is conducted as infrequently as possible
4. trailing is conducted when bankline soil moisture is relatively low, whenever possible
5. trailing is conducted in the winter months whenever possible.

Gila Allotment - 4014

There will be no livestock use on public land in the riparian areas along the Gila River. Approximately two thirds of a mile of the Gila River within this allotment is privately owned, and not managed through this plan. Fencing, water gaps and upland water developments will be necessary. The allottee has voluntarily removed livestock from public land riparian areas. This has, in part, negated the need for the Preferred Alternative action to retire the allotment. However, water gaps securing livestock on the private land, to meet planning and legal requirements, will conflict with recreational use of the river. With respect for private land rights and concerns, the BLM will work with the land owner to explore possible resolutions. The best resolution will allow the BLM to meet its planning and legal requirements, provide for continued safe use of the river by the public, and provide for the land owner's needs and concerns.

	Specific Management <u>Actions</u>
Miles of water pipeline	2
Number of water storage tanks	3
Miles of fence	4
Number of water gaps	3

Morenci Allotment - 4003

There will be no livestock use in the riparian areas along the Gila River. An administrative decision will be issued to

discontinue livestock use along the river. Fencing, upland water developments, and water gaps would be required.

	Specific Management <u>Actions</u>
Miles of water pipeline (outside RNCA)	2
Miles of fence (outside RNCA)	4
Number of water gaps	2

Appendix D

Arizona Desert Wilderness Act of 1990

Public Law 101-628—Nov. 28, 1990 104
STAT. 4475

Title II—Designation of the Gila Box Riparian National Conservation Area

SEC 201. Designation and Management

- (a) **Purposes** — In order to conserve, protect, and enhance the riparian and associated areas described in subsection (b) and the aquatic, wildlife, archeological, paleontological, scientific, cultural, recreational, educational, scenic, and other resources and values of such areas, there is hereby established the Gila Box Riparian National Conservation Area (hereafter in this title referred to as the "conservation area").
- (b) **Areas Included** — The conservation area shall consist of the public lands generally depicted on a map entitled "Gila Box Riparian National Conservation Area" dated February 1990, and comprising approximately 20,900 acres.
- (c) **Map** — As soon as practicable after the date of enactment of this Act, a map and legal description of the conservation area shall be filed by the Secretary with the Committee on Interior And Insular Affairs of the United States House of Representatives and the Committee on Energy and Natural Resources of the United States Senate. Such map shall have the same force and effect as if included in this section. Copies of such map shall be on file and available for public inspection in the office of the

Director of the Bureau of Land Management, Department of the Interior, and in the appropriate office of the Bureau of Land Management in Arizona.

- (d) **Management of Conservation Area** —
- (1) The Secretary shall manage the conservation area in a manner that conserves, protects and enhances its resources and values, including the resources and values specified in subsection (a), pursuant to the Federal Land Policy and Management Act of 1976 and other applicable law, including this title.
- (2) The Secretary shall allow only such uses of the conservation area as the Secretary finds will further the purposes for which the conservation area is established. Except where needed for administrative purposes or to respond to an emergency, use of motorized vehicles in the conservation area shall be permitted only on roads specifically designated for such use as part of the management plan prepared pursuant to subsection (g).
- (e) **Withdrawal** — Subject to valid existing rights, all Federal lands within the conservation area are hereby withdrawn from all forms of entry, appropriation, or disposal under the public land laws; from location, entry, and patent under the United States mining laws; and from disposition under all laws pertaining to mineral and geothermal leasing, and all amendments thereto.
- (f) **Water** —
- (1) Congress hereby reserves a quantity of water sufficient to fulfill the purposes, as specified in subsection (a), for which the conservation area is established. The priority date of the reserved right shall be the date of enactment of this Act.

(2) The Secretary and all other officers of the United States shall take all steps necessary to protect the right reserved by paragraph (1), including the filing by the Secretary of a claim for the quantification of such right in any present or future appropriate stream adjudication in the courts of the State of Arizona in which the United States is or may be joined and which is conducted in accordance with the McCarran Amendment (43 U.S.C. 666).

(3) Nothing in this title shall be construed as a relinquishment or reduction of any water rights reserved or appropriated by the United States in the State of Arizona on or before the date of enactment of this Act.

(4) The Federal rights reserved by this title are specific to the conservation area located in the State of Arizona designated by this title. Nothing in this title related to reserved Federal water rights shall be construed as establishing a precedent with regard to any future designations, nor shall it constitute an interpretation of any other Act or any designation made pursuant thereto.

(5) Nothing in this title shall be construed to impair or conflict with the implementation of the authorization contained in section 304(f) of Public Law 90-537, approved September 30, 1968.

(g) Management Plan —

(1) No later than two years after the date of enactment of this Act, the Secretary shall develop a comprehensive plan for the long-term management of the conservation area (hereinafter in this title referred to as the "management plan") in order to fulfill the purposes for which the conservation area is established. The management plan shall be developed with full public participation and shall include provisions designed to assure protection

of the resources and values (including the resources and values specified in subsection (a)) of the conservation area.

(2) The management plan shall include a discussion of the desirability of the inclusion in the conservation area of additional lands, including the lands not in Federal ownership that are contiguous to the boundary of the conservation area (as depicted on the map referenced in subsection (b) or as hereafter adjusted pursuant to section (h)) and within the area extending two miles on either side of the centerline of Eagle Creek from the point where Eagle Creek crosses the southern boundary of the Apache National Forest to the confluence of Eagle Creek with the Gila River (this area is hereafter referred to in this title as the "Eagle Creek riparian area").

(3) In order to better implement the management plan, the Secretary may enter into cooperative agreements with appropriate State and local agencies pursuant to section 307(b) of the Federal Land Policy and Management Act of 1976.

(4) In order to assist in the development and implementation of the management plan, the Secretary may authorize appropriate research, including research concerning the environmental, biological, hydrological, cultural, and other characteristics, resources, and values of the conservation area, pursuant to section 307(a) of the Federal Land Policy and Management Act of 1976.

(h) Acquisition and Boundary Adjustments —

(1) Subject to the limitations set forth in paragraph (3), the Secretary is authorized to acquire non-Federal lands or interests therein within the boundaries of the conservation area or within the Eagle Creek riparian area.

(2) The Secretary is authorized to adjust the boundaries of the conservation area so as to incorporate within the conservation area any lands or interests within the Eagle Creek riparian area that may be acquired after the date of enactment of this Act as well as public lands within that portion of the Eagle Creek riparian area west of the centerline of Eagle Creek that the Secretary finds appropriate in order to properly manage such acquired lands as part of the conservation area. Any lands or interests so incorporated shall be managed as part of the conservation area.

(3) No lands or interests therein owned by the State of Arizona or any political subdivision of such State shall be acquired pursuant to this subsection except through donation or exchange, and no lands or interests within the conservation area or the Eagle Creek riparian area shall be acquired from any other party or entity except by donation, exchange, or purchase with the consent of the owner of such lands or interests.

(i) No Buffer Zones — The Congress does not intend for the establishment of the conservation area to lead to the creation of protective perimeters or buffer zones around the conservation area. The fact that there may be activities or uses on lands outside the conservation area that would not be permitted in the conservation area shall not preclude such activities or uses on such lands up to the boundary of the conservation area to the extent consistent with other applicable law.

(j) Advisory Committee — The Secretary shall establish an advisory committee to advise the Secretary with respect to the preparation and implementation

of the management plan. Such advisory committee shall consist of seven members appointed by the Secretary. One member shall be appointed from among recommendations submitted by the Governor of Arizona, one member shall be appointed from among recommendations submitted by the Graham County Board of Supervisors and one member shall be appointed from among recommendations submitted by the Greenlee County Board of Supervisors. The remaining members shall be persons recognized as experts in wildlife conservation, riparian ecology, archeology, paleontology, or other disciplines directly related to the purposes for which the conservation area is established.

(k) Report — No later than five years after the date of enactment of this Act, and at least each ten years thereafter, the Secretary shall report to the Committee on Interior and Insular Affairs of the United States House of Representatives and the Committee on Energy and Natural Resources of the United States Senate on the implementation of this title, the condition of the resources and values of the conservation area, and the progress of the Secretary in achieving the purposes for which the conservation area is established.

(1) Enforcement — Any person who violates any regulation promulgated by the Secretary to implement the provisions of this title shall be subject to a fine in accordance with applicable provisions of the Sentencing Reform Act of 1984, or imprisonment of not more than 1 year, or both such fine and imprisonment.

(m) Authorization — There are hereby authorized to be appropriated such sums as may be necessary to implement the provisions of this title.

Appendix E - USFWS Biological Opinion on the Gila Box Management Plan

United States Department of the Interior
Fish and Wildlife Service
Arizona Ecological Services Field Office
2321 W. Royal Palm Road, Suite 103
Phoenix, Arizona 85021-4951

November 6, 1997

MEMORANDUM

TO: Field Manager, Bureau of Land Management,

Safford, Arizona

FROM: Field Supervisor

SUBJECT: Conditional Concurrence with Informal Consultation Findings for Gila Box
Riparian National Conservation Area

Thank you for your letter dated October 6, 1997, requesting informal concurrence with your finding of "may affect, but not likely to adversely affect" for cactus ferruginous pygmy-owl (*Glaucidium brasilianum cactorum*) and Arizona hedgehog cactus (*Echinocereus triglochidiatus* var. *arizonicus*) regarding the Gila Box Riparian National Conservation Area (Gila Box RNCA). Formal section 7 consultation by the U.S. Fish and Wildlife Service on the draft plan of the "Preferred Alternative" in 1994 resulted in the non-jeopardy Opinion dated May 3, 1994, number 2-21-92-F-070. Species addressed in that Opinion were endangered bald eagle (*Haliaeetus leucocephalus*), peregrine falcon (*Falco peregrinus anatum*), razorback sucker (*Xyrauchen texanus*) and its Gila River critical habitat, threatened spikedace (*Meda fulgida*) and loach minnow (*Tiaroga cobitis*), and proposed endangered southwestern willow flycatcher (*Empidonax trailii extimus*). After that Opinion became effective, the endangered bald eagle was reclassified as threatened, and the proposed endangered southwestern willow flycatcher and the Category 1 cactus ferruginous pygmy-owl (*Glaucidium brasilianum cactorum*) were listed as endangered. The Arizona hedgehog cactus (*Echinocereus triglochidiatus* var. *arizonicus*) is newly considered in this plan, as it may occur in the area.

Species taxonomy is still considered uncertain for the Arizona hedgehog cactus, making this species difficult to positively identify. Per your letter, cacti similar to the Arizona hedgehog occur in the planning area. Unconfirmed as *E. triglochidiatus* var. *arizonicus*, these similar plants would also be out of the traditional altitudinal range of 3,500 - 5,500 feet. Getting close enough to examine and identify these cacti is difficult due to their locations on sheer canyon walls and rocky outcrops. To your knowledge, formal surveys for this species have not been conducted, but any individual projects will be evaluated for possible impacts to any listed species or species of concern. Proposed activities which may impact this species are recreational developments and

the transportation system. Because proposed recreational developments, transportation system, grazing or sandrail uses will not occur on this habitat type, and the final plan combines Alternative 1 and 2 from the draft plan, these proposed activities are not expected to adversely affect this cactus species.

Because the cactus ferruginous pygmy-owl was a Category 1 species at time of previous consultation, it was considered under the BLM's request to the Service for formal consultation. Formal protocol surveys were conducted in 1996, in appropriate habitat located in the Gila River and Bonita Creek by BLM personnel. Cactus ferruginous pygmy-owls were not found in the survey areas at that time. The Service reports information on two sightings of this species in the Gila River; one in the 1970's and one in the 1980's. Formal protocol surveys in appropriate habitat of the planning area will be continued in 1997 by BLM personnel.

Because cactus ferruginous pygmy-owls could move into the area over the life of the plan, the Service recommends protocol surveys be updated in the year of any action that would result in vegetative removal in areas supporting suitable pygmy-owl habitat. Such actions include but are not limited to development of parking lots, trailheads, wildlife viewing platforms, or water developments. If any pygmy-owls are found, formal consultation would need reinstatement.

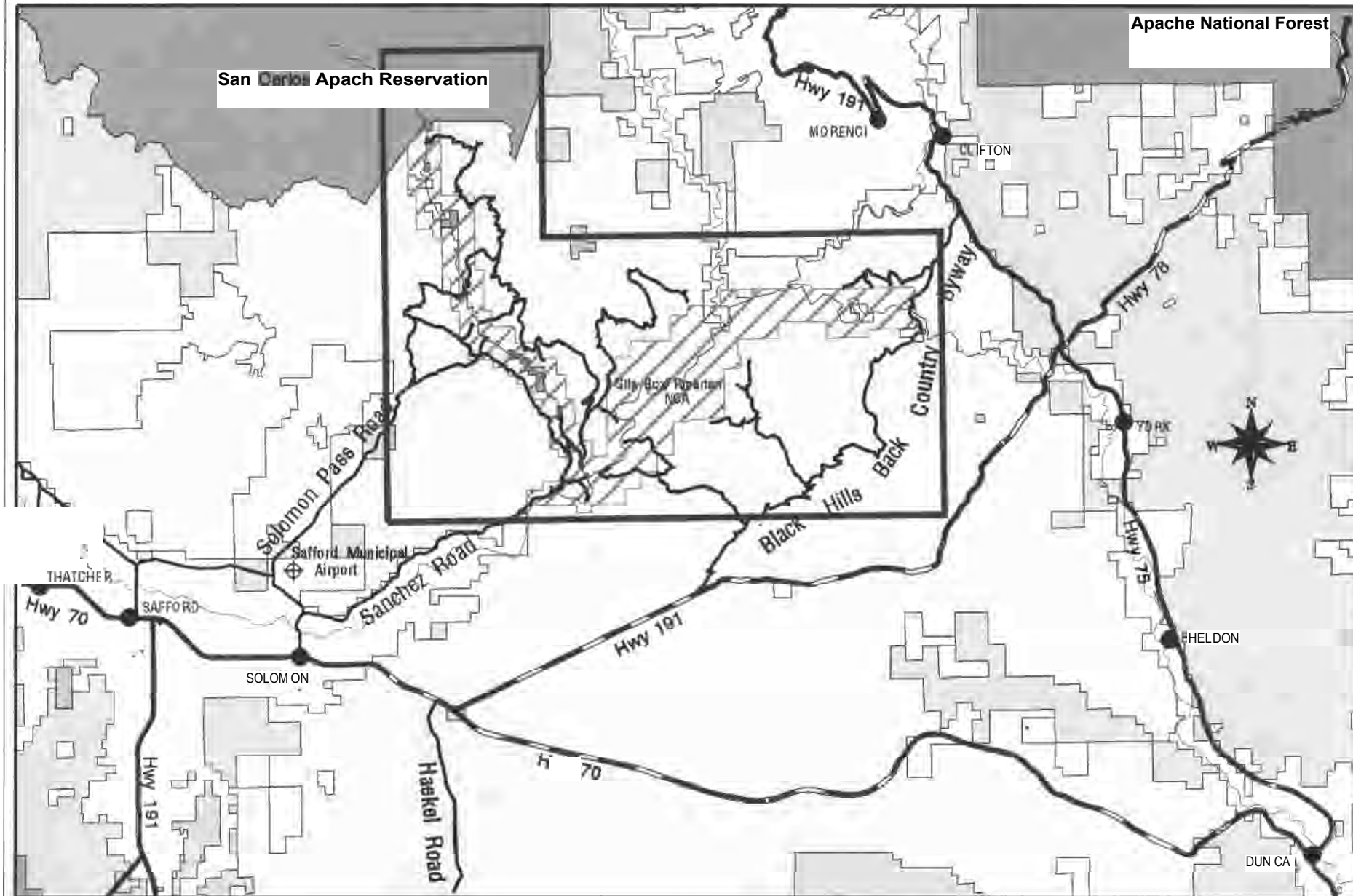
NEPA allows BLM to select any action or combination of actions from the draft plan, incorporating these changes into the final plan. Provided the above recommended condition is implemented, the Service conditionally concurs with the BLM in their finding of "may affect, but not likely to adversely affect" the cactus ferruginous pygmy-owl and the Arizona hedgehog cactus. This conditional concurrence is due to the reasons cited above, and the combination of Alternative 1 and 2 from the draft plan into the final plan.

We appreciate your efforts in managing for endangered species. Please feel free to contact Thetis Gamberg or Angie Brooks with any questions or concerns regarding this consultation.

Sam F. Spiller

cc: Regional Director, Fish and Wildlife Service, Albuquerque, NM (GMA)
Field Supervisor, Ecological Services, Fish and Wildlife Service, Albuquerque, NM
Director, Arizona Game and Fish Department, Phoenix, AZ

Gila Box Riparian National Conservation Area Access Map



City of Safford Lands
Apache Reservation Lands
 Private Lands
 State Lands

Gila Box Riparian NCA
 BLM Lands
 Highways (State and Federal)
 Other Roads

Outline of larger scale
Gila Box map
 Forest Service

SCALE 1:454538
 1 0 1 2 3 Miles

November 19, 1997

