FES 89-14

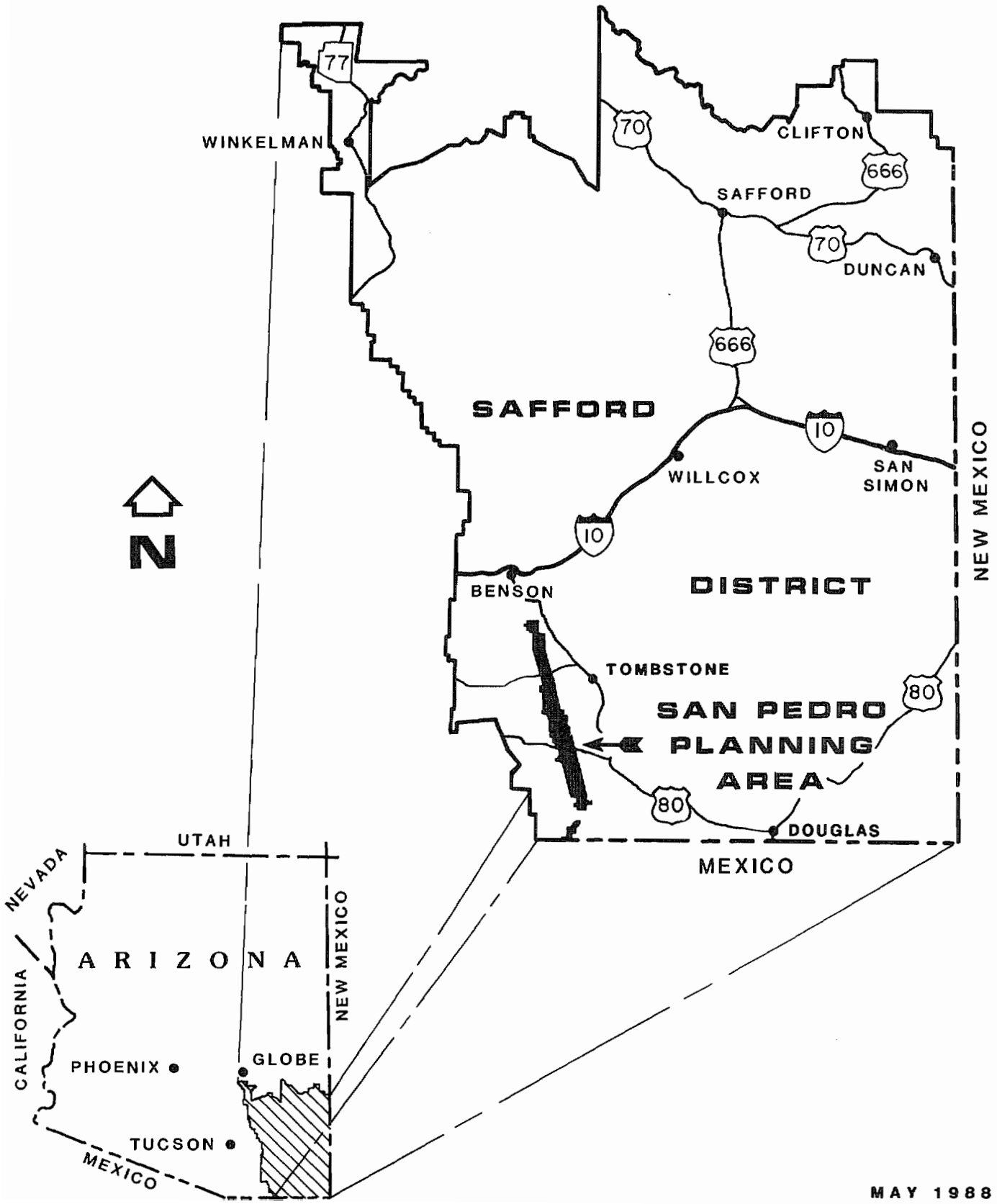
SAN PEDRO RIVER RIPARIAN MANAGEMENT PLAN AND ENVIRONMENTAL IMPACT STATEMENT

FINAL

U.S. Department of the Interior
Bureau of Land Management
Safford District
Safford, Arizona

June 1989

SAN PEDRO RIPARIAN PLANNING AREA LOCATION MAP



MAY 1988

FINAL

SAN PEDRO RIVER RIPARIAN MANAGEMENT PLAN
and

ENVIRONMENTAL IMPACT STATEMENT

for the

SAN PEDRO RIVER EIS AREA

Cochise County Arizona

FES 89-14

Prepared by

THE DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
SAFFORD DISTRICT

STATE DIRECTOR
ARIZONA

This Final Environmental Impact Statement (FEIS) describes and analyzes the four alternatives for the protection and enhancement of public land and the riparian ecosystem along the upper San Pedro River in Cochise County, Arizona. Alternatives analyzed include a Utilization Alternative, a Preservation Alternative, a No Action Alternative, and a Preferred Alternative (Proposed Action).

For further information contact: Vernon L. Saline, San Simon Area Manager, Safford District Office, Bureau of Land Management, 425 East 4th Street, Safford, Arizona 85546, or call (602) 428-4040.

Date draft statement made available: June 16, 1988

United States Department of the Interior

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TAKE PRIDE IN AMERICA

IN REPLY REFER TO:

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(040)

Dear Public Land User:

Enclosed for your review is the final environmental impact statement (FEIS) for the San Pedro River Riparian Management Plan. The draft environmental impact statement was distributed in June 1988. A 90-day public comment period on the DEIS concluded September 21, 1988. Changes based on public comments and new information have been incorporated into this FEIS and all parts of the draft have been reprinted to reflect those changes. For a complete understanding of the analysis, comments and responses, the FEIS should be used with the DEIS. This FEIS contains the proposed management plan (preferred alternative), a modification of the preferred alternative analyzed in the DEIS. The proposed plan is BLM's proposed action.

During the development of the draft and final EISs, Congress was in the process of creating legislation designating the EIS area plus additional acreage as the San Pedro Riparian National Conservation Area (NCA). The legislation was passed by both the House and Senate near the end of the last Congressional session and signed by the President on November 18, 1988. There area approximately 56,431 acres included in the NCA. The difference in the acreages contained in the EIS area and the NCA is about 8,763 acres. These additional lands will recive planning through the Safford District Resource Management Plan, currently in preparation.

The legislation directs BLM to manage the NCA in a manner that conserves, protects and enhances the riparian area and the various other resources of the NCA. Restrictions of use contained in the legislation will permit motorized vehicles only on roads specifically designated for such use. All Federal lands within the NCA are withdrawn from all forms of entry, appropriation or disposal under the public land laws; from location, entry and patent under the mining laws; and from disposition under all laws pertaining to mineral and geothermal leasing. The legislation also provides BLM with the authority to limit visitation, issue permits for public use, or close portions of the NCA to public use.

A Record of Decision document will be prepared and issued at the completion of a 30-day public review period on this FEIS.

Sincerely,

Ray A. Brady
District Manager

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SUMMARY

SUMMARY

PURPOSE AND NEED

The San Pedro River Riparian Management Plan and Environmental Impact Statement (EIS) involves lands located along the San Pedro River in western Cochise County, Arizona. These lands, acquired through private and state exchanges in 1986 and 1987, total 47,668 acres.

The purpose of the proposed action and its alternatives is to define a plan to protect and enhance the riparian ecosystem and the area's historic and prehistoric values. Because of the sensitive nature of the riparian ecosystem, BLM will stress certain traditional multiple use activities and prohibit others.

Throughout the planning process and EIS preparation, BLM asked for information and concerns from individuals, groups and land management agencies.

Public participation included public meetings in Benson, Bisbee, Sierra Vista, Tucson and Phoenix in January, 1986 during the development of the Draft EIS. Public hearings were held in Tucson and Sierra Vista in August, 1988 during the draft EIS review process.

In the EIS, BLM considered four alternatives to resolve the issues identified through the public meetings. These are: A) *No Action*, B) *Preservation*, C) *Utilization* and D) *Balanced or Preferred Alternative*. After review of public comments of the draft and with some changes to the alternative, BLM has selected the Preferred Alternative as the Proposed Action. Following a 30-day review of the Final EIS, BLM will prepare a Record of Decision which will define the management actions to take place during the life of the plan.

ALTERNATIVES AND CONSEQUENCES

Alternative A: No Action

Implementation

This alternative will reduce human activity to a minimal level. Only those actions required to protect the property and its resources will be permitted. The No Action alternative will prohibit public access and limit projects to those deemed essential to protect Threatened and Endangered Species

Consequences

Implementation of this alternative will cause adverse impacts to the economic component through loss of economic returns from recreation and sand and gravel extraction. Social impacts will occur because people will not be able to recreate on the lands.

Benefits will accrue to the water, vegetation, cultural, wildlife, soil and air resources because of the lack of disturbances.

Alternative B: Preservation

Implementation

Under this alternative limited public recreation use can take place with five small recreation sites and day-use only for dispersed recreation. Actions taken will be those which enhance wildlife habitat, water and vegetation. This alternative will also provide protection to cultural and paleontological resources through denial of public use of sites.

Consequences

Wildlife habitat, water, vegetation and soils will benefit through implementation but to a slightly lesser degree than under the No Action alternative. Permitting some dispersed recreation and five small recreation sites will have a positive effect on the social component.

Alternative C: Utilization

Implementation

This alternative emphasizes the use of the land by the public. Enhanced recreational opportunities will be available with four large and 12 small recreational sites developed. Overnight use by permit will be allowed. The increased use cannot significantly impact the natural resources.

Consequences

There will be adverse impacts to water quality, wildlife, vegetation, soils and cultural/paleontological resources. This alternative has positive economic and social benefits.

Alternative D: Proposed Action

Implementation

This alternative will permit developed sites outside the riparian areas to the extent of four large sites and seven small sites. Overnight camping by permit would be permitted. Discharge of firearms would be permitted in some areas for regulated hunting only. Other areas would be closed to

Chapter 1
PURPOSE AND NEED

CHAPTER 1
PURPOSE AND NEED

INTRODUCTION

This environmental statement considers the anticipated consequences of implementing four alternatives for the protection and enhancement of public land and the riparian ecosystem along the upper San Pedro River in Cochise County, Arizona. These lands, recently obtained through private and state exchange, will be administered by the San Simon Resource Area, Safford District. This study addresses 47,668 acres of land (see Map 1) in a strip about 36 miles long and 2.6 miles wide. Safford District has no land use plan for the Cochise Planning Unit, the location of these lands.

PURPOSE AND NEED

The purpose of the proposed action and its alternatives is to define a land use plan that will protect and enhance the riparian ecosystem. The plan will also be consistent with the multiple use mission of BLM.

Because of the sensitive nature of the riparian ecosystem BLM will stress certain traditional multiple-use activities and prohibit others.

Setting

The *San Pedro River Management Plan/EIS* area is in the southwestern part of the San Simon Resource Area in Cochise County. BLM obtained most of these lands through a private exchange concluded on March 6, 1986. The lands were historically referred to as the San Juan de las Boquillas y Nogales and the San Rafael de Valle land grants. The former owners allowed some limited uses to occur on these lands in the past. At the time of acquisition one rancher grazed livestock on the land and two sand and gravel operations were active. The terms of the exchange allowed these to continue at least until the end of the lease periods. Many rights-of-way for roads and utilities cross the lands. Since the 1986 acquisitions BLM has added more lands through private and state exchanges so the EIS area now extends to the Mexican border. On November 18, 1988 President Reagan signed the Arizona-Idaho Conservation Act, designating the San Pedro Riparian National Conservation Act. This EIS only evaluates the lands in the original exchanges plus the lands south of Palominas. The Safford District Resource Management Plan, now under development, will address the adjacent public lands.

The upper San Pedro River is the focal point of the EIS area. Arising in northern Mexico, it flows northward to its confluence with the Gila River near Winkelman, Arizona. The river is perennial from Charleston to near Hereford and supports a riparian ecosystem in good condition with high wildlife species diversity.

Scoping

Scoping meetings were held in Tucson, Phoenix and Sierra Vista in January 1986. From these scoping meetings and subsequent meetings with individuals, organizations and state agencies a number of specific concerns were identified. The EIS team organized and combined these into seven issues. Five, discussed below, are addressed in this EIS. Two other issues (wilderness and livestock grazing) are not addressed.

ISSUES ADDRESSED

Issue 1 - Wildlife Habitat

The San Pedro River is an outstanding example of desert rivers in the Southwest. Many species of wildlife depend on the vegetation found here and any degradation or loss would have serious consequences.

Various forces, human-caused and natural, affect the continued existence of this resource. One example of this is the loss of mature plants and their reproductive potential from the loss of water supply, streambank erosion and vegetation removal. Natural forces affecting the riparian ecosystem could include climatic changes, fires and earthquakes. Human-caused activities include mineral operations near the river, livestock grazing, firewood cutting, inappropriate vehicle use and excessive water pumping.

Issue: How can BLM manage these lands to protect and enhance the wildlife habitat, especially the riparian ecosystem?

Issue 2 - Sand and Gravel Operations

Presently, sand and gravel is extracted at one location near the river. This will continue until the lease period expires. Continuation of this use is at issue here.

Issue: Should BLM permit sand and gravel operations if they don't cause damage or loss of riparian vegetation, water quality degradation, and visual intrusions?

Issue 3 - Recreation Use and Development

The public has high expectations for recreational uses. These range from very limited, primitive types of uses to extensive use and development. The effects of these various levels and kinds of use on water quality, riparian vegetation, wildlife species, cultural and paleontological resources and soils need examining.

Issue: What types and levels of recreation use should BLM permit while still protecting the other resource values?

Issue 4 - Protection of Cultural and Paleontological Resources

Many historic, prehistoric and paleontological sites are on these lands, some with great significance. BLM is required, by law, to protect these sites in its management of the San Pedro lands.

Issue: How can BLM protect these resources and at the same time provide opportunities for public education and appreciation and for scientific research?

Issue 5 - Water Quality and Quantity

Water quality and quantity are important concerns, and have high significance. Much of the watershed is in Mexico where a high potential for use of the water exists. Also, a growing population in Sierra Vista represents an increasing demand for ground water.

Existing water rights, future Bureau activities, increasing water demands in the San Pedro River basin, and the protection and maintenance of the riparian ecosystem produce conflicts for maintaining the existing quantity and quality of water.

Issue: How can BLM retain adequate water to protect the riparian ecosystem and provide for other resource needs? Also, how can BLM maintain the riparian ecosystem and minimize the impacts on other water users?

ISSUES CONSIDERED BUT NOT ANALYZED

Wilderness - The potential for wilderness in the EIS area was considered but not included. An inventory applied the size criterion (greater than 5,000 roadless acres) and found two eligible regions. One (the Boquillas unit) is in the west central portion of the EIS area and the other is in the southwestern portion of the EIS area (the West del Valle unit).

The Boquillas unit did not meet the naturalness criterion. The unit contains boundary and interior roads and ways, railroad tracks, powerlines, old railroad grades and bridge abutments, ruins of a farming settlement and its fields, ruins of the town of Charleston, and livestock facilities. The Boquillas unit also lacks outstanding opportunities for solitude and primitive recreation because of: boundary roads and vehicles on them, an extensive network of interior roads and ways, the railroad line, and the other evidence of human activities.

The West del Valle unit is mostly natural in appearance, has few visible human impacts, and meets the criterion for naturalness. The unit lacks outstanding opportunities for solitude and primitive recreation because of: boundary roads and vehicles on them, the long and thin alignment of the unit, the lack of topographic relief, and the lack of vegetative screening.

Since these two units fail to meet some of the requirements for wilderness, they are not carried forward and are not an issue in this FEIS.

Livestock Grazing - The primary purpose for obtaining the lands in the EIS area was to protect and enhance the riparian ecosystem along the upper San Pedro River. While BLM does not regard livestock grazing to be incompatible with the continued existence of the riparian ecosystem, a decision was made to prohibit livestock grazing for the 15-year life of this plan. At the end of that time livestock grazing in the EIS area will be re-evaluated.

ALTERNATIVE FORMULATION CRITERIA

The criteria for alternative formulation are:

- All alternatives will provide for protection and enhancement of the riparian ecosystem.
- All alternatives will provide for protection of the habitat of threatened and endangered species as required by the *Endangered Species Act.*
- All alternatives will provide for protection of significant cultural resources as required by the *National Historic Preservation Act* and the *Archaeological Resources Protection Act.*
- All alternatives will assume a continuation of existing interagency cooperative agreements.
- At least one alternative will provide for some developed recreational uses.
- All alternatives will be reasonable and attainable.
- At least one alternative will comply with the No Action stipulation of the Council on Environmental Quality regulations (40 CFR 1502.14(d)).

ALTERNATIVE EVALUATION CRITERIA

Criteria used to evaluate the alternatives are:

- significant social and economic impacts
- consistency with federal, state and local plans
- significant impacts to resource values, such as:
  - wildlife habitat condition, especially in the riparian area;
  - watershed/water quality and quantity;
  - recreation opportunities
  - historic and prehistoric sites;
- compatibility with adjoining land uses and
- implementation requirements.

- Assess impacts to federally listed Threatened and Endangered species and state-listed species. Bureau inventories have not identified any federally listed species in the San Pedro EIS area to date. BLM will not authorize actions that jeopardize potential populations or their habitat.
- Consider special status species (i.e., state listed species and candidate species listed in the *Federal Register*) on a case-by-case basis. Although candidate species have no legal protection under the *Endangered Species Act*, it is BLM's policy to manage their habitat at levels high enough to keep them from becoming federally listed.
- Establish mitigation procedures to reduce impacts to wildlife and wildlife habitat.

Vegetation

- Prohibit firewood cutting (including the gathering of down and dead wood) within the San Pedro EIS area.

Minerals

- Withdraw the San Pedro property from mineral entry and mineral leasing laws.

Cultural

- Preserve or enhance cultural resource values through management actions and the control of land uses. Management actions include patrol, stabilization of ruins and control of access.

Paleontological

- Manage all paleontological sites to preserve their scientific values and potential public use values.

NO ACTION ALTERNATIVE

Theme Statement

The theme of the *No Action Alternative* is to protect and/or improve the resources of the San Pedro EIS area by reducing human activity to a minimal level. This will protect cultural and paleontological resources from actions that may adversely affect them. It will also improve the wildlife, vegetation and water resources by allowing natural processes to occur without intervention.

Recreation

Objective: Provide only minimal informational facilities.

Planned Actions:

- Close the entire San Pedro to all forms of public recreation use.
- Install signs for informational and interpretive use in the Fairbank, Charleston, Highway 90 bridge, Hereford and Palominas areas.

Lands

Objective: Provide for the use of only those lands necessary for existing rights-of-way.

Planned Actions:

- Allow maintenance on existing rights-of-way, subject to stipulations that will protect resource values.
- Permit no new rights-of-way.

Water

Objective: Conserve the groundwater resource.

Planned Actions:

- Shut down permanently, cap and abandon all irrigation and domestic wells. Remove pumping and distribution equipment and restore the impacted areas.

Wildlife

Objective: Provide for the reintroduction of federally listed native Threatened and Endangered species.

Planned Actions:

- Develop habitat improvement projects as agreed upon through the consultation requirements of the *Endangered Species Act*.

Objective: Determine the condition and status of wildlife and their habitat.

Planned Actions:

- Inventory terrestrial and aquatic habitats.
- Inventory terrestrial and aquatic vertebrates along with their associated food supplies.
- Monitor changes in terrestrial and aquatic habitats.

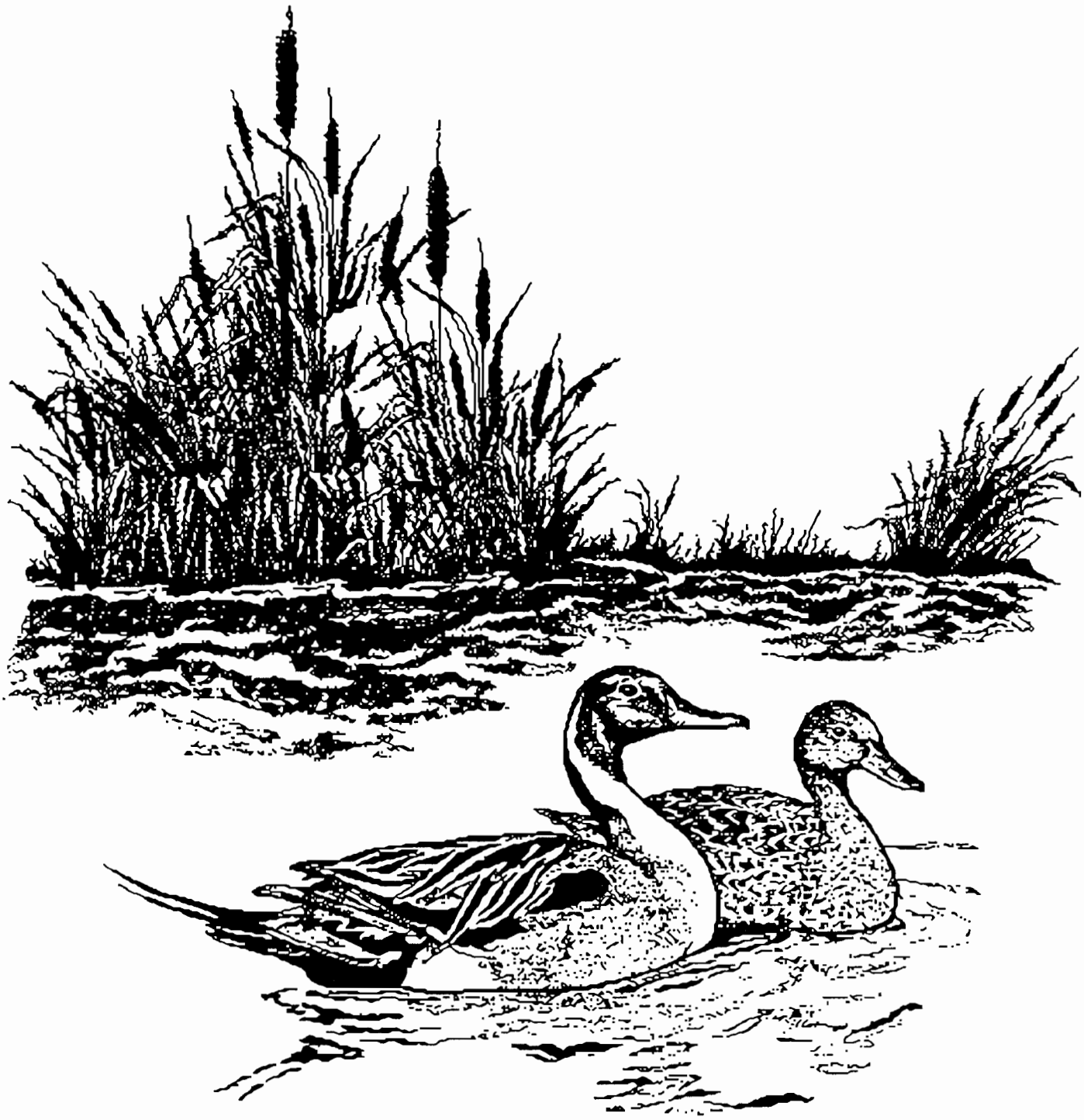
Vegetation

Objective: Allow only natural processes to affect vegetation.

Planned Actions:

- Leave abandoned farm fields unplanted.
- Plant no trees for wildlife habitat improvement purposes.
- Prescribed fire will not be used to maintain existing vegetation communities or to reduce hazards due to fuels build-up.

Chapter 2
THE ALTERNATIVES



CHAPTER 2
THE ALTERNATIVES

INTRODUCTION

Chapter II describes in detail four alternatives, including the *Preferred Alternative* and the *No Action*. These alternatives were developed to resolve the issues discussed in Chapter 1. This chapter identifies the various combinations of public land uses and resource management practices that respond to the five major planning issues. All alternatives are assessed in relation to long-term impacts, except where noted as short-term. The short-term period is defined as up to five years following filing of the final EIS and plan. The alternatives are: *Preservation, Utilization*, *Preferred* and *No Action*. Table 2-1 summarizes the management actions proposed in each alternative.

MANAGEMENT PRACTICES COMMON TO ALL ALTERNATIVES

The principal concern of management is to protect and enhance the riparian ecosystem along the San Pedro River. Acquisition of the lands was and is primarily for their riparian or water-related values.

General

- Continue inventories and studies as necessary to meet objectives determined in this document.
- Follow monitoring plans developed as a part of this document (Appendix 10).
- Follow all applicable laws, regulations and policies.
- Fence property boundaries to establish visual identification of the land ownership and reduce the probability of unauthorized use.
- Prepare environmental assessments to assess impacts of site-specific projects.
- Maintain property improvements that are needed for the administration of the area.

Recreation

- Establish firearms restrictions around developed facilities and at other specific locations. Coordinate with the Arizona Game and Fish Commission and the Arizona Game and Fish Department on these designations and their enforcement.
- Prohibit off-road use by any type of vehicle.

Areas of Critical Environmental Concern.

- This document will only recommend designations of Areas of Environmental Concern (ACEC). Actual designations will be through the *Safford District Resource Management Plan (RMP)* currently being prepared.

Lands

- Maintain and use existing rights-of-way, subject to stipulations that will protect resource values.
- Obtain additional lands within the San Pedro boundaries by mutual agreement via exchange or purchase to block up the land ownership pattern or for riparian values. Lands may also be obtained outside the boundaries for the protection and enhancement of the resource values found inside the EIS area.
- Establish protective withdrawals for administrative and interpretive facilities as necessary for management of the EIS area.
- Retain existing roads in the area for public and/or administrative use or close and rehabilitate them, depending on the alternatives. The most roads are open to use under the *Utilization Alternative*, limited amounts under the *Preferred Alternative*, and none under the *No Action* and *Preservation Alternatives.*

Water

- Maintain water quality in accordance with state and federal standards by implementing resource management actions.
- Plan activities to maintain existing surface and groundwater conditions. BLM will continuously monitor river flow and fluctuations of the groundwater table to determine if changes occur in the floodplain and regional aquifers. Water quality monitoring will be an ongoing process.
- Follow all available legal avenues to protect rights to surface and groundwater. This includes the protection of the Bureau's pending application for instream flow rights, those rights of the St. David Irrigation Company for the San Pedro River, and groundwater rights under a potential active management area designation.

Wildlife Habitat

- Manage terrestrial wildlife habitat to provide the best habitat for existing population levels of wildlife.

- Assess impacts to federally listed Threatened and Endangered species and state-listed species. Bureau inventories have not identified any federally listed species in the San Pedro EIS area to date. BLM will not authorize actions that jeopardize potential populations or their habitat.
- Consider special status species (i.e., state listed species and candidate species listed in the *Federal Register*) on a case-by-case basis. Although candidate species have no legal protection under the *Endangered Species Act*, it is BLM's policy to manage their habitat at levels high enough to keep them from becoming federally listed.
- Establish mitigation procedures to reduce impacts to wildlife and wildlife habitat.

Vegetation

- Prohibit firewood cutting (including the gathering of down and dead wood) within the San Pedro EIS area.

Minerals

- Withdraw the San Pedro property from mineral entry and mineral leasing laws.

Cultural

- Preserve or enhance cultural resource values through management actions and the control of land uses. Management actions include patrol, stabilization of ruins and control of access.

Paleontological

- Manage all paleontological sites to preserve their scientific values and potential public use values.

NO ACTION ALTERNATIVE

Theme Statement

The theme of the *No Action Alternative* is to protect and/or improve the resources of the San Pedro EIS area by reducing human activity to a minimal level. This will protect cultural and paleontological resources from actions that may adversely affect them. It will also improve the wildlife, vegetation and water resources by allowing natural processes to occur without intervention.

Recreation

Objective: Provide only minimal informational facilities.

Planned Actions:

- Close the entire San Pedro to all forms of public recreation use.
- Install signs for informational and interpretive use in the Fairbank, Charleston, Highway 90 bridge, Hereford and Palominas areas.

Lands

Objective: Provide for the use of only those lands necessary for existing rights-of-way.

Planned Actions:

- Allow maintenance on existing rights-of-way, subject to stipulations that will protect resource values.
- Permit no new rights-of-way.

Water

Objective: Conserve the groundwater resource.

Planned Actions:

- Shut down permanently, cap and abandon all irrigation and domestic wells. Remove pumping and distribution equipment and restore the impacted areas.

Wildlife

Objective: Provide for the reintroduction of federally listed native Threatened and Endangered species.

Planned Actions:

- Develop habitat improvement projects as agreed upon through the consultation requirements of the *Endangered Species Act.*

Objective: Determine the condition and status of wildlife and their habitat.

Planned Actions:

- Inventory terrestrial and aquatic habitats.
- Inventory terrestrial and aquatic vertebrates along with their associated food supplies.
- Monitor changes in terrestrial and aquatic habitats.

Vegetation

Objective: Allow only natural processes to affect vegetation.

Planned Actions:

- Leave abandoned farm fields unplanted.
- Plant no trees for wildlife habitat improvement purposes.
- Prescribed fire will not be used to maintain existing vegetation communities or to reduce hazards due to fuels build-up.

Soils/Watershed

There are no objectives or planned actions for soils/watershed under this alternative.

Fire

Objective: Control wildfires threatening natural resources and structures and reduce the acreage burned.

Planned Actions:

- Suppress wildfires on a high priority basis. All wildfires on or threatening to burn onto the San Pedro EIS area will receive full and sustained suppression action.

Cultural

Objective: Preserve significant sites to maintain their present condition.

Planned Actions:

- Conduct occasional patrols to monitor site condition and identify potential threats to the resource.
- Complete protection measures to preserve scientific and sociocultural values at significant sites, such as stabilization, fencing and data recovery.

Paleontological

Objective: Preserve the scientific values of paleontological resources.

Planned Actions:

- Check known sites periodically (every 3-5 years) and collect exposed fossils.
- Check high potential areas periodically.
- Protect significant paleontological resources by controlling other resource and land uses through avoidance, mitigation and other measures.
- Collect significant fossils threatened by natural and human disturbance.

Minerals

Objective: Do not permit mineral activities in the San Pedro EIS area.

Planned Actions:

- Allow no new development on any of the subject lands.
- Current contracts will not be renewed.

Visual

Objective: Maintain the San Pedro EIS area's existing visual character.

Planned Actions:

- Make no visual resource management classifications (see Appendix 4). All 47,668 acres remain unclassified. The entire EIS area will be managed as a VRM Class III area, the standard BLM practice for unclassified areas.

Areas of Critical Environmental Concern (ACECs)

- There are no objectives for ACECs under this alternative. No ACECs or RNAs are recommended for designation under this alternative.

Administrative Facilities

Objective: Provide for minimal administrative facilities.

Planned Actions:

- Continue using the existing small facility at Fairbank.
- Use the housing at Boquillas Ranch, Fairbank, Hereford and Palominas for employees or for use by cooperating agencies.

PRESERVATION ALTERNATIVE

Theme Statement

The theme of the *Preservation Alternative* is to protect and enhance, to the maximum extent possible, the resources of the San Pedro EIS area. Management actions focus on: enhancing wildlife habitat, water quality and quantity, and vegetation; protecting cultural and paleontological resources; and permitting limited public use.

Recreation

Objective: Provide for limited recreational use of the EIS area with minimal facilities.

Planned Actions:

- Designate the entire San Pedro as a special recreation management area.
- Prepare project plans for the proposed facilities.
- Allow no pets in the EIS area.
- Apply the Limits of Acceptable Change (LAC) planning system.
- Make the San Pedro available for recreation research.

- Close all roads to public use but allow continued BLM administrative use of roads. Designate the entire EIS area as "Closed" to ORV use.
- Close the entire San Pedro EIS area to the discharge of firearms and the use of any other weapons.
- Allow only day use of the EIS area. Limit recreation use to primitive and non-impairing forms. No campfires allowed. No equestrian use permitted.
- Install signs (informational, directional, interpretative) and build parking areas at Fairbank, Charleston, Highway 90, Hereford and Palominas.
- Provide two dedicated, undeveloped outdoor environmental education field study areas.

Lands

Objective: Provide for limited future rights-of-way across the EIS area.

Planned Actions:

- Establish rights-of-way corridors at the Charleston and Hereford crossings.
- Confine all new rights-of-way to these corridors.
- Allow maintenance on existing rights-of-way, subject to protection of resource values.

Water

Objective: Allow for limited consumptive use of the groundwater resource.

Planned Actions:

- Close and cap all irrigation wells, except for those irrigation wells needed to provide water for wildlife habitat improvements. Occasionally pump the capped wells in order to insure protection of groundwater rights based on prior use. This would occur only if the upper San Pedro watershed is designated as an Active Management Area.
- Continue to pump a small number of non-irrigation wells to support resource needs and administrative activities in the San Pedro EIS area.

Wildlife

Objective: Determine the condition and status of wildlife and their habitat.

Planned Actions:

- Inventory terrestrial and aquatic vertebrates along with their associated food supplies.
- Monitor changes in terrestrial and aquatic habitats.
- Mitigate potential impacts to terrestrial and aquatic habitats to assure existing habitat diversity through time.
- Identify special management guidance to protect areas important for raptors and herons.
- Prepare a habitat management plan (HMP) for the EIS area.

Objective: Emphasize the nonconsumptive use of fish and wildlife.

Planned Actions:

- Allow no trapping in the San Pedro EIS area.
- Minimize human disturbance around important wildlife areas.
- Allow wildlife species collections only for administrative purposes. Coordinate these collections with the AGFD.
- Analyze the potential for wildlife-related research in the EIS area.
- Establish interpretive and environmental education programs on wildlife and their habitat, with emphasis on the riparian ecosystem.

Objective: Provide for the reintroduction of native wildlife species, including Threatened and Endangered species. Use habitat improvements to maximize habitat availability.

Planned Actions:

- Plant abandoned farm fields (1,500 to 2,000 acres) with preferred forage species.
- Use prescribed fires to improve terrestrial habitat.
- Develop ponds and marshes for aquatic and terrestrial wildlife.
- Plant native trees (seedlings or poles) along the riparian corridor and other areas where desirable to enhance wildlife habitat.
- Use short-term pumping of irrigation wells to support aquatic habitat improvements.
- Develop plans for removal of exotic fish from existing ponds in cooperation with AGFD.

Vegetation

Objective: Maintain and enhance the vegetation communities of the San Pedro EIS area.

Planned Actions:

- Replant abandoned farm fields to native grasses, forbs and/or shrubs. Use some non-native species now found in the area and considered beneficial .
- Replant areas outside the farm fields, where needed. Select a mix of native species to balance watershed protection and wildlife habitat needs.
- Establish, if desirable, a native tree nursery.
- Use prescribed fire to maintain the natural vegetation mosaic.

Soils/Watershed

Objective: Maintain and enhance the soils/watershed resources of the EIS area to reduce future soils erosion.

Planned Actions:

- Build a low, main channel detention structure at the site of the St. David Canal diversion to regrade the eroded channel and for water diversion by the canal company.
- Build, as needed, additional erosion control structures along either the main or side channels. This can include small structures that might be needed to protect other resources, such as eroding cultural sites.
- Remove the dikes or berms on both the east and west sides of the farm fields. Return the land as near as possible to its natural (pre-clearing) contour.

Fire

Objective: Control wildfires threatening natural resources and structures and reduce the acreage burned.

Planned Actions:

- Suppress wildfires on a high priority basis. All wildfires on or threatening to burn into the San Pedro EIS area will receive full sustained suppression action.

Cultural

Objective: Manage cultural resources.

Planned Actions:

- Prepare a Cultural Resource Management Plan (CRMP) for the EIS area.
- Allocate all sites to one or more of the following use categories: scientific use, management use, public use, socio-cultural use, and conservation for future use (see Appendix 2 for definitions of these categories).
- Nominate eligible properties to the *National Register of Historic Places*.
- Manage sites to realize their allocated use while protecting the site's other cultural resource values from impact.
- Complete a Class III intensive field inventory of the entire management area and record all cultural resources.
- Maximize the efficiency and quality of site management through the development of cooperative management agreements and the use of volunteers.

Objective: Manage a majority of sites for their information potential (see Appendix 1).

Planned Actions:

- Allow scientific study to gain knowledge on the full array of the cultural resources in the EIS area, to fulfill regional research objectives, and to fill regional data gaps (Bronitsky and Merritt 1986).
- Identify scientific research objectives by historic context for the EIS area.
- Allocate the following sites to scientific use (see Appendix 2): AZ EE:8:1 (ASM), AZ EE:8:5 (ASM), AZ EE:8:7 (ASM), AZ EE:8:4 (AMF), Benson 8:3 (GP), SPII-10, SPII-16, SPII-20, AZ EE:4:3 (ASM), AZ EE:8:48 (ASM), and AZ EE:8:34 (ASM).
- Manage sites eligible for scientific use allocation to preserve scientific values and other cultural resource values.

Objective: Manage no sites for public values (see Appendix 1).

Planned Actions:

- Identify socio-cultural values. Give full consideration to these values in the management of associated sites and areas.

Objective: Manage a small number of sites for conser vation (see Appendix 1) to protect and preserve representative samples of all the cultural resources in the EIS area.

Planned Actions:

- Protect sites potentially eligible for allocation to conservation for future use (see Appendix 2) to preserve their scientific and public values.
- Allocate a representative sample of sites in each historic context to conservation for future use.
- Do not permit conflicting land and resource uses on allocated sites.
- Release sites from conservation for future use only if they meet the required conditions (see Appendix 3 for the conditions).

Paleontological

Objective: Preserve and enhance the scientific and potential public use values of paleontological resources to increase the knowledge of the San Pedro EIS area's natural history.

Planned Actions:

- Inventory any future land acquisitions for paleontological resources.
- Check known sites periodically (every 3-5 years) and collect exposed fossils.
- Check high potential areas periodically.
- Allow excavation and collection at the following sites: Diack, Horsethief Draw Mammoth and Horsethief No. 2.
- Allow new paleontological research.
- Protect significant paleontological resources by controlling other resource and land uses through avoidance, mitigation and other measures.
- Collect significant fossils threatened by natural and human disturbances.

Minerals

Objective: Do not allow mineral activities in the San Pedro area.

Planned Actions:

- Allow no new development on any of the subject land.
- Do not renew any current contracts.

Visual

Objective: Manage the San Pedro EIS area's visual resources to preserve the outstanding scenery and enhance areas impacted by human disturbance.

Planned Actions:

- Designate the visual resources of the subject lands into the following Visual Resource Management classes (see Appendix 4):

  Class I: 2,060 acres
  Class II: 11,144 acres
  Class III: 8,914 acres
  Class IV: 25,500 acres

  Preservation-oriented management will occur in the Class I areas (the proposed RNAs) and Class II areas (most of the scenic valley bottom along the San Pedro River). Enhancement actions will take place in those areas previously impacted by human disturbance.

Areas of Critical Environmental Concern (ACEC)

Objective: Preserve and enhance the identified special values of the San Pedro EIS area.

Planned Actions:

- Recommend designation in the Safford RMP for the entire San Pedro EIS area as the San Pedro Riparian ACEC. Accomplish management of this ACEC by applying the management direction for the *Preservation Alternative*.
- Recommend designation in the Safford RMP of three research natural areas (RNA) within the ACEC - St. David Cienega, 350 acres; San Pedro River, 1,340 acres; and San Rafael, 370 acres (See Appendix 13). Apply the following management to these areas: prohibit developments and new rights-of-way; prohibit overnight camping and campfires; encourage avoidance by recreation users; preserve and enhance vegetation communities; place signs where needed along the boundaries; control exotic vegetation; prohibit the introduction of non-native species; and preclude public vehicular access.

Administrative Facilities

Objective: Provide for administrative facilities.

Planned Actions:

- Expand the existing facilities at Fairbank to handle the identified needs.
- Use the housing at Boquillas Ranch, Fairbank, Hereford and Palominas for employees or for use by cooperating agencies.

Research

Objective: Provide minimal facilities for a variety of research in the EIS area.

Planned Actions:

- Develop a small facility at Fairbank for research in such fields as biology, hydrology, archaeology, paleontology, soils and botany.

UTILIZATION ALTERNATIVE

Theme Statement

The theme of the *Utilization Alternative* is to emphasize the availability of the San Pedro EIS area for public use while still protecting the wildlife, cultural, paleontological, vegetation and water resources.

Recreation

Objective: Provide for extensive recreation use of the EIS area (to the extent possible without impacting other sensitive resources), with emphasis on both dispersed and developed recreation. Intensively interpret all of the resources of the EIS area.

Planned Actions:

- Designate the entire San Pedro as a special recreation management area.
- Prepare project plans for all proposed facilities.
- Apply the Limits of Acceptable Change (LAC) planning system.
- Make the San Pedro available for recreation research.
- Designate the entire EIS area under the ORV management regulations as "Limited to Designated Roads". Allow public vehicle and mountain bike use on designated roads only.
- Close the EIS area to the discharge of firearms except those used by hunters licensed under the regulations of the State of Arizona during the period of September 1 to March 31. Close the area around developed facilities to hunting. Target practice or "plinking" is not allowed anywhere in the EIS area. The use of bows and arrows is permitted anywhere in the EIS area under the regulations of the State of Arizona
- Limit the length of stay at campgrounds to 7 days.
- Allow dispersed recreation.

- Restrict campfires to designated locations.
- Allow overnight use by permit only.
- Allow commercial use only if compatible with the management of the San Pedro River.
- Develop the following in the Highway 90 area (San Pedro Ranch House):

  – 30 to 50 unit campground;
  – large visitor contact and interpretive facility;
  – interpretive display in the historic San Pedro Ranch House and also use the facility as the headquarters of the Friends of the San Pedro River;
  – interpretive trail to the river;
  – small picnic site and a group picnic site;
  – interpretive displays at the campground and picnic sites; and
  – highway pullout with information, directions and interpretive signs.
- Rebuild the San Rafael del Valle Road (Highway 90 to Hereford), use as a motorized interpretive route, and develop the following:

  – day-use only restriction,
  – graveled road,
  – 8 to 12 pullouts with interpretive displays;
  – up to 6 short spur roads to small parking areas;
  – up to 4 small picnic sites; and
  – two overlooks with interpretive displays.
- Develop the following in the Hereford area:

  – 20 to 40 unit campground;
  – graveled access road;
  – parking area with interpretive display;
  – two small picnic sites; and
  – highway pullout with information, directions and interpretive signs.
- Develop the following in the Fairbank area:

  – medium size visitor contact and interpretive facility;
  – parking area;
  – small picnic site; and
  – highway pullout with information, directions and interpretive signs.
- At the Presidio of Santa Cruz de Terrenate:

  – control access to the site; and
  – build an interpretive trail through the site.
- At the Boquillas Ranch:

  – build an interpretive display for the ranchhouse and an old railroad commissary building; and
  – restrict use of the area.
- Develop the following on the Babocomari River:

  – trail along the river using the old railroad grade;
  – small parking area and trailhead near the river's mouth; and
  – interpretive site.
- Develop the following on the Boquillas Road (road between Fairbank and Charleston):

  – day-use only restriction;
  – graveled road;
  – small picnic site; and
  – interpretive display at the Boston Mill ruins.
- Develop the Lewis Springs Road:

  – graded access road;
  – parking areas;
  – small picnic site; and
  – interpretive displays.
- Develop the following at Escapule Wash:

  – a small parking area;
  – a small walk-in picnic site with interpretive display; and
  – restriction to day use only.
- Develop the following at Murray Springs:

  – interpretive display in a small building;
  – interpretive trail through the site; and
  – graded access road.
- Develop the following on the north end of the EIS area:

  – 10 to 15 unit primitive campground; and
  – a small picnic site.
- Develop the following at the Lehner Ranch:

  – interpretive display in a small building; and
  – an interpretive trail through the site.
- Develop the following in the Charleston area:

  – highway pullout with information, directions and interpretive signs;
  – interpretive display near the ruins;
  – foot trail to the ruins; and
  – a small picnic site.
- Develop the following at Palominas;

  – highway pullout with information, directions and interpretive signs;
  – 10 to 15 unit primitive campground;
  – graded access road; and
  – a small picnic site.
- Develop 2 to 3 dedicated outdoor environmental education field study areas of 5 to 10 acres each. Facilities will include shade shelters, tables, signs, and small parking areas. Access to and use of these sites will be restricted.
- There are two scenarios possible on recreation use of the existing railroad corridor.

  – In one scenario the railroad track is abandoned and the privately owned right-of-way is obtained. BLM will develop a hiking and equestrian trail on the grade, along with access/parking/corrals at Hereford, Highway 90, Charleston, Fairbank, and on the north end of the EIS area;

  – In the second scenario a privately run tourist train will use the existing track, with possible construction of a spur line to Tombstone. BLM will work with the operator on stops for the train, possibly including the installation of historic train stations. These facilities will use some private lands but may need the use of some of the EIS area adjacent to the tracks. BLM will develop access/parking/corrals at Hereford, Highway 90, Charleston, Fairbank, and on the north end of the EIS area for dispersed hiking and equestrian use.

Lands

Objective: Provide for future rights-of-way across the EIS area and for other lands actions compatible with the subject lands.

Planned Actions:

- Grant rights-of-way only in areas with no significant resource conflicts and/or in right-of-way corridors established at Charleston and Hereford.
- Allow maintenance on existing rights-of-way, subject to protection of resource values.
- Issue land use authorizations on a case-by-case basis, minimizing disturbances and consistent with the management objectives of the EIS area.

Water

Objective: Allow for limited consumptive use of the groundwater resource while providing necessary support for other resource programs.

Planned Actions:

- Pump irrigation wells only as necessary to sustain and protect future water rights. When pumping, irrigate the lands associated with the pumped well to encourage growth of vegetative cover and improve wildlife habitat.
- Use wells on an emergency basis to supplement surface flow to protect an endangered resource (such as fish populations or riparian habitat).
- Use non-irrigation wells to provide water in support of the various resource and administrative activities in the EIS area.
- Close and cap unneeded and unnecessary irrigation and nonirrigation wells.

Wildlife

Objective: Determine the condition and status of wildlife and their habitat.

Planned Actions:

- Inventory terrestrial and aquatic habitats.
- Inventory terrestrial and aquatic vertebrates along with their associated food supplies.
- Monitor changes in terrestrial and aquatic habitats.
- Mitigate potential impacts to terrestrial and aquatic habitats to assure existing habitat diversity through time.
- Identify special management guidance to protect areas important for raptors and herons.
- Prepare a habitat management plan (HMP) for the EIS area.

Objective: Provide for the reintroduction of native Threatened and Endangered species.

Planned Actions:

- Develop habitat improvement projects as agreed upon through the consultation requirements of the Endangered Species Act.
- Develop plans for the removal of exotic fish from existing ponds in cooperation with AGFD.

Objective: Emphasize the nonconsumptive use of fish and wildlife while accommodating some consumptive use.

Planned Actions:

- Do not allow trapping in the EIS area.
- Allow wildlife species collections only for administrative purposes. Coordinate these collections with AGFD.
- Pursue establishment by AGFD of hunting regulations for the EIS area. This relates to length of season, time of season and types of weapons permitted.
- Analyze the potential for wildlife-related research in the EIS area.
- Establish interpretive and environmental education programs on wildlife and their habitat, with emphasis on the riparian ecosystem.

Vegetation

Objective: Emphasize the natural succession of vegetation communities.

Planned Actions:

- Do not allow vegetation plantings except for Threatened and Endangered species projects.
- Accomplish vegetation changes naturally or by the use of prescribed fire.

Soils/Watershed

Objective: Maintain and enhance the soils/watershed resources of the EIS area.

Planned Actions:

- Build structures in side channels if necessary for erosion control, flood control or watershed protection.
- Build contour dikes on the eroded areas on the northwest side of the EIS area (south of St. David).
- Build dikes and gully plugs on side drainages as needed.

Fire

Objective: Control wildfires threatening natural resources and structures and reduce the acreage burned.

Planned Actions:

- Suppress wildfires on a high priority basis. All wildfires

on or threatening to burn into the EIS area will receive full and sustained suppression action.

Cultural

Objective: Manage cultural resources.

Planned Actions:

- Prepare a Cultural Resource Management Plan (CRMP) for the EIS area.
- Allocate all sites to one or more of the following use categories: scientific use, management use, public use, socio-cultural use, and conservation for future use (see Appendix 2 for definitions of these categories).
- Nominate eligible properties to the *National Register of Historic Places*.
- Manage sites to realize their allocated use while protecting the site's other cultural resource values from impact.
- Complete a Class III intensive field inventory of the entire EIS area and record all cultural resources.
- Maximize the efficiency and quality of site management through the development of cooperative management agreements and the use of volunteers.

Objective: Manage a majority of sites for their information potential (see Appendix 1).

Planned Actions:

- Promote scientific study to gain knowledge on all the cultural resources in the EIS area, to fulfill regional research objectives, and to fill regional data gaps (Bronitsky and Merritt, 1986).
- Fund scientific studies when appropriate to meet priority regional research objectives.
- Identify scientific research objectives by historic context for the EIS area.
- Allocate the following sites to scientific use (see Appendix 2): AZ EE:8:1 (ASM), AZ EE:8:5 (ASM), AZ EE:8:7 (ASM), AZ EE:8:4 (AMF), Benson 8:3 (GP), SPII-10, SPII-16, SPII-20, AZ EE:4:3 (ASM), AZ EE:8:48 (ASM), and AZ EE:8:34 (ASM).
- Manage sites eligible for scientific use allocation to preserve scientific values and other cultural resource values.

Objective: Manage a small number of sites for public values (see Appendix 1).

Planned Actions:

- Promote the interpretation of cultural resources to provide the public with information on the history and prehistory of the area. Educate the public on the value of cultural resources.
- Allocate the following sites to public use (see Appendix 2): Presidio of Santa Cruz de Terrenate, Fairbank, Murray Springs site, Lehner site, Charleston, Millville (Gird and Corbin Mills), Boquillas Ranch headquarters, Brunckow cabin, San Pedro Ranch House, and Gaybanipitea.
- Complete stabilization work at the following sites to preserve public values and other identified values: Presidio of Santa Cruz de Terrenate, Fairbank, Charleston, Millville, Contention, Contention City, Grand Central Mill, Sunset Mill, the San Pedro Ranch House and the Boston Mill.
- Assure the preservation of scientific and other cultural resource values and achieve cultural resource objectives in the development and use of interpretive sites.
- Provide data and display items for public interpretation.
- Provide support in the planning, designing and development of interpretive sites.
- Identify socio-cultural values. Give full consideration to those values in the management of associated sites and areas.

Objective: Manage a few sites for conservation (see Appendix 1) to protect and preserve representative samples of all cultural resources in the EIS area.

Planned Actions:

- Protect sites potentially eligible for allocation to conservation for Future Use (see Appendix 2) to preserve their scientific and public values.
- Allocate a representative sample of sites in each historic context to conservation for future use.
- Do not permit conflicting land and resource uses on allocated sites.
- Release sites from conservation for future use only if they meet the required conditions (see Appendix 3 for the conditions).

Paleontological

Objective: Emphasize scientific research while preserving paleontological resources.

Planned Actions:

- Promote and fund the excavation and collection of the Diack site, the Horsethief Draw Mammoth site, and the Horsethief No. 2 site.
- Protect significant paleontological resources by controlling other resource and land uses through avoidance, mitigation and other measures.
- Promote and fund new paleontological research.
- Conduct regular patrols to monitor site condition.
- Collect significant fossils threatened by natural and human disturbance.

Minerals

Objective: Do not allow mineral activities in the sensitive portions of the EIS area.

Planned Actions:

- Permit sand and gravel extraction operations outside the riparian area.

Visual

Objective: Manage the EIS area's visual resources to preserve the most outstanding scenery and to enhance areas impaired by human disturbance.

Planned Actions:

- Designate the visual resources of the subject lands into the following Visual Resource Management classes (see Appendix 4):

  Class I: 850 acres
  Class II: 9,007 acres
  Class III: 13,982 acres
  Class IV: 23,829 acres

  Preservation oriented management will occur in the Class I areas (the proposed RNAs) and Class II areas (much of the scenic valley bottom along the San Pedro River). Enhancement actions will take place in those areas previously impacted by human disturbance.

Areas of Critical Environmental Concern (ACEC)

Objective: Preserve and enhance the identified special values of the EIS area.

Planned Actions:

- Recommend designation in the Safford RMP of the entire EIS area as the San Pedro Riparian ACEC. Accomplish management of this ACEC by applying the management direction for the *Utilization Alternative*.
- Recommend the designation in the Safford RMP of three research natural areas (RNA) within the ACEC — St. David Cienega, 130 acres; San Pedro River, 550 acres; and San Rafael, 170 acres (See Appendix 13). Apply the following management to these areas: prohibit developments and new rights-of-way; prohibit overnight camping and campfires; encourage avoidance by recreation users; preserve and enhance vegetation communities; place signs where needed along the boundaries; control exotic vegetation; prohibit the introduction of non-native species; and preclude public vehicular access.

Administrative Facilities

Objective: Provide facilities in several locations to properly administer the EIS area.

Planned Actions:

- Build an administrative facility at the Highway 90 location as part of the visitor contact and interpretive facility.
- Build a small facility at Fairbank to administer the northern end of the EIS area.
- Use the housing at Boquillas Ranch, Fairbank, Hereford and Palominas for employees or for use by cooperating agencies.

Research

Objective: Provide facilities for a variety of research in the EIS area.

Planned Actions:

- Develop an adequate facility at either Fairbank or the Highway 90 area for research in the fields of biology, hydrology, archaeology, soils, paleontology and botany.

PREFERRED ALTERNATIVE

Theme Statement

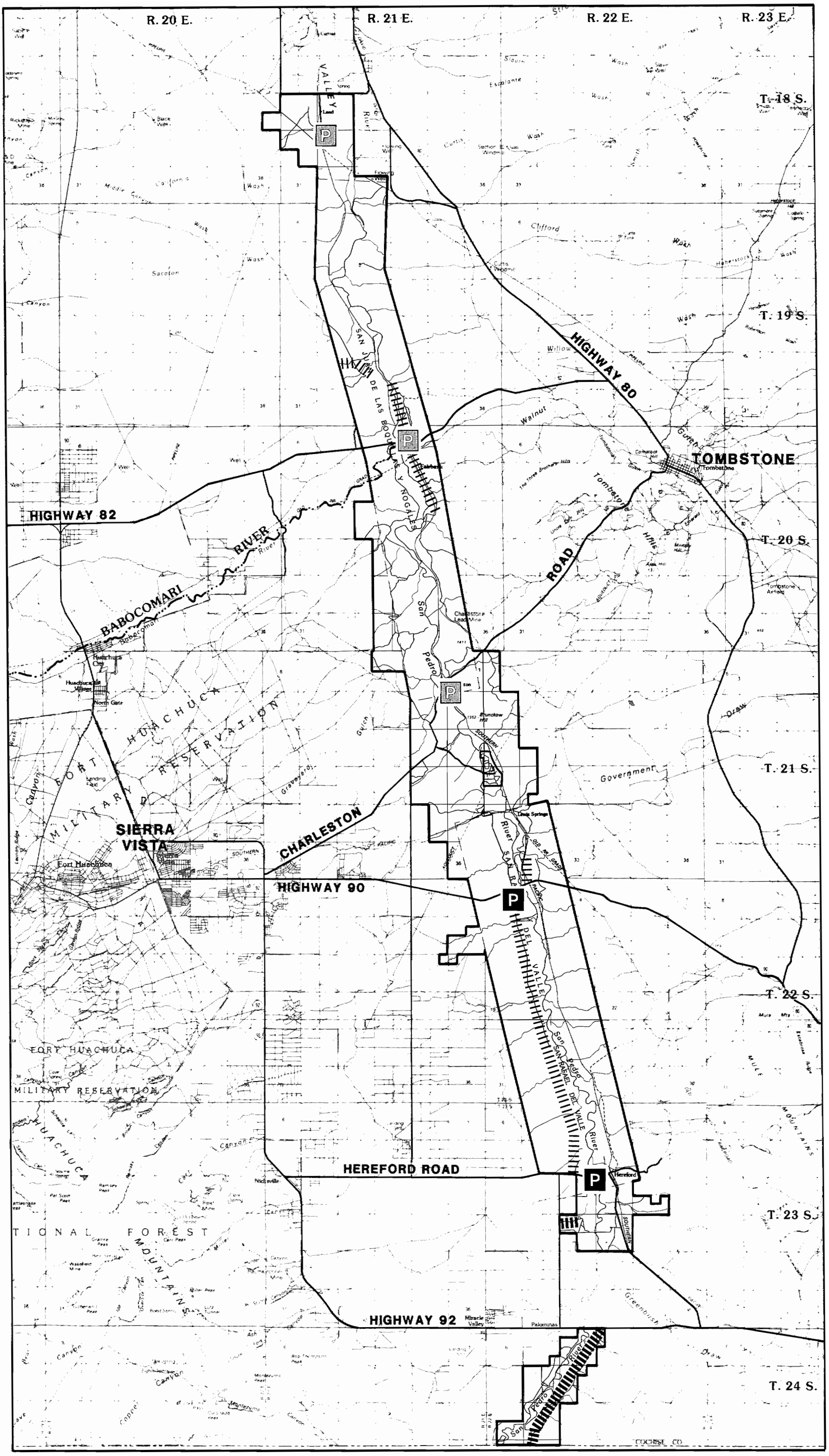
The theme of the *Preferred Alternative* is to balance the resource protection and public use activities in the San Pedro EIS area. Protection and/or enhancement of wildlife, cultural, paleontological, vegetation and water resources is emphasized. Public use is allowed where natural resources are not significantly impacted.

Recreation

Objective: Provide for moderate recreation use of the EIS area (to the extent possible without impacting other sensitive resources), with both dispersed and developed recreation available. Intensively interpret all of the resources of the EIS area.

Planned Actions:

- Designate the entire EIS area as a special recreation management area.
- Prepare project plans for all proposed facilities.
- Apply the Limits of Acceptable Change (LAC) planning system.
- Make the San Pedro available for recreation research.
- Allow commercial uses only if compatible with the management of the San Pedro.
- Develop a small parking area on the north end of the EIS area.
- Allow equestrian use
- Designate the entire EIS area under the ORV management regulations as "Limited to Designated Roads". Allow public vehicle and mountain bike use on the designated roads. (See Map 2-1).
- Close all public lands in that portion of the EIS area between Charleston Road and the Hereford area (See Map 2-2), and all public lands within one-quarter mile of developed facilities to the discharge of firearms at any



MAP 2-1

ROADS AND ACCESS

PREFERRED ALTERNATIVE

Federal, State, County, and Private Roads

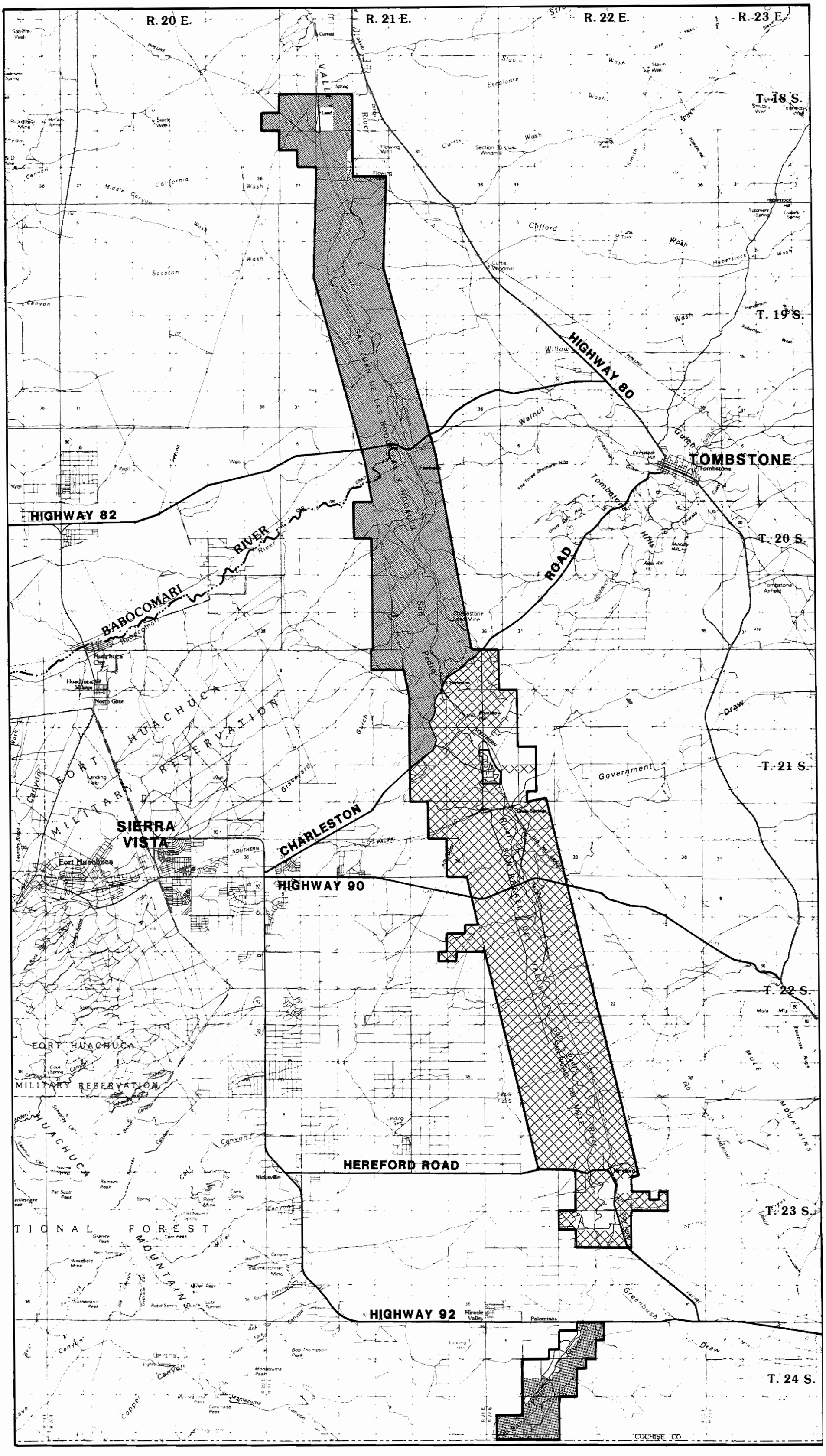
Existing BLM Roads and Parking Areas

Potential BLM Roads and Parking Areas

SCALE

0 1 2 3 4 5 Miles

N



MAP 2-2

FIREARMS RESTRICTIONS

PREFERRED ALTERNATIVE

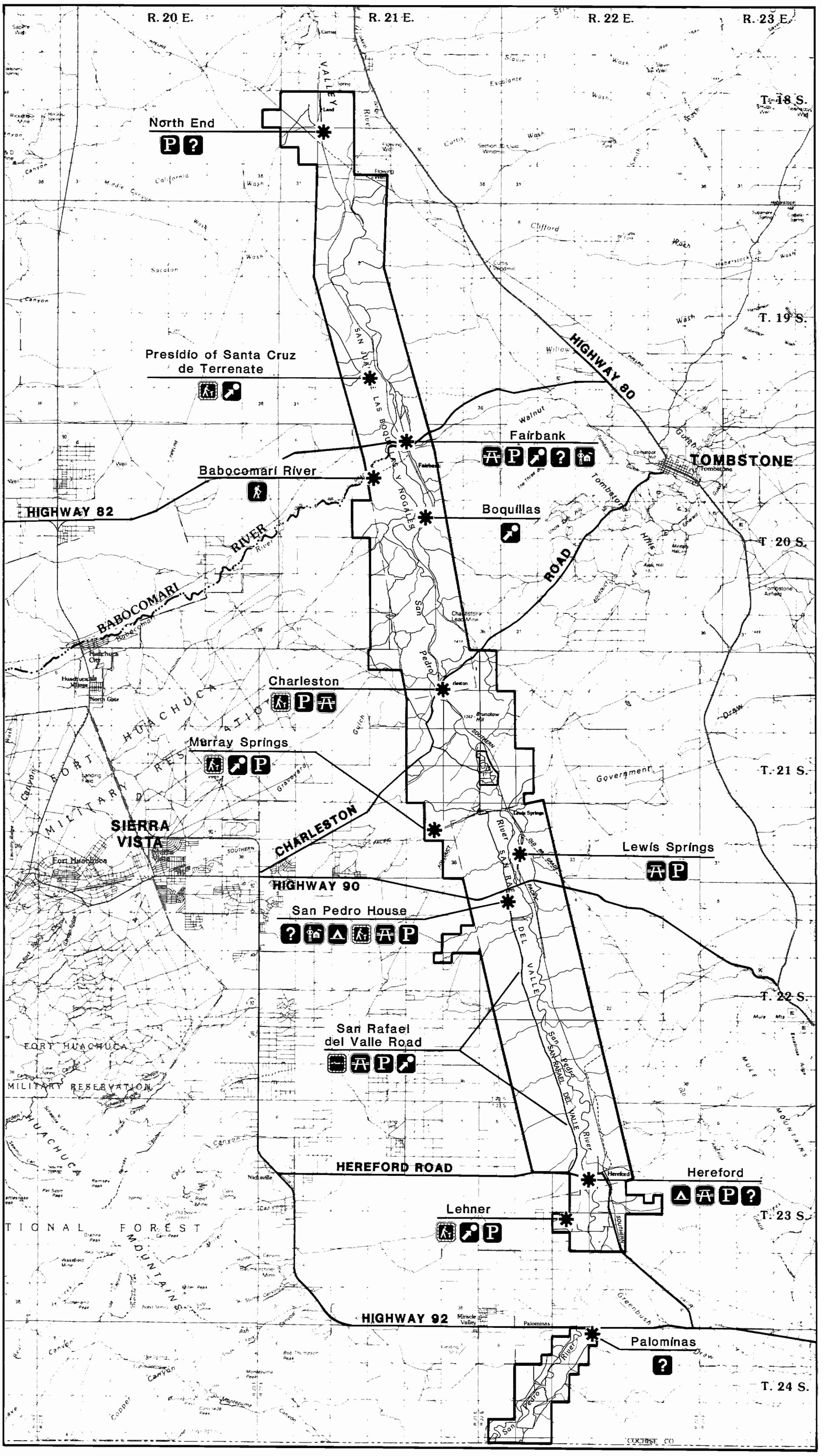
Lands Available for the Discharge of Firearms

Lands Closed to the Discharge of Firearms

SCALE

0 1 2 3 4 5 Miles

N



MAP 2-3

PROPOSED RECREATION FACILITIES

PREFERRED ALTERNATIVE

- Point of Interest
- Interpretive Trail
- Interpretive Auto Road
- Campground
- Parking
- Picnic Area
- Information
- Administrative Site
- Hiking Trail

SCALE

0 1 2 3 4 5 Miles

N

time during the year. The discharge of firearms in the remainder of the EIS area will be allowed only for the purpose of regulated hunting as authorized by the laws of the State of Arizona, but only during the period of September 1 through March 31. Allow the use of archery equipment anywhere in the EIS area, except within one-quarter mile of developed facilities, but only for the purpose of regulated hunting as authorized by the laws of the State of Arizona.

- Limit the length of stay at campgrounds to seven days.
- Allow dispersed recreation.
- Restrict campfires to designated locations.
- Allow overnight use by permit only.
- Require pets to be leashed in posted areas.
- Develop the following in the Highway 90 (San Pedro Ranch House) area.(See Map 2-3 for this and all following development locations):

  – 30 to 50 unit campground;
  – large visitor contact and interpretive facility;
  – interpretive display in the historic San Pedro Ranch House and also provide the facility as the headquarters of the Friends of the San Pedro River support group;
  – interpretive trail to the river;
  – interpretive displays at the campground and picnic sites; and
  – highway pullout.

- Rebuild the San Rafael del Valle Road (Highway 90 to Hereford) use as a motorized interpretive route and develop the following:

  – day use only restriction;
  – graveled road;
  – 7 to 10 pullouts with interpretive displays;
  – up to 2 short spur roads to small parking areas;
  – 1 to 2 small picnic sites; and
  – 1 to 2 overlooks with interpretive displays.

- Develop the following in the Hereford area:

  – 15 to 30 unit campground;
  – graveled access road;
  – parking area with interpretive display, information/directions station; and
  – a small picnic site.

- Develop the following in the Fairbank area:

  – small visitor contact and interpretive facility and an information/directions station;
  – parking area; and
  – small picnic site.

- At the Presidio of Santa Cruz de Terrenate:

  – control access to the site, and
  – build an interpretive trail through the site.

- At the Boquillas Ranch:

  – build an interpretive display for the ranchhouse and an old railroad commissary building; and
  – restrict use of the area.

- Develop the following on the Babocomari River:

  – trail along the river using the old railroad grade;
  – small parking area and trailhead near the river's mouth; and
  – interpretive site.

- Develop the following on the Boquillas Road (road between Fairbank and Charleston):

  – graveled road, and
  – designate as closed to public use from Boquillas Ranch to Charleston.

- Develop the following on the Lewis Springs Road:

  – graded access road;
  – parking areas;
  – a group picnic site;
  – a primitive camping area; and
  – interpretive displays.

- Develop the following at Murray Springs:

  – an interpretive display;
  – an interpretive trail through the site; and
  – short, graded access road to a small parking area.

- Develop the following at the Lehner Ranch

  – interpretive display, and
  – interpretive trail through the site.

- Develop the following in the Charleston area:

  – highway pullout with information, directions and interpretive signs;
  – an interpretive display near the ruins;
  – foot trail to the ruins; and
  – a small picnic site.

- Develop the following at Palominas:

  – highway pullout with information, directions and interpretive signs;
  – graded access road; and
  – a small picnic site.

- Develop 2 to 3 dedicated outdoor environmental education field study areas of 5 to 10 acres each. Facilities will include shade shelters, tables, signs, and small parking areas. Restrict access to and use of these sites.
- There are two scenarios possible on recreation use of the existing railroad corridor.

  – In one scenario the railroad track is abandoned and the privately owned right-of-way is obtained. BLM will develop a hiking and equestrian trail on the grade, along with access/parking/corrals at Hereford, Highway 90, Charleston, Fairbank, and on the north end of the EIS area;
  – In the second scenario a privately run tourist train will use the existing track, with possible construction of a spur line to Tombstone. BLM will work with the operator on stops for the train, possibly including the installation of historic train stations. These facilities will use some private lands but may need the use of some of the EIS area adjacent to the tracks. BLM will develop access/parking/corrals at Hereford, Highway 90, Charleston, Fairbank, and on the north end of the EIS area for dispersed hiking and equestrian use.

Lands

Objective: Provide for future rights-of-way across the EIS

area and for other lands actions compatible with the subject lands.

Planned Actions:

- Restrict rights-of-way and other uses to areas where they would not significantly impact resources.
- Allow maintenance on existing rights-of-way, subject to protection of resource values.
- Designate a right-of-way corridor at Charleston. The northern boundary will be no farther north than the existing northern right-of-way and the southern boundary will be 660 feet south (see Map 2-4).
- Designate a right-of-way corridor at Hereford. The northern boundary will be the southern and western edge of the Hereford Road. The southern boundary will follow the established utility easement on the southern San Rafael grant line. The corridor is 150 feet in width.
- Issue land use authorizations on a case-by-case basis, minimizing disturbances and consistent with the management objectives of the EIS area.

Water

Objective: Conserve the groundwater resource while providing necessary support for other programs.

Planned Actions:

- Pump most of the irrigation wells only to protect potential water rights. Protect water rights if the San Pedro Watershed is designated as an Active Management Area. Pump for an emergency use if a resource value becomes jeopardized (such as fish populations due to reduced surface flow).
- Use one well on a short-term basis in one field for an experimental revegetation trial.
- Keep some of the non-irrigation wells operational to provide the required water for various resource activities and for administrative purposes.
- Close and cap unnecessary irrigation and non-irrigation wells.

Wildlife

Objective: Determine the condition and status of wildlife and their habitat.

Planned Actions:

- Inventory terrestrial and aquatic habitats.
- Inventory terrestrial and aquatic vertebrates along with their associated food supplies.
- Monitor changes in terrestrial and aquatic habitats.
- Mitigate potential impacts to terrestrial and aquatic habitats to assure existing habitat diversity through time.
- Prepare a habitat management plan (HMP) for the EIS area.
- Identify special management guidance to protect areas important for raptors and herons.
- Evaluate, in cooperation with AGFD, the impact of hunting on wildlife and wildlife habitat.
- Evaluate the impact of visitor use on wildlife and the riparian ecosystem. Determine if these impacts are consistent with the overall management of the riparian ecosystem and the associated wildlife resource.

Objective: Emphasize consumptive and non-consumptive use of fish and wildlife.

Planned Actions:

- Do not allow trapping in the EIS area except in cases that are determined in consultation with APHIS or AGFD for administrative purposes.
- Minimize human disturbance around important wildlife areas.
- Allow wildlife species collections only for administrative purposes. Coordinate collections with AGFD.
- Analyze the potential for wildlife-related research in the EIS area.
- Establish interpretation and environmental education programs on wildlife and their habitat, with emphasis on the riparian ecosystem.
- Pursue establishment by AGFD of hunting regulations for the EIS area. This relates to length of season, time of season, and the types of weapons permitted.

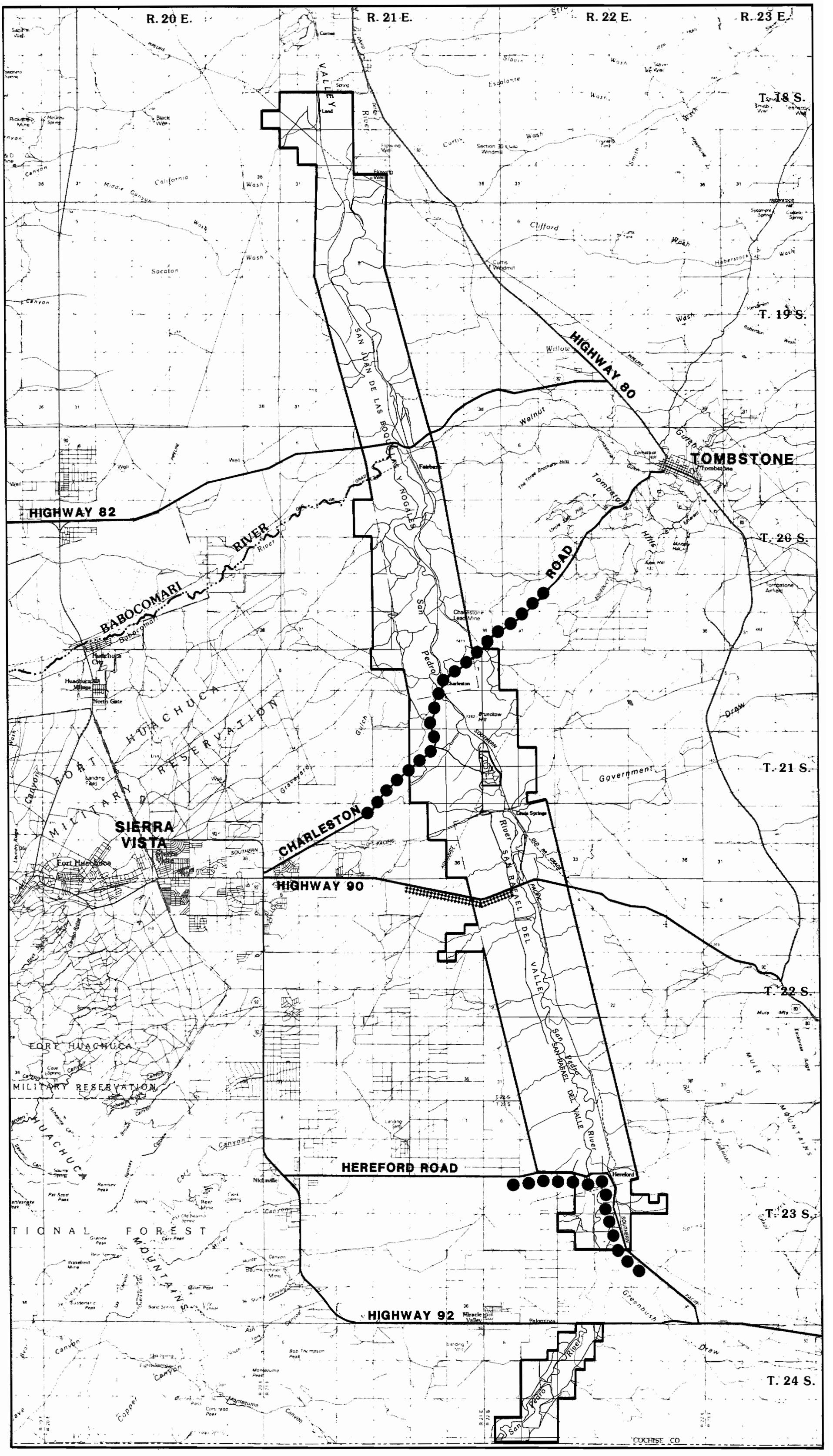
Objective: Provide for the reintroduction of native wildlife species, including Threatened and Endangered species. Use habitat improvements to optimize habitat availability.

Planned Actions:

- Plant one abandoned farm field, on an experimental basis, with preferred forage species.
- Use prescribed fires to improve terrestrial habitat.
- Develop ponds and marshes for aquatic and terrestrial wildlife.
- Plant native trees (seedlings and poles) along the riparian corridor and other areas where desirable to enhance wildlife habitat.
- Pump non-irrigation wells in support of aquatic habitat improvements. Pump irrigation wells for emergency use if a resource becomes jeopardized (such as fish populations due to reduced flows).
- Provide wildlife waters in the drier upland portions of the EIS area.
- Provide habitat for terrestrial wildlife species that use tree cavities (holes) through placement of nest boxes or other methods.
- Consider plans for the removal of exotic fish from existing ponds in cooperation with the AGFD.

Vegetation

Objective: Maintain and enhance the vegetation communities in the EIS area.



MAP 2-4

PROPOSED RIGHTS-OF-WAY AND CORRIDORS

PREFERRED ALTERNATIVE

Telephone and Power Lines

Corridor

SCALE

0 1 2 3 4 5 Miles

N

Planned Actions:

- Use an abandoned farm field for experimental reseeding/revegetation plantings of native species. Use some non-native species now found in the area and considered beneficial. If the experimental reseeding is successful and beneficial, consider using it in other areas. Natural plant succession would occur on most of the EIS area. Plant trees in areas that can support wildlife and recreation activities. Consider streambank revegetation where necessary.
- Use prescribed fire to maintain wildlife habitat diversity and to reduce hazardous build-up of fuels.
- Establish, if desirable, a native tree nursery.

Soils/Watershed

Objective: Maintain and enhance the soils/watershed resources of the EIS area to reduce future soil erosion.

Planned Actions:

- Remove the dikes or berms along the east and west sides of the abandoned farm fields and allow preexisting drainages to re-establish.
- Build side drainage erosion control structure only as needed to protect other resources and watershed values.

Fire

Objective: Control wildfires threatening natural resources and structures and reduce the acreage burned.

Planned Actions:

- Suppress wildfires on a high priority basis. All wildfires on or threatening to burn into the EIS area will receive full and sustained suppression action.
- Reduce the potential for damage to resources and structures within the EIS area and to adjacent land owner's properties. Do this by using fire breaks, both natural and constructed, as determined by resource and fire objectives. Emphasize the following areas: the southwest portion of the EIS area, where extensive fuels are within one mile of private dwellings; in the vicinity of the El Paso Natural Gas pipeline; and near any structures within the property.

Cultural

Objective: Manage cultural resources.

Planned Actions:

- Prepare a Cultural Resource Management Plan (CRMP) for the EIS area.
- Allocate each site to one or more of the following use categories: scientific use; management use, public use; socio-cultural use; and conservation for future use (see Appendix 2 for definitions of these categories).
- Nominate eligible properties to the *National Register of Historic Places*.
- Manage sites to realize their allocated use while protecting the site's other cultural resource values from impact.
- Complete a Class III Intensive Field Inventory of the entire EIS area and record all cultural resources.
- Maximize the efficiency and quality of site management through the development of cooperative management agreements and the use of volunteers.

Objective: Manage a majority of sites for their information potential (see Appendix 1).

Planned Actions:

- Promote scientific study to gain knowledge on all of the cultural resources in the EIS area, to fulfill regional research objectives, and to fill regional data gaps (Bronitsky and Merritt 1986).
- Fund scientific studies when appropriate to meet top priority regional research objectives.
- Identify scientific research objectives by historic context for the EIS area.
- Allocate the following sites to scientific use (see Appendix 2): AZ EE:8:1 (ASM); AZ EE:8:5 (ASM); AZ EE:8:7 (ASM); AZ EE:8:4 (AMF); Benson 8:3 (GP); SPII-10; SPII-16; SPII-20; AZ EE:4:3 (ASM); AZ EE:8:48 (ASM); AZ EE:8:34 (ASM).
- Manage sites eligible for scientific use allocation to preserve scientific values and other cultural resource values.

Objective: Manage a small number of sites for public values (see Appendix 1).

Planned Actions:

- Promote the interpretation of cultural resources to provide the public with information on the area's history and prehistory. Educate the public on the value of cultural resources.
- Allocate the following sites to public use (see Appendix 2): Presidio of Santa Cruz de Terrenate, Fairbank, the Murray Springs site, the Lehner Site, Charleston, Millville (Gird and Corbin Mills), the Boquillas Ranch headquarters, the Brunckow cabin, the San Pedro Ranch house and Gaybanipitea.
- Complete stabilization work at the following sites to preserve public values and other identified values: Presidio of Santa Cruz de Terrenate, Fairbank, Charleston, the Brunckow cabin, the Carr Canyon school, Millville, Contention, Contention City, the Grand Central Mill, the Sunset Mill and the San Pedro Ranch house.
- Assure the preservation of scientific and other cultural resource values and achieve cultural resource objectives in the development and use of interpretive sites.
- Provide data and display items for public interpretation.
- Provide support in the planning, designing and development of interpretive sites.
- Achieve cultural resource management objectives in

development plans, designs, development actions and operations.

- Identify socio-cultural values and give full consideration to these values in the management of associated sites and areas.

Objective: Manage a few sites for conservation (see Appendix 1) to protect and preserve representative samples of all the cultural resources in the EIS area.

Planned Actions:

- Protect sites potentially eligible for allocation to conservation for future use (see Appendix 2) to preserve their scientific and public values.
- Allocate a representative sample of sites in each historic context to conservation for future use.
- Do not allow conflicting land and resource uses on allocated sites.
- Release sites from conservation for future use only if they meet the required conditions (see Appendix 3 for the conditions).

Paleontological

Objectives: Preserve and enhance the scientific and potential public use values of paleontological resources to increase the knowledge of the San Pedro EIS area's natural history.

Planned Actions:

- Inventory any future land acquisitions for paleontological resources.
- Check known sites periodically (every 3-5 years) and collect exposed fossils.
- Check high potential areas periodically.
- Promote the excavation and collection of the Diack site, Horsethief Draw Mammoth site, and Horsethief No. 2 site.
- Promote new paleontological research.
- Fund new paleontological research when appropriate to meet top priority management objectives.
- Protect significant paleontological resources by controlling other resources and land uses through avoidance, mitigation and other measures.
- Collect significant fossils threatened by natural and human disturbance.

Minerals

Objective: Keep mineral activities out of the sensitive portions of the EIS area.

Planned Actions:

- Prohibit gravel extraction operations in the riparian area.
- Allow the existing operation outside the riparian area to continue until the material under the already stripped area is removed. Issue new permits on an annual basis.

Visual

Objective: Manage the EIS area's visual resources to preserve the outstanding scenery and to enhance areas impaired by human disturbance.

Planned Actions:

- Designate the visual resources of the subject lands into the following Visual Resource Management classes (ses Appendix 4):

  Class I: 2,060 acres
  Class II: 8,311 acres
  Class III: 11,926 acres
  Class IV: 25,371 acres

  Preservation oriented management will occur in the Class I areas (the proposed RNAs) and Class II areas (most of the scenic valley bottom along the San Pedro River). Enhancement actions will take place in those areas previously impacted by human disturbance.

Areas of Critical Environmental Concern (ACEC)

Objective: Preserve and enhance the identified special values of the EIS area.

Planned Actions:

- Recommend designation in the Safford RMP of the entire EIS area as the San Pedro Riparian ACEC. Accomplish management of the ACEC by applying the management guidelines of the *Preferred Alternative.*
- Recommend the designation in the Safford RMP of three research natural areas (RNA) within this ACEC — St. David Cienega, 350 acres; San Pedro River, 1,340 acres; and San Rafael, 370 acres (See maps in Appendix 13). Apply the following management to these areas: prohibit developments and new rights-of-way; prohibit overnight camping and campfires; encourage avoidance by recreation users; preserve and enhance vegetation communities; place signs where needed along the boundaries; control exotic vegetation; prohibit the introduction of non-native species; and preclude public vehicular access.

Administrative Facilities

Objective: Provide facilities in several locations so as to properly administer the EIS area.

Planned Actions:

- Build an administrative facility at the Highway 90 location as part of the visitor contact and interpretive facility.
- Build a small facility at Fairbank to administer the northern end of the EIS area.

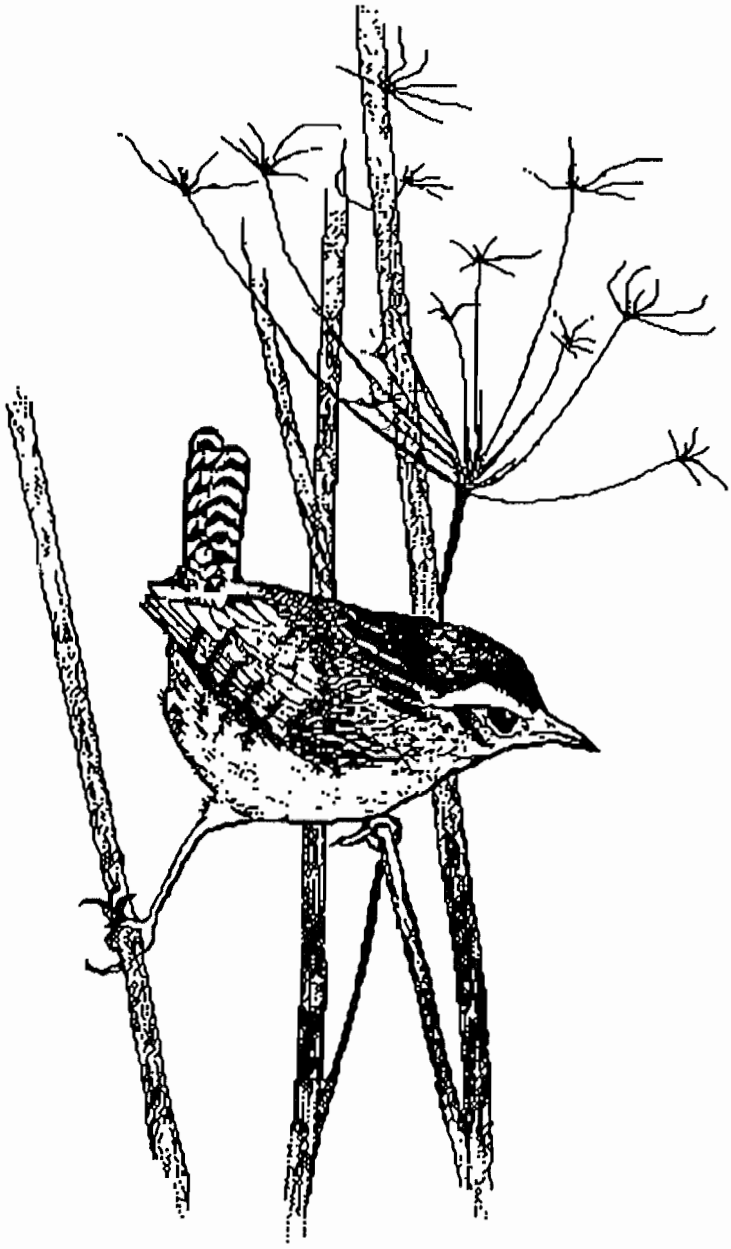
- Use the housing at Boquillas Ranch, Fairbank, Hereford and Palominas for employees or for use by cooperating agencies.

Research

Objective: Provide facilities for a variety of research in the EIS area.

Planned Actions:

- Develop an adequate facility at either Fairbank or the Highway 90 area for research in such fields as biology, hydrology, archaeology, paleontology, soils and botany.



ENVIRONMENTAL IMPACTS SUMMARY

The *No Action Alternative* proposes no actions which would create environmental disturbances. The impacts are, therefore, those which could be anticipated from taking no action. Such impacts would be on the economic component through loss of economic returns from recreation and from sand and gravel extraction. The inability to recreate on the property would have some social impacts as many people anticipate being able to do so. Additionally, if the public cannot recreate on the San Pedro property, they may elect to do so on other public lands, creating environmental impacts on those lands. Beneficial effects are anticipated to water, wildlife, and vegetation and soil.

The *Preservation Alternative* proposes some actions that would benefit the natural resources such as water, wildlife, vegetation and soil/watershed. Wildlife habitat improvement projects could impact cultural and paleontological resources but would positively affect wildlife species. They would also improve dispersed recreation activities by providing a greater diversity of species. Construction of the St. David detention dam would adversely affect cultural and paleontological resources but would positively affect erosion processes and riparian vegetation by regrading the stream channel. Social and economic effects are very nearly the same as No Action but with a slightly more positive effect.

Implementing the *Utilization Alternative* would negatively impact water quality, wildlife, vegetation, soils and cultural/paleontological resources. These impacts are due largely to the greater emphasis on developed recreation and the continued extraction of sand and gravel off the riparian corridor. The same emphasis would benefit the economic and social components. Some of the management actions of this alternative would also positively affect wildlife habitat, water, soils and vegetation.

The *Preferred Alternative* would have actions impacting wildlife, soils, cultural/paleontological, vegetation, water, visual resources and the economic component. Other actions would provide positive impacts to the same resources. Most impacts are minor and reflect short-term vs long-term effects.

TABLE 2-1
MANAGEMENT ACTION SUMMARY

BUREAU OF LAND MANAGEMENT
Safford District, Arizona

Management Actions	No Action	Preservation	Utilization	Preferred
RECREATION				
ORV Designation	None	Closed	Limited to designated roads.	Limited to designated roads.
Public Vehicular Access	None	Designated parking areas - no roads	Large number of designated roads available.	Limited number of roads available.
Public Use	None	Available with limitations	Available	Available
Firearms	Prohibited	Prohibited	Restricted to specified hunting season.	Open and closed areas.
Developed Recreation Sites	No developed sites.	No large sites - 5 small sites.	4 large sites; 12 small sites.	4 large sites; 7 small sites.
Dispersed Recreation	None	Available - limited to day use only.	Available - permit for overnight use.	Available - permit for overnight use.
VISUAL RESOURCES	No VRM classification.	92% of scenic riparian corridor in VRM Class I & II.	84% of scenic riparian corridor in VRM Class I & II.	86% of scenic riparian corridor in VRM Class I & II.
ACEC RECOMMENDATION	None	1 ACEC of entire San Pedro; 3 RNAs.	1 ACEC of entire San Pedro; 3 small RNAs.	1 ACEC of entire San Pedro; 3 RNAs.
LANDS				
Maintenance of Existing ROWs	Yes	Yes	Yes	Yes
Protective Withdrawals for Administrative Purposes	Yes	Yes	Yes	Yes
Acquire Additional Lands	Yes	Yes	Yes	Yes
Allow New ROWs	No	Yes	Yes	Yes
WATER				
Maintain Quality and Quantity	Yes	Yes	Yes	Yes
Develop Springs	No	No	No	No
Use Irrigation Wells	No	Yes, if needed.	Yes, as necessary.	Yes, as necessary.

TABLE 2-1
MANAGEMENT ACTION SUMMARY

BUREAU OF LAND MANAGEMENT
Safford District, Arizona

Management Actions	No Action	Preservation	Utilization	Preferred
Use Non-Irrigation Wells	No	Yes, as necessary.	Yes, as necessary.	Yes, as necessary.
WILDLIFE HABITAT				
Upper San Pedro River HMP	No	Yes	Yes	Yes
Maintain or Improve Wildlife Species Diversity	Yes	Yes	Yes, only projects required for T&E species.	Yes
Maintain or Improve the Riparian Eco-System	Yes	Yes	Yes	Yes
Maintain or Improve Aquatic Habitat	No. Natural processes only.	Yes	No, except for T&E.	Yes
Reintroductions of Native Wildlife Species	No	Yes	Only T&E species.	Yes
Exotic Fish Removal	No	No	No	Yes
Monitor Habitat Changes	Yes	Yes	Yes	Yes
Vegetation Manipulation Projects	No	Yes	Yes, only for T&E Species.	Yes
WATERSHED				
Main Channel Detention Dam Construction	No	Yes	No	No
Erosion Control Structures - Main Channel	No	Yes	No	No
Erosion Control Structures - Side Drainages	No	Yes	Yes	Yes
Remove Dikes and Berms Around Farm Fields	No	Yes	No	Yes

TABLE 2-1 (continued)
MANAGEMENT ACTION SUMMARY

BUREAU OF LAND MANAGEMENT
Safford District, Arizona

Management Actions	No Action	Preservation	Utilization	Preferred
VEGETATION				
Plant Abandoned Farm Fields to Native Species	No	Yes	No	Yes, but limited.
Plant Trees for Wildlife or Recreation	No	Yes	Yes	Yes
Prescribed Fire	No	Yes	Yes	Yes
FIRE				
Suppress Wildfire	Yes	Yes	Yes	Yes
MINERALS				
Gravel Production in the Riparian Area	Prohibited	Prohibited	Prohibited	Prohibited
Gravel Production Outside the Riparian Area	No	No	Yes	Existing operation only.
CULTURAL				
Scientific Study of Cultural Resources	Allow (limited)	Allow	Promote, fund	Promote, fund
Patrol of Cultural Sites	Occasional	Regular	Regular	Regular
Public Use of Cultural Sites: Interpretive Sites	No	No	Yes, 11 sites.	Yes, 10 sites.
Allocate Cultural Sites for Conservation	No	Yes	Yes	Yes
On Site Protection	Yes	Yes	Yes	Yes
Cultural Resource Activity Plans	No	Yes	Yes	Yes

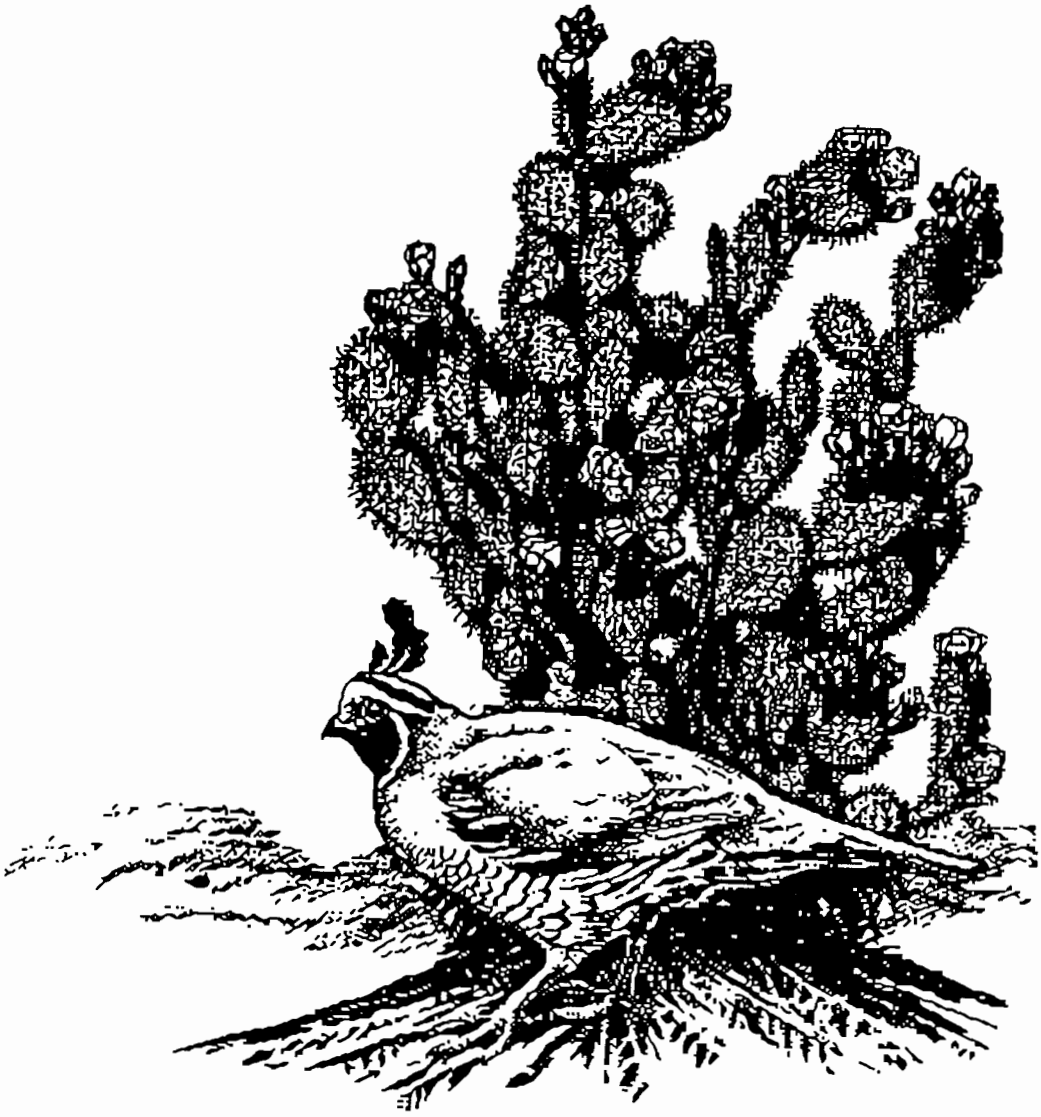
TABLE 2-1
MANAGEMENT ACTION SUMMARY

BUREAU OF LAND MANAGEMENT
Safford District, Arizona

Management Actions	No Action	Preservation	Utilization	Preferred
RESEARCH CENTER				
Build Center	No	Yes, small	Yes	Yes
ADMINISTRATIVE FACILITIES				
Build facility	No additional.	Expand existing facility.	New facility.	New facility.

Chapter 3

AFFECTED ENVIRONMENT



CHAPTER 3
AFFECTED ENVIRONMENT

INTRODUCTION

Chapter 3 describes the resources that may be impacted by implementing the alternatives including the *Preferred Alternative*. Descriptions are only as detailed as needed for the reader to understand the effects of implementation. Where impacts are slight or nonexistent (climate, topography, air quality, natural history), descriptions are brief or omitted. More detailed descriptions of the resources of the EIS area are available in the Safford District Office.

PHYSICAL SETTING

The EIS area lies in the Basin and Range physiographic province, characterized as possessing gently sloping valleys separated by abruptly rising mountains. Such is the case where the San Pedro valley separates the Dragoon and Mule Mountains to the east from the Huachuca and Whetstone Mountains to the west. The elevation is about 3,900 ft.. The climate is arid to semi-arid. Summers are warm, averaging 95° daily maximum in June. Winters are relatively mild with average maximum in January of 61° and lows of 34°. Precipitation averages about 13" annually with 50-60% of that total falling in July-September and 20% in December-February.

RECREATION

Recreation has not been a recognized use of the San Pedro EIS area, primarily because the land was previously in private ownership. A small amount of hunting was selectively authorized by the owners. Other occasional uses include birdwatching, nature study, picnicking and sightseeing. The area between the two land grants, centering on Escapule Wash, received extensive use from off-road vehicles.

The San Pedro offers many opportunities for a variety of recreational activities. During the public meetings many people identified potential uses of the San Pedro, e.g., camping, hiking, picnicking, nature study, birdwatching and interpreting the natural, cultural and paleontological resources.

SPECIAL AREAS (Potential Areas of Critical Environmental Concern ACEC)

The San Pedro EIS area has significant examples of archaeological and historical sites, a perennial stream, wildlife populations, paleontological resources and vegetation communities. These special features are enough to meet the relevance and importance criteria for ACECs and to qualify as Research Natural Areas (RNA). The San Pedro lands encompass several vegetation types that are either not represented or only minimally represented in the RNA program. The RNA program does not have any representation of the Chihuahuan Desert scrub, sacaton grassland, mesquite bosque and cienega vegetation types. The cottonwood-willow riparian vegetation type is only minimally represented. The San Pedro offers an opportunity to fill these voids. Brief descriptions of the nominated ACEC and RNAs are as follows:

San Pedro Riparian: This potential ACEC covers the entire San Pedro property and includes 36 miles of the San Pedro River (partly perennial), extensive stands of cottonwood-willow riparian vegetation, many significant archaeological, historical and paleontological sites, and a wide variety of wildlife.

St. David Cienega: The potential RNA at the cienega is a remnant of what much of the San Pedro River Valley used to look like. The marsh-like cienega has a vegetation type dominated by reeds and sedges. Also in this potential RNA are a small mesquite bosque, a grassland area seasonally impacted by water, and small areas of Chihuahuan Desert scrub vegetation.

San Pedro River: This potential RNA contains the cottonwood-willow riparian vegetation type. Bordering the riparian area is an extensive mesquite bosque. The eastern portions of this area contains the Chihuahuan Desert scrub vegetation type, characterized by creosote, tarbush and catclaw.

San Rafael: This potential RNA is dominated by grasslands, with alkali and giant sacaton the most common. Running through this grassland area is the San Pedro River with an excellent representation of the cottonwood-willow riparian vegetation type.

VISUAL

The riparian forest along the San Pedro River is the most recognizable visual feature of the San Pedro property. This is especially true where the four primary highways cross the river. The riparian forest offers a dramatic visual change from the surrounding country's vegetation, dominated by such Chihuahuan Desert shrubs as creosote, catclaw, tarbush, whitethorn and mesquite.

In the larger picture, the San Pedro EIS area occupies the valley bottom of the upper San Pedro River Valley. Most of the country to the east and west is dominated by gently sloping valley terraces with many small drainages. The only major break in the valley's topography is near the center of the property, where the Charleston Hills rise above the surrounding landscape. Long distance views are available from the EIS area—the Mule and Dragoon Mountains and the Tombstone Hills to the east, the Huachuca and Whetstone Mountains to the west, and the San Jose Mountains to the south in Mexico.

Though generally natural in appearance, the San Pedro property has been modified over the last 100 years. These

changes include four paved roads crossing the property and many graded and dirt roads, electric and telephone lines, and several towns. In addition, there are some ranch houses and ranch facilities, an active railroad line and several old railroad grades, and about 2,200 acres of old farm fields.

Scenic vistas from highways and the San Pedro River are important because of the associated sightseeing values. Two major attractions to recreationists are water and the riparian forest. Protecting views of these features is a concern.

Designation of visual resource management classes has not occurred on the public lands in the San Pedro EIS area. A visual resources management (VRM) inventory was completed for the entire San Pedro area regardless of land ownership. BLM will manage visual resources only on the public lands. (See Appendix 4 for a discussion of Visual Resource Management.)

LANDS AND REALTY

Land Uses

Activities occurring when BLM obtained the land consisted of livestock grazing, sand and gravel operations, rights-of-way and some unauthorized recreation uses. Neighboring lands have these same uses with the addition of rural residences and subdivisions. Southern Cochise County is one of the fastest growing areas of southeastern Arizona for this type of use. The Escapule subdivision and its residences (about 200 acres in sections 18 and 19, T. 21 S., R. 22 E.) are located just north of the San Rafael del Valle land grant, bordering the EIS area. Military operations occur on the adjacent lands of Fort Huachuca.

State Highways 82, 90 and 92 cross the San Pedro property. Two Cochise County roads, Charleston and Hereford, also provide access to the planning area. The Charleston road is a deeded easement, except the San Pedro River crossing where it has a right-of-way. The Southern Pacific Railroad (Benson to Douglas rail line), crosses the planning area north to south. This is also a fee right-of-way.

Many rights-of-way including natural gas pipelines, water pipelines, utility easements, powerlines, roads and telephone lines cross the EIS area. See Map 3-1. Noticeable concentrations are at the Charleston River crossing and in the Hereford-Palominas area. Most were authorized by the previous landowner. BLM has granted rights-of-way for new bridges at the Charleston and Hereford crossings of the San Pedro River. An environmental assessment will be prepared before final location and construction of the new bridges. See Table 3-1 for the listing of these rights-of-way.

The St. David Irrigation District has a damsite and canal in the northern part of the San Juan de las Boquillas land grant. The dam diverts water into the canal for use on fields near St. David.

In 1987 Arizona Electric Power Cooperative applied to construct a 230 kv electric line from the Apache Power Plant near Sunsites to Sierra Vista. BLM issued a right-of-way for the selected route, including a crossing of the San Pedro River at Charleston.

Certain sites within the EIS area where there are existing facilities may be designated as administrative sites. Such sites include the Boquillas Ranch, the current BLM administrative site at Fairbank, and any other developed recreation, research or administrative facilities.

Acquisition

Several additional parcels of private land may be obtained for protection of the riparian values, the water table and to help provide continued flow in the San Pedro River. Private exchanges are being negotiated that may lead to acquisition of these lands. The private lands are also valuable for protection of wildlife and cultural and historic properties.

TABLE 3-1
Rights-of-Way
BUREAU OF LAND MANAGEMENT
Safford District, Arizona

Holder	Type	Feet/Acres
Sulphur Springs Valley Electric Coop., Inc.	Powerline	57,132/32
Mountain Bell	Telephone	85,641/20
El Paso Natural Gas	Gas Pipeline	18,424/9
City of Tombstone	Water Pipeline	90,710/208
Arizona Public Service	Powerline	19,430/5
Cochise County	Road	37,000/59
William D. Glenn	Road	2,250/5
Arizona Department of Transportation	Road	25,932/147
St. David Irrigation	Dam, Canal, Road	9,140/53
Bob & Janet Watkins	Utility Easement	3,500/1
1st Interstate Bank	Road	2,460/1.4
Cochise County	Charleston Bridge	2,400/33.1
Cochise County	Hereford Bridge	2,950/40.6
Arizona Electric Power Cooperative, Inc.	Powerline and Access Roads	95,315/142.46

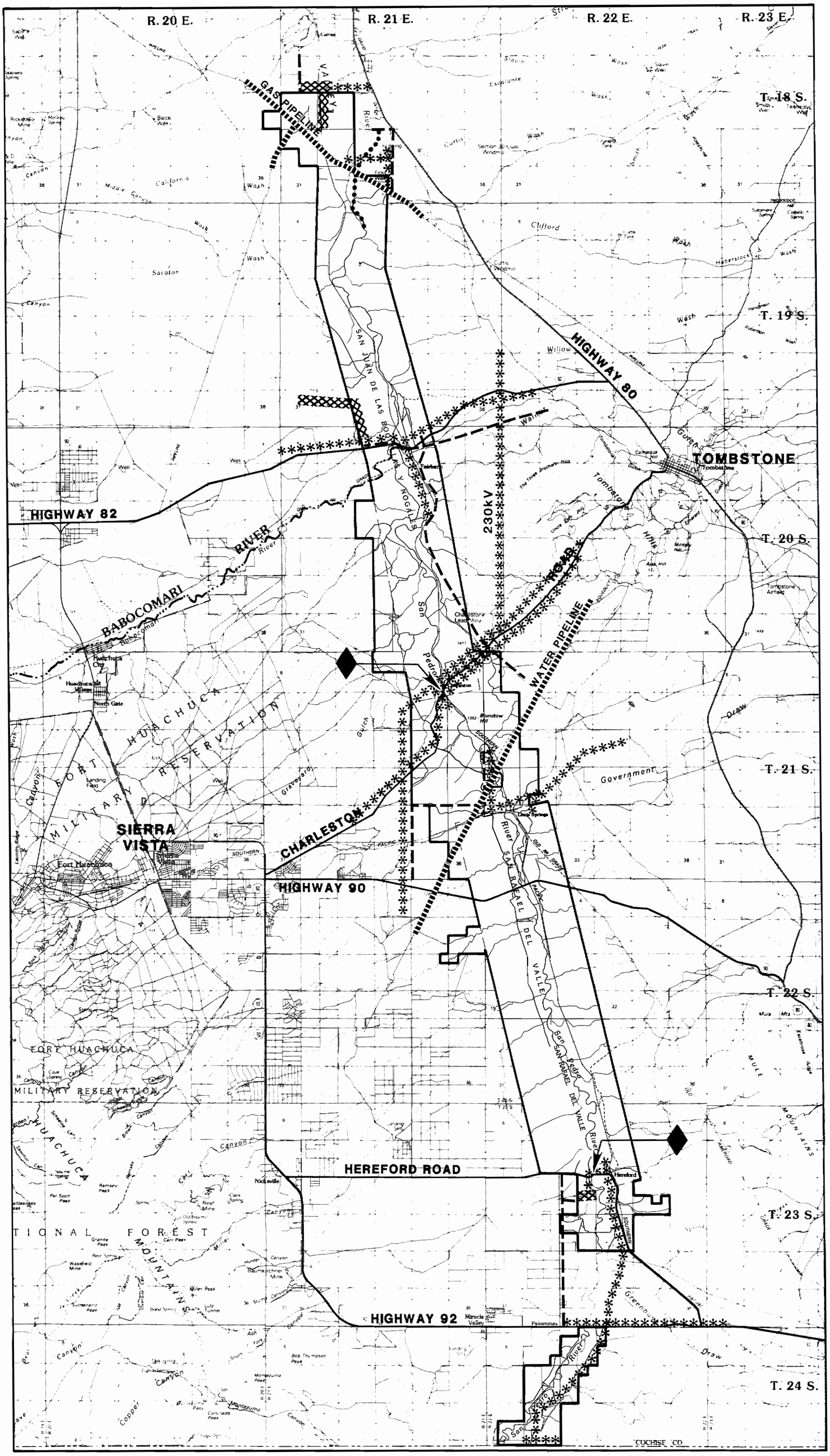
Source: Safford District Files

WATER

Following are selections from a detailed discussion of water attached as Appendix 5. (See Map 3-2 for water source locations).

Surface Water

The San Pedro River starts in the desert grasslands of northern Sonora, Mexico. The river flows north for about 140 miles, entering the Gila River near Winkelman Arizona. Its watershed of over 4000 square miles includes most major vegetational life zones of North America. These range from coniferous forests on mountains higher than 7400 feet above mean sea level to Sonoran desert scrub at 1800 feet elevation near the river's mouth. Much of the mainstream flows through structural basins over valley fill approaching or exceeding 1000 feet thick. Its floodplain is usually a half mile or more wide, except where bedrock out-



MAP 3-1

EXISTING RIGHTS-OF-WAY

- Canal
- Telephone
- Powerline
- Pipeline
- Combination Telephone and Powerline
- Bridge

SCALE

0 1 2 3 4 5 Miles

N

Analysis of Floodplain Well Data

Floodplain well data analysis determined: 1) depth to groundwater within the riparian zone; 2) seasonal variations in riparian zone groundwater elevations; and 3) correlations (if any) between riparian zone groundwater elevations and streamflow. In addition, the analysis of data from selected wells in the floodplain aquifer determined the trends in groundwater elevations and whether changes in these elevations corresponded to changes in either mean monthly flow or base flows (defined as the 90-day annual low flow).

Water Sources Inventory

To date, 40 wells have been located, inventoried and mapped within the EIS area (see Appendix 12), five of which are totally unusable. The Bureau of Reclamation installed two additional wells for groundwater monitoring purposes. Thirteen wells are currently in use and the rest could be put into operation with the installation of pumping equipment, a power source and/or some maintenance. Twenty of the wells have been used for irrigation; one for an industrial operation; and five for domestic use. The rest were used for livestock watering. Most of the irrigation equipment is still in place. Depth-to-water measurements range from 12 to 35 feet. These measurements include a number of the irrigation wells.

The eight springs and seven ponds have also been inventoried and mapped. Those sources are described earlier in this section.

Since the first acquisition of land in the EIS area, additional lands have been obtained and included within the EIS area. Water sources on these additional lands still need to be inventoried. The inventory phase will continue until all sources are located and mapped. A number of wells and stockponds exist on these recently obtained lands.

Water Quality

The quality of the surface water is good. Over the years, a number of entities have measured water quality in the river (U.S. Geological Survey, Arizona Department of Health Services, Arizona Game and Fish Department, Southeast Arizona Governments Organization, U.S. Fish and Wildlife Service, and Gray Triangle Action Group). This was usually in response to the many pollution spills in the upper watershed. Spills usually occur when intense rainstorms cause the holding ponds for sewage or mining wastes to overflow or breach. On occasion, the sewage and/or mining wastes may have been intentionally or accidentally released, usually to create more storage capacity.

As a general rule, high flows in the San Pedro River show the presence and movement of high levels of heavy metals in the water. Water samples taken in a one-time grab sample during a moderately high flow (August 20, 1987) show this relationship for the six most dangerous heavy metals (see Table 3-2). The table also shows the additional information of cubic feet per second (CFS) and pH. The flow is estimated in cubic feet per second. The designated beneficial uses established for the San Pedro River are: aquatic and wildlife; incidental human contact; agricultural irrigation; and agricultural livestock watering as established by the State of Arizona's Water Quality Standards.

Data obtained during another measurement (September 23, 1986) showed all heavy metals except mercury well below the Maximum Contaminant Level standards. Mercury was detected at only one site at 0.004 Mg/L. The 1986 analysis was for one day following a high intensity storm.

Water Rights

The Huachuca Audubon Society submitted an "Application for Permit to Appropriate Surface Water" to the Arizona Department of Water Resources in August 1985 to get an instream-flow water right. The requested water right is for the segment of the San Pedro River from Hereford to Benson. After BLM took ownership of the lands, the instream-flow water right was reassigned to the BLM. The application is now under consideration by the Department of Water Resources. The application requested a quantity of flow for wildlife (including fisheries and riparian habitat maintenance) and recreation use (including esthetics).

The San Pedro Watershed is now undergoing water rights adjudication proceedings under the direction of the courts and with guidance from the Department of Water Resources. These proceedings will consider all submitted water claims and determine the apportionment of the existing water resources.

WILDLIFE

Terrestrial Habitat

A vegetation inventory using the Brown, Lowe and Pase (1979) classification system identified 21 different plant communities (see Vegetation portion of this chapter for these classifications). These 21 communities are combined into 12 communities (see Appendix 3) in the Wildlife section for the sake of simplicity.

The riparian communities (cottonwood-willow riparian, mesquite bosque and cienega) contain 228 species or 53 percent of the total terrestrial wildlife species. Less than five percent of the EIS area, however, classifies as riparian communities. These communities, therefore, are the most important since the number of species using them are greater than the number of species using the other communities. The terrestrial wildlife species in the riparian communities include 167 species of birds, 47 species of mammals and 14 species of herptiles.

The riparian inventory showed a good distribution of age classes and frequency of trees in the cottonwood-willow riparian association in the area around Hereford. As a general rule, going north (downstream) leads to a poorer distribution of age classes and frequency of trees in the cottonwood-willow riparian association. Inventory data also reveals the age class distribution leans more toward the mature age classes than the seedling and young age classes.

The uplands consist of six plant communities. About 200 species of wildlife use the uplands, including 136 species of birds, 37 species of mammals and 27 species of herptiles.

Refer to the Vegetation section for more information regarding vegetation classification as well as quantity and quality of these habitats.

TABLE 3-2
Water Quality Analysis
BUREAU OF LAND MANAGEMENT
Safford District, Arizona

Sample Type	Above Green Brush	Lewis Spring Bridge	Charleston Bridge	Fairbank Bridge	Standard (Aquatic and Wldlf/Agric. Irrigation)
Flow	35.000	38.000	55.000	75.000	
pH	7.600	7.900	8.000	8.000	9.0
Cu T	.262	.260	.090	ND	0.500 mg/L
Cd T	0.320	ND	ND	ND	.050 mg/L
Pb T	.400	.141	.150	ND	0.10 mg/L
Zn T	1.880	ND	ND	.110	10.000 mg/L
Fe T	4.100	.301	.600	13.000	1.000 mg/L
Hg	ND	ND	ND	ND	0.0002 mg/L

Source: Safford District Files
ND - Not detected. T - Total pH - Amount of the hydrogen ion in solution. Refers to the acidity or alkalinity of a solution. Less than 7.0 indicates the solution is acidic, more than 7.0 indicates the solution is alkaline. Water is neutral at 7.0 pH.
Cu - Copper; Cd - Cadmium; Pb - Lead; Zn - Zinc; Fe - Irou; Hg - Mercury

Table Summary

- Copper exceeded the standard of 0.050 mg/L from Hereford to Fairbank by a factor of 5.
- Cadmium exceeded the standard of 0.050 mg/L above Greenbrush Draw by a factor of 6.
- Lead exceeded the standard of 0.010 mg/L from Hereford to Fairbank by a factor of 4.
- Iron exceeded the EPA aquatic life criterion of 1.00 mg/L from Hereford to Fairbank. This excess ranged up to 13 times the established criterion at the Fairbank Bridge.
- Zinc did not exceed the standard of 10.000 mg/l
- No mercury was detected in the August measurement.

Appendices 6-8 provide lists of species by plant community: Appendix 6, birds, Appendix 7 mammals and Appendix 8, herptiles.

Terrestrial Wildlife

Wildlife inventories on the upper San Pedro River found 303 species of birds, 84 mammals, and 41 herptiles on or adjacent to the EIS area. These species are subdivided into the following classifications to demonstrate different management strategies by groups of animals.

Non-game

Non-game species include 267 species of birds, 64 species of mammals and 40 species of herptiles.

Game

Game species include 36 species of birds (32 of which are waterfowl), 20 species of mammals and one species of herptile.

Table 3-3 displays a partial list of representive game species showing the relationship of short-term and long-term trends, current populations and the maximum possible populations in the area (personal communication AGFD).

Threatened and Endangered Species (terrestrial)

These are federally listed or special status species (federal candidates and state listed). Threatened and Endangered species are nongame species and have additional protection under state and federal statutes, as well as BLM Manual direction.

Wildlife inventories found 24 federal and/or state listed species as present or possible in the EIS area (see Table 3-4). Current inventories have not verified the existence of any federally listed Threatened and Endangered species other than those migrating through the area.

Aquatic Habitat

The only portion of the San Pedro River classified as a perennial stream is from the Hereford area to the vicinity of the Charleston Hills. The rest of the river usually has only intermittent flows.

The quality of the aquatic habitat is directly proportional to the existing ground and surface water quality. Water quality along the perennial stretch of the river is considered good and, therefore, the quality of the existing habitat may also be considered good. Additional information on water quality is found in the water portion of this chapter and in Table 3-2.

TABLE 3-3
Game Species
BUREAU OF LAND MANAGEMENT
Safford District, Arizona

Species	Short Term Trend	Long Term Trend	Current Population	Maximum Population*
Mule Deer	Up	Stable	420	1,220
Javelina	Up	Up	730	1,500

Source: Arizona Game and Fish Department

* The maximum population is the maximum biological potential of the area to produce these species while implementing all necessary habitat improvements and proper management strategies.

TABLE 3-4
Federal and State Listed and Proposed Species
BUREAU OF LAND MANAGEMENT
Safford District, Arizona

Species	Abundance	Presence	Status
Sanborn's Long-tongued Bat	Unknown	Possible	F-P
Greater Mastiff Bat	Unknown	Possible	S
Mexican Gray Wolf	Unknown	Possible	F-E
Swainson's Hawk	Common	Observed	S
Mississippi Kite	Rare	Observed	S
Gray Hawk	Common	Observed	S
Ferruginous Hawk	Uncommon	Observed	S
Aplomado Falcon	Accidental	Possible	F-E
Bald Eagle	Rare	Observed	F-E
Peregrine Falcon	Rare	Observed	F-E
Black Hawk	Uncommon	Observed	S
Caracara	Accidental	Observed	S
Osprey	Rare	Observed	S
Black-bellied Whistling Duck	Uncommon	Observed	S
White-faced Ibis	Unknown	Possible	S
Yellow-billed Cuckoo	Uncommon	Observed	S
Elegant Trogon	Rare	Observed	S
Green Kingfisher	Rare	Observed	S
Thick-billed Kingbird	Accidental	Observed	S
Tropical Kingbird	Rare	Observed	S
Black-crowned Night Heron	Uncommon	Observed	S
Snowy Egret	Uncommon	Observed	S
Long-billed Curlew	Unknown	Possible	S
Northern Beardless Tyrannulet	Uncommon	Observed	S
Gila Monster	Common	Observed	S
Western Massasauga	Unknown	Possible	S
Mexican Garter Snake	Rare	Observed	S
Desert Kingsnake	Uncommon	Observed	S
Chiricahua Leopard Frog	Unknown	Possible	S

Source: U.S. Fish and Wildlife Service

S = Special Status Species
F-E = Federally Endangered
F-P = Federally proposed for listing

Aquatic Wildlife

Native Fishes

Historically, 13 native species of fish were present in the Upper San Pedro River (see Table 3-5). Of those species, two remain in the streams, the longfin dace and desert sucker.

TABLE 3-5
Native Fishes
BUREAU OF LAND MANAGEMENT
Safford District, Arizona

Loach Minnow
Flannel-mouth Sucker
Roundtail Chub
Spikedace
Longfin Dace
Desert Sucker
Gila Topminnow
Sonoran Sucker
Razorback Sucker
Gila Chub
Colorado River Squawfish
Speckled Dace
Desert Pupfish

Source: Arizona Game and Fish Department

Non-native Fishes

Most of the fishes present in the Upper San Pedro River system are non-native species. Fourteen species of non-native fishes (see Table 3-6) inhabit the Upper San Pedro River or its tributaries.

TABLE 3-6
Non-Native Fishes
BUREAU OF LAND MANAGEMENT
Safford District, Arizona

Common Carp
Rainbow Trout
Black Bullhead
Green Sunfish
Mosquitoefish
Goldfish
Fathead Minnow
Yellow Bullhead
Channel Catfish
Bluegill
Largemouth Bass
Brook Trout
Threadfin Shad
Red Shinner

Source: Safford District Files

Threatened and Endangered Species (aquatic)

Five federally listed Threatened and Endangered Fishes were native to the Upper San Pedro River but have since been extirpated from the area. These species are the desert pupfish, Gila topminnow, spikedace, loach minnow, and the Colorado River squawfish.

VEGETATION

Vegetation Communities

The area's vegetation was mapped in 1987 by BLM resource specialists using the vegetation classification scheme of Brown, Lowe, and Pase (1979). The vegetation was specified to the third decimal point or the association phase of the system. A total of 21 different plant associations were identified, as well as three miscellaneous types. The miscellaneous types were: agricultural, meaning lands that had been cultivated but are now in federal ownership; PVT agricultural, agricultural lands in private ownership; and RESIDENTIAL, areas of private lands primarily used for housing. Approximately 82,000 acres were mapped to provide coverage for any future land acquisitions in the EIS area.

The associations delineated, with a brief description of major plant species present are:

143.123

Hilaria mutica-mixed scrub Association—usually found in swales, with fine textured soils, made up of primarily tobosa (*Hilaria mutica*) grass and mixed shrubs. Principal shrub species include mesquite (*Prosopis juliflora*), wolfberry (*Lycium* spp.), littleleaf sumac (*Rhus microphylla*), snakeweed (*Gutierrezia sarothrae*) and fourwing saltbush (*Atriplex canescens*). Other major grasses present are sacaton (*Sporobolus wrightii*) and vine mesquite (*Panicum obtusum*).

143.141

Sporobolus wrightii Association—grasses, with sacaton being the dominant grass, make up the major component of this association. This association occurs on fine textured soils on low terraces. Other major species present include mesquite, whitethorn (*Acacia neovernicosa*) and wolfberry.

143.142

Sporobolus wrightii-Prosopis juliflora Association—a mixture of sacaton and mesquite. It occupies the fine textured soils of the lower terraces of the major drainages. Other major species present include whitethorn, wolfberry, tobosa and vine mesquite.

143.152

Mixed grass-*Prosopis juliflora* Association—characterized by mixed grasses, mainly the introduced grass species, Lehman lovegrass (*Cragrostis lehmannia*) and mesquite. Other species are burroweed (*Aplopappus tenuisectus*), snakeweed, sideoats grama (*Bouteloua curtipendula*) and black grama (*Bouteloua eriopoda*). This association is a disclimax grassland that historically had few shrubby species and is now supporting a mixed grass-shrub community. It is found on upland sites above the San Pedro River terraces.

143.155

Mixed grass-mixed scrub Association—found on shallow soils on mountains and low hills. This association is characterized by perennial grama grasses (*Bouteloua* spp.), cane beardgrass (*Andropogon barbinoidis*), bush muhly (*Muhlenbergia porteri*), other native grasses and mixed native shrubs, including spice bush (*Aloysia wrightii*), ocotillo (*Fouquieria splendens*) and whitethorn.

143.156

Mixed grass-mixed shrub Association—similar to 143.155, but with a mixture of whitethorn and mesquite as the principal shrubs. Spice bush is rarely found on the hills and mountains of this association.

143.157

Mixed grass-*Acacia neovernicosa* Association—similar to both 143.155 and 143.156 but the principal shrub is whitethorn. This association occurs on shallow soils on low hills and mountains.

143.163

Aplopappus tenuisectus-Prosopis juliflora Association—a disclimax grassland found on moderately fine and fine textured upland soils. Historically, this was a perennial grassland with few shrubs. Principal species present are burroweed and mesquite, which together make up over 90 percent of the perennial plant composition.

143.164

Aplopappus tenuisectus-mixed scrub Association—similar to 143.163 except whitethorn rather than mesquite dominates as the principal tall shrub. Other species present are snakeweed, desert zinnia (*Zinnia pumila*) and a few perennial grama grasses.

153.243

Prosopis juliflora-mixed scrub Association—composed of shrub-size mesquite intermixed primarily with tarbush (*Flourensia cernua*), desert zinnia and very few perennial grasses. This association is found on fine textured soils on high terraces.

153.261

Acacia greggii-mixed scrub Association—found on moderately deep soils derived from acidic parent materials. This association is composed primarily of catclaw (*Acacia greggii*), tarbush and whitethorn, with little or no perennial grass species.

153.215

Mixed Chihuahuan scrub Association—major shrubs are mesquite, whitethorn, tarbush, creosotebush (*Larrea divaricata*), desert zinnia and mariola (*Parthenium incanum*). Bush muhly is the major grass species present, but minor amounts of other native grasses may occur. Throughout the area the relative dominance of each species may vary. This plant community is found on limy terraces and ridges adjacent to the San Pedro River. Acreage is the largest of the associations mapped.

153.221

Acacia neovernicosa Association—primary plant species is whitethorn, although minor amounts of other species occur. Other shrubby plants present may be mariola, desert zinnia, snakeweed and tarbush, with minor amounts of grasses (principally bush muhly). This association occurs mainly on limy breaks above the San Pedro River valley.

153.272

Atriplex canescens Association—found on very limy high river terraces and composed of fourwing saltbush, mesquite, whitethorn and few grass species. Grass species include tobosa, bush muhly and plains bristlegrass (*Setaria macrostachya*).

153.213

Larrea divaricata mixed scrub Association—creosotebush (*Larrea divaricata*) is the major shrub present along with minor amounts of mesquite, whitethorn and desert zinnia. The major grass species are bush muhly and plains bristlegrass. This association grows primarily on deep, limy soils on low terraces and alluvial fans above the San Pedro River.

223.231

Prosopis juliflora Association—on the floodplains along the San Pedro River and large tributaries where soils are usually deep, and loam or sandy loam in texture. Mesquite is the major component of this association, known as a mesquite bosque. Mesquite trees in this association can form a closed canopy and few other species achieve dominance. Four-wing saltbush and wolfberry are two associated species. This association varies from large trees to small stands of trees less than 10 feet tall. Many of the trees are sprouts from the trunks of older, cut trees.

223.232

Prosopis juliflora-short tree Association—scattered small (less than 10 feet tall), mesquite trees dominate this association. Fourwing saltbush and wolfberry are the associated shrubs, and scattered grasses include tobosa or vine mesquite. This association grows on moderately fine and fine textured soils on low terraces and alluvial fans, mainly on the north end of the EIS area. The area has a scattered shrub appearance with bare ground among the shrubs and some grasses present in the small drainages.

223.211

Populus fremontii-Salix gooddingii Association—the cottonwood (*Populus fremonti*) and Goodding willow (*Salix gooddingii*), or broadleaf riparian, association occupies the bottom of the San Pedro River, maintained by the relatively permanent water source. This association is on stream banks and low terraces in coarse textured soils. The association is characterized by a gallery forest of cottonwood and Goodding willow. Other associated species are Arizona walnut (*Juglans major*), seep willow (*Baccharis glutinosa*) and bermuda grass (*Cynodon dactylon*). More than 2,000 acres of this association were mapped in the study area, but this acreage doesn't portray its true size. Mapping is on 1:24,000 scale photos and includes large areas of relatively bare streambed in the acreage figures.

233.210

Mixed narrowleaf scrub-*Hymenoclea monogyra* Association— occupies sandy, dry stream bottoms on tributaries of the San Pedro River. Principal species are: burrobrush (*Hymnoclea monogyra*), rubber rabbitbrush (*Chrysothamnus nauseosus*) and mesquite. Only small acreages of this association are mapped due to the mapping scale but it is quite common mixed with other stream bottom plant communities.

233.221

Tamarix chinensis Association— small areas on the north end of the EIS area and in areas that have traditionally been broadleaf riparian or mesquite bosque association. Salt cedar (*Tamarix chinensis*), an introduced, noxious phreatophyte that has invaded much of Arizona's wetlands, but grows as a monotype with few other associated plants on only a few hundred acres of fine textured bottom lands.

243.321

Juncus spp-Carex spp. Association—rushes (*Juncus spp.*), sedges (*Carex spp.*), cattails (*Typha spp.*) and saltgrass (*Distichlis stricta*). Associated species are mesquite, sacaton, tobosa grass and Goodding willow. This association occurs on the north end of the EIS area, west of the San Pedro River, in one of the few surviving cienegas. Several springs maintain a marsh of several hundred acres.

Ecological Condition

Range condition (expressed as excellent, good, fair or poor) reflects the current vegetation composition of the rangeland in relation to the potential climax plant community. The potential climax plant community is grouped by soils and called a range site. The Soil Conservation Service (SCS) prepares a range site guide for each soil type by showing the potential climax plant community for each site. The EIS area has not been formally inventoried, but BLM has made estimates of rangeland conditions. BLM surveyed the riparian community (Brown, Lowe and Pase number 223.211) along the San Pedro River in 1986. The SCS soil survey identified a total of 12 range sites. A discussion of the relative condition of each site follows:

Clay Loam Upland—characterized by the Mixed Grass-*Prosopis juliflora* Association (Brown, Lowe and Pase Number 143.152) and in poor or fair condition. The site should be a grassland with a few shrubs in evidence. The presence of Lehman lovegrass further contributes to the poor rating since it is an introduced species and is given no worth (using SCS guidelines) in determining the condition.

Clay Bottom—typical vegetation is *Sporobolus wrightii* Association (143.141) and is in good to excellent condition. The mesquite present on this site in places would lower the rating since this is primarily a bottomland grassland site.

Deep Sandy Loam—mesquite bosque or *Prosopis juliflora* Association is the typical vegetation on this site. It is in poor to fair condition due to the large quantity of mesquite. This range site is in process of revision by SCS and will be redescribed as a woodland site which will raise its ecological condition rating.

Granitic Hills—mixed Grass-Mixed Shrub Association is the most common vegetation community and is usually in high-poor or low-fair condition. This site is a disclimax grassland—probably in grassland before the coming of Europeans to the area. The site has been invaded by shrubs and the condition will not change in either direction very quickly.

Limy Slopes—characterized by either a Mixed Chihuahuan scrub Association or a *Larrea divaricata*-mixed scrub Association, usually in high-fair to low-good condition. The only plants that occur are extremely tolerant to drought and large quantities of calcium carbonate (lime) in the soil profile. The site doesn't respond well to management practices and will remain in its present condition for many years.

Limy Upland—similar to and contains the same vegetation communities as the Limy Slopes site. However, due to its position on the landscape and the soil characteristics, its potential for grass production is lower than the Limy Slopes site. This site is in high-good to low-excellent condition and will remain so regardless of management practices applied.

Loamy Upland—various vegetation communities found are: *Sporobolus wrightii-Prosopis juliflora* Association, Mixed grass-*Prosopis juliflora* Association, *Aplopappus tenuisectus-Prosopis juliflora* Association, and *Larrea divaricata*-mixed scruh Association. The condition of the range site varies from poor in the *Aplopappus tenuisectus-Prosopis juliflora* and *Larrea divaricata* Associations to fair in the Mixed grass-*Prosopis juliflora* Association to good to excellent in the *Sporobolus wrightii-Prosopis juliflora* Association. Condition on these sites will change slowly, regardless of management practices.

Sandy Upland—mesquite bosque (*Prosopis juliflora* Association) is the primary plant community and generally in fair to good condition. Sites with a good understory of perennial grasses are in good condition. The description of this site should probably be a woodland site and not a range site since trees are a major component in the potential plant community.

Shallow Upland—Mixed Grass-Mixed Scrub Association is its major plant community and is in fair to good condition depending on the relative mix of grasses to shrubs. Grasses should be 70 to 85 percent of the plant community in excellent condition. Site rating could change fairly rapidly through the use of fire as a management tool to reduce the mixed scrub species.

Sandy Loam Bottom—Mixed Chihuahuan Scrub Association (the major vegetation type) is in poor condition because shrubby species have taken over a site that should be primarily a grass type. An upward change in the condition of this site would be slow with the application of any management practices.

Sandy Loam Upland—dominated by three major plant communities: Mixed Chihuahuan Scrub, Mixed Grass-*Prosopis juliflora* and the *Aplopappus tenuisectus-Proposis juliflora* Association in poor condition. The site should be dominated by mixed perennial grasses with few shrubs; the opposite is the case. Any change in the condition of this site will he slow with or without any management practices.

Volcanic Hills—Mixed Grass-Mixed Scrub Association (the principal vegetation type) is in fair to good condition depending on the amount of perennial grasses present. This site should be nearly all grass species with few shruhs. Prescribed or natural fire could change this site to a higher condition class by reducing the shrubby species composition. Without fire, change will be slow.

The riparian vegetation was mapped as two vegetation communities: *Populus fremontii-Salix gooddingii* (cottonwood-Goodding willow) and *Tamarix chinensis* (salt cedar) Associations. These are not range sites and not evaluated as such. BLM did a riparian inventory of the main San Pedro River corridor in 1986 to assess the characteristics and general health of the riparian vegetation.

The southern two-thirds of the corridor consists of a cottonwood-Goodding willow community in good health. A good distribution of all age classes is present, including seedlings. Some Arizona walnut and velvet ash are also present along with good herbaceous ground cover such as bermuda grass, sacaton and annual forbs and grasses.

From Fairbank north to the northern edge of the EIS area, the quality of the riparian community declines. Very few seedlings and young cottonwoods or willows are present. Most of the riparian species present are mature or

decadent cottonwoods and willows. From the ghost town of Contention north, several colonies of salt cedar are present. This imported invading plant species is indicative of poor health of a natural, native riparian ecosystem.

Threatened and Endangered Species

No Threatened and Endangered plant species are known to exist in the EIS area.

SOILS

The Soil Conservation Service (SCS), on contract to BLM, completed a soils inventory (standard SCS Third Order Survey) in 1986-87. The soil mapping is in soil associations, complexes and as single soil series. A total of 49 mapping units, made up of 27 different soil series, were delineated on 1:24,000 scale aerial photos. A summary of soil characteristics of the San Pedro area is in Table 3-7.

FIRE PROGRAM

The Safford District is now operating under the policies as mandated in Departmental Manual, Wildland Fire Control and Management, Part 910, Chapter 1.1, 1.2, 1.3, and 1.4 and Section 9210.06 Fire Management of the Bureau Manual.

Wildland fires (whether on BLM lands or adjacent lands) that threaten life, improvements, or the natural resources and facilities under the Bureau's jurisdiction, are emergencies. Their suppression is given priority over other Bureau

TABLE 3-7
Summary of Soil Characteristics of the San Pedro Area
BUREAU OF LAND MANAGEMENT
Safford District, Arizona

Soil Name	Surface Texture Abbrev.	Ecological Site Name	Location on Landscape	Brown, Lowe and Pase Vegetation Community
Blakeney	SL	Limy Upland	Alluvial Fans	153.215
Bodecker	VGSL	SL Bottom	Alluvial Fans	153.215
Chiricahua	GSL	Granitic Hills	Granitic Mountains	143.156
Courtland	SL	SL Upland	Fan Terraces	153.215
Diaspar	LS	SL Upland	Alluvial Fans	143.163
Douro	GSL	Loamy Upland	Fan Terraces	153.213
Durazo	LS	Sandy Upland	Low Stream Terrace	223.231
Forrest	CL	CL Upland	Valley Plains	143.152
Forrest	SL	Loamy Upland	Valley Plains	143.52
Gadwell	GSL	SL Upland	Fan Terraces	143.163
Hooks	SICL	Clay Bottom	Flood Plains	143.141
Karro	Loam	Limy Slopes	Limy Fan Terraces	153.215
Kee	VGSL	SL Upland	Fan Terraces	143.152
Kee	GSL	SL Upland	Fan Terraces	143.152
Kimbrough	VGL	Limy Slopes	Limy Fan Terraces	143.155
Kinco	SL	Limy Slopes	Sloping Terraces	153.215
Lalande	SIL	Limy Upland	Limy Fan Terraces	153.215
Lemitar	VGSL	Volcanic Hills	Volcanic Mountains	143.156
Mabray	GSL	Limy Slopes	Limestone Hills	143.155
McAllister	LOAM	Loamy Upland	Level Fan Terraces	143.163
Monterosa	VGL	Limy Slopes	Level Fan Terraces	153.215
Perilla	SL	Deep Sandy Loam	Stream Terraces	224.521
Pomerene	GSL	Shallow Upland	Granitic Mountains	143.156
Riggs	SIC	Clay Bottom	Flood Plains	143.141
Sharvana	CL	Limy Upland	Fan Terraces	153.215
Stronghold	GFSL	Limy Upland	Fan Terraces	153.215
Tierranegra	GCSL	Loamy Upland	Fan Terraces	143.142
Tombstone	GFSL	Limy Upland	Fan Terraces	153.215
UBIK	SL	SL Upland	Flood Plains	143.142
UBIK	LOAM	Loamy Upland	Alluvial Fans	143.142

Source: USDA Soil Conservation Service, 1986. Unpublished soil survey.

programs. The Safford District is now operating under two categories of suppression action:

1. Suppression - Initial attack action is required to contain all fires at the smallest acreage and at the least cost. Initial attack action will vary with the conditions at the time of the fire start.

If fire escapes initial attack, BLM prepares an Escaped Fire Situation Analysis (EFSA). This determines the most appropriate suppression strategy based on safety, cost efficiency and effectiveness of the fire suppression resources. Value at risk of the natural resources being threatened is also a consideration in the determination of the type and extent of suppression action.

2. Monitor - Generally fires of short duration contained within natural or man-made barriers. Surveillance is the most appropriate response.

In case of multiple fires, BLM gives priority to fires threatening areas of higher values.

All reported fires are checked by air reconnaissance or by ground transportation. A fire in an area with a history of erratic fire behavior, high concentration of fuels, dangerous terrain or probability of threat to life or property will have a resource advisor immediately assigned. Input from the resource advisors is standard operating procedure for most fires in the Safford District. Their active participation in wildfire management helps to coordinate both fire and resource management objectives.

Areas of Special Suppression Consideration were identified and delineated on the Safford District dispatch map. Any wildfires on or within one mile of these areas will receive full and immediate suppression.

Pending completion of the San Pedro Management Plan/EIS and associated land use plans, all fires in the San Pedro EIS area will receive full and immediate suppression.

Prescribed fires, including all ignition sources, may be used to achieve resource management objectives as defined in prescribed fire management plans. The Safford District is now working on an environmental analysis that will cover proposed prescribed fires by fuel types. BLM develops a prescribed burn plan for each fuel type. Detailed maps showing the proposed burn area, buffer zones and contingency plans will be available for each individual prescribed burn. When completed, the district will have the flexibility of using a natural start for a prescribed fire. Qualified personnel will attend all prescribed fires in the district under a written prescription (prescribed fire plan). Prescribed fires are monitored to assure they remain within prescription.

MINERALS

The San Pedro EIS area has one permit for removal of material from public lands. Sierra Ready Mix runs a crushing operation in a major wash east of the riparian area. At the time of acquisition there was a second operation run by Young Block just south of Highway 90. The Young Block operation left in March 1988.

In fiscal year 1987, Young Block removed 40,215 cubic yards of processed material and Sierra Ready Mix removed 120,000 tons of bankrun material for processing. The Young Block material was predominantly used to manufacture concrete block and the Sierra Ready Mix material to produce asphalt and concrete.

The Sierra Ready Mix permit expires on February 17, 1990.

CULTURAL RESOURCES

Introduction

The cultural resources of the management area represent a diverse array of site types, cultures and time periods. The human occupation of the area began about 11,200 years ago. Many sites have exceptionally high scientific and/or public values with some values at the international level of importance. The EIS area provides a unique opportunity for the scientific study, public interpretation and conservation of the full array of cultural resources found in southeast Arizona.

About 150 recorded cultural resource properties are in the EIS area. BLM has conducted a records search/library research inventory and field-checked some of the more significant sites on the property. The inventory was conducted in 1986 and 1987 by archaeologists John Herron, Deni Seymour and Sheila Donnelly. An inventory of the entire property is needed to identify and manage the full array of cultural resources.

Site and inventory data are on file at the Safford District Office. Sensitive site-specific information on archaeological resources is, however, classified and excluded from the Freedom of Information Act, and will be available only to qualified persons with legitimate research interests.

Historical Contexts

Descriptions and evaluations of the cultural resources of the San Pedro EIS area are in the framework of their historical context. A historic context is an organizational format that groups information about related historic properties based on a theme, geographical limits and chronological period. A simple historic context describes one or more aspects of the historical development of an area and identifies the significant patterns that individual historic properties represent. A set of historic contexts is a comprehensive summary of all aspects of the history of the area.

The historic context is the cornerstone of the planning process. The goal of cultural resource planning is to identify, evaluate, and manage the full range of properties representing each historic context, rather than only one or two types of properties. Identification activities are organized to assure that research and survey activities include properties representing all aspects of the historic context. Evaluation uses the historic context as a framework within which to apply the evaluation criteria to specific properties or property types. Major decisions about identifying, evaluating and managing cultural resources are most reliably made in the context of other related properties (Department of the Interior 1983).

The following discussions include a synthesis of the EIS area's cultural history and previous research. A more detailed summary is in the San Pedro acquisition Environmental Assessment (U.S. Department of the Interior,

Bureau of Land Management 1986). A broader treatment on southeast Arizona, including discussions on management objectives, is in the southeast Arizona Class I inventory report (Bronitsky and Merritt 1986). Changing land use and the environmental effects are thoroughly covered in *Historical Land Occupance of the Upper San Pedro River Valley Since 1870* (Rodgers, Wm M. 1965). and summarized in *Land Use History: Upper San Pedro River Valley* (Wilken and Galante 1987). These publications contain excellent bibliographies.

Description of Specific Historical Contexts

The Clovis Hunters—11,200 Years Ago to about 8,000 Years Ago

Theme. Big game hunting and lifeways of the first Americans.

Previous Research. Byron Cummings visited the area in 1928(?) and in 1931 when he investigated a mammoth south of Hereford. The Gila Pueblo Foundation conducted surveys from 1929-1938. Dr. Emil W. Haury conducted University of Arizona field seminars from 1937 to the 1970s. Dr. Haury excavated the Lehner site in 1955 and 1956. Dr. C. Vance Haynes conducted the Murray Springs Project from 1966-1971, and excavated the Escapule mammoth in 1967 (on state owned land near the EIS area). Dr. Haynes did further excavations at the Lehner site in 1974 and 1975. Dr. Haynes and Bruce Huckell test-excavated a mammoth in 1987 and 1988 at the Horsethief Draw Site.

Processes and Patterns. The Clovis hunters had a mobile subsistance pattern based on following herds of now extinct mammals such as mammoth, horse, camel, bison and tapir. They also ate small game and probably some plant foods.

Important Events. Clovis hunters may have been the first Americans, as their sites are the oldest firmly dated sites in the New World (ca. 11,200 BP - before present).

Property Types. There are few known types due to age, poor preservation if exposed, mobility of Clovis man (resulting in limited material remains), burying of sites by post glacial and recent deposition, and recent erosion of sites. There are four known and projected site types: kill sites, butchering sites, camp sites, and a combination of these types. The physical remains of the first three site types include the following: kill sites - bones of animals and Clovis projectile points; butchering sites - bones of animals, chipped stone knives and scraping tools, and possibly projectile points; and camp sites - fire hearths, knives and scraping tools, waste flakes, bones of animals and, possibly cores and projectile points.

The Murray Springs site contains Clovis kill sites, butchering sites, and a camp site. It also has an Archaic component and has yielded significant data on the pre-Clovis animals and environment. The Lehner Site contains kill sites, butchering sites, and is believed to have an undiscovered camp.

The Horsethief Draw Site is presently being excavated and has the bones of a single mammoth in a Clovis age deposit. No cultural artifacts or features have been found.

Locational Patterns. Sites are in or near wash banks of San Pedro tributary streams. Predicted locational patterns include additional wash banks on other tributary streams as well as the banks of the San Pedro River.

Condition, Sources of Deterioration, and Sensitivity. Overall, sites are in good condition due to protection by deposition. Some sites may have been destroyed by erosion and weathering after being exposed. Impacts have resulted from erosion, weathering, rodent disturbance, and natural mixing of deposits.

All sites are highly sensitive to human disturbance (such as construction) due to their poor visibility. In addition, erosion and weathering can disturb the integrity of the site (the artifact-killed prey association). Eroding channels of washes are the most sensitive areas.

Values. All known sites have high scientific (research) values on an international scale. High public use values occur at select sites. The EIS area contains more known Clovis sites than any other area in the new world. The area has the greatest potential of any area for yielding important information on the Clovis Culture. The Murray Springs and Lehner Sites have yielded important information and have high potential for more. No cultural resource data has been found in the Horsethief Draw Mammoth Site to date, but it has the potential. The EIS area has a high potential to contain evidence of pre-and post-Clovis occupations. Presently, such evidence is totally lacking in southern Arizona.

These sites also have public use values as potential interpretive sites. The Murray Springs Site has exceptionally high public use values due to the abundance and diversity of the excavated artifacts, bones, and features, and the visible stratigraphy. The Lehner Site has nearly equal use values. Any interpretation of the Murray Springs Site could include the Escapule Site.

National Register of Historic Places. The Lehner Site is a National Historic Landmark. The Murray Springs Site qualifies for nomination to the *National Register of Historic Places* for its yielding information important in American prehistory. It is a high priority for nomination to the *National Register*.

Existing and Potential Uses. The Horsethief Draw Mammoth Site is being excavated at present and this use will continue. It could be assigned to public use upon completion of excavation. The Murray Springs, and Lehner Sites are now being managed for potential public and scientific use.

Results of Previous Management Actions. High public interest in the Murray Springs Site and the Lehner Site (recently donated to BLM) resulted in their being recognized as priority sites for protection and development as public exhibits in place.

Commitments and Agreements. Arizona State Parks is considering the Lehner Site as a potential addition to the state parks system. If this happens, the site would continue to be public land but cooperatively managed by BLM and Arizona State Parks.

The Cochise Culture—8,000 BP to AD 1

Theme. Archaic hunting and gathering.

Previous Research. The Gila Pueblo Foundation conducted inventories throughout the vicinity from 1929-1938 and worked in the San Pedro EIS area from 1936 to 1938. They recorded 14 sites in the EIS area. The purpose of their research on the upper San Pedro was to locate and excavate Cochise sites.

Dr. Emil W. Haury conducted University of Arizona Archaeology Seminar field trips in the area from 1937 or 1938

to the mid-1970s. They visited sites discovered by Gila Pueblo and recorded seven sites. They also collected or excavated eroded sites (Cattanach 1966).

The most intensive and extensive inventory in the EIS area was the Central Arizona Project Charleston Dam and Reservoir Survey in 1968 by the Arizona State Museum. They recorded 126 sites, including Cochise sites. The area from three miles south of Hereford to four miles north of Charleston was partially inventoried. In 1968 the Arizona State Museum conducted a survey for the Central Arizona Project Tucson Aqueduct, recording one Cochise site in the EIS area.

Processes and Patterns. The Cochise Culture people represented the southeastern Arizona manifestation of the Western Archaic or Desert Culture tradition. The Archaic people lived by gathering wild plant foods and hunting small and medium-sized game. This subsistence strategy represented an adaptation to the drier climate that followed the last Ice Age. They lived in more than one location thoughout the year as they sought the areas containing plants and animals ready to harvest. Until late in their long occupation of the area they lived in temporary brush or skin covered shelters. Later they built shallow pit structures and may have started to practice limited corn agriculture. They used baskets instead of ceramic vessels and ground their plant food with grinding stones (manos and metates) and mortars and pestles. They hunted with spears and used chipped stone knives and scraping tools to obtain and process some foods.

Important Events. The most important single event during the Cochise Culture's long occupation was the acquisition of an agricultural technology - they began to grow corn in about 300 B.C. The transition of the area from an economy based solely on wild foods to one also based on the growing of plants was to dramatically change the southwestern lifestyle forever. This period is best represented on the upper San Pedro River.

Property Types. The known and projected site types are: artifact scatters (stone tools); fire hearths or roasting pits; artifact scatters with hearths or roasting pits; and pit structures; pit structures with artifacts and/or fire features. Additional data could group these site types into two classes—base camps and work sites. Rock art is an additional site type expected to occur.

The EIS area has many Cochise sites, mostly recorded by the Charleston Dam survey. Most of these are artifact scatters with hearths or artifact scatters without hearths. The EIS area contains the type site for the San Pedro Stage of the Cochise Culture - AZ EE:8:1 (ASM) (the Fairbank Site). Three other highly significant San Pedro Stage sites are in the EIS area - AZ EE:8:5 (ASM), AZ EE:8:7 (ASM), and AZ EE:8:11 (ASM). These were either excavated or collected by Gila Pueblo or the University of Arizona.

Locational Patterns. All known Cochise sites are in one of two settings: on terrace tops immediately adjacent to the San Pedro River floodplain or on eroded surfaces immediately adjacent to side washes (large primary tributaries of the San Pedro). The main concentration of known sites is along large washes on the west side of the river south of Charleston.

Predicted Locational Patterns. Sites are also expected to occur along small washes and on upland areas between washes. They are not expected to be visible except in eroded areas and in wash banks where the wash has cut into and exposed sites.

Condition, Sources of Deterioration and Sensitivity. The majority of sites are badly eroded. This has transported artifacts, disturbed and destroyed features, and mixed remains of various ages. Deposition has covered sites, making discovery difficult. Cattle trampling has broken and moved artifacts and accelerated erosion. Overall, sites are in fair condition.

Sources of deterioration besides erosion, deposition and cattle trampling are off-road vehicle (ORV) travel, collecting, and construction (such as roads).

Cochise sites are highly vulnerable to disturbance from erosion, trampling, ORV use and construction involving earth moving. Exposure caused by erosion greatly increases sensitivity. Exposed remains are easily moved and destroyed. Buried remains are easily destroyed by construction due to lack of visible surface remains. Channel cutting can quickly destroy buried sites. The most sensitive area is the west side of the river south of Charleston along tributary washes.

Values. The majority of sites are important for their scientific values. The high number of late Cochise sites makes the EIS area a valuable source of data for the study of past adaptations to an arid environment. The poorly understood transition to an agriculture and sedentary lifestyle could also be studied here. These are priority research objectives throughout western North America. A few known Cochise sites also have public use values as potential interpretive sites, although these values do not appear high (site AZ EE:8:1, EE:8:5, EE:8:7, EE:8:11 (all ASM)).

National Register of Historic Places. Many of the Cochise sites with integrity would qualify for nomination to the *National Register* for their scientific values. AZ EE:8:1 (ASM) should be eligible as a type site. Priority sites for nomination to the *National Register* are AZ EE:8:1 (ASM) - the Fairbank Site, AZ EE:8:5 (ASM), AZ EE:8:7 (ASM), and AZ EE:8:11 (ASM). All sites could be nominated together as a multiple property nomination.

Existing and Potential Uses. One archaeological research project is presently being conducted. Known sites with high potential for future scientific study or public uses are listed above.

The Mogollon, Hohokam and Salado Occupation—AD 1 to 1450

Theme. Prehistoric Resource Utilization and Agriculture.

Previous Research. Adolph Bandelier explored the Southwest, including the upper San Pedro River Valley, for the Archaeological Institute of America in 1883 and 1884. He reported at least one site of this period near Contention City in 1884.

Frank Russell of the Bureau of American Ethnology, Smithsonian Institution, traveled in the Southwest observing ruins and making collections in 1890. He may have passed through the EIS area.

Carl Sauer and Donald Brand of the University of California, Berkley, conducted a reconnaissance survey of the Southwest in 1929 and recorded four sites in the EIS area.

The Gila Pueblo Foundation recorded ceramic period sites in the EIS area on its Eastern Range of the Red-on-buff Culture inventory in 1929 and 1930.

University of Arizona Archaeology Seminar Field Trips, led by Dr. Emil Haury from 1937 to the 1970's, visited known sites and took collections. The Fairbank Depot Site

AZ EE:8:3 (ASM) was a "Hohokam" site excavated by this class.

Most of the recorded sites of this historical context are from the Charleston Dam and Reservoir Survey conducted by the Arizona State Museum in 1968. The Museum's 1969 inventory of the Tucson Aqueduct Project recorded three additional "Hohokam" sites.

Process and Patterns. The earliest evidence of occupation following the end of the established Cochise sequence dates to AD 700 - but ceramic-producing people may have occupied the area as early as AD 1. These people had a culture that was a mixture of Hohokam and Mogollon. Floodplain and dryland agriculture were practiced, along with gathering and hunting. This subsistence strategy was a refinement and expansion of that established by the Cochise to adapt to the arid environment. They were semi-sedentary, living in more than one place each year. They lived in shallow pit structures, made pottery, and had the bow and arrow. Later houses may have been surface structures of earth, adobe or stone.

Important Events. Important events consisted of the development of agriculture as a major subsistence activity, the acquisition of a pottery making technology, the development of semipermanent house types, the use of the bow and arrow, and the change to a more sedentary lifestyle.

Property Types. Known and predicted site types are: artifact scatters, features, artifact scatters with features, agricultural fields, and rock art. Another predicted site type, though tentative, is socio-cultural, such as shrines. Functional classification as either habitation sites or work sites can occur with more data for many of the artifact scatters and artifact scatters with features.

Locational Patterns. The locations of artifact scatters and artifact scatters with features (possible habitation sites) are on the San Pedro floodplain and on terrace tops immediately adjacent to the San Pedro or its major tributaries. Other artifact scatters and features (not appearing to be habitations) are found throughout all environmental zones. The few agricultural fields consist of dryland rock pile fields on alluvial areas adjacent to major washes. Rock art occurs at or near the base of hill slopes.

Predicted Locational Patterns. In addition to the patterns reviewed above, the following are predicted. Many of the artifact scatters and artifact scatters with features not believed to be habitation sites may be habitations. If this is the case, habitation sites would be found on the terraces away from the San Pedro. Dry-land agricultural fields could be anywhere on the property. Floodwater fields may occur on the San Pedro floodplain and in major side drainages but it is predicted that any present have been either buried by deposition or removed by erosion. Any fields found, however, may not be distinguishable from later Sobaipuri fields. Rock art could be anywhere boulders or cliffs are available.

Condition, Sources of Deterioration and Sensitivity. Overall, the known sites are in fair condition. Erosion has disturbed many sites and is destroying such significant sites as the Fairbank Depot site. Floodplain deposits are believed to have buried many sites. Many habitation type sites were collected and dug for their artifacts. Cattle trampling has disturbed most sites and a sand and gravel extraction operation on the west side of the San Pedro River has destroyed at least parts of sites. Road and other construction has impacted a few known sites. Off-road vehicle travel has disturbed a few sites and has resulted in increased erosion, as has cattle trampling. Sites of this historic context are sensitive to land uses in a manner similar to that discussed for the Cochise sites. In addition, sites containing features, such as houses, are even more sensitive to disturbance. Possible habitation sites, rock art, and other small sites are more sensitive to construction and ORV use than larger more dispersed sites (artifact scatters).

Values. The primary value identified for all known sites is scientific. To varying degrees, all have the potential to yield important information.

Several sites have public use values for limited development as interpretive sites. Among these are a ruin south of Charleston (AZ EE:8:20 (BLM)), a site north of the Charleston Hills with associated rock art, (AZ EE:8:35 (ASM)), and the Boquillas Ruin northeast of Terrenate (AZ EE:8:4 (AMF)). The public use values of these sites appear to be relatively low.

National Register of Historic Places. All sites with integrity belonging to this historic context would qualify for nomination to the *National Register* as a multiple property nomination because of their potential to yield information important in prehistory.

Existing and Potential Uses. The existing use of all sites is interim protection. The primary potential use is scientific study. Ceramic and chronology studies are critical research priorities. An inventory of the EIS area is required to identify sites and determine appropriate uses under long-term management.

The Sobaipuri Occupation—About 1450 to 1769

Theme. Protohistoric agricultural communities.

Previous Research. The only known field research conducted on the Upper San Pedro Sobaipuri was the excavation of Gaybanipitea and the Presidio of Santa Cruz de Terrenate. Dr. Charles DiPeso of the Amerind Foundation excavated these sites in 1950 and 1951. DiPeso believed the Presidio was built on the Sobaipuri village of Quiburi. He concentrated his excavations on houses and other features identified as Sobaipuri. Three University of Arizona students are now conducting field research on the Sobaipuri. Limited research has occurred on the Sobaipuri or Upper Pima in other areas.

Processes and Patterns. The origin of the San Pedro Sobaipuri and the date of their first occupation of the area is unknown. They were there when Fray Marcos de Niza marched through in 1539. They reportedly abandoned the San Pedro for the last time shortly after 1780. They based their life on an agricultural subsistence strategy, living in villages overlooking the river. The Sobaipuri reportedly practiced extensive irrigation agriculture on the San Pedro floodplain. They may have lived part of the year in the small camps away from the river to be close to plant gathering or hunting areas. They were very important to the Spaniards for they served as a buffer against the Apache. This allowed the Spaniards to maintain a northern border at a great distance from their mission locations.

Important Events. The most important events involving the Sobaipuri were their battles with the Apache and their contacts with the Jesuit missionary Eusebio Kino from whom they received cattle and a variety of European crops.

Property Types. The only type of site discovered to date are villages. Two predicted types are agricultural fields and burial sites. Temporary camps may be present.

Locational Patterns. All known villages are on terrace tops overlooking the San Pedro floodplain. They are concentrated on the west side of the river between Saint David and some point south of Fairbank.

Predicted Locational Patterns. Burial sites should be near the villages and rarely in villages. Agricultural fields were present on the floodplain of the San Pedro according to historic records. Buried remains (canals, ditches, other agricultural features, field houses and farming tools) are predicted for the floodplain of the river and for the larger side drainage floodplains. Dry-land fields may occur on the terrace tops.

Condition, Sources of Deterioration, and Sensitivity. Known sites are in fair condition. Erosion has been the main cause of impact. In addition to exposing remains to other impacts and destroying part or all remains of a few villages, erosion has likely removed entire agricultural fields on the floodplains. Deposition has buried houses, possibly entire villages, and has covered all fields on the floodplains. Cattle trampling and artifact collecting has had some impact. The shallow houses and features are very sensitive to erosion. Areas of high sensitivity are the terrace tops adjacent to the river.

Values. The primary value for all site types is scientific value. This time period is the biggest gap in the knowledge of southwestern prehistory and history. The San Pedro can contribute more than any known area to filling this gap, for the area contains more Sobaipuri sites of this period than any other area. Important research topics include Spanish contacts, Apache contacts, Sobaipuri movement, and Sobaipuri lifestyle.

The Sobaipuri sites have public values, for they may be of socio-cultural value to the Pima and Tohono O'odham living in southern Arizona today.

Several sites appear to have additional public use values. Specifically, Gaybanipitea has good opportunities for public interpretation and other sites have some public interpretation value.

National Register of Historic Places. All properties with integrity belonging to this historic context would qualify for nomination to the *National Register* as a multiple property nomination. They would qualify because of their potential to yield important information and possibly for their association with important events (Spanish colonial efforts and Apache raiding) and persons (Kino).

Existing and Potential Uses. The village sites are now the subject of archaeological and historical studies. Potential uses include scientific research, and to a lesser extent, development as public exhibits in place.

The Apache—About 1600 to 1886

Theme. Apache raiding, warfare and foraging.

Previous Research. No field research has occurred. Historians, archaeologists, and others have conducted limited library and archive research on Apache activities in the area. Several known Spanish historical journals contain information on the Apache.

Processes and Patterns. Research indicates that the Apache arrived in the southwest in about AD 1500. A nomadic people, they were reportedly in the Upper San Pedro area by AD 1640, subsisting on the gathering of wild plant foods and hunting. The Apache did limited farming in other areas. In this area they are best known for their raids and battles with the Sobaipuri, Spanish settlers and soldiers, Mexican ranchers, and early American settlers. Their houses were brush shelters sometimes covered with animal skins or dirt. They stayed in one place for only short time periods and had few possessions. Many of their possessions by the 1800s were of Anglo origin. Remains of their presence are difficult to find and identify today. The EIS area has no reported sites.

Important Events. The most important Apache events were their raids on the Sobaipuri and foreign intruders. This raiding was the major cause of abandonment of the area by the Sobaipuri, the prevention of permanent and expanded Spanish settlement, and the long delay in American settlement.

Property Types. Predicted site types are: temporary camps and rock art. A possible site type is shrines. Isolated artifacts and features (non-sites) will be very important.

Predicted Locational Patterns. It is predicted that visible and recognizable sites will be rare, with the majority east of the San Pedro River. They could be in any environmental setting. No villages are expected in the EIS area.

Condition, Sources of Deterioration and and Sensitivity. Possible sources of deterioration are erosion, weathering, deposition, and cattle trampling.

Values. Potential values are of two types: scientific and socio-cultural. Any scientific data that could be obtained from sites would be very important in reconstructing the poorly known activities and lifestyle of the early Apaches. Present day Apaches in southern Arizona and New Mexico may value early Apache sites for social, cultural, or heritage reasons.

Potential Uses. Sites could be the subject of scientific research.

The Spanish—1539 to 1820

Theme. Spanish exploration, religious and military activities, and ranching.

Previous Research. The only field research conducted in the EIS area was the excavation of the Spanish Presidio of Santa Cruz de Terrenate. The site was excavated by Charles DiPeso of the Amerind Foundation in 1950 and 1951. Only part of the site was excavated and work focused on the structures Di Peso believed were the remains of the Sobaipuri village of Quiburi.

Much library and archival research has been accomplished on the Spanish occupation of the southwest, with some of the work being directed at the upper San Pedro area. Some of the research continues at present.

Important Processes, Events and People. Spanish presence in the Southwest was a process of exploration, mining, ranching, establishment of a mission system, and an attempt at establishing permanent settlements. The Spanish were the first Europeans to enter western North America. Both Fray Marcos de Niza in 1539 and Francisco Vazquez de Coronado in 1540 followed the San Pedro River in their explorations. The Jesuit priest Eusebio Francisco Kino visited the San Pedro in 1692 and stopped at Quiburi on a later trip in 1696. He left cattle and crop seed with the Sobaipuri. From 1705 to his death in 1711, Kino fought without success to get a mission established at Quiburi. Approval for construction of a presidio (fortified settlement)

to protect ranchers from the Apache was given in 1772. Construction began in 1775 or 1776 on the Presidio of Santa Cruz de Terrenate. It may have been on the site of Quiburi. Abandonment of the post, due to the continuous Apache attacks, occurred in 1780. This marked the end of Spain's attempt to maintain its northern frontier beyond Tucson.

Cattle ranching began in 1696 when Kino brought cattle to the Sobaipuri at Quiburi. Cattle numbers remained low until 1790-1811 when a few Spanish cattle barons raised many cattle.

Property Types. Known site types consist solely of a single presidio. A possible site type is visitas (square adobe houses built in Sobaipuri villages to house visiting Spanish priests). An adobe brick building at Gaybanipitea was interpreted by DiPeso as being a visita. Another possible site type is the Spanish ranch house. None have been reported but Spanish ranchers did run cattle on the area.

Locational Patterns. Military sites are in good defensive locations. Any ranching sites should be on or near the river or water sources. Visitas would be in Sobaipuri villages.

Condition, Sources of Deterioration and Sensitivity. The Presidio of Santa Cruz de Terrenate is in poor condition as a result of weathering. Excavation of the site and the lack of backfilling the excavated buildings has accelerated the weathering. Destruction of part of the chapel occurred when treasure hunters dug at the site. In addition, collectors have removed surface artifacts. The site is highly sensitive to weathering, collecting, and uncontrolled visitor use.

Values. The Presidio is the only one in the country under federal management, still in a natural setting and with ruins of a commander's quarters of that time period.

The Presidio has high public values for interpretation. There are opportunities for development of the site as an exhibit in place. High scientific values are also present, as only a portion of the site has been excavated. The site could yield much information on the lifestyle of the Spanish soldiers and on Apache contacts. It should provide data to settle the question whether Quiburi is at this location. Additional data on the pre-historic occupation is also believed to be present.

National Register of Historic Places. The Presidio of Santa Cruz de Terrenate is on the *National Register*.

Existing and Potential Uses. The Presidio is being used for tours for special groups. Opportunities are high for development as a public exhibit in place. Historical research is being conducted and there are good opportunities for future excavation and other scientific research.

Results of Previous Management Actions. Deterioration of the Presidio has nearly ended through the construction of a cattle exclosure and completion of emergency stabilization of adobe walls.

Commitments and Agreements. Arizona State Parks is considering the presidio as a potential addition to the state parks system. If this were to occur, the property would continue to be public land but cooperatively managed by BLM and Arizona State Parks. BLM's commitment is to preserve the standing walls of the Presidio.

Mexican Ranching—1821 to 1853

Theme. Mexican ranching.

Previous Research. The only studies known are historical research on the general Mexican occupation of the Southwest and limited research on the land grants.

Important Processes Events and People. Two important events were the establishment of two land grants and a sharp decline in ranching. The EIS area was part of large Spanish ranches. The two land grants in the EIS area were granted by the government of Mexico after Mexican independence.

A grant was issued in 1827 for the San Juan de las Boquillas y Nogales land grant. Captain Ignacio Elias Gonzalez and Nepomucino Felix paid the equivalent of $240 and received title in 1833. The first U.S. patent issued for the Boquillas grant property was to William Randolph Hearst and his mother in 1901. A grant was issued in 1827 to Rafael Elias Gonzales for the San Rafael del Valle land grant, with the title issued five years later. The Camou brothers received the first U.S. patent. Cornell Greene purchased the property in 1905. (See Appendix 9 for a list of owners).

Establishing the land grants was important because it allowed the large ranching operations of the Spanish settlers to continue into the Mexican and American periods. Cattle numbers, however, decreased until the 1880s.

The decline of ranching (cattle numbers) mirrored the Mexican period decline in general. Apache raids prevented settlement and destroyed ranches. A reported 60,000 loose cattle roamed southeastern Arizona in 1851.

Property Types. There are no known Mexican sites in the EIS area. Predicted types are ranch houses and associated outbuildings and graves. A Mexican fort is reported to be in the EIS area.

Predicted Locational Patterns. Ranch houses are expected to be in or near the riparian zone.

Values. Mexican sites having integrity are expected to be important sources of scientific and historical information, as the Mexican lifestyle is poorly known.

American Ranching and Farming—1853 to 1988

Theme. American ranching and farming.

Previous Research. The major research and publication completed was a thesis prepared by J.J. Wagoner in 1949 on the history of ranching in southern Arizona. Several studies on environmental change have dealt with ranching and farming in the area (Rogers 1965, Wilkin and Galante 1987). The only known extensive field work was by Hastings and Turner while preparing their book "The Changing Mile".

Processes and Patterns. The history of ranching in the upper San Pedro was a process of increasing cattle and sheep numbers until 1891 and then decreasing numbers. Ranching was also a process of changing from many small operations to ranching dominated by a few large operations. These post-1891 patterns or trends have continued to the present.

The trend in farming was one of increasing farm numbers and sizes through time. While the railroads were being built, Chinese laborers established small farms near Fairbank. Mormons farmed on home-steaded lands near the north end of the EIS area and in the area between Lewis

Springs and Mexico beginning in the 1870s. Fields were recently cultivated south of Highway 90 under agricultural leases from Tenneco West.

Important Events and People. The reestablishment of controlled herds in the 1850s-1870s marked the beginning of cattle ranching as a major business in the area. The purchase of the land grants by Americans between 1880 and 1905 was the birth of the large ranches. Two of these ranchers were important men - William Randolph Hearst and Cornell Greene. Abandonment of most of the railroads caused Fairbank to become primarily a ranching town. Hereford became a ranching community when Greene built his house there. Acquisition of the grants and adjoining rangeland by the Boquillas Land and Cattle Company (1901 and 1912) marked the end of local ownership of the largest ranches. The settlement by Mormons and other early homesteaders was the start of a growing farm economy. Acquisition by BLM marks the end of ranching and farming as major businesses on the subject lands.

Property Types. Only a few site types have been identified: ranch headquarters (Boquillas), range improvements, ranch houses (the San Pedro Ranch House and outbuildings), agricultural fields, wells, ponds, dams and irrigation canals. A predicted site type is graves.

Locational Patterns. The ranches comprised the entire EIS area. The location of all known site types is on the San Pedro floodplain, except that a minority of the range improvements are on the adjacent terraces or in side drainages. Graves could be in any setting. Ponds, dams and canals would be along the San Pedro River.

Condition, Sources of Deterioration and Sensitivity. Overall, the sites are in good condition. The Boquillas Ranch headquarters is in excellent condition, although the original buildings may be gone. The San Pedro Ranch House is in good condition. The primary threats to the San Pedro Ranch House are fire (illegal alien camp), vandalism, and gradual weathering. The agricultural fields are gradually reverting back to natural vegetation.

The most sensitive site types are those with standing structures. They are highly vulnerable to construction, vandalism, weathering, and in some cases fire. The area of highest sensitivity is the San Pedro floodplain.

Values. All site types have scientific values. Ranch headquarters and houses have very high scientific values. They can provide data to address two major regional data gaps: pioneer lifestyles and the nature of early ranching, farming and homesteading.

The Boquillas Ranch Headquarters has exceptionally high public values. Its integrity is high and it provides opportunities to preserve and interpret a rare and important site type. Local and former residents consider the property to have socio-cultural value as an important part of their heritage. The San Pedro Ranch House has high public values as a potential interpretive site and the opportunities for public use are high. The historical significance of the property and its past residents is low in comparison to the Boquillas Ranch Headquarters.

National Register of Historic Places. All ranching sites with integrity would qualify for nomination to the *National Register* as a multiple property nomination for their research values and their association with important events and people. The Boquillas Ranch Headquarters meets the same criteria for nomination as an individual property. The San Pedro Ranch House may be eligible individually for its association with important events. The Boquillas Ranch Headquarters and San Pedro Ranch House are the top priority sites for listing.

Existing and Potential Uses. The Boquillas Ranch Headquarters served as a ranch headquarters until 1988. At that time it changed to a BLM residence and field maintenance headquarters. Potential uses include partial public use as an interpretive site (primarily the commissary), and continued use as a residence and maintenance center. The San Pedro Ranch House is being stabilized and security is being provided. Potential uses include public use as an environmental education center, an interpretive center, an office for the Friends of the San Pedro support group, and/or a temporary visitors center. The San Pedro Ranch House requires rehabilitation before public use.

Results of Previous Management Actions. Stabilization of the San Pedro Ranch House will preserve it for future public use while preserving scientific and other values.

The Processing of Gold and Silver Ore—1878 to the 1890s

Theme. Human use and occupation as it relates to mining.

Previous Research. Much historical research has been done on this subject. There are many books and articles on the ore mills and mill towns, especially Charleston. No archaeological studies are known to exist.

Important Processes and Events. Mineral related activities on the upper San Pedro River were the result of the discovery of silver near Tombstone in 1877. The lack of water near the mines for ore processing led to the construction of stamp mills along the San Pedro River, a minimum of six miles away. The large mills were: Gird Mill, Corbin Mill, Boston Mill (also called Empire Mill), Grand Central Mill, Contention Mill, and Sunset Mill (also called Head Center Mill and Bullionville). Smaller mills were the Fairbank, Hereford, and Clifford Mills. The Gird and Corbin Mills were among the largest stamp mills in the country and their machinery came all the way from Europe. A sawmill, parts of which came by sea and land from San Francisco, operated in the Huachuca Mountains to supply lumber to construct the mills. The mills operated for about ten years, until the Tombstone mines shut down in 1887 due to flooding.

Mining towns sprang up near several of the mills: Millville, Charleston, Contention City, and Emery City. Fairbank began as an important shipping and railroad town at a major junction of railroads connecting the mills, mines and towns. Hereford started near a small smelter and later (1904) became a ranching town on the large Green Cattle Company ranch. A local miner started Lewis Springs.

Property Types. The known site types are: mill sites, mill towns, houses, commercial business buildings, wells, cemeteries and graves.

Locational Patterns. The known property types are on or near the San Pedro floodplain. Mill sites are at the base of terrace slopes adjacent to the river floodplain. Towns are on the floodplain or on low terraces next to the floodplain. Houses could be anywhere but would be expected to be near mill sites (such as the Brunckow Cabin). Wells are at town sites. Cemeteries and graves are on hilltops or other terraces at some distance from towns.

Predicted Locational Patterns. Graves could occur in any location.

Condition, Sources of Deterioration and Sensitivity. In general, the mining sites are in fair condition. Digging and collecting by relic hunters has significantly reduced scientific values at town sites. Graves have been opened and cemetery headstones and fences have been destroyed, stolen and moved (such as the Charleston Cemetery). Nearly all lumber has been removed from mills and buildings. Cattle trampling has impacted the standing walls of houses and other buildings. Erosion has destroyed many buildings, especially at Charleston where the San Pedro has changed course and increased in channel size. General weathering has worn down adobe buildings. Very few adobe buildings remain except at Charleston. The 1887 earthquake reportedly shook down buildings at Charleston, and street fighting exercises held there in World War II impacted the site.

The most sensitive feature types are adobe buildings (weathering and erosion) and towns (relic hunters). High sensitivity areas would be the town sites.

Values. All known mining sites have high scientific values, especially the town sites. Town sites could yield extensive information on every day life on the mining frontier. Studies on this are rare throughout southern Arizona. The mills could provide badly needed data on the technology of stamp mills. The towns, mills, cemeteries, and graves have high public values. There are opportunities for public interpretation at Charleston, Millville, and the two mills by Millville (Gird and Corbin). The towns, mills, cemeteries, and graves also have high socio-cultural values to the people formerly associated with the area.

National Register of Historic Places. All mining sites with integrity would quality for nomination to the *National Register* as a multiple property nomination for their association with important events and people and for their potential to yield information important in American history. Each of the towns and mill sites qualify for individual nominations.

Transportation and Commerce During the American Settlement—1853 to 1912

Theme. Transportation and commerce.

Previous Research. Limited research has occurred pertaining specifically to this historic context. David Myrick's books on railroads are excellent works on the history of railroads in the area. General research has been conducted on the Wells Fargo Stage system.

Processes and Patterns. Very few roads existed before the 1870s. The extensive mining activity and, to a lesser extent, ranching led to establishing a network of roads and railroads. The Wells Fargo Company established stations at most of the towns and in other isolated locations. This transportation and freight system was a key factor in the American settlement of the region.

Many rail lines were built to connect the mines, mills, towns and the outside world. Each mill had its own spur line. Fairbank started as a railroad town at the major intersection of railroads. Depots were built, often with a number of associated buildings and houses, along each rail line. Towns and depots were water and fuel sites. Ore, cattle, supplies, mail and passengers were transported by train.

Important Events and People. Important events included the following: establishment of Wells Fargo agencies in 1880 at Contention City, Charleston, Millville, Benson and Tombstone, in 1883 at Fairbank, and in 1904 at Lewis Springs and Hereford; construction of railroads and freight roads; establishment of Fairbank as a railroad town in 1882; train robbery at Fairbank by the Billy Stiles-Burt Alvord gang in 1900 and the shoot-out with Sheriff Jeff Milton; and the closure of the Tombstone mines in 1887, marking the beginning of the end for most of the railroads, stage lines and extensive commerce.

Property Types. Known property types are: roads, stage stations, railroad lines, railroad trestles, bridges, depots, railroad sidings, towns, commissaries, houses, railroad stations and cemeteries.

Locational Patterns. Historic roads are in all environmental zones throughout the property. Stage stations are at towns and elsewhere on or adjacent to the San Pedro floodplain. Railroads are on the San Pedro and Babocomari River floodplains and on the terraces. Main lines ran north-south between Benson and Bisbee (through the San Pedro Valley), with east-west lines to Tombstone and Nogales. Spur lines ran to the mills and towns. In general, the primary lines follow rivers because of water and fuel supplies and terrain factors.

Predicted Locational Patterns. The Drew Stage Station is believed to be located about two miles north of Contention City, on or near the San Pedro floodplain on the east side of the river.

Condition, Sources of Deterioration and Sensitivity. The general condition of the sites is poor. Roads and abandoned railroad beds are highly eroded and overgrown and sometimes difficult to see. Stage stations have not been identified. Railroad trestles have been mostly destroyed by salvaging the timbers and by floods. Depots, houses, railroad stations and other buildings are mostly gone except a few intact cement foundations. The railroad master's house at Fairbank was destroyed by fire in 1987.

Highway construction destroyed about half the buildings at Fairbank and now by present administrative use of the historic property. The presence of BLM personnel also protects the town. The Fairbank Cemetery has had headstones and fences destroyed, and graves opened. Weathering has destroyed grave markers.

The most sensitive property type is buildings constructed of wood. They are extremely sensitive to fire. Roads and railroad beds are sensitive to erosion. Previously inhabited stations, towns and other site types are sensitive to digging and collecting by relic hunters, construction, and rehabilitation for use.

Values. All known sites have scientific values. Railroad towns (Fairbank) have very high scientific values. All site types can provide important information on transportation and commerce during this period. Some sites can yield information on the lifestyle of former occupants. This is an important data need in southeastern Arizona.

Several sites have public values. Fairbank, the railroad commissary at the Boquillas Ranch Headquarters, and the railroad tie building at the San Pedro House (temporary quarters for railroad workers) have high values for interpretation as exhibits in place. Other sites may also have public values.

National Register of Historic Places. All sites with integrity belonging to this historic context would qualify for

nomination on the *National Register* as a multiple property nomination. Qualifying values include association with important events and people, and the potential to yield information important in Arizona history.

Most of the sites would also qualify as individual nominations. Fairbank is the top priority site for listing if individual sites are nominated.

Existing and Potential Uses. Many of the roads are no longer in use. All but one railroad line is abandoned. The Fairbank site is presently a temporary BLM administrative site. Potential uses include scientific study at all sites and public interpretation at select sites.

Results of Previous Management Actions. Fairbank is being protected by the presence of BLM facilities, although this use (storage) is causing some impact. Fairbank requires an evaluation of preservation needs. Interim stabilization of the mercantile store will result in the long term preservation of significant buildings.

U.S. Government and Military Activities—1846 to 1940

Theme. U.S. government and the military.

Previous Research. Limited research has occurred on the Mormon Battalion's march down the San Pedro, including some field studies. No known research is available on Civilian Conservation Corps activities in the EIS area or on army maneuvers at Charleston during World War II.

Important Events and People. The Mormon Battalion, infantry volunteers in the Army of the West, marched down the San Pedro River in 1846 enroute to California during the Mexican War. Led by Colonel Phillip St. George Cooke, they reached the San Pedro near Hereford and followed the river north to about Benson. While in the Charleston-Fairbank vicinity they engaged in the only action they had in the war. Wild cattle charged the Battalion in what has become known as the Battle of the Bulls.

The San Pedro was a crossroads for the army in its pursuit of Apache raiders until 1886. Fort Huachuca (adjacent to present day Sierra Vista) was established in 1887. The U.S. Army used Charleston to practice street fighting during World War II.

The Civilian Conservation Corps (CCC), administered by the Works Progress Administration, worked on conservation projects along the San Pedro in the 1930s. They used and may have built the northern-most house and garage/shop at Fairbank. The nature of their work and the location of other sites in the EIS area are unknown.

Property Types. Known property types are: trails; battle sites (Battle of the Bulls); and CCC camps (Fairbank). Predicted site types are Army camps and CCC conservation features.

Locational Patterns. The Mormon Battalion trail is primarily on the San Pedro floodplain and on the nearby terraces (exact route unknown). The exact location of the Battle of the Bulls is unknown. The Fairbank CCC Camp is on the San Pedro floodplain. No predictions can be made on the locational settings of army camps and CCC conservation features.

Condition, Sources of Deterioration and Sensitivity. The Mormon Battalion trail is in poor condition and signs of it are visible in perhaps only one place. The CCC buildings at Fairbank are in good condition. They have deteriorated some due to general weathering and relic hunters have collected artifacts. These buildings are very sensitive to weathering, vandalism and adaptive use.

Values. All property types possess scientific values and public use values. Values are relatively low for the Mormon Battalion trail and the Battle of the Bulls site due to their poor integrity. Scientific values are moderate for the Fairbank CCC buildings and the public use values are also moderate. Limited interpretation for visitor use could be accomplished.

National Register of Historic Places. The Mormon Battalion trail, including the Battle of the Bulls site, may be eligible for nomination because of its association with important events and persons. The Fairbank CCC buildings may be eligible by themselves for their association with an important event or they may be eligible as part of the town of Fairbank.

Existing and Potential Uses. The Fairbank CCC Camp is part of the temporary BLM administrative site. The house is used to store equipment, the garage/shop is a fire cache, and the shed is used for horse feed. The potential uses include public interpretation as part of the interpretation of Fairbank.

Results of Previous Management Actions. A preservation evaluation, completed in 1988, will lead to the stabilization and securing of the Fairbank CCC buildings.

PALEONTOLOGICAL

Dr. Everett H. Lindsay of the University of Arizona inventoried the EIS area for paleontological resources in 1986 and 1987. This inventory, conducted for BLM, consisted of visiting the 14 known sites and surveying high potential locations throughout the EIS area. The known sites were recorded and 22 new sites discovered and recorded. The majority of sites are of Pleistocene age (2 million - 10,000 years ago). The remaining sites date to the Pliocene (7-2 million years ago) and the Holocene ages (10,000 years ago to the present). Most of the fossils are mammals but turtles, snails and plants are also found in some of the deposits. Nine sites were classified as Class I, containing or producing fossils of significant scientific interest.

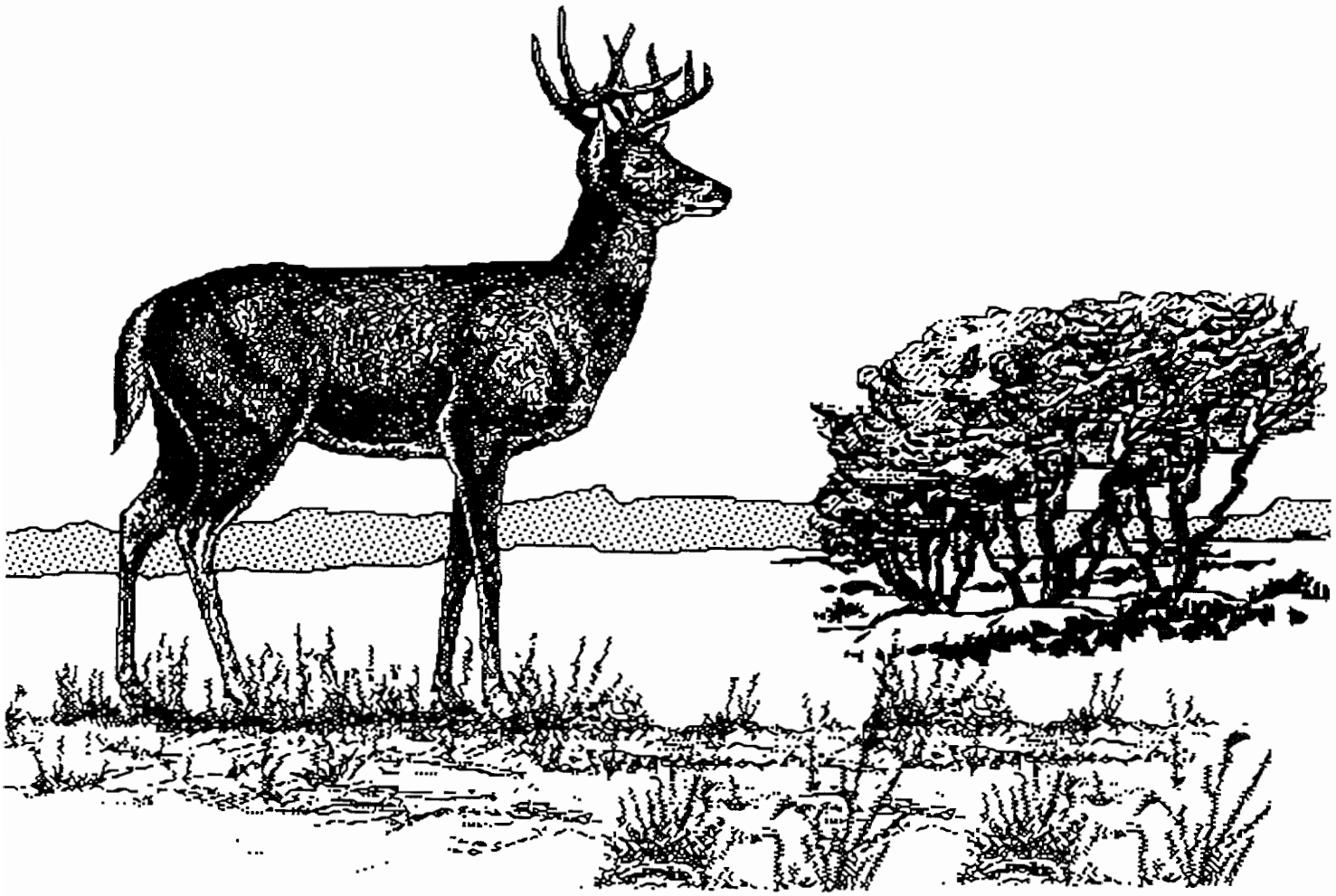
The paleontological resources of the EIS area rank among the top two paleontological areas in Arizona. They rank in the top five for the late Cenozoic (approximately 1-5 million years ago) terrestrial deposits in North America. The EIS area ranks as the top area in the western hemisphere for paleontological sites associated with early man. This is because of the number of sites, the excellent chronological control of those sites, and the potential for additional sites. The fossils of the EIS area have a high potential for yielding important information on mammal evolution and intercontinental dispersal, the earliest humans to occupy North America, late Cenozoic geology and life, vegetational changes, and climatic changes.

Exposed fossils are in and near the river and wash channels. Many are consequently in poor to fair condition as a result of erosion and exposure. Fossils, located throughout the EIS area, are concentrated between Charleston and Highway 90.

SOCIAL

A social analysis (University of Arizona 1985) has been completed. The initial part of this study, conducted prior to BLM's acquisition of the San Pedro EIS area, was updated in 1987. This report is available for review at the Safford District Office.

It is apparent from that analysis and subsequent discussions between BLM specialists and the public that the protection and enhancement of the riparian ecosystem and the preservation and study of significant cultural artifacts are most important to a majority of respondents. While the use of the area for recreational purposes was valued, control of that use was also important to them. Similarly, sand and gravel from the San Pedro is acknowledged to be important as an inexpensive and important source of material, yet a need to control the use of that resource is apparent. Off-road vehicle use and mining are deemed inappropriate by most of the respondents because they felt these activities would be harmful to the environment, disrupt traditional uses of the river and be unfair to all concerned.



resources under this alternative. There will be moderate impacts to the economic component.

Fire

Intense fires and the suppression actions on them will have some significant short-term impacts on cultural, paleontological, visual, soils, vegetation and wildlife resources. Long-term benefits can occur to visual, vegetation and wildlife resources.

Visual

This alternative makes no visual resource management (VRM) classifications. The protection offered by the more restrictive VRM classes will not be available. The area, however, will be managed as if it were a VRM Class III area. No impacts are anticipated from implementing this VRM Class III management.

Administrative Facilities

Continuing the use of the current facilities will have no significant impacts on any other resources.

Conclusion

Implementation of the resource management provisions of the *No Action Alternative* will not have any significant long-term impacts on the environment. This alternative will have a significant impact on recreational use and a moderate impact on the economic elements of the EIS area.

Certain resources will benefit from the *No Action Alternative*. These include water, wildlife, cultural, vegetation and soils.

PRESERVATION ALTERNATIVE

Recreation

The recreation management provisions of the *Preservation Alternative* are expected to benefit most other resources. Prohibiting ORV use (closed designation) and the discharge of firearms, providing only a few small developments, and restricting use to primitive and non-impairing forms will provide moderate to significant benefits to water quality, wildlife, vegetation, soils, cultural and paleontological resources.

Impacts to off-road vehicle users will occur as this area is unavailable for their use. Recreation related to vehicles and roads is also significantly impacted as no roads are available for public use.

Implementation of this alternative will have both a negative and positive effect on public recreation expectations and may have economic impacts associated with restricted recreation opportunities.

Areas of Critical Environmental Concern

Designating the entire San Pedro EIS area as an ACEC and implementing the management guidelines of the *Preservation Alternative* provides protection for vegetation, soils, wildlife, water quality, visual, cultural and paleontological resources. Designation of the three RNAs and implementing the additional management constraints provides additional protection for the vegetation communities found in them. The designation of the RNAs will not significantly impact other resources.

Lands

Maintenance of existing ROWs will be subject to stipulations to protect cultural and paleontological resources. Impacts to these resources, therefore, are not expected to be significant.

Designation of ROW corridors at Charleston and Hereford will minimize adverse environmental impacts and the proliferation of separate ROWs. Construction in the corridors is dependent on case-by-case environmental assessments. Some moderate impacts to visual resources, soils and vegetation are anticipated within these corridors. No impacts to other resources will occur outside the corridors.

Water

Not pumping the irrigation wells will have no significant benefits or impacts on water quality and quantity. The pumping of the nonirrigation wells will result in minor benefits to administrative activities.

Wildlife

Certain provisions of the wildlife management component of the *Preservation Alternative* will have benefits on resource values. Increasing species diversity will benefit recreation values. Completing habitat improvement projects (replanting farm fields, prescribed fire, developing ponds and marshes, planting trees) will benefit Threatened and Endangered and other wildlife species, vegetation, recreation and visual resources. These actions can cause minor to significant impacts to cultural and paleontological resources, soils, water, vegetation and visual resources.

Vegetation

Replanting abandoned farm fields with native grasses, forbs and/or shrubs will benefit wildlife, recreation and soil/watershed resources. Replanting will result in moderate benefits to soils and vegetation as it reduces erosion by increasing vegetative cover.

Prescribed fires can cause minor to significant short-term impacts to cultural, paleontological, soils, vegetation and visual resources. Significant long-term benefits will occur to vegetation. Minor benefits can occur to other resources.

Soil/Watershed

Gabion and dike installation will potentially provide significant benefits to fish and aquatic habitat. Building gabions and dikes on side channels can disturb cultural and paleontological resources through construction and siltation.

Constructing the St. David detention dam will reduce soil loss, deposit soils behind the structure, regrade the

Chapter 4

ENVIRONMENTAL CONSEQUENCES

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INTRODUCTION

Chapter 4 analyzes the environmental consequences of implementing the alternatives, including the *Preferred Alternative*. The level of analysis for each resource depends on the degree of impact expected. The interdisciplinary team determined no measurable impacts would occur to topography, air quality or climate and they are not discussed further in this chapter.

BASIC ASSUMPTIONS

The impact analysis was based on the following assumptions.

1. Funding and personnel will be available to fully implement any alternative.

2. Those resources now receiving special protection will continue to receive that protection.

3. The definition of long-term is five years or more. All impacts are long-term unless otherwise noted.

4. Native American religious practices shall receive due consideration under the provisions of the *American Indian Religious Freedom Act* (P.L. 95-341).

5. BLM will write Environmental Assessments before implementing any activity plans or site-specific actions.

6. Ground and surface water will be adequate to maintain the river system (including the riparian and aquatic habitats) and all of the consumptive and nonconsumptive uses described in the alternatives for about 15 years.

7. Cultural resources will continue to deteriorate through natural forces, visitation and vandalism if no corrective or preventive action occurs.

8. Inventories for cultural resources and native American values will occur on areas of proposed land uses. Protection of significant values will occur through avoidance and mitigative actions. Compliance with Section 106 of the *National Historic Preservation Act of 1966* and its implementing regulations in 36 CFR 800 will occur before starting specific projects resulting from this plan's decisions.

9. All impacts are direct unless otherwise noted.

IMPACTS OF ALTERNATIVES ON RESOURCES

NO ACTION ALTERNATIVE

Recreation

Under this alternative there will be no opportunities for recreation. This will result in significant impacts to that portion of the public desiring to see and recreate on the San Pedro. The closure of the San Pedro EIS area to public recreation use, coupled with the absence of any developments, will benefit most other resources.

Areas of Critical Environmental Concern

Under this alternative ACECs and RNAs are not recommended for designation and there are no impacts to other resources. The special resources of the San Pedro, however, will not receive potential protection from an ACEC or RNA designation.

Lands

Eliminating any provisions for new ROWs can have economic and social impacts due to the lack of new utilities or the increased costs of routing the utility lines over greater distances.

Water

Benefits will occur to water quality and quantity due to the absence of polluting activities and consumptive uses. The inability to pump water can adversely impact wildlife if surface flow disappears and water is not available.

Wildlife

Implementing the planned wildlife actions of this alternative will not have any impacts. Minor benefits will come from inventory and monitoring work.

Vegetation

The *No Action Alternative* will allow for natural plant succession on previously used farm and ranch lands. This natural succession will benefit wildlife habitat, soils and watershed.

Soil/Watershed

There will be minor benefits to soil and cultural resources through reduction of erosion caused by the lack of activities and by increases in vegetative cover.

Cultural/Paleontological

There will be no significant impacts from the cultural or paleontological management actions of this alternative.

Minerals

Benefits will occur to water and air quality and to visual

resources under this alternative. There will be moderate impacts to the economic component.

Fire

Intense fires and the suppression actions on them will have some significant short-term impacts on cultural, paleontological, visual, soils, vegetation and wildlife resources. Long-term benefits can occur to visual, vegetation and wildlife resources.

Visual

This alternative makes no visual resource management (VRM) classifications. The protection offered by the more restrictive VRM classes will not be available. The area, however, will be managed as if it were a VRM Class III area. No impacts are anticipated from implementing this VRM Class III management.

Administrative Facilities

Continuing the use of the current facilities will have no significant impacts on any other resources.

Conclusion

Implementation of the resource management provisions of the *No Action Alternative* will not have any significant long-term impacts on the environment. This alternative will have a significant impact on recreational use and a moderate impact on the economic elements of the EIS area.

Certain resources will benefit from the *No Action Alternative*. These include water, wildlife, cultural, vegetation and soils.

PRESERVATION ALTERNATIVE

Recreation

The recreation management provisions of the *Preservation Alternative* are expected to benefit most other resources. Prohibiting ORV use (closed designation) and the discharge of firearms, providing only a few small developments, and restricting use to primitive and non-impairing forms will provide moderate to significant benefits to water quality, wildlife, vegetation, soils, cultural and paleontological resources.

Impacts to off-road vehicle users will occur as this area is unavailable for their use. Recreation related to vehicles and roads is also significantly impacted as no roads are available for public use.

Implementation of this alternative will have both a negative and positive effect on public recreation expectations and may have economic impacts associated with restricted recreation opportunities.

Areas of Critical Environmental Concern

Designating the entire San Pedro EIS area as an ACEC and implementing the management guidelines of the *Preservation Alternative* provides protection for vegetation, soils, wildlife, water quality, visual, cultural and paleontological resources. Designation of the three RNAs and implementing the additional management constraints provides additional protection for the vegetation communities found in them. The designation of the RNAs will not significantly impact other resources.

Lands

Maintenance of existing ROWs will be subject to stipulations to protect cultural and paleontological resources. Impacts to these resources, therefore, are not expected to be significant.

Designation of ROW corridors at Charleston and Hereford will minimize adverse environmental impacts and the proliferation of separate ROWs. Construction in the corridors is dependent on case-by-case environmental assessments. Some moderate impacts to visual resources, soils and vegetation are anticipated within these corridors. No impacts to other resources will occur outside the corridors.

Water

Not pumping the irrigation wells will have no significant benefits or impacts on water quality and quantity. The pumping of the nonirrigation wells will result in minor benefits to administrative activities.

Wildlife

Certain provisions of the wildlife management component of the *Preservation Alternative* will have benefits on resource values. Increasing species diversity will benefit recreation values. Completing habitat improvement projects (replanting farm fields, prescribed fire, developing ponds and marshes, planting trees) will benefit Threatened and Endangered and other wildlife species, vegetation, recreation and visual resources. These actions can cause minor to significant impacts to cultural and paleontological resources, soils, water, vegetation and visual resources.

Vegetation

Replanting abandoned farm fields with native grasses, forbs and/or shrubs will benefit wildlife, recreation and soil/watershed resources. Replanting will result in moderate benefits to soils and vegetation as it reduces erosion by increasing vegetative cover.

Prescribed fires can cause minor to significant short-term impacts to cultural, paleontological, soils, vegetation and visual resources. Significant long-term benefits will occur to vegetation. Minor benefits can occur to other resources.

Soil/Watershed

Gabion and dike installation will potentially provide significant benefits to fish and aquatic habitat. Building gabions and dikes on side channels can disturb cultural and paleontological resources through construction and siltation.

Constructing the St. David detention dam will reduce soil loss, deposit soils behind the structure, regrade the

channel, and cause an increase in riparian vegetation. Moderate impacts to cultural, paleontological, vegetation, water, soils and visual resources can occur from construction.

Moderate benefits will occur from reestablishment of vegetation after removal of the farm-field dikes and berms. Removal of these dikes and berms will minimally increase soil erosion in the short-term and moderately in the long-term as natural drainages reestablish themselves.

Cultural/Paleontological

No significant impacts will result from implementing the cultural/paleontological management actions in this alternative. Major benefits can occur to cultural and paleontological resources and the social element.

Mineral

Benefits will occur to air and water quality and to visual resources under this alternative. There will be moderate impacts to the economic component.

Fire

Full suppression of fires creates a potential for increases in future fire size and intensity, possibly resulting in moderate impacts to all resources.

Visual

Under the *Preservation Alternative* management of most of the San Pedro's scenic riparian corridor (92%) will be as VRM Class I and II areas. This will protect the scenic quality along the San Pedro River by restricting any changes in the visual character of the area (see Appendix 4). As this alternative proposes only a few small developments (highway pullouts, signs) there will be little impact to visual resources on the San Pedro.

Administrative Facilities

Expansion of administrative facilities at Fairbank will have minor impacts on cultural, visual and vegetation resources. Continuing the use of other administrative facilities will not significantly impact any other resources.

Research

Development of a small research facility at Fairbank will have minor impacts on cultural, visual and vegetation resources. Moderate to significant benefits will result to those resources being studied.

Conclusion

Implementation of the *Preservation Alternative* will not have any significant impacts or benefits on the environment. Some resources will receive benefits from implementing the *Preservation Alternative*, including water, wildlife, vegetation, soil/watershed and cultural resources.

Implementing this alternative will cause both positive and negative effects on public expectations for recreation and will have moderate economic impacts resulting from restricted recreation opportunities.

Some moderate impacts can occur to cultural and paleontological resources from actions such as ROW corridor work, dam construction, fire suppression and habitat improvement projects.

UTILIZATION ALTERNATIVE

Recreation

Minor impacts are expected to water quality, wildlife, vegetation, soils, cultural and paleontological resources from the development of recreational facilities and overall recreation use. The ORV designation (limited to designated roads) will have major benefits for water quality, wildlife, vegetation, soils, cultural and paleontological resources.

Impacts to wildlife, vegetation, soils and cultural resources will be low because most of the large developments are in old farm fields and other previously disturbed areas. The total area of disturbance is about 130 acres, with 75% of this acreage in the four large developments. Many of the impacts will be short-term, with long-term benefits upon completion of landscaping around most of the developments.

Impacts to off-road vehicle users will occur as this area will be unavailable for their use.

Recreational use and development will result in moderate benefits to the economic component.

Areas of Critical Environmental Concern

Designating the entire San Pedro area as an ACEC and implementing the management guidelines of the *Utilization Alternative* will provide protection for vegetation, soils, wildlife, water quality, visual, cultural and paleontological resources. Designating the three RNAs and implementing the additional management constraints will provide additional protection for the vegetation communities found in them. The designation of the RNAs will not significantly impact other resources.

Lands

Work within the ROW corridors can have moderate impacts on cultural resources if not mitigated. These impacts become insignificant outside the corridors. Benefits will result to social and economic components due to presence of additional utilities in the San Pedro Valley.

Water

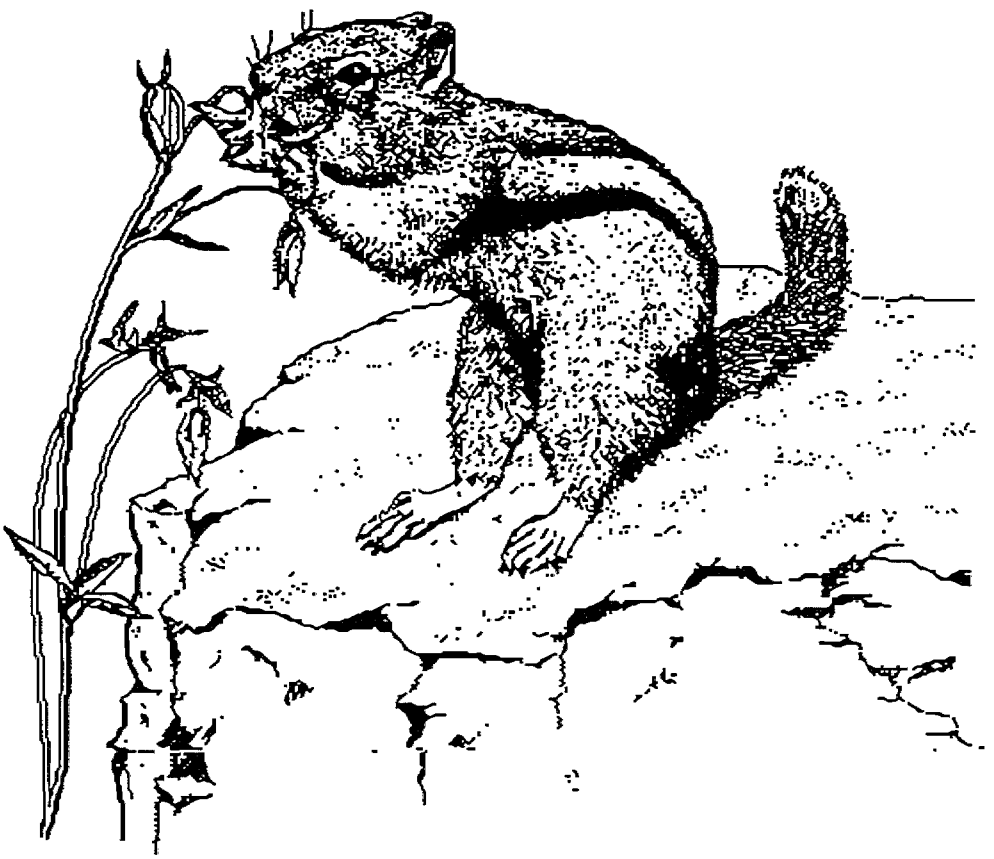
Limited well pumping will minimally impact surface water flow. Minor water quality impacts will occur from agricultural return flow. Limited pumping of irrigation wells will benefit vegetation in the local area of pumping. Minor soil disturbance will occur due to pumping the irrigation wells.

- The *Proposed Action* closes 47,668 acres to mineral entry. No prospecting, exploration or mining is allowed. The impacts will primarily affect the social and economic components.
- The *Proposed Action* closes 47,668 acres to off-road use by vehicles. Only designated roads will be available for vehicular use. The impacts will primarily affect recreationists using off-road vehicles and the social and economic components.

IRREVERSIBLE AND IRRETRIEVABLE COMMITMENTS OF RESOURCES

This section identifies the irreversible and irretrievable commitments of resources resulting from the *Proposed Action.*

The *Proposed Action* proposes few actions not capable of being reversed. Impacts to cultural and paleontological resources are, if not mitigated, irreversible. Changes in cultural and paleontological resources and the loss of data are irretrievable. While there will be irreversible and irretrievable commitments, none are significant due to avoidance/mitigation.



tional protection for the vegetation communities found in them. The designation of the RNAs will not significantly impact other resources.

Lands

Work within the ROW corridors can have moderate impacts on cultural resources if not mitigated. These impacts become insignificant outside the corridors. Benefits will result to social and economic components due to the presence of additional utilities in the San Pedro Valley.

Water

Not pumping the irrigation wells will result in no significant benefits or impacts on water quality and quantity. Pumping one irrigation well in support of a reseeding project will result in moderate benefits to vegetation and wildlife. Minor benefits for the resource and administrative activities can occur from pumping the nonirrigation wells.

Wildlife

Construction of wildlife habitat improvement projects will cause minor impacts to cultural, paleontological, soils, water, vegetation and visual resources, primarily during the short-term. Completing these projects will benefit Threatened and Endangered and other wildlife species. Increasing species diversity will benefit recreation values.

The use of prescribed fires will cause short-term minor impacts to vegetation and visual resources. In the long-term, prescribed fires will benefit wildlife, vegetation, soils and visual resources and result in less intense and smaller wildfires.

Vegetation

Replanting and irrigating one farm field will result in minor short-term impacts to soils, vegetation, water and visual resources. Benefits will occur to vegetation, soils, and wildlife habitat by experimental seedings, natural revegetation and prescribed fires.

Soil/Watershed

Removal of the farm-field dikes and berms will minimally increase soil erosion in the short-term and moderately in the long-term. Construction of erosion control structures in side channels can have moderate impacts on cultural and paleontological resources.

Cultural/Paleontological

Providing cultural and paleontological sites for interpretive use will result in benefits to recreation. The same applies to the social component by providing sites for scientific study.

Minerals

The absence of the sand and gravel operations from the area will have benefits on visual, cultural and water resources. Impacts will occur to the economic component from the loss of sand and gravel sources.

Fire

The construction of fire breaks to reduce fire size will have minor to moderate short-term impacts on recreation, visual, soils/watershed, cultural, paleontological and vegetation resources. In the long-term, the reduction in fire size and intensity will significantly benefit all resources.

Visual

Under this alternative management of most of San Pedro's scenic riparian corridor (86%) will be as VRM Class I and II, thereby protecting the scenic quality by restricting any changes in the visual character of the area (see Appendix 4). Overall impacts to visual resources are expected to be low as most developments (campgrounds, buildings, signs, roads, pullouts) are in lands classified as VRM Class III and IV, areas previously disturbed.

Administrative Facilities

Construction of a new administrative facility at Highway 90 and a new small facility at Fairbank will have minor impacts on soils, vegetation, wildlife, water, cultural and visual resources. The new facilities will have minor short-term benefits to the economic component.

Continuing the use of other administrative facilities will not significantly impact any other resources.

Research

Development of an adequate facility at either Fairbank or Highway 90 will have minor impacts on cultural, visual, and vegetation resources. Moderate to significant benefits will occur to those resources being studied.

Conclusion

Implementation of the management actions of the *Preferred Alternative* will cause minor impacts to wildlife, soils, cultural, paleontological, vegetation, water and visual resources and the economic component.

Minor to moderate benefits will occur to the same elements described above, as well as the social component. This generally reflects short-term versus long-term effects of management actions.

MITIGATING MEASURES

The Management Guidance Common to All Alternatives section in Chapter 2 identifies measures that BLM will take to mitigate possible impacts to the resources of the EIS area. Additional measures are in Chapter 4 assumptions.

UNAVOIDABLE ADVERSE IMPACTS

Unavoidable adverse impacts are those impacts created by the *Proposed Action* that cannot be mitigated. These impacts are as follows:

Wildlife

Minor impacts to cultural, paleontological, soils, water, vegetation and visual resources can result from development of habitat improvement projects, primarily during the short-term. Moderate long-term benefits will result to vegetation, wildlife, recreation and visual resources.

Vegetation

There will be short-term impacts to soils due to no replanting and the potential for increased erosion.

Soil/Watershed

The construction of dikes on the side channels will result in minor to moderate short-term impacts to cultural resources, water quality (from sedimentation) and soils (from erosion). The completion of functioning structures will stabilize the side channels and decrease erosion.

Cultural/Paleontological

Providing cultural and paleontological sites for interpretive use will result in benefits to recreation. The same applies to the social component by providing sites for scientific study and analysis.

Minerals

Allowing the existing sand and gravel operation to continue will cause increasing impacts to air quality, visual resources and wildlife. Because these disturbances are on a side drainage, no additional impacts to water quality are expected.

The development of new sand and gravel operations and their needed access can create significant but localized impacts on cultural and visual resources, vegetation, wildlife and air quality.

The local economy will benefit from the development of additional sand and gravel operations.

Fire

Full suppression of fires creates a potential for increases in future fire size and intensity, possibly resulting in moderate impacts to all resources.

Visual

The *Utilization Alternative* classifies much of the riparian corridor (84%) as VRM Class I and II, thus protecting the scenic quality along the San Pedro River (see Appendix 4). This alternative proposes slightly more development to occur in the larger acreage in the less restrictive VRM Class III and IV areas away from the river. Overall impacts to visual resources are expected to be low as most developments (campgrounds, buildings, signs, roads, pullouts) are in areas previously disturbed.

Administrative Facilities

Construction of a new administrative facility at Highway 90 and a new small facility at Fairbank will have minor impacts on soils, vegetation, wildlife, water, cultural and visual resources. The new facilities will have minor short-term benefits for the economic component.

Continuing the use of other administrative facilities will not significantly impact any other resources.

Research

Development of an adequate facility at either Fairbank or Highway 90 will have minor impacts on cultural, visual and vegetation resources. Moderate to significant benefits will occur to those resources being studied.

Conclusion

Implementation of the resource management actions of the *Utilization Alternative* will have minor to moderate impacts to all other resources. Many of these impacts are short-term and localized. Expansion of sand and gravel operations can cause significant impacts, especially to wildlife, vegetation, visual, recreation, cultural and paleontological resources. Benefits will occur to the wildlife, water, soils and vegetation resources, plus the economic and social components.

PREFERRED ALTERNATIVE

Recreation

Minor impacts are expected to water quality, wildlife, vegetation, soils, cultural and paleontological resources from the development of recreation facilities and overall recreation use. The ORV designation (limited to designated roads) will have significant benefits for water quality, wildlife, vegetation, soils, cultural and paleontological resources.

Impacts to wildlife, vegetation, soils and cultural resources are low because of the location of most of the large developments in old farm fields and other previously disturbed areas. The total area of disturbance is about 100 acres, with 83% of this acreage in the four large developments. Many of the impacts will be short-term, with long-term benefits upon completion of landscaping around most of the developments.

Impacts to off-road vehicle users will occur as this area will be unavailable.

Minor social benefits are anticipated. The level of recreation use may be less than some publics anticipate. For the most part the level of development and use is in line with the feelings expressed by the public in the social analysis. Recreational use will result in moderate benefits to the economic component.

Areas of Critical Environmental Concern

Designating the entire San Pedro EIS area as an ACEC and implementing the management guidelines of the *Preferred Alternative* will provide protection for vegetation, soils, wildlife, water quality, visual, cultural and paleontological resources. Designating the three RNAs and implementing the additional management constraints will provide addi-

Chapter 5

CONSULTATION AND COORDINATION

CHAPTER 5
CONSULTATION AND COORDINATION

INTRODUCTION

The San Pedro Environmental Impact Statement was prepared by resource specialists at the Safford District Office. Assistance was provided by program leaders and specialists in the Arizona State Office. The State Office also reviewed the EIS for compliance with laws and regulations.

PUBLIC INVOLVEMENT AND CONSULTATION

Arizonans responded enthusiastically to BLM's request for comments and advice about the San Pedro riparian area. Since March of 1986 several hundred people have expressed an interest in performing volunteer work and assisting in other management needs on the property. Of the volunteers, many have inquired about and joined the Friends of the San Pedro River support group.

The SPEIS Team has -

1. called or written (to request advice and facts about management of specific San Pedro resources) other government agencies, interested groups and/or professional experts in these fields;
2. sent out three newsletters in 1986 and 1987 to a mailing list of about 280 organizations and individuals to update those involved with San Pedro about the progress of the planning;
3. conducted about 70 tours of the San Pedro management area for local officials and interested persons, BLM management personnel, Congressional visitors and school groups;
4. organized and led four technical committees (for cultural, biological, recreation and soil/water/air resources) to advise BLM on particular resources (for example, the Safford District archaeologist headed a group of seven people from the University of Arizona, Arizona State Museum, Arizona State Historic Preservation Office, a private consulting firm and the Amerind Foundation);
5. conducted public meetings in Tucson (January 8, 1986), Sierra Vista (January 9, 1986), and Mesa (January 16, 1986);
6 published draft plan/EIS for public review June 16,1988;
7. conducted public hearings in Tucson and Sierra Vista on August 3 and 4 respectively; and
8. analyzed public comments following the end of the public review on September 21, 1988.

The SPEIS team members and other district personnel have worked closely with an ad hoc committee formed to advise the BLM about interim management of the San Pedro.

OTHER ORGANIZATIONS AND AGENCIES CONSULTED

The SPEIS team consulted with and/or received comments from the following during the preparation of this document.

Federal

Bureau of Reclamation
Bureau of Indian Affairs
Fish and Wildlife Service
International Boundary and Water Commission
Soil Conservation Service
U.S. Army, Fort Huachuca
U.S. Border Patrol
Western Archaeological and Conservation Center (NPS)

State

Arizona State Parks
Arizona State University
Arid Lands Research
Arizona Game and Fish Department
Department of Water Resources
State Land Department
University of Arizona

Local

Cochise County Board of Supervisors
Cochise County Planning Board
Cochise County Public Works Department
Sierra Vista City Government

Special Interest Groups and Individuals

Archaeological Conservancy
The Nature Conservancy
Sierra Club
Huachuca Audubon Society
Defenders of Wildlife
Tenneco
Mountain Bell
Sulfur Springs Valley Electric Power Cooperative
Arizona Public Service Company
Arizona Electric Power Cooperative
St. David Irrigation District
Sierra Vista Riding Club
Young Sand and Block Co.
Sierra Vista Ready-Mix
Bruce Huckell
Bernard Fontana
W. Bruce Masse
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Hollis N. Cook
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Bob Ohmart
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Chuck Hunter
Troy Corman
Mark Stromberg
Doug Danforth
Bill Mannon
Frank Scruggs
Dale Shatto
Michael Gregory
Jim Herrewig
Harry Woodward
Lt. Col. Richard Wallenberg
Jane Chambers
Lester Mauk
Tom Turner
Sierra Vista Rod and Gun Club
Sierra Vista Lions Club
High Desert Garden Club
Republican Women's Club
Westerner's International Officer's Club
Sierra Vista Kiwanis International
Cochise Conservation Council
Director's Subcommittee on Recreation
Sam Negri
Raptor Task Force
Friends of the San Pedro River
San Pedro Water Resources Assoc.
Society of Army Military Engineers
Sierra Vista Rotary
Arizona Riparian Council
Cochise College
ORV Task Force
Boy Scouts of America
MENSA
Coronado Resource Conservation and Development Area
Arizona Association In and For Learning About the Environment
C. Vance Haynes
Steve Rogers
Jim Officer
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Joe Patz
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Anita Cohen
Milton Curtis
John Escapule
R. Gwinn Vivian
David F. Myrick
John Irish
Susan Brew
Richard Myers
Beth Walton

DISTRIBUTION

Copies of the FEIS will be sent to the following:

Federal Agencies

Advisory Council on Historic Preservation
Soil Conservation Service
Forest Service
Army Corps of Engineers
U.S. Army, Ft. Huachuca
Department of Commerce
Department of the Interior
Bureau of Indian Affairs
Bureau of Mines
Fish and Wildlife Service
Geological Survey
Bureau of Reclamation
National Park Service
Environmental Protection Agency
Council on Environmental Quality
Western Archaeological and Conservation Center

State Agencies

Governor's Office
AZ Game and Fish Department
AZ Clearing House
State Historic Preservation Officer
AZ State Land Department
AZ State Parks
Arizona Commission on the Environment
University of Arizona

Arizona State University
AZ Department of Water Resources
AZ State Land Commission
Arizona Department of Transportation
Department of Library Archives and Public Records
Arizona Agriculture and Horticulture Department

Local Agencies and Groups

Cochise County Supervisors
Cochise County Planning and Zoning
Cochise County Public Works
Sierra Vista City Planning Office
Tombstone City Council
Benson City Council

Special Interest Groups

AZ Cattlegrowers
Cochise County Cattlegrowers
AZ Wildlife Federation
The Nature Conservancy
The Sierra Club
Huachuca Audubon Society
Defenders of Wildlife
Arizona 4-Wheel Drive Association
Safford District Advisory Council
Safford District Grazing Advisory Board
The Wildlife Society
The Wilderness Society
Public Lands Council
National Council of Public Land Users
League of Women Voters
Arizona Riparian Council

Elected Representatives

Federal

Senator Dennis DeConcini
Senator John McCain
Representative Jim Kolbe
Representative Morris K. Udall
Representative Bob Stump
Representative Jon Kyle
Representative Jay Rhodes

State

Senator Gus Arzberger
Representative Bart Baker
Representative Bill English
Representative Rueben Ortega
Representative Mike Palmer

Indian Tribes

Ak-Chin (Maricopa) Papago
Gila River Pima
Salt River Pima
Tohono O'odham (Papago)
San Carlos Apache

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C. Gawin	Cartography
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Safford District Office Assistance

The following people from the Safford District Office provided technical assistance and review for this document.

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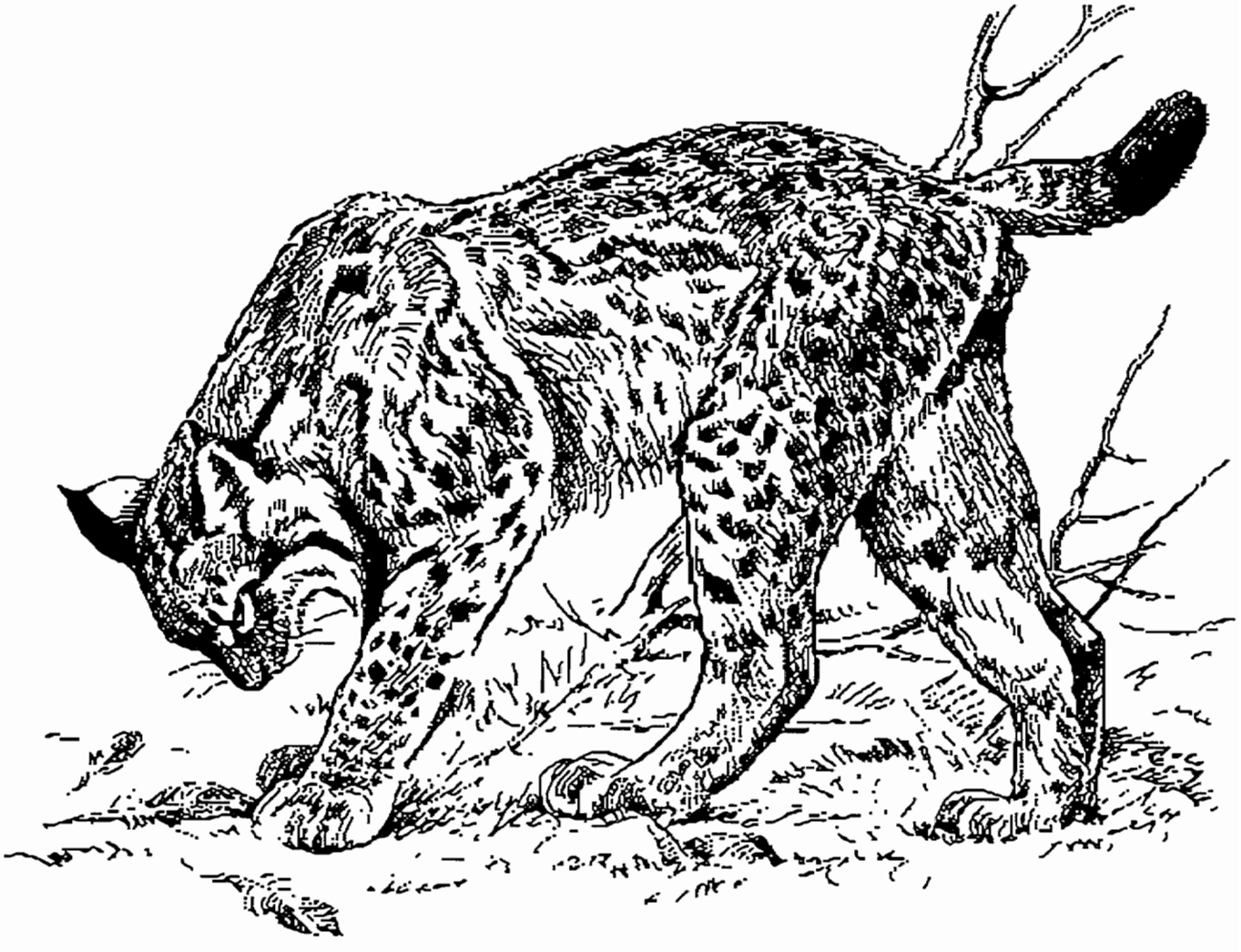
Vernon Saline	San Simon Area Mgr.
John Augsberger	Wildlife Biologist
Erick Campbell	San Pedro Project Manager



ANALYSIS AND REVIEW PROCEDURES

The draft EIS was filed with the Environmental Protection Agency on June 13, 1988 and their notice of availability was published in the *Federal Register* on June 24, 1988. The Bureau of Land Management's Notice of Availability and announcement of public hearings was published in the *Federal Register* on June 16, 1988

Over 900 copies of the draft EIS and management plan were mailed to federal, state, and local governments, private groups and organizations and individuals for review and comment. News releases provided information on how to obtain copies of the draft document and where it could be reviewed. Formal public hearings were held in Tucson and Sierra Vista on August 3 and 4, respectively.

One hundred twenty six letters of comment were received during the comment period. Two additional letters were received too late to be included in the final EIS but will be considered in the Record of Decision for the future management of the San Pedro Riparian National Conservation Area

General Response No. 1 (Multiple Use).

Multiple use is practiced throughout the Safford District. It should be understood that not all uses occur on every parcel of public lands. For instance, some areas such as wilderness are restricted from some types of uses such as motorized access or mining activities. Even in these areas, however, grazing, recreation, and wildlife habitat improvements are often permitted. We do not believe the multiple use concept has been violated by the moratorium on grazing for an interim period. The *Federal Land Policy and Management Act of 1976* provides for the use of some land for less than all of the resources (P.L. 94-579 Sec. 103(c)).

General Response No. 2 (Tiering).

The San Pedro River Riparian Management Plan is an inclusive plan requiring that resource-specific activity plans (e.g.: Habitat Management Plans, Cultural Resource Management Plans) and project-specific plans be developed according to clear prescriptions and stipulations. This process of going from "general to specific" is consistent with the regulations developed by the *National Environmental Policy Act* (40 CFR 1508.22).

General Response No. 3 (Decisions)

The Draft Plan discusses and the Draft EIS analyzes the effects of four different management plans. Following analysis of public responses to the Draft, the Revised Plan/FEIS has been developed. The *Preferred Alternative* has changed in several respects, in part reflecting input from the public. Following this FEIS, a Record of Decision and approved San Pedro Management Plan will be published. The approved plan will contain a monitoring plan to gauge how completely the objectives set forth in the land use plan are met. Monitoring reports will be available for public review.

General Response No. 4 (Alternatives).

Each alternative is developed around a theme or management direction. Each has, as integral parts, various actions or levels of actions that appear to best meet the thrust of that theme. When the decisions are made as to what the plan will contain, parts of any of the alternatives may be included. The alternatives are not designed to require adoption of all their components.

General Response No. 5 (Legislative).

From the beginning, Congress indicated an interest in designating the San Pedro River EIS area as a National Conservation Area. Such designation includes various land use prescriptions or limitations for management. Although Congress had not yet completed action on the Conservation Area designation when the DEIS was developed, the Safford District attempted to include the philosophy and wishes of Congress in establishing the limits for uses in the San Pedro EIS area.

General Response No. 6 (Inventories).

Several letters referenced the need for inventories of various kinds. Generally speaking, inventories are undertaken only if significant issues identified by BLM or the public need resolutions and adequate data are not available to resolve those issues. At the same time, Bureau employees, volunteers, researchers and other interested parties will be inventorying the San Pedro study area as a routine part of their work or as a special effort. We inventoried to the point we believed was adequate to address the issues at hand. Insects, for instance, were not inventoried as no specific issues seemed to require that level of knowledge. Inventory work is continuing in all resources as a greater level of knowledge may be required for the preparation of specific activity or project level plans.

General Response No. 7 (Hunting).

During the public comment period on the DEIS, many commentors expressed opinions on hunting and the discharge of firearms, both for and against. Of those comments opposed to hunting and the discharge of firearms in the EIS area, the most common rationales mentioned were those of visitor safety and resource protection. Based on these comments we have made changes in the management prescriptions for the Preferred Alternative. The new prescription includes both closed and open areas for firearms discharge. The area proposed to be closed year long to all firearms discharge includes all public lands in the EIS area between Charleston Road and the Hereford area, as depicted on Map 2-2. This closure is through the authority in 43 CFR 8364.1. The remainder of the EIS area (Charleston Road to the north boundary and the Palominas property (Highway 92 to the Mexican border)) is proposed to be open to the discharge of firearms by hunters licensed under the regulations of the State of Arizona during the period of September 1 to March 31. Target practice and "plinking" will not be permitted anywhere in the EIS area.

The use of bows and arrows will be permitted in the entire EIS area by hunters licensed under the regulations of

the State of Arizona. The land within ¼ mile of all developed facilities is closed to the discharge of firearms or other weapons as per 43 CFR 8365.2-5(a) and 43 CFR 8364-1.

We will continue to work with the Arizona Game and Fish Department and the Arizona Game and Fish Commission to designate the EIS area a State Wildlife Area. The designation would provide authority to the Arizona Game and Fish Department to establish hunting regulations for the area consistent with BLM's management objectives.

General Response No. 8 (Railroad)

There was some confusion in the public comments about the railroad corridor. The land in the railroad corridor is privately owned by the Southern Pacific Transportation Company. At one point during the planning period Southern Pacific was preparing to abandon this rail line and BLM was interested in obtaining this land. Before Southern Pacific filed an abandonment of track petition, another private group asked to buy the land in the railroad corridor and use the track for a tourist train. Nothing final has occurred with the tourist train or the track abandonment.

The DEIS and FEIS display two scenarios for use of the railroad corridor, one with the lands in federal ownership and one in private ownership. In the first scenario, the track was abandoned and obtained by BLM. We then proposed using the railroad grade for hiking and equestrian use. The second scenario envisioned the tourist train becoming a reality with the railroad corridor staying in private ownership. If this occurred then we proposed to work with the operator on the use of adjacent BLM land, stops for the train and any facilities that may be needed. BLM has no control over what happens on the private land.

General Response No. 9 (Monitoring).

The DEIS is a general plan, describing the activities which can take place in implementation. The monitoring plan displayed in the DEIS is, for consistency sake, also a general plan. Some corrections have been made to the draft monitoring plan as a result of the public review. Where specific activity plans are prepared to fully implement the plan, more specific monitoring plans will be part of those plans. Development of the activity plans and monitoring plans will occur after the Record of Decision has been approved.

UNITED STATES DEPARTMENT OF THE INTERIOR

BUREAU OF LAND MANAGEMENT

SAFFORD DISTRICT

SAFFORD, ARIZONA

HEARING ON THE SAN PEDRO RIVER RIPARIAN

MANAGEMENT PLAN AND

ENVIRONMENTAL IMPACT STATEMENT

AUGUST 3, 1988

TUCSON HILTON EAST HOTEL

7600 E. BROADWAY

TUCSON, ARIZONA

ORIGINAL

REPORTED BY: WILLIAM D. HOLE

ACME COURT REPORTERS

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PROCEEDINGS

MR. ABBEY: Ladies and gentlemen, this public hearing will now come to order.

First let me introduce myself. I am Robert Abbey. I'm the Acting District Manager for the Yuma -- for the Bureau of Land Management, Yuma District.

Tonight's hearing is being conducted under the authority of the Federal Land Policy and Management Act, and in accordance with established BLM regulations.

Most of you signed the attendance sheet as you came into the room tonight. If you haven't done so, please raise your hand and we'll make sure that a sheet gets to you. If you plan to make a statement be sure to check the appropriate space on the attendance sheet so we can add you name to the list of speakers.

The official reporter seated on my left is Bill Hole. He will prepare a verbatim transcript of everything that is said tonight -- at tonight's hearing. If you wish to obtain a copy of the transcript you should make your own arrangements with the reporter after this meeting.

This public hearing is being held to obtain comments on the draft San Pedro Riparian Management Plan and Environmental Impact Statement prepared by the BLM's Safford District office.

The purpose of this hearing centers on two issues: First, are the proposed actions as addressed in the draft plan suitable and in the public's best interest; second, is the draft Environmental Impact Statement adequate?

Your comments and suggestions on either aspect will certainly be appreciated.

I'd like now to introduce Ray Brady, the Safford District Manager, who will introduce the members of his staff that are here tonight and also give a brief overview of the planning area.

Ray?

MR. BRADY: Thank you very much, Bob.

I would like to introduce Lyn (phonetic) Saline who is on Bob's immediate left. Lyn is the San Simon Area Manager.

To Lyn's left is Erick Campbell who is the San Pedro Project Manager. Erick is located at our San Pedro Project Office at Fair Bank, Arizona.

Our other BLM people that are here this evening include: Mike Hoffman (phonetic) who is

back at the registration desk. Mike is a recreation specialist on our San Pedro Project; Pete Zwaneveld who is also a recreation specialist in our District Office in Safford; Kevin Freeman (phonetic) is our ranger down on the San Pedro property; Doug Duncan is back in the back in the BLM uniform and is located down on the San Pedro property; and Jerry Coolidge.

Jerry, where are you? Jerry's back in the back corner. Jerry is our planning coordinator in the Safford District.

Our staff will be here after the hearing this evening to answer any questions that you may have -- any further questions that you may have on our San Pedro Project.

Public notice of this evening's hearing was published and advertised in the local media, and was also provided as a notice in the Federal Register on June 16, 1988. We also have a public hearing tomorrow evening in Sierra Vista, Arizona.

We would like to first present this evening an overview of our draft San Pedro Management Plan and Environmental Impact Statement in the form of a slide presentation.

And if we can go ahead and make arrangements to put the screen up here and run the

slide show?

(Whereupon, a slide presentation was made at this time.)

I believe this presentation gives you a pretty good idea of what we're here for this evening; to listen to your public comments and concerns regarding the management plan.

I want to again stress, as it said in the slide program, that no decisions have been made on a specific management action for the San Pedro to date.

Although the draft plan includes a preferred alternative, the final plan will consider your public comments this evening and further comments that we receive in writing during this comment period.

The final plan may include individual parts from any one of the alternatives that was presented in the slide program.

Our current schedule is to complete the final plan and Environmental Impact Statement in November of this year.

Bob, I'd like now to turn the meeting back over to you to continue the formal hearing part.

MR. ABBEY: Thanks, Ray.

Now for a few words about the procedure. This hearing is not a debate, a trial, or a question and answer situation. It is an advisory hearing, and all interested persons may present statements, either written or oral, or both.

There will be no cross examination from the audience. But if anyone fails to understand the statement of any speaker you may direct a clarifying question to me and I will determine its pertinence.

This may seem overly formal, but it is intended to give everyone a formal -- excuse me -- a fair and reasonable opportunity to present his or her views.

In light of the number of people that are here tonight and the limited time available, each speaker will be limited to ten minutes. If you cannot express all of your comments in that length of time, you may submit further comments in writing.

Any written statements submitted tonight will be included in full in the transcript and will be considered on the same basis as all oral comments.

You may also submit written comments until September 21st, 1988, and these will also be

considered fully prior to finalizing the plan. Written comments should be addressed to the District Manager, Bureau of Land Management, 425 East Fourth Street, Safford, Arizona. The zip code is 85546. Again, that address is 425 East Fourth Street, Safford, Arizona, 85546.

As I call you name I'd like for you to come up to the microphone so our court reporter can hear you better. You'll be standing right there (indicating). If you will, for the convenience of our court reporter, please spell your name -- your last name so that he can enter it properly into his notes.

And if you're also representing a group tonight please state such. I'd like you to keep in mind that this isn't an adversarial proceeding. The purpose is for all our benefits. The Bureau of Land Management needs your comments and we certainly welcome them.

So first -- the first name on my list is Joseph Dreyfuss.

MR. DREYFUSS: I'd like to thank the BLM for giving me this opportunity.

Gentlemen, I'd like to qualify myself. My name is Joe Dreyfuss, D-r-e-y-f-u-s-s. I am a fourth generation, born and raised in the State of

Arizona, and I was raised within the boundaries of the San Pedro Riparian area.

I studied range management at the University of Arizona, and did a research on the Boquillas ranch while in college. I also had two generations of my family work there and make some of the history of the area.

And believe me, I truly love the area. It offers so many opportunities, and I think just about everyone's different likes and dislikes can be mainly satisfied there.

I want to commend the Bureau of Land Management on their Environmental Impact Statement in part. It was very thorough in part. But there are some holes that are as big as the land itself.

Chapter three on the affected environment -- I would like some people, you people if you would, to tell me who wrote the paragraph under recreation; "Recreation has not been a recognized use

TU-1 of the San Pedro and the EIS are, primarily because the land was previously in private ownership. A small amount of hunting was selectively authorized by the owners."

I take grave issue with that, gentlemen. My family and I can probably get at least a

TU-1

thousand people who have had free-lance to come and go as they please to hunt the area under the regulations of the State of Arizona.

I don't necessarily need to hunt with a rifle or a bow. I would like to hunt also with a camera. But I want the right to choose. I want to be able to hunt those areas under regulated -- regulation by the State of Arizona.

In the research of the historical areas, I know of some archaeological spots that probably no one in this room knows of, and I know that the Bureau of Land Management don't know about, and it's doubtful if some people will find it due to the fact that I work in the area and was raised in the area.

I think these should be truly protected, I -- I think to an extreme, too. There is one major factor that the Bureau of Land Management did not put in the Environmental Impact Statement.

Okay. We have already impacted the area by taking the cattle out. Okay, granted. None of this was brought forward in your statement.

And I would like to know from the Bureau of Land Management about prescribed burning uses. We definitely need them, gentlemen, and I'm

Response TU-1. This statement was based on information obtained from Tenneco and relates to the time they owned the lands.

saying this as -- as somebody that was raised in the area.

Being you have pulled the cattle out of that area, you're going to have an overgrowth on the bottom. After two to three years you will reach critical mass, and when you do, and when it does ignite, no Forest Service truck, or Bureau of Land Management individual, and all the people in this room put together twice is going to stop it.

And there are areas on the river where this has happened, and it has killed the cottonwood and willow population. Gentlemen, I feel we definitely need a controlled burn probably every three years.

I would like to see some extension -- extensive work done on the northern boundary on the erosion caused by the Southern Pacific Railroad. Okay? And most of that can be researched out through area residents; some of them -- Marwood (phonetic) and Frank Miller that are now 80 years old and still active, working people.

There's also a great amount of information in the archives at the University of Arizona as per some of the problems in the past management of this area.

I am opposed to all terrain vehicles. There should be some limit to that access. I -- I truly believe that your preferred alternative is probably the best way to go. I think it serves everyone's purpose.

Gentlemen, there's one thing that I couldn't find, and it's -- it's from my lifestyle, and I know a bunch of native people. When I was a little boy, as did my grandfather and two or three other relatives, they were able to start at Land Station where I was raised, get on a horse and ride unrestricted to the border.

Okay. Times have changed. But I think that fifth generation sitting right over there should have the choice to be able to do that still. I believe that the area can withstand it with the right regulations. But I still they should have the choice to do so.

Also, I would like to know if the Bureau of Land Management -- I've lost my page number over here on the wildlife populations. Where did they come up with 450 mule deer and 750 javelina?

I-2

Can somebody justify that for me, or qualify it, please?

MR. ABBEY: That -- that can be

qualified after this hearing.

MR. DREYFUSS: Okay. Thank you.

Well, it is my opinion as a native, somebody who was raised in the area, whose father's property lies within the borders, that that is definitely, definitely not accurate. We have quite a few more animals than that. There are different species.

Also, when you people touched on endangered species that you would like to re-introduce, I would like to know which ones. I think the public needs to know which ones.

You do have neighbors and they do have livestock. Okay. But I do know that there are quite a few neighbors that have livestock that would like to see some of these endangered species brought back in.

And there is a large number of hunting individuals that would like to see the animals brought back in. But they still want the choice to hunt and move freely.

One thing that I will offer to the Bureau of Land Management and I don't believe there's too many neighbors in this group, I will donate 140 hours a year for the next five years of my own physical

I-3

Response TU-2. Unless an animal census is conducted we generally request herd size estimates from the Arizona Game and Fish Department, since their responsibilities include wildlife population management.

Response TU-3. Reintroductions are not unilaterally undertaken by the Bureau of Land Management. It is necessary to coordinate and cooperate with the U.S. Fish and Wildlife Service and the Arizona Game and Fish Department before any reintroductions can take place. Additional environmental evaluation is part of this process.

time -- physical labor -- if we can help do something about the control of erosion on the north end.

Thank you very much.

MR. ABBEY: Thank you, Mr. Dreyfuss.

The second name on my list is Mark Battaglia.

MR. BATTAGLIA: Battaglia.

Thank you, Mr. Brady. I have some remarks which I have in memorandum form, but I will summarize those to expedite this matter. And I have copies of those available for you and the other panel members. I don't have enough for all of the audience, but they will be presumably part of the record as well. And I'll give the court reporter a copy.

Gentlemen, I represent the City of Benson. And the city, as the nearest incorporated governmental unit on the northern boundary has some interest in what happens, and has reviewed the management plan, and has seen fit to make a few limited comments.

Basically we support the preferred alternative as the most desirable management plan. The area, Benson in particular, has been affected adversely over the past several years in an economic sense by the closing of several employers or reductions in force;

1 specifically the Johnson-Cyprus operation, the
2 generating station and general office, as well as the
3 largest single employer in the area, the Apache Powder
4 Company.
5 The City of Benson's interest in the
6 management plan is primarily from an economic
7 standpoint and the effect on the general economy of the
8 northern, surrounding areas.
9 And one of the notions that has come
10 to pass is the announcement of the Kartchner Cavern
11 State Park project is that this project ought to very
12 much compliment the state park project. Even if they
13 are two separate and distinct projects, and under two
14 separate and distinct managements, they are going to be
15 of interest to the same general population.
16 And for that reason the city would
17 like to see more consideration of facilities on the
18 north end of the project; specifically, a camp ground
4 19 area or camp ground related, or in the alternative or
20 in addition, we would like to suggest consideration of
21 a light rail train system which would originate
22 probably at the south boundary of the City of Benson,
23 and would utilize the existing Southern Pacific track
24 to convey people into and out of the project area.
25 The notion of the light rail system

Response TU-4. Development of the northern end of the EIS area is not being considered at this time due to several considerations, with access being the primary one. The Escalante Crossing road parallels the EIS area's northern boundary. This road can be accessed from the east on US Highway 80 and on the west from the Apache Powder Road. Only one usable road enters the EIS area from the Escalante Crossing Road. This road, paralleling the Southern Pacific Railroad, is on private land. Though open to public use for a distance of 1 mile south from the Escalante Crossing Road, this road is not under the Safford District's control and as such is not identified for public access to the EIS area. Other concerns about development of the northern end relate to fragile soils, the St. David Cienega area, the El Paso Natural Gas Company pipeline, the lower quality of the riparian vegetation, the railroad tracks, the lack of roads and the privatelyowned lands.

We do believe, however, that the Benson/St. David area will gain economic benefits from their proximity to the EIS area. These two communities will function as a gateway to the entire upper San Pedro Valley. Many of the tourists visiting the San Pedro will still come through these communities and utilize their tourism oriented facilities.

has some advantages, I think, from the management standpoint in that it would permit you to legitimately preclude or prohibit private vehicles, at least in that end of the project, or perhaps in the whole project. It would allow you to control entry by making available a mode of transportation which would not damage the ecosystem in any significant manner at least compared to people driving four wheeled vehicles or other automotive vehicles even though they're only going to be operated on designated roads.

You and I both know that that's a little bit harder to accomplish than just putting up signs. And if the vehicles weren't there though you would not have that particular problem.

Another advantage would be that it would open the project to probably more people. Particularly it would open it to people who were handicapped, the elderly people, or people who are very young, or who would not otherwise be able to, for instance, walk into the project or ride horseback into the the project.

If they could be transported into the project on a light rail system somewhat similar, for instance, to that in use at the San Diego Wild Animal Park, they would be able to view these resources, and

they would have, hopefully, an opportunity to -- to get off of the train in various areas or in any area perhaps.

TU-5 But we would urge you to consider that and to consider that the train scheme would have the advantage of being virtually non-polluting as compared to -- to automotive vehicles.

It would be substantially less polluting than people otherwise entering the project for the simple reason that they would tend to stay in proximity of the -- of the railroad rather than going about on the roads that -- that would be pretty much at random.

Another pollution that would be reduced would be noise pollution and so I -- and the advantage from the City of Benson's standpoint would be back to what I said initially; it would have favorable economic impact which I think is a legitimate consideration of any environmental impact statement to the same degree as some of the things that are more generally concentrated on.

And with that I would conclude my remarks. Thank you.

MR. ABBEY: Thank you, Mr. Battaglia.

The next person on our list is Al

Response TU-5. See General Response 8.

Kreutz.

MR. KREUTZ: My name is Al Kreutz. I'm an avid hunter, fisher, and conservationist in the State of Arizona. I'm the conservation chairman for the Tucson Rod and Gun Club and past President of that club, which is the largest club of any type in Arizona that has to do with hunting, and fishing, and conservation in the United States, as an individual city-owned club.

I am also one of four sportsmen from the State of Arizona that is appointed to the Arizona Access Committee which is made up of cattlemen, sheep growers, bull growers, and sportsmen for Access, for bird watching, hunting, fishing, and other outdoor recreation.

I think the BLM did a very good job with their EIS study. I'd like to say that 95 percent of our riparian habitat in Arizona in the last hundred years we've lost. And we've got to take care to preserve what we've got left.

Our club could sponsor the preferred plan, but we would like to go on record as supporting plan C as our first choice.

Like one of the other people that talked earlier before me, as a hunter and a firearm

safety instructor teaching our children to preserve things for the future, I really don't have too much objections against some limited access.

I am strictly against ATC vehicles on it. That is the biggest problem on our state for causing erosion and other problems.

A good hunter, we tell our children, hunts anywhere from a mile to a mile and a half from camp. So with this having access on the sides -- and I was one of the fortunate few I think as the man talked to earlier that have had the right to hunt down there for the last 15 years or more on the land grant because I knew somebody and had a friend there.

And I'd like to see this hunting left open for the public in the permanent plan.

I think we've got to worry about our -- our water quality in it which is going to keep our riparian habitat in good shape. And I think alls we can do about that is pray and hope that Mexico don't dump any more real bad chemicals and stuff in the water that it comes clear down to Benson, real, real red.

That's about all I have to say.

MR. ABBEY: Thank you.

Douglas Morse?

MR. MORSE: That's Morse; M-o-r-s-e.

I want to congratulate the BLM on their choice of the San Pedro site as a preservation area. I think it's a good choice.

These are some of my concerns as just a person who likes to enjoy and recreate on the public lands.

Under the category of firearms, I'd like to see that hunting and shooting not be allowed in the BLM EIS area. I think the reason for this is that it's a very narrow strip of land. In order to achieve the one and a half miles or one mile distant from adjacent private for state owned land and roads, it would be very difficult. People would be shooting in a very narrow corridor.

So I think generally it's probably too narrow an area for much the same reasons that the wilderness area was not considered.

Also there's plenty of hunting and shooting available in nearby state and Federal lands, particularly up in the Huachuca Mountains, the Dragoon Mountains, and the Coronado National Forest.

I think that also it's been my experience that hunters are generally some of the worst abusers of public lands in many ways not related to hunting.

On the subject of off-road vehicle use, I think that limiting driving to established roads in the preferred alternative is probably the best compromise in that area. I'd like to see aggressive prosecution of off-road vehicles vehicle violations. And I just don't believe that off-road vehicle activities is suitable use for public lands in general.

In the area of mineral exploitation, I'm glad to see that there will be no mineral extraction done. But I would also like to recommend that -- that there be no sand and gravel extraction in the area as well.

The reason for this is that first of all sand and gravel is available at other locations near Sierra Vista. I know there's one near Whetstone. And in addition to this, wash and riverbeds scouring is often the result of such operations. And the EIS makes clear that the losses of Cienaga and other wetlands in the area has been due to past incising of the riverbed in this area.

I would -- I would encourage the use of prescribed burn in the area because -- because the cattle grazing is not there, and fire is a naturally constructive tool in the management of range.

In the area of camp grounds, I would

not support a -- a large RV type campground as I would feel that this would have a heavy effect on the water supply and the quality within the riparian zone. More primitive, dry campgrounds would probably be more suitable.

Also the ability to obtain permits to do backpacking in the area, and the restrictions that you must pack in water, and that no fires are used for cooking.

As far as the tourist train goes, I can see one maybe from Tombstone to Charleston, but I feel that a train along the river would be rather noisy for most people enjoying the area.

And I think that the general abandonment of the right-of-way, if that's what Phelps Dodge so chooses, the conversion to equestrian trails is probably a very good use for this area.

That concludes my statements. Thank you.

MR. ABBEY: Thank you.

I have a name here that was handed me by someone who wishes to speak. I'm going to miss this one because I really can't read the handwriting. It's R. McCurty or --

MR. McQUADE: Yeah.

MR. ABBEY: All right.

MR. McQUADE: It's M-c-Q-u-a-d-e.

In 1935 I -- I spent about a month at that road that heads south to elk hunt, and runs east and west from Sonoita over to Fort Huachuca. And that's my only claim to fame about knowing that area.

I remember at that time Fairbank was a thriving community. We used to go to the movies there. That was about '35.

Well, I'm a minor historical buff of human -- human history, not animal, or mammoths, or that stuff. And I -- I have been entranced by the fact that the San Pedro was the entry point for European civilization to get into the U.S., you know. And they came up the San Pedro.

And I -- I've been reading on that for years. I've picked up a lot of old maps. I'm always disappointed in your maps in that you never extend the San Pedro on into Mexico. I think it probably only goes 25 miles further into Mexico, and it would be sort of helpful to see that on the maps.

Here's an old map. You can't even -- from, you know, about the 1300's. No, it had to be the 1500's because they do show the United States.

I don't know. I would just like to

say that I have had a -- my ambition has been for years to travel up the San Pedro from the Mexican border up to the Gila. They think that that's the way Coronado went although a lot of people think at Tres Alamos he cut northeast and -- and intercepted the Gila, not where it intersects with the San Pedro.

There are a few people that think that Coronado and some of those really early timers were in reality going up the Santa Cruz rather than the San Pedro.

I -- I've clipped out everything that's ever been written that I've ever seen in our local newspapers.

Kino's historical memoirs of Premira Alta recounts his trips up the San Pedro when there were a lot of indian villages there. And I think it's real important that those things be protected from the type of people that might want to dig in those things.

I'm sure everybody knows that's there's been four or five names -- I'm looking for them now.

The Gila, by Carl, he had some good background on the San Pedro. Simon Romo (phonetic) had horses stolen by Apaches. Evidence of 11,000 year old community on the path to Huachuca. Bolton's Spanish

Exploration Of The Southwest.

I would hope I could find these other names for the San Pedro 'cause -- well, I'm sure that some of your historical people have already passed them on to you.

Old Camp Grant was located from 1865 to December of 1872 at the intersection of the Arivapi (phonetic) Creek and the San Pedro River. It held other names; Fort Arivapi, Fort Breckenridge, Camps Stanford, and again Breckenridge. In 1865 it was named Camp Grant. That's of course where the Camp Grant massacre took place in probably about the 1870's as I recall.

Reddington originally was about six miles south of the present location on the San Pedro. It was established there in 1872.

Charleston on the San Pedro was west of Tombstone. It had a post office from '79 to '88.

I mean this is old stuff.

Tres Alamos -- well, I'm still -- before I use up my ten minutes I'm hoping to read those other names to you. And I'm doing this just to let the Bureau of Land Management know that there maybe other people like me that are really interested in the historical significance of the San Pedro.

And I would say what -- what reading I've done of the impact statement or whatever it's called, that I -- that I like that final alternative at this point in my study of what you have written down.

I -- I certainly would be sympathetic with these old timers. The people five generations old in that area should have a lot to say about what happens.

Unknown Arizona And Sonora, by Mange' (phonetic) translated by Kerns (phonetic). The San Pedro River -- the town of Santa Cruz. They departed the Santa Cruz River over to the San Pedro River and north to Quiberri (phonetic), then ten leagues north to Los Alamos with large trees. And then north several villages to Ari -- Ari -- they spelled it different, but it was Arivapi Canyon.

Well, I've got another minute or so. I hope somebody's keeping time. I'm -- I'm going to go my ten minutes hoping to find those other names.

Does anybody else know the other names for the San Pedro? There's about three or four alternative names that it has gone by over the years.

Okay. Ground water removal threatens San Pedro. Here's a -- I'm sure you've all seen this. Here's the geological survey map that does trace the

Pedro down further into -- I know you've got thousands of these -- into Mexico. No. Come to think of it, it doesn't. It cuts off right at the Mexican Border.

That's why I'm rather frustrated. I've been meaning to get aeronautical charts. I'm a World War Two pilot, and I'm sure they would show the river going on down.

Here's another little map. Friars, Soldiers, and Reformers by John L. Kissel (phonetic), Simbrano (phonetic) family, page 219 -- Vincente' Simbrano (phonetic). He enlisted in the Mexican Army in December of 1813 at Tubac.

You know, those are the miscellaneous facts that historical buffs get a kick out of.

Here's an article: Coin found in Florida from the 16th century. This was July of '87. An inch wide coin minted in Spain between 1504 and 1517.

You know, I just know -- well, I don't know, but I suspect that some of those four generation people have found some interesting things down that San Pedro River. I mean that's where the Spaniards entered the United States.

Sue Udall (phonetic) has written about the San Pedro several times, and he and others

feel that, you know, eventually we will find -- nobody has really found any of the sites where they think Coronado camped.

Well, I'm going to give up. I thought I might stumble on it, but I haven't.

But there were several very clever names, four at least. If I find them some day, which I will, I'll write you a memo with the names.

Thank you.

MR. ABBEY: Thank you.

MR. McQUADE: I wonder, could I put this back here and look at it (indicating to map) and lean it against that table so that the back half of the group can see it also?

MR. ABBEY: That would be fine.

MR. BRADY: As long as you don't walk out the door with it.

MR. ABBEY: That concludes all the names on my list of people that indicated a desire to testify. But I'm sure with this many people here there's somebody that would like to testify.

So if you -- if there is anyone sitting down that would like to come up and offer a statement, please raise your hand and I'll get you up here.

MR. HAYHURST: I have a question.

My name is Mike Hayhurst. I notice on your map here you've got a darkened-in area to the west, and a widened area to the east, and it doesn't appear on the map in here. Could you explain that please?

MR. ABBEY: Mike, again, I -- we will have the BLM employees that will be here right after this hearing. And that would be the proper time to get with you and talk to you about the map. So that would be the best time.

Is there anybody that would like make a statement?

Boy, that was quick.

Okay. If not --

MR. GRISWOLD: I'm sorry, I have one.

My name is George Griswold, G-r-i-s-w-o-l-d.

MR. ABBEY: Would you like to come up to the podium?

MR. GRISWOLD: Well, I just -- it's -- it's just -- I'm just curious. This is my first opportunity to look at your report. Of course I only heard about this -- read about it in last night's paper.

And you keep talking about the water quality and all that kind of stuff. But there are a bunch of streams that go into the San Pedro, or San Pete, or whatever you want to call it.

And what's going to happen to those? I mean have you -- have you got some ideas for those? What happens if -- the use of the water upstream from those things is already being used by people; by ranchers and stuff. Have you got your designs on those? That's what I'm concerned about.

I, you know, I'm interested in ownership of certain ranch areas in the area, and we're being watered by certain streams in there.

And -- are you going to extend this out so that -- or is this all you're going to do for the next 20 years on this deal? Or are you going to start moving out to the left and right of that; do you know, or do you have any plans to be on this?

MR. ABBEY: Ray, what I'd like to do is -- I'm -- I'm -- I'll accept that question, and I'll turn it over to you to -- to kind of give, again, a statement of what all this plan represents.

MR. GRISWOLD: That would be great.

MR. BRADY: This San Pedro River Riparian Management Plan addresses those lands that are

under current BLM administration.

The majority of these lands were acquired in 1986 through a land exchange -- a private land exchange, and -- where the Bureau of Land Management acquired the -- the major two land grants along the San Pedro River.

We have picked up a few additional acres of other private lands along the main stem of the San Pedro.

But we do not have any current plans, and the management plan does not propose any plans to acquire any other lands beyond that river corridor area.

MR. GRISWOLD: So whatever's indicated -- what's indicated on the map is what you're going to do. There's not anything beyond that?

MR. BRADY: Yes, the boundaries as depicted on the map are those lands that are included in this management plan right now.

MR. GRISWOLD: We hope -- that map, or we don't know which map? When the other people come it will be this map probably; right?

MR. BRADY: The map that you refer to in the front of the room here is a map that shows several options for the Congressional Legislation

that's before Congress right now on designating the area as the San Pedro Riparian National Conservation Area.

And that legislation is currently pending in Congress, and has not been passed yet. But that map with several different lines on it shows some different options for designation.

MR. GRISWOLD: Well, I guess I'm still -- what I'm trying to find out is: Is there a map available in the report or somewhere that we can get says this is the boundary of this Environmental Impact Statement, and this is what we're going to do, and this is what we're trying to do now, and we're not going to spread our tentacles out this way or that way.

In other words, can we define that here, now, tonight, either after this formal meeting or something?

MR. BRADY: Yes. That map is at the -- is the last insert in the management plan. There's a map right at the back.

MR. GRISWOLD: In here?

MR. BRADY: Yes. And the exterior boundaries of that map represent the exterior boundaries of our management area.

MR. GRISWOLD: Oh, all right.

MR. ABBEY: Thanks, Ray.

MR. McQUADE: I found those other names for you.

MR. ABBEY: If you will hold on to those until after the hearing and we'll -- we'll jot them down; okay?

MR. McQUADE: Okay.

MR. ABBEY: Thank you.

Is there anybody else who would like to make a statement?

MR. KREUTZ: I'm Al Kreutz again.

One thing that I did forget to say, as a conservation club, two years ago when we met at the Smuggler's Inn, I volunteered my time and the club's time for conservation projects for your project.

Nobody's ever called me to ask for any help. I do want to go on record as volunteering our help for conservation again.

Thank you.

MR. ABBEY: Thank you, Al.

I guarantee you, if you don't hear from anybody in Safford, I'll call you from Yuma.

Anyone else?

If not I'd like to announce that there will be another hearing tomorrow night at the

Ramada Inn in Sierra Vista.

There being no other people wishing to testify, I hereby close this hearing.

Anyone wishing to ask questions of the BLM staff that's here tonight, feel free to do so at this time.

(Whereupon, this hearing concluded at approximately 7:58 p.m.)

C E R T I F I C A T E

I, do hereby certify that as Court Reporter in the County of Pima, State of Arizona, I was present at the hearing of the foregoing entitled case; that while there, I took down in shorthand, all the oral testimony adduced and/or proceedings had; that I have transcribed such shorthand into typewriting; and that the foregoing typewritten matter contains a full, true, and correct transcript of my shorthand notes as taken by me aforesaid.

William D. Hole

WILLIAM D. HOLE,
COURT REPORTER

UNITED STATES DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
SAFFORD DISTRICT
SAFFORD, ARIZONA

HEARING ON THE SAN PEDRO RIVER RIPARIAN
MANAGEMENT PLAN AND
ENVIRONMENTAL IMPACT STATEMENT

AUGUST 4, 1988
RAMADA INN
HIGHWAY 92 SOUTH
SIERRA VISTA, ARIZONA

ORIGINAL

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P R O C E E D I N G S

MR. ABBEY: Ladies and gentlemen, this public hearing will now come to order.

My name is Robert Abbey. I'm the Acting District Manager for the Bureau of Land Management's Yuma District, and I'll be tonight's hearing officer.

This hearing is being conducted under the authority of the Federal Land Policy and Management Act, and in accordance with established BLM procedures.

Most of you have signed the attendance sheet as you came into the room. Is there anybody that hasn't done so? Please raise your hand.

If you'll keep those hands up we'll get somebody to bring an attendance sheet to you so you can sign.

While we're doing that I'd like to say that if you plan to make a statement be sure to check the appropriate space on the attendance sheet so that we can add your name to the list of speakers.

The official reporter tonight seated to my left is Bill Hole. He will prepare a verbatim transcript of everything that is said in this hearing.

If you wish to obtain a copy of this

transcript you need to make your own arrangements with the reporter after tonight's meeting.

This public hearing is being held to obtain comments on the draft San Pedro River Riparian Management Plan and Environmental Impact Statement prepared by the BLM's Safford District Office.

The purpose of this hearing centers on two issues: First, are the proposed actions as addressed in the draft plan suitable and in the public's best interest; second, is the draft Environmental Impact Statement adequate?

Your comments and suggestions on either aspect will be appreciated.

Again, if you will raise your hands if you haven't signed in, we have some lists going around so --

I'd like to introduce Ray Brady, Safford District Manager who will give us -- well, first of all, he'll introduce members of his staff that are here tonight, and then give us a brief overview of the planning area.

So, Ray?

MR. BRADY: Thank you, Bob.

I would first like to introduce Lyn Saline on my far left. Lyn is the San Simon Resource

Area Manager for this resource area that includes the San Pedro Project.

On my immediate left is Erick Campbell. Erick is the Project Manager for the San Pedro Office located at Fairbank, Arizona.

We have several other BLM representatives here this evening, and I won't go around and introduce all those individuals. But we will be here after the hearing this evening to answer any questions that you may have regarding the San Pedro Project.

Public notice of the hearing this evening in Sierra Vista -- we also had a hearing in Tucson last night -- public notice was advertised in the local media. It was also advertised in the Federal Register Notice dated June 16th, 1988.

We would first this evening like to present to you an overview of the draft San Pedro Plan. And this overview will be in the format of a slide program that we have, and it takes about five minutes. And then we will get back into the formal hearing process.

(Whereupon, a slide program was presented at this time.)

MR. BRADY: I believe this short presentation provides you a general idea of why we're here this evening. And I hope that most of you had an opportunity to -- to read the draft plan in more detail that was distributed prior to this meeting this evening.

I want to again stress that no decisions have been made to date on the specific actions proposed for the San Pedro Project area. The draft plan does include a preferred alternative, but the final plan will consider your public comments that we receive, both orally here this evening and in writing up to the closing date of September 22nd.

The final plan may include individual parts from any one of the alternatives.

Our current schedule right now is to complete the final Environmental Impact Statement and Management Plan in November of this year. And all of your comments will be considered and incorporated into that final plan.

Before turning the hearing back over to Bob, I wanted to express my deep appreciation for the large turn out this evening. I think this turn out reflects the broad interests of the local community in

our plans for the San Pedro. I think this is the largest gathering that the Bureau of Land Management has ever had in any hearing that we have ever had here in Arizona. And so I think it reflects well upon the community of Sierra Vista and your broad resource interests in the San Pedro River. So thank you.

Bob, I'll turn the hearing back over to you.

MR. ABBEY: Thank you, Ray.

If I start acting a little -- a little strange -- if I start acting a little strange tonight it's because I'm being shocked by all these wires I'm sitting on top of.

Now I'd like to give a few words about tonight's procedure. This hearing is not a debate, a trial, or even a question and answer session. It is an advisory hearing, and all interested persons may make statements, either oral, or written, or both.

There will be no cross examinations from the audience. But if anyone fails to understand the statements of the speaker, you may direct a clarifying question to me, and I will determine its relevance.

This may seem overly formal, but it is intended to give everyone a fair and equitable

opportunity to present his or her views.

In light of the number of people who wish to speak tonight and the limited time available, each speaker will be limited to seven minutes. If you cannot express all of your comments in that length of time you may also submit further comments in writing.

And written statements submitted here will be included in full in the transcript and it will be considered on the same basis as the oral comments.

You may also submit additional written comments up until September 21st, 1988, and these will also be considered fully prior to finalizing the plan. Written comments should be addressed to the District Manager, Bureau of Land Management, 425 East 4th Street, Safford, Arizona, zip code 85546. Again that address is 425 East 4th Street, Safford, Arizona, 85546.

As I call your name tonight I'd like for you to come up to the podium so that our court reporter can hear you better. For his convenience as well, I'd like for you to spell your last name. And should you be representing any group tonight, I'd like for you to indicate for the record.

Again, I'd like to remind you that this isn't an adversarial proceeding. The purpose is

for all our benefit. The Bureau of Land Management certainly needs your comments and they are most welcome.

The first person who has indicated the desire to give testimony tonight is Grady D. Cook.

MR. COOK: Last name is C-double-oh-k.

I'm here representing myself. And I like to hike, I like to hunt, picnic, and enjoy the outdoors completely.

I would like to see a solution that will allow people to enjoy the picnicking, hiking, enjoy all that, and also have a limited type of hunting in the area.

The type hunting that I tend to support would be archery and muzzle loader for the large game that would be in the area, and shotgun for the small game.

Thank you.

MR. ABBEY: Thank you, Mr. Cook.

The second person is Grady C. Cook.

MR. G. C. COOK: Pass.

MR. ABBEY: Okay, he passes.

James R. Brown?

MR. BROWN: Okay. That's B-r-o-w-n,

just like the color.

I am not here representing an organization. I am representing the land and the creatures along the San Pedro for they have no voice, and someone has to be their voice. And I'm sure there are a lot more of you out there who would like to be their voice.

I'm very lucky. I live off Escacillo (phonetic) Road which is a private area. And so I get to enjoy the San Pedro and its inhabitants every day of the week. In fact, every evening before sunset, I like to take a walk down a particular wash.

And to give you a list of the wildlife I have seen, it's just endless; skunks the other night, a bobcat, a mother bobcat and its kitten, and of course the deer and the javelina.

So in view of the wildlife that can be seen, I ask why should there be a hunting alternative? Each one of those wild creatures can be an inspiration to every person who sees it. While each hunter gets his enjoyment, that creature is gone; it's lost its life. That's it.

Now is that a disruptive influence? Is that disruptive use? I say it's a destructive use of the wildlife and the resources.

I kind of see this whole thing coming down to two elements: We have the appreciative element, and that's the backpackers, the hikers, the photographers, and those of us who like to go out and just enjoy it and see it; and what I call the destructive, exploitive element. And I think we know what that's all about; those who want to take.

I have an equation there that I just jotted down. An increase in people input equals an increase in destructive output.

Now there's going to be some deterioration of that habitat with any intrusion, any influx of people. But isn't the point to keep this down to a minimum? This -- isn't the whole object some preservation?

If we can strike a balance between the preservation alternative and the non-action, I would think that that would be the most desirable way to go with this.

I think it also comes down to the fact that we're looking at a concept or concepts of multiple use and management which are the religious catchwords of the Federal Agencies who sometimes justify their own existence with them.

And I think these are times akin to

handing these organizations who have the power of life and death over the wilderness, a loaded gun, handful of dynamite, whatever, and given a free ride on an off-road vehicle through our public lands.

Here's a late edition: If one wants to enjoy developments, one can take a walk in one's own subdivision. If one wants to enjoy nature, then nature should be left alone so one can enjoy its true beauty and natural state.

I -- that's all I have.

MR. ABBEY: Thank you.

Arthur Trujillo?

MR. TRUJILLO: Trujillo, T-r-u-j-i-l-l-o.

I'm not representing any one group right now. I'm representing myself.

I have been a native --

1ST VOICE: I can't hear.

2ND VOICE: Can we get some microphones, please?

3RD VOICE: Speak up.

MR. TRUJILLO: Okay. I'm representing myself.

VOICE: It's not on.

MR. TRUJILLO: Okay. I'm just

representing myself.

I have been a resident of Sierra Vista for a long time -- for almost 30 years. I have enjoyed the area immensely due to all the outdoor activities which we have here in this community.

We have, you know, the mountain range of 9,000 feet down to the desert scrublands. And I just believe that the land is for everybody to use whether you're a -- a birdwatcher, a hunter, or a hiker. And to limit the use of this land, which basically belongs to all of us, to certain individuals, I just believe that that's wrong.

And that's about all I have to say.

MR. ABBEY: Thank you.

We're playing Russian Roulette with the microphones tonight.

The next person that indicated the desire to speak is John Behrens.

MR. BEHRENS: That's B-e-h-r-e-n-s.

And I'm here representing the Douglas Rifle and Pistol Club in Douglas, Arizona, Cochise County.

We have a hundred and sixty members that enjoy the outdoors. We hunt, we fish, we hike, we camp. Anything that can be done in the outdoors, we do

it.

And we're here -- there's just a couple of us here -- and we're here to -- we really want to have hunting allowed in this area. Well, we -- people say that hunters endanger numerous wild species, and that campers and hikers somehow upset the balance of nature. But that's just absurd. It's not true.

The greatest enemies of wildlife are really development and pollution. And as long as you keep pollution and bulldozers out of this area it will be here for millions of years. It's as simple as that.

And hunting is our oldest sporting activity. You have these archaeological digs; the caveman, the early man was here hunting the woolly mammoth.

I'm a hunter education teacher, and we teach the youth to respect and to enjoy the outdoors. But we have people here today that don't want people in the outdoors. There are fanatical groups out there that try to push us off the land, to keep us out of the outdoors.

But our tax dollars are establishing these outdoor recreation areas and maintaining them. So public lands are just that; they're meant for the public. And we hope that this area could be

established for everyone; for the hunters, for the picnickers, the campers, the hikers, backpackers, the birdwatchers, everyone.

Thank you.

MR. ABBEY: Thank you.

Cliff Brooks?

MR. BROOKS: That's Brooks, B-r-o-o-k-s.

I'm also here in the delegation from the Douglas Rifle and Pistol Club, and would like to add only this to what John has already said: When a hunter is in the field, any one hunter may only be there a couple of days. And the seasons for the big game are only open like 13 days in this particular area.

And under the management of the Game and Fish Commission, it is easily proven that well managed game areas, the game flourish rather than being predated or lost to natural causes from overgrazing or whatever else may be the situation.

It seems to us that our real interest is in conservation of the beauties of nature, not in destruction. It's easily reckoned that someone walking down a trail every day of the week will tear up more of the landscape than someone who comes very carefully

into and area, not intending to disturb it but to harvest part of the wildlife there, would make less of an impact.

I think this needs to be considered.

Thank you.

MR. ABBEY: Randy Breeland (phonetic)?

Randy, if you will, you have to almost get right on top of that thing to make people hear you.

MR. BREELAND: I can talk loud enough if I'm over to the side of it here. You have more control of it I think.

Well, I appreciate the opportunity of being here this evening and being able to speak my piece in this public forum.

I am a professional wildlife biologist. I have been here in the Sierra Vista area for 13 years. But tonight I'm speaking as a representative of the Huachuca Trophy Whitetail Club, and also as Vice President of the Arizona Bow Hunters and Field Archery Association.

So I can kind of look at both sides of the track objectively. We have a lot of non-game management on Fort Huachuca as well as hunting

programs. We have found that these are not in any way incompatible with each other with a modest amount of coordination and cooperation.

In Garden Canyon alone we have approximately 8,000 birdwatchers a year. They're not restricted out of the area during the hunting seasons. We have never had one incident where a hunter has harassed the non-hunting public.

In the 13 years I have lived in Arizona a member of the non-hunting has never been killed by a hunter. Arizona has one of the safest hunting records in the United States. So I don't think the hazard to the non-hunting public can be used as a valid argument.

I think that there's room for all types of outdoor recreational activities in the San Pedro area. Now granted, this is a very fragile area. Certain controls, I think, are necessary particularly in off-road vehicle use.

You're in a flood plain. You're in a situation where off-road vehicle use could cause severe erosion. And I would certainly support keeping three wheelers, and motorbikes, and four wheel drives just on the main roadways.

The hunting season usually begins at

about the end of August and closes in the early spring with the end of the javelina season. I would have no problem, in fact, I would encourage keeping firearms and hunting out of the area throughout the spring and summer time which is kind of the peak of the -- of the birdwatching season.

In terms of what types of hunting should be allowed in there, I feel that all legal game seasons should be supported. Again, this is not incompatible with sound wildlife management.

Fort Huachuca has approximately 50 to 60 percent hunter success for deer hunting each year, and yet we have the healthiest, most thriving population of whitetail deer probably in the world, at least speaking in terms of the Sonoran whitetail deer. And this is because of the -- this sound wildlife management practices that we have there.

And by harvesting these animals we only harvest off the -- the harvestable surplus, if you will. It keeps the animals within the carrying capacity of the habitat.

Now this argument, of course, cannot be used in every case where hunting is involved. But I feel it is my right as an American to be able to hunt. My family hunts and we enjoy the meat. We eat venison

at our house and, in fact, my children prefer it to beef.

I resent any implications that sometimes we see in the paper when people write in editorials that portray hunters as a -- as a bunch of ignorant slobs.

This is certainly not true. You can find ignorant slobs in any fraternity that you want to address out there. I can assure you of that because we deal with the public a lot on Fort Huachuca.

Unfortunately, in today's day and age, because of land developments, because of man's progress, this is the -- the most significant problem for wildlife in the world today is the loss of habitat due to development. I think pollution has already been mentioned.

And unfortunately, there are those people out there that think that you can just let nature take care of itself. This does not work.

Now granted, it's man's fault, but it's not the hunter's fault, it's not your fault, it's not my fault. It's due to the progress of man that we force wildlife to survive in smaller and smaller areas.

So I think that management is necessary. This is a basic premise as stated in the

preamble right in this document of the Bureau plan management.

Management is based upon the principles of multiple use and sustained yields. And hunting is not incompatible with this idea.

I want to allay any fears or doubts that you may have that the San Pedro would become an armed camp because this is certainly not the case, although some people feel that this would be true.

Hunting is kind of a self limiting thing. Hunters don't want to go around a campground and hunt. Hunters such as myself like to get out in a remote area.

And we do enjoy nature. I'm a birdwatcher. I made a trip to Africa and I kept a diary of every bird that I saw in Africa. And I got a great thrill there. I didn't go to Africa to hunt. I went to appreciate the wildlife.

So to say that all hunters are out there just to destroy and take is certainly not true. In fact, those types of people are in the minority, and you will find that hunters police their ranks probably better than any group that you ever saw.

The Arizona Game and Fish Department would make almost no arrests or no cases if it were not

for hunters turning in the slobs in their fraternity.

So I would urge the Bureau of Land Management to please consider all forms of hunting in the San Pedro Management Area.

Thank you.

MR. ABBEY: Cathy Fish?

MS. FISH: F-i-s-h.

I'd like to start off by thanking the BLM.

And I would like to say that when I first found out what you're doing there I was a little amazed because I really thought you guys just cared about cows.

And I think that it's real refreshing that BLM has come in and taken responsibility for this area. I very much supported the land acquisition, the conservation, and all that.

And I have read -- I don't know about anybody else, but I read your EIS, and just as a citizen, I find it very hard to read. I just wanted to mention that. It's very complicated.

Two of the things that touched me was that you said that wildlife would be afforded protection, and secondly you would reduce consumption - - consumptive use of the resources.

Well, something that has come to my attention recently is that 90 percent of the riparian area -- in other words, the environment around rivers in Arizona have become over the years, public and developed which means that only 10 percent of the riparian area in Arizona is undeveloped. Out of that about one percent is public land.

Now I come from a family of hunters, and I'm sure most people here do because our history in this country is hunting, and I think we shouldn't forget that.

I am not one that believes that hunters are slobs. In my family we teach the children very careful safety control. We learn all the rules. In fact, I agree with the last speaker that, in fact, hunters are very -- they're self policing. I don't have an issue with that at all.

We live in a free country and, I don't know about you, but I've noticed we've been losing a lot of our rights. And that bugs me.

My issue here is appropriateness. Does anyone that owns an ATV have the right to three wheel it down that river? Does anyone that owns a gun have the right to shoot a gun on that river?

Now I know that brings peoples'

hackles up because it sounds like I'm against hunting, and I want to make clear that I am against hunting on the river because of appropriateness of position.

I believe that there is lots of land in Arizona for hunters, lots of land, including BLM land, National Forest land, and the wilderness areas. They're all open for hunting.

My family is not suffering from not having enough places to hunt. And I can't imagine that yours is. My family is not starving from not enough venison because there's not enough places to hunt.

But what my family is starving for is a place to go in a riparian area where we can be quiet and be assured that the animals feel comfortable being there.

Now a riparian area is a very sacred area to me in the sense that water's there. And there's not a lot of water -- running water -- in Arizona. So to me it would only make sense that we would have special feelings towards an area like this.

Now there are three things I want to hit here: One is that the San Pedro is a very narrow area. It's not like Fort Huachuca, or the National Forest, or BLM where there's expansive areas of land where animals -- where it's really a fair fight with an

animal.

Secondly, the San Pedro is badly overgrazed. I don't know if you have gone and looked at it, but it's badly overgrazed. And its carrying capacity right now is very, very low. So I believe that what needs to happen to the San Pedro is it needs to be brought back to some kind of carrying capacity where the natural animals that have always lived here can repair themselves and come back to the normal capacity that it should be there.

Now, as far -- I love to talk about rights, you know. And if people were really uptight about their rights, there's enough rights for us to talk about; income tax, and all the rest of those. But I know the hunting issue we all get fired up about.

If we want to talk about rights, and there should be a right for everyone on this river. I want to just mention a letter that I read to the editor of the Arizona Highways magazine where they were just talking about some of the damage that's been done by off-roaders.

And, you know, I have to admit that my husband rides motorcycles off-road, and we're sensitive to the issues too.

This guy said that he, for

entertainment, drives a tractor through the forest knocking down trees. And by golly, he has the right to do that. He's an American citizen, he fought in Viet Nam, and all that. It's like, okay. I'm only asking for appropriateness; that we look at it in terms of appropriateness.

So my position is, with the questions that you asked initially -- I feel that the trails should be opened to hikers, bikes, and horses. I favor no action and the preservation combination of those two plans.

I'm a little afraid that the Bureau of Land Management might be looked upon from upper echelons and Federal agencies as being successful the more people that come and the more activities that happen there. And I'm not so sure that in this particular area that that is the most appropriate way to measure the use of this land.

So you asked two questions. No, I believe -- you said was this in the public's best interest -- I'm paraphrasing it. I believe not because we're not protecting the land and the wildlife's best interests.

And, secondly, I didn't quite catch the wording of the second one, but I feel that they

need to be re-done so that there's a combination of no action preservation.

I don't know how many people are aware of how many riparian habitats are being lost. And people who like to be in riparian habitats that are unmolested have a right to find that place somewhere in Arizona. And as far as I'm concerned, it's my honest belief, and I would personally like to talk to any of my fellow hunters who think I'm wrong, there's plenty of places to hunt in Arizona today.

Thank you.

MR. LEHNER: May I ask a question of the speaker, please, sir?

MR. ABBEY: You can ask me the question, yes.

MR. LEHNER: When she referred --

MR. ABBEY: Excuse me. Could you state your name please?

MR. LEHNER: Ed Lehner, L-e-h-n-e-r.

When she referred to bikes, is she talking about motorbikes, or --

MS. FISH: Bicycles.

MR. ABBEY: Just bicycles.

MR. LEHNER: Thank you.

MR. ABBEY: Karen Riggs (phonetic)?

MS. RIGGS: I'm Karen Riggs. I'm the conservation chairperson for the Huachuca Audubon Society.

First of all I'd like to thank the BLM for holding this meeting tonight and inviting us all here, and for drafting this management plan which I found to be very well done.

Huachuca Audubon, after reviewing all the designated alternatives is choosing to go with the preferred alternative with the following modifications: We would like to encourage continued pursuit of instream flow appropriations.

S.V.-1 We would like to request that no ORV's, off-road vehicles, be allowed within the riparian area at all because it is so fragile, and I don't believe that the method to monitor and police this will be available.

If people choose to leave the designated roadways in the off-road vehicles, I don't believe that it will be possible to police them, and monitor them, and keep them off. Therefore, if we cannot do this we should keep them out. Because if they start going off of these designated roadways, the riparian area will be in jeopardy.

Also, from a public safety point of

Response SV-1. Off-road use by any type of vehicle will not be permitted in the EIS area. Vehicle use for access is limited to a few designated roads.

view, we ask that no hunting be allowed within the EIS for the San Pedro area.

Basically, other than those modifications, we accept the preferred alternative.

And from a personal standpoint, I would add that I would certainly not take my children for a picnic to watch birds if I knew that people with firearms were in the area because perhaps the hunters can control where they go and what they do, but are we to put our children on a leash so that they don't run off into an area where there might be a hunter?

I consider that as just too potentially dangerous regardless of a safe record that the state has had in the past, and that we deserve to be able to relax if we go into an area and not worry about anything occurring like that.

And once again, we'd like to thank you very much. I enjoyed this.

MR. ABBEY: I have a couple of maybes here; W. Jordan (phonetic)? Would W. Jordan like to make a statement?

VOICE: No.

MR. ABBEY: Okay. Allen Hillhouse?

Would you please spell your name for the reporter?

MR. HILLHOUSE: Yes. H-i-l-l-h-o-u-s-e.

My name's Allen Hillhouse. I'm a commercial beekeeper and also a member of the Southern Arizona Beekeeper's Association.

And us beekeepers are kind of a strange bird in the first place. But I just wanted to address the fact that I would hope that the Bureau of Land Management would allow bees on select locations down along the river, the biggest part being that they enhance the environment by pollination of the legume varieties which are Mesquite, Whitethorn, Catclaw, and Prairieduster.

Also, with the influx of the African bee coming in the United States, the areas that bees are going to concentrate will be in the riparian areas. And it is consensus with the USDA Bee Lab in Tucson that that's the way we can beat this situation is with genetic stock of our own which is from Europe.

And also, I have kept bees in Tombstone and whatnot and caused no problems for anybody. My employer, who is also a commercial beekeeper, he has locations on three different Forest Service locations which is very similar to what the BLM has. And we have had no problems with people out there

getting stung or anything like that.

Thank you.

MR. ABBEY: Thank you.

Douglas Pressel?

VOICE: He had to leave for an hour, and he wanted to know if you would call him at the end.

MS. RIGGS: I have a question for him.

MR. ABBEY: You can address the question for me.

Excuse me, could you state your name again for the reporter?

MS. RIGGS: Karen Riggs.

If we have these colonies along the river, and even existing colonies, I would ask that these be monitored for mites, and also for infestation.

MR. ABBEY: Well, since that wasn't a question I guess I don't have to answer it.

Douglas Pressel?

VOICE: He had to leave --

MR. ABBEY: Oh, that's right.

VOICE: -- for an hour, and he wants to know if you could call him at the end.

MR. ABBEY: If we're still around

I'll call him.

Norman House?

MR. HOUSE: Spell the last name H-o-u-s-e.

I don't represent anyone except myself and my wife. And we talked about this before I came. And I applaud the BLM for taking the opportunities and taking the time to allow for public input.

If I -- if I knew Miss Fish before she spoke, I certainly would have seconded everything she said. And I do that now because she was very eloquent -- eloquent in expressing my personal thoughts.

As I look at the -- at the area that we're talking about, it's very long and very narrow. And it's a very special place. We're building a home in Ash Canyon, and we know what's been going on in Ash Canyon. Fortunately it hasn't impacted where we're going. But I do like the quietness, and I do like the areas where we can get away, and get away from the hussle and bussle of a lot of the pressures that we have.

I just listed a few things that I personally would like to see that should be there, and

things I would feel uncomfortable if they were there. And I looked at your study, and they kind of bounce back and forth, but I'll just summarize.

I would like to keep it in as much its natural state as possible. I would like to see no vehicles in the area except on emergency use, unless they're just going ingress and egress from east to west on the major roads. I would like to see no hunting.

I have quite a few friends that are hunters. Personally I'm not a hunter. All the birds and all the animals would die a natural death if it were up to me. But -- but I -- but there's good arguments for hunting, and those are well established. I really don't have any problem except I don't know that we're really taking away from hunters anything that perhaps they don't already have. There's ample places to hunt in Arizona within an -- an area.

If I understand you correctly, you will have some limited sand and gravel exploration in the area. If I'm wrong -- I would not like to see any mining of sand and gravel operations. There's plenty of washes around here in areas where sand and gravel can be obtained.

I'd like to see no grazing. The limited camping that you have outlined is great. I'd

like to see people trails, and I'd really like to see horse trails. That's -- and where -- and if you have ample horse trails, people on a horse -- horse riders will stay on those trails, and I think that's just a natural way to go in and out.

I just like -- I think we have such a beautiful opportunity to have something really, really special for people to enjoy nature that I hope it's done right. And I know that the -- that the effort is there to do it right. And perhaps maybe we can say no to some of the special interest groups and do the best we can.

And I applaud your efforts, and thank you very much.

MR. ABBEY: Thank you.

Woody Yates? Is he -- is he here? Woody Yates? Maybe he's with Douglas Pressel.

VOICE: Can I ask a question? How do you sign up to speak? I didn't know that there was a procedure.

MR. ABBEY: We -- there's a little place on the sign-in sheet that you should indicate --

MR. YATES: I'm Woody Yates.

MR. ABBEY: Excuse me?

MR. YATES: I'm Woody Yates.

MR. ABBEY: Oh, okay.

MR. YATES: I was just out.

MR. ABBEY: Sir, you'll have a chance to speak if you wish at the end of all this.

VOICE: All right.

MR. YATES: Okay. My last name is Y-a-t-e-s, Yates.

I'm just representing myself. I think throughout this whole thing that the key phrase should be limited access. I think there's enough room for everybody, but I think limited access -- remember that.

Thank you.

MR. ABBEY: Vincent Lopresti?

MR. LOPRESTI: I read your report. It was excellent. And I think you for the opportunity to speak a little bit.

I'm the Director of Cochise College Botanical Garden. My interests lie in two areas: One in local history which the area in question is full of, historical points; and the other is plant conservation.

I'm on the National Committee for plant conservation. It happens to directed towards cactus and succulents. I'm very much concerned with plant conservation.

S.V.-2

To me the one thing that was lacking in the report, it totally ignored one of our local points of interest which are cactus and succulents. I did a survey, and there are approximately 30 varieties in the area in question.

I am a hunter. I have hunted big game in Africa. I have hunted from the northwest down to southern California, and in this area, and clear to the east coast.

What we're ignoring here is the unique shape of the area. I have been shot at in war, and I have been shot at in hunting. And the guy says, Oh, I fired at a sound. Well, you can't keep idiots from hunting because they get the license as well as members of hunting clubs.

I am against hunting in the area of any type. There's no shortage of hunting areas in Arizona. So why should we hunt in a narrow strip which presents danger to people including the hunters? I feel that the area in question should be a game refuge and a bird sanctuary.

I have been working with the local rangers in repairing damage from off-road vehicles. We take a group of Boy Scouts out. And all it takes is one vehicle to come down a hill, and the next time

Response SV-2. See General Response 6.

there's a rain storm, water comes down it, and then more off-road vehicles. And now you have a gully coming down a hill and destroying the hill.

S.V.-3 I feel no off-road vehicles should be allowed in the area. The area should be restricted to parking areas near the paved roads. If you want to see the area, use shank's mare and walk.

The parking should be limited to the paved areas that go through the area today. From those paved areas you should have access to camping grounds which should be limited to a weeks' use; to picnic grounds where you can build a fire in a fireplace only.

Now I would like to see in this area, and I have offered to do this with BLM, to go through the area, and it's no little job, identify plants, and have the colloquial names and the botanical names so that when you and your children go through it will be instructive to the children.

I'd like to close with a little story. As I have said, I have hunted up and down the west coast and the east coast. Well, if you have ever been into Idaho which is a great elk and moose country, you go into a club with -- that is the way they call a bar.

And I was in more than one where I

Response SV-3. See Response SV-1.

saw this: Stuffed animals all the way along the wall, and there's a place of honor at the end, and there's a stuffed man there. And we are going to have stuffed people if we allow shooting in a narrow area. I'm all for hunting, but not under conditions which are dangerous to the people on shank's mare.

Thank you.

MR. ABBEY: Mrs. J. M. Brossman? Or Mister?

MR. BROSSMAN: Name is Brossman, Phil Brossman.

MR. ABBEY: Would you spell that for the court reporter?

MR. BROSSMAN: B-r-o-s-s-m-a-n.

MR. ABBEY: Thank you.

MR. BROSSMAN: I had a couple of comments I wanted to make, but I just heard most of them expressed very well by Mr. Lopresti, Norman House, and Ms. Fish.

I'm a hunter myself. I would -- initially intended to come and say that I was concerned about the danger to other people in the area. I would be uncomfortable hunting in such a narrow area, and definitely uncomfortable about using a rifle.

And I feel that the comments of

danger and concern for other people really precludes any open hunting.

I would also like to say that I would not support any commercial use, or grazing, or off-road travel in the area.

Thank you.

MR. ABBEY: Thank you.

Well, I'll have to say this is a pretty fair audience. You'll applaud anybody's speech.

Lloyd Pressel?

MR. PRESSEL: My name is Pressel, P-r-e-s-s-e-l.

I also grew up as a hunter, and we hunted all types of game. I haven't hunted for 40 years now. I just have no interest in hunting.

I like to go out and see the animals, the birds, the trees. I find that my form of hunting.

I really address the challenge to the BLM. I don't know how they can have a narrow riparian land for some 40, 50, 80 miles, and think that a hunter can come in and find game if there are a lot of little kids, and a lot of campers, and a lot of people out there chasing the game out. Never in my life did I hunt in a camping ground.

Visa versa; I don't think that

campers would want to be on a hunting range. So, BLM, you have a tremendous challenge. You can't have both. I hope in your wisdom you're able to solve it.

I think the previous speakers have said that there's plenty of hunting space in Arizona; that this precious, narrow, riparian right doesn't have to be a hunting range.

And so I would support anything that would keep hunting out of that area.

MR. ABBEY: Mr. Dreyfuss?

MR. DREYFUSS: Joseph Dreyfuss, D-r-e-y-f-u-s-s.

I spoke with you gentlemen yesterday. I'm here to bang horns with you again.

Members of the BLM, thank you for the opportunity of communicating with you again. Ladies and gentlemen, I am the fourth generation to have been born and raised in the State of Arizona. My father's property lies within the San Pedro Riparian.

I, while attending the University of Arizona, did a research on the San Juan de las Boquillas Ranch.

Two generations of my family worked on that ranch, and some of them wrote the history there.

Okay. I have a better understanding of this area than any biologist, anybody in this room. I know all the archaeological sites, and some that they don't know about, and I won't tell them. I don't want them destroyed.

Okay. I don't want you people to destroy them. But I want to utilize the area. I know this area inside and out. I was raised on the north end.

I commend the Bureau of Land Management in part on their Environmental Impact Statement which I used to be able to write one of these but I can't any more.

Anyway, much of it is very, very accurate, but the historical part of it from 1953 on is extremely inaccurate. I will, for the Bureau of Land Management and for my fellow citizens write them -- give them some information that they can utilize to figure out some of the problems we're going to face here.

Ladies and gentlemen, I hunt. But I don't necessarily have to hunt with a rifle. I don't have to hunt with a bow, and I don't have to hunt with a camera.

For over a hundred years my family

has been able to ride from one end of that to the other end, not bothered. I want, not the right, but the freedom of choice to do that. I want my children, the fifth generation to be able to camp there.

Through the Game and Fish I would like to see some controlled hunting. Okay. Let me justify this. The data presented by the Bureau of Land Management on javelina and muledeer is extremely inaccurate, and I will work to help them find out that I'm right.

Okay. There's one item; Chapter three, gentlemen. And pure and simply when I refer to the historical data 1853 to 1890 that was missed, it's at the bottom of the page, and it's under recreation. And it's that first paragraph that ends.

Okay. If you look in the Mormon Battalion Historical Logs, you will find that the first picnic was taken on the San Pedro River. And they hunted there, and they hunted wild cattle.

Now I am an enthusiastic range management individual. We don't need cattle in the area. They shouldn't be there. But what bothers me in the Environmental Impact Statement is that for over 300 years we had cattle on our river.

Okay. We pulled the cattle out. I'm

not going to stand on either side of the fence saying, Well, that's bad, or that's good. Okay. We're in a new day and a new situation.

What bothers me, and it is my experience, my historical knowledge of the area that we pull the cattle out, in two years you are going to see such a critical mass point of undergrowth that when it does catch fire you will not be able to extinguish it. And you're going to do some damage.

Okay. I want to see in your first two -- the no action and the preferred, or the second choice, pardon me, the preservation alternative, does not provide for controlled burning.

Okay. The area has already been impacted. Man's already been there. Okay. He's been utilizing that river.

What bothers me -- I want these neighbors, and friends, and those children in 20 years to be able to go down there and see a cottonwood tree just the way I did as I grew up.

If we don't have a controlled burn you asking for trouble. I want to go on record for that because I have been in on one of those areas that was not grazed out, reached critical mass point, and we had some extensive damage.

S.V.-4

Now I am totally opposed, due to the soil types in the area, to off-road vehicles. But I do feel on the north end we should have some hunting, regulated highly by the Game and Fish.

I have had no less than a thousand people in there hunting that end. If you will do some real careful checking with the Arizona Game and Fish you will find that the state record raccoon was taken out of there in the 1960's.

Okay. There's been many animals taken out of that area. I feel we should have the hunting on a controlled basis.

On other impact areas where we have people in there who want to picnic, they want to snooze in the afternoon, whatever, we don't need any hunting in those areas.

I'm in agreement with part of these people and I'm trying to help the Bureau of Land Management.

Just one other thing that I would like the Bureau of Land Management to know, in the past, the monitor on the screw worm fly was the people that leased it; Tenneco Oil, Kern County Land Corporation (phonetic), et cetera.

Okay. They monitored the screw worm

Response SV-4. See Response SV-1.

fly. For those of you that don't know what a screw worm fly is, there is a screw worm eradication program which was instilled in the 60's. I doctored worms on that river at that time. I know how bad it can get. If we don't have a monitor there -- it's going to have to be you people, or it's going to have to be hunters.

Early hunts; people saying, Hey, I'm finding animals that are dead or half alive, and they have worms. Okay. We need a monitor there. Doesn't matter if it's the Audubon Society or my dad's ranch. We need a monitor there.

Controlled burn, controlled hunting, the ability to ride from one end to the other, the use of the train.

There has been reference to -- by -- by many people and some things I have read in the paper, the train and the noise pollution bothering the wildlife.

Well, now wait a minute. I live there. I was raised in a house not 20 feet from the railroad tracks at Land Station. Incidentally, Mr. Land was the first Anglo rancher on the San Pedro River Valley.

Okay. Believe me. I can take you down there right now and show you it has no effect on

these animals. They will sleep, the javelina especially will sleep in the culverts under the railroad tracks while the train goes over, and the deer will sleep on the other side. No problem.

Okay. I would like to see a tram for elderly people that can get on whether it's at Land Station fence or where ever; Huachuca City. Whatever you want to do, I want the elderly to be able to go down that narrow strip and see some of the archaeological sites. This would be a lovely thing, and it would help the community of Sierra Vista financially, and Benson also.

But to say no hunting is, believe me, a mistake. There are too -- it has without a doubt, the largest javelina population in the state, and one of the largest mule deer herds I have ever seen on the north end.

MR. ABBEY: Joseph, you have about 30 seconds.

MR. DREYFUSS: Okay. Also I would like to tell the Bureau of Land Management that I will offer 140 hours a year for the next five years of my own personal time and company's money to control erosion on the north end which was caused by the railroad.

Thank you.

MR. ABBEY: You've got another ten minutes now. You can go ahead.

Shelby Weller?

MS. WELLER: My last name's Weller, W-e-l-l-e-r.

I wasn't planning on saying anything when I came tonight, although after hearing some of the people I decided that I'd like my family's view to be heard.

I have lived on the San Pedro for almost 25 years. I have seen off-road vehicles. I have seen hunters. I have seen hikers. And I'm not against or for anybody.

My family; my husband, my brother -- my father told me tonight, Don't you go and ruin my hunting rights in that area.

They're all hunters. I told him the same things I have heard several people say tonight; there's plenty of other places to hunt.

I have walked on the river and been shot at. I don't know if it was a hunter, but there are a lot of guns. I don't know what they're hunting, but I don't want to be one of the things that they shoot.

I have also been down and been blown off the road by off-road vehicles. My brother has one. And he's probably just as guilty as any of them. And it's destroyed a lot of the -- just the grass, the trees, the garbage, the trash, the old mattresses laying in the middle of the road, the beer cans, the beer bottles, the Kentucky Fried Chicken wrappers.

I like to camp. I like to picnic. But I think we need to be responsible for our own land. We're all responsible whether we're hunters, or birdwatchers, or whatever.

But I have really noticed that since that land has been closed off, a lot more birds; herons that haven't been there in years, quail, dove.

A lot of wildlife; there has been mountain lions. There used to be a lot of mountain lions and javelina. Recently there has been a lot more than I have ever seen.

So I think we just need to be careful, and it needs to be limited use for everyone.

Thank you.

MR. ABBEY: Michael Gregory?

MR. GREGORY: My name is Michael Gregory, G-r-e-g-o-r-y.

I'm the Conservation Chairman for

Sierra Club in the State of Arizona.

I will of course be handing in my usual detailed comments to you folks later. Meanwhile, here's a -- an article that I wrote that was in the Arizona Daily Star yesterday, and I'll submit it now.

And rather than go over everything I have said there, or most of the things that have been said here tonight, I would just like to say a few words that came to my mind this afternoon when I was thinking about whether I wanted to say anything tonight.

The -- the main problem with the plan from my point of view is that it emphasizes recreational and educational values over non-utilitarian values on the San Pedro.

This is not surprising to me. Those of us who have been following the acquisition of the area and the development plan over the past few years are aware that many people objected to BLM's taking control of the land in the first place.

There was a desire among some folks to have Fish and Game take over the San Pedro rather than BLM. Or some people talked about the Parks Service and tried to make it a National Monument. There were various possibilities.

The main objection to BLM was that

the agency's history is a history of using land; finding ways to turn multiple use into the greatest use for the greatest number of people. And many people did not feel that that's the way that this particular piece of property ought to be dealt with.

Although we do not oppose multiple use, we do feel that as somebody said earlier, appropriateness is an important term.

When I start thinking about what is a value of the San Pedro to me as a -- as a resident of this county and somebody who sees this river almost every day and spends time on it, it seems to me that the most important thing that -- that I think of is something I would call serenity.

There's not very much in this county left where I can feel that I can find peace and quiet; where I can get away from what is becoming an increasingly hectic life for me, and I think for many of us.

We live in a growing country -- a growing county. The City of Sierra Vista of course is one of the fastest growing areas in the country. And we are seeing more and more people not only move to this area and become residents, but we're seeing more and more people come here as tourists.

And we encourage that growth in some ways, and certainly we encourage tourism for our cities, and we encourage it for our local businessmen who need the income.

But we don't need to encourage it, it seems to me, on this sensitive piece of real estate. It seems to me that that is what BLM's plan overall does is encourage people to come here.

And basically I don't feel that the river was set aside as Federal property for use -- not for use by people certainly.

It seems to me that the main reason that we want to save this river is for itself, for the animals that live there, for the plants that live there, not for us. We have other places. We have always had other places, and we have a history of destroying those places that we love most.

So I think that we should direct the BLM in our letters after tonight's meeting to think more about the natural resources that we need to protect. It is the natural resources, not the human resources that we're setting this land aside for.

And as I said, I have -- I am going to be handing in, of course, more detailed statements, and I don't want to go over all of those now.

I would like to just mention some of the things that I think we should not have on the river. We should not have large campgrounds. We should certainly not have the million dollar visitor center that I have heard rumors about as going into the Wolf Creek area. We don't want any motor homes in there. We don't want any motorcycles in there or other kinds of ORV's.

We certainly, I don't think, want the San Raphael del Ville improved and opened up to traffic all the way from Highway 92 to Highway 90, or from the Hereford Road to Highway 90.

It seems to me that what we want to do actually is shut that road off and make it not be a through road, and make it a road that people can only go in part way on to small picnic sites, not overnight camping.

No motorized traffic at all should be driving all the way down the length of that river, especially the southern length of that river.

We don't want any hunting in there. We don't want any fishing in there. We haven't talked much about fishing tonight, but I understand that part of the Arizona Game and Fish Department's plan is to build the river up to a place where we can start

1 stocking it so we can start fishing in it again.
2 It seems to me that that is a little
3 backwards. What we should be doing is improving the
4 river for non-native fishes, and maybe somewhere down
5 the line, maybe 15 years from now, 25 years from now,
6 we can start talking then again about hunting, and
7 fishing, and maybe even about motorized travel.
8 But what we need to talk about right
9 now is recovery. We have overused and abused this
10 property for a long time. It needs recovery. BLM has
11 agreed to that in many areas and recognized that fact.
12 The reason that we're withdrawing the area from mining,
13 the reason that we're taking out at least some of the
14 sand and gravel operations -- and I believe we should
15 take them all out -- the reason that we are taking --
16 putting a moratorium on cattle grazing for 15 years is
17 because BLM has recognized that there is some recovery
18 necessary -- a recovery period.
19 I think that that recovery period
20 should also include recovery from hunting, and fishing,
21 and trapping, and just trampling; recovery from people
22 in general. And if we do that, maybe our children,
23 their children -- our grandchildren, our great-
24 grandchildren will have something more of peace and
25 quiet than we have now.

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1 Just in closing, one or two points
2 that I think ought to be addressed in the EIS that I
3 haven't heard many people talk about, I strongly
4 believe that we should be protecting not just animals,
5 and fish, and birds down there, but we also ought to be
6 talking about the plant life. As one gentleman
7 mentioned, this is a very special vegetation area.
8 We should also be talking about those
9 creatures which help the plant life to exist. As one
10 of our beekeepers mentioned, we should be talking about
11 insect life down there too.
12 Many of the most endangered species
13 in the world today are insects and other kinds of non-
14 vertebrate animals.
15 The BLM's EIS, as I recall, doesn't
16 mention anything about those. And we ought to be
17 making a special effort to both inventory and to
18 protect some of the more endangered insect species that
19 we find on our river.
20 And that includes one other aspect
21 that as some of you know is very close to my heart, I
22 don't believe there should be any pesticides used on
23 that river. The EIS doesn't talk about that, and that
24 to me is a bad sign.
25 If you say -- if you don't say you're

S.V.-5

Response SV-5. The use of pesticides or herbicides is not contemplated in the plan. If the use of pesticides or herbicides is proposed, an environmental evaluation will be completed on a site-specific basis. This environmental evaluation will include opportunities for public comment.

not going to do it, chances are some place down the line you're going to do it. I don't think we should be using insecticides any place on that river or near it.

And I don't think -- we certainly shouldn't be using any herbicides. If we're going to have plants down there we want -- like we want the animal life, we want it to be native plant life, and we don't want to be killing the things that normally exist there.

MR. ABBEY: John Downs?

MR. DOWNS: Name is Downs, D-o-w-n-s.

I think that the approach to this whole problem should be, first, to an effort long-term, years of effort to restore the area to its natural or original state and essentially a pristine state.

And then, over the long-term, after that, that limited use, very limited use of the area should be permitted.

There should be no commercial use; that includes mining, sand and gravel, cattle. It also includes recreational vehicle parks, tourist cabins, and that sort of thing.

The area should be -- use should be denied for any type of overnight stay, and that would

be camping, recreational vehicle parks, tourist cabins, any sort of overnight stay. In the long term, the maximum stay in the area should be limited to a picnic area.

All types of vehicles should be prohibited over the length of the preserve. There should be no off-road vehicles of any sort that would be permitted there. And the straight motor car should be limited to areas that are immediately adjacent to current highways; parking areas, paved parking areas.

The access to the area should be by trail, foot, horseback, bicycle, but no other motorized vehicles throughout the length of the -- of the preserve.

There should be no hunting of any sort with any sort of weapon. As a matter of fact, all sorts of weapons should be prevented in the area including things like slingshots, fishing hooks.

The area should be preserved for peace, quiet, the natural animal life that exists there, the observation of that, and should be primarily for -- the access should be limited to people who really want to get there, and they're willing to walk in order to see it.

And that would be a long time, over a

period of 25, 50 years. And -- but in the immediate near future, restoration to its original state.

Thank you.

MR. ABBEY: Dennis Coleman?

MR. COLEMAN: Coleman, C-o-l-e-m-a-n.

I'm here representing Huachuca Mountain Bow Hunters. I'm a fisheries biologist and have been in fisheries and wildlife management for 14 years.

I am glad that the BLM has gotten control of the San Pedro Riparian area. Before it was privately owned, overgrazed, gravel removed, and generally abused for a long time.

I believe multiple use resource management of this area is possible, and as a pro-hunter, I do not intend to recommend that we kick out any bird watchers, or birdwatchers, or hikers, or wildlife photographers.

The area has been referred to as very narrow. In the presentation at the beginning of the program it was pointed out that it's two to three miles wide. It is also contiguous to other Federal hunting lands. To me this is not a narrow area.

I have also been a hunter safety instructor for eight years, and in the last two years I

have only heard of two rifle fatalities in Arizona. You are much more likely to be killed in your own home than you are in a hunting area. And shotguns are much more dangerous than rifles.

The San Pedro area is unique because of its special wildlife habitat. That is the reason the area was adopted by the BLM in the first place. Human use of the area should be a secondary consideration -- I mean all uses.

And another problem I have with the EIS process is that it is so limiting. If it is decided by the BLM officials that one activity or another will be excluded, it will be excluded forever in perpetuity, whether it be hiking, birdwatching, hunting, or anything else. It -- it's a final type of decision.

The development of the area, I believe, is the biggest problem in the riparian zone. The habitat is special. If we start building parking lots, putting in roads, allowing off-road vehicles, putting in horse trails, putting up little signs to identify all the plants, I think we're making a big mistake.

And that's one thing I like about a hunter. He doesn't need a trail, he doesn't really

need a horse. He's just going to walk through the woods. Hunters harvest only legal game, and all the surplus that is determined by the Arizona Game and Fish Department.

Overprotection, historically -- and the Kaibab Deer population is a perfect example -- has lead to very sickly, deceased, and self-terminating wildlife populations.

I'm not finished yet.

All Federal lands have multiple use management including hunting, birdwatching, hiking, and so forth. Around here, you're right, there are other areas to hunt besides the San Pedro River. But in Arizona, riparian lands open to hunting are almost non-existent. And it is a unique type of hunting experience that doesn't occur hardly anywhere in the west.

And the recovery period that was mentioned for the San Pedro River is well taken. But a man walking through the woods harvesting surplus game is not going to damage that land any more than the cows have over the last hundred years or so.

The -- I and the Huachuca Mountain Bow Hunters are opposed to all off-road vehicle use, indiscriminate gunfire, and any other abuses of the

area by anyone.

And I believe I would have to side with the man who said he favored periodic control of burning of the areas. It is probably an issue well taken.

In closing, as a pro-hunter who hasn't quit hunting, and as a person who's very sensitive to other species in the environment -- I'm personally responsible for introducing three endangered fish species to Fort Huachuca -- I believe that hunting is a compatible activity with all the other proposed activities, and I believe we should be more concerned about the destruction of the habitat in that riparian zone.

Thank you.

VOICE: Question.

MR. ABBEY: You -- what -- what's your question?

VOICE: A question for the speaker.

MR. ABBEY: No. You can address your question to me.

VOICE: What I would like to know -- he mentioned that the hunters will allow the birders, hikers, photographers on the San Pedro. Will there be anything left to photograph and watch?

MR. ABBEY: That's not an appropriate question.

FEMALE VOICE: No cross examination.

MR. ABBEY: That's true.

VOICE: One more question?

MR. ABBEY: No.

VOICE: This one --

MR. ABBEY: No.

VOICE: -- may be pertinent.

MR. ABBEY: No. Well, go ahead. Ask your question.

VOICE: Has there been -- and I haven't heard it from you people -- has there been a survey by Game and Fish on populations, on the bird and the wild animal populations? Can it sustain this management technique -- practice over years? Will it deplete the populations within a few years?

(MULTIPLE VOICES AND CONFUSION)

MR. ABBEY: Hold it, guys. You're going to have to hold it.

There has been a survey taken, am I correct, Ray?

MR. BRADY: Game and Fish.

MR. ABBEY: There has been a Game and Fish survey. So that -- that's the response.

Okay. You had a question.

VOICE: Clarification.

MR. ABBEY: Yes.

VOICE: What is the width of the preserve -- average width?

MR. BRADY: Two to three miles.

MR. ABBEY: Two to three miles.

VOICE: The BLM has acquired property and will keep that a preserve a mile on either side of the river; is that what you're saying?

MR. CAMPBELL: Those are public lands one to one and a half miles on each side of the river.

MS. FISH: Cathy Fish. What is the actual width of the actual riparian zone?

MR. ABBEY: Do you know that, Ray?

MR. BRADY: It varies.

MR. ABBEY: It just varies.

VOICE: It's no more than three blocks is it?

MR. CAMPBELL: It would vary. It's very narrow in places to perhaps a quarter mile in other places where over the years it has --

VOICE: Louder please.

MR. CAMPBELL: It -- it's very narrow in many places and up to a quarter mile in other places where over the years, the river has changed course.

MR. ABBEY: Again, I think that a lot of these questions can be addressed more appropriately after this hearing's over with. We will have BLM employees here, and they can respond accordingly.

So if you hold those kinds of questions until after the hearing.

Thank you.

MR. COLEMAN: May I have one more statement?

MR. ABBEY: Feel free.

MR. COLEMAN: Okay. Huachuca Mountain Bow Hunters support all types of hunting -- legal hunting -- in the riparian area.

Thank you.

MR. ABBEY: Thank you.

Is Douglas Pressel back yet?

VOICE: No.

MR. ABBEY: Okay. That's all the names on my list of people that indicated that they desired to speak.

Is there anybody here in this room that would like -- okay. I'll go ahead and call on

this gentleman in the blue hat first, and then we'll get to the others.

When you get up here, please state you name, and again, we would appreciate it if you would spell your last name

MR. IRWIN: Al Irwin, I-r-w-i-n.

I'm not much of a speaker.

I'll tell you what: My folks come to Tombstone in nineteen five. I was born and raised in Bisbee, Arizona. And I have hunted this river and I have fished this river. There's catfish on that river bigger than a foot long. And I have seen turtles in that river that you couldn't set on that table right there that come out of Mexico -- water turtles.

I was down here last week and seen water turtles right then.

And I'm -- I'm a hunter. I've been hunting all my life. I've hunted along that river a lot.

And I think that -- I'm one for restricting off-road vehicles, you know, because I can see what they have tore up and such as that. I've seen that river when we were allowed to go in it, drive down the river.

I've been down that river in cars and

jeeps. And I know what it will do.

And I think that hunting, just like earlier they was talking about they'd rather not get shot. Well, I'll tell you what: You let things go to pot down there and you get them rattlesnakes, and all that going down there, you won't need to get shot because them snakes will get you.

And another thing, since it's been opened up where they got this park down here, there's a lot of older people in this place -- in this room right here that probably couldn't make it down to the river anyway because that's a long walk.

I know I walked down there last week, and it's, you know, I think it should be opened up to limited camp grounds where, say, the birdwatchers or the elderly people can get down close to the water and enjoy a nice little picnic, and, you know, bring, you know, their kids or grandkids.

And I want to -- another thing, you know, just like hunting, I paid for my hunting license. And I figure that, you know, we should use it. And the biggest share of Arizona, I don't think it, you know, if I'm down on the river, you know, what are they going to do, give me a reimbursement cause I can't hunt there, or reimburse me on my fishing license because I

can't fish there?

And it's just like that young man that said earlier, you know, I've been on that river, and I know where there's a lot of things on that river that they probably don't know about.

And it's just like he said, I'm not going to tell them because it just -- they're going to come in there and dig a bunch of holes themselves, and, you know, look for this stuff 20 feet under ground. And, you know, what difference is that if somebody digging holes and pulling, you know -- the gravel, you know, I think we need the gravel.

I'm not one way or the other on them gravel pits down there because they don't, you know, I can't see -- if the sand's coming down the river, use it.

And it's just like, since it's open down there -- I've been down there several times, and I've only seen two other cars down there besides me, and the people in the car, they wasn't interested in no river.

And, you know, the way they're, you know, I figure they're talking -- I didn't get a chance to read it -- but, you know, some of the land could be, you know, closed down. But I don't see why they should

shut the whole thing down for hunting.

If they want to save some of the historical stuff and like that, let them go in and -- and, you know, set boundaries, and save this stuff.

I can understand that there's a lot of people down the road that's going to want to see this stuff. But, you know, if you got something going ten miles this way and ten miles that way, and, you know, you lock the whole thing up, well, what good's this little spot here and this little spot here?

You know, people can hunt in between, or fish in between, or camp in between, and utilize it. I mean, I can't see taking it away from everybody, you know, hunting away from everybody, fishing away from everybody, or camping away from everybody just to save, you know, a few little things.

Or, you know, they're talking about saving this stuff. And I'm like the other guy said. They're wanting to build all this stuff down there. You know, well, why don't they save the ground that they're going to dig up and put something on it, you know.

That's my opinion.

MR. ABBEY: Thank you.

The last name is spelled

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V-l-a-h-o-v-i-c-h.

MR. VLAHOVICH: My name is Jim Vlahovich. I'm a planner representing the Cochise County Planning Department.

The County Planning Department has reviewed the draft plan in its entirety. We have also analyzed the preferred alternatives specifically, and we would like to make a few comments, slash, recommendations.

The first recommendation the Planning Department recommends that the entire management area be closed to hunting. Since the management area is only two point six miles in width, user groups would be concentrated into a relatively small recreational area.

Such concentration along the San Pedro could create potential safety problems and conflicts between hunters and all other user groups.

Due to the local popularity of bicycling, the Planning Department recommends that the BLM provide trails for bicycles within the management area. These trails could be developed on the railroad line, confined to roads, the Lewis Springs Road, or other existing jeep roads in the management area.

S.V.-6

Such bicycle trails should be located away from the sensitive riparian areas but should

Response SV-6. The text has been updated to read that mountain bikes will be allowed on those roads open for public access.

provide additional recreational opportunities for a greater number of user groups.

Finally, several additional hiking trails should be provided within the management area. This would enable user groups to access more areas in and around the San Pedro River, and would subtlely encourage recreationists to utilize the developed trails, thereby minimizing user impact on more sensitive sites within the management area.

Overall, the Planning Department feels that the preferred alternative offers a unique balance in providing a myriad of recreational opportunities in and around the San Pedro River, and at the same time protecting and enhancing the riparian ecosystem within the EIS area.

Thank you.

MR. ABBEY: Thank you, Jim.

MS. WOLVERTON: The name is Wolverton, W-o-l-v-e-r-t-o-n.

I own some property adjoining BLM.

MR. ABBEY: Ma'am, you may want to pull that microphone down and speak directly into it.

MS. WOLVERTON: I own some property adjoining BLM. I'm very glad that they took the opportunity to close that area for a time because I saw

the damage that was done by -- by trespassers.

But I believe it was Mr. Coleman that said that there are more people killed in their own home or hurt in their own home than by hunters.

My house is very close to that property line. What makes you think a hunter with his high powered rifle is going to stop at that property line? And I'm going to be in kitchen and become one of Mr. Coleman's statistics of those people that get killed in their own homes.

MR. ORNDORFF: My name is Chris Orndorff, O-r-n-d-o-r-f-f.

It's quite apparent to me that there are basically two schools of thought on the hunting issue; those who think you should and those who think you shouldn't.

I'll not voice my own opinion, but I will propose to BLM that you have an area here that is 40 miles long and two to three miles wide and perhaps it is possible to split it in half. Use half one way and use half the other way, and come back five or ten years from now and see which one is in better shape. That's my comment.

Thank you.

MR. ABBEY: Thank you.

MR. MISCIONE: I have lived here for 18 and a half years. I have hiked the entire San Pedro from Mexico to as far as it goes nine times. I'm a hunter, I'm a conservationist; you can be both.

The only thing I want to say is the BLM is doing a good job. The only issue I see -- everybody agrees on the same thing; the river should be used and it should be preserved.

You got a 30 mile area. You want no access, you close off a section. You want hunting, you hunt in that section. You want birding, you bird in that section.

Now I have hiked the river five times this year. The only ducks I have seen that were nested have been south of Highway 92. All the use is in the Hereford Road or the Charleston Road area.

You have had off-road use in the Charleston Road area since long before I lived here. Why not leave it there? That area is never going to grow back in our lifetime.

It's been overgrazed, motorcycles use it. The ground is packed so hard there's still no grass growing in some areas.

The thing is this area is 30 miles long. Everybody agrees on, you know, the principle

that it should be protected. I totally agree. The thing we should do is just compromise.

I'm all for people hunting, I'm all for people birding. I used to be a member of the Audubon Society. I'm a member of other organizations. I bird. My family -- we go to the river as often as possible. We like the area.

The thing that I see is hunters in general tend to be good for the most part, but you have a bad one. Birders are the same way. When I was a member of the Audubon Society in 1975, I seen birders do things like scare birds to death. I also seen off-roaders who could ride through an area and you would never know that there was a motorcycle through there.

The thing is that you're going to have bad in every group. The thing is you've got to compromise. Every group has got to have its little say otherwise nobody's going to be happy.

Thank you.

MR. ABBEY: Thank you.

MR. TREIBER: My name is Tom Treiber, T-r-e-i-b-e-r.

I represent the Douglas Rifle and Pistol Club, and I represent myself.

I'm a hunter, my wife is a

1 birdwatcher, and there's no conflict in our family.
2 She doesn't care if I go hunting, and I don't care if
3 she goes birdwatching.
4 I don't think that any hunter in here
5 is going to take exception with anybody that wants to
6 go down to that river and watch birds, or photograph
7 them, or just walk along and enjoy it. However, I
8 think the hunters might resent that many of them would
9 like to restrict us from using it.
10 You have to remember that in hunting
11 there's probably 30 days, if that, out of the entire
12 year that a hunter might be found down there. He might
13 be there at other times, but he wouldn't be hunting.
14 I might go down there with my wife
15 just to help her watch birds. I do that often. She
16 doesn't come out and help me hunt; I don't need any
17 help there.
18 I don't think there's any reason to
19 restrict the area to hunting. I think -- heard people
20 talking about being afraid of being shot, or the area
21 being too small. There's lots of areas that are
22 smaller than this that are successfully hunted.
23 There's many other areas in the state
24 that can be used for hunting. These areas are also
25 used for birdwatching, camping, hiking, and other

1 facilities.
2 And hunters go all over the State of
3 Arizona and hunt. And there's really not a lot of
4 conflict between hunters, and birdwatchers, and people
5 that just like to hike, and camp, and go out and use
6 the wilderness. I don't think that there should be any
7 large conflict, and I don't think that there is any
8 imminent, immediate danger.
9 Many people think that when you say
10 hunting that the place is going to be immediately
11 overrun with thousands of hunters. This is not going
12 to be the case.
13 The hunting is going to be on a very
14 limited basis because the Game and Fish Department is
15 going see this on a limited basis because there's only
16 a certain amount of deer permits, a certain amount of
17 javelina permits, and there's only a certain amount of
18 people that will go down on to that river to hunt birds
19 of one sort or another.
20 You're not going to be overrun with
21 thousands of hunters. And for somebody to make the
22 claim that there is, they're mistaken.
23 Now I agree with many of the people
24 that have stood up here tonight. I don't think we need
25 four wheel drives driving up and down the river. I

don't advocate this.

I'd much rather walk when I hunt. I don't want to see ATV's going up and down the river. I would rather walk.

I don't think we need trails for bicycles. I don't think we need trails for anything.

I think that everybody in this room probably represents a large cross section of our country, and I think that like one gentleman said, there probably is some room for compromise.

I don't think that any one group should or really expects to get their way in this thing completely. I just hope it works out for everybody's benefit to some degree.

Thank you.

MR. ABBEY: This gentleman in the blue shirt.

MR. FROST: My name is Clinton Frost, F-r-o-s-t.

And I'm here representing a group which is kind of unique. I'm bound not to say anything about the hunters because they're the ones that feed me. I'm representing the Taxidermist and Guide people.

Okay. We have -- I have listened this evening to the controversy on both sides. I have one -

- my mother and dad belong to the Audubon and everything.

I am pro-hunting. My dad has hunted all his life. I have hunted all my life and intend to hunt the rest of my life, and also do the taxidermy and guide because that's the way I make my living.

But we're -- I would like to bring out the fact that we would like to look at hunting as a tool. If we look at the Kaibab area and the history of the Kaibab, we went up as man has done so many times before and intruded on the environment.

He went into the Kaibab area and he took the mountain, he took the varmint, the predation. There was no predation left.

Okay. Along came the development of the Arizona Game and Fish. Okay. Now we have the Arizona Game and Fish that has been given the responsibility to see to it that the restoration of wildlife, and that the wildlife is to be taken care of.

And they have given me an assignment so that all of us can enjoy a walk out into the woods and watch deer, and watch elk.

What they asked them to do is they asked them to do this without the aid of any tools because we have taken the predation. Now there is

nothing for Mother Nature to control her own source.

So the only thing that the Game and Fish was left with was to use the intruder to help correct this.

What I'm asking -- or what I'm saying in voicing my opinion is that hunting has become one of the most vital tools that we have due to our own fault, that we may use to control.

In other words, we have become the predators. Otherwise what we end up with is we end up with a vastly deteriorating herd of mule deer, which bring us to the San Pedro area.

The San Pedro area has not only been closed off by the BLM for the purpose of controlling it, but it was closed off by private owners and private enterprise long before this, leaving management out of it also.

And I commendate [sic] the BLM for all their efforts and everything.

But the controversy between the hunting, remember that I feel that it is a tool, not necessarily that everybody is going to go in there and arm themselves and annihilate everything.

That is definitely going to be controlled. The taxidermist is controlled. The hunter

is controlled. The birdwatchers are controlled.

But I am in agreement with the BLM in the aspect that off-road vehicles down the river -- my opinion of an off-road vehicle is where the road ends, is where that vehicle should stop. And if we apply [sic] to that in relation to the San Pedro River, we have limited access. And I agree with that totally.

The other thing is part of my work as a taxidermist is restoration, and utilization, and education. And it applies to the birdwatching along with the hunter.

I'm not only interested in the hunter, but I have lots and lots of birdwatchers come to me and ask me, Oh, I had a hummingbird fly through my window -- my kitchen window because my feeder's setting in front of my kitchen window. Can you mount it?

No, I can't. The restoration of this has to be totally for educational purposes.

And I can -- so what I'm showing is the control that is put forth on the taxidermist and control that's put forth on the guides.

We are now in the process of starting an Arizona Guide's Association. It's originating out of Globe, Arizona, under Mr. and Mrs. Ellison

(phonetic).

MR. ABBEY: Clint, you have one more minute.

MR. FROST: Mr. and Mrs. Ellison. they're out of Globe, Arizona. I have a letter. I can -- I can give you a letter. I'll mail you a letter that has --

MR. ABBEY: Appreciate it.

MR. FROST: I will give you the letter that has that information on it.

Okay. And other than the fact that I believe that we can all share what Mother Nature has to offer. And man is his own worst enemy.

Something that has came [sic] up is hunters shooting other people. We have a unique situation on Mount Graham that the blueberry becomes ripe around, I think it's Memorial Day.

And we -- up at Mount Graham we have all kinds of motor homes and everything else, and people right outside the campgrounds picking blueberries, and canning them in their motorhomes. And at the same time, all around them, the bear hunting is in process.

So this is something to keep in mind. I am a hunter education instructor.

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And that is all I have. And I'd like to share the San Pedro system with you.

MR. ABBEY: Thank you.

MR. FROST: Thank you.

MR. AVERY: My name is Ben Avery, A-v-e-r-y.

I didn't intend to say anything here tonight. I would like to make a few comments on this EIS.

I agree with one of the speakers here tonight. I don't -- I don't think it emphasizes restoration enough. I think we should put more emphasis on restoration of this area to its original, natural state as much as possible.

And one of the things I would like to see there as soon as the young cottonwoods and willows come back is that we introduce beavers to help with that job. We should use natural restoration to the best of our ability.

S.V.-7

I think that we also should provide for an automatic review about every ten years -- ten or fifteen years at least.

We have made a pretty good inventory of this area. And I think if we can review and take stock about every ten years, it would provide the best

Response SV-7. The operation of a stagecoach on the San Pedro comes under the heading of commercial recreation use. The recreation sections under each alternative have been expanded to cover commercial use.

direction of management that we can get here. And I think this -- I would like to see this written into the management plan that we use.

Those are about the only comments that I have. I want to really compliment the people who drew this up for the emphasis that's being put on public education.

I think as far as the location of the campgrounds, I think the best site available has been picked for these places. And certainly we want to use -- have public use of the area. It should be for their enjoyment, but not for their damage.

As far as hunting and anti-hunting argument, I don't think that's really relevant. We have an area just outside of Phoenix called the Green Belt which is very similar to this. It's about 30 miles long. It's a riparian area along the Gila and Salt rivers, and it's open to unlimited hunting except in season. There's no restrictions on hunting.

And we have several areas there that are -- we have tremendous concentrations of hunters; the Robin's Butte (phonetic) area, the Arlington area both get tremendous numbers of hunters. And this has been going on for 20 years now and we've never had anybody hurt. And it has been a good management tool.

I don't think the Game and Fish Department is going to allow any damage to wildlife from hunting, and hunting is a good management tool. And I foresee the time would be when we would need some type of management like that.

I -- I think the EIS generally is very well done, and I think it was a good job.

Thank you.

MR. ABBEY: Thank you.

MR. EVANS: My name is Bill Evans, E-v-a-n-s.

My proposal is specific in nature. My wife and I own an original stock Concord stagecoach which we purchased two years ago in Idaho. And we are proposing to run an original stagecoach along the Charleston Road route that ran from Tombstone down to Bisbee.

I have sent my proposal about three months ago to BLM, and Mr. Brady indicated that it would not be bad for me to come out here -- it would be a good idea for me to come out here and at least mention it.

What we want to do is have access with our horse drawn stagecoach from the Tombstone area providing an authentic tour with authentically clothed

personnel to give an historic tour down to the San Pedro River area, specifically down to where the Clanton Ranch ruins are, which is out near Lewis Springs.

And we are hoping that whatever plan's adopted by BLM and whatever public pressure is brought to open or close that area, we are hoping that we can be allowed some access to that area to give people who may come from out of state to tour Arizona and see what all they have to offer, to get on an original stagecoach as it would have been a hundred years ago, ride from Tombstone about an hour and a half down to the Lewis Springs area, get off the coach and see some of the things that are there.

My wife and I are both Audubon Society members. But I am also a hunter. And by the way I work at Sierra Vista Jewelry and Guns, and they just had a sale last week and there's still some stuff left to buy.

So in any event, we would like to show people that come in all the things that the San Pedro River has to offer; the flora, the fauna, the historical things that are there. And we would not want those things closed off.

The only things that we would ask is

that the hunters not try to rob our stagecoach. So that's all I have.

Thank you.

MR. BAHTI: My name is Curt Bahti, B-a-h-t-i.

I'm a wildlife manager from the Arizona Game and Fish Department, and I have units 34 A and B. 34B is one of the units that borders the San Pedro River north of Highway 82, and down the west side.

I'd like to make a couple comments on the plan. I think that the preferred alternative is a good plan. I strongly support no RV's.

I'd like to speak directly to this multiple use. Multiple use is used on all Federal lands right now, and it seems to be working real well.

With their preferred plan, the river is closed to hunting for five months out of the year for the people that want to find their serenity or are worried about hunters the other time of the year.

Hunters aren't out there usually seven days a week from the opening of a -- I believe the plan is from September 1 through March 31st. That doesn't mean that hunters are going to be there all the time.

Something I -- I noticed a lot of people are worried about is they think there's a really high density of hunters out there. Well, I've had the other side of the river too, and between what I have now, I probably had pretty close to two thirds of what's in the area at this time. And I have never seen a high density of hunters in there.

In fact, sometimes it's downright difficult to find a hunter, even in the middle of deer season, or in the middle of quail season, dove, or anything like that.

So don't expect -- don't worry that you're going to go out there and find this large concentration of hunters.

Also it sounds like people think that this area is going to be a specific little unit set off by itself. Well, this is -- this is part of a much, much larger area, I mean, to the tune of a couple thousand square miles. So it's not an area where the hunters are going to be, you know, have to be restricted, and they got to stay within this area. They can go anywhere -- anywhere they want in the area.

Some people are worried about accidents. Right now there is a quarter mile law. You can't hunt within a quarter mile of an occupied

building without permission of the owner, or an established campground. So that would keep them a quarter mile away right there. And in some cases, that would be outside of the area already.

Contrary to some -- some belief also, we are loosing hunting areas in Arizona. Another point, I think it was -- it was kind of brought up by a person and it's interesting, they said hunters can always go someplace else. Well, anybody can always go someplace else.

And in my job I find some beautiful, serene places even in the middle of hunting season, and all over Arizona.

A comment that I would like to make, some people think that having just shotgun only -- in my district right now I have an area called the Santa Rita experimental range, and it was closed to hunting with anything other than a shotgun from the beginning of dove season to the end of quail season. It's open now. You can hunt with anything you want to. We haven't had an increase, you know, we haven't had an injury over there.

Speaking from my own personal knowledge and over nine years with the Arizona Game and Fish Department, we have a lot more accidents during

shotgun hunts than we do with firearms hunts. We have a very, very few firearms accidents in the State of Arizona which is a reason to applaud our hunters.

Thank you.

MR. ABBEY: Thank you.

VOICE: Can I ask a question?

MR. ABBEY: You can ask a question of me.

VOICE: Yes. I would like to ask a couple of technical questions. The speaker may be able to answer them for me.

Number one, what is the average range of a rifle bullet, and what is the average range of the sound of a gun going off in a riparian area?

MR. ABBEY: Okay. First of all, are you -- are you going to stay around after -- for a little bit after the meeting?

VOICE: Yes.

MR. ABBEY: I'd like for you to ask him that question after the meeting please.

VOICE: Okay.

MS. YORK: My name is Blythe York, B-l-y-t-h-e Y-o-r-k.

As many have mentioned before me, I also wasn't planning on coming up here and speaking

this evening.

VOICE: We can't hear you.

VOICE: Can't hear you.

MS. YORK: Okay. I'm sorry. As many people before me have mentioned, they haven't -- they weren't planning on coming up here an speaking this evening. But as you can see I have changed my mind.

And I know this an unpopular view of the hunters, but as for what -- as -- excuse me, I'm nervous.

As one of the first gentlemen said, we need to speak for the voiceless, and these voices are the animals' and their rights.

We have mentioned the peoples' rights, and I'm all for peoples' rights. But our rights should not infringe on the animals' rights.

And a fundamental right is the right to life. Every creature values life just as much as we value ours. Therefore I don't think hunting should be allowed in the San Pedro area.

I keep hearing the word harvest when the hunters are talking about harvesting -- I mean hunting on the area. And to me this term is like comparing the animals to crops like corn and wheat.

And I don't feel that -- that this is

what it is to me. To me it's a slaughter. And it's not -- slaughter is not out of concern for the creatures.

And they -- it -- the term harvest implies that the hunters think of animals as they were objects of interest and only so far as they serve human purposes.

And I thought that we wanted to preserve the wildlife in the San Pedro area. But how can -- we aren't preserving.

In addition, the genetic quality -- well, to me it would seem that the genetic quality of the animals would be weakened by allowing the hunting because the hunting -- the hunters are picking and choosing who will live and die, and who survives -- well, who live and die instead of letting nature do her thing by allowing the strongest and the best adapted to survive.

And also in response, I keep hearing all of these comparisons between hunters, and the photographers, and birdwatchers. And to me there's a major difference between binoculars, cameras, and guns, because guns kill.

And also we aren't keeping the hunters out, we're just not allowing the guns with

them. I don't think -- I don't think it would kill them to leave it at home, but it will kill the animals if they bring them.

And I'd like to re-quote, I think his name was Mike Gregory, and he said that this land is for the natural resources not human resources that we're studying the plan for.

MR. ABBEY: May I have a show of hands of anybody that wishes to speak again?

Okay. Because of the numbers, we're going to take a five minute break and give our court reporter a little -- a little breather.

So we'll reconvene at 9:35.

(Whereupon, a break was taken from 9:22 p.m. to 9:36 p.m.)

MR. ABBEY: Ladies and gentlemen, would you please take your seats so we can go ahead and reconvene with the hearing?

Anybody still willing to -- or wishing to speak, I would like for you to raise your hands and we'll go ahead and jot your names down so we can kind of get this thing organized again.

We'll have a BLM representative going

around and writing your names down. That's the gentleman in the middle. So when you see him pass your isle, raise you hand and he'll sign you up.

In the mean time, I have Douglas Pressel. Douglas, please spell your name, your last name when you come up.

MR. PRESSEL: My last name is spelled P as in pop-up -r-e-s-s-e-l.

VOICE: Speak into the microphone.

MR. PRESSEL: Speak into the microphone. Okay.

I am a hunter. I am an appreciator of animals, both dead and alive. I appreciate them most when they're alive. I believe in something called the food chain. And when animals are in the food chain they got to die just like plants do for vegetarians.

What concerns me about the San Pedro conservation area is a matter of intent and purpose. To me the intent of preserving this watercourse in the desert is to conserve. And I don't think we're going to do a good job of conserving if we allow hunting down there.

I know that I can hunt just about 80 percent of the land area in Arizona. I could be wrong -- off by a plus or minus five percent. I can

hunt 80 percent of Arizona. I don't need to hunt the San Pedro conservation area.

And frankly, I like the idea of having a place close to my home -- I live in Bisbee -- having a place close to my home where I can go and not be concerned about being shot.

I told you I'm a hunter. I've been around guns ever since -- I have had a gun, a personal gun, ever since I was 11 years old. I consider myself extremely safe with weapons. I'm teaching my nine year old boy to be safe with weapons. And I know how dangerous they are.

I have almost shot myself twice, once almost fatally, and I'm extremely careful with weapons.

I know hunters who have shot and killed close friends while hunting. And they considered themselves safe. I know hunters who have shot and killed complete strangers, and they considered themselves safe.

Weapons are dangerous tools. And I do not believe the public interest is going to be served by taking one more wildlife area and turning it over to hunting.

We've got most -- it's a matter of balance. And I think the balance is going to be -- is

strongly in favor in Arizona -- strongly in favor of the hunter. I like that. But I think balance in the public interest says that this is an area that we can hold out from hunting. And I as a hunter am very happy with that.

Thank you.

MR. ABBEY: Thank you.

Bob Brahm?

MR. BROWN: My name is Bob Brahm, B-r-a-h-m.

I live in Benson. I think the key word here is preservation. I would like to see this land preserved for future generations; my children, my grandchildren, and on, and on.

And let's hope in their wisdom the Bureau of Land Management can do it.

Thank you, very much.

MR. ABBEY: Thank you, Bob.

Frank Leslie?

MR. LESLIE: Leslie, L-e-s-l-i-e.

Most of what I have heard tonight has been hunter/anti-hunter. In general, all the hunters have -- want to allow other uses; birdwatching, et cetera, et cetera.

On the other side, the anti-hunters

have made a big thing out of safety. Believe me, ladies and gentlemen, you have run a greater risk out here on the highway coming tonight than you ever will out in the field.

I can recall over 40 some years of hunting, two times when I have had firearms discharged in my direction. I can't remember how many times I've had close calls in a motor vehicle.

Another gentleman had talked about special interest groups as -- as if the hunters were the only special interest group. But everyone here has a special interest or they wouldn't be here.

The -- as far as closing the whole area off, there is a possibility or could be a possibility, of absolutely blocking the whole area off. And I know some people might really like that being there would be no human impact.

But how about the mine tailings up stream coming in from Cananea, the run-off. There is -- there is no way that we can get away from human impact at this stage. You can build a fence around it, but it's going to be there. There is -- there is no way out.

I -- my own opinion, I believe that the San Pedro area should be open for multiple use. I

see absolutely nothing wrong; hunting will be regulated, the birdwatching -- the number of the people that are anti-hunting have proposed campgrounds.

The Arizona Game and Fish Department already has regulations out on that about camping within a quarter mile of available water. So they're -- anything is going to be a certain amount of impact.

The hunting will not really degrade the animal population. A lot of people treat animals like humans -- ascribe human characteristics. I heard of a study where fifth and sixth graders, I think 40 percent thought that animals get lonely in the wild. Lonely for what; human companionship? They're out of touch with reality. Animals are not humans.

Another individual said that hunting will cause a genetic inferiority. To me, survival of the fittest proves the genetic superiority. I think we'll help that out.

Hunting is a harvestable crop. Someone had mentioned that they can't put deer or javelina in the same category as wheat or oats. But aren't cattle and pigs animals?

So I see no real inconsistency here. I see no great harm. As a matter of fact I see a

positive aspect by allowing hunting on the San Pedro area.

Thank you.

MR. ABBEY: Thank you, Frank.

David Greenberg?

MR. GREENBERG: It's David Greenberg, G-r-e-e-n-b-e-r-g.

I also represent a special interest group. I'm an American. And I feel that when I came to Arizona 13 years ago, Cochise County specifically, I learned of rights and freedoms that I never knew I had in other parts of the country. And I really appreciate them.

And I would hate to have birdwatchers, or hunters, or any -- anyone telling me I couldn't do what I wanted to do as long as it was in the bounds of legal requirements and fair to everyone involved.

And I think that's the whole thing is everyone has to be fair to everyone else. There are people talking compromise. Well, that's true. There's plenty of room down there for everybody to do their thing.

And I think the BLM -- the preferred plans looks good to me. I'd hate to see roads all

through there. Some limited access or emergency roads would be fine with me.

But for the most part, I think there's enough room for everyone to enjoy themselves. That's what I came here for.

Thank you.

MR. ABBEY: Thank you.

John Millican?

MR. MILLICAN: John Millican, M-i-l-l-i-c-a-n.

I'm Wildlife Manager for the Arizona Game and Fish Department. I have unit 35A which encompasses the river in the bounds of south of Fairbank down to the Mexican border on the west side of the river.

First I'd like to clarify something one of the speakers said. The Game and Fish Department has not proposed building dams or stocking fish. This is not state land. This is BLM land. And we do whatever -- we have a comment input into what the BLM does, but we don't go in and do programs unless we are asked.

Second, the Game and Fish policy as stated in the draft is to allow hunting for all legal wildlife species during prescribed dates, using all

legal firearms. And it will be closed from April 1st through August 31st. We will stop any target practicing or carrying of firearms in that area at that time.

Hiking, birdwatching, and hunting all have an impact on our environment. These impacts can be positive or negative depending on the degree of management involved.

Loss of habitat is the key to losing wildlife species. This loss of habitat comes in many forms; development of houses, roads, trails, campsites, off-road vehicle travel, locked gates which deprive all citizens from enjoying public lands and is a very large and growing problem in southeastern Arizona.

True, some of these impacts are greater than others, but it all -- it is all a from of habitat destruction, and therefore, impacts all wildlife species.

The San Pedro Management area encompasses three management units. It encompasses unit 34B, 30B, and 35A, all of which have limits imposed on the types and dates of hunting by state law.

The San Pedro Management area is a relatively small, narrow area compared to the surrounding areas -- the three encompassing units.

Hunting goes on in those units and will continue to go on in those units up to the boundary of the San Pedro Management unit. There has never been a problem in the past with any of the residences in those areas.

I grew up in Bisbee. There was -- before the BLM owned it or before it was closed to any problem than on public -- or private lands, excuse me.

At that time there was no problems. All the hunting pressure, if there was any hunting pressure, would be on the uplands, far removed from the San Pedro River. And that was mainly because not everybody in their right mind likes to wade through Whitethorn and Catclaw.

Generally more restrictions cause more confusion, and therefore, only complicate the multiple use question.

Therefore, as I see it, the issue is not, to allow hunting or not to allow hunting just as it is not, to allow birdwatching or not to allow birdwatching. The issue is that this is public land and therefor, the multiple use is the norm, which will not limit any one fraternity.

As mentioned before, U.S. Citizens have rights. If these rights are legal as prescribed by sound management practices, then all citizens should

have a right to pursue the activity of their choice.

Thank you.

MR. ABBEY: Thank you.

Grady Cook? Grady Cook?

MR. HAYDEN: Can I address a question to you?

MR. ABBEY: Could you state your name please?

MR. HAYDEN: Ken Hayden, H-a-y-d-e-n.

The gentleman that just spoke seems to speak with authority as to what applies to public lands; i.e. multiple use, and therefore, it is more or less a -- a set procedure.

My question is, is that a fact in -- or are we more or less wasting a lot of time and in the end this -- this public procedure will prevail, and it will in fact be multiple use with hunting?

MR. ABBEY: I'm really not sure that I understand what you're -- what you're asking.

Multiple use comes in many forms.

MR. HAYDEN: What I'm saying is, the gentleman that just spoke seemed to speak with a degree of authority, stating that public lands -- that its citizens have a right to multiply use those public lands. And I inferred -- he seemed to infer that that

included hunting.

And my question to you is, are we -- are we somewhat wasting our time debating or making these statements, and in the end you're going to conclude that there will be hunting as well as these other -- these other things?

MR. ABBEY: Sir, I wouldn't be sitting here right now if I thought that this was a waste of time.

MR. HAYDEN: I didn't say that.

MR. ABBEY: I know that.

MR. HAYDEN: I didn't say wasting time.

MR. ABBEY: I know. But -- or your time either.

We can adopt any of these alternatives that are presented in a plan.

MR. HAYDEN: But is it a foregone requirement that you will include hunting?

MR. ABBEY: No, it's not.

MR. HAYDEN: Okay. That's what I wanted to know.

MR. ABBEY: Please spell your last name.

MR. COOK: My name is Grady Cook,

C-o-o-k.

I am a hunter and I am in favor of limited hunting on the San Pedro River area.

There are wide areas along the river in several places, well away from residences, and roads, hikers, picnickers, where hunting can be carried on safely. I don't feel that there's any kind of a threat to the public for limited hunting in certain areas.

One spot in particular is south of Highway 90 and just west of the San Pedro, east of Mosin (phonetic) Road. This area is not in the riparian zone. It's quite ugly as a matter of fact. It's all Catclaw, Whitethorn, and cactus which some of us like.

But I don't really see where a lot of birdwatchers would go in there when they can be down along the river in a big tree where I assume most of the birds that you would be looking for live.

This area is full of wildlife. I have seen mule deer, javelina, quail, and doves in the area. I don't feel it would be a threat for hunting in this area.

I do think that hunting should be restricted from high density usage areas such as the

highway crossings, and firearms should be restricted from those areas for safety matters.

But in these other areas where -- I have hiked them many, many times and have never seen another person there at all for miles around. I don't feel that that would be a threat.

I -- in this area I have been in I have witnessed severe damage by erosion. And most of it's caused by grazing. There are washes in some places that are a foot wide and six feet deep, and I'm not exaggerating at all.

It's not a place I would want to be at night. But this is due to cattle grazing, cattle trails. You can go out and find a cattle trail somewhere where the water is washing through it, and it will just drop five or six feet all of a sudden.

For this reason I do not feel that grazing, or off-road vehicles for that matter, should be allowed in that area, and also horse trails. Because I don't see much of a difference between somebody riding a horse through there on a trail every day -- many people riding them -- and having cattle running the same trail every day.

It's going to eventually erode out, and this needs to have a stop put to it.

My main concern, and I've only heard I think two other persons also expressing concerns with archaeological resources along the San Pedro.

I -- it's the most concentrated area in the county as far as archaeological sites go. There are sites there dating back ten and twelve thousand years of Clovis sites that are not found in very many other parts of the world. The sites are not understood very well, and all the information that can be gained from them will help us to understand our past a little bit better.

After that we had Indians in the area for hundreds and hundreds of thousands of years. For over twelve thousand years we have had varied occupation by different cultures in the area. And there are hundreds of sites up and down the San Pedro. Not many of them are documented.

The well known sites; Quibarri (phonetic), Gaybanipitea, Charleston Springs, Murray Springs, Lewis Springs, Hereford area, the Lehner Site. All of these are well known, and I feel that they should be protected, have interpretive signs and displays put up around the sites for people to enjoy so we can -- the public can get some interest out of them.

There are other sites, hundreds of

them. They're just small campsites and what have you that can be damaged by people going in and digging on them to remove the artifacts. And I think the area should be patrolled heavily to prevent this kind of destruction.

Everyone's concerned so much about the plants and animals. I think they're forgetting about some of the other things that are on the river such as the archaeological resources.

Thank you.

MR. ABBEY: Again, that's all the names on my list. Is there anybody who would like to speak that hasn't?

Well, Ray, we not only had a lot of people here tonight, we had a lot of good comments. So I certainly don't envy you and the -- the members of your staff with the task that you're faced with.

There being no other people wishing to testify, I hereby close this hearing.

Oh, excuse me.

MR. PRESSEL: I want to follow up that question that the gentleman was asking.

My name is Doug Pressel.

I just wanted to ask a question. The gentleman asked a question along the lines of, are we

wasting our time and energy discussing the hunting issue.

It's my understanding that -- this is my question: Is hunting in each of the four of the proposals?

MR. BRADY: No.

MR. PRESSEL: Which proposal excludes hunting?

MR. BRADY: The no action.

MR. ABBEY: The no action proposal.

MR. PRESSEL: That's the only one that doesn't have hunting?

MR. BRADY: And also the preservation.

MR. ABBEY: Yes, the preservation.

MR. PRESSEL: And preservation?

MR. ABBEY: Yes. Okay?

MR. PRESSEL: Okay.

MR. ABBEY: Thank you.

MR. PRESSEL: Thank you.

MR. BRAHM: One more question please, sir. Regarding the two --

MR. ABBEY: Your name?

MR. BRAHM: My name is Brahm.

Regarding the two gentlemen from Game

and Fish -- it wasn't mentioned -- were those personal comments, or was that -- should we construe that as the position of the Game and Fish Department on that situation?

MR. ABBEY: Again, I -- I don't -- well --

MR. BRAHM: Was that the official stand of the Arizona Game and Fish?

MR. ABBEY: The official stand for the Arizona Game and Fish will be in written comments, and they will be presented to the District Staff.

MR. BRAHM: Because it came across as being their official stand.

MR. ABBEY: Yeah. Their official comments will be written and submitted to the District staff.

MR. BRAHM: Thank you.

MR. DREYFUSS: My name is Joe Dreyfuss.

Could you please clarify something for me?

MR. ABBEY: Sure.

MR. DREYFUSS: When you refer in -- in the statement, returning the land to its natural state; are we talking 1595 A.D?

MR. ABBEY: Joseph, we can answer that question at the end of this hearing -- after this hearing is concluded; okay?

MR. DREYFUSS: All right.

MR. ABBEY: There being no other people wishing to testify, I hereby close this hearing. Anyone wishing to ask questions of the BLM staff, feel free to do so.

Thank you for coming.

(Whereupon, this hearing concluded at 10:06 p.m.)

C E R T I F I C A T E

I, do hereby certify that as Court Reporter in the County of Pima, State of Arizona, I was present at the hearing of the foregoing entitled case; that while there, I took down in shorthand, all the oral testimony adduced and/or proceedings had; that I have transcribed such shorthand into typewriting; and that the foregoing typewritten matter contains a full, true, and correct transcript of my shorthand notes as taken by me aforesaid.

William D. Hole

WILLIAM D. HOLE,
COURT REPORTER

TO
ERIC CAMBELL

MY WIFE AND I STRONGLY AGREE WITH TOM MISCHIONE - COMPROMISE, MULTI-USE - WILL WORK!

USE OF THE SCENIC SAN PEDRO RIVER AREA

PROBLEMS WE HAVE OBSERVED IN THE PAST:

1. Litter and Debris. The San Pedro River is such a beautiful place, regardless of whether it is Summer, Autumn or even Winter. During several photo trips to the area, I'd get ready to focus in with my Minolta on a pleasing scene, only to have to find another view because of all the trash! People have dumped mattresses, box springs, car parts, old signs, rags, nonfunctional appliances, mountains of beer cans and every kind of litter imaginable, ruining the landscape. In time, the once "Scenic San Pedro" became "Eyesore River." What a waste of waste, the nerds spread it all over the landscape like peanut butter, instead of hauling it to a landfill. How dumb!

2. Guns, Loud Noise, and Broken Glass. Target practicing is a very enjoyable activity that can last for hours, or as long as the ammo lasts. However, target practicing where there are large numbers of people walking, riding and moving about over the terrain, and popping up from out of nowhere, makes such an activity dangerous. I know there has been concern about over population, but... The San Pedro River area is no place for guns.

   The loud noise the guns make frighten off the wildlife many locals, myself included, like to photograph and watch. Soon, all the bird watchers who live in Sierra Vista will no birds to watch at the river. I'm sure this does not bless them.

   The third problem with the guns is that most of the targets have usually been glass bottles on one of the banks or sand bars, where people like to wade barefoot. Since walking barefoot in the cool sand feels so good, many people participate in this pleasurable pastime, only to have it ruined by an expensive trip to the local hospital to have glass removed from their feet! For many individuals, a day off is a rare treat. Cut feet from glass that shouldn't be there definitely can spoil their day, or yours if you wade. In addition, the glass in the river didn't go over to well with some of the ATV riders, it gave them unwanted and inconvenient flat tires.

3. Carelessness With 4 X 4s and Monster Trucks. Four wheeling is fun to watch and even more fun to do, however, when done incorrectly, or without thought, the vegetation and terrain is damaged or destroyed. Most of 4 X 4 people I've met, do have respect for the brush, grass and plants that adorn the scenic area, but there are a few who could care less.

They ride on the narrow ATV trails and hiking trails, crushing the vegetation on the sides of the trail, or they take off across patches of lush vegetation, spinning their tires, uprooting anything they can. Later, when a hiker or ATV rider comes by to admire the beauty of the land or photograph it so others can enjoy it, there is little left to look at! The once terrific terrain now resembles a scene from a Rambo movie. What a foolish waste!

4. Booze Parties. The river is a place many people like to bring their kids, or come for rest and relaxation.

   With excessively noisy, riotous beer and booze parties going on, the area gets polluted. These inconsiderate individuals get drunk, start driving their vehicles while under the influence of alcohol, cause accidents, tare up the turf and disturb others who are attempting to mind their own business. Then they usually leave litter and foul smelling residue all over, ruining the place for others who come afterward.

5. Unbelievably Loud Music. Music is supposed to be enjoyable, edifying, and pleasing the ears. However, when certain small, minority groups, who wanted to be heard, turned the volume up so high that the vibrations caused bird nests to fall off tree limbs, leaves to be pulsated off tree branches, and the ears of all humans and animals within a five mile radius to cease to function properly, it became a health hazard!

THE FOUR BLM PROPOSALS FOR THE SAN PEDRO, (which are listed in the Weekend Times):

Plan 1. The No People Plan. This plan is absurd! The land is there for the public to use and enjoy.! The hands off approach puts and end to that immediately! As for the future, the way this world is going, the end is near! Thank God for His Rapture Plan, which is described in 1 Thessalonians 4:16-17.

Plan 2. The Preservation Alternative. This seems like it would be a great benefit for the land and wildlife. However, there is one glitch. What about the people! Where do they come in? What about the fabulous ATV trails, the numerous horse trails, and the short hiking trails that led to so many beautiful areas. These trails make the land accessible to everyone. Eliminating the trails is eradicating the enjoyment of so many people. All it's done so is stir up strife and discontent.

Plan 3. Utilization Plan is also good, but there are two glitches. One is Plan 2 appears to be negated or done away with. The other is there is no mention of allowing ATVs in the area.

If ATVs aren't allowed in, many people won't be able to enjoy the land, and one of those who'll be kept out is me! With the health problems I have, that are the result of too many years of 90 hour work weeks, which were not of my choice, long hikes are an impossibility for me now. In addition, when I was discussing this with Jim Herriwig, who is in charge of planning and zoning at the city and also an encouraging friend, he said he no longer can make long hikes either. Randy Barnes, of Sierra Cycles, also mentioned the large number of people who buy ATVs to transport them into the wilderness areas because health problems, age or a need to carry more than a backpack will hold, prohibit them from making it in on foot. Several others, too numerous to mention, said, in so many words, that keeping ATVs out is keeping a large portion of the population out, and it's unfair to them.

Plan 4. The Balanced Alternative sounds like a happy combination of Plan 2 and Plan 3. This, I believe is the solution. Yet, even it has two problem areas. The first being the execution of the plan. Although combining Plan 2 and Plan 3 is the right thing to do, it won't be easy! It will take much time, thought and planning. But the results will be well worth the effort. The second problem, is again, no mention of ATV use.

LAND AND TRAIL UTILIZATION:

I believe that the scenic San Pedro area is plenty large enough to be divided up equally for a wide variety of uses, from conservation, research, picnicking, hiking, ATV riding, 4 X 4 use and even dirt bike trails.

However, notice that I used the word "equal." God created all people equal, so why not treat everyone equally and give each their fare share? This is America, isn't it? The land of the free and the brave, or is it? Certain groups have lost their freedom! In some parts of this wonderful state, something not so wonderful is happening to certain groups of people. For example, the poor ATV riders. They have been treated like refugees, pushed around and shuffled off to only the ugliest, most unattractive, unappealing, dusty and worthless land. And the Indians living in the late 1800s and early 1900s thought they had it rough! Meanwhile, the hikers and bicyclists have been given areas with the most sensational scenery, terrific turf, filled with multitudes of eye pleasing sights. This is definitely not pleasing to God, nor is it the American way. Something has gone wrong!

In the river area, and for that matter, in most of the state parks, there is ample land for everyone to have their fare share. At the river, for example, the area off of Escupule Road, "The Bowls," and the land just East and West of there, which is criss crossed with many wonderful trails, is suitable for ATV use. Parts of the land West of there would be good for dirt bike use. The area near the Highway 90 bridge would be great for picnics. As for hiking trails, the possibilities seem endless.

Some trails are suited for only certain kinds of use.

Hiking Trails are suited for hikers only, as they are only about two feet wide or less, or they are narrow and loaded with rocks or boulders and other obstacles a hiker would have no problem with, but would slow or stop most vehicles. I would recommend that no vehicles be used on such a trail, and that the people walking on hiking trails be sure not to leave any paper, cigarette butts, or other forms of litter. The BLM or who ever cares for the land should see that this is carried out.

ATV Trails are suited for ATVs because they are usually about four to six or seven feet wide, are fun to ride on, or they may be challenging, and therefore thrilling, or they may be too steep for other types of vehicles. These trails often lead to many secluded and scenic areas, places where many individuals need to go for a little peace and solitude. As I said earlier, there are many people can't walk long distances due to health problems, so they use ATVs to take them where they normally couldn't go. For my wife and I, it is absolutely necessary that we be allowed to use many of the trails, because the photos we take on these trails help supplement my disability retirement check and her meager salary at the store. Recently, we began selling photos of the scenic places in Southern Arizona. If we can't ride on the trails, we can't take photos. No photos means nothing to sell. Nothing to sell means more years of poverty. And even if we never sell another photo, the enjoyment we get from getting out in the wild and riding our ATV helps take some the pressure of life off of us. Also, I write Christian booklets and articles, and much of my inspiration comes from our trail riding experiences. What we write touches the lives of many people.

4 X 4 Trails are suited for this type of vehicles since they are nine to twelve feet wide, may be too steep for normal passenger cars, or they may have incredibly steep angles of incline, providing the challenge and excitement many 4 X 4 enthusiasts crave. The steeper, hillclimb type 4 X 4 trails should be located away from picnic areas so dust doesn't into the food the hungry picnickers are wolfing down. Sand and teeth don't mix too well. Yech! Pitoowee!

Dirt Bike Trails are narrow and similar to some hiking trails, but due to the noise the many dirt bikes make, they are to be located in out lying areas, away from the bird watching sites, picnic areas and the Ranger Station-they get headaches easy. These dirt bike trails should not be shared with hikers, ATVs or other slower moving things, for obvious safety reasons.

Multi-Use Trails are those which are wide and fairly level and lead to other trails that can be used by hikers, ATVs, 4 X 4s and passenger cars. These trails or roads may or may not be graveled. Excessive speeds should not be permitted on these Multi-Use roads or trails. Drivers must exercise consideration of those who may be walking.

Open Riding Areas. A few of these do exist. I saw one near "The Bowls" which had many sand hills and was void of vegetation. I saw another on the West side of the river. It was a large, barren tract of land, away from everything else, that would be suitable for converting to a dirt bike or ATV practice track. Places like this can be utilized by most off road vehicles without any harm to terrain. Even if these vehicles don't toss any sand around, the wind will, and in much larger quantities. Sand is sand, and moving it around doesn't hurt it in any way.

RULES I WOULD LIKE TO SEE MADE AND STRICTLY ENFORCED!

1. Absolutely No Littering! Heavy fines and or clean up labor would be mandatory for offenders. Repeated offenders would receive even heavier fines and on the third offence, they will be banned from entering or using the River Park. Scenic areas such as the San Pedro are too precious to be polluted with trash. Put the garbage into a landfill, not the landscape!

2. No Graffiti on rocks, boulders, or trees. This is detrimental and destructive, in addition to being defacing to the object it is done on. No spray paint cans should be permitted inside the River Park grounds! Pre-entry vehicle searches may be necessary to enforce this. If someone does manage to sneak a can or two in and deface the landscape with graffiti, they should be punished. First time offenders should be made to remove their undesirable art work from the rocks or where ever they put it. Second time offenders will be heavily fined and made to remove their annoying scribble. Third time offenders should receive a public paddling, to be applied to their posteriors by the biggest, badest W.A.C. sergeant or lady wrestler that can be found, then have to pay a very heavy fine, and still be made to remove the unsightly mess they made.

3. No Alcoholic Beverages Permitted, at all, or for any reason, in the San Pedro River Park area. If necessary, have all vehicles searched for the smelly junk, before they are allowed to enter the Park area. The hindrances, hassles and headaches alcohol brings is not desirable in a family oriented recreational park.

4. No Smoking On The Trails. Many smokers leave an unsightly trail of cigarette butts on the trail. Also, many fires have been started by tossed cigarettes on such trails. And why should the nonsmokers have to inhale that foul odor on the trails?

5. No Non-Prescription Drugs Allowed in the River Park, at any time. Any one caught in possession of or selling drugs will be prosecuted to the maximum extent the law allows!

6. No Firearms will be permitted in the River Park area, except at a well planned, safe shooting range, which should be constructed in a secluded location, that will not interfere with other people or wildlife in the park! This will keep the target shooters happy and the rest of the population safe. I enjoy target shooting too, but realize that safety and wisdom are first.

7. Hikers Must Not Harass the ATV Riders or curse them for no reason. Such unfriendly activity has no place in a peaceful park!

8. All ATV Riders Must Wear Protective Safety Gear such as helmets, gloves and boots. Elbow guards should be recommended.

9. Slow Down When Approaching Hikers On Multi-Use Trails. On trails which are shared by hikers and ATV riders, the driver the ATV will slow down when approaching hikers, to prevent the hiker from being sand blasted! Sand has a gritting, irritating, strife causing effect, especially when it gets in the eyes. Also, taking time to get acquainted with one another on the trail can result in some neat friendships. While on the trails, we have met some very nice people.

10. Do Not Remove the Baffles in the Muffler on Your ATV. Most ATVs are very quiet, even the ones with high performance exhaust systems. However, a few idiots think they will gain more power by removing the baffles in the mufflers. In reality, it causes power loss, in addition to being a health hazard. This practice must be prohibited in the River Park area.

11. Excessively Loud Vehicles Are Not Permitted in the River Park. All vehicles, cars, 4 X 4s, ATVs, dirt bikes or other, must not have excessively loud exhaust systems, as it bothers humans and wildlife alike. A healthy rumble is permitted, but no vehicle shall exceed 100 decibels of sound.

12. No Off Trail Riding. All vehicles must be driven on the trails only, unless they are in a designated open riding area, or they are parking. If they are parking, they must stop only the cut out parking areas, or a place void of vegetation, unless it is an emergency. The land must be protected so others can enjoy!

13. All Who Enter Must Pay the Entry Fee, except park employees, or families who make less than $9,600 per year and can furnish proof.

14. All Trails, Picnic Areas and Facilities Will Be Carefully Maintained. This regulation is for the park personal. A poorly maintained park is a blight. Fortunately, much of time, most park areas seem to be kept in fairly good shape. However, this is not always the case. Earlier this year, my wife and I and some friends revisited scenic Carr Canyon, and found the roads in a state of disrepair. This was right after a "ranger," who was not in uniform, nor operating a green, ranger vehicle with the official Ranger emblem, informed me that they were "just graded." The main road was full of deep, rough ruts, bad bumps, and had boulders blocking parts of it. The trails, leading off the main road, were either neglected or blocked off. In addition, I found much trash scattered in and around the camp areas and on the portions of the roadside.

Then, two "rangers," who were out of uniform, out of shape, (one was at least a hundred pounds overweight and the other I couldn't tell whether it was male or female) and not driving official vehicles, complained about the litter as they stood in one area for over an hour, dropping one cigarette butt after another, till there was a pile of over twenty of the unsightly things at their feet! When I tried to talk to them, the foul stench, which was almost overpowering, made it very difficult. Then one of them had the gall to complain and make false statements about ATVs, while they allowed an annoying booze party to go on not more than two hundred feet from where they were standing! When I told them about my need to get to certain areas to take photographs, they, in so many words, said, "You can't, too bad." That was several months ago, and I haven't gone back since. In the past, the park rangers always let me use the trails. That is no way to run a park. This gross inefficiency, negligence and laziness is a waste of the tax payers hard earned money, in addition to being irritating, and it must be halted immediately! No, I not saying that all park personal are shiftless and lazy, most of them are not! Every time we have ever visited any of the State Parks in Southern Arizona, the rangers, in uniform, were always working, assisting someone or doing something that had to be done. We have found them to be helpful, friendly and encouraging.

If all the rules I have written, though they may sound strict, were diligently enforced on all of the state parks, they would all benefit and be greatly improved. Just about everybody would be much happier!

I hope that what I have said will be of some help. Many have said my ideas on the subject are good.

Sincerely,

Bill & Lori Chiriani

Bill Chiriani

— Enter —

Your Notes from our Embassy
Come Back Soon

4 Aug 88

District Mgr.
BLM
425 E. 4 st.
Safford, Az
85546

Sir,

In ref. to public meeting in Sierra Vista on 4 Aug 88, concerning the San Pedro draft plan.

I favor access for hunting in the San Pedro river lands. I favor the balanced approach of multiple-use on the San Pedro River lands.

The BLM is doing a great job. We can all share these natural resources. Thanks for your efforts.

Dennis Dzelan
3710 Blackbird Dr.
Sierra Vista, Az.
85635

EMBASSY SUITES

If campgrounds are made I feel they should be well planned and controled. Many National Forest campgrounds are good examples of bad campgrounds. People realize that N.F. campgrounds dont have hosts and these are the best places to go to stay up all night drinking and playing music. If your campgrounds lend themselves to this, people who like nature wont come but partiers will come. One night at Organ Pipe National Monument rustic campground our neighbors spent the night maintaining a large fire by burning fallen organ pipe skeletons and anything else they could find even though fires were specifiaally forbiden. How will you stop this? I sugest that each campground have a host or that they are be patroled twice each night once at dinner time to prevent cooking with wood and once at about 10:00 PM to enforce quiet hour and prevent all night partying. I also believe that a non locked gate at campground entrances should be closed each night at 10:00 PM to discourage late night activities. Charge enough money for camping to facilitate these controls. Keep campgrounds away from cottonwoods to prevent tree carving and chopping. Provide lots of space between campsites and plant between sites with low water natives or eldarica pines.

I have rafted down the San Pedro several times I think it is the finest way to experience the river. I hope that this activity is never prohibited. I would like to be able to call a hydrologist to check river depths when I am planning to float. I can provide much information about river rafting.

I feel that hunting controls over population

but a wildlife refuge with man as the inplanted preditor is limiting. I think following state hunting regulations is too simplistic for this place because we have the opertunity to encourage natural processes that control populations. I absolutely dont want to see the San Pedro used to grow animals for hunters because they provide funds through hunting licences. Hunters have the vast majority of public lands on which to hunt. Alow the San Pedro area to be used first to bring back natural preditors. I, and I believe others would be willing to pay the equivalent of a hunting licence to see the river returned to its most natural ecological balance. Many people who love nature are thriled to see wildlife. It is hard to explain just how deflating it is for such a person to see a hunter try to kill the wildlife they love. The sound of a gun in the serenity of natural beauty is sad. The nature lovers need a place to go during deer hunting season where they don't have to fear being shot. I have been to wildlife refuges where hunters were required to take a class to know protected animals. I would like to see no hunting at all in large areas where a hiker could make 20 mile round trip hike and at sensative areas. Otherwise I believe hunting should only be allowed where it is determined to be necessary for the health of the environment.

O.R.V. use should be completely prohibited because I have never seen it used in otherthan a hell rasing manner

and the noise carries a long way. Lets always remember that when ever we allow something the priviedge will be misused, and we should take into account the full consequence of this misuse.

Thank You Mike Foster

Box 1183
Bisbee Az 85635
4323419

NO ACTION ALTERNATIVE

is a sensible, responsible alternative for the San Pedro "management" area.

There is a wash draining into the San Pedro at which I have seen more different species of wildlife than any other one place I have ever hiked. A partial list: great horned owls, barn owls, redtailed hawks, gray hawks, great blue herons, green herons, western diamond-back rattlers, black necked garters, various toads and frogs, porcupines, skunks, bats, deer, javelina, bobcats, and enough different species of smaller birds to make a birdwatcher think that he or she had died and gone to heaven. I have seen the young or their tracks of nearly half of the above species. The disturbance created by the number of people developed picnic grounds or nature trails would attract would disrupt the reproduction of such species.

The Preservation Alternative would be acceptable if the "limited public use" applies only to non-exploitive activities such as hiking, photography, and birdwatching. NO collecting, NO hunting, and NO ORV's.

The relative ease with which one can see the wildlife in this area would be destroyed if an intensified fear of humans was generated by hunting.

ORV's are the most useless, purposeless, wasteful, and destructive weapons ever used in the war against the planet. They should be outlawed. A wonderful letter written to Arizona Highways by John Oldberg reads:

> " . . . Just because you own a seat on the boat does not give you the right to drill a hole under it. If a few people destroy the wild lands, all of us lose. To do anything except leave them as you found them is to steal from your own children."

On this principle, the third and fourth alternatives are totally unacceptable. No developed campgrounds, no developed picnic sites, no developed nature trails, NO development, period.

If one wants to enjoy developments, one can take a walk in one's subdivision. If one wants to enjoy nature, than nature should be **LEFT ALONE** so one can enjoy its true and natural state.

Joanne Cockerill
P.O. Box 5081
Huachuca City, AZ 85616

Joseph E. Patz
1131 Catalina Drive
Sierra Vista, AZ
85635
1 August 1988

SUBJECT: San Pedro River Riparian Management Plan and Environmental Impact Statement

Upon review of the draft San Pedro River Riparian Management Plan and Environmental Impact Statement, the following observations are made:

1. Several of the alternatives proposed would allow regulated hunting upon this property. I feel that allowing this would place all people using the Riparian Area at risk and jeopardize the Bureau's stated objective of reintroducing native threatened and endangered species. The nature and the size of the San Pedro Resource Conservation Area is completely unsuitable to allow the discharge of firearms. The bullet from a weapon discharged within confines of the Conservation Area can easily travel with fatal velocity into any one of a number of habitated areas. I do not oppose the permitting of bow hunting within this area, as these weapons have a greatly reduced lethal radius.

2. I oppose the introduction and the encouragement of non-native species of vegetation within the San Pedro Resource Conservation Area. Once again I feel that this action would jeopardize the Bureau's stated objective of reintroducing native threatened and endangered species. To encourage the growth of non-native species will create competition which native species may not be able to cope with. I feel what should be done is to eliminate all non-native species on the property and reintroduction and encourage natural plant succession and the growth of native species.

3. I also oppose the continued operation and issuance of new gravel extraction contracts anywhere within the San Pedro River drainage. Permitting operation such as this will change drainage patterns, encourage erosion and destroy wildlife habitats. In light of their past actions, I do not feel that those persons responsible for the operation of these businesses have realized their responsiblities as stewards of the land leased to them.

Joseph E. Patz

MEMORANDUM

TO: Bureau of Land Management, Safford District

FROM: City of Benson

DATE: August 3, 1988

SUBJECT: Comments on Draft San Pedro Riparian Management Plan

PREPARED BY: Mark E. Battaglia, Benson City Attorney

INTRODUCTION:

The City of Benson has seen fit to comment on the Draft San Pedro Riparian Management Plan and Environmental Impact Statement because of the city's proximity to the northern boundary of the area being considered.

BACKGROUND:

Benson is the only incorporated city near the northern boundary of the San Pedro Riparian Area (SPRA). The local economy has been adversely impacted by the loss of the mining industry employment with the shutting down and relocation of the Cypress Johonson Mine at Dragoon, the continual work force shrinkage due to decreased product demand at the area's primary employer, Apache Powder Company, and major staff reduction at the Arizona Electric Power Generating Station and general office. Of the various impacts considered and discussed in the E.I.S., the economic considerations predominate the concern of the local government and are the primary focus of these comments.

COMMENTS:

The State of Arizona's acquisition of Kartchner Caverns and the State Park's Department's plan to develop the property into a

major park has caused the Benson City Council to adopt a program of aggressively seeking tourist business to offset the jobs lost in the industrial sector of the local economy and to maximize the potential economic benefits anticipated from construction of a state park projected to attract upwards of 200,000 visitors annually. Development of the SPRA could compliment the Kartchner Caverns State Park and provide additional economic benefits to the Benson area if the management plan selected is either the Utilization Alternative or Preferred Alternative and provision is made for facilities at the north end of the project. Due to the north end's proximity to Interstate Route 10 and U.S. Route 80, it is the city's position that it would be feasible to provide a visitor's center and campground similar to the Highway 90 area facility discussed for the San Pedro Ranch area.

In addition, to the visitor's center and campground, Benson suggests consideration of a privately operated light rail train originating in the area of the south boundary of the city and US Route 80, several miles from the SPRA boundary, and operating over the existing rail right-of-way. The proposed light rail system would allow prohibition of all motorized vehicles, except for administration purposes. In addition to the economic benefits, a light rail system would have a number of advantages which would include:

1. Little or no air pollution, as the light self-contained units could be operated on a clean burning fuel;

2. Allowing the maximum number of visitors by permitting access to elderly, infirm or very young, who would otherwise be unable to access the area on foot or horsebacking;

3. Minimum damage to terrain by reason of prohibiting vehicular traffic;

4. Substantially reduce noise pollution otherwise generated by individual vehicles;

5. Tend to more evenly balance the visitor population over a wider expanse of the area rather than concentrating on the southern portion;

6. Allow the option of locating major tourist-oriented facility, such as a campground, some distance outside from the SPRA, thus minimizing the impact on the ecosystem being preserved.

RECOMMENDATION:

Based on its considerations of the Draft Management Plan and Environmental Impact Statement, the City of Benson recommends adoption of the Preferred Alternative Use Plan, with said plan being modified to provide for recreational facilities at the north end of the project or at least accessible therefrom, and such use to include provision for a rail or light rail train system originating in, or near, Benson, and using the existing track and providing frequent opportunities to exit or reboard the train at reasonably convenient time intervals and, in conjunction therewith, to prohibit private vehicular traffic.

'Rational exploitation' and 'sustainable yield' were key phrases invented and used by biologist-philosophers to convince the world that trees, fish, and other wildlife should be so managed as to offer material benefits to humanity. Scientists sought, by measuring, scraping, probing, and by constructing mathematical models of living populations, to learn how they multiplied, grew, and died in order to advise how the maximum benefits might be attained.

There are far fewer forests in the world now, however; more of the fishes are overfished, and wildlife species steadily diminish--owing primarily to overconfidence in our ability to predict the behavior of complex living systems and to weakness of the institutions through which people of many nations seek to achieve common goals.

Sidney Holt

COCHISE COUNTY PLANNING DEPARTMENT
P.O. DRAWER AC, BISBEE, ARIZONA 85603 (602) 432-5471

August 3, 1988

Ray A. Brady
District Manager
Safford District Office
Bureau of Land Management
425 E. 4th Street
Safford, AZ . 85546

Re: San Pedro River Riparian Management Plan and Environmental Impact Statement (EIS)

Dear Mr. Brady

The Cochise County Planning Department has reviewed the above Draft Plan in its entirety. In particular, we have analyzed the preferred alternative and have included specific comments/recommendations relative to the eventual implementation of the alternative.

Hunting Activity
Under the preferred alternative, the Bureau is proposing to close the EIS area to the discharge of firearms except those areas associated with regulated hunting. Hunting would be permitted between September 1 and March 31 and no hunting areas would be designated around developed facilities.

The Planning Department recommends that the entire management area be closed to hunting. Since the management area is only 2.6 miles in width, user groups would be concentrated into a relatively small recreational area. Such concentration along the San Pedro could create potential safety problems/conflicts between hunters and all other user groups. Designation/posting of hunting areas removed from locations specifically dedicated for developed or dispersed recreation would not prevent hunters from inadvertently entering these high-usage areas. Additionally, it is felt that the BLM does not possess the manpower to intensively manage all proposed hunting areas to prevent such user conflicts from occurring.

Bicycling/Hiking Trails
The Draft Plan has indicated that one scenario for the existing railroad corridor is to abandon the railroad track, obtain the

privately owned right-of-way and develop a hiking and equestrian trail along the grade. Due to the local popularity of bicycling, the Planning Department recommends that the BLM provide trails for bicycles within the management area. These trails could be developed on the railroad line frontage roads, Lewis Springs Road or other existing jeep roads in the management area. These trails could also be shared with equestrians. However such bicycle/equestrian trails should be located away from sensitive riparian habitats but would still provide recreational opportunities for a greater number of user groups. (It should be noted that extensive local efforts are underway to retain the railroad line from Benson to Douglas to promote tourism and to support industrial development).

Several additional hiking trails should be provided within the management area. This would enable user groups to access more areas in and around the San Pedro River and would subtly encourage recreationists to utilize developed trails, thereby minimizing user impact on more sensitive sites within the management area. Additionally, such trails could connect those developed recreational sites that allow overnight use to encourage hikers to camp in these areas that are less sensitive to recreational impact.

Overall, the Planning Department feels that the preferred alternative offers aunique balance in providing a myriad of recreational opportunities in and around the San Pedro River and at the same time protecting and enhancing the sensitive riparian ecosystem within the EIS area.

We thank you for allowing us this opportunity to comment on the Management Plan and EIS.

Sincerely,

Jody N. Klein

Jody N. Klein
Cochise County Planning Director

JNK/fb

1

JEROME J. PRATT

WILDLIFE MANAGEMENT CONSULTANT

3000 MEADOWLARK DRIVE
SIERRA VISTA, ARIZONA 85635

MEMBER THE WILDLIFE SOCIETY

July 3, 1988

Mr. Jerrold Coolidge
EIS Team Leader, BLM
425 E. 4th St.
Safford, AZ 85546

Dear Mr. Coolidge:

I have reviewed the draft San Pedro River Riparian Management Plan and Environmental Impact Statement and support Alternative D: Preferred.

The only comments I have relate to wildlife matters:

1-1 Page A-41, you include "Rock Dove." There has never been an authentic record of a wild rock dove (Columbia livia) in the New World. Just because the AOU lists feral pigeons as rock doves it does not justify your agency to perpetuate dissemination of this false information. When ranchers lived on this property they kept chickens, so why not list junglefowl?

1-2 Page A-62, reference, ? Ft. Huachuca, AZ-- (Mexican wolf). Arizona Game & Fish Wildlife Restoration Project 46-R-1, Job No. 3, Completion Report February 15, 1951, states: "A predator control program was inaugurated on the Huachuca Wildlife Area in the spring of 1949. This was a cooperative program with the U. S. Fish and Wildlife Service, Mr. Earl Long acting as the resident trapper." Mr. Long related to me that he removed the male wolf and pups at the outset of his work on Fort Huachuca, but I do not recall if these animals were taken by trapping or shooting.

From an endangered species aspect for reintroduction, it may be of interest to you to know that the Masked Bobwhite, Colinus virginianus ridgwayi, was likely found in grasslands along the San Pedro River and as far east as the Sulpher Springs Valley according to the late J. Stokley Ligon. See my paper, "The ancestral range of the Masked Bobwhite in Arizona," proceedings of a symposium "Masked Bobwhite Biology and Conservation," University of Arizona, August 1986.

Sincerely

Jerome J. Pratt

Jerome J. Pratt

DESERT AND ISLAND ECOLOGY

Response No. 1-1. The text has been corrected.

Response No. 1-2. The text has been corrected.

2

COCHISE COLLEGE BOTANICAL GARDEN

Vincent F. Lopresti
3300 E. Fry Blvd. # 61
Sierra Vista, Az 85635

901 N. Columbo Avenue
Sierra Vista, Arizona 85635

Subject: San Pedro River Riparian Management Plan and Environmental Impact Statement Draft, review of:

Thank you for sending me a copy of the draft. It is a very outstanding comprehensive document. In addititon to being a member of The Friends of the San Pedro, I have areas of interest which may enable my making a contribution to the project. In my retirement I am spending full time on two fields of endeavor, both of which have been hobbies for many years, Botanical and Historical Research.

Botanical relates to Cactus & Succulents. I have been a member of a research team for the past 10 years which has discovered 6 new plants in Mexico and on my own I have discovered a new cactus South of St. David which is yet to be named. I am a member of the National Board of Directors of the Cactus & Succulent Society of America and in that capacity I am on its Conservation Committee. I have been guiding Federal Authorities around S.E. Arizona to acquaint them with Cactus & Succulent locations and help with plant identification. Research assignments are received from the U. of Mexico, Mexico City and results of this effort have been published in the Cactus & Succulent Journal of Mexico.

Local Cactus & Succulents likely to be found in the subject area:

Coryphantha vivipara bisbeeana and arizonicas
Echinocereus pectinatus v. rigidissimus (rainbow cactus)
Echinocereus fendleri (hedge hog cactus)
Mammillaria grahamii/oliviae (fish hook cactus)
Echinomastus intertextus
Echinomastus erectocentra v. (unnamed) It should be on the endangered list.
Piniocereus greggii (night blooming cereus)
Various Opuntia & Chollas
Ferocactus wislizenii (barrel cactus)
Echinocactus triglochidiatus

Succulents

Agave parryii
Agave parryii v huachucensis
Fouquierra splendens (Ocotilla)
Yuccas
Dasylirion wheeleri (desert spoon)

Historical Research at the present time consists of preparing a "Pictorial History" of S.E. Arizona and preparing Travel Guides related to that history for the Ranger Station in Sierra Vista, as a volunteer. For example, research disclosed that the BLM map showed Camp Wallen four miles displaced and the village of Huachuca indicated in Bolton's "Rim of Christendom" Life of Padre Kino was located near the settlement buildings on the Babacomari Land Grant Ranch (only an Indian cemetary remains). The same book indicated Padre Kino was a frequent visitor to a Village named Santa Cruz located directly across the San Pedro from Fairbank. In this case investigation indicated the presence of pits under more recent ruins. Bolton's Research commenced in 1911 and it shows a picture of "Quiburi" did he know something we no longer can be sure of today. Naturally I am very interested in continuing my studies of the San Pedro Riparian area.

2-1 Confirmation of the above indicated cactus & succulents can only be accomplished through field research. This is an offer to guide BLM personnel is such an effort. I have made one trip into the area North of Fairbank with a BLM Archaeologist and hope to continue making trips with BLM personnel.

General Comments:

I feel very strongly that no off-road-vehicles should be allowed. Likewise there is absolutely no need to allow hunting as there is an abundance of hunting area within easy driving distance.

Access should be very limited. It is visualized that there be parking areas in Fairbank, Charleston, Boquillas Ranch, San Pedro Ranch House etc. ie: A person wants to see Charleston/Milltown access from the present paved road would be by walking on a clearly define path, and the same applies to other areas of interest.

Fires should be limited to specified areas where their are fireplaces. Likewise camping should be limited in duration and permited in specified areas. Policing will be a vital function to prevent distruction. Ranger guides would be an asset, and the presentation of historically oriented programs would be a big plus. Archaeological and Paleontological Research should continue under strict guidelines as to items of interest disclosed and future corrosion of exposed findings.

The PREFERRED ALTERNATE PLAN makes sense.

Please feel free to call on me if my areas of expertise can be of assistance, Telephone 458 4177.

Sincerely,

Vincent F. Lopresti
Director

Response No. 2-1. See General Response No. 6. We thank you for your offer of assistance in developing an inventory of the cactus and succulents of the San Pedro River study area.

3

COCHISE CONSERVATION COUNCIL

AFFILIATE

JEROME J. PRATT, PRESIDENT
3000 Meadowlark Drive
Sierra Vista, AZ 85635

CINDY HAYOSTEK, SEC'Y-TREAS.
P. O. Box 72
Douglas, AZ 85607

July 9, 1988

Mr. Jerrold Coolidge
EIS Team Leader, BLM
425 E. 4th St.
Safford, AZ 85546

Dear Mr. Coolidge:

The Environmental Assessment Committee of the Cochise Conservation Council has reviewed the draft San Pedro River Riparian Management Plan and Environmental Impact Statement.

We favor Alternative D: Preferred, as the most desirable plan for the management of this area.

Sincerely

Jerome J. Pratt
President

4

ZR HEREFORD RANCH

OWNED BY ZEV AND LORI BOS — P.O. Box 2225
SANTA ROSA, NEW MEXICO 88435 Benson, AZ 85602
602-586-3509

July 8, 1988

ZR PRINCE HUSKER B1O

Jerrold Coolidge, EIS Team Leader
Safford District Ovvice, BLM
425 E. 4th St.
Safford, AZ 85546

Dear Mr. Coolidge,

I am in receipt of the San Pedro River Riparian Management Plan and Environmental Impact Statement. I would like to submit the following comments on the draft plan and EIS.

I feel qualified to comment because of first-hand experience with a part of the area involved, experience with similar country in the area, more knowledge of the impact of t food-producing livestock on the local and national economy than is displayed by authors the Draft.

I congratulate the authors on their massive detail compiled and reported on most are of concern, but not on all. I congratulate the dedication of the specialists in the various disciplines involved and their determination to have their own special goals included in the plan.

The value and validity of the draft is compromised, however, by the bias apparent throughout the Draft, highlighted by the complete disregard of the economic and ecologic impact of food production in the area. If, as stated, the purpose of the acquisition of these lands is to "protect and enhance the riparian ecosystem" evaluation of the issues and possible alternatives is impossible without consideration of livestock for food production as it has affected, for better or worse, the area since the time of the earliest missions.

Let me state categorically, at the outset, that I am in complete agreement on the value of the riparian area, the value of the paleontological resources, and all of the cultural and social values. Where we disagree is in the method you choose to implement their preservation. There is no reason why food production cannot work hand in hand wit science in protecting and enhancing these areas. It is my firm conviction that livestoc for food production should be a valued and integral part of the Plan. I cannot agree that, in balance, an endangered minnow or plant that would be seen by very few in the ne 50 years should outweigh the overall health of the area or require the exclusion of food producing animals.

It is ironic that one of the prime criticisms in recent years of the ranching community has been their attempt at control of lands, locking of gates, restricting the general public's use of these lands. Now you propose tight control, limited access, banning of camping, shooting, etc. in order to control vandalism, ORV destruction of lands, theiving -- all items the rancher has tried, without the backing of federal authority but for the benefit of the public lands, to control.

A collective pat on the back was given the study on page 3-40 with the statement tha the goals as outlined were "most important to a majority of respondents." I submit that the number of respondents, in terms of "the public" was not only very limited, but they were not given all information needed to make an intelligent evaluation. It must be

the Brand to Buy!
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conceded that the naturalists, Environmental Extremists (EEs, as opposed to more pragmatic environmentalists such as ranchers), parts of the scientific community, have a decided anti-livestock bias not necessarily based on fact or research.

4-1 Specifically, I criticise the arbitrary decision to prohibit livestock grazing for 15 years (page 1-4). No reasons, as is the case in designating Wilderness as an issue not considered. No cateloguing of perceived damage or specific problems. Certainly no suggestion of any possible benefits. Yet some things must be considered in deciding whether or not to allow grazing.

1. Historically, by its very nature, riparian systems have served as travel/migration routes and have been the location for villages, homes, farms and food raising. In semi-arid regions such as this, they have always attracted use as a natural consequence of their very nature, a water source.

2. In more recent history, the establishment of mesquite and other woody brush has made management more and more difficult. Non use has proven to be no remedy. I had occasion, a few years ago, to have cattle on an area of the Boquillas. It had not been grazed for a period of 3 years, prior to our cattle being there. It was virtually impenetrable, the sacaton being old and rank, mesquite thickets thriving, rats riddling the flats to the extent that the ground was "rotten" and ripe for errosion. In a period of 15 years, the situation would be many times worse. Changing the name of a "community" from grass to woodland, would not in any way "up grade it" as suggested in vegetation evaluation on page 3-16. Mesquite, undistrubed, will continue its inroads on grassland, appropriating more and more of the water available. Without grazing and rubbing traffic of livestock, thickets become worse. The same is true of the invasive salt cedar.

3. Assuming a relatively low carrying capacity of 5 head per section for the 47,668 acres involved, assuming 75 lbs. of beef per capita annual consumption in the U.S., we can project the following benefit from livestock producing food on this area:

47,668 ac/128 ac per cow year long = 372 cows - 22 bulls = 350 cows
80% calf crop x 350 = 280 calves produced annually
275 calves (aprox. 2% death loss) reach slaughter age & weight x 600 lbs.
retail meat per head = 165,000 lbs meat
165,000 lbs/75 lbs per capita = 2200 individual annual supplies of beef.

If carried to the same detail with which the authors developed evaluations of the grass communities, mineral, cultural and all the other "impacts" we could carry this initial statement of impact on to the benefits to local community where the ranching operation buys, on to the larger scene of grazier, feeder, packer enroute to the very reason for the livestock's existence, the consumer.

4. USDA figures (Draft Grazing Report, pg. 3) indicate that 47% of the beef cow herd is in the 17 western states heavily dependent on public lands for their operations. The current trend toward removing food producing animals from the public lands is, therefore, putting 47% of the nation's beef supply in jeopardy, even though only 2% of the producers are here. Hence the adverse impact of losing the use of the lands is only to 2% of the beef producers, who would be put out of business. But the adverse impact of 47% of the beef herd affects 100% of the American Public in drastically reduced supplies of a vital part of the food chain and the resultant extremely high cost of quality protein. While the San Pedro area is small, it is only a part of the whole trend and must be evaluated in that sense.

5. Modern technology and improved knowledge and understanding of our natural

Response No. 4-1. The riparian area covered in this EIS has had a long history of livestock grazing. Certain conclusions can now be made of the effects of livestock grazing. During the 15-year moratorium, we will be monitoring the effects of non-grazing on the riparian resources. At the conclusion of the 15-year period an evaluation will be made and decision made as to whether or not to allow grazing to occur. If livestock grazing is considered as a management tool prior to the end of the 15-year period, a formal amendment to the plan would be required to allow for such use. The amendment would require full public review. Also see General Response No. 1 (Multiple Use).

resources make management of the riparian areas, including livestock grazing for the benefit of the United States citizens, a possible, very desirable, alternative.

6. Food producers -- livestock and crop -- by their very presence have provided a custodial service to the lands. Water developments have benefitted wildlife as well as domestic stock. The cost of the controls outlined in the Plan could be mitigated by the inclusion of the responsible ranching community. The Plan does not indicate the projected costs of parking lots, patrols, modification of the environment, construction and renovation of sites for staff and scientific use. It would seem that that evaluation must be viewed in conjunction with the possible inclusion of ranching as part of that control.

7. The very impressive list of species (bird, herpetile, mammal as well as vegitative) prove to be lists, not only of what is present, but what might be. This would seem to present a biased view, particularly in light of the fact that a true part of the ecosystem has been dismissed out of hand.

Multiple use of public lands should be as much a part of the thinking of the BLM as it is of the U.S. Forest Service which is pledged to manage for the greatest good of the greatest number. Food production must be a part of this. Preserving history to a reasonable degree, making cultural sites available to the public are all admirable goals. But it would seem we must guard against the extreme view of protecting one particular plant or minnow at the expense of the overall good, particularly when the various goals can serve each other. The many myths about "livestock", the attitude that they are simply something there for the enjoyment of the rancher, are part of the price we pay for so few Americans being involved in food production. The "Milk comes from the supermarket" thinking is understandable, but must be corrected when public policy is in the balance.

I submit that the Draft Plan and EIS are invalid because of being incomplete. I submit that the use of food production and the action of livestock on the area must be included for the benefit of preserving the historic-use character of the country, the health of the renewable resource communities, as well as for the benefit of the county, state and nation from the standpoint of food supply.

Respectfully submitted

Peggy Monzingo

Mrs. Ed Monzingo

cc: ACGA, AZ Congressmen

5

633 Quail Place
Sierra Vista, Az
85635
24 June 88

Mr. Ray Brady
District Manager
Bureau of Land Management
425 East 4th Street
Safford, Arizona 85546

Mr. Brady:

Enclosed are several items which will serve as an introduction to our proposal for an addition to the San Pedro River Land Use program which I understand is being finalized.

5-1 As part of that program my wife and I are seeking permission to enter a portion of the Land Grant area from the vicinity of Charleston south to Hereford for the purpose of operating our stagecoach along the original stage route, or thereabouts as close as possible, from Tombstone to Bisbee.

Mr. Eric Campbell has indicated that our plan may not be in concert with the uses which the BLM has planned for that area. However, I hope the following presents a better idea of our total proposal which we feel would not only harmonize with the Bureau's but would greatly enhance the enjoyment of the San Pedro Land Grant area.

We appreciate your consideration of our material and anxiously await your reply.

I remain,
Respectfully yours,

William H. Evans

Response No. 5-1. The operation of a stagecoach on the San Pedro comes under the heading of commercial recreation use. The recreation sections under each alternative have been expanded to cover commercial use.

Under the Preferred Alternative, commercial use could be allowed. This would occur only after full evaluation of the proposed use. An environmental evaluation will be written for each proposed use to determine the environmental impacts of such use. Decisions will also be made on the suitability of any proposed commercial use in the EIS area. Also, see General Response No. 2.

6

July 15, 88

US Department of the Interior
Bureau of Land Management
Safford District Office
425 E 4th St
Safford, AZ, 85546

Mr. James W. Cooper
2384 Golf Links Rd.
Sierra Vista,
AZ, 85635

Dear Sirs:

Per your request here are my comments on the San Pedro River Management Plan.

Firstly, I agree with your Preferred Alternative, it brings together many good choice. However, it needs some fine tuning. Please consider the following changes:

6-1 1. Page 2-23 "Check known sites periodically every 3 to 5 years. to collect exposed fossiles". This should be done yearly for several reasons, a periodic check in say Feb or March could be scheduled years in advance and made an annual event, a fossil party as it were. The second reason would be in the event of a massive washout early in the year the loss of fossils would be minimized.

6-2 2. Page 2-26 "Hunting would be restricted to regulated hunting" Please clarify. Arizona has no unregulated hunting, nor has it had such for generations. Do you intend to put another layer of regulations on the AZ game laws or what?

6-3 3. Page 2-28. Exotic fish removal. How do you plan to do this? The only sure way is to poison off the entire stream and start over. This does not seem to be an acceptable solution. In addition, eggs from "exotic" fish would be flown in on birds and the stream would be quickly repopulated. I suggest that no exotic fish removal be planned. In addition, the SP dries up sporadically so I would question if there are any exotic fish in the SP.

4. Page 3-12, Table 3-6. As I stated in 3 above the SP dries up at times. Therefore I question this list, at least as it applies to the upper SP. If this is a list of fish that will be eliminated I protest again. If the beavers are reinstated the rainbow trout, green sunfish, channel catfish, bluegill, brook trout and the largemouth bass will become important recreational species in the beaver ponds.

Response No. 6-1. We will check the known paleontological sites as often as we can. At a minimum, they will be visited every five years. We plan to check the most significant sites annually.

Response No. 6-2. The statement is that the use of firearms is restricted to regulated hunting. Use of firearms for "plinking" or target practice will not be permitted.

Response No. 6-3. The removal of exotic fish will be from existing ponds in cooperation with the appropriate state or federal agencies. The methods used will be evaluated in the associated enviromental evaluation that must be prepared prior to taking the action.

5. Which brings us to the subject of the beavers. As I understand it, in the days of the fur trappers and mountain men every gully and wash had a beaver dam, there was little erosion and the waters in the streams flowed sweet and pure. Myth or not, the beaver certainly had a constructive impact on the ecology of the plains and the West.(At least until our forefathers turned them into hats.) Historically the beaver has lived in the SP and the reintroduction would have a most beneficial effect on the ecology. Your plan should address the reintroduction of the beaver and the benefits of multiple beaver dams and the source of dam material.

Sincerly.

James W. Cooper

7

CHARLES A. SCHLEY
8811 E. OLD SPANISH TRAIL
TUCSON, AZ 85710

July 26, 1988

District Manager
Bureau of Land Management
425 E. 4th Street
Safford, AZ 85546

Attention: Mr. Jerrold Coolidge, EIS Team Leader

Dear Mr. Coolidge:

I thank you and the Department for receipt of your June 1988 San Pedro River Riparian Management Plan and Environmental Impact Statement.

I must first compliment you on the overall excellence of your E.I.S. and its supportive Appendices along with the marvelous comprehensiveness of your Draft Plan for the Riparian Management.

A very clear view was presented by your staff of the make-up of the San Pedro riverine area, the problems involved in attempting its management for benefit of us all and, indeed, a most heartening overview was afforded via the four well conceived plans for the Rivers utilization and management.

The people of this state owe you a warm vote of appreciation for a job well done in anticipating the administration of this non-pareil riverine treasure. As a lone voice, please accept my sincere thanks.

I find myself, save for some minor points, in complete agreement with your Preferred Alternative. The only change I suggest would be to reduce public impact on the area a bit more than proposed by reducing the number of for (4) large and nine (9) small developed recreation sites to a half dozen (6) of your choice based on historic or paleontological importance. 7-1

A special plan should be drawn to consider complete restoration of the Presidio of Santa Cruz de Terrenate on the site. This, probably the best preserved Spanish Presidio in the United States, is the gem piece of the San Pedro acquisition and should be the focus of all attention. 7-2

Response No. 7-1. The number and size of the recreational developments has been decreased in the final EIS. See Chapter 2 in the text.

Response No. 7-2. We agree that the Presidio of Santa Cruz de Terrenate is a significant site. It is important not only for its public use and historical values but also for its scientific study values. Based on this evaluation, numerous public comments, and recommendations from our technical advisory committee, we have decided on an appropriate management strategy. The strategy is to preserve the ruins in their present condition rather than attempt to restore them to their original form. Complete restoration would decrease their scientific values and, in many people's view, also detract from their historical and public values. We have prepared and implemented a management plan for the protection of the site by fencing the property, stabilizing the walls and other measures.

Mr. Jerrold Coolidge
Bureau of Land Management
July 26, 1988
Page two

7-3 Finally, regarding the two (2) scenarios proposed on recreational use of existing railroad corridor, I would favor converting some to a hiking and equestrian trail only.

My minds eye sees a tourist train, especially if privately run, becoming all too successful to the detriment of the entire San Pedro project. Imagine the impact of say a Multi-City Tourist Association and/or other promotional groups, touting this scenic ride on a ~~natural~~ artificial basis. The area would soon be crushed by the press of people and the weight of traffic. Something to be seriously considered!

Otherwise, I applaud and support your well thought out, inclusive Preferred Alternative plan for the San Pedro.

Appreciatively and Sincerely,

Charles A. Schley

Charles A. Schley

Response No. 7-3. See General Response No. 8.

8

Dos Cabezas Route
Box 6309
Willcox, Az. 85643

RECEIVED
BUREAU OF LAND MANAGEMENT
JUL 29 1988
SAFFORD DISTRICT

	ACTION	INFO	INITIAL	DATE
DIST. MGR.				7/29/88
P I O				
P. & E. C.		✓		
RESC. MGT.				
ADM				
[illegible]				
[illegible]				
SAN SIMON		✓		
cc San Pedro				
		DISCARD		

July 27, 1988

Mr. Ray Brady, District Manager
Bureau of Land Management
Safford District Office
425 E. 4th St.
Safford, Arizona 85546

Re: San Pedro River Management Area Water Rights

Dear Mr. Brady:

The evaluation of groundwater rights and options for the San Pedro River Management Area is certainly a complex and difficult one to solve or anticipate. The intended purpose for establishing this Management Area is to protect the Natural and Historic Resources. The use of groundwater in the area should be of great concern for the protection of these Resources.

8-1 It would seem, therefore, that the BLM should continue to encourage the establishment of an Active Management Area for the best and orderly water use in the entire region. At the same time, in order to develop a more effective posture for the future, perhaps a Type 2 Grandfathered Right should be obtained. The flexability to transfer its groundwater use from place to place might prove benefical.

I should also like to emphasize and encourage that the fallow agricultural fields be restored or returned for the most part in a natural manner with little help except in special situations. This is an arid region and the ultimate success of this restoration will be determined in large measure by the timing and abundance of rainfall. It would also help in keeping the operating costs down.

The above comments at this point might seem a little premature. With every meeting more information is obtained which helps to provide a clearer and more desirable solution.

Sincerely,

Dan Fischer

Dan Fischer

Response No. 8-1. The Arizona Department of Water Resources (DWR) conducted a hydrologic study of the Upper San Pedro Basin to evaluate whether a designation of the basin as an Active Management Area (AMA) was warranted. The DWR released its findings in mid-1988. In accordance with Arizona Statutes, a set of criteria was used to determine if the conditions in the basin would meet the requirements for AMA designation. Based on the study's conclusions, DWR determined that a designation could not be made at that time.

We intend to acquire any or all rights necessary for the protection of the EIS area and its associated water values. This includes the acquisition, upon a future AMA designation for the Upper San Pedro basin, of the available grandfathered groundwater rights.

We support any considerations for the careful management and conservation of the groundwater resource in the Upper San Pedro basin. To the extent possible, this includes local groundwater management initiatives or state-imposed measures to protect the river's resources.

9

Automotive & Industrial
SUPPLY
Drawer 46 635 G Ave • Douglas Arizona 85607
602 364 8411

July 29, 1988

Bureau of Land Management
Safford District Office
425 E. 4th Street
Safford, AZ 85546

Mr, Ray A. Brady
District Manager

Thank you for the copy of the San Pedro River Riparian Management Plan and EIS. It is a well prepared document with a great deal of information

I would like to see the Preferred Alternative chosen for this area. We need this type of recreational opportunity in Southeast Arizona - its the only active stream there is. But, its also important to protect the environment, etc., and I believe this alternative would do so.

Thank you for the opportunity to comment on this Plan.

Patricia Redman

PATRICIA REDMAN
USDA-Forest Service employee

10

July 29, 1988

Bureau of Land Management
Safford District
425 E. 4th
Safford, AZ 85546

NO ACTION ALTERNATIVE

is the only sensible, responsible alternative for the San Pedro Management area.

There is a wash draining into the San Pedro at which I have seen more different species of wildlife than at any other one place I have ever hiked. A partial list: great horned owls, barn owls, red tailed hawks, gray hawks, western diamondbacks, black necked garters, various toads and frogs, porcupines, skunks, bats, deer, javelina, and bobcats. The place is a veritable nursery for wildlife, as I have seen the young or their tracks of nearly half of the above species. The disturbance created by the number of people developed picnic grounds or nature trails would attract would disrupt the reproduction of such species. 10-1

The Preservation Alternative would be acceptable if the "limited public use" applies only to non-exploitive activities such as hiking, photography, and birdwatching. NO collecting, NO hunting, and NO ORV's!!

ORV's are the most useless, purposeless, wasteful, and destructive weapons ever devised in the war against the planet. They should be outlawed. A wonderful letter written to Arizona Highways by John Oldberg reads:

> ". . . Just because you own a seat on the boat does not give you the right to drill a hole under it. If a few people destroy the wild lands, all of us lose. To do anything except leave them as you found them is to steal from your own children."

On this principle, the third and fourth alternatives are totally unacceptable. No developed campgrounds, no developed picnic sites, no developed nature trails, NO developments, period.

If one wants to enjoy developments, one can take a walk in one's subdivision. If one wants to enjoy nature, then nature should be LEFT ALONE so one can enjoy its true and natural state.

For the Earth,

Joanne Cockerill
P.O. Box 5081
Huachuca City, AZ 85616

Response No. 10-1. We believe that the amount of recreation use will not have a significant impact on the reproduction of wildlife species. Most proposed recreation facilities are located well away from the riparian area. Dispersed recreation will occur in the riparian area but we are proposing limitations on the amount of use to keep the impacts at an acceptable level.

11

July 31, 1988

Superintendent
Bureau of Land Management
Safford District
425 East Fourth
Safford, AZ 85546

Dear Sir:

Anyone who has a sincere feeling for the beauties of riparian zones knows that the only way to enjoy them is on foot and very quietly.

11-1 BLM's plan to open the San Pedro to vehicular travel is hardly in the best interest of the life forms that inhabit the San Pedro.

Our recommendation is to improve the habitat not for the convenience of humans but for the fauna and, for that matter, the flora that makes the San Pedro the gem it is. The best way to improve the habitat is to leave it alone!

Thanks.

Virginia Angenent

Virginia Angenent

Thomas Angenent

Thomas Angenent
3850 North Fanning Dr., D-2
Flagstaff, AZ 86004

Response No. 11-1 Our plans do not include a total opening of the EIS area to vehicular travel. Only a limited number of roads will be available for vehicular access and most of these are short, ending at parking areas, interpretive stations or picnic sites. Map No. 2-1 shows those roads proposed for future public vehicular access. Certain other existing roads will be available for administrative use only. As a further point of clarification, none of the roads available for public access are in the riparian area.

12

Memo from –

EVELYN SPENCER

July 30, 1988

Safford District Office,
Bureau of Land Management
425 E. 4th St.,
Safford, Az. 85546

Gentlemen:

My husband and I will be unable to attend the planned meeting in Sierra Vista , Az. regarding the usage of the San Pedro River area.

We sincerely hope this area might include such recreational activities as picnicking and hiking. The area was the source of much pleasure for older people in years past.

Thank you,

Evelyn M. Spencer

Evelyn M. Spencer.
Box 877
Tombstone, Az.. 85638

13

Roy A. Early.
Rte. 2, Box 152.
Hereford, Az. 85615.
Aug. 2, 1988

JERROLD COOLIGE,
EIS TEAM LEADER,
SAFFORD DISTRICT OFFICE;
BUREAU OF LAND MANAGEMENT,
425 - E. 4TH STREET.
SAFFORD, AZ. 85546.

Gentlemen;

I wish these comments on the BLM's plans for the San Pedro River Riparian Management Plan to be consided when the decision is made as to the use of this area.

As you can see by my address I am near the area being considered, not some environmentalist from Calif, Tucson or Phoenix. This issue involves our recreation.

I, and most of my neighbors are fed up with these groups (Sierra Club, Defenders of Wildlife,) etc closing off public lands.

(2)

I am in agreement with the proposed "UTILIZATION ALTERNATIVE", it will open a recreation area to the general public, (which is sorely needed around here), not just to Sierra Club back packers or bird watchers. I think you might
13-1 consider "SHOTGUN ONLY" hunting the area.

Please consider the silent majority on this issue and not the vocal environmental groups. most of us work and run farms and ranches and dont have time to attend meetings as we have to attend stock etc.

Thankyou,

Sincerely
Roy A Early

Response No. 13-1. See General Response No. 7.

14

August 1, 1988

To whom it may concern:

I did not write letters in support of the San Pedro Riparian area only to see this plan modified to include hunters!! How can anyone enjoy the peace and tranquility of the river and surrounding area with the possiblity of gunfire nearby? It would put a big damper on my enjoyment. I don't think I am the only one who feels this way although I may be the only one who has taken the time to write.

With the way man has encroached upon so much of the land in Arizona, I would like to see an area set aside for wildlife to use as a refuge. People as well would be able to enjoy this area but with cameras, binoculars or just a picnic lunch! Why must hunters have this area too? Who wants to go for a relaxing walk down by the river and see spent shells and animal carcass remains? Not me. I am highly disappointed by this modification to a good plan. I am hoping maybe enough people speak out on this subject to keep the land for the wildlife.

Susan Corsi
Susan Corsi
Rt 2, Bx 24AA
Hereford, AZ 85615

15

ARIZONA STATE PARKS

800 W. WASHINGTON
SUITE 415
PHOENIX, ARIZONA 85007
TELEPHONE 602-255-4174

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KENNETH E. TRAVOUS
EXECUTIVE DIRECTOR

COURTLAND NELSON
DEPUTY DIRECTOR

August 5, 1988

Ray A. Brady
District Manager
DOI Bureau of Land Management
Safford District Office
425 E. 4th Street
Safford, AZ 85546

RE: San Pedro River Riparian Management Plan and Environmental Impact Statement (EIS), DOI-BLM

Dear Mr. Brady:

I have reviewed the draft Management Plan and EIS for the above project and have the following comments pursuant to 36 CFR Part 800:

It is my opinion that the document more than adequately addresses any concerns we might have as respects significant cultural resources within the area. The job done by Mr. Gay Kinkade and his staff is commendable as the plan incorporates the major sites known in the area, historical contexts, and protective and interpretative issues.

Your continued cooperation with this office in complying with the historic preservation requirements for Federal undertakings is appreciated. If you have any questions, please do not hesitate to contact me.

Sincerely,

Robert E. Gasser
Archaeologist & Compliance Coordinator

for Shereen Lerner, Ph.D.
State Historic Preservation Officer

CONSERVING AND MANAGING ARIZONA'S NATURAL, CULTURAL, HISTORICAL, AND RECREATIONAL, SCENIC AND NATURAL AREAS

16

8/8/88

Dear Mr. Jerrold Coolidge,

Concerning the San Pedro area usage, I'd like to suggest that it would be a wonderful place for field trips for students - young and old. Biology, Zoology, Art, Photography and Conservation are all topics developed in schools - plus much more. My request would simply be - please keep all the aspects of usage in an even proportion as possible or have restricted/posted areas.

Thank you for your time and consideration.

Respectfully,
Joan Reichel

Box 739
Bisbee, Az 85603

17

James Irwin
P.O. Box 3004-50
Corvallis, OR 97339
Aug. 2, 1988

District Manager
BLM
425 E. 4th St.
Safford, AZ 85546

Dear District Manager:

I am writing in support of your decision to end grazing on the San Pedro River property. IT's gratifying to see that all your alternatives for your Draft Management Plan prohibit grazing. I also support the draft's "no action" alternative, which would best emphasize the recovery of the riparian community.

Sincerely,

18

August 4, 1988

District Manager
BLM
425 E. 4th St.
Safford, Arizona 85546

Dear District Manager,

It has come to my attention that the BLM has recently released its Draft Management Plan and EIS for 48,000 acres along a 36-mile stretch on the San Pedro River. The four alternatives all call for a continuance of no livestock grazing, which has been in effect for two years, if I understand correctly.

I would like to highly commend you for your decision to eliminate cattle grazing from the area. It's surely about time!!! Livestock grazing has been terribly destructive to the San Pedro for about 120 years. The BLM is well-known for its blind devotion to the ranching industry, so this is truly an exciting and momentous achievement!

I strongly urge you to continue to strive for environmental improvement by ending all livestock grazing on all BLM lands and minimizing detrimental impacts from other users.

Thank you.

Sincerely,

Lynn Jacobs

Lynn Jacobs
P.O.Box 5784
Tucson, Arizona 85703
(602)578-3173

19

STEWART L. UDALL
ATTORNEY AT LAW
70 EAST MITCHELL DRIVE
PHOENIX, ARIZONA 85012
TELEPHONE (602) 230-1254

2

August 3, 1988

Mr. Dean Bibles
BLM State Director
Phoenix, Arizona

Dear Dean:

I wish to lodge a citizen comment re the preliminary management plan for the San Pedro River Reserve which, I understand, is the subject of public hearings this week.

19-1 The purpose of this letter if to advise you and your hearing officer that some of us history buffs and conservationists are in the early stages of preparing a proposal to submit to the public -- and to the members of the Arizona's congressional delegation -- concerning an outdoor public use hiking trail that would traverse the trail Coronado followed on his historic trek across present-day Arizona in 1540. If we are able to generate public support for this concept, the historical records of Coronado's expedition tell us that in all likelihood his line of march followed the San Pedro river downstream from the international border at least to the vicinity of Tres Alamos wash near Cascabel.

If this concept proves to be viable, this might be an ideal use for the splendid new Reserve that your agency has acquired for the American people. Hence, we who are now studying this plan feel it might be appropriate for this idea to be tentatively taken into account in the final management plan your agency prepares.

Most ~~Sincerely~~,

Stewart L. Udall

Response No. 19-1. We are aware of the interest in a hiking trail following the route of Coronado, including that portion along the upper San Pedro River. As there is no firm proposal for this trail at this time, inclusion in this Management Plan and FEIS is not warranted. When a proposal is submitted it will be evaluated to determine the environmental impacts and the suitability of such a trail in the EIS area.

20

Atalanta Records & Books
32 Main Street Post Office Box 317
Bisbee, Arizona USA 85603 (602) 432-9976

8-1-88

Jerrold Coolidge
Bureau of Land Management

Dear Mr. Coolidge,

I am opposed to hunting in the San Pedro River Conservation Area. It seems to me that there are plenty of places in this state where hunting is allowed. I would like to see this small area set aside as one where a person can enjoy the natural setting without fear of guns.

Thank you.

Joan Werner

Member, American Booksellers Association
PRINTED BY TREADLE POWER ON RECYCLED PAPER

21

Date: Aug. 3, 1988

Name: Clark H. Derdeyn
1023 Sahuaro Dr.
Sierra Vista, AZ 85635

Subject: Written comments for BLM public meeting on San Pedro River Management Plan (Aug. 4, 1988 in Sierra Vista, Arizona).

Summary: Justification for allowing big game hunting, recommendations on how to implement hunting, prevention of careless firearms use, and protection of active gray hawk nests.

A large number of Arizona sportsmen actively supported having BLM manage the San Pedro River Area (SPRA). These sportsmen felt BLM would continue to follow their excellent prior record of coordinating wildlife programs with the Arizona Game and Fish Department (AGFD).

Wildlife is one of the renewable natural resources found on this area. Modern renewable natural resource management has been defined as "wise use of our renewable resources". Wildlife harvests approved by the AGFD are based on only taking wildlife from the annual harvestable surplus. The old saw "use it or lose it" applies since wildlife cannot be stockpiled over the habitat's carrying capacity. Attempting to stockpile big game animals will result in the unharvested surplus animals reducing the habitat's carrying capacity by over-utilization as they die of starvation and disease. We owe our future generations healthy natural areas and the knowledge to manage these areas to produce optimum wildlife population levels. Such management knowledge will benefit all wildlife species native to the area and not just the species used for human food; therefore, an absence of hunting not supported by the AGFD cannot be wise use.

21-1 Some public concern over the use of rifled firearms on the SPRA has been voiced. Arizona hunters have one of the lowest hunting accident rates in the United States. No Arizona hunter has injured or killed a nonhunter. The National Safety Council figures for 1982 indicate that a hunter is eight times more likely to have an injury accident in his home than they are while out hunting. Therefore, any legal weapon allowed by AGFD regulations should be legal for use on the SPRA.

Careless use of firearms by nonhunters should be the major concern on the SPRA. Establishing the following regulations for the SPRA should cure this problem.

1) Target practice and plinking are not permitted on the SPRA.
2) Only properly licensed hunters or a juvenile hunter accompanied by a properly licensed adult hunter may possess firearms on the SPRA.
3) Any firearm discharged on the SPRA must be discharged by a properly licensed hunter (see 2) above) in an attempt to take legal game.
4) No firearm may be discharged within one quarter mile of developed public parking or picnic areas on the SPRA.

The Gray Hawk (Buteo nitidus) is probably the most noteworthy species found on the SPRA. In order to protect this species disturbances near known nest sites , during the nesting season, should be prevented. Protection should be accomplished by regulations preventing any public access to within 100 yards of a known active nest. In addition, the regulations should contain provisions to prevent people from remaining close to any previously unknown active nest.

Sincerly yours,

Clark H. Derdeyn

Clark H. Derdeyn

Response No. 21-1. See General Response No. 7.

22

MR & MRS DENNIS DEZELAN
3710 BLACKBIRD DR
SIERRA VISTA, AZ. 85635

DISTRICT MANAGER
BLM
425 E 4th ST
SAFFORD,AZ. 85546

BLM DISTRICT MANAGER;

AS A MEMBER OF THE AUDIENCE IN THE SIERRA VISTA HEARING CONCERNING THE SAN PEDRO RIVER AREA ON 4 AUG. 88, I WANT TO TAKE THIS OPPORTUNITY TO SUBMIT MY WRITTEN COMMENTS. PLEASE INCLUDE MY REMARKS AS PART OF THE RECORD.

I AND MY FAMILY OF FIVE FAVOR THE 'PREFERRED ALTERNATIVE' OF THE BLM'S PLAN. AS SUCH WE FAVOR OPEN HUNTING IN THE RIPARIAN AREA FROM SEPTEMBER THRU MARCH. THE PROPOSAL COMPLEMENTS ACTIONS ALREADY IN PLACE IN ARIZONA. CLOSING THIS LARGE AREA WHICH BISECTS THE SAN PEDRO VALLEY WOULD 22-1 SERIOUSLY IMPACT SPORTSMAN HUNTING THRU THE AREA,EAST TO WEST, FROM ADJOINING FEDERAL LANDS AS WELL AS THOSE WHO WOULD PURSUE LEGAL GAME ANIMALS ALONG ITS MAIN AXIS.

THE PURCHASE OF THE LANDS BY THE BLM NOW MAKES THOSE LANDS PART OF THE FEDERAL INTEREST. THAT MEANS THE PURCHASE OF THOSE LANDS IN PART OR IN FULL WERE PURCHASED WITH FEDERAL FUNDS THUS ALLOWING USE BY ALL ITS CITIZENS FOR LEGAL PURPOSES. PUBLIC LANDS BELONG TO ALL THE PEOPLE. THEY ARE NOT JUST A PLACE TO COMMUNE WITH NATURE, FOR ME THEY MEAN SAVORING OUR PIONEER HERITAGE. THEREFORE AS AN AMERICAN I WANT TO EXERCISE OUR RIGHT TO FREELY ACCESS PUBLIC LANDS; TO HUNT, CAMP, BIRD WATCH, PICNIC OR JUST KNOW ITS THERE FOR OUR USE AND THE USE OF ALL FUTURE AMERICANS.

Dennis Dezelan
Diane Dezelan
DENNIS & DIANE DEZELAN

Response No. 22-1. See General Response No. 7.

District Manager, 23

BLM

Safford, Az.

August VIII 1988

Dear District Manager

Re. EIS/Mgmt. Plan for San Pedro Riparian Area

Please take note that I am in firm support of the "No Action" Alternative. Because of the critical rarity of desert riparian ecosystems, I feel that the San Pedro R.A. should have the least possible human use - so as to better regenerate and sustain its biodiversity. Your district is to be congratulated on discontinuing cattle-grazing - a wise and courageous decision -- However, I earnestly

23-1 ask you to reconsider the Preferred Alternative proposal to develop up to sixteen recreational sites. This would not be conducive to the overall ecological riparian health.

Yours, Geoffrey Platte.

Response No. 23-1. The number and size of the recreational developments has been decreased in the final EIS. See Chapter 2 in the text.

24

Sirs:

Please read ALL of my letter, please.

First, I would like to state that I am against the possible permission of hunting to be allowed along the San Pedro River Conservation Area.

What does the word conservation mean anyway?

It means to protect and both the land and the animals in this unique area need our protection. Arizona is a unique area that is rapidly dying because of our neglect of those things which make it unique.

The desert is being chopped up all over to build condominiums.

But why were the condiminiums built here in the first place?

Because the area is unique!

But once the condos dominate, the area is no longer unique!

Once the land is devoured, the plants and animals are gone!

The San Pedro River Basin has been set aside because it is a unique area that we want to save. In reality, most of Arizona needs to be saved or the whole place will look like Phoenix or Tucson!

The people both from in and out of our state come to the San Pedro and other areas because they think the natural beauty is wonderful.

24-1 What about the safety of these people who are there looking at our unique environment while people around them are hunting.

Hunting is a frivilous hobby, these days, NOT A NECESSITY.

This area and others in other states should be protected in all ways for our children and our children's children. This realization of our uniqueness is why people locally were able to ban the

RICHARD BYRD
BOX BP * 40 MAIN ST. BISBEE, A 85603 602/432-3911

Response No. 24-1. See General Response No. 7.

Phelps-Dodge Douglas Smelter from operation. Not because we wanted the local copper processors to lose their jobs, but because it was scientifically proven of the dangers of processing copper in a plant that had no environmental protection controls by a company that refused to put the controls on the plant. It was scientiffically proven that acid rain caused directly from the smelter's pollution caused plantlife to die as far away as Montana and caused health hazzards to humans as far away. Not to mention the health hazzards for workers directly in contact with particulates or breathing fumes inside the plant. Oddly, on a national level the EPA did nothing until local groups started the initiative to make the environment safe for all. Please help save this unique area and other for the enjoyment and mental and physical health of all.

Thank You,

Richard Byrd

Richard Byrd

25

Aug 9, 1988

Dear Mr. Coolidge,

I am writing you concerning the BLM San Pedro Plan to object to the area being made into a wildlife area and hunting, fishing area at the same time. The area is just now beginning to recover from cattle overgrazing and off road vehicle use, as well as woodcutting and trash littering. My family and I stopped going to the area by the river off Escuela Road because it was both so trashed out and because there was never a moments peace with 2 and 3 wheelers tearing up and down the river banks. Notice the area looks much better without the cows - perhaps it needs a longer time to recover from overuse before any new plans are made to develop it. I support the proposal to designate the San Pedro as an Area of Critical Environmental Concern - the area really does need to be managed, not developed. I do not want to see any large campgrounds only day use, and that very limited. Absolutely no motor-cycles, off road vehicles or motor homes in the area itself. No trapping or hunting - on a side, who will

protect visitors without guns from those with them - the BLM? the Fish & Game Dept.? It is too small of an area to hunt in and it is absurd to have a wildlife conservation area and a hunting area together - are you luring animals in, under protection, to only kill them later?

I also do not want any mining or cattle grazing in the area. Let it be for awhile, give it a chance to recover from all the traffic, keeping it open to quiet activities to attract the wildlife, not scare it away. It is a vulnerable and beautiful area - let's keep it that way - protect it instead of developing it as another "tourist attraction"

Thank you

Boyd, Laurie & Sara Nichell

26

Dear BLM: Aug. 7, 1988

I recently learned that you are planning to stop grazing in the San Pedro River for 15 years. I hardly endorse this decision and feel that restoration of riparian zones in the Southwest will only be accomplished by eliminating domestic livestock grazing. Please also keep human use in this riparian zone to things like hiking-- no motorcycles and ORV use. Thank you.

George Wuerthner
Box 273, Livingston, Mt. 59047

27

9/9/98

BLM
Safford District office
425 E 4th
Safford, AZ 85546

Dear People,

It is my belief that the San Pedro Riparian Area south of St. David have as its highest priority the protection of the land for the use of the wildlife that live there, rather than for use by humans. Humans already have so much more area to "play" in that they already misuse than the wildlife have. Please, this area is critical to some types of habitats to survive. Let's not muck it up for the animals that need it to survive. After all, we may someday be those animals that need it.

Thank you.

Beryl Baier
2707 S. Mission
Tucson, Az 85713

28

8/10/98

Dear BLM & Gerald Crabtree —

Please keep the San Pedro River conservation area FREE FROM HUNTERS! It is such a special place. Let's not disrupt it.

Thank you —

June Laird

29

Dear Jerrold Coolidge, 8/10/88

I am a registered voter and tax payer who favors saving the San Pedro River Conservation Area, keeping it safe from the destruction of its natural beauty, as a refuge for our indigenous various species of birds and animals from hunters.

Sincerely,
Dick Bakken

30

District Ranger - BLM
[illegible] 4th Street
Sierra Vista, Arizona 85635

No Hunting

on

The San Pedro.

Ted R. Miller
Route 1, Box 117
Hereford, AZ 85615

Ted R. Miller
Wilma G Miller

31

Donald Robb
Boix 1234
Bisbee AZ
85603

NHES

10 AUG 88

BLM

SAFFORD,AZ.

JERROLD COOLIDGE (OR OTHER REP.),

PLEASE REPRESENENT MY LARGE FAMILY OF CHILDREN AND YOUNG ADULTS AND MY WIFE, SELF, AND MANY RELATIVES IN THIS AREA OF THE SAN PEDRO RIVER LAND PROJECT OF BLM, AND, THE MANY IN THE POPULATION WHO ARE NOT ABLE TO ATTEND MEETINGS ETC ON THIS ISSUE OF HUNTING VS NO-HUNTING THERE. SEE INCLOSED EDITORIALS TO ILLUSTRATE SAME. ONLY A FEW OF US HAVE TIME FROM WORK ETC TO EXPRESS OUR VOHEMENT DISDAIN AND DISPLEASURE WITH EVEN TO CONSIDER ALLOWING HUNTING. TO DO SO JEPORDIZES THE PUBLICS SAFETY TO THE EXTENT THAT MOST OF US, 31-1 AT LEAST HALF THE POPULATION USING THE LAND, WILL NOT EVEN GO OUT TO THE AREA FOR FEAR OF CATCHING A STRAY BULLET, OR, ARROW.

Response No. 31-1. See General Response No. 7.

IT IS UNCONSTITUTIONAL TO ARBITRARILY ALLOW HUNTING DECIDED BY A FEW WHEN THE MANY DID NOT EVEN HAVE THEIR DEMOCRATIC RIGHT TO VOTE ON THE ISSUE. IT VIOLATES THE VERY LAWS, OF, RIGHT TO BE PROTECTED FROM OTHERS WHO ABUSE COMMIT CRIMES ETC. MY GOD, IF FEDERAL LAW NOW PROTECTS OTHERS FROM SMOKERS, PEOPLE SHOULD CERTAINLY FEEFL SECURELY PROTECTED BY LAW AND LAW ENFORCEMENT TO PEACEFULLY WALK THE RIVER AREA WITHOUT THE MENTAL STRESS OF POSSIBE OR POTENTIAL INJURY, AND/OR DEATH. (THINK OF NOISE AS WELL).

I WORKED TWENTY YEARS WITH FEDERAL GOVERNMENT, BECOMING DISABLED, THEN RETIRING. I FOR ONE HAVE LOOKED FORWARD TO THE PLEASANT VISITS THERE ON RIVER BANK. FURTHERMORE, I AM NATIVE OF ARIZONA AND COCHISE COUNTY; AND, ALL MY LIFE DENIED ACCESS TO THIS BEAUTIFUL WONDERMENT OF GOD'S CREATION BECAUSE OF THE NASTY LEGAL SIGNS PLACED BY RANCHERS, WHO NOW CAN KILL WILDELIFE INDISCRIMINATELY BEING LEGALLY PROTECTED BY LAW TO DO SO. THE REAL CULPRIT THOUGH IS THE IDIOTS OUT SHOOTING ANYTHING THAT MOVES, OFTEN CATTLE; AND, CERTAINLY ENDANGERING HOMO SAPIENS AS WELL. WE NEED PROTECTION EVEN AS THE EANCHER DOES FROM SUCH IRRESPONSIBLE PEOPLE (?).

THE WILDE LIFE ALSO NEEDS LAWS TO PROTECT THEM THERE, AND, THEY ARE COMPATIBLE WITH PEACEFUL PEOPLE VISITING; HUNTERS ARE NOT COMPATIBLE W/ WILDEIFE! (OR PEOPLE VISITING)

In Christ Our Hope
Donn Robb

32

SIERRA CLUB

Grand Canyon Chapter · Arizona

RINCON GROUP

August 11, 1988
117 N. 2nd Avenue
Tucson, AZ 85705
792-2690

Ray A. Brady
Safford District Manager
Bureau of Land Management

RE: San Pedro Plan & EIS

Dear Mr. Brady:

Thank you for this chance to comment on the draft San Pedro River Riparian Management Plan and Environmental Impact Statement. I appreciate the wisdom and sensitivity shown by your closing of the area to both grazing and public access during the first several years of BLM management. These were vital steps for the recovery of such a large, sensitive, and damaged riparian ecosystem. It is my hope that your future management will follow a similar course directed at restoring and preserving the health of the San Pedro's community of life.

To that end, I support the "preservation" alternative offered in the draft, with the following changes:

-- The area should remain closed to hunting, trapping and fishing, at least until the area's wildlife population and habitat has fully recovered from past abuses (which is not to imply that hunting was a major abuse of the land, but rather that it may impede rapid recovery).

32-1 -- Recreational promotion and development should be minimal, and should be designed to route human traffic away from particularly sensitive areas.

32-2 -- Fire management should not be suppression, but rather should allow naturally occurring fires to run their course, with control efforts directed only at preventing damage to adjacent private property.

32-3 -- Pesticides should not be used within the area, as they tend to have effects that reach far beyond the target species and place.

Beyond that, I want to specifically support the proposal to designate the San Pedro area as an Area of Critical Environmental Concern.

Yours,

Dale S. Turner
Conservation Chair
Rincon Group

Response No. 32-1. This generally is our plan. We do plan a larger facility at the San Pedro House location on Highway 90. This proposed facility is in an old farmfield and away from the sensitive riparian area.

Response No. 32-2. The development of a fire management plan for the San Pedro EIS area will determine where fires should be suppressed (for resource or property protection or visitor safety), and where prescribed fire should be managed as an integral part of the ecosystem. All fires will receive an "appropriate response." This response can cover a full spectrum of choices from an aggressive all-out suppression to routine monitoring for fires that are burning under pre-established conditions. If a prescribed fire is exhibiting erratic fire behavior and/or not burning in accordance to the prescription, it will be suppressed.

Response No. 32-3. See Response SV-5.

33

August 12, 1988

Jerrold Coolidge
EIS Team Leader
Safford District Office
Bureau of Land Management
425 E. 4th St.
Safford, AZ 85546

Dear Sir,

The following are my comments to the Draft "San Pedro River Riparian Management Plan and Environmental Impact Statement" dated June, 1988:

- An overall comment is that your Preferred Alternative is pretty good, but leans a little too heavy toward development and utilization. Somewhere between the Preservation Alternative and the Preferred Alternative would be the best balance,

- I strongly support your "No trapping" position. It is definitely incompatible with the wildlife and recreation goals for the area. I also believe you should reconsider your hunting position. I realize that it is a politically tough item. I think hunting opportunities already abound on public lands in the area and the San Pedro would serve both wildlife and recreation better as a "No Hunting" area. The nonconsumptive recreationist (wildlife observers, photographers, etc.) have very few safe places to go on public land in Southeast Arizona during hunting season. The San Pedro offers exceptional photographic and wildlife observation opportunities and I think it it would be a better use of the area than hunting. The area also would better serve the needs of rare wildlife if they were not exposed to the pressure of hunters (even though they would not be the target species.)

33-1 If you insist on hunting, do not open the entire area to hunting and consider not allowing hunting dogs. The impacts to wildlife from the territoriality of dogs is well known.

33-2 - This leads into the next item - PETS. They are not addressed in the EIS but should have been. Any pets should be kept on a leash and limited to roads and campgrounds. The impacts of pets on wildlife are well documented and the special wildlife values in the San Pedro Riparian Area should be protected from pets. The Sonoita Creek Nature Conservancy Sanctuary outside Patagonia is a good model for riparian area protection. Pets and hunting are not permitted. Camping is not allowed in the riparian corridor and human impacts are restricted to one side of the corridor. This leads to the next item:

- Keep all development, trails, human use, etc. to one side of the San Pedro for each major stretch of the river, i.e. highway to highway. Again referring to the Patagonia Sanctuary - the raptors and many other species primarily nest on the side that humans do not traffic. For example, Gray Hawks not only nest on the opposite side of the creek from human traffic, but also on the far side of the trees. Preferrably develop on the side with the least riparian vegetation. If developed this way it will minimize impacts to wildlife from development.

Response No. 33-1. See General Response No. 7.

Response No. 33-2. Pets were overlooked in the DEIS. We agree they should have been addressed. See the changes in Chapter 2 of the text.

- Also, if you shift development from one side of the river to the other as you move up or downstream, leave an undeveloped area between the developed sections. This will allow for a continuous wildlife corridor for the entire length of the area. This is important for wildlife movement and migration.

- I definitely support removal of exotics (fish, plants, etc.

- I encourage use of the area for reintroduction of T & E species where possible. I especially support the area for introduction of the Aplomado Falcon and Mexican Wolf. You do not mention the Jaguarundi, but I know some BLM personnel suspect they may frequent the area. I think you should consider reintroducing them on the San Pedro and protecting it for them. I also think a wildlife corridor should be maintained through the areas for species such as the Jaguar which is being observed more frequently in Southeast Arizona these days.

33-3 - I also would prefer to see the Railroad right-of-way used as a trail than for a railroad.

Thanks for your consideration of the above input. I think you folks have put considerable effort into your Draft EIS. You are trying to please as many people as possible. I urge you to give wildlife and the resource the top priority with people in second place. I hope to recreate in the area a lot, but hopefully not at a major expense to the flora and fauna.

Gracias,

Jim Notestine

Jim Notestine

P.O. Box 461
Sonoita, AZ 85637

Response No. 33-3. See General Response No. 8.

34

From the desk of . . .

DANIEL SILVER, M.D.

August 8, 1988

Dear Sirs:

I would like to generally support your draft plan for the San Pedro River area, which eliminates destructive grazing. Because riparian habitats are so endangered, I support the "no action" alternative, or minimal development

Thank you

Sincerely,

Daniel Silver, MD

Daniel Silver, M.D.
1422 N. Sweetzer Ave. #401
Los Angeles, CA 90069 1628

35

NORTHERN ARIZONA AUDUBON SOCIETY
SEDONA ARIZONA 86336
Box 1496

Aug. 13,1988

Mr. Jerrold Coolidge
Bureau of Land Management
Safford, AZ 85546

This chapter of the National Audubon Society is enthusiastic about the San Pedro River Preserve acquired by the B.L.M.,from St. David to the Mexican border in a land swap with an investment firm-to protect wildlife and its habitat there.

We agree heartily with Michael Gregory of McNeal,AZ, conservation chairman of the Grand Canyon chapter of the Sierra Club-that public use areas should be on the periphery to least disturb the wildlife in its habitat.

We will appreciate news of your concurrence as this plan develops.

Sincerely,

Will Osborn

Will Osborn
Corresponding Secretary

37

B.L.M.
425 E. 4th St.
Safford, Ariz. 85546

Dear Jerrold Coolidge: August 13, 1988

I wish to voice my opinion of hunting on the San Pedro River.

Hunters have the national forest, the B.L.M. land and the wilderness to hunt animals. I have nothing against hunting. I much perfer wild meat than the carcinogenic beef now available on the market. But I do not think that we need to have the hunters hunt the animals which have found safety and refuge on the San Pedro River. Let than have their refuge....PLEASE!
The animals will still be hunted on your land, in the wilderness and national forests.

The San Pedro River has been my refuge for nearly 14 years now. This area is where I go for solitude and prayer. I pick up the trash whenever I find it and treat the river with reverence. Its our only natural made water source available in this county.

Who would be liable if I got injured by a bullet? Who would take care of my son and his education if I (a widow and single parent) got killed by a hunter?

I stay out of the wilderness while hunters hunt in their season. I ask the hunters to stay out of my place of refuge and meditation. Please, B.L.M., don't allow this hunting on our only riparian reserve.
Thank you for listening.

Sincerely,

Carol Escott

Carol Escott
P.O. Box 1560
Bisbee, Ariz. 85603

36

Aug. 8, 1988

District Manager, BLM
Safford, Arizona

Greetings;

I was very pleased to hear of your Draft Management Plan for BLM land along the San Pedro River. Allow me to briefly comment.

1) No grazing! Desert water sources are becoming far too valuable to allow "cows in the creek". That land needs extensive restoration, not more abuse.

2) Very carefully limit "recreational" use. The area shouldn't be locked up totally, but close to it. This puts my viewpoint between the preservation and no action alternatives, but leaning towards the latter.

3) I feel the area has good potential to become a fine wildlife refuge within a few years. It should be left in a condition to do so.

36-1 4) Mechanized forms of recreation should be strictly forbidden and controlled. This would include chainsaws and all vehicles with the possible exception of cars and mountain bikes on designated roads.

Sincerely;

Lloyd Knapp

Lloyd Knapp
537 Thompson Cr. Rd. #29
Applegate, OR 97530

Response No. 36-1. The text has been updated to read that mountain bikes will be allowed only on those roads open for public access.

38

3705 Toltec Court,
Sierra Vista, AZ 85635
15 August 1988

Jerrold Coolidge, EIS Team Leader
Safford District Office
Bureau of Land Management
425 E. 4th St.,
Safford, Arizona 85546

Dear Mr. Coolidge:

Although I was not able to attend either of the two public hearings of the draft San Pedro EIS, I have received a copy of the plan, and wish to submit the following comments:

1. Congratulations on the preparation of a very extensive and interesting report.

38-1 2. No mention is made of the present and future use of the area as an infiltration route for illegal aliens.

3. The need for proper management and erosion control measures extends to the tributary areas also. An education program is suggested for landowners in the areas bordering the river.

4. In view of the apparent carelessness of upriver (Mexican) users, perhaps some sort of rudimentary treatment plant at the border should be considered for the future, to prevent damage to the whole ecosystem from upriver pollution.

38-2 5. Recreational equestrian use should be considered.

38-3 6. Although my associates in the Rod and Gun Club might curse me for this, I strongly recommend a moratorium on all hunting for at least two years, whatever alternative plan is adopted. This would permit a careful evaluation of game repopulation rates.

7. It should be remembered that this project and its handling will be a sort of landmark project, and may well become the model for other conservation projects in future.

38-4 8. In my opinion, a profile of the stream bed of the study area should be prepared. This would make it possible to determine whether or not further channel degradation is taking place. If furnished with an adequate set of topographic maps, I should be willing to attempt this.

I have some preliminary ideas for occasional pools, the banks to be stabilized by stones or gabions, that might harbor fish during dry seasons. When filled up with stormwater debris, they could be dredged out. Also for low check dams, to help inhibit further channel erosion.

Very truly yours,

E. Benson Meservey

E. Benson Meservey

Response No. 38-1. The use of the San Pedro River area as an infiltration route by illegal aliens is beyond the scope of this document.

Response No. 38-2. Equestrian use was only minimally addressed in the draft plan/EIS. This has been corrected in the text. Equestrian use is allowed under both the Utilization and Preferred Alternatives.

Response No. 38-3. See General Response No. 7.

Response No. 38-4. We have established permanent channel transects to assess the San Pedro channel profile. During 1989 a watershed activity plan will be written. The plan will determine if additional cross-channel transects should be surveyed and established. We are also studying the geomorphic evolution of the San Pedro stream channel to determine episodes of sedimentation (channel aggradation) and incision (channel degradation). From these studies, we will be able to evaluate the feasibility of channel restoration (stabilization) projects such as emplacement of gabions or check dams. A total of seven permanent cross-channel transects were established in February 1987 during the initial project assessing the San Pedro water resources.

39

5510 Osage Avenue ..
Sierra Vista, Arizona
85635
Tel No (602) 378-2897

13 August 1988

District Manager
Bureau of Land Management
425 East 4th Street
Safford, Arizona 85546

SUBJECT: San Pedro Management Area

Gentlemen:

Planning for the future of the San Pedro Management Area should emphasize the following objectives:

1) The peace and tranquility of the entire San Pedro Management Area should be the paramount and overriding management objective.

2) The Bureau of Land Management should police the Management Area on a frequent and continuing basis in order to control vandalism, litter and activities that infringe on the peace and tranquility of the Area.

3) Management should include an effort to reestablish the ecology of the Management Area as it was before the intrusion of white settlers. This would probably require an effort to reintroduce some plant, animal, bird and insect life.

In order to implement and reinforce the above objectives, the following regulations should be included in the operation and use to the Management Area:

39-1 1) No commercial activities are permitted within the Management Area.

39-2 2) Specifically excluded among other commercial and noncommercial activities are mining, gravel extraction, livestock grazing, recreational vehicle parks, camp grounds, food and supply vendors (including machines), and BLM information centers larger than minimal.

3) No roads or highways in the Management Area except those that currently cross the it laterally.

4) All motorized vehicles are excluded from the Management

Response No. 39-1. See Response 5-1.

Response No. 39-2. No commercial recreational vehicle parks or food and supply vendors are proposed for the EIS area.

Area except on the lateral roadways (3, above) and in parking facilities immediately adjacent to the roadways.

5) Traffic is limited to foot, horseback and bicycle traffic on pathways provided by the BLM, which may run the length of the Management Area, and are placed by the BLM to provide access to points of interest.

6) Picnicing is limited to designated picnic areas that have picnic and latrine facilities provided by the BLM.

7) Visitors must leave the Management Area at nightfall or within the early evening hours.

39-3 8) All firearms, air guns, bows and arrows and weapons of all classes are excluded from the Management Area.

9) No hunting or trapping in the Management Area with any type of weapon or device.

This program would provide a serene area, with plants and wildlife in nature's setting, close to local communities, that can be enjoyed by individuals and families who are willing to make the effort.

Cordially yours,

John A. Downs

John A. Downs

Response No. 39-3. See General Response No. 7.

40

August 1, 1988

TO WHOM IT MAY CONCERN:

SUBJECT: BUREAU OF LAND MANAGEMENT PROPOSAL TO ALLOW HUNTING AT THE SAN PEDRO RIVER PRESERVE

The faceless bureaucrats in the Bureau of Land Management who propose allowing hunting in the San Pedro River area should offer themselves as unarmed and innocent prey for the hunters. Their "animal instinct" would surely activate their "survival instinct."

Because hunters obviously like to kill, let's up the ante: have hunters hunt other hunters. It would be more challenging to hunt a human animal who can "think" than to hunt defenseless dumb animals that cannot devise protective strategies. And since hunters in this situation would either live or die, this would let them hone and refine their hunting and survival skills to the maximum. This would be a hunter's ultimate sport.

The aforementioned situation would save the animals from the vicious macho hunters, and it would still let the hunters have their fun.

SUMMARY: NO HUNTING IN THE SAN PEDRO RIVER PRESERVE!!!!!!!!!!!!!!!!!!!!!!!

Stephen M. Milne

Stephen M. Milne

STEPHEN M. MILNE personally appeared before me on 1 August 1988 in Cochise County, Arizona.

Melody J. Carolan

MELODY J. CAROLAN

My Commission expires: FEB 26 1990

41

LAKE POWELL SUNSET

Hurray for making the right decision to eliminate grazing along the San Pedro River! I strongly favor the "NO Action" alternative but if kept with Earth in mind 1st, the "Preservation" alternate could be acceptable. Keep up the fight.

Ruby

PAGE, AZ AUG 5 PM 1 ESOAD

District Manager
B.L.M.
425 E. 4th St.
Safford, Az. 85546

Photo by David Muench 1918

ELIZABETH STRALEY
PARIA CANYON BOX 3637
PAGE, AZ. 86040

Distributed by Petley Studios, P.O. Box 24098 Tempe, Arizona 85282.

42

Sirs, Thank you for getting the cows off the land. Please implement the "no action" alternative. 8-10-88

Please give priority to the protection & preservation of the wildlife and natural habitat in the San Pedro Riparian Area. NO ROADS! No "Vehicular Recreation" (a gross and destructive idea). Development and protection are incompatible — say "NO" to those who would abuse this unique area and do your job to protect our lands. Thank you

Please send the draft EIS and management plan.

— Charles Conner

Walt & Phyllis Leonard
dba Tombstone Taletellers
(602) 457-3855
P.O. Box 400
TOMBSTONE ARIZONA
85638

43

8-16-88

District Manager/BLM
425 E. Fourth St.
Safford
AZ 85546

Dear Sir:

The attached 8-14 editorial from the Sierra Vista ~~Herald~~ pretty well covers our thoughts on the treatment to be accorded the San Pedro River area discussed at the excellent meeting on the 4th.

43-1 The subject of hunting in the editorial's second paragraph does not address the fact that there are indeed several county areas to which hunters can go: the Chiricahuas, Dragoons, Mules and so on plus other areas all over the state. It doesn't mention the bow hunters either. Bullets "travel considerably farther than you can see," and although bows are unfamiliar with arrow flight, they probably go a great deal further than you'd think. Bow hunting should also be banned.

We thought your conduct of the meeting was fair and good-humored, and we were proud to be a part of such an amiable crowd.

Please decide in favor of our unique riparian zone by keeping it free from hunting, firearms, off-road vehicles, overnight camping, ~~xxxxxxxxxxxxxxxxxxxxxxxx~~ and being loved to death. Your suggestion of having hunting seven months and non-hunter use five months is really not acceptable. We have chatted with many friends who feel they should be able to enjoy what the editorial calls "a serene sanctuary."

Thank you for using our tax dollars wisely and being the best of stewards for this irreplaceable treasure.

Sincerely,

Phyllis and Walt Leonard

Freelance Writing & Photography

Response No. 43-1. See General Response No. 7.

44

HUACHUCA AUDUBON SOCIETY

POST OFFICE BOX 63 SIERRA VISTA, ARIZONA 85635

August 15, 1988

Mr. Jerrold Coolidge
EIS Team Leader
Safford District Office
Bureau of Land Management
425 East 4th Street
Safford, Arizona 85546

Dear Mr. Coolidge:

As you are well aware, the Huachuca Audubon Society has a great interest in the San Pedro River Riparian Management Area and how it is to be managed as public lands. We have supported BLM's successful land acquisition effort, and appreciate the continued efforts the agency is making to protect and enhance this scarce and fragile ecosystem. The genuine concern for the preservation of the remaining riparian areas throughout the state of Arizona by the BLM is not going unnoticed by the environmental community, and we applaud your foresight.

After careful review of the draft Environmental Impact Statement by the Huachuca Audubon Society, we respectfully submit our recommendations. Of the four alternatives offered by the BLM, we have chosen to support the "preferred alternative." However, because this alternative obligates excessive recreational development, we feel several modifications to this alternative are necessary to truly reach a balance between resource protection and public use activities in the San Pedro EIS area. Please consider the following revisions:

Recreation

44-1 -- Designate the entire EIS area as "closed" to ORV use including all designated roads.

44-2 -- Total closure of the EIS area to all forms of recreational hunting; no discharge of firearms or use of bow and arrows. We feel the consumptive use of wildlife within the EIS area is inappropriate and poses a serious safety threat to the general public.

-- Highway 90 area: No campground or large visitor contact and interpretive facility near the San Pedro Ranch House. The San Pedro Ranch House can serve as a visitor contact and interpretive facility, as will Fairbank.

Response No. 44-1. The EIS area is being designated as "Limited to Designated Roads". Off-road use by any type of vehicle is not permitted.

Response No. 44-2. See General Response No. 7.

-- Retire existing San Rafael del Valle Road (Highway 90 to Hereford) and do not construct a new road. If existing road is maintained, it should be for administrative use only.

-- No motorized access on the Sierra Ready Mix Road.

-- Hereford area: No campground. Day use facilities only.

-- Boquillas Ranch area: Restrict use of the Boquillas Ranch road. Administrative and primitive campsite use only.

44-3 -- We would propose that a small campground (15 to 30 sites) be located south of Highway 92 and that this be the only developed campsite on the river. This location provides good access and is conveniently located near Palominas.

-- No ground fires should be allowed. Campfires allowed only in the developed campground in raised barbecue grills.

44-4 -- We propose establishing a primitive group campsite which would be strictly regulated by permit only. A possible location would be approximately one mile south of Boquillas Ranch. This primitive campsite would provide "wilderness" camping opportunities for groups such as Boy Scouts/Girl Scouts.

44-5 -- We endorse, with some reservation, the privately run tourist train. The problem that may arise is this private venture may open up the door to other private commercial exploitation. This needs to be carefully evaluated.

-- Our final tally for recreational sites in the EIS area would be six picnic areas (Highway 90, Hereford, Fairbank, Lewis Springs, Charleston and Palominas), ten parking areas (Highway 90, Hereford, Fairbank, Presidio of Santa Cruz de Terrenate, Babocomari, Lewis Springs, Murray Springs, Lehner Ranch, Charleston, and Palominas), one developed campground (near Palominas), and one primitive group campsite.

-- It is important that funding be made available for increased law enforcement to ensure the protection of the natural resources in and near developed areas.

Wildlife

-- No consumptive use of fish and wildlife.

-- No artificial water impoundments in drier upland portions of the EIS area.

Response No. 44-3. Much of this land has been heavily impacted by man's activities, is in need of extensive rehabilitation, and is isolated from the majority of the EIS area. We considered the proposed area but rejected it for the reasons listed above.

Response No. 44-4. We are proposing such a facility for a location on the Lewis Springs Road. The location you proposed is in a portion of the San Pedro proposed for no developments. In addition, it has poor access and is near a BLM housing area that limits the primitive character of the area.

Response No. 44-5. See General Response No. 8.

Minerals

-- Allow no new mineral activities on any of the EIS area.

-- Do not renew any current contracts at their expiration.

Administrative Facilities

-- No new administrative site or research facility at Highway 90 San Pedro House area.

-- Expand the already existing Fairbank site to include administrative and research facility.

Thank you for considering our comments and please keep the Huachuca Audubon Society up-to-date on any management decisions on this issue.

Sincerely,

Karen Riggs

Karen Riggs
Conservation Chairperson

45

Madam C. J. Walker (1867-1919). Businesswoman. Philanthropist. Inventor. Confidence builder. Born Sarah Breedlove in Delta, LA, she was a laundress until 1905, when she first formulated hair and scalp preparations especially for black women. When she died, at 51, she had become the first self-made U.S. woman millionaire. She traveled extensively, promoting her products and speaking out on issues affecting women and blacks. Thousands of Walker agents, nearly all women, sold her "Wonderful Hair Grower" in the U.S., Central America and the Caribbean. More than 200 agents met in Philadelphia in 1917 to hear Madam speak about "Women's Duty to Women" at the first convention of the Mme. C. J. Walker Hair Culturists' Union of America. That same summer Mme. Walker was the only woman in a group of black men who visited the White House to petition President Woodrow Wilson to make lynching a federal crime. Mme. Walker contributed generously to educational and other causes, in which she believed, including Mary McLeod Bethune's Bethune-Cookman College. Madam's Irvington-on-Hudson, NY, mansion, "Villa Lewaro," was the site of important meetings of black leaders. The Walker Co. still is in Indianapolis, manufacturing Madam Walker's original formulas. It was Madam's wish that the company president always be a woman.

© 1984 Helaine Victoria Press, Inc. A nonprofit educational organization.
Research and ception by A'Lelia P. Bundles, great-great-granddaughter of Madam Walker. Madame Walker at wheel with her neice Anjetta Breedlove in the front seat; Alice Kelly, the forewoman of the factory, behind Madam and Lucy Hint, Madam's secretary, behind Breedlove. Indianapolis, ca. 1912. Photo courtesy of Madam C. J. Walker Manufacturing Co., Indianapolis, IN.

P.O. Box 1779, Martinsville, IN 46151

June 25, 1788 Virginia USA 25

Postcard

Dear Mr. Coolidge:
I live in Bisbee, Arizona, am a property owner and especially love this area because of its quietness. I hope that your bureau will not allow hunting in the San Pedro river area... this area of the country is so beautiful. Should people keep destroying the wild creatures & their habitats and for what?

Yours sincerely
Christine Kennedy
P.O. Box 503, Bisbee, AZ 85603

To:
Bureau of Land Management
Jerrold Coolidge
425 E. 4th St.
Safford, Arizona
85546

46

8/13/88

Att: District Manager:

I am writing in reference to the San Pedro River area. Please when considering its fate think of its fragile wetland eco-system, and all of the life that it houses.

I commend you on your decision to end cattle grazing in this area and hope you continue your good decisions into human usage. Humans do not belong on this land and I implore you to chose the "No action" alternative for this precious land.

Thank you, Hilary Roggio

47

District Manager,
Bureau of Land Management
425 E. 4th St
Safford, AZ 85546

August 15, 1988

Dear Sir,

I am writing to congratulate you for ending grazing on your San Pedro River property in southeast Arizona. When I read about your actions in Earth First! this month, I had to write you and show my support! Because cattle grazing is so destructive to our public lands, I'm glad to see the BLM taking a stand against it.

I encourage the BLM to stop grazing in other areas as well, and support the "no action" alternative in your Draft Management Plan for the San Pedro River property. Keeping human use to a minimum is also important in restoring this fragile wetland community.

Your revolutionary anti-grazing stand is a strong sign of hope for our public lands!

Sincerely,

Jennifer Andrews
Rt. 3 Box 3307
Kennewick, WA 99337

48

5122 East Citrus Street
Tucson, Arizona 85712
August 19, 1988

District Manager, B.L.M.
425 East 4th Street
Safford, Arizona 85546

Dear Sir:

Our comments concerning land use of the San Pedro Riparian Management Area are:

① The best thing you did for the area was to eliminate grazing - we certainly hope this policy will be continued.

205

48-1 ② The "No Action" alternative would be the preferable one because human impacts, such as recreational development, would impact adversely on this fragile area.

③ The regulations under which the "interim opening" is operating seem excellent. Among those which should be retained are ... no overnight camping, no pets, no fires, no firearms, vehicles only on roadways and parking areas, hiking between sunrise and sunset. Horses should be restricted to established trails, or they'll make new ones all over.

Sincerely,
Walter & Dorothy Pelech

Response No. 48-1. See Response 10-1.

TO: **49**

Land
M.J. Hassell
Natural Resources, Rm. 307
1624 W. Adams, 4th Floor
Phoenix, AZ. 85007

FROM: *Arizona State Clearinghouse*
1700 West Washington Street, 4th Floor
Phoenix, Arizona 85007

State Application Identifier (SAI)
JUN 24 1988
State AZ No **88800114**

Economic Sec.
Indian Affairs
*Transportation
*Public Safety
Mineral Res.
Att'y General
Corrections
Civil Rights
Education
Gov's Office for Children
Administration
JLBC
Developmental Disabilities
*Game & Fish
*Ag. & Hort.
*Tourism
Health
AZ Environ. Qtly
Water
*Parks
*Land
Commerce
Region I, II, III
IV, V, (VI)
*PARKS - AORCC
*CENTER FOR PUBLIC AFFAIRS
Salt River Indian Clearinghou
Navajo Indian Clearinghouse

This project is referred to you for review and comment. Please evaluate as to the following questions. After completion, return THIS FORM AND ONE XEROX COPY to the Clearinghouse no later than 17 WORKING DAYS from the date noted above. Please contact the Clearinghouse at 255-5004 if you need further information or additional time for review.

☐ No comment on this project ☐ Proposal is supported as written ☒ Comments as indicated below

1 Is project consistent with your agency goals and objectives? ☐ Yes ☐ No ☒ Not Relative to this agency

2 Does project contribute to statewide and/or areawide goals and objectives of which you are familiar? ☒ Yes ☐ No

3 Is there overlap or duplication with other state agency or local responsibilities and/or goals and objectives? ☐ Yes ☒ No

4 Will project have an adverse effect on existing programs with your agency or within project impact area? ☐ Yes ☒ No

5 Does project violate any rules or regulations of your agency? ☐ Yes ☒ No

6 Does project adequately address the intended effects on target population? ☒ Yes ☐ No

7 Is project in accord with existing applicable laws, rules or regulations with which you are familiar? ☒ Yes ☐ No

Additional Comments (Use back of sheet, if necessary)

Livestock Grazing within the San Pedro River Riparian Management Area should be addressed under the "Vegetation" Management Action.

Reviewers Signature [signature] Date 7-18-88

Title DIRECTOR, DIVISION OF NATURAL RESOURCES Telephone 255-4625

ROSE MOFFORD
GOVERNOR

ARIZONA DEPARTMENT OF COMMERCE

STATE CAPITOL
1700 WEST WASHINGTON
PHOENIX, ARIZONA 85007
(602) 255-5371

LOIS C. YA
ACTING DIRE

MEMORANDUM

TO : DOI BLM

FROM : ARIZONA STATE CLEARINGHOUSE

DATE : August 19, 1988

RE : BUREAU OF LAND MANAGEMENT
DRAFT SAN PEDRO RIVER RIPARIAN MGT PLAN & EIS 15.999
AZ880701800114

This memorandum is in response to the above project submitted to the Arizona State Clearinghouse for review.

The project has been reviewed pursuant to the Executive Order 12372 by certain Arizona State officials and Regional Councils of Government.

If the Standard Form 424 was submitted with the application, it is attached for your information.

No comments were received on this project. It was supported as written. If any comments are received we will forward them to you for your consideration.

Attachment

cc: Arizona State Clearinghouse
Applicant

SIGNOFF

OMB Approval No. 0348-0006

FEDERAL ASSISTANCE

1. TYPE OF SUBMISSION (Mark appropriate box)
- ☐ NOTICE OF INTENT (OPTIONAL)
- ☐ PREAPPLICATION
- ☐ APPLICATION

2. APPLICANT'S APPLICATION IDENTIFIER
- a. NUMBER
- b. DATE Year month day 19

3. STATE APPLICATION IDENTIFIER (NOTE: TO BE ASSIGNED BY STATE)
- a. NUMBER AZ880701-80-0114
- b. DATE ASSIGNED Year month day 19 JUN 24 1988

Janie Dunn

Leave Blank AUG 19 1988

4. LEGAL APPLICANT/RECIPIENT
- a. Applicant Name: Bureau of Land Management
- b. Organization Unit: Safford District Office
- c. Street/P.O. Box: 425 E. 4th Street
- d. City: Safford
- e. County:
- f. State: Arizona
- g. ZIP Code: 85546
- h. Contact Person (Name & Telephone No.):

5. EMPLOYER IDENTIFICATION NUMBER (EIN)

6. PROGRAM (From CFDA)
- a. NUMBER 1 5 . 9 9 9
- MULTIPLE ☐
- b. TITLE DOI BLM

7. TITLE OF APPLICANT'S PROJECT (Use section IV of this form to provide a summary description of the project.) DRAFT SAN PEDRO RIVER RIPARIAN MANAGEMENT PLAN AND ENVIRONMENTAL IMPACT STATEMENT. THIS DOCUMENT DESCRIBES FOUR ALTERNATIVES FOR MANAGING PUBLIC LANDS ALONG THE UPPER SAN PEDRO RIVER IN COCHISE COUNTY, ARIZONA.

8. TYPE OF APPLICANT/RECIPIENT
A—State; B—Interstate; C—Substate Organization; D—County; E—City; F—School District; G—Special Purpose District; H—Community Action Agency; I—Higher Educational Institution; J—Indian Tribe; K—Other (Specify): FEDERAL AGENCY
Enter appropriate letter: K

9. AREA OF PROJECT IMPACT (Names of cities, counties, states, etc.) COCHISE COUNTY, ARIZONA

10. ESTIMATED NUMBER OF PERSONS BENEFITING

11. TYPE OF ASSISTANCE
A—Basic Grant; B—Supplemental Grant; C—Loan; D—Insurance; E—Other
Enter appropriate letter(s): ☐☐

12. PROPOSED FUNDING

a. FEDERAL	$ .00
b. APPLICANT	.00
c. STATE	.00
d. LOCAL	.00
e. OTHER	.00
f. Total	$ .00

13. CONGRESSIONAL DISTRICTS OF:
- a. APPLICANT
- b. PROJECT

14. TYPE OF APPLICATION
A—New; B—Renewal; C—Revision; D—Continuation; E—Augmentation
Enter appropriate letter: A

15. PROJECT START DATE Year month day 19

16. PROJECT DURATION Months

17. TYPE OF CHANGE (For 14c or 14e)
A—Increase Dollars; B—Decrease Dollars; C—Increase Duration; D—Decrease Duration; E—Cancellation; F—Other (Specify):
Enter appropriate letter(s): ☐☐☐

18. DATE DUE TO FEDERAL AGENCY ► Year month day 19

19. FEDERAL AGENCY TO RECEIVE REQUEST
- a. ORGANIZATIONAL UNIT (IF APPROPRIATE)
- b. ADMINISTRATIVE CONTACT (IF KNOWN)
- c. ADDRESS: SAME AS ABOVE

20. EXISTING FEDERAL GRANT IDENTIFICATION NUMBER

21. REMARKS ADDED ☐ Yes ☐ No

SECTION I—APPLICANT/RECIPIENT DATA

SECTION II—CERTIFICATION

22. THE APPLICANT CERTIFIES THAT► To the best of my knowledge and belief, data in this preapplication/application are true and correct, the document has been duly authorized by the governing body of the applicant and the applicant will comply with the attached assurances if the assistance is approved.
- a. YES, THIS NOTICE OF INTENT/PREAPPLICATION/APPLICATION WAS MADE AVAILABLE TO THE STATE EXECUTIVE ORDER 12372 PROCESS FOR REVIEW ON: DATE _____
- b. NO, PROGRAM IS NOT COVERED BY E.O. 12372 ☐ OR PROGRAM HAS NOT BEEN SELECTED BY STATE FOR REVIEW ☐

23. CERTIFYING REPRESENTATIVE
- a. TYPED NAME AND TITLE
- b. SIGNATURE

SECTION III—FEDERAL AGENCY ACTION

24. APPLICATION RECEIVED Year month day 19

25. FEDERAL APPLICATION IDENTIFICATION NUMBER

26. FEDERAL GRANT IDENTIFICATION

27. ACTION TAKEN
- ☐ a. AWARDED
- ☐ b. REJECTED
- ☐ c. RETURNED FOR AMENDMENT
- ☐ d. RETURNED FOR E.O. 12372 SUBMISSION BY APPLICANT TO STATE
- ☐ e. DEFERRED
- ☐ f. WITHDRAWN

28. FUNDING

a. FEDERAL	$ .00
b. APPLICANT	.00
c. STATE	.00
d. LOCAL	.00
e. OTHER	.00
f. TOTAL	$ .00

29. ACTION DATE► Year month day 19

30. STARTING DATE Year month date 19

31. CONTACT FOR ADDITIONAL INFORMATION (Name and telephone number)

32. ENDING DATE Year month date 19

33. REMARKS ADDED ☐ Yes ☐ No

NSN 7540-01-008-8162
PREVIOUS EDITION IS NOT USABLE

424-103

STANDARD FORM 424 PAGE 1 (Rev. 4-84)
Prescribed by OMB Circular A-102

TO:

Executive Director
PARKS
800 W. Washington
Phoenix, AZ 85007

FROM: Arizona State Clearinghouse
1700 West Washington Street, 4th Floor
Phoenix, Arizona 85007

State Application Identifier (SAI)
JUN 24 1988
State AZ No 88800114

Economic Sec.
Indian Affairs
*Transportation
*Public Safety
Mineral Res.
Att'y General
Corrections
Civil Rights
Education
Gov's Office for Children
Administration
JLBC
Developmental Disabilities
*Game & Fish
*Ag. & Hort.

*Tourism
Health
AZ Environ. Qtly
Water
*Parks
*Land
Commerce
Region I, II, III
IV, V, (VI)
*PARKS - GOREC
*CENTER FOR PUBLIC AFFAIR
Salt River Indian Clearingho
Navajo Indian Clearinghouse

This project is referred to you for review and comment. Please evaluate as to the following questions. After completion, return THIS FORM AND ONE XEROX COPY to the Clearinghouse no later than 17 WORKING DAYS from the date noted above. Please contact the Clearinghouse at 255-5004 if you need further information or additional time for review.

☐ No comment on this project ☒ Proposal is supported as written ☐ Comments as indicated below

1 Is project consistent with your agency goals and objectives? ☐ Yes ☐ No ☐ Not Relative to this agency

2. Does project contribute to statewide and/or areawide goals and objectives of which you are familiar? ☐ Yes ☐ No

3 Is there overlap or duplication with other state agency or local responsibilities and/or goals and objectives? ☐ Yes ☐ No

4 Will project have an adverse effect on existing programs with your agency or within project impact area? ☐ Yes ☐ No

5. Does project violate any rules or regulations of your agency? ☐ Yes ☐ No

6 Does project adequately address the intended effects on target population? ☐ Yes ☐ No

7 Is project in accord with existing applicable laws, rules or regulations with which you are familiar? ☐ Yes ☐ No

Additional Comments (Use back of sheet, if necessary)

Reviewers Signature [signature] Date 7/22/88

Title ARCHAEOLOGIST & COMPLIANCE COORDINATOR Telephone 255-4009

TO:

Mr. Jesse Brown
Executive Director, SEAGO
118 Arizona Street
Bisbee, AZ 85603

RECEIVED
1988 20 JUL
S.E.A.G.O

State Application Identifier (SAI)
JUN 24 1988
State AZ No 88800114

Economic Sec.
Indian Affairs
X Transportation
X Public Safety
Mineral Res.
Att'y General
Corrections
Civil Rights
Education
Gov's Office for Children
Administration
JLBC
Developmental Disabilities
X Game & Fish
X Ag. & Hort.

X Tourism
Health
AZ Environ. Qtly
Water
X Parks
X Land
Commerce
Region I, II, III
IV, V, (VI)
X PARKS - AORCL
X CENTER FOR PUBLIC AFFAIR
Salt River Indian Clearingho
Navajo Indian Clearinghouse

FROM: Arizona State Clearinghouse
1700 West Washington Street, 4th Floor
Phoenix, Arizona 85007

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7. Is project in accord with existing applicable laws, rules or regulations with which you are familiar? ☐ Yes ☐ No

Additional Comments (Use back of sheet, if necessary)

Reviewers Signature [signature]
Date 8/9/88
Title PLANNER
Telephone 432-5301

TO:

Director
Agriculture & Horticulture Dept
421 Capitol Annex West
Phoenix, AZ 85007

FROM: Arizona State Clearinghouse
1700 West Washington Street, 4th Floor
Phoenix, Arizona 85007

State Application Identifier (SAI)
JUN 24 1988
State AZ No 88800114

Economic Sec.
Indian Affairs
X Transportation
X Public Safety
Mineral Res.
Att'y General
Corrections
Civil Rights
Education
Gov's Office for Children
Administration
JLBC
Developmental Disabilities
X Game & Fish
X Ag. & Hort.
Salt River Indian Clearingho
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X Tourism
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☐ No comment on this project ☐ Proposal is supported as written ☒ Comments as indicated below

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6. Does project adequately address the intended effects on target population? ☐ Yes ☐ No

7. Is project in accord with existing applicable laws, rules or regulations with which you are familiar? ☐ Yes ☐ No

Additional Comments (Use back of sheet, if necessary) The EIS Meets Ariz Noxious Plant Concerns. The Commission would like a letter offering entry to this Area to survey for noxious weeds and dangerous pests & diseases. Agricultural Bee dropping etc.

49-1

Reviewers Signature R A Cantelman Date 7-15-88

Title Eastern Regional Director Telephone 255-4373

Response No. 49-1. Representatives of the Commission are allowed access to survey for noxious weeds and dangerous pests.

50

CGCGA

Cochise-Graham Cattle Growers' Association

Box 218
Pearce, Arizona 85625

BILL MCDONALD, PRESIDENT
1553 10 th Street
Douglas, Arizona 85607

BEN SNURE, JR., SECOND VICE-PRESIDENT
Box 1002
Douglas, Arizona 85608

PHIL CLIFTON, FIRST VICE-PRESIDENT
Box 4441
Ft. Grant, Arizona 85643

MARILYNN SEARLE, SECRETARY-TRESURER
Box 218
Pearc, Arizona 854625

DIRECTORS:
* Lloyd Adams, Dragoon
Scotty Anderson, Douglas
Janet Benson, Douglas
Jack Burgess, Bowie
* Terry Burgess, Bowie
* Don Burnett, Elfrida
Bonnie Cantanzaro, Portal
* Joe Clinton, Hereford
Bob Cowan, Tombstone
Fred Davis, Tombstone
Ned Hall, Bowie
Nimon Hopkins, Douglas
Don Lackner, Bonita
Stan Mazanek, Bonita
* Claude McNair, Bowie
Paul Messenger, Willcox
Annie Marie Moore, Elfrida
* L. E. Moore, Jr., Elfrida
Tom Peterson, Douglas
Clay Riggs, Willcox
H. Robin Riggs, Willcox
R. L. Robbs, Willcox
* Ron Searle, Pearce
Les Shannon, Bonita
Bob Sproul, Sunizona
A. L. Stansberry, Willcox
Gordon Whiting, Klondyke
* Jim Wilbourn, Douglas

EX-OFFICIO DIRECTORS
Extension Agents
Eric Schwennesen
Cochise County
Ron Cluff
Graham County

Rep. District 8
* Joe Lane

* Past Presidents

August 19, 1988

Mr. Jerrold Coolidge
EIS Team Leader
Safford District Office
Bureau of Land Management
425 E. 4th Street
Safford, Arizona 85546

POSITION PAPER ADOPTED BY THE COCHISE-GRAHAM CATTLE GROWERS' ASSOCIATION, AUGUST 4, 1988, WILLCOX, ARIZONA:

THE COCHISE-GRAHAM CATTLEGROWERS ARE OPPOSED TO THE 15 YEAR REMOVAL OF LIVESTOCK FROM THE SAN PEDRO RIPARIAN AREA, AS DRAFTED BY THE BLM PROPOSED RULES AND REGULATIONS. 50-1 AS THESE ARE PUBLIC LANDS, THE MULTIPLE USE CONCEPT MUST APPLY.

50-2 LIVESTOCK GRAZING SHOULD NOT, AUTOMATICALLY, BE CONSIDERED DETRIMENTAL TO A RIPARIAN AREA. AN EVALUATION OF 50-3 GRAZING IMPACT SHOULD BE DONE BY A NON-BIASED GROUP.

Cochise-Graham
Cattle Growers Association
Bill McDonald
Bill McDonald
President

cc. Hon. Donald Hodel, Director, BLM
Mr. Dean Bibles, Director, BLM, Arizona
Ms. Pam Neal, Exec Vice-President, Arizona Cattle Growers Association

Response No. 50-1. See General Response No. 1.

Response No. 50-2. We agree and the EIS so states. See General Response No. 5.

Response No. 50-3. Since grazing was not a consideration in the plan, an evaluation of grazing impacts is beyond the scope of this EIS. (Also, see response 4-1).

51

Charles E. Russell
4742 E. Andrew Street
Tucson, Arizona 85711

August 19, 1988

Jerrold Coolidge
EIS Team Leader
BLM Safford District Office
425 E. 4th St.
Safford, Arizona 85546

Dear Mr. Coolidge:

On August 3rd, I attended the hearing in Tucson concerning the San Pedro River Riparian Management Draft Plan. At that meeting I heard one individual speak out against hunting, because he felt the one mile wide corridor was too narrow to handle hunting. I disagree with his statement, and would like to see this area open to hunting. 51-1

Sportsmen (Hunters and Fishermen) have contributed both time and money for the betterment of wildlife and wildlife habitat. They should be allowed to purse their hobbies on public lands. Upon examining the map on the back page of the draft plan, I see that in some areas as much as three miles of state and public lands lie adjacent to the area, on both sides. The current one quarter mile minimum distance could easily be achieved in most places within the area. Areas around visitor centers should be closed to hunting, but this leaves a lot of areas open. With such a large area as we have here, there should be plenty of room for both hunters and non hunters.

While I believe that we should use our natural resources, we need to make sure they are always here for future generations. For this reason I'm writing this letter in support for the Preferred Alternative as listed in the draft plan. Allowing hunting in all areas except those close to Visitor Centers.

Sincerely,

Charles E. Russell

Response No. 51-1. See General Response No. 7.

52

Dear Sir,
I have learned of your courageous stand against moneyed interests (that are anti-Earth), and I wish to commend you for recognising that the desert is neither to be abused nor dead. Please keep up the good work by supporting a "no-action" alternative.
Again, for Mother Earth and myself, thank you! — M Wiesinger

53

ARIZONA TRAVEL SERVICE
Of Bisbee

12 LYRIC PLAZA P.O. BOX 1786
BISBEE, ARIZONA 85603
(602) 432-5359

MEMBER AMERICAN SOCIETY OF TRAVEL AGENTS ASTA

AUG. 23, 1988

DEAR MR. COOLIDGE,

I AM WRITING YOU REGARDING THE ISSUE OF HUNTING ALONG THE SAN PEDRO RIVER CONSERVATION AREA. I AM WHOLEHEARTEDLY OPPOSED TO THIS RIDICULOUS NOTION. THERE ARE FEW AREAS THAT ARE TRULY PROTECTED FROM THE VIOLENCE OF MAN. ANIMALS & PLANTS ARE LIVING / BREATHING BEINGS THAT HAVE AS MUCH RIGHT (OR MORE) TO BE ON THIS PLANET; IN OTHER WORDS, THEY HAVE A RIGHT TO LIVE. PEOPLE SHOULD WORK TO PROTECT & DEFEND ALL THOSE WHO NEED IT. WE SHOULD GLADLY GIVE SUCH SANCTUARY FREELY & COMPLETELY. KILLERS (A MORE ACCURATE WORD THAN HUNTERS) WOULD HAVE US BELIEVE IT NECESSARY TO KILL OFF THE WEAK & INJURED & TO CONTROL POPULATION GROWTH. NOW REALLY MR. COOLIDGE, DON'T YOU THINK THAT'S JUST A WEE-BIT EGOTISTICAL? BESIDES, KILLERS ALWAYS GO FOR THE BEST, THE STRONGEST & USUALLY THE FATTEST GAME. I DON'T SEE HOW THEY HELP WITH THE EVOLUTION OF A SPECIES AT ALL!!
KILLING IS VIOLENT!! I AM OPPOSED TO ALL VIOLENCE & ALL KILLING. I HAVE RELEASED A DOG FROM A TRAP. TRAPS ARE SADISTIC. LET US USE THIS AREA TO PROTECT LIFE, TO DEFEND LIFE — NOT TO KILL, NOT TO DESTROY. I CAN'T BELIEVE ALL 4 MGMT ALTERNATIVES ALLOW KILLING. THIS IS AGAINST LIFE!!!

I HAVE SEEN ANIMALS SHOT THAT ESCAPED & LATER, DIED IN MY ARMS. IT WAS A PAINFUL DEATH. THERE ARE MANY AREAS KILLERS CAN GO PLAY. BUT THE SAN PEDRO SHOULD NOT BE ONE.

IF PEDESTRIANS / HIKERS / BIRDERS / HORSEBACK RIDERS WON'T THE NOISE JEOPARDIZE THEIR "PEACEFUL" RECREATION & POTENTIALLY INJURE? EVEN A GUNSHOT FAR OFF COULD CAUSE A HORSE TO REAR & THROW ITS RIDER...

THERE SHOULD BE NO KILLING OF ANY KIND ALONG THE SAN PEDRO !!!

THANK YOU,

SINCERELY,

J. MacKenzie Shumwate

P.S. WHILE I'M WRITING 2 OTHER THOUGHTS COME UP.

1.) AN ACQUAINTANCE TOLD ME HE MADE ALMOST $7,000.00 TRAPPING BOB CATS ON THE BACK OF THE MULE MTS, LAST WINTER. I RIDE THAT RANGE ALMOST EVERY DAY (FOR 3 YRS NOW.) I HAVE NEVER EVEN SEEN ONE. SAD HE CAN MAKE $ OFF OF WHAT I DON'T EVEN HAVE THE PLEASURE & PRIVILEGE TO OBSERVE. IF HE KILLED THAT MANY, HOW MANY CAN BE LEFT?

2.) I READ AN ARTICLE THAT CERTAIN INDIVIDUALS HAVE THE LEGAL RIGHT TO KILL ALL THE MT. LIONS THEY WANT WITHOUT A LICENCE. CAN THAT BE ?? !!! THEY SAY THOSE ARE THE WELFARE RANCHERS WHO RAISE CATTLE ON BLM LAND. IS IT REALLY TRUE ??!!

PLEASE REPLY

THANK YOU

JMS

54

Arizona • Colorado • Idaho
Montana • Utah • Wyoming

National Audubon Society
ROCKY MOUNTAIN REGIONAL OFFICE
4150 DARLEY, SUITE 5, BOULDER, COLORADO 80303 (303) 499-0219

August 23, 1988

Mr. Jerrold Coolidge
EIS Team Leader
Safford District Office
Bureau of Land Management
425 East 4th Street
Safford, AZ 85546

Dear Mr. Coolidge,

The National Audubon Society together with its six Arizona chapters have long recognized the intrinsic values of the San Pedro corridor and likewise been acutely aware that this fragile ribbon of green could easily be degraded as has happened in too many similar circumstances in the Southwestern United States. Acquisition and proper management are the first and second priorities and we applaud BLM for accepting the challenge, carefully involving many of the people who best know the San Pedro. Like the Birds of Prey Natural Area in Idaho the San Pedro is quickly proving to be a paradigm in terms of BLM's protection of important wildlife habitats. Many of the actions taken on this project will hopefully form the basis for future riparian areas. Your Safford district office has already moved forward on the Gila River and two tributaries, Bonita and Eagle Creeks thus earning a double "well done" from the conservation community.

Switching from the general to specifc comments, our regional office endorses the position (preferred alternative) taken by the Huachuca Audubon Society including all of their recommended revisions as listed in their August 15th letter. We understand the importance of using the area without abusing it and know that frequently these can be especially hard terms to define and proscribe in a management plan. Hunting is our major concern in that we feel it is incompatible from a safety standpoint with other uses. Audubon does not oppose hunting per se but does feel in this case that the hazards are too great and with many nearby areas opened to hunting it is not necessary to the sportsman to use the San Pedro corridor. 54-1

Public access will increase the layperson's respect for this ecosystem but we caution as others have done against opening up too many areas for recreational use. It's the basic quality/quantity issue and we encourage only those recreational uses special (unique) to this riparian ecosystem. The nearby Huachuca Mountains for instance may in certain areas be better

Response No. 54-1. See General Response No. 7.

suited for other forms of recreational use than say the San Pedro.

Demographics tell us that many rich natural history locales in southeastern Arizona will be receiving increasing pressure making a sound management plea all the more important.

Audubon wholeheartedly applauds the acquisition of key parcels of adjacent properties which will enhance the corridor. Also borrowing from the Sierra Club's comments we urge that adjacent land management practices, where they can be influenced by BLM policy/regulations, be conducted in a manner that enhances the riparian corridor; e.g. halting erosion, better vegetative mix, etc.

Since in many ways this entire project will be a first, at least in this magnitude - 44,000 acres plus, we encourage BLM to use an ongoing citizen advisory group to continuously brainstorm management ideas and options. Almost certainly as the San Pedro Corridor gains in national stature new ideas will present themselves and require evaluation. An alas proper management requires monetary appropriations which citizen activists can best "push for".

In closing, Audubon applauds BLM for its efforts in acquiring the San Pedro corridor and believes the stage is set for successful management.

Sincerely,

Robert K. Turner
Regional Vice President

cc: Arizona chapter presidents
Arizona chapter conservation chairpersons
C. Eugene Knoder
Brock Evans

55

I OPPOSE ALL HUNTING & TRAPPING AT THE SAN PEDRO RIVER. IT IS A SERIOUS THREAT TO ALL LIFE. IT WOULD INTERFER WITH PUBLIC RECREATION & BE IN CONFLICT WITH WHAT A CONSERVATION AREA SHOULD BE. THANK YOU

CARSON CITY, NEVADA
Illustrated by Shunichi Yamamoto

CARSON AZ 85
PM
24 AUG
1988

July 26, 1788 USA
New York 25

Jerrold Coolidge
BLM
425 E. 4TH ST
SAFFORD, AZ
85546

AUG 25 1988

Great Western Publications
Midvale, Utah
(801) 562-0526

56

August 24, 1988

District Manager
Bureau of Land Management
425 East 4th Street
Safford, AZ 85546

Dear Sir:

In response to your request for comments on BLM Draft San Pedro Land Use Plan, following is a list of services the Tombstone & Southern Railroad (T&SRR) could provide in the event your agency deemed them appropriate and related considerations of mutual interest were addressed and satisfactorily resolved:

1. T&SRR could operate self-propelled, light rail vehicles (LRVs) to shuttle visitors between BLM conservation area points of entry on a schedule appropriate to demand. LRVs could make stops at designated points within the conservation area to discharge and pick up visitors.

2. LRV's service could be expanded to include not only BLM points of entry but additional access points to be served by the T&SRR such as Benson and Tombstone.

3. T&SRR automated 800 number reservation systems, (including the computerized Sabre & Apollo systems linked to thousands of travel agencies nationwide) could book reservations and collect fees for access to the conservation area if these services were desired by the BLM.

In my opinion, the opportunity inherent in LRV service to educate visitors while at the same time increasing their conservation awareness is worth further examination. As for example, BLM or Arizona State Parks Department personnel could provide historic information on the area and its place in the national conservation system either in person, or by recording, as visitors are transported from point to point.

It is currently estimated that the most practical LRVs would be diesel/electric units with modern heating, air conditioning, and toilet facilities. It is estimated the desirable speed of operation of the units would range from 5 to a maximum of 25 mph.

Although acquisition of the branch line between Benson and Douglas, scheduled for abandonment by Southern Pacific, has not been completed by T&SRR, in the event BLM is interested in these proposals the time to begin discussion regarding the desirability of their implementation would be prior to September 15, 1988. This is due to the fact that in order to implement any one or more of these suggestions in a timely manner, it would be necessary to include them in our proposed initial operating budget, currently in final preparation for our investment bankers.

If you are interested in discussing any of these items further please do not hesitate to contact me at 946-1800.

Yours truly,
TOMBSTONE & SOUTHERN RAILROAD, INC.™

N.N. (Bill) Luxon, Jr.
President

cc: Eric Campbell
Mark Battaglia

7031 East Camelback • Box 400 • Scottsdale, AZ 85251 • (602) 946-1800

57

THE UNIVERSITY OF ARIZONA
TUCSON, ARIZONA 85721

COLLEGE OF AGRICULTURE

SCHOOL OF RENEWABLE NATURAL RESOURCES
325 BIOLOGICAL SCIENCES EAST BUILDING

ARIZONA STATE OFFICE
BUREAU OF LAND MGMT
AUG 24 '88
INIT/DATE
SD/ASD
PUB AFF
EEO
RESOURCES
MINERALS
OPERATIONS
ADMIN
CENT FILES
TRNG CNTR
DIST MGRS
ACTION

August 18, 1988

Dean Bibles
State Director, U.S.D.I.
Bureau of Land Management
3707 N. 7th Street
Phoenix, Arizona 85011

Dear Director Bibles:

Over the past four years, my students and I have been studying the natural and cultural history of the upper San Pedro River valley. We have concentrated on ways in which the natural resources of the area have influenced human cultural development, as well as the reverse. Our paper, "A Land Use History of the Upper San Pedro River Valley", written for the Bureau of Land Management, was one result of our research. The wealth of information and materials we have accumulated continues to stir my interest in the area.

Recently, I spoke with Eric Campbell regarding problems and opportunities associated with the San Pedro riverine area acquired by the BLM. As a result of our conversations, I have given some thought to the future management of the site, most particularly the outstanding potential for integrating an interpretive program with a plan for research.

Given the area's almost unique significance in the cultural and natural history of the southwest, and that the area is intended to serve a variety of functions including education, recreation, conservation, preservation, and research, any management program must be based on several principles:

1) Management must obviously be very careful to promote thoughtful, almost reverent use of the site as opposed to maximum or exploitive use;

2) Use impact, especially that of visitors, must be concentrated, leaving most of the area, particularly adjacent to the river, as undisturbed as possible;

3) While management must provide tight control of movement on and use of the site, it must, at the same time, provide an overall site cohesiveness; and

4) Each and every visitor on the site should leave with an enhanced sensitivity to the value and importance the site represents.

All these points impinge specifically on any anticipated interpretive program. Obviously, interpretation can serve in large measure to help achieve management goals. An effective interpretive program will be best supported by a vigorous and forward-looking research program.

It is my firm belief that, given the special value of the site in its natural and cultural historic significance, your interpretive program should be aimed rather higher than is typically found in other natural public facilities. It should take on the dimensions and stature of an integrated interpretive and scientific research program. It should, as much as anything else, stimulate everyone visiting the site to think more deeply about those unanswered questions the site represents, and their importance to people in developing arid regions around the world. I refer specifically to the relative effects . . . of fire, deforestation, livestock grazing, native herbivory, wildlife, earthquakes, ground water withdrawals, mining and smelting, acid rain, global warming, and other byproducts of cultural developments . . . on the river, as well as on the course of cultural development in the valley itself. This site is unique in its potential for allowing us to sort out these interactions.

We have identified fourteen separate locations along the river that are actually or potentially of significant importance in understanding the cultural and natural history of the area. I am interested in helping you develop an integrated interpretive and research program that will develop each of the sites separately, but that will also provide a logical framework, when taken altogether, for understanding the system as a whole.

As part of the interpretive program, for example, the Boquillas Ranch Headquarters could provide an opportunity to discuss and demonstrate the strong ties the valley has had to Mexico and the Spanish. It could serve as well to demonstrate the impact of the cattle industry, ecologically, historically, and economically, on the valley. The St. David cienega exemplifies the importance that both natural and man-caused events have on surface and ground waters and, in turn, how those influence agriculture and human settlement patterns. A cottonwood gallery could be used as a natural "time-line" display, using the life span of various trees to indicate the timing of events, both natural and cultural, that influenced the river and human activities near it. The importance of riparian vegetation could be demonstrated. The visitor's center, of course, could serve as a focal point to introduce the river and its history for those with a basic interest, and could provide a springboard for those who desire a more in-depth experience. All these locations could be interpreted in such a way as to instill in the casual visitor a deeper appreciation for the unusual importance and value of the site.

Far more importantly, however, these interpretive sites and the site as a whole could be developed in such a way as to create, in effect, a prestige research site of potential world significance. Arid riverine systems worldwide are experiencing some of the most rapid rates of population growth and development. There are few research-oriented facilities in the world devoted to this kind of ecosystem, and none of international significance. By emphasizing the many unanswered questions about the dynamics of the whole ecosystem over time, and by touting the research potential of this particular site, we could attract the interest of a highly select group of scientific specialists, e.g. hydrologists, biologists, ethnographers, archaeologists, paleontologists, paleobotanists, climatologists, and so on, much the way Kitt Peak attracts world-renowned astronomers.

I have been convinced for several years now that the San Pedro Valley could, and should, become a scientific mecca for those around the world interested in studying and truly understanding a human-impacted arid riverine ecosystem in its entirety. A long-term, whole-system study makes far better scientific sense than the piecemeal way the valley has been approached in the past. Such study would not focus simply on the current dynamics of the system but would attempt to describe the series of interactions that brought the system to its present state. If such integrated research were anticipated in both the management and interpretive programs for the site, it would be a substantial boon both to the BLM and to the scientists around the world who would be attracted to it. Such a program would have far-reaching implications.

I am now preparing a proposal to the U.S. Man and the Biosphere Program (MAB) to characterize the San Pedro River valley in such a way that we could identify arid river valleys around the world similar enough to the San Pedro that research done here would apply usefully there. This anticipates somewhat the potential international significance of your site.

At this point, my question is whether the BLM would be receptive to a more complete proposal for developing an integrated interpretive/research plan for the site. My existing base of knowledge of the valley, our accumulated materials, and the enthusiastic participation of eager graduate students could go a long way toward providing a plan that would make the San Pedro a resource of world significance, thereby enhancing the image of the BLM as a cutting-edge resource management agency.

I look forward to hearing from you.

Sincerely,

Dr. Donovan C. Wilkin
Associate Professor
Landscape Resources Division

58

18 August 1988

Eric G. Campbell
San Pedro Project
HCR, Box 853
Elgin, AZ 85611

Dear Mr. Campbell,

I am writing to you concerning the San Pedro Project; specifically, as it pertains to hunting in the Riparian Zone. I am an avid hunter, using shotgun, rifle, black powder and bow. However, I am also sensitive to non-hunters and those who believe the Riparian Zone may suffer through hunting.

We all know, even though opponents to hunting refuse to admit it, that hunting has an important place and role in the effective control and management of all wildlife. The Reparian Zone is no different. I am sure that no rules, regulations, restrictions, etc., need to be implemented that will either benefit or appear to benefit, one position over the other (pro-hunting versus anti-hunting or vice-versa). Programs can be enacted that could satisfy both groups.

Therefore, I offer the following recommendation.

Allow hunting in certain designated areas of the Zone or prohibit hunting in certain designated areas of the Zone (a simple play on words meant to satisfy with no difference in meaning or results).

58-1 Further, within the established areas, restrict hunting to shotgunning (dove, quail, waterfowl, rabbit) and bowhunting only for large game. Consideration may also be given to allow for black powder hunting; however, I believe a suggestion of this nature may be more acceptable if no type of large bore hunting were allowed.

I believe both hunters and non-hunters could be persuaded to accept such a compromise. I do not; however, accept the argument that I know will arise, that this would "unfairly" give bowhunters an advantage over non-bowhunters. There is no "unfair" advantage for every person, man, woman and child, has the opportunity and capability to be a bowhunter and those that are not, do so through their own personal choice.

Thank you for your consideration.

Wayne Della
RR #1, Box 828A
Sierra Vista, AZ 85635

Work: 533-3263/3264 Home: 378-0344

Response No. 58-1. See General Response No. 7.

59

18 Aug 88

James R. Tomlin
1816 Windsor Drive
Sierra Vista, Az 85635

Eric G. Campbell
San Pedro Project
HCR Box 853
Elgin, AZ 85611

Dear Mr. Campbell:

I heartily indorse hunting in the San Pedro Project. There has been uncontrolled hunting along the San Pedro for more than 100 years. Wildlife and plants have flourished. The so called "fragile balance" appears to be a conveniently contrived ploy by the anti gun anti hunter lobbyists to deprive hunters access to this area.

Wonder if there were any such concerns in the 60's and early 70's when Charleston Dam was going to inundate 50% of the Riparian Zone?

Jim

60

BLM SAFFORD DIST. OFFICE
425 E FOURTH STREET
SAFFORD, AZ 85546

28 AUG 88
THOMAS L. BEATTY SR.
89 MILLER CANYON ROAD
HEREFORD, AZ 85615

DEAR SIR:

I ATTENDED YOUR MEETING IN SIERRA VISTA, 4 AUG 88; BUT DIDN'T ADDRESS THE GROUP. I WOULD LIKE TO EXPRESS MY OPINIONS WITH THIS LETTER.

1. THANKS FOR GETTING THE BIRD-WATCHERS OFF THE HEREFORD BRIDGE...
2. MULTI-USE IS THE ONLY WAY TO GO, WITH A PROJECT OF THIS SIZE/COST.
   (MORE RETURN ON TAXPAYER'S MONEY, AND LOWER VISITOR COST)
3. COMPROMISE IS THE NAME OF THE GAME.
   (THERE SHOULD BE SOMETHING FOR EVERYONE)
   (WITH NO ONE SPECIAL INTEREST GROUP TRYING TO EXCLUDE ANOTHER)
4. HUNTING IS THE MOST CONTROVERSIAL OF THE MANY PROPOSED USES, AND BECAUSE OF THIS MANY RESTRICTIONS WILL NEED TO BE APPLIED TOWARD HUNTING.
   A. NO FIREARMS FOR 5 MONTHS. APRIL - AUGUST.
   B. NO 22'S FOR THE WHOLE YEAR, WILL GREATLY INCREASE SAFETY AND REDUCE VANDALISM, PLUS GAME VIOLATIONS (PLINKING OF SONG BIRDS, ETC..)
   C. FEDERAL HUNTING STAMP (SIKES ACT) SHOULD BE REQUIRED; THIS WOULD BRING IN MONEY FOR WILDLIFE, PLUS FURTHER LIMIT NUMBER OF HUNTERS.
      (SPUR OF THE MOMENT HUNTERS-DRINKING KIND-MOST LIKELY)
      (WOULD NOT HAVE THE STAMP ETC..)
   D. BIG GAME RIFLE HUNTERS ARE LIMITED, DUE TO ARIZONA'S LOTTERY SYSTEM.
   E. MUZZLE-LOADERS CAN BE A FIRE HAZARD, AND THEREFORE MAYBE RESTRICTED.
   F. SIGN IN/OUT OF ALL HUNTING, DAILY PERMIT SYSTEM ETC..
   G. HIGH PEOPLE AREAS, MAYBE BE CLOSED TO HUNTING.

60-1

5. THERE SHOULD BE SOME AREAS FOR ORV'S TOO, BUT VERY LIMITED IN NUMBER/SIZE.
6. LIMIT ROADS, HORSE TRAIL, HIKING PATHS INTO THE NEAR RIVER AREA.
   (SUMMER/WINTER FLOODING WILL ONLY TAKE THEM OUT)
7. HAVE A GOOD FIRE PREVENTION PLAN-VIA CONTROL BURNS ETC..
8. RE-INTRODUCE BEAVER, TO IMPROVE WILDLIFE/FLOOD/FIRE CONTROL
9. MUST WORK ON REMOVING ALL NO CAN DO, X SIGNS, AT YOUR HEREFORD BRIDGE SITE
   (AT THE MOMENT-GOOD ONLY FOR BIRDING)
10. WORK WITH U.S. FOREST SERVICE TO DOWNLOAD USE FROM THE EAST SIDE OF THE HUACHUCA MOUNTAINS TO THE RIVER.
   (HAS BEEN DONE SOME, WITH YOUR LIMITED USE AREAS FOR BIRDING/PICNICS)

I LIVE LESS THAN 100 YARDS FROM THE MILLER PEAK WILDERNESS AREA, SO SEE FIRST HAND, DAILY USE OF PUBLIC LANDS. I PRESENTLY HAVE STATE/FOREST-SERVICE BEE GRAZING PERMITS, AND HAVE RUN BEES ON THE SAN PEDRO RIVER. (BETWEEN HEREFORD AND LEWIS OVERPASS)

I AM A HUNTER AND HOPE TO HUNT DUCKS ON THE SAN PEDRO AGAIN, AND HAVE FOR MANY YEARS SENT SAN PEDRO DUCK WINGS TO THE U.S. FISH AND WILDLIFE SERVICE. KEEP IN MIND THAT THE SPECIAL INTEREST GROUPS WILL SOMETIMES DO MOST ANYTHING TO GET THEIR WAY. ONE SUCH HUNTER (AT THE MEETING, REALLY BIRD WATCHER), SAID HE WON'T HUNT THE RIVER ONLY THE MOUNTAINS. HE DOES NOT HAVE A CURRENT AZ HUNTING LICENSE AND HAS NOT HAD ONE FOR SEVERAL YEARS. HE LIED WHEN HE SAID HE WAS A HUNTER, WHEN REALLY HE IS (AT MOST) A FORMER HUNTER.

Sincerely Yours,
Thomas L. Beatty

Response No. 60-1. See General Response No. 7.

61

I would like to commend you for your decision to end grazing along the San Pedro River its about time someone started doing something to help stop overgrazing. I am supporting the NO Action alternative if thats the one that will end grazing in this area.

Sincerely Peter J. Galvin 934 SE Nicholson Pgh

62

R&J ASSOCIATES

~~4100 N. Romero Rd. 108, Tucson, AZ 85705 (602)293-3012~~

Robert C. Tweit, Ph.D Joan C. Tweit, M.A.L.S.

3116 N Willow Creek Drive
Tucson AZ 85712-1382
August 30, 1988

District Manager, Bureau of Land Management
425 E. 4th Street
Safford AZ 85546

COMMENTS ON THE SAN PEDRO RIVER RIPARIAN MANAGEMENT PLAN

We generally support the Preferred Alternative with the following specific comments:

RECREATION

62-1 We strongly suggest closing all of the riparian area to hunting as a safety measure. Discharge of firearms in this area of limited visibility is an invitation to injury or death.

We also support limiting ORV use to roads only.

We suggest monitoring dispersed recreation usage carefully to avoid damage from overuse, and limiting it to specified areas if necessary. We often disperse camp and notice that sites grow larger and larger with damage to vegetation both from vehicles and firewood cutting of both dead and live wood. Prohibiting campfires at dispersal sites would be beneficial to vegetation in several ways.

62-2 Level gravelled pads in the campgrounds constructed so that vehicles cannot be driven off them would help keep vehicles where they belong; more extensive development such as hookups should be left to commercial campgrounds in surrounding communities.

The planned high level of interpretation is an excellent idea to help people understand the importance of the area as well as its proper use.

WILDLIFE:

We strongly recommend using the same observers to monitor bird populations over the years. Inter-observer variability can mask other changes.

Response No. 62-1. See General Response No. 7.

Response No. 62-2. We agree. No facilities such as these are proposed for the EIS area.

MINERALS:

We support phasing out all gravel mining operations within the area.

RESEARCH:

This unique area offers an excellent facility for a wide variety of non-disruptive research projects. Establishment of the proposed RNA's would facilitate this objective.

Thank you for the opportunity to comment on this plan.

Robert C. Jewit
Joan C. Jewit

63

Sept. 2, 1988

Mr. Jerold Coolidge, EIS Team Leader
USDI-BLM Safford District
425 E. 4th Street
Safford, Arizona 85546

Dear Mr. Coolidge,

I was unable to attend the August 4th public hearing in Sierra Vista on the San Pedro River Riparian Management Plan. I, therefore would like to express my views by letter.

I find it unbelievable that hunting and target shooting are being considered as recreational options in the San Pedro Wilderness area. There are no valid reasons to permit hunting in this area, there is plenty of public and private land where this activity can be pursued.

63-1 The area is too narrow to support hunting (etc.) activities safely. Hunting is incompatible with this conservation area.

I would further urge BLM to restrict all vehicle use to designated roads only. I'm sure BLM will adopt a final plan that will place emphasis on the conservation of this area and find a sensible balance between conservation and recreation

Sincerely

Angelo Tredella

Response No. 63-1. See General Response No. 7.

64

Aug 31, 1988

Dear Manager

I strongly support the "no action" alternative - and your great plan to ban all grazing along the San Pedro River. However you must also keep humans out. W.S.L. needs more undisturbed riparian habitat. Also this habitat would be great for scientific baseline studies.

Sincerely,

Robert F. Mueller PhD

65

August 29, 1988

Dear Sir,

As a friend of the San Pedro I urge you to adopt plan 2, Preservation, as a way of managing the San Pedro.

I would not be opposed to overnight camping with a permit, but I am opposed to any hunting on the river.

Sincerely,

Bryan Kaplan
56 Bea St.
Bisbee, Az 85603

66

Dos Cabezas Route
Box 6309
Willcox, Az. 85643

September 1, 1988

Mr. Jerrold Coolidge
Bureau of Land Management
Safford District Office
425 E. 4th St.
Safford, Arizona 85546

Re: San Pedro River Riparian Management Plan and Environmental Impact Statement

Dear Mr. Coolidge:

After reviewing the (EIS) I find that the BLM Preferred Alternative proposal is quite acceptable with the following exceptions:

Hunting--

66-1
- Hunting within this narrow strip should not occur because of the safety hazard to other hunters and would be in conflict with non-consumptive users.
- This area can provide a refuge and a place of renewal for many game species which are hunted ajacent to the area.
- The obvious disturbance to many sensitive species particularly in the early spring is just not realistic. Many raptors are just returning from migration and choosing nesting sites.

Pesticides & Herbicides--

66-2
- No mention is found with respect to the use of these tools to control insects and plants respectfully. Certainly, by now, the Bureau understands the potential harmful aspects. They should be totally banned.

Fires--

66-3
- The use of fires within a riparian area seems totally out of character. These areas should be able to mature in a complete and natural way. They also are subject to so many problems such as unexpected floods, natural occuring fires and droughts.

I would also like to commend the BLM generally on the complete and through presentation of the subject material.

Sincerely,

Dan Fischer

Dan Fischer

Response No. 66-1. See General Response No. 7.

Response No. 66-2. See Response SV-5.

Response No. 66-3. Fire will only be used under an approved prescribed fire plan. This plan will establish the conditions under which fire will be used. It will also have an environmental evaluation completed prior to any planned ignition. Generally, hazard reduction measures will not occur within the riparian area. Most of these measures will take place on lands adjacent to the riparian area that display the potential for fires escaping to neighboring private lands.

67

EIS TeamBLM
425 E. 4th St
Safford, AZ

Sept 7, 1988

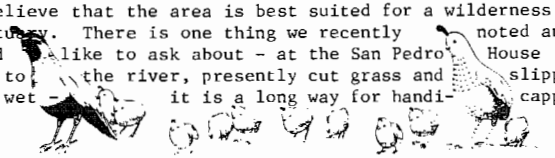
Dear Mr Coolidge:

We were at the meeting in Sierra Vista in August. We have since talked to many friends - at least half of them hunters as is our family - but they and we DO NOT wish to see hunting along the BLM land of the San Pedro River. Our local newspaper came out with this position also and advocated little development and use.

We urge and recommend passage of the NO ACTION ALTERNATIVE. Although the group at the meeting appeared evenly divided the vociferous hunters dwelt on their right to hunt there. That in itself is patently absurd as laws are passed as to where people can and cannot hunt all the time. They said that they wouldn't mind the bird watchers and photographers being there but the general populace would indeed mind them being there. Also to say that hunting is in the fall/ winter and therefore other people could have it inthe spring/summer is overlooking the fact that many people do not like to go out in the heat of summer and prefer the cooler time, when even the birds are more in evidence.

We support the position eloquently stated by a Mrs Fish, Mr. Norm House, the Sierra Club, and life long residents of the San Pedro area. We have hunted in Arizona for 12 years and currently have venison in our freezer but we do not feel the need of a new hunting territory. We live on 10 isolated acres out in the country and we also have access to Ft Huachuca but not all Sierra Vista area residents do - and they need a tranquil, quiet place of beauty to go to. Parents and children should not be in fear of guns in a narrow, small, fragile area.

We believe that the area is best suited for a wilderness sanctuary. There is one thing we recently noted and would like to ask about - at the San Pedro House path to the river, presently cut grass and slippery when wet - it is a long way for handicapped



to negotiate to the river - one of us could not walk that distance. It is a far prettier area than at Hereford Rd.- is there any way it could be made available for cars with handicapped plates with limited parking closer to the river?

67-1

Thank you for your consideration,

J.M. & M.P. BROSSMAN
Rt 2, Box 514A
Sierra Vista AZ 85635

Response No. 67-1. We are planning to have some facilities for handicapped use. This management plan is too general to get into the specifics of where, what, or how handicapped use can be accommodated. Access for the handicapped will be included in the project planning for the San Pedro Ranch House area and possibly at other recreation sites.

68

9/3/88

After reading the draft Environmental Impact Statement and San Pedro River Riparian Management Plan, and attending the meeting in Sierra Vista on August 4, I have come to the conclusion that minimal human impact on the area is a necessity for the foreseeable future. I commend the BLM for agreeing to keep ORV's and grazing out of the area. However, I think hunting, hiking, horses, bicycles, camping, etc. would be equally inacceptable. Please keep in mind the ("wild") native inhabitants of the San Pedro valley and give them a chance to live as they did before human interference. There are so few riparian habitats left in Southern Arizona. Please give up your anthropocentric views that give humans precedence over other species. This is not our land (and water) - it rightfully belongs to them. If you can make a stand for protecting their rights, maybe the planet can be saved for all species.

With that said, of the alternatives available I would prefer a combination of the preservation and no action alternatives - the preservation alternative seems suitable, but the "recreation" section of the no action alternative seems preferable.

Please save the San Pedro for its native species - we humans have enough places to play. Thank you.

David Skinner

David Skinner, P.O. Box 777 Bisbee AZ 85603

69

Hello -

I want to congratulate you on your move to end grazing and public use of the San Pedro River Property in Arizona.

In the draft to cover future use of this fragile wetlands community I encourage you to adopt the "no action" option to allow this land to heal.

Thank-you

N. Lyn Peabody
1161 Maez Rd.
Santa Fe, NM 87501

District Manager
BLM
425 E. 4th St
Stafford, AZ
85546

70

September 7, 1988

Mr. Jerrold Coolidge
EIS Team Leader
BLM-Safford District Office
425 East 4th Street
Safford, AZ 85546

Dear Mr. Coolidge;

I want to commend the BLM for showing the foresight to protect an ecologically valuable areas such as the San Pedro River. I hope this is a continuing trend for the agency.

I have reviewed the EIS and support the preferred alternative with the following suggestions;

70-1 --The BLM should take an active role in having the San Pedro Basin included in an AMA. Water is the most critical element in a riparian ecosystem. Sierra Vista and surrounding communities will continue to grow at exponential rates and strain the over taxed ground water within the basin.

70-2 --If a base flow is secured for the San Pedro, consideration should be given to the removal of non-native fish and the introduction of rare native species.

--Visitor use should be monitored to ensure that it does not adversely affect sensitive species such as the Gray Hawk.

70-3 --Revegetation of the area should emphasize native species.

70-4 --Hunting and high visitation by non-hunters may be mutually exclusive. The narrow riparian corridor will concentrate hunters and non-consumptive users which may result in fatal accidents.

--Consideration should also be given to the reintroduction of extirpated species of wildlife (e.g. Ocelot, Jagurundi).

70-5 --The area, including designated roads, should be closed to all ORV use.

Thank you for considering the above comments. Please add my name to your mailing list for the final EIS and any other mail outs concerning the San Pedro Management Area.

Sincerely,

Randall L. Gray

Randall L. Gray
P.O. Box 47
Sells, AZ 85603

Response No. 70-1. See Response 8-1.

Response No. 70-2. Quantities of base-flow were determined, to some extent, by the instream-flow requirements of non-native fish. While it may be possible to reintroduce native fish species to the San Pedro, flow and habitat conditions need to be re-evaluated for the species to be reintroduced.

Response No. 70-3. Any artificial revegetation would emphasize native plant species, but the use of non-native species that already occur in the watershed is not ruled out. In any case, a site-specific environmental assessment would be done before any revegetation is initiated.

Response No. 70-4. See General Response No. 7.

Response No. 70-5. See Response 44-1.

71

8275 S.W. 172 St. Miami, Fla. 33157

District Mgr, BLM :

Thank you for not allowing grazing on the San Pedro River property. We support the "no-action" alternative.

Sincerely,

Pat & Frank Oblak

72

321 16th Terrace
Bisbee 85603
AZ

8 September 1988

Dear Jerrold Coolidge,

I saw the flyer for "Save the San Pedro Area".

A hundred years ago this whole area of Southeastern Arizona was populated with a huge number and variety of game and wildlife. It was greener, more fertile and a balanced ecosystem before white-man appeared on the scene. Now we have a lot less. Our children grow up seeing only what it is like today, and they think that is what it has always been like. We need to preserve areas like they were before we and our forebears arrived, so that we can show our children what it could still be like with some effort from us.

You have our full support in your attempts to ban all forms of hunting in the San Pedro River Area, in order that the wildlife may remain undisturbed for years to come.
Efforts must be made by us all to curb pollution and vegetation-destruction in this area. We must also procure more land from ranching operations, turn it free and protect it so our children and grand-children can appreciate rolling natural grassland, and have a heritage to use as comparison to the overgrazed cattle lands.

Save San Pedro.

Thank you.

Yours sincerely,

Jean and John Kerr

Jean and John Kerr

73

Julie Papavero
22890 NW Alder
Hillsboro, Or. 97124

September 7, 1988

District Manager
Bureau of Land Management
425 E. 4th St.
Safford, AZ. 85546

Dear District Manager:

Thank you for caring for the riparian system along the San Pedro. By putting a stop to cattle grazing you allow the stream side to regenerate and flourish. Inevitably you also inspire a conflict and trouble from the ranchers. Congratulations on meeting the challenge of protecting this fragile life zone despite such a menacing obstacle.

An Admirer of the Southweet,

Julie Papavero

Julie Papavero

74

OFFICE OF THE COMMISSIONER
UNITED STATES SECTION

INTERNATIONAL BOUNDARY AND WATER COMMISSION
UNITED STATES AND MEXICO
THE COMMONS, BUILDING C, SUITE 310
4171 NORTH MESA
EL PASO, TEXAS 79902

SEP 7 1988

Mr. Jerrald Coolidge
EIS Team Leader
Bureau of Land Management
Safford District Office
425 East 4th Street
Safford, Arizona 85546

Dear Mr. Coolidge:

Thank you for the opportunity to review and comment on the draft San Pedro River Riparian Management Plan and Environmental Impact Statement, reference 1791(040).

The U.S. Section's review of the plan and EIS finds that the proposed action and its alternatives will have no apparent adverse effect on our projects or adverse effects of an international nature.

Sincerely,

George R. Baumli

George R. Baumli
Principal Engineer

75

ASSOCIATED GYNECOLOGISTS, LTD.
GYNECOLOGY • ONCOLOGY

WILLIAM E. CRISP, M.D.

1144 EAST McDOWELL ROAD
PHOENIX, ARIZONA 85006
(602) 258-8995

September 12, 1988

District Manager
Bureau of Land Management
425 East 4th Street
Safford, AZ 85546

Dear Sir:

Congratulations on your efforts for ending grazing along the thousand acres on the San Pedro River. This thirty-six mile stretch we hope will return to its natural state before too long.

Both my family, friends and I support the "no action alternatives" so that this land can truly be a natural preserve.

Thank you for your kind assistance. If I may be of help in legislation that you need to protect this land, please let me know.

Best regards.

Sincerely,

William E. Crisp, M.D.

WEC:al

76

Sept. 12, 1988

Dear Mr. Coolidge

Please protect the San Pedro River area, including the preservation of wildlife, the banning of guns, hunting, automobiles, trucks, motorcycles as well as any other motorized vehicles, and the limiting of human use. Thank you.

Sincerely

John Doty
P.O. Box 82
Bisbee, Az. 85603

77

2503 Kiowa Court
Sierra Vista, AZ 85635

September 12, 1988

Mr. Jerrold Coolidge, EIS Team Leader
USDI - BLM Safford District
425 E. 4th Street
Safford, AZ 85546

Re: San Pedro River Riparian Management Plan

Dear Mr. Coolidge:

This letter is to express my support for the "Conservation Alternative" advocated by the Sierra Club with regards to the Management Plan for the San Pedro River area, and to urge the Bureau of Land Management to adopt this alternative.

In particular, I believe that the following should not be allowed in the San Pedro River area:

- hunting
- overnight camping
- building of campfires
- motorized through traffic
- use of firearms
- cattle grazing
- mining
- other commercial uses

I urge the BLM to save the San Pedro area for the enjoyment and enrichment of future generations. Our land is there for all of us, not just for the "big money" interests, or for government-subsidized cattle ranchers.

Sincerely,

Kate Lawson

Kate Lawson

78

2921 NE 53rd Street
Lighthouse Point, Florida 33064
September 11, 1988

Bureau of Land Management
Safford District Office
425 E. 4th Street
Safford, Arizona 85546

Dear Mr. Bredy:

Regarding the San Pedro River Riparian Management Plan and Environmental Impact Statement, I support Alternative B (Preservation). If we do this, The San Pedro River, can be preserved for its scenic, recreational, wildlife and primitive values. Thank you for this opportunity to comment.

Sincerely,

Reed Secord

Reed Secord

79

Sep 12 - 1988

Dear Bureau of Land Management,
As a 12 year resident of Cochise County I find the San Pedro River area one of the most beautiful places to visit.
I would like to see this area left completely natural, open from sunrise to sunset for picnicks and hikers & birdwatchers, no dogs unless on leashes, NO HUNTING AT ALL. It is too close to residential living and too narrow a stretch of land to allow hunting, anyways.
Thank you for considering my requests.

Sincerely,
Judith L. Maresca

80

Catharine Seibolt Berman
RR 2, Box 240, Sp 5
Sierra Vista, AZ 85635

Sept. 9, 1988

Bureau of Land Management
425 East 4th
Stafford, AZ 85546

Dear Sir:

I am writing to express my heartfelt opinion on the proposed BLM plan to open the San Pedro Riparian Management Area to hunting.

We have a wonderful opportunity at the San Pedro to preserve a remarkable area for future generations. Not only is there an abundance of wildlife, there are historical and cultural sites.

To open the area to even limited hunting would be, in my opinion, a decision we would all live to regret.

Allowing hunting increases the possibility of damage to the area by eager hunters longing to make "a kill," and not concerned about damage to either the land or historical sites.

Even if the BLM fences off closed areas, how many hunters tracking a deer will stop at that point?

It will increase, also, the danger to nongame animals. Just ask any rancher how many cattle and horses have been killed by hunters who shot first and looked later. In addition, many hunters will not hesitate to bag a Great Horned Owl or other "innocent" creature if there is nothing else to shoot at.

80-1 There is also the danger to people. Will we be forced to close the area during hunting season? I can't imagine turning a Boy Scout troop loose in an area where hunters are carrying lethal weapons.

This beautiful area belongs to all the people, not just a small group of hunters. Hikers and hunters have never been -- and never will be -- able to coexist safely.

Please, protect this fragile area. Do not allow ANY hunting.

Sincerely,

Catharine Seibolt Berman

Catharine Seibolt Berman

Response No. 80-1. See General Response No. 7.

81

1220 W.Las Lomitas
Tucson. AZ. 85704
12 Sept. 1988

District Manager
BUREAU OF LAND MANAGEMENT
425 E. 4th St.
Safford, AZ. 85546

Re. Draft EIS
San Pedro

Greetings:

Please consider the following when formalizing the final plan for the above mentioned area.

1. The preferred alternative appears to be the best at this time.
2. Do not permit overuse of the area by the public as we see happening in our National Parks, e.g. Grand Canyon. Do not hesitate to enforce limits on the number of campers etc. to protect the area.
3. Strictly enforce the ORV rules and impose heavy fines and even vehicle confiscastion if necessary.
4. Do not publicize the location of archeological sites that will not be afforded some type of continuing protection. These sites should be for the use of archeologists or anyone that has respect for their value. Anyone wanting to visit an unprotected site should be required to have an authorized individual accompany them on a resesrvation basis.
5. Prohibit any type of trapping within the entire EIS.
6. Prohibit mining of any kind.

Thank you for the privelege to comment on the use of a portion of our American Heritage, public land. May we all strive to protect same, it's a non-renewable resource.

Sincerely,

Gene I. Wendt

GIW/giw

82

P. O. BOX 2128
1500 MARTINGALE RD.
SIERRA VISTA, AZ-85636

Sept.13, 1988

U.S. Bureau of Land Management
Safford District Office
425 E. 4th Street
Safford, AZ-85546

References: (1) San Pedro River Riparian Management Plan and Environmental Impact Statement

(2) Sierra Vista public Hearing, August 4, 1988

(3) Editorial. "Limited Use for San Pedro Area," S.V. Herald and bisbee Review, Aug.4, 1988, p. 4a (Encl. a)

After attending the BLM Hearing (ref.2) and evaluating the comments we would like to endorse the position taken by the S. V. Herald[ref. #3,Encl.(a)] with the following exceptions, additions, and comments:

No Hunting... "If populations of deer and javelina begin to exceed the carrying capacity of the area..." **trapping and relocation** should be the first expedient before "bringing in hunters..." If or when such expedients are necessary the area should be closed to other recreational activities. **Guns and huntingin this four mile wide corridor is potentially lethal.**

82-1

Several years ago, we and another camper, at a Missouri State Park on the banks of the Mississippi River narrowly missed tragedy. A bullet fired across the river by a hunter from the Illinois bank five miles away pierced and landed inside the camper parked next to us. The two people inside were almost hit. A close call, even though there were only four of us in the park!

In evaluating the effect on wildlife it was not brought out in the Public Hearing that **there are two peak seasons of bird life in the area,** Spring/Summers and Fall/Winter. For the winter habitat the local Audubon Christmas Bird count is approximately 175 species, and Summer 173, of which only about 94 are year-around residents. (See Encl. a). The main natural water supply for the area is the San Pedro River. Hunting could have serious effects on the bird life in the area and the unique migrations from Mexico. The bird list in the Impact Statement gives the habitat areas, but not seasonal counts.

Dispersed recreation:... "Overnight use..." in a flood plain area requires more sanitary facilities & more water lines, with the danger of contaminating the water supply with increased use and flooding. Camping encourages "domesticating" the wildlife population. Having towns within easy reach and campgrounds and R-V parks in the area, **over-night camping is inappropriate for the San Pedro River Riparian Area.** Night use would also put the historical, paleontology and archeological sites in greater jeopardy.

Response No. 82-1. See General Response No. 7.

Rather than dispersing recreation, **centralized activities** at the Fairbanks, Lewis Springs, San Pedro House and Hereford Bridge with well planned exhibits, short nature trails, picnic sites, sanitary facilities, parking etc. plus **conducted tours** of the historical, paleontology and archeological sites from these four centers would take care of most of the public education and interests and furnish supervised recreation.

For more extensive uses such as horseback riding, bicycling, hiking, bird watching, photography, etc. special permits from these centers could control the sensitive riparian areas.

The "small sites" recommended (Encl.a) should be primative chemical toilets(?) and on the 'pack in-pack out' system planned for the necessities of the special permit group(s).

Rose Ella K. Brown

Rose Ella K. Brown

W. Jim Brown

W. Jim Brown
Members of:
Friends of the San Pedro
Nature Conservency
Audubon Society
Good Sam
S. V. Camera Club
Bisbee District Camera Club

Encl: (a) S.V.Herald "Limited use for San Pedro Area," Aug.14, 1988
(b) Bird List Covering area of Sierra Vista

(BLM13SE8.LTR)

Limited use for San Pedro area

The final plan for the San Pedro River management area will be developed by the Bureau of Land Management over the next few months. We recommend the preferred alternative to the plan, with the following modifications:

- No hunting. A compact riparian zone is a poor shooting gallery. You can't see very far and bullets travel considerably farther than you can see — a dangerous proposition for picnikers, hikers, birders and horseback riders. If populations of deer and javelina begin to exceed the carrying capacity of the area, the BLM can selectively bring in hunters at a later date. We agree that the area should be allowed to fully recover from decades of abuse. The zone should remain a serene sanctuary for wildlife and humans alike.
- No off-road vehicles of any sort at any time — not even on designated roads. While there are responsible operators of two, three and four-wheeled off-road vehicles, the damage caused by the irresponsible ones is so severe and the riparian environment so sensitive, we cannot risk even one bad apple in the barrel. If the BLM cannot adequately police roads or the activities of OR vehicles, they should be banned from the area.
- Public vehicular access: Designated parking areas only at Fairbank, Lewis Springs, San Pedro House and the Hereford Bridge. No roads, or at least, no through roads. Locked barriers could be opened by emergency personnel.
- Firearms: Prohibited.
- Developed recreation sites: four large sites and five small sites — a mix of the so-called preferred and preservation plans.
- Dispersed recreation: Day use only. Overnight camping has more impact (collection of wood and littering) than day use. The area needs more recovery time. Overnight use might be introduced at a later date.
- Railway corridor: Allow the privately run tourist train as an alternative to through roads. This must be tightly managed to minimize impact on the riparian environment.
- Fires: Controlled fires should be utilized to bring down the fuel load of some areas. They can be managed to not hurt the mature trees, but to eliminate accumulations of dead wood, scrub and improve wildlife habitat.

In sum, the San Pedro is a marvelous resource for Southern Arizona, but it must be allowed to revert to a natural riparian zone in order for its beauty and ecological importance to be fully appreciated. Limited use of the area by people should be encouraged, but those first encounters should be tentative and regulated. If there is error in the management plan, let it be toward conservation.

Sierra Vista Herald/Bisbee Daily Review

Bird List

Covering Area of Sierra Vista

	S	S	F	W
GREBES				
Eared Grebe	x	x		
Pied-billed Grebe	x	x		
Western Grebe	x	x		
CORMORANTS				
D-Crested Cormorant	x	x		
Olivaceous Cormorant	x	x		
HERONS				
Gt. Blue Heron	x	x	x	x
Green Heron	x	x	x	x
Common Egret	x		x	x
Snowy Egret	x		x	x
Cattle Egret		x	x	
B/C Night Heron		x	x	
IBISES				
Wh faced Ibis		x	x	
GEESE				
Snow Goose		x	x	
W Fronted Goose		x	x	
Ross Goose		x	x	
DUCKS				
Blk bd Tree duck	x			
Mallard			x	x
Mexican duck	x	x	x	x
Gadwall			x	x
Pintail			x	x
Gr winged teal			x	x
Amer Widgeon			x	x
Shoveler			x	x
Redhead			x	x
Bufflehead			x	x
Ruddy Duck	x	x	x	x
B winged teal			x	x
Ring nkd Duck			x	x
Canvasback			x	x
Lesser Scaup			x	x
R b Merganser			x	x
Cinnamon teal			x	x
VULTURES				
Turkey Vulture	x	x	x	
HAWKS, EAGLES & FALCONS				
Goshawk		x	x	x
Sh Shin Hawk	x	x	x	x
Cooper's Hawk	x	x	x	x
Red tailed Hawk	x	x	x	x
Red winged Hawk	x			
Swainson's Hawk		x	x	
Rough legged Hawk			x	x
Harris Hawk			x	
Golden Eagle	x	x	x	x
Bald Eagle I			x	x
Marsh Hawk	x	x	x	x
Prairie Falcon I				x
Pigeon Hawk			x	x
Sparrow Hawk	x	x	x	x
Zone tl Hawk	x	x	x	
Ferruginous Hawk			x	x
Gray Hawk	x	x		
QUAIL				
Scaled quail	x	x	x	x
Gambel's quail	x	x	x	x
Montezuma quail	x	x	x	x
TURKEYS				
*Turkey	x	x	x	x
RAILS, GALLINULES & COOTS				
American Coot		x	x	
PLOVERS				
Killdeer	x	x	x	x
Ruddy Turnstone				x
SNIPE & SANDPIPERS				
Common Snipe			x	
Spotted Sandpiper		x	x	
Greater Yellowlegs		x	x	
Lesser Yellowlegs		x	x	
Pectoral Sandpiper			x	
Least Sandpiper		x	x	
Western Sandpiper		x	x	
Willet			x	
Baird's Sandpiper			x	
Solitary Sandpiper		x	x	

	S	S	F	W
AVOCETS & STILTS				
American Avocet			x	
PHALAROPES				
Wilson's Phalarope			x	
Northern Phalarope			x	
GULLS				
Ring billed Gull			x	x
Bonaparte Gull			x	x
TERNS				
Forster Tern			x	
Black Tern			x	
PIGEONS & DOVES				
Band tld Pigeon	x	x	x	x
White winged Dove	x	x	x	x
Mourning Dove	x	x	x	x
Ground Dove	x	x	x	x
Inca Dove	x	x	x	x
CUCKOOS & ROADRUNNERS				
Yellow billed Cuckoo	x	x		
Roadrunner	x	x	x	x
OWLS				
Barn Owl	x	x	x	x
Screech Owl	x	x	x	x
Whiskered Owl	x	x	x	x
Flammulated Owl		x		
Gt Horned Owl	x	x	x	x
Pygmy Owl	x	x	x	x
Elf Owl		x	x	
Burrowing Owl	x	x	x	x
Spotted Owl	x	x		
GOATSUCKERS				
Whip poor Will		x	x	
Poor Will		x	x	
Common Nighthawk	x	x		
Lesser Nighthawk		x	x	
SWIFTS				
Wh throated Swift	x	x	x	x
HUMMINGBIRDS				
Lucifer H bird I			x	
Bl Chinned H bird		x	x	
Costa's H bird		x	x	
Anna's H bird		x	x	
Broad tld H bird		x	x	
Rufous H bird		x	x	
Allen's H bird		x	x	
Calliope H bird		x	x	
Rivoli's H bird	x	x	x	
Blue th H bird		x	x	
Violet cr H bird		x	x	
Wh eared H bird		x	x	
Br billed H bird		x	x	
Berylline H bird I			x	
TROGONS				
Coppery td Trogon	x	x		
KINGFISHERS				
Belted Kingfisher	x	x	x	x
Green Kingfisher			x	x
WOODPECKERS				
Red shafted Flicker	x	x	x	x
Gilded Flicker				x
Gila Woodpecker	x	x	x	x
Acorn Woodpecker	x	x	x	x
Yellow bld Sapsucker			x	x
Ladder backed Wdpk	x	x	x	x
Arizona Woodpecker	x	x	x	x
Lewis Woodpecker				x
Williamson's Sap sucker			x	x
FLYCATCHERS				
Western Kingbird		x	x	
Cassin Kingbird		x	x	
Sulphur bellied Flyc	x	x		
Ward's Crested Flyc	x	x		
Ash throated Flyc	x	x	x	x
Olivaceous Flyc		x	x	
Black Phoebe	x	x	x	x
Say's Phoebe	x	x	x	x
Traill's Flyc		x	x	
Gray Flyc	x	x	x	x
Western Flyc	x	x	x	x
Buff breasted Flyr		x	x	
Coues' Flyc		x	x	
Western Wood Pewee	x	x		

	S	S	F	W
FLYCATCHERS (cont.)				
Olive sided Flyc	x	x		
Vermilion Flyc	x	x	x	x
Beardless Flyc	x	x		
Tropical Kingbird	x	x		
LARKS				
Horned Lark	x	x	x	x
SWALLOWS				
Violet Green Swallow	x	x	x	x
Barn Swallow	x	x	x	x
Cliff Swallow	x	x		
Rough winged Swallow	x	x		
JAYS & RAVENS				
Steller's Jay	x	x	x	x
Scrub Jay			x	x
Mexican Jay	x	x	x	x
Common Raven	x	x	x	x
Wh necked Raven	x	x	x	x
Clark's Nutcracker				x
TITMICE, VERDINS & BUSHTITS				
Bridled Titmouse	x	x	x	x
Verdin		x	x	
Common Bushtit	x	x	x	x
NUTHATCHES				
Wh brst Nuthatch	x	x	x	x
Red brst Nuthatch	x	x	x	x
Pygmy Nuthatch			x	x
CREEPERS				
Brown Creeper	x	x	x	x
DIPPERS				
Dipper			x	x
WRENS				
House Wren	x	x	x	x
Br thrtd Wren	x	x		
Winter Wren				x
Bewick's Wren	x	x	x	x
Cactus Wren	x	x	x	x
Canon Wren	x	x	x	x
Rock Wren	x	x	x	x
L B Marsh Wren			x	x
MOCKINGBIRD & THRASHERS				
Mockingbird	x	x	x	x
Brown Thrasher I				x
Curve bld Thrasher	x	x	x	x
Crissal Thrasher	x	x	x	x
Sage Thrasher				x
THRUSHES, BLUEBIRDS & SOLITAIRES				
Robin	x	x	x	x
Hermit Thrush	x	x	x	x
Swainson's Thrush	x	x	x	x
Eastern Bluebird	x	x	x	x
Western Bluebird	x	x	x	x
Mountain Bluebird	x	x	x	x
Townsend's Solitaire		x	x	
GNATCATCHERS & KINGLETS				
Bl Gray Gnatcatcher	x	x	x	x
Bl Tld Gnatcatcher	x	x	x	x
Ruby Crwd Kingler	x	x	x	x
PIPITS				
Water Pipit		x	x	x
WAXWINGS				
Cedar Waxwing		x		x
SILKY FLYCATCHERS				
Phainopepla	x	x	x	x
SHRIKES				
Loggerhead Shrike	x	x	x	x
STARLINGS				
Starling	x	x	x	x
VIREOS				
Hutton's Vireo	x	x		
Solitary Vireo	x	x		
Warbling Vireo	x	x		
WARBLERS				
Black & White Wblr I			x	
Prothonotary Wblr I	x			
Tennessee Warbler I	x			
Orange crd Warbler	x	x		

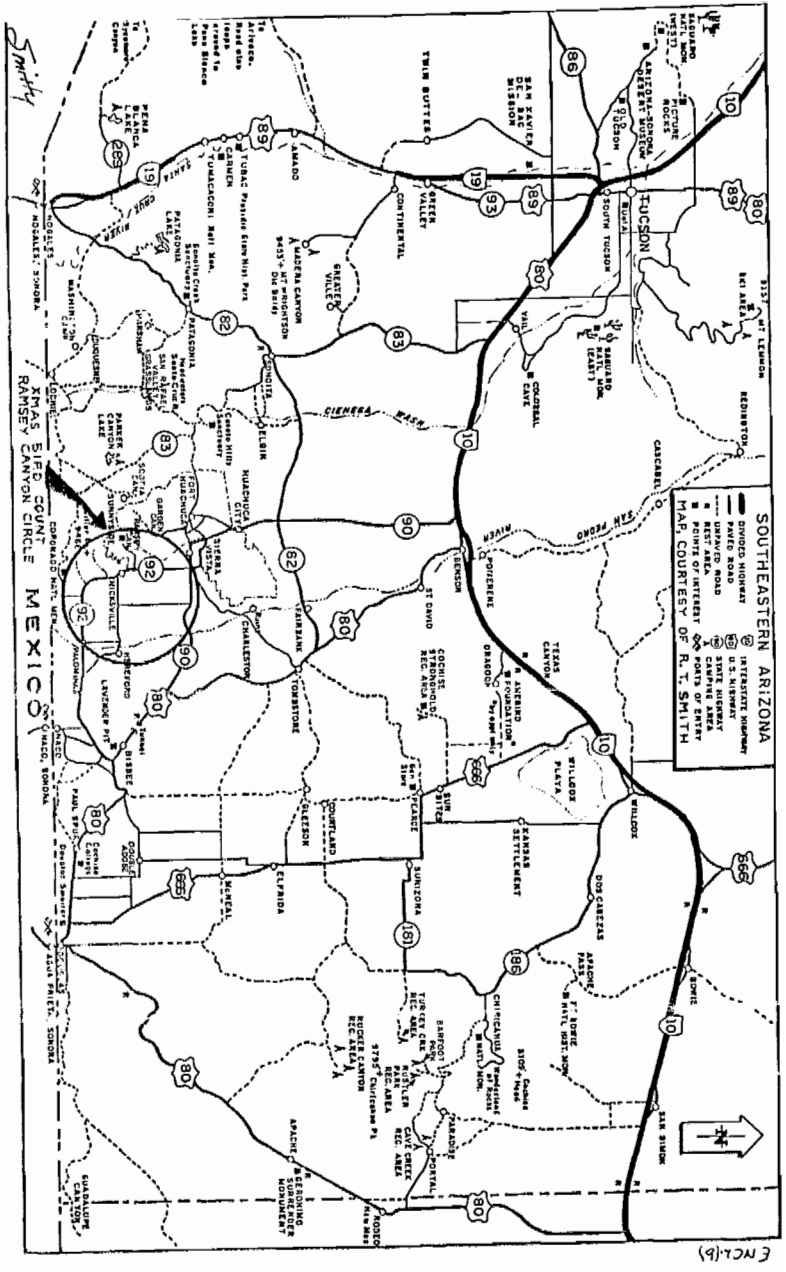
	S	S	F	W
WARBLERS (cont.)				
Nashville Warbler			x	
Virginia's Warbler			x	x
Lucy's Warbler			x	
Parula Warbler I	x	x		
Olive Warbler	x	x	x	x
Yellow Warbler		x	x	
Myrtle Warbler		x	x	
Audubon's Warbler	x	x	x	x
Bl thr Gray Warbler	x	x		
Townsend's Warbler	x	x		
Hermit Warbler		x	x	
Louisiana Water thrush		x	x	x
MacGillivray Warbler	x	x		
Yellowthroat		x	x	
Yellow brd Chat		x	x	
Red faced Warbler		x	x	
Wilson's Warbler		x	x	
Painted Redstart	x	x	x	x
Grace's Warbler		x	x	
WEAVER FINCHES				
House Sparrow	x	x	x	x
MEADOWLARKS, BLACKBIRDS & ORIOLES				
Eastern Meadowlark	x	x	x	x
Yellow hd Blackbird			x	x
Red wng Blackbird	x	x	x	x
Hooded Oriole		x	x	
Scott's Oriole		x	x	
Bullock's Oriole		x	x	
Brewer's Blackbird	x	x	x	x
Boat tld Grackle		x	x	x
Common Grackle	x	x	x	x
Br hd Cowbird		x	x	
Bronzed Cowbird		x	x	
TANAGERS				
Western Tanager		x	x	
Hepatic Tanager		x	x	
Summer Tanager		x	x	x
GROSBEAKS, FINCHES, SPARROWS & BUNTINGS				
Cardinal			x	x
Pyrrhuloxia	x	x	x	x
Rose brstd Grosbeak	x			
Black hd Grosbeak	x	x		
Blue Grosbeak		x	x	
Lazuli Bunting		x	x	
Indigo Bunting		x	x	
Purple Finch				x
Cassin's Finch				x
House Finch	x	x	x	x
Pine Siskin			x	x
Amer Goldfinch		x		
Lesser Goldfinch	x	x	x	x
Lawrence Goldfinch			x	x
Green tld Towhee	x	x	x	x
Rufous sd Towhee	x	x	x	x
Brown Towhee	x	x	x	x
Abert's Towhee	x	x	x	x
Lark Bunting			x	x
Savannah Sparrow	x	x	x	x
Grasshopper Sparrow	x	x	x	x
Baird's Sparrow				x
Vesper Sparrow			x	x
Lark Sparrow	x	x	x	x
Rufous crwd Sparrow	x	x	x	x
Botteri's Sparrow			x	
Cassin's Sparrow	x	x	x	x
Blk thrd Sparrow	x	x	x	x
Oregon Junco			x	x
Gray head Junco			x	x
Mexican Junco	x	x	x	x
Rufous Wgd Sparrow	x	x	x	x
Chipping Sparrow	x	x	x	x
Brewer's Sparrow				x
Wh Crwd Sparrow			x	x
Wh thrt Sparrow I				x
Lincoln's Sparrow			x	x
Song Sparrow			x	x
Swamp Sparrow			x	x
Ch cpld Longspur				x

S Spring F Fall
S Summer W Winter
I-regular
* Seen in eastern canyons, Huachucas

X Species seen in season indicated

ENCL.(6)

Printing, courtesy of Mr. & Mrs. Robert Crooks



83

THE UNIVERSITY OF ARIZONA
TUCSON, ARIZONA 85721
COLLEGE OF ARTS AND SCIENCES
FACULTY OF SCIENCES
DEPARTMENT OF ECOLOGY &
EVOLUTIONARY BIOLOGY

5 September 1988

Mr. Jerrold Coolidge
EIS Team Leader
Safford District Office
Bureau of Land Management
425 E 4th St
Safford, Arizona 85546

RE: 1791 (040)

Dear Mr. Coolidge:

I have read the Management Plan and EIS for the San Pedro River Riparian area and the San Pedro Tech. Rept. No. 1 (Small Mammal Inventory Progress Report) and wish to contribute the following: A) information which is derived from my studies of mammals and especially bats, and B) suggestions for consideration which are not neatly packaged in any of the alternatives.

Since 1980, I have been studying two species of insectivorous bats, Antrozous pallidus (Pallid Bat) and Eptesicus fuscus (Big Brown Bat) which occupy maternity roosts along east drainages of the San Pedro River. Approximately 2800 bats of these two species were banded and have been captured a total of 20,000 times over that time period. Some of the animals banded in 1980 are still present. I am in the process of calculating life history tables and life history parameters including longevity, fecundity, mortality, birth rate, and reproductive capacity. Given these results (in preparation as a Ph.D. dissertation) and the fact that Antrozous is roosting in the San Pedro RNCA (right at the Fairbanks headquarters), this would be a suitable study species to evaluate long-term changes in the area and its effects on wildlife.

A. 1) The two bat species mentioned above feed on a tremendous variety of insects along the San Pedro drainages. They have certain specific roost requirements for raising young in the desertscrub. Yet they are fairly generalized species, and would probably benefit from the kinds of limited protections such as are suggested in Alternative B.

2) There are, however, less generalized bat species occurring along the San Pedro corridor. For instance, nectar-feeding bats (eg., Leptonycteris sanborni, Sanborn's Long-nosed Bat) depend upon very limited seasonal production of carbohydrates from specific plants which occur in Chihuahuan desertscrub and the semi-desert grassland. This habitat has been seriously grazed; the effects of plant community alteration (due to grazing and land clearing to permit more grazing) on this bat-plant relationship should be considered, and is only one element of a complex ecological web in which these mammals participate.

On page A-63 of the M.Plan and EIS, it says that the "area does not have the necessary caves or mining tunnels necessary for roosting..." and the "area does not provide much...feeding habitat due to the low density of yuccas and agaves." Caves and mine tunnels are not their only roost-type; there are several documented reports of nectar bats utilizing abandoned buildings. It is premature to say that there is not suitable feeding habitat for these bats on the SPRNCA. Much information is available noting their use of agave (and saguaro which apparently does not occur on the SPRNCA), but they must be utilizing other plants as well, because they are found in southeastern Arizona in habitats after these two major food types have finished flowering. Other plants that are potential alternate food resources need to be determined.

83-1 Also on page A-63 is a description of the records of Leptonycteris from the area. The list is in error. The Galiuro record was incorrectly recorded as a Leptonycteris and is actually a Choeronycteris (Sidner and Davis, 1988), thus the Galiuros should not be included. Leptonycteris has now been taken in the Whetstones (photo voucher available), and in the San Pedro EIS area (see below.)

3) The importance of the San Pedro RNCA to various bat species is obvious from the following species list which I accumulated after just a 1/2 hour of work at the BLM Fairbank headquarters, which I visited on 11 June this year. Within the buildings, I observed:

Family Vespertilionidae
- Antrozous pallidus, approx. 40 bats
- Plecotus townsendii, 2 bats, one of which was a male.
- Myotis velifer, 2 bats, one of which was a male, now UA Mammal Collection specimen (RMS # 122).

Family Phyllostomidae
- ** Leptonycteris sanborni, 1 skeleton, now UA Mammal Collection specimen (RMS # 123).
- (** This species is being considered for federal endangered species status.)

4) The mammal list in Appendix 7, page A-47, contains several errors, many of which would probably have been resolved if scientific nomenclature had been included. (Corrections attached.)

B. 1) The bat species utilizing the area will benefit most by alternatives which strongly encourage habitat preservation and natural restoration. This includes a continuation or improvement of their water supply, food resources, and roost sites.

2) Alternatives which suggest the use of non-native plant species should be thoroughly reviewed to determine the effect on native plants that the nectar bats are using directly, and native plants that insectivorous bats use indirectly because their insect food relies upon them. Replanting native plant species seems an important topic.

3) Suppression of wildfires should be discouraged because of the unnatural effects it has on native plants.

Response No. 83-1. Hoffmeister (1986) indicates these suggested changes to be correct. The FEIS has been updated.

4) Alternatives which suggest development of certain abandoned buildings such as the Fairbanks schoolhouse and Fairbanks mercantile building will eliminate established bat roosts.

5) Closure of the area after dark will provide maximal protection to bat species during foraging activity.

6) Interpretative displays about wildlife should include information about rodents and bats, two orders of mammals which are often excluded in such information. Considering rodents make up 42% and bats 31% of the 84 mammals in Appendix 7, they should certainly receive as much attention as crowd favorites like deer, javelina, and the carnivores which all total only 21% of the list. If it is to be truly educational, let's give the public something new to learn about such as the interesting, beneficial, and complex ecology of bats in their conservation area.

7) Alternatives should include the continued acquisition of information about wildlife in the area. I would caution, however, against the need to collect (harvest) many bat specimens. As a mammalogist, I understand and respect the need for voucher specimens. I do not think it is any longer necessary to collect a series of specimens of the same species. Careful collection of specimens, and immediate identification by qualified biologists (especially for problematic species like the Myotis bats) will prevent the need to take additional specimens. In no case should firearms be used as this is an indiscrimant method which could result in a dead endangered bat before identification could occur. There are suspected (and in several cases documented) declines in bat numbers. Unlike small rodents, bats have extremely low reproductive rates; therefore, the loss of an individual bat has more serious population consequences than the loss of one rodent.

Finally, I should like to compliment Doug Duncan for his San Pedro Tech. Rept. No. 1, in which he recommended that additional study include "collecting information on bats." Again, I caution against unnecessary harvest of bats. His mammal list corrects many of the problems in Appendix 7, page A-63.

Please retain me on your mailing list; I would like a copy of the final EIS and future.

Sincerely,

Ronnie Sidner

Ronnie Sidner, M.S. General Biology

cc: Frank Baucom, United States Fish and Wildlife Service
Dan Campbell, Arizona Nature Conservancy
Erick Campbell, BLM
E. Lendell Cockrum, UA Mammal Collection
Terry Johnson, Arizona Game & Fish Department
Ruth Ogden Russell, Tucson Audubon Society
Dale Turner, Sierra Club, Rincon Chapter

Comments about
Appendix 7, Species List - Mammals, BLM, MP and EIS, p. A-47.

Use of scientific nomenclature and standardization of common names from references such as the following would make reading and interpretation of data easier to check.

Jones, J. K., Jr., et al., 1986, Revised checklist of North American mammals north of Mexico, 1986, Occas. Papers Mus., Texas Tech Univ. 107:1-22.
Hoffmeister, D.F., 1986, Mammals of Arizona, Univ. Ariz. Press and Ariz. G & F Dept.

The following names need to be revised:

Peter's Leaf-chinned Bat ---Ghost-faced Bat
Mexican Long-nosed Bat ---This is the common name for Leptonycteris nivalis; this species does not occur in Arizona. Rather, the Mexican Long-tongued Bat, Choeronycteris mexicana, does.
Long-leagged Myotis ---legged
Long-eared Myotis ---This is the common name for Myotis evotis and is not considered to occur in southeastern Arizona below the Mogollon Rim. Confusion resulted from specimens now referred to other species.
83-2 *Small-footed Myotis ---Western Small-footed Myotis is the common name of Myotis ciliolabrum (was M.leibii) which is different from the Eastern Small-footed Myotis.
83-3 *Allen's Lappet-browed Bat ---Allen's Big-eared Bat.

* Not updated but correct if Hoffmeister (1986) is used.

Response No. 83-2. The text has been changed.

Response No. 83-3. Hoffmeister still lists this species as the lappet-browed bat. No change will be made at this time.

1520 Bryn Mawr Ave.
Racine, WI 53403

9/9/88 F

84

District Manager
Bureau of Land Management
425 E. 4th St.
Safford, AZ 85546

Dear Sir/Madam:

Bravo for ending grazing in the San Pedro River area! Now, please enact the "no action" (eliminate almost all human use) alternative for this area.

Thank you.

Sincerely,
Mark M Giese
MARK M GIESE

CC: File

85

m. anderson construction corp.

9/13/88

District Manager
Bureau of Land Management
425 E. 4th Street
Safford, Az. 85546

Dear Sir:

The acquisition and placement into public hands, a major portion of the San Pedro River Riparian Zone is in my opinion, very beneficial. The acquisition by the BLM will insure that this area will be conserved and preserved for future use, study, and enjoyment for all who are interested in this valuable and unique resource. I believe it is important to encourage as many people as possible to explore, enjoy and appreciate these beautiful areas. In this way, respect and concern for our natural areas can be encouraged.

85-1 It seems logical to me that the Northern end of the San Pedro River Conservation Area (SPRCA) should be developed as an access point. I believe this area lends itself very well as an access point for the following reasons:

1. The greater population of Tucson can more easily access the SPRCA from the North. Traveling down I-10 to Benson and then South on State Route 80. The area is close to Route 80 with access available all along Curtis Flat Road.
2. Access by people traveling along I-10 from other parts of the country is greatest from the North.
3. There is a very interesting group of old buildings (Curtis Homestead) which is approx. 100 years old. They are hidden in the trees at your extreme North boundry, 100-200 yards West of Curtis Flat Road. At this location is an old carbide generator site and an adobe structure. Both have historical value and should be preserved.
4. The topography in this area is very flat and lends itself very well as a trail head into the area and as a visitor center.

The uses I would encourage for the North point would be predominately non-vehicular and consist of hiking, camping, and equestrian in their orientation. Floral, geological, archeological, or paleontological interpretive trails would also be useful.

4650 North Kain Ave. • Tucson, Arizona 85705-1918 • (602) 887-0823

Response No. 85-1. See Hearing Response TU-4.

I feel the BLM is the rising star of resourse management. When I was engaged in my forestry and watershed management training at the University of Arizona, we were told the BLM was a land bank for vast areas of relatively low quality acreage and had no active management philosophy or role. The BLM acquisition of the San Pedro River Conservation Area as well as the Empire/Cienega Ranches, represents a tremendous opportunity for your agency. I am supprised and very pleased at your sincere desire to garner public imput and to shape your management goals accordingly.

Sincerely,

Mark Anderson

Mark Anderson
MAA/sw

86

the Warne Company

13 September 1988

U.S. Department of Interior
Bureau of Land Management
Safford District Office
425 E. Fourth Street
Safford, AZ 85546

Attn: Ray A. Brady

Re: 1791 (040)
San Pedro RMP & EIS

Thank you for the opportunity to comment on the referenced plan.

I own properties adjacent to the subject property in Sec 34, T23S/R22E and in Sec 27, T22S/R22E. A third generation native of the area, I have been familiar with the subject property since birth (1926).

Upon my rather cursory review of the referenced plan, the input received while attending the August 3, 1988 review of the RMP/EIS and personal experience/knowledge received through the years, the following comments are submitted:

1. Of the alternatives outlined/considered in the RMP/EIS, I agree that the most appropriate alternative was chosen. Provides something for everyone, a middle of the road approach. Hopefully, however, intelligent management will set forth prescribed parameters so as to better contain future tamperings with present intent and acknowledgement for benefit of future generations. (i.e. not so intelligent management and/or giving in to special interest groups who insist upon the exclusion of uses other than their own)

2. 86-1 I would question consistency in policy with references made in Chapter 1 of the RMP/EIS regarding the multiple use mission of BLM and in scoping where the issues of wilderness and livestock grazing are not addressed. I am under the impression that the land traded in Maricopa County was under grazing lease. If so, then lands have been removed from this use (for at least 15 years). Regardless, grazing leasing is certainly a major BLM function.

3. 86-2 Contrary to the statement made under SCOPING, Chapter 1, it appears that livestock grazing <u>was</u> addressed in the RMP/EIS. It was summarily decided (by outside

4455 East Camelback Road • Suite 290E • Phoenix, Arizona 85018 • Telephone (602) 952-8312

Response No. 86-1. See General Response No. 1.

Response No. 86-2. As stated on page 1-4 of the DEIS, "while BLM does not regard livestock grazing as incompatible with the continued existence of the riparian ecosystem, a decision was made to prohibit livestock grazing for the 15-year life of this plan. At the end of that time livestock grazing will be re-evaluated." Also, see General Response No. 5.

forces?) that there would be no livestock grazing...for at least 15 years. I believe this to be a poor decision and urge reconsideration for those portions of
86-2 the property that favorably lend themselves to grazing. It would appear that little/no consideration was given to the impact that the introduction of so many more people into the area will have on fire potential.

4. Proper address and consideration of the livestock grazing issue may well prove that:

a. better overall management will be provided <u>because</u> of the special attentions needed for this activity that may not be otherwise provided.
b. elimination of grazing could endanger the present ecosystem that has developed through many thousands of years of animal grazing and browsing, including livestock activities permanently introduced in the early 1800's.
c. the reduction of fire hazards thru grazing could prove to be immeasurably more effective than
86-3 relying wholly on control burning for proper management of government-owned property but in the exercise of responsibility toward adjacent (private) properties.
d. the compatibility with adjoining land uses issues may well be best addressed by proper grazing techniques <u>and</u> firewood cutting. Owners of adjacent properties will be surely become antagonistic toward a potential tinderbox in their immediate vicinity.
e. cost/benefit of such a program could far exceed the alternatives; additionally, revenues would be generated that would not otherwise be available to the BLM and to the cattle growers.

5. A disastrous fire potential will develop under the ban on livestock grazing for any period in excess of 2 years, unless massive efforts (and cost) are expended beginning in the winter of 1988-89 and continued there on. There has been no major fires to denude the area in recent history, which in consideration of the populus and use subjected, can no doubt be contributed
86-4 to livestock grazing or to darned good luck. Were the area to have been denuded during the past 50, maybe even 100 years, I would doubt the BLM would have had any great interest in obtaining the property. Proper grazing use could be implemented forever. I cannot be that optimistic about good luck, particularly in respect to the much more dynamic impact by man than ever previously.

6. If the BLM is successful in averting disaster by competent control burning, the cost/benefit will be

Response No. 86-3. You may well be correct in these statements. We will have a better answer at the end of the moratorium.

Response No. 86-4. Prescribed fire, a proven cost effective resource management tool, and the construction and maintenance of a few fire breaks are planned to reduce the potential for disastrous fires. Using existing roads for fire breaks is also a consideration for hazards reductions. As BLM is a multiple use agency, we must consider the effects of fires not only to vegetation, but to all the resources involved.

We recognize that fire is a natural phenomenom. Fire can open up areas of decadent vegetation and increase the vigor of plants by adding nutrients to the soils. Major fires within the last 50 to 100 years would have caused changes in the vegetation, along with fire scars on some trees. These changes are not evident, though nature would have regenerated much of the burned areas by now.

exorbitant in comparison to that developed from proper grazing, firewood cutting techniques.

7. Livestock grazing should be permitted to a rancher proven competent by past performance and rotated so as to minimize fire potential due to the presence of heavy grass, underbrush growth. Provide several pastures to allow adequate rotation to accomodate adequate rest periods of one to two years during normal and above normal rainfall periods. Longer rest periods for years of less than normal rainfall; or variances in unit numbers.

8. 86-5 Firewood cutting should be allowed thru appropriate control methods. Licensing of limited numbers of competent entrepreneurs in the business of selling wood. Pre-identify wood to be cut/removed.

9. None of the area should be open to the use of off-road vehicles.

10. Transportation within the area (except highways) should be confined/limited to historical means: by foot, horseback, train, stagecoach and perhaps small boat. Each to be especially designed to properly care for the area and not become an overwhelming edifice. Except for the foot trails, each should be licensed to operators in the private sector that are carefully chosen for their demonstrated capability and soundness. In most cases, these operators will need to be tied into lodging/recreation/tourist systems that are in position to accomodate need.

    The terminus and all ancillary provisions to these transportation means should be provided by the private sector <u>off</u> BLM premises.

11. Allow no animal trapping.

12. 86-6 Designate areas for hunting game on rotation basis and closely control its use. Use input from BLM rangers that are on site.

13. It is obvious that a competent study of existing wildlife was not included in the EIS. Information included in the RMP/EIS is glaringly erroneous (i.e. mule deer and javelina which are the most obvious to residents of the area). Surely evaluation and management of the plan will be best implemented with good information.

14. Comments that the area has always been closed to public entry is incorrect. To my knowledge, the property has always been open to citizens of the area traveling by

Response No. 86-5. The use of the area for firewood cutting was considered in some of the early issue scoping meetings. Firewood cutting was not carried forward because of problems of enforcement and because the mesquite bosque type of vegetation is necessary for maintenance of the ecosystem. Associated problems such as soil compaction, off-road vehicle use and vandalism could also occur.

Response No. 86-6. See General Response No. 7.

foot or horse, and in some cases, by auto (since closed by BLM). Hunting and picnicking in the area has been a large ticket item for as long as I can remember and evidenced by pictures of my family taken during the 1920's and 1930's.

15. Wildlife management in regard to compatibility with adjoining land uses will require special consideration/attention with regard to (1) present and future coyote and wild dog propulation, and (2) a real hard look at the reintroduction of the grey wolf, if that particular special interest group prevails.

16. The gentleman that could not find his resources at the Tucson meeting may have had a nice idea for a name/place or two within the development. He was probably looking for the (first recorded) names which were probably Rio de San Jose de Terrante and Rio de Quiburi (Kino 1692+).

Surely you've read the attached editorial, which in my opinion makes a good point or two. I doubt the weather/precipitation conditions in our area will allow us to be as lucky as Yellowstone. That is, disaster will occur much, much sooner due to our climatic conditions.

I've been fortunate to enjoy the San Pedro and Yellowstone. My grandchildren will not have the opportunity of seeing Yellowstone replenished, but I hope they can continue to enjoy the San Pedro. With intelligent management, rather than edicts presented by the environmental elite (as referenced by the media), I'm sure they can.

Respectfully submitted,

J. E. Warne, Jr.

JWJ/gg

THE ARIZONA REPUBLIC
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Where The Spirit Of The Lord Is, There Is Liberty — II Corinthians 3:17

EDITORIALS

THE FIRES OF '88

Playing God in Yellowstone

HUBRIS, not lightning, was the cause of the great Yellowstone conflagration. For the first century of the park's existence, wildfires were suppressed quickly and thoroughly in the mistaken belief that this was "protecting" a peerless natural resource.

Then, at the urging of an environmental elite, the National Park Service reversed this practice in 1972 under a new policy of "natural" management. Nature would be left to manage itself, the Park Service announced, and wildfires would be allowed to burn.

Over a hundred years a tremendous amount of fuel had been allowed to accumulate in the form of dead trees and dense undergrowth — tinder that normally would have been reduced by fire. When the Park Service swung from one management policy extreme to another, a disaster was in the making.

The Yellowstone plateau's damp weather concealed the magnitude of the impending disaster. Naturally caused wildfires were permitted to burn, but the ecosystem's natural checks-and-balances usually limited these blazes to a few hundred acres.

But after two years of below-normal precipitation came an unprecedented summer drought that reduced the moisture in the park's vegetation to just 2 percent. Suddenly the "let burn" policy combined with the century-old fuel buildup to produce catastrophe. The Park Service's stubborn commitment to laissez faire in the face of this year's explosive conditions was an act of criminal neglect.

More than 1 million of Yellowstone's 2.2 million acres have been affected by the rampaging fires, but Park Superintendent Robert Barbee is right: these areas have not been "destroyed." The forests, meadows and grasslands will revive, and in the long term the fires will have a beneficial effect.

Yet the larger question of the Park Service's philosophy of "natural" management remains. It is sophistry to pretend, as the service does, that Yellowstone or any other national park can be managed as if it were pristine wilderness unaffected by the presence of man.

More than 2 million persons a year visit Yellowstone. What could be more "unnatural" than that? The impact of human activity on the ecology and terrain is an unalterable fact. Even before the advent of Europeans, the Indians were managing Yellowstone's environment through gathering, hunting, fishing and controlled burning of grasslands.

By playing God in Yellowstone, the Park Service has abdicated responsibility. If, in years past, it had implemented a transition program of burns to reduce the forest's fuel content, the fires of '88 would have been far less catastrophic and costly.

Many aspects of the Park Service's hands-off philosophy undoubtedly have been successful, but good policy is flexible amid changing circumstances. The question raised by the Yellowstone fires is not whether man will manage nature, but whether he will do so wisely.

87

Janina Miller
1441 E. Adelaide Dr.
Tucson, AZ 85719

Safford District Office
Bureau of Land Management
425 East 4th St.
Safford, AZ 85546

September 15, 1988

To whom it may concern:

In regards to the San Pedro Management Area, I want to address the issue of firearms use.

I propose that no firearms be allowed in the SPMA area. I feel that it would disturbing to the enviroment, animals and people that live and visit there. In returning an area to its natural state, or as near as possible, I think that firearms have no place in the plan.

I have lived in the country for 7 years in No. California on private land, and during hunting season I would be disturbed by the sound and intention of the hunters. Not to mention not knowing if the shots were coming in my direction. Even if there is a designated area for hunting, I think that it is difficult to know if they are really in the right area or if there could be a stray bullet. There is also the common occurence of hunters drinking alcohol during this activity, which distorts the decision-making process and could mean loss of human life and destruction to wildlife and enviroment.

Please take into consideration my viewpoints when it comes to your final decision regarding the San Pedro Management Area. Thank you.

Sincerely,

Janina Miller

Janina Miller

88

CABOT SEDGWICK
BOX 1386
SANTA FE RANCH
NOGALES, ARIZONA 85628

September 14, 1988

Mr. Jerrold Coolidge
EIS Team Leader
Bureau of Land Management
425 E. 4th Street
Safford, Arizona 85546

Dear Mr. Coolidge:

Mr. Brady's office kindly sent me along a copy of the draft San Pedro River Riparian Management Plan and Environmental Impact Statement. I have read this through carefully and I must say that I was greatly impressed. It is obvious that much time, effort and careful thinking went into each of the four proposals.

The so-called Preferred Proposal has much to be said for it, but after considerable thought it seems to me that the Preservation Proposal is on balance the best route to be followed; to my way of thinking, of course. On Government property as well as my own, I have seen the damage done by ORV's. It is practically impossible to confine them to designated areas. Similarly, I feel that firearms should be prohibited.

88-1 Clearly it is important that there should be some developed recreation sites, but it seems to me that thirteen sites is altogether too many and is likely to impinge upon the experience of those who are truly interested in a natural area. Allowing overnight use is likely to have a similar result.

Partially based on personal experience, I do not believe that the removal of the exotic fish is feasible. This has already been tried on a Nature Conservancy preserve and having been a complete failure the project was abandoned.

I have somewhat mixed views relative to the provision as regards the public use of cultural sites. Under the Preferred alternative there would be ten sites; under the Preservation alternative there would be no sites. I personally feel that there should be a happy medium with possibly five or six sites.

Response No. 88-1. The number and size of the recreational developments has been decreased in the final EIS. See Chapter 2 in the text. See Response 7-1.

I have been interested in the San Pedro project for a long time and at one time had some semi-official involvement at the request of Governor Babbitt, but I certainly have no claim to expertise and offer the foregoing comments in an effort to be helpful. Incidentally, I thought that Pete Cowgill's article in the September 9th Daily Star was quite useful and hopefully will be followed by something along the same lines in the Phoenix media.

Sincerely,

Cabot Sedgwick

CS:hd

89

United States Department of the Interior

NATIONAL PARK SERVICE
WESTERN REGION
450 GOLDEN GATE AVENUE, BOX 36063
SAN FRANCISCO, CALIFORNIA 94102

IN REPLY REFER TO:

L7619(WR-RP)

September 13, 1988

Memorandum

To: District Manager, Bureau of Land Management, Safford, Arizona
Attention: Gerrold Coolidge, EIS Team Leader

From: Associate Regional Director, Resource Management and Planning, Western Region

Subject: Draft San Pedro River Riparian Management Plan and Environmental Impact Statement (DES-88/31)

We have reviewed the subject document and note that on page 1-3, the San Pedro River is recognized as an outstanding example of desert rivers in the Southwest.

In conduct of the Nationwide Rivers Inventory in 1979, the National Park Service initially included the San Pedro River in the Inventory. However, further screening of streams initially listed in the Inventory resulted in the San Pedro River being dropped because of lack of information on potentially outstanding values and additional evidence of man-made intrusions. Therefore, it was not included on the final Inventory listing published in 1982.

We recognized at that time that desert streams were not well represented on the Inventory. The fact that the Bureau of Land Management has acquired a sizeable portion of the San Pedro River Corridor and now proposes management for protection and restoration of natural values may well indicate that the affected portion of the San Pedro River should be included in the Inventory. We would welcome your comment and opinion on such an addition. Meanwhile, in view of the limited number of high natural quality desert rivers, we recommend that you apply the highest degree of protection and restoration efforts to the San Pedro River. 89-1

We appreciate the opportunity to comment on your plan and statement.

Ray Murray

cc:
WASO-762

Response No. 89-1. The San Pedro River appears to have many features that may qualify it for inclusion in the Nationwide Rivers Inventory. We do not, however, see the necessity of adding the San Pedro River to the Inventory. We base this opinion on the recent Congressional passage and enactment of a bill designating the EIS area as a National Conservation Area (NCA). The legislation calls for conserving, protecting and enhancing the riparian area (the river) and its surrounding lands, an area of some 56,000 acres. This is coupled with this management plan calling for maintenance of the river's unique qualities and the rehabilitation of man's impacts on the area. We do not believe that the addition of the San Pedro River to the Inventory or its designation as a wild and scenic river will add anything to the management of the NCA. Congress's intent in the legislation and BLM's objectives in this management plan already cover those management needs.

90

Craig D. Allen
Bandelier National Monument
Los Alamos, NM 87544-9701
1/14/88

District Manager
Bureau of Land Management
425 E. Fourth Street
Safford, AZ 85546

Dear District Manager,

I became familiar with the San Pedro riparian area long ago, as I have lived and worked in the Tucson and Bisbee areas various times over the past 12 years - I continue to return to this area often as my grandparents live in Bisbee. I might note that I study land management practices as a career - I am currently a Ph.D. candidate in the Forestry and Resource Management Department at the University of California, Berkeley. I have some comments on management options for the San Pedro riparian area.

Simply put, I support emphasis on maintaining the wild qualities of this increasingly rare riparian system. Still, an interpretive center for the flora, fauna, and archeological resources, limited facilities for camping and picnicking, and a limited trail system seem like reasonable ideas if done carefully so such public access does not disrupt the integrity of this special place.

I come from a long line of hunters and do not philosophically oppose hunting, but the San Pedro seems like one of those special places where any hunting that takes place should be done with binoculars or a camera. Hunters do disrupt the quiet and serenity of their hunting grounds for many people and for certain wildlife species, including some rare raptors. The "surplus" that hunters take would be harvested by wild predators (including some of our rarest and most prized wildlife species) who would keep most prey species populations in control. One possible exception to this scenario is deer populations, since one of their main natural predators (the wolf) is locally extinct. If deer populations should increase to the point that they threaten to damage local habitats I would support the institution of limited hunting, perhaps bow only, to keep their populations in check. I advocate waiting to see what happens without hunting before allowing any hunting in this area, as it would be hard to restrict hunting access once allowed if considered unnecessary or undesirable at a later date.

From my perspective, off-road-vehicles have no place in the San Pedro riparian area. ORV's damage soil, vegetation, and water resources, and they disturb other human beings and wildlife. ORV users have no right to damage public lands, and particularly this riparian area where ORV use would degrade the qualities that make these lands special.

Similarly, I can see no reason that a huge, alien herbivore, "the cow", should be allowed to use the San Pedro riparian area. Livestock grazing also often damages soil, vegetation, water, wildlife, and recreational resources. Taxpayer subsidy of this damage on public lands is increasingly unpalatable. Inasmuch as livestock graze most BLM lands it seems unnecessary to propose damaging this special area for what is an absolutely trivial number of cattle in the larger scheme of things.

"Balanced use" of the San Pedro riparian area should be considered in the context of the tens of millions of acres managed by the BLM in the West that are open to hunting, ORV's, livestock grazing, and unrestricted public access. To my mind, balance here calls for emphasizing the qualities that make the San Pedro riparian area special - including the rare wildlife, the unique archeological resources, the quiet splendor and wildness of the cottonwood gallery forests, the living stream amidst the desert. The hunters, ORVers, and cattle have many other places to go - the plants and animals of this threatened ecosystem have no other options. Human uses compatible with the special qualities of this riparian area exist, but significant restrictions on public use of these lands are necessary if these special qualities are to survive the potential onslaught of human activities in this rapidly developing area.

In summary, I hope that the BLM recognizes that this riparian area will increasingly be valued as a natural treasure in the Southwest, as high quality riparian environments are largely eliminated and local human populations continue to increase. If the BLM does not manage this tract of land with sensitivity toward the rare and special qualities that it contains, it seems likely that management of this area will eventually be legislatively transferred to another agency that the public believes will do a better job. By the same token, this is a golden opportunity for the BLM to improve its public image by recognizing the special character of these riparian lands. The San Pedro riparian zone has been one of my favorite areas in Arizona for a long time. Best wishes in your efforts to manage the San Pedro riparian area in a fashion that will make current and future generations proud of our society, and proud of the BLM. Please keep me informed of your actions in this area.

Sincerely,

Craig D. Allen

Craig D. Allen

91

September 14, 1988

Jerold Coolidge, EIS Teamleader
Safford District Office, BLM
425 4th Street
Safford, Arizona 85546

Dear Mr. Coolidge,

The Greenlee County Cattle Growers are opposed to the proposed fifteen year removal of livestock from the San Pedro Riparian area. We support the multiple use concept on all public lands.

91-1 We feel that grazing could be used as an effective management tool within the area. Examples would include fire control, improvement of quality and vigor of forage for wildlife.

Fence maintenance and difficulty in keeping gates closed may lead to a problem of cattle using the area on an uncontrolled basis. The best way to alleviate this type of problem may be to allow grazing on a controlled basis within the area. Furthermore, grazing would generate some income for the Federal Government.

Greenlee County Cattle Growers
Larry Barney, President

Larry Barney

Response No. 91-1. See Response 86-2.

92

ARIZONA STATE PARKS

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September 16, 1988

Jerrold Coolidge, EIS Team Leader
Safford District Office
Bureau of Land Management
425 E. 4th Street
Safford, AZ 85546

Re: Response to the Draft San Pedro River Riparian Management Plan

Dear Mr. Coolidge:

Thank you for the opportunity to respond to your Management Plan Proposal for the San Pedro River Riparian planning area. Let me begin my comments by expressing how appreciative we at State Parks are for the opportunity to be involved in the planning of this project. I personally spent a day with several of your employees at various sites along the San Pedro and environs. At that time, I was very impressed with the potential that the area had for conservation, preservation, and recreation.

As you may suspect, we feel most comfortable commenting on the recreational aspects of your plan. State Parks supports the preferred Alternative B as it emphasizes a variety of public recreational uses while providing for protection, enhancement, and interpretation of natural and cultural resources. I have taken the opportunity to canvas a number of individuals on our staff and have them review your proposal. If you have any additional questions or comments for us, I would appreciate a phone call or letter to help clarify any or all of your concerns.

There are a couple of other issues that I would like to address prior to getting into more specific observations. As you know, there is a push at the federal and state levels to evaluate the potential of partnerships to provide better public service as well as more comprehensive management. Arizona State Parks has stated publicly that we are interested in exploring positive partnership opportunities. We feel that we are good resource managers and have certain expertise in both planning and operations. As you move along to more definitive plans we would not be opposed to mutually investigating a joint management opportunity at selected areas within the management system. In addition, I am sure you are aware of our newest State Park, Kartchner Caverns, six miles southwest of Benson. We hope to have a fully functioning resource at the cave within four years. We certainly will have some on site activities within three years. We will, therefore, be your neighbors both in location as well as public service. We intend to work very closely with the BLM, the Forest Service, and the National Park Service in the San Pedro area to coordinate our recreational services as professionally and efficiently as possible. There may be some opportunities for us to work together to solve some mutual problems as we both enter the planning stages of our mutual responsibilities.

92-1

Response No. 92-1. We agree. As project plans are developed we will continue investigating joint management opportunities with Arizona State Parks.

Additional Comments

- We would suggest a phased approach to your planned actions within the recreation section of the preferred alternatives. Our experience in developing recreational facilities has shown that the need for a complete master plan is very important. However, in most cases, the money does not follow as quickly for the additional needs of a recreational area once the first phase of funding is completed. We hope the federal government does not suffer from those same tendencies. However, if you can prioritize those specifics within the master plan (campground, interpretive center, picnic sites, study areas, etc.) to reflect those most important needs, it may prove to be more acceptable politically which will ultimately lead to easier funding. 92-2

- A wide variety of interpretive displays would certainly be a wonderful addition to the management area. We would like to encourage you to consider using a primary visitor center at some point along the River as an orientation for the other interpretive areas and emphasize more the self-guided approach to the interpretive areas. This would save on manpower as well as encourage disbursed recreation.

- We certainly would like to see the tourist train have an opportunity to provide that aspect of recreation, if possible. We would, in any event, encourage you to have a linear trail system along the drainage in place, regardless of the tourist train. This is a very important element in the future of recreation around the State and we feel very strongly that it has an appropriateness, especially in the riparian area that you are managing. We are finding that there is a great deal of interest in the Greenway project in the Verde Valley and there are a number of similarities. I think you will find this to be a strong selling point for your plan. 92-3

- A major recreational trend that we have seen substantiated through independent research shows a desire for more improved camping and group picnicking activities. We would suspect that a number of visitors to the management area would be part of a group, either of a recreational nature or a scientific nature. We would encourage you to provide more group camping and picnicking opportunities for your visitors. Should the investigation and exploration of the archaeological sites and the cultural history sites along the management area continue, this would be an additional benefit for those groups as they prepare their schedules. In addition, Arizona has over a quarter of a million senior citizens visit our State in the winter. Many of them travel by bus on their recreational tours and group picnic sites work out very well to accommodate that user group.

- We would like to see more detail concerning the potential of laboratories and outdoor research at the Lehner Site. This is a prime area for studying life sequences and riparian habitats and, therefore, has the potential for attracting people interested in learning and understanding through excavation and data collection. 92-4

- Under the section on Water - Planned Actions, your proposed uses for non-irrigated wells should include provisions for horse troughs and drinking water areas along the 36 mile route to help protect the riparian habitat along the river.

Response No. 92-2. This is our intent. We agree that the funding for these proposed recreation developments may not come all at once. A multi-year construction horizon is envisioned.

Response No. 92-3. No linear trails are proposed for construction in the riparian portion of the San Pedro River. We believe that the regular high flows of the San Pedro River preclude construction of any trails in this area. Some informal trails will probably develop on both sides of the river as recreationists use the area. We believe these trails will be adequate for recreational use, will keep impacts to the riparian area at a low level, and will help spread out the use. We are proposing to use the railroad grade for hiking and equestrian use if the tourist train does not become a reality, the track is abandoned, and BLM obtains the land.

Response No. 92-4. A more detailed plan (project plan) will be developed for the Lehner Site at a later date. The project plan will detail what will occur at this site, such as facilities, locations, access, parking, etc. It will also include an environmental assessment to determine the impacts of the proposed developments.

Thank you for the opportunity to comment on the draft plan. If you need additional information from myself or our staff, please do not hesitate to contact us. Thank you very much.

Sincerely,

Courtland Nelson
Deputy Director

CN:oml

93

September 18, 1988

District Manager
Bureau of Land Management
425 E. 4th Street
Safford, AZ 85546

Sir:

The Preferred Alternative is supported by the Huachuca Hiking Club.

The Preferred Alternative approaches the best balance in all areas for development and use by the public.

93-1 We do express our concern about authorizing any type of hunting in the areas that will have the greatest use by the public. Remote areas appear to be the most logical areas for limited hunting without any real impact on public use.

Lester A. Mauk
Lester A. Mauk
Huachuca Hiking Club
2601 Meadowlark Dr
Sierra Vista, AZ 85635

Response No. 93-1. See General Response No. 7.

94

September 19, 1988

Jerrold Coolidge, EIS Team Leader
USDI - BLM Safford District
425 E. 4th Street
Safford, AZ 85546

Dear Sir:

I wish to express my concern over the possible over-development and resulting over-use of the proposed San Pedro Riparian National Conservation Area as a recreational visitor attraction.

It was my understanding from the beginning that this strip along the river would be preserved as a wildlife habitat and nature area. But if there is to be road building for motorized through traffic, development of picnic areas, etc., the entire area will soon be trashed and the original purpose for preserving it will be lost.

I must stand behind the Sierra Club, Chiricahua Group, which advocates resource protection and that the balance be tipped in favor of wildlife rather than human use wherever there might be a conflict.

Common sense would ban hunting and use of firearms in the San Pedro river riparian area and restrictions should be placed on visitor use, including length of stay, size of party, noise, campfires and site abuse.

If such restrictions are not imposed this will become just another over-crowded, polluted, trashed public recreation area devoid of any significant bird and wildlife and with much of the natural vegetation trampled into the ground.

You can't trust the general public when turned lose in a recreation area.

Thanks for listening

David Hynek
Rt. 1 - Box 122-3
Hereford, Arizona 85615

David Hynek

95

Dear Mr. Coolidge,

As one of the rare examples of desert riparian areas in the Southwest, we must do all we can to preserve this prime ecosystem from the forces of man that are bound to destroy it, if they are not kept in check.

While I don't think the area should be completely closed off to the public, I feel the level of public recreation and access should be limited to allow for the least disturbance of this fragile environment.

It is with this thought that I feel that Alternative B: Preservation is the best plan in my opinion for this area.

Please consider my thoughts as you prepare to decide the future of this most valuable of natural resources.

Thank you,
Sincerely,

John Pampeian

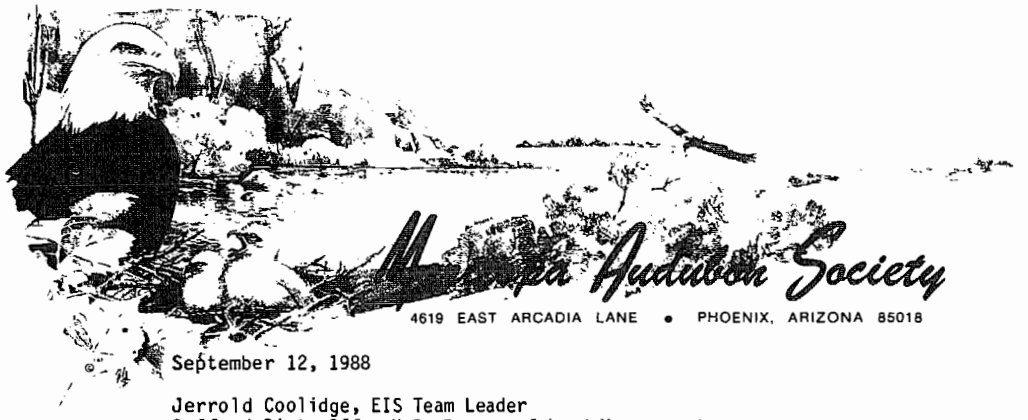
96

NAME	ADDRESS
Roger Ward	P.O BOX 1644 Bisbee
Stephen M. Kelley	P.O. Box 1191 Bisbee Az
Jim Chapelle	P.O. Box 981 Bisbee
Sterling H. Mauro	P.O. Box 1568 Bisbee AZ 85603
Paul M. Costner	P.O Box 1007 Bisbee 85603

WE, THE ABOVE SIGNED WANT TO SEE THE SAN PEDRO RIVER CONSERVATION AREA REMAIN IN IT'S NATURAL STATE. WE WANT NO HUNTING AND NO DEVELOPMENT IN THE AREA.

9-18-88

97



4619 EAST ARCADIA LANE • PHOENIX, ARIZONA 85018

September 12, 1988

Jerrold Coolidge, EIS Team Leader
Safford Dist. Off., U.S. Bureau of Land Management
425 E. 4th St.
Safford AZ 85546

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Elizabeth N Hatcher *Membership*
Manan Eubanks *Education*
Anthony B Anthony *Publicity*
Keri Smith *Editor*

Dear Mr. Coolidge:

The Bureau of Land Management deserves an accolade of praise for initiating the management of what will be one of the gems in their crown of outstanding Arizona lands. This BLM San Pedro DEIS shows you have taken your responsibilities for this fragile riparian treasure seriously. Private groups such as ours look forward to working with such obviously dedicated BLM public servants. We can see you take your task seriously-- preserving and protecting such treasures as this one for future generations of Americans.

<u>We endorse the preferred alternative of the DEIS with the following recommendations and suggestions:</u>

The entire area should be closed to ORV use.

97-1 All forms of hunting, not just for safety reasons, are inappropriate in this very narrow corridor. Bow, muzzle loaders, and shotguns would also be dangerous. We are not being anti-hunting. We would submit that there are state regulations which prohibit hunting within certain distances of human habitations, roads, etc. Hunting would conflict with an invaluable, irreplaceable natural resource which should be guided by non-consumptive unobtrusiveness.

There should be no campgrounds of any size- over 15 parties. People can camp in a commercial campground in nearby Sierra Vista. No stay along the San Pedro should exceed three days, not one week. No water or electricity should be available- only primitive campsites. Noise in campgrounds should be minimal. Visitors should be encouraged to respect the awesome, cathedral-like quality of this area.

97-2 Limit interpretive facilities in such a way that they will cause the minimum impact. Any nearby associated camping facilities would be harmful. Interpretive facility parking lots should be away from the river and it should be necessary to walk a hundred yards at least to any

Response No. 97-1. See General Response No. 7.

Response No. 97-2. This is our intent. No parking areas or other facilities are proposed in the riparian areas.

facility which would be nestled among a riparian overstory canopy. For those who cannot walk electric vehicles might be one option.

Keep roads to a bare minimum and retire the San Rafael del Valle Rd. from public use.

No camping in the Hereford area. Day use only, please.

Boquillas Ranch Road should be restricted.

Have only one group campsite, by permit only, for wilderness camping experiences- for scouts, etc.

A tourist train, if very carefully monitored to protect the values of the area, may be acceptable.

Attempts to produce marsh and cienega habitat should be emphasized. With the amount of historic upland overgrazing in the region no amount of time could reproduce the original wetland appearance. Cottonwoods are valuable for wildlife even thought purists may understandably tend to look at them as invaders. Management efforts should include allowing for the return of velvet ash, Arizona walnut, willow, elderberry, hackberry etc.

Reintroduction of endangered species may be possible with good upland and riparian management by BLM- prairie dog, aplomado falcon, amphibians, herpeteforms etc.

97-3 Fire management is important to prevent accumulation of debris. But a word of caution should be made. Until a healthy, non-overgrazed riparian ecosystem is present, cottonwoods will be very vulnerable from fire. Along the Colorado, Gila, Eagle Creek and elsewhere in the state illegal fires have been harmful to the weakened, fragile, overgrazed cottonwood and mesquite vegetation.

Gravel extraction leases should be closed after their expiration. Upstream gravel extraction could have adverse impacts. Ample areas exist downstream. New mineral leases in the EIS area would be inappropriate land use.

Thank you for this opportunity to share with you in the planning process of this remarkable area. Please let us know how we may be of additional assistance or support to you.

Sincerely,

Robert A. Witzeman

Robert A. Witzeman, M.D., Conservation Chairperson
MARICOPA AUDUBON SOCIETY

Response No. 97-3. The use of fire in the EIS area will be covered by an approved activity plans (habitat management plan, fire management plan). Individual fires will, in turn, be covered by site-specific prescribed fire plans. See General Response No. 2.

98

THE WILDLIFE SOCIETY, ARIZONA CHAPTER
P.O. Box 11135
Phoenix, AZ 85017

Sept. 18, 1988

Mr. Jerrold Coolidge
EIS Team Leader
Safford District Office
Bureau of Land Management
425 E. 4th St.
Safford, Arizona 85546

Dear Mr. Coolidge:

We welcome the opportunity to review the Management Plan and the Environmental Impact Statement for the San Pedro River. We are very encouraged and wish to commend the BLM for recognizing the importance of the San Pedro River, its riparian habitat, and its associated fish and wildlife resources. Most of the management direction that you propose in your preferred alternative is very good and we wish to extend to you our support.

Grazing has been and still is in many places a problem causing severe impacts on riparian ecosystems. Your decision to prohibit grazing for the 15-year life of this plan is the right decision to make recognizing the importance of this area to wildlife and recreation and recognizing the importance and need for the restoration of this area. These values and needs by far exceeds the importance of this area as a range resource.

The use of ORV's have been and still is very detrimental to fish and wildlife and their habitat in many riparian ecosystems. Your decision to prohibit off-road use by any type of vehicle is also a very sound resource decision and we extend our full support.

Fuelwood cutting has been very detrimental within many riparian areas. We fully support your decision to not allow firewood cutting within the San Pedro EIS area.

We encourage you to obtain all additional lands within the San Pedro boundaries and support your efforts in doing so.

Water rights are priceless in the Southwest and we support your actions to follow all available legal avenues to protect rights to surface and groundwater.

We support your actions to withdraw the San Pedro property from mineral entry and mineral leasing laws. However, we do not fully understand how the gravel operation is handled. It appears that you

will allow the existing operation to continue until they have removed the material under the already stripped area and then issue new contracts on an annual basis. Even though this area is outside of the riparian area you will need to monitor the existing operation very closely to determine that water quality is maintained and further erosion is not occurring due to this operation. The continuation of the gravel operation should continue only if there are no adverse impacts to the watershed and this should be supported by data and not just by observation.

Under the preferred alternative you plan to reseed only one abandoned farm field, however, under the preservation alternative all fields will be planted. It appears that you have the ideal situation with water rights and irrigation wells available. We encourage you to revegetate all abandoned fields as quickly as possible. We also support using native vegetation as much as possible but also encourage the use of non-native vegetation that is beneficial to wildlife, grows well in the area, and is readily available. The use of irrigation to establish vegetation would accelerate restoration efforts and at the same time would help the BLM to maintain the associated water rights.

98-1 There are two scenarios for the existing railroad corridor. Recreational opportunities will be greatly enhanced without a privately run tourist train. We recommend that you adopt the first scenario where trails will be built on the existing grade.

In summary we would like to thank you for this opportunity to review this Plan and EIS. We wish to commend all of those responsible for this document and all of the good work and planning efforts. With minor changes we fully support the preferred alternative. We are sure that the plan will be successful and we look forward to hearing about your successes associated with the San Pedro.

Sincerely,

Keith A. Menasco

Keith A. Menasco
Co-Chairman
Conservation Committee

Response No. 98-1. See General Response No. 8.

99

Woodrow & Lucille Baker
P.O. Box 428
St. David, Az 85630
September 17, 1988

District Manager
Bureau of Land Management
425 E 4th Street
Safford, Az 85546

Dear Sir:

Regarding the San Pedro River Riparian Management Plan. We endorse the Preferred Alternative with the following reservations. Reference page # to Draft, June, 1988.

2-17, column 2

1. no firearms, no hunting within area, too narrow (unsafe for people, river is water-hole for game)
2. No overnight camping, or only in smaller developed areas with campground hosts
3. 99-1 2-19 Do not remove the railroad tracks; maybe add diner & caboose; equestrian trails elsewhere.
4. 2-19/20/21 Absolutely protect your water rights! Meese and his opinion (Az. Daily Star, Tucson, Sunday July 31, 1988) will surely "fade away" and logical reasoning shall then prevail.

Response No. 99-1. See General Response No. 7.

Page 2 of 2

We support the following:

2-17 1. Small picnic sites, pullouts, interpretive materials & trails

2-20 * 2. Protect + conserve water. (8-3-88, Az Daily Star) Contrary to "... Sens. Malcolm Wallop, R-Wyo., and James McClure, R-Idaho, oppose the measure because they are concerned that BLM will take water rights from nearby landowners". BLM protection may be the only prevention of Sierra Vista doing to the San Pedro area what Phoenix has done to Maricopa County. Phoenix, Scottsdale, etc. are also purchasing "water ranches" in Yuma-La Paz and Pinal Counties. Furthermore Meese's opinion may affect the Aravaipa, Bill Williams River etc. When the water is bought + transported to large cities, there will be nothing left for down-stream landowners.

2-21 3. Suppress fires on a high priority basis.

2-23 4. Check resource sites

2-27 5. Develop Springs *

6. Control erosion

2-30 7. Research Center and Administrative Facilities.

Yours truly,
Theodrow & Lucille Baker.

100

The Nature Conservancy

The Arizona Nature Conservancy
300 East University Boulevard, Suite 230, Tucson, Arizona 85705
(602) 622-3861

September 16, 1988

Mr. Jerold Coolidge
BLM Safford District
425 E. 4th Street
Safford, AZ 85546

Dear Mr. Coolidge:

In response to the Draft Riparian Management Plan and Environmental Impact Statement, The Arizona Nature Conservancy submits the following comments. We strongly support the Bureau of Land Management in their acquisition efforts and management of this critical Arizona resource.

We have arranged our comments in the order in which issues/planned actions appear in the draft document.

Page 2-2.

We urge you to manage all special status species' habitats to maintain populations of sensitive plants and animals at a level which will avoid endangering these species and/or will result in a need to list these species as threatened or endangered by either State or Federal government. We do not feel that it is necessary to consider special status species on a case by case basis.

It has been our understanding that the San Pedro River Management Area is intended to serve as a Riparian Conservation Area and management practices should be conducted in a manner which provides optimal protection of all special status species. We urge you to remove the qualifying language in this paragraph. As currently written there is little that indicates that the San Pedro Management Area will provide a greater level of protection for sensitive species than is typically availed these species on any public lands.

Page 2-17 thru 2-25.

We support your intention to limit ORV use to designated roads. Please include a map of these roads for the public's evaluation.

100-1 We commend your intentions to designate the entire Management Area an Area of Critical Environmental Concern and to designate 3 Research Natural Areas within it. We find it somewhat incongruous that the area will also be designated a Special Recreation Management Area. An explanation of why it is necessary to utilize the special recreation management designation in addition to an ACEC designation would help clarify what would otherwise appear to be a potential conflict.

100-2 We strongly support designation of three Reseach Natural Areas as decsribed in the preferred Alternative. We recommend that detailed maps and more specific planned actions be included in the final plan. Our recommendations are:

1. Include boundary maps for eack RNA in the final plan.

2. Identify the special values that are to be "preserved and enhanced" within each RNA.

3. Include the control of exotic vegetation as a planned action. This is especially important in the Fairbanks RNA where salt cedar is present in the northern boundary area. Our original nomination of this site was based in part on the need for special management to control salt cedar. A technical note on salt cedar control is included for your reference. These guidelines have greatly assisted our efforts to control salt cedar in our Hassayampa River Preserve.

4. Prohibit overnight camping within RNA boundaries. Permit overnight camping only if in association with research activities conducted within each RNA.

5. Route all trails around RNA boundaries whenever possible.

100-3 6. Prohibit use of non-native species.

100-4 7. Conduct a hydrological analysis for St. David Cienega to identify necessary management actions that will ensure that the artesian flows which suppor the cienega are maintained.

100-5 Include terrestrial and aquatic plant inventory in planned actions for Wildlife. Based upon the information presented, inventory efforts for plants have been non-existent. We draw your attention to one plant in particular, Lilaeopsis shaffneriana var recurva, a Category 2 plant species. Recent work by Peter Warren, ecologist for The Arziona Nature Conservancy indicates that this plant is known from only six sites globally. Two historical locations have been noted for the general area of the San Pedro River, one of which is within the management area (i.e Highway 80 bridge crossing).

100-6 We recommend that planned actions be developed and included in the final plan which specifically address re-introduction of

Response No. 100-1. A special recreation management area was defined in the Glossary of the DEIS. We are proposing a number of recreational facilities and explicit recreation management in the EIS area. It thus qualifies for identification as a special recreation management area. No recreation developments are proposed for the Research Natural Areas or for areas with significant features that qualify the San Pedro as an ACEC. There is no conflict between identifying the EIS area as a special recreation management area and designation of an ACEC or RNA.

Response No. 100-2. Detailed maps have been added (See Appendix 13). Some of your recommendations have been incorporated into the text, others will be retained for use in management plans that will be written for each RNA.

Response No. 100-3. See Response 70-3.

Response No. 100-4. Surface and groundwater conditions within the area will be monitored and appropriate management actions will be taken to maintain the resource.

Response No. 100-5. See General Response No. 6.

Response No. 100-6. See General Response No. 2.

100-6 native wildlife and plants with special emphasis on native fish.

A map of proposed ponds and marshes should be included in the final plan.

We request that only native species be employed in the management and enhancement of vegetation communities. We cannot support planned actions which recommend the use of non-native species even if on an experimental basis. We do not support the use of prescribed fire to maintain wildlife diversity, but recommend that prescribed fire be used to protect the riparian corridor and to manage for natural vegetation types that are known to require periodic fire disturbance.

Page 3-3.

We strongly support additional land acquisitions to protect riparian values and water supply, particularly instream flows.

Page 4-7.

100-7 We are somewhat concerned about the level of recreational development proposed in the Preferred Alternative. Environmental impacts related to proposed recreation activities do not appear to be adequately documented. At a minimum we ask for a map of all proposed developments.

The Nature Conservancy appreciates the opportunity to provide comments on your draft plan and we look forward to working with the BLM in areas of mutual interest wihin the San Pedro Management Area.

Sincerely,

Andy Laurenzi

Andy Laurenzi
Director of Land Protection

Response No. 100-7. A map has been added to the FEIS.

101

MILLER RANCH
St. David, Arizona
Commercial Records

19 Sep 1988

District Manager
Bureau of Land Management
425 E. 4th St
Safford, Az. 85546

Re: San Pedro River Management Plan

Dear Sir

The BLM land included in the San Pedro River Riparian area on the North (North of the San Juan De Los Boquillas Spanish land grant) is unique in several ways and should receive special study and handling.

In tshp 18S Rg 21E
Section 19 (Long known as the Storehouse pasture)
Section 20 exclusive of 2 privately owned parcels (known as the Cienega)
Portions of Sections 29 + 30
In tshp 18S Rg 20E
Part of sec 24

This area is especially unique; the underground water (aquifer) separated from aquifer to the North by a fault line

Route 1, Box 180 St. David, Arizona 85630 Telephone (602) 586-4788

running essentially along the Apache powder Plant wall running East & West from the North quarter corner of Sec 19 to the San Pedro River. The surface is naturally divided into two distinctly different areas: the Cienega on the Eastern side and the upland area on the West. The two areas divided roughly by the Southern Pacific Railroad line.

101-1 Section 19 and the area to the West has been heavily damaged by erosion caused by the earthquake of 1887 and the construction of the SPRR grade with its canalization of flood waters.

The management plan should provide for erosion control of the upland portion as an emergency measure.

My primary recommendation however is that a contract be negotiated with the University of Arizona to conduct a study over an extended period of time to develop a plan for the repair, preservation and utilization of this area.

Response No. 101-1. The erosion on the north end of the EIS area has been identified and will be studied to determine any future actions. A watershed management plan will be developed to guide erosion control efforts.

The Cienega area should also be included in such a contract.

My family has ranched in this area (the ~~Ft~~ David area of the San Pedro Valley) since the turn of the century and pastures cattle on the East, North, & West sides of this land for which the plan is being developed. We have seen the area used and abused. It is now better protected and controlled than it has been for many years, but the pressures from recreationists is heavy and growing. I wage a constant struggle to control access to both my lands and the Riparian area (especially by maintaining existing fences), but it would be very comforting to me to have Dr Phil Ogden or others from the University Arizona giving ~~es~~pecial attention in conducting a study of the area.

I had nearly despaired of this beautiful area being salvaged and preserved. But with U.S. governmental

intervention it can be. I would be pleased to assist, cooperate, collaborate in any way I can in this effort.

I have discussed these suggestions with Rep. Jim Kolbe, who reacted very favorably to them, and with Mr Erick Campbell.

Sincerely,

Quentin Mille

102

To District Mgr.

Thanx for having the courage to eliminate cattle grazing from the San Pedro River property. I formerly lived in Arizona and know how fragile that type of land can be. I support the "no action" alternative.

Frank Zugmunt
7790 Durham Way
Boulder 80303

103

I am thoroughly against your proposal of deer hunting in or near the San Pedro River. You sure buffaloed the public, thinking it would be a sanctuary for wildlife; a horseback trail; a picnic area, hiking; preservation of wildlife. I planned on horseback riding the length from Palominas to Chandler Rd. but I would be taking my life in my hands if I did with hunters around. I am a past deer hunter & believe in it, but only in the forests or remote mountainous areas.

Think of Sierra Vista's future! I have been riding when a hunter on each side, just firing & I had to leave.

Mgr. BLM
425 E. 4th St. Safford 85546

Sept. 1988

To Whom It MAY Concern:

Re: San Pedro River Reserve

Addendum to letter after the meeting in S.V.

I was shocked at the Gun Club members' making statements "that they patrol each other." How come there are signs all shot up [street & realtors] and shell casings all over on private property left to the river? When I ride horseback, I carry a grocery bag to pick up broken glass they have used for target practice.

I also know that a percentage of hunters mix liquor with hunting. Are they the ones that shoot at "anything that moves"? Even though Michigan laws require hunters wearing red jackets, coyote and people have been shot. I wouldn't dare go near the river at any time if hunting was allowed. They stated at the meeting to have hunting allowed in the fall and winter, just as if no one rode horseback or hiked during this season. That happens to be the best time!

I bought 40 acres 2 yrs. ago just west of the river for peaceful solitude and riding away from the traffic. Will it have been in vain? Three buyers around me bought for retirement homes and one plans on building next Spring. They said they just want peace & quiet. I know that if a hunter sees a deer "across a fence" he is going to shoot anyway and climb the fence. This private property has deer trails on it.

Also, I see where the deer have been chased out of the Huachuca Mts. and/or the river area, as there were deer prints 1/4 mile W. of Moson Rd., at Ramsey & Arabian Drive. The week before I saw 2 dead deer along Hwy. 92 just 1/2 mile S. of Fry.

I am a deer hunter from way back in the 40's and love venison but don't see how you can mix all these sports and keep people from being killed & preserve the wildlife. The man who said, "You can get killed in a car too" needs an education between the difference.

The rancher on the north, Mr. Harp, has had his cattle shot, adobe ruins shot, and his well there used for targeting. There is not the

Sept. 1988

respect for other peoples' property today, like years ago. Witness the trash along the roads.

Sincerely,

Pat. Worster

104

Greater Huachuca Area
DEMOCRATIC CLUB

Sept 16 '88

Address reply to

Jerrold Coolidge E.I.S. Team Leader
U.S.D.I. BLM Safford Dist
425 E. 4th St.
Safford AZ 85546

San Pedro Riparian Management Plan

Mr. Coolidge:

We completely agree with the Sierra Club's 'Conservation ~~Opp~~ alternative for the San Pedro River RMP/EIS. and want to see it implemented.

Mike Gregory of Grand Canyon Chapter presented this @ Public Hearing Aug 4 @ Sierra Vista.

By copy of this letter Senator Deconcini is requested to take action for implementation of our recommended program & advise us of his action.

Sincerely

F. L. Salinger (Publicity)

F.L. SALINGER
921 EL Sonoro Dr
Sierra Vista AZ 85635

105

COCHISE COUNTY DEPARTMENT OF PUBLIC WORKS
P.O. DRAWER AJ, Bisbee, Arizona 85603 – Phone (602) 432-5471
Engineering Highways Sanitation
Buildings and Grounds Flood Control

September 16, 1988

Mr. Jerrold Coolidge
EIS Team Leader
Safford District Office
Bureau of Land Management
425 East Fourth Street
Safford, AZ 85546

RE: San Pedro River Riparian Management Plan and Environmental Impact Statement

Dear Mr. Coolidge:

The Cochise County Public Works Department has reviewed the draft San Pedro River Riparian Management Plan and Environmental Impact Statement and offers the following comments:

1. In 1987 the Bureau of Land Management entered into an agreement with Cochise County to reserve 600 foot wide swaths of land at the Charleston and Hereford Bridges. The intent was to provide for future realignment of the roadway approaches and bridge replacement. Currently, the Charleston Bridge replacement and road realignment are being designed and processed through the Arizona Department of Transportation for federal funding. The sharp S-curves approaching Charleston Bridge and the narrowness of the structure have combined to make this segment of road very dangerous. As traffic increases, the chances of an accident occurring go up. It is, of course, important that this project be allowed to continue to completion. We anticipate a dramatic reduction in the frequency of accidents as a result of these improvements being made. The management alternative chosen must provide for the Charleston Bridge project. 105-1

2. Hereford Bridge was tentatively slated for replacement as well, however, this project has been put on hold for now. The accident rate at this location is low and replacement would be bureaucratically difficult due to the fact that the structure has been nominated for inclusion on the National Register of Historic Places. Nevertheless, concern for this facility exists. The Preferred Alternative suggests a 15-30 space campground and interpretative display in the vicinity of Hereford Bridge.

Response No. 105-1. As this is an on-going project we do not foresee any problems with its completion. We will continue to work with Cochise County to ensure public safety on their roads and bridges.

105-2 This will attract visitors, many of whom may be unfamiliar with Hereford Road and Bridge. It is important that the County and the B.L.M. work together to ensure that any future facilities along the road are developed safely. All access points from Hereford Road must comply with current engineering standards and should be reevaluated at a predetermined interval.

3. Both Hereford and Charleston Roads are County-maintained. Although not currently on the Federal Aid-Secondary system, these roads have been considered for inclusion on a contingency list for Federal funding for improvements. Whatever management alternative is finally selected, the County reserves the right to continue maintenance of these roads and to improve the roads.

4. Escalante Crossing and Keller Ranch Road in the north, Escapule Road and Judy Drive in the central portion, and Waters, O'Neil (also known as Stoner and Hereford Ranch) and Palominas Roads in the south also receive maintenance from the County. The County reserves the right to continue maintenance for as long as necessary.

5. There are several "dedicated public roadway easements" in at least two locations in the Conservation Area. These easements are not eligible for maintenance by the County, but may provide the only access to private properties. Some may no longer be necessary due to the acquisition of land by the B.L.M. We support the abandonment of unnecessary easements.

6. The County will not be responsible for maintenance on any roads proposed to be built or rebuilt unless by intergovernmental agreement with the B.L.M.

7. 105-3 Many areas along the San Pedro River are in designated floodplains. Development in these areas would normally have to comply with federal regulations administered by the County Flood Control Office. Although no permanent dwellings or large structures are proposed, campgrounds and other public facilities should be planned so as not to encroach on the floodplain. This is a matter of public safety.

Response No. 105-2. We agree that BLM and the County should work together to ensure the safety of visitors at any facilities along Hereford Road.

Response No. 105-3. We agree. The locations proposed for campgrounds and other facilities were checked against the Federal Emergency Management Agency's Flood Insurance Rate Maps. None of the proposed facilities are within the floodplains outlined on those maps.

8. Cochise County owns a little over sixteen acres to the east of Hereford Bridge in the San Rafael Del Valle Land Grant. This was acquired from Tenneco West, Inc. in 1982 along with a 30 foot wide easement for ingress and egress to the site. In the past, this property has been used as a materials pit. Since this is deeded land, the County reserves the easement and the right to maintain it and reserves the right to remove material from the property if necessary regardless of which management alternative is chosen.

We appreciate the opportunity to comment on the Draft Management Plan and Environmental Impact Statement for the San Pedro River area. If you have any questions, please contact this office.

Sincerely,

Allon C. Owen, P. E.
Director of Public Works

By: Mary Dahl
Mary Dahl
Transportation Planner

ac

cc: Board of Supervisors

106

DOUGLAS RIFLE & PISTOL CLUB *Inc.*

P.O. BOX 3582 DOUGLAS, AZ 85608

September 20, 1988

Ray Brady
Bureau of Land Management
425 E. 4th Street
Safford, AZ 85546

Dear Mr. Brady:

Our club has received word that the BLM has decided to close the northern half of the San Pedro River Riparian Area to hunting.

106-1 Our club members urge the BLM to reconsider and allow hunting and all other recreational uses in the northern half of the San Pedro River.

The following signatures represent 160 members (plus family members) who wish to see hunting along the San Pedro River.

Sincerely yours,

Tom Treiber

Tom Treiber, President

John Behrens

John Behrens, Secretary

Mike A. Alva

Mike Alva, Vice-President

Cliff Brooks

Cliff Brooks, Exective Board

Paul E. Behrens

Paul Behrens, Executive Board

cc: Jerrold Coolidge

Response No. 106-1. See General Response No. 7.

107

Jim Webb
President, Phoenix
Bill McGibbon
1st Vice President, Green Valley
Harold LeSueur
2nd Vice President, Springerville
Joe Lane
Treasurer, Willcox
Pamela Neal
Exec. Vice President, Phoenix

DIRECTORS
Rob Hooper, Springerville
Apache County
Darlo Esplin, St. George, UT
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San Carlos Cattle Assns.
Rukin Jelks, Elgin
Santa Cruz County
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Tonto Cattle Growers Assn.
Roy Moore, Congress
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Capt. Wm. H. McKittrick*, Willcox
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William W. Cook*, Phoenix
Dwight B. Heard*, Phoenix
James A. Johnson*, Williams
Charles P. Mullen*, Prescott
Lon L. Harmon*, Prescott
Elbert H. Crabb*, Flagstaff
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Harry H. Saxon*, Willcox
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A. C. Webb*, Miami
Wayne W. Thornburg*, Phoenix
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Thomas E. Heady*, Nogales
Norman Fain, Prescott
Fred J. Fritz*, Clifton
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John Babbitt, Flagstaff
Ralph Cowan*, McNeal
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Earl Horrell*, Globe
Ernest Browning*, Willcox
Ray Cowden, Phoenix
Ted Lee, Thatcher
Brad Stewart, Camp Verde
Frank "Pancho" Boice*, Tucson
Vince Butler, Springerville
Duane Miller, Sedona
Joe Lane, Willcox
Fred T. Boice, Tucson
Herb Metzger, Flagstaff
Walter Armer, Tucson
Lynn Anderson, Peoria
Bob Bowman, Sonoita
*Deceased

Arizona Cattle Growers' Association

Publishers of Arizona Cattlelog
1401 North 24th Street, Suite #4 • Phoenix, Arizona 85008 • Telephone (602) 267-1129

September 20, 1988

Mr. Jerrold Coolidge
EIS Team Leader
Safford District Office
Bureau of Land Management
425 E. 4th Street
Safford, AZ 85546

Dear Mr. Jerrold:

Enclosed is the resolution regarding Public Lands Riparian Areas which was passed by the Arizona Cattle Growers' Association at it's annual meeting on August 12, 1988.

In regards to the San Pedro Riparian Management Plan and Environmental Impact Statement, we were disappointed in the agency's decision to close the area to livestock grazing for a full fifteen (15) years. It seems to us that the agency is taking the political position in this regard rather than a position based on management principals of a resource.

107-1 Livestock grazing is a tool for controlling brush and improving habitat conditions in many instances, and it appears to us the agency has deprived itself of this tool by eliminating grazing for a full 15 years.

Perhaps a more general position which would allow the agency to truly manage the land based on changing conditions without the need for formal amendment would be in the best interest of all.

Thank you for considering our comments.

Sincerely,

Pamela Neal

Pamela Neal
Executive Vice President

PN:sln

Enclosure

Response No. 107-1. See Response 4-1.

ARIZONA CATTLE GROWERS' ASSOCIATION
RESOLUTION #7-88
ADOPTED AUGUST 12, 1988
ACGA PUBLIC LANDS - BLM COMMITTEE

TITLE: PUBLIC LANDS RIPARIAN AREA

Be it resolved, that the ACGA work toward the adoption by the agencies of the various state and federal governments of a uniform definition of a "riparian area", excluding from that definition any areas created or enhanced by artificial water or spring development.

Be it further resolved, that the ACGA opposes proposals of the federal land management agencies for mandatory fencing riparian areas along streams or springs on the public lands except where:

1.) Alternate sources of livestock water are identified, satisfactorily developed, and made available for livestock use; and,

2.) Privately owned state water rights in federal riparian areas are fully recognized and protected, including the right of access across federal lands to those waters and the use thereof; and,

3.) The proposed sites are studied in full cooperation, coordination, and consultation with the livestock operator and the, where appropriate, local district grazing advisory board; and

4.) A comprehensive cooperative agreement, including a termination date, adequate monitoring provisions, and an assignment of construction and maintenance responsibilities to the benefiting function, is voluntarily entered into between the agency and the livestock operator

108

Date: Sept. 19, 1988

To: Jerrold Coolidge, EIS Team Leader
Safford Dist. Office, BLM
425 E. 4th St.
Safford, Arizona 85546

From: Clark H. Derdeyn
1023 Sahuaro Dr.
Sierra Vista, Arizona 85635

Subject: Comments on San Pedro River Management Plan and EIS

I basically support the preferred alternative; however, I would recommend some changes in the proposal.

108-1 1. The developments aimed at encouraging the general public to come hike and picnic are too numerous. Excessive human disturbance,especially by general public, during the spring and summer, when wildlife species are raising their young, is not desirable. Especially since many of these public are ignorant of nature and wildlife;i.e. the type who save the orphaned deer fawn, stay too close for too long under raptors' nests (to get just the right picture or recording), or keep trying to get too close to a wildlife mother and her young for a better picture or look. Areas available at this time of the year should be tightly controlled.

2. BLM seems to have allowed divisive attitudes to develop (or strenghten) by not taking an early, strong stand for wise use of the area's renewable natural resources. Sportsmen, meat hunters, bird watchers, ranchers, environmentalists, wildlife biologists, and range managers should have the same goal; ensuring the future preservation of the habitat that is the source of renewable-natural resources.

3. It would be desirable for basic natural-resource-management research to be conducted on this area. Grazing, burning, wildlife harvest, and habitat restoration research should be initiated during the 15 year life of this plan(i.e. determination of proper habitat management techniques for future generations would be the most valuable use of the area). As an example, many of the upland portions of the area were semidesert grasslands (Hastings and Turner, 1965, "The Changing Mile"). Techniques to restore the origional grasslands would be a valuable natural-resource-conservation accomplishment.

Sincerly yours,

Clark H. Derdeyn

Clark H. Derdeyn

Response No. 108-1. The number and size of the recreational developments has been decreased in the final EIS. See Chapter 2 in the text.

109

SAN PEDRO NRCD
247 S. CURTIS
WILLCOX, AZ. 85643

September 20, 1988

Safford District Office
Bureau of Land Management
425 East 4th Street
Safford, Az. 85546

Attn Mr. Brady,

Dear Sir,

The Supervisors of the San Pedro NRCD would appreciate your attention to the urgent need for a recreation area in the Benson, St. David Pomerene area.

109-1 The northern portion of the S.P.M.S. would be easily accessable for these residents. Many own horses and would like to ride in the area, but would like access at the northern end. This would also benefit day hikers. The crossing at St. David has for many years been a traditional picnic area for residents and high school students. The present access serves the need of the Sierra Vista, Palominas and Tombstone residents, but provides nothing to residents on the north end.

If we can be of any assistance, please feel free to contact us.

Sincerely,

Tommy Dreyfuss, Chairman

Hank Behr, Secretary

pb

Response No. 109-1. See Hearing Response TU-4.

110

Arizona Native Plant Society

P.O. Box 41206 - Sun Station • Tucson, Arizona 85717

September 16, 1988

Mr. J. Coolidge
Safford District - BLM
425 E. 4th Street
Safford, AZ 85546

Dear Mr. Coolidge:

In response to your request for comments on the Safford District's San Pedro River Management Plan, the Arizona Native Plant Society includes our comments below. As a statewide, non-profit organization dedicated in part, to the conservation of Arizona's native flora, we address several issues related to vegetation management in the Plan.

General comments:

110-1 We support your preferred alternative with modification. We recommend that in the final plan dispersed recreation management receive more emphasis, non-dispersed recreation receive less emphasis, more complete documentation be presented concerning environmental impacts and that more detailed maps be made available which indicate vegetation types, designated travelways, recreation development sites and Research Natural Area boundaries.

Specifics comments:

110-2 1. Vegetation inventory is lacking. We urge the BLM to identify plant inventory as a planned action.

2. Include plants in any re-introudction objectives.

110-3 3. ANPS strongly opposes the use of non-native vegetation in any revegeation efforts. Revegetation efforts should focus exclusively on the use of natives.

4. We strongly support your proposed actions in the Preferred Alternative with respect to minerals, livestock grazing and ORV travel.

110-4 5. ANPS commends your proposal to designate the entire site an Area of Critical Environmental Concern and to designate three Research Natural Areas. More detailed planned actions with respect to RNA management should be included in the final plan to provide the ANPS with the assurance that these areas will be managed to preserve and protect their special resource values.

Response No. 110-1. See Response 7-1.

Response No. 110-2. See General Response No. 6.

Response No. 110-3. See Response 70-4.

Response No. 110-4. The text has been expanded with respect to RNA management. Specific management plans will also be written for each RNA.

Arizona Native Plant Society

P.O. Box 41206 - Sun Station • Tucson, Arizona 85717

6. Prescribed fire should be used as a tool to properly manage plant communities within a more natural dynamic setting. Wildlife diversity objectives are but a small part of fire management and an argument can be made that in certain instances the need for prescribed fire may in fact decrease wildlife diversity. The main criteria for the use of prescribed fire should be related to the needs of the particular vegetation community, the potential for prescribed fire to aid efforts to re-establish natural vegetation which was found prior to the European settlement period and as tool to control damaging non-natural fires, especially within those riparian communities where fire is not likely to have been a natural component of the community.

The Arizona Native Plant Society appreciates the opportunity to comment on the future management of the San Pedro River Management Area.

Sincerely,

Stephanie Meyer
President

cc: Dan James, Conservation Chairperson

TUCSON AUDUBON SOCIETY

Audubon Nature Shop

300 E. University
#120
Tucson, Arizona
85705

602/629/0510

conservation
education
recreation

111

20 September 1988

Jerrold Coolidge
EIS Team Leader
BLM Safford District Office
425 E. 4th St.
Safford, AZ 85546

Dear Mr. Coolidge:

I would like to offer the following comments on the San Pedro River Riparian Management Plan and Environmental Impact Statement on behalf of Tucson Audubon Society.

Given the overwhelming importance of maintaining existing levels of streamflow, resolution of water issues should be given the highest priority. Water issues such as establishment of instream flow water rights for wildlife and recreation, existing and projected Mexican water uses, upstream pollution sources, groundwater/surface water interaction and regional aquifer drawdown must be addressed.

Funds for development of the area for picnic sites, campgrounds, roads, etc. should take place only when a) adequate funding has been committed to addressing water issues and, b) such developments are shown to not adversely affect the wildlife and riparian values for which the site was originally acquired.

Specific Suggestions:

111-1 1. More detailed guidelines on how the area's critical water issues will be resolved should be part of the Management Plan/EIS. The preferred alternative should reference the recommendations made on pp. 131-133 in the "Assessment of Water Conditions and Management Opportunities in Support of Riparian Values - BLM San Pedro River Properties, Arizona" report. These recommendations include the suggestion that BLM push for designation of an Active Management Area for the San Pedro River basin. These recommendations are critical to protecting the existing San Pedro River streamflow.

111-2 2. The recommendation on pages 133-35 of this same report should also be adopted to provide cost-effective and environmentally sound management guidelines. The thrust of these recommendations is a general hands off policy in terms of actual on-the-ground manipulative techniques. The role of natural processes is encouraged. These recommendations view channel enhancement or erosion control structures (proposed on page 2-21, Soils/Watershed of the Plan/EIS) as too costly, washing out too often and distorting benefical understandings that will result from a study of natural processess. They should only be used as a last resort if cultural sites are threatened.

111-3 3. Use of non-native species should be avoided (EIS page 2-21). Natural long-term revegetation should be relied on instead. This will lead to a more healthy and productive natural ecosystem.

Response No. 111-1. See Response 8-1. We are pursuing all rights available under state law for maintaining flow-dependent resources. This includes perfecting the rights applied for in application No. 33-90103, supporting rights downstream that provide protection to the area, cooperating in groundwater management planning at all levels, and securing grandfathered groundwater rights when the opportunity arises.

Response No. 111-2. The recommendations presented on page 2-21 of the DEIS do not refer to main channel structures. See Response 101-1.

Response No. 111-3. See Response No. 70-3.

111-4 4. Given the strong sentiment for habitat preservation at the BLM conducted public input meetings, the number of recreational developments in the Bureau's proposed alternative would appear to be too substantial and run the risk of overdeveloping the area. It also runs the risk of establishing commitments that divert funds and personal from streamflow protection efforts.

111-5 5. Development of facilities should be restricted to only one side of the stream at each particular site. This would leave some undisturbed habitat to allow wildlife movement through the riparian corridor as needed on the opposite side of the San Pedro River. Campgrounds, picnic sites, etc. should be located in areas already disturbed whenever possible. Given that it was the exceptional biological values of the area that brought it to people's attention and led to its acquisition, these values should be given the highest priority when conflicts arise.

6. The restriction on trapping on page 2-20 is supported given the potential conflicts with non-target wildlife and recreational use.

111-6 7. Given the expected recreational use and the narrow configuration of the area discharge of firearms and archery should not be allowed.

111-7 8. Is it practical to designate the same area as both a Special Recreation Management Area (p. 2-17) and an Area of Critical Environmental Concern (p. 2-24)? It would seem that the many recreational developments proposed conflict with the intent of an ACEC designation.

111-8 9. Is the expense of rebuilding the San Rafael del Valle Road justified given the numerous access points to the BLM area that are already available?

111-9 10. Establishing expanded rights-of-way at this time (p. 2-19) runs the risk of encouraging additional uses of these routes instead of diverting them entirely away from the San Pedro River. It they have to cross the River it should be downstream from the BLM area so that possible oil or gas leaks from future uses do not pose serious threats to any existing aquatic resources, future reintroduced native fisheries or to the riparian vegetation itself.

11. The designation of three research natural areas is supported. Enlargement of their proposed sizes should be considered to ensure more meaningful research opportunities.

12. To protect the riparian habitat from fire damage and excessive wood collecting fires should be restricted to use of charcoal and only in developed fire pits.

13. There should be a time frame on the duration of mineral activity identified on page 2-24 such as a five year phase out period.

Response No. 111-4. See Response No. 7-1. We believe that the recreational facilities listed under the Preferred Alternative are modest and will not overdevelop the area. These facilities may cover about 100 acres out of some 47,000 acres in the EIS area. In addition, these facilities are being located in areas previously disturbed and in places where they will not impact the San Pedro's other significant resources.

Response No. 111-5. We agree. Most of the proposed facilities are in old farmfields or other previously disturbed areas.

Response No. 111-6. See General Response No. 7.

Response No. 111-7. See Response No. 100-1.

Response No. 111-8. We feel that reconstruction of this road is warranted, even if only for our own administrative use. This proposed access would be the only one on the San Pedro allowing visitors into the interior of a portion of the EIS area. All other access points are on existing highways or on short dead-end roads branching off the main highways. This road will function as a graded, limited-use, low-speed interpretive route and not as an upgraded, unlimited access, through route. The road will have several pullouts, each interpreting such features as vegetation types, wildlife, cultural and paleontological resources, water and soils. The key function of this road is to educate the users about the San Pedro and its resources.

111-10 14. A thorough independent economic feasibility study needs to be done for the proposed tourist train along the existing railroad corridor that goes through the area. We need to guard against a project that will run into serious financial difficulty and then push for other nearby developments to guarantee its economic survival? Equestrian and hiking use of this corridor would be preferable from the perspective of compatibility with wildlife values and facilitating public use.

In conclusion, Tucson Audubon Society supports a preferred alternative that stresses the protection of water resources as the number one objective. It must include a comprehensive plan and strategies for water protection. This is essential if we are to avoid a situation twenty or thirty years from now where water diversions will have seriously depleted the streamflow destroying the wildlife and recreational values that we now cherish.

Thank you for the opportunity to offer these comments.

Sincerely,

Ruth Russell

Ruth Russell
President

Response No. 111-9. Although right-of-way corridors at Charleston and Hereford may be designated, this does not necessarily mean that all new rights-of-way proposed within these areas will be granted. Each proposal will be subject to the NEPA process and will be granted or denied accordingly. An environmental evaluation is required for each right-of-way to determine impacts on the resources of the area. Any site-specific mitigation needs would be identified at that time also. At present, we know of no proposed oil or gas pipelines for these rights-of-way.

Response No. 111-10. See General Response No. 8.

112

DEFENDERS OF WILDLIFE TRUST FOR THE
GEORGE WHITTELL WILDLIFE PRESERVE at ARAVAIPA CANYON

300 E. University Blvd. • Suite 221 • Tucson, AZ 85705 (602) 628-7576

20 September 1988

Mr. Jerrold Coolidge
BLM Safford District
425 E. 4th. St.
Safford, AZ 85546

RE: Draft San Pedro Riparian Managment Plan and EIS

Dear Mr. Coolidge:

I have had a chance to review the referenced plan and EIS as well as the "Assessment of Water Conditions and Management Opportunities in Support of Riparian Values" prepared by the Bureau of Land Management.

112-1 I believe the plan and EIS should have more specific directives to address the water related problems of the San Pedro River. They should include the water rights recommendations of the "Assessment of Water Conditions..." report in an effort to maintain sufficient water supplies needed to sustain the natural values of the San Pedro River.

112-2 The plan should highlight the urgent need for a detailed hydrologic study that thoroughly assesses the dynamics and interaction of the surface and subsurface water regimes of the area. This is fundamental to answering some of the serious questions about future water protection needs.

112-3 The recreational facilities outlined in the proposed alternative are too numerous for an area that has been identified as one of the most biologically rich in the United States. The plan should authorize some of these sites to meet current recreational needs but only without impairing this rare habitat.

There may be a need to consider additional recreational facilities in future years but it seems inappropriate to authorize such extensive development initially before a thorough biological assessment and long-term study of the habitat have been completed.

I appreciate the opportunity to offer these thoughts.

Sincerely,

Doug Koppinger

Douglas Koppinger

Response No. 112-1. See Response 8-1.

Response No. 112-2. We are continuously monitoring the riparian water table and streamflow conditions, studying channel development processes and participating in the general adjudication of water rights associated with the San Pedro River. Detailed hydrologic study of surface and subsurface water conditions is an on-going process in the basin. We are participating, where there is an opportunity to do so, in all studies covering this subject.

Response No. 112-3. The number and size of the recreational developments has been decreased in the final EIS. See Chapter 2 in the text.

113

Dear Mr. Brady:

I have throughly read your EIS booklet, and as I stated at the two previous meetings the EIS is in part very poorly researched. The paragraph under Recreation 3-1 is untrue. This area has been under recreational use since the time of the Mormon battalion. I, along with many others have hunted and camped in the area as long as we can remember. Two generations of my family as well as the mormon families living near St. David have done the same.

3-2 "the potential RNA at the cienega is a remnant of what much of the San Pedro River Valley used to look like." is very miss leading, and due to the fact BLM did not do a composite range study, that statement is quite void of any truth.

I do not envy you, your job. The fact is I feel as the Fourth generation of natives that my freedom of choice, as well, proper, and mutiple use is not being taken into consideration.

The 15 year moritorium on liverstock use is ludicrous; so be it. We must now burn at least every two years to replace over 400 years of livestock use and lands evolution to accomodated cattle's impact.

I am all for the preferred alternative. We need direction. Use on the North end should be considered a great advantage. This would displace an intensive use over-all. Hunting and horseback riding from the north end would create a Grand opportunity for generations to come. BLM could put personel at the Stone house wind mill for a minimal investment and then effectively patrol the area. The north end creates recreational opportunities for the Benson, St. david area residences that is accessable.

113-1

Having been raised at Land Station and while in college done a research paper on the Boquillas I feel I am qualified to make these remarks.

Mr. Brady your personel are well trained and are responsive, but some what out of their "environment" therefore I would like to make the following suggestions for the protection of your personel and the general public..

1: After the winter rains and in all wet times the San Pedro River get's quick sand in areas that look to be solid. warn people!

2: after rains, then dry spells, sink holes appear in places that are very unlikely. (evidence of these are everywhere in the heavy clay soils)

3: Illegal aliens are now beginning to rob residents of the river and pose a threat to the general camping public.

4: During dry spells the river is nortorious for rabies out breaks.

Response No. 113-1. See Hearing Response TU-4.

AGAIN, I STRESS, MULTIPLE USE AND USE OF THE NORTH END. PLEASE DON'T SHUT MY FAMILY OFF FROM DOING WHAT THEY HAVE INHERITLY DONE FOR OVER 100 YEARS. HORSEBACK RIDING, HUNTING, AND CAMPING FROM THE NORTH TO THE MEXICAN BORDER.

Joseph Dreyfuss

12:45 AM

Sept. 20, 1988

DREYFUSS DRYWALL
13690 E. Garigan's Gulch
Tucson, Arizona 85747
License Number 068940-009

622-8779

Dear Mr. Brady: on a more personal note! I think you show great qualities as an administrator but, there is one thing I feel you have overlooked. BLM did not do a range composite on the river. My Attorney tells me I can do some legal blocking, if nesscessary, to insure the ground flow of water is not adversly affected by non use.. I do hope that in all ways we can cooperate to insure a better environment for future generation!s. My knowledge of the area can be invaluable to your personel. Things like. where the FENCES will be washed out and where poachers do there corrosive deeds ect. I pledge my knowledge and support to your efforts to insure an advantage in the overseeing of our RIVER.

YOURS TRULY:

Joseph Dreyfuss

Specializing in Smooth Walls And One of a Kind Textures

114

9/21/88

Dear Mr. Brady:

My husband and I are members of the Redington Natural Resource Conservation District and have taken a tour of the San Pedro Management Area on Monday, September 19. We found the areas we saw showed a great diversity of environmental types, habitats for wildlife, and archaeological treasures. Therefore we hope that some input by the public will help the BLM in their decision on the future of the SPMA.

I read the report (most of it) on the riparian area and the EIS, and feel that the Preservation approach would be of the best benefit for the SPMA, with one change. My husband and I agree that upgrading the train tracks and introducing the use of a steam engine train would allow visitors a much closer look at the various historical sites and avoid environmental damage associated with road building. You would probably be able to charge a small fee for the train ride to offset expenses.

Anyone who has read about or seen the SPMA realizes that the area is unique in its historical, environmental and archaeological situation, and that human and economic impact should be kept to a minimum to avoid excessive damage. I also realize that there must be a balance between practical use and preservation, but I do hope that the BLM will realize that this riparian area is unique, and make a concerned effort to preserve this uniqueness and its historical value.

Most of the people on our tour expressed this same hope, so I feel I am speaking for them also.

Thank you for your time and attention.

Sincerely,

Mrs. Dorothy M. Elliott
Harold A. Elliott
HCR Box 746
Benson, AZ
85602
Phone: 624-6646, Unit 5601

115

BENSON ECONOMIC DEVELOPMENT COMMITTEE
P.O. Box 2223
Benson, Arizona 85602

September 12, 1988

United States Department of the Interior
Bureau of Land Management
Safford District
425 E. 4th Street
Safford, Arizona 85546

ATTN: Ray Brady

RE: San Pedro River Riparian Management Plan and Impact Statement

Dear Mr. Brady:

I have reviewed the draft San Pedro River Riparian Management Plan and Environmental Impact Statement and, after consideration of the testimony made at the public hearing held in Tucson and in Sierra Vista, am submitting these comments on behalf of the Benson Economic Development Committee.

The Committee is an organization made up of representatives of the Benson City Council, the Benson area Chamber of Commerce and the Benson Industrial Development Authority as well as individual citizens interested in the area's economic well-being and the community's general quality of life.

Approximately three months ago, the Arizona State Parks Department announced acquisition of a formerly unknown "world class" cavern and its plan to develop the property into a major state park. Although the state's planning process has just begun, there is a high level of enthusiasm and support in both the executive and legislative branches of the state government and the planned park has been frequently characterized as being the "crown jewel" of Arizona's State Parks. The Kartchner Caverns State Park will be located approximately eight miles south of Benson just a few miles northwest of the San Pedro River Riparian area and is expected to attract upwards of 200,000 visitors annually.

Subsequent to the announcement of the Kartchner Caverns State Park, after considering the potential impact of the park, the San Pedro Riparian area and the likely completion of the Tombstone and Southern scenic railroad project, the Benson Economic Development Committee unanimously agreed to orient its business development activities toward tourism. The goal of the administration of the City of Benson as well the business groups in the area, is to make Benson the gateway to scenic Cochise County. Benson's proximity to Tucson, the origin point of most of the area's tourists, makes it the logical starting point for most of the area's visitors. One new major motel was completed last year and two more are currently being planned. As the Kartchner State Park nears its anticipated opening date in 1991, we have every reason to believe that a number of new tourist accommodations will be completed or undertaken.

If the Bureau of Land Management adopts either the management plan Utilization Alternative or the Preferred Alternative, the Riparian area will become a popular visitors attraction with the majority coming from outside Southern Arizona. In other words, your project will become a tourist attraction. A brief article in the September, 1988 issue of Sunset Magazine is a forerunner of the type of publicity one might reasonably expect and which will attract numerous visitors.

115-1 In order to better accommodate the many citizens who will want to visit and spend time in the Riparian area, the Benson Economic Development Committee recommends development of a primary point of entrance and interpretive display on the north end of the project. A visitor's center in the area of the Apache Powder Road near the entry of the existing Southern Pacific Spur Line Railroad tracks would seem ideal.

A major entry point on the north end of the project would result in two substantial benefits: (1) significant RV and campground facilities would be developed by private enterprise in the Benson area and such development would minimize the need for overnight camping facilities within the Riparian area; and (2) making available an entry point in the area of the maximum concentration of tourists would allow many more people to see, use and enjoy the facilities

Response No. 115-1. See Hearing Response TU-4.

as contrasted to the number who would make the circuitous trip to the Highway 90 San Pedro Ranch House Center or any of the other access points located some distance from the north end of the project. Providing for a major north end entry point will allay many of the environmental concerns expressed in the public hearings as no overnight campground facilities would be necessary for the reason that they would be conveniently available a short distance away in Benson but that distance would be great enough to eliminate any undesirable impact to the Riparian area's ecosystem.

115-2 A second recommendation of my Committee is that the management plan expressly provide for development of a light rail or tram system utilizing the existing Southern Pacific tracks to transport visitors from an embarkation point north of the project and into all, or a portion, of the Riparian area. Our second recommendation, particularly if combined with the first recommendation, would permit closing of a substantial area of the project to all except administrative motor vehicles. The transport system selected could be small, efficient, very quiet and relatively non-polluting. If frequent schedules and stops for boarding or exiting the train were adopted, many people who could not otherwise visit and enjoy the Riparian area would be accommodated. A substantial number of today's travelers are not physically able to undertake even a short backpacking trip. Likewise, most parents are unprepared to take small children into such an area without the normal creature comforts or some form of transportation which is usually an automobile. Finally, a tram would attract many visitors whose time is limited and who would otherwise elect to pass by an attraction which requires both significant physical effort and expenditure of time. On the other hand, a clean, modern tram would in itself be an attraction and when coupled with the project's scenery and wildlife, its ability to draw from a major tourist gateway area would maximize the project's utilization and benefits without adversely affecting its ecology.

Adopting my Committee's recommendation will increase the public's use of the Riparian area and, at the same time, protect and better preserve the lands for the future.

In all other respects, except as noted herein, the Benson Economic Development Committee urges adoption of the Preferred Use Alternative.

Very truly yours,

Paul Nordin

PAUL NORDIN
Chairman

Response No. 115-2. See General Response No. 8.

116

United States Department of the Interior

BUREAU OF RECLAMATION
LOWER COLORADO REGIONAL OFFICE
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BOULDER CITY, NEVADA 89005

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LC-159
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SEP 2 0 [illegible]

Memorandum

To: Mr. Lester Rosenkrance, District Manager, Safford District Office, Bureau of Land Management, 425 E. 4th Street, Safford AZ 85546
Attention: Mr. Jerrold Coolidge, EIS Team Leader

From: Regional Environmental Officer

Subject: Review of Draft San Pedro River Riparian Management Plan and Environmental Impact Statement (RMP/EIS) - Cochise County, AZ (EIS)

We have reviewed the subject RMP/EIS and have the following comments.

1. We suggest adding a note on the figure on page 1-2 that a larger version of this map can be found at the back of the document (easier to read); and

116-1 2. Page 3-3, Land Uses: There is no mention of Charleston Dam, an authorized feature of the Central Arizona Project. Potential impacts of the dam should be discussed in this document.

William E. [illegible]

Response No. 116-1. Because the Charleston Dam withdrawal is no longer an active project, an analysis of its impacts is not necessary in this EIS.

117

ARIZONA RIPARIAN COUNCIL

Center for Environmental Studies
Arizona State University
Tempe, Arizona 85287-1201
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21 September 1988

Ray A. Brady, District Manager
Bureau of Land Management
Safford District Office
425 E. 4th Street
Safford, Arizona 85546

Dear Mr. Brady:

The Arizona Riparian Council (Council) appreciates this opportunity to review the draft San Pedro Riparian Management Plan and Environmental Impact Statement (EIS), and offers the following comments for your consideration. As you may know, the Council represents about 300 Arizona citizens from backgrounds as diverse as wildlife management, hydrology, botany, environmental education, conservation, water development, range management, and environmental law. The Council is dedicated to conserving and providing coordinated guidelines in managing our quickly diminishing riparian resources.

In this vein, the Council joins the many conservation groups and government agencies in applauding the Bureau of Land Management's (BLM) efforts to provide for the protection and enhancement of the riparian ecosystem within the lands along and adjacent to the San Pedro River and its tributaries. As one of the last remaining healthy contiguous stands of cottonwood/willow riparian and perennial stream habitats in Arizona it is imperative that this area be safeguarded and enhanced for future generations to appreciate, understand, and enjoy.

The Council's review of the Draft Plan and EIS resulted in one general comment that involves the style and the content of the entire document. We feel the plan and EIS is so poorly documented with hard data and that the wording is so vague that anyone, regardless of their view, can read what they want into the document. We believe the Congressional intent to protect riparian resources is hidden in the document, however we are not convinced that this fragile riparian ecosystem will be preserved and enhanced under any of the action alternatives presented, including the Preservation Alternative. Preservation and enhancement is the principal concern of management in this EIS and is reiterated in the San Pedro National Riparian Conservation Area Congressional legislation. Because this document is so vague and ambiguous, the Council interpreted the document based on a worst case scenario for each issue of interest. Please

keep this in mind as you read our comments; we hope that these comments will result in a better, well-documented Plan and EIS. We recommend that the BLM develop specific wording to avoid our worst-case assumptions or misconceptions.

117-1 In the Preferred Alternative, statements are made that only minor impacts are expected to water quality, wildlife, vegetation, etc. from the development of recreation facilities, but no explanation is provided as to how these resources will be impacted (e.g., how will water quality be impacted from recreation development) or how a determination was made that these impacts would be minor. What are the specific impacts to riparian systems from recreation? How many acres will be affected in each riparian habitat? Specifically, how will anticipated impacts from recreation be mitigated for?

117-2 Indirect impacts were not addressed either with respect to these issues. For example, when a recreation site such as a campground is developed, a number of people are concentrated in an area and this development and use results in the loss of habitat at the campground. This habitat loss, however, is not confined to the border of the campground. The increased human use and activity which radiates from the campground also results in lost or diminished riparian resources in adjacent areas. We only need to cite recreation management on the Salt River above Phoenix as an example of a worst-case scenario for the EIS area. This and other direct and indirect impacts need to be quantified and addressed in this draft EIS.

117-3 117-4 The draft EIS also fails to provide a worst-case analysis from implementation of the Preferred Alternative. No information is given on the potential public recreational use of the San Pedro River during peak times such as Memorial Day weekend, which coincides with optimum time for bird breeding and birdwatching. With people using the area for hiking, picnicking, camping, birdwatching, horseback riding, train riding, exploring cultural and historic resources, or just getting away from the city, there could be more than 10,000 people along the San Pedro River on a given day. Another peak period would be Labor Day weekend when dove-hunting may be added to the activities mentioned above. We request that worst-case analyses be conducted for peak periods of recreational use and that these analyses be documented thoroughly.

117-5 Maps should be provided which indicate locations for all proposed development for each of the alternatives including rights-of-way locations, campground and picnic area locations, trail sites, new road locations, parking lot and pullout locations, and roads that would be open for public use. These maps should also show the boundaries for cottonwood-willow and honey mesquite riparian habitats, so that distances between these habitats and proposed developments (especially proposed campgrounds) can be better delineated.

The grazing issue was identified by the public as an issue to be evaluated and discussed in this draft EIS. However, this issue was dismissed because grazing will not be permitted during the 15-year period of the Plan. There still is a need to address the grazing issue. The Council understands that BLM plans to monitor vegetation along the San Pedro River during this 15-year grazing moratorium to determine potential effects to vegetation from the absence of grazing. No information is presented on how BLM proposes to assess any changes in the terrestrial, riparian, and aquatic habitats with respect to the grazing

Response No. 117-1. The types and intensity of impacts were thoroughly analyzed by the interdisciplinary team during the development of the DEIS. No significant impacts were identified at that time. The Council on Environmental Quality (CEQ) regulations in 40 CFR 1502.2 (b) directs us to discuss impacts in proportion to their significance.

Response No. 117-2. It is true that impacts from a campground are not confined to the campground itself. Locating the facilities away from the riparian area, limiting the size of the facility, limiting the amenities available, landscaping the area, and educating the public will all combine to keep impacts to the riparian area well below that which you described.

Response No. 117-3. We did not undertake this because of the lack of significant impacts identified during the development of the DEIS and because of the significant costs that a worst-case analysis would incur. If the impacts of potential use were significant we would use the appropriate requirements for analysis in the CEQ Regulation. However, these requirements no longer include a 'worst case analysis' (43 CFR 1502.22).

moratorium. Will there be onsite and offsite comparisons both between and among the various vegetation associations identified in the draft EIS? What sampling methodology and sampling design will be used by BLM to assess both the direct and indirect impacts of livestock grazing on water, soil, vegetation, and fish and wildlife resources? A discussion of these questions should have been presented in this draft EIS.

The Council fully supports the designation of the entire EIS area as an Area of Critical Environmental Concern and designation of the three research natural areas at St. David Cienega, San Pedro River, and San Rafael. Such a designation clearly assigns special resource value to these areas and aids in the acquisition of adequate funding to properly manage these areas.

117-6 We are unable to comment on whether the proposed road closures are appropriate because no information was provided indicating the current location of roads or which of these roads would remain open. This information should be provided on a map as requested above. The Council does support the general need to control vehicular access to riparian areas.

The Council recognizes a unique opportunity to use the EIS area effectively as a tool to educate the public on the importance of riparian systems and other resources within and along the San Pedro River Valley. We commend BLM's efforts to develop natural resource education and research opportunities and facilities within the EIS area.

The Council agrees with the intent to not allow any prospecting, exploration, or mining within the sensitive portions of the EIS area. We also believe that mining activity should be prohibited within the entire EIS area. We believe that prospecting, exploration, or mining are incompatible uses within an Area of Critical Environmental Concern (ACEC) and may establish a precedent. This designation would not prohibit mining operations in the Sierra Vista-Tombstone area. Rather it would restrict mining activities to those areas outside the approximately three-mile wide corridor along the San Pedro River. We consider tributaries of the San Pedro River with xeroriparian habitat as important to the general health of the riparian system and as wildlife movement corridors to and from the San Pedro River.

117-7 The Council was unable to find any discussion of energy exploration or development. We believe that the alternative selected and implemented by the BLM should state that energy exploration or development will not be allowed within the EIS area because it would conflict with the BLM's management objectives for protecting and enhancing riparian and other natural resources. Such exploration and development would be insignificant to the industry, while potentially harmful to other natural resources that the EIS area was created to protect. A similar view has been expressed in H.R. 568 and S. 252 with respect to mineral and geothermal leasing within the EIS area.

Another area of potential conflict is the proposed recreation development and management. In both the House and Senate bills, recreation is listed as the last intent of the establishment of the San Pedro Riparian Conservation Area; it follows the conservation, protection, and enhancement of the riparian area and the aquatic, wildlife, archeological, paleontological, scientific, cul-

Response 117-4. No information was placed in the DEIS because of a lack of hard data for recreational use in Cochise County. We do expect the San Pedro to be a popular place to visit, for both local residents and for those from outside Cochise County. We have no intention of allowing unlimited use on the San Pedro. Provisions written into the DEIS call for a variety of methods to limit recreational use. These include areas with day-use only constraints, a permit system for overnight use, keeping parking areas at access points small, and sharply limiting the number of access roads.

Response No. 117-5 Maps showing this information have been added to the FEIS. No new roads are proposed, just reconstruction of existing roads. No roads are in the riparian area nor would reconstruction of existing roads place them in the riparian area.

Response No. 117-6. Maps showing this information have been added to the FEIS. We agree that there is a need to control vehicular access and the plan was written with that in mind.

Response No. 117-7. The entire study area has been withdrawn from all forms of mineral entry and leasing. This includes fluid minerals.

tural, and educational resources of the EIS area. Yet in the Utilization and Preferred Alternatives, recreation development is stressed over riparian, aquatic, wildlife, archaeological, paleontological and other resource values. Public use would be available with little or no limitations. The Council wishes to encourage recreational use of the EIS area, however we support more regulated use than presently called for in the Plan. We found no data on potential recreational use and no specific assessment of impacts to riparian resources from recreation. We also did not find any indication of commitment by the BLM to manage projected recreational activities, growth, and population use over the next 15 years. Overnight use would not be restricted to the
117-8 campgrounds but would be allowed within the entire EIS area by obtaining a permit from the BLM. What would the maximum number of permits be? The emphasis on recreational use and development within the EIS area without extensive enforcement and monitoring commitments may result in significant adverse impacts to the unique riparian, aquatic and cultural resources of the EIS area and is not in consonance with the intent of congressional legislation to designate the area as a National Riparian Conservation Area. The intensity of proposed recreation development would also seem to conflict with proposed ACEC and Resource Natural Area (RNA) designations. How does the BLM intend to resolve these conflicts?

Uncontrolled human use cannot be allowed within this EIS area without continued degradation to the habitat and wildlife that use these areas. Pertinent impacts to riparian habitats may include 1) vegetation loss from hiking and clearing areas for camping, 2) associated soil erosion, 3) soil compaction from these activities and horseback riding, 4) wood collection for campfires, and 5) a decrease of riparian wildlife populations in areas frequently used by people. Additionally, sensitive wildlife species, such as the gray hawk and yellow-billed cuckoo, would occur on the EIS area beyond the opening of the proposed hunting season of September 1. This time overlap may result in the loss of
117-9 some of these individuals from hunting. The Council suggests that BLM consider the development of hunting zones away from areas of known use by sensitive species, at least during dove season. We believe the BLM should make extraordinary commitments to extensively patrol areas receiving high recreational use within the riparian corridor. These areas should include but not be limited to highway crossings such as at Lewis' Springs. The Draft Plan and EIS is far from convincing us that BLM will have the resources and, therefore, the commitment to effectively control human use and abuse on the San Pedro River.

117-10 The inclusion of a Monitoring Plan in this EIS is needed and helpful. However, the information provided in the Monitoring Plan is general and unclear and therefore is inadequate. The Council can only guess at what techniques would be used, what data would be collected, and at what intensity monitoring would be made within the stated time frames. Many of the "changes requiring reevaluation" appear to be poorly thought out. A change of 25% is excessive for habitat diversity. Does this mean that an increase of healthy riparian habitat at the expense of poor riparian habitat and abandoned farmland would cause the BLM to stop improvements because the changes exceeded 25%; alternatively, would the BLM wait to consider management changes until 25% of the remaining healthy cottonwood-willow stands had become saltcedar disclimax? The Council certainly hopes that is **NOT** BLM's intention.

Response No. 117-8. Under the Utilization and Preferred Alternatives there are increases over the other alternatives in the number of recreational developments. Recreation use was not stressed over the resources you listed. In all cases, proposed recreational developments had to be located only where they would not impact the significant resources of the EIS area.

Public use will be available on the San Pedro but with significant limitations on the amount of use. This will be accomplished through a limited number of access roads, a limited number and size of parking areas, day-use only restrictions in certain areas, limitations on the number of overnight permits, restrictions on firearms discharge and a prohibition on ORV use.

We have no data on potential use. Based on the use of other recreation areas in Cochise County there is a potential for a large amount of use demand. This is why the number and size of recreational developments have been kept small and limitations proposed for recreational use. By using the Limits of Acceptable Change process we will be able to determine if and when any changes are exceeding the established parameters.

Similarly, a 10% loss of species from wildlife species diversity would suggest a serious and possibly an irreversible problem. It is conceivable to have a dramatic change in habitat with no net change in species diversity, however, many sensitive species may disappear while other widespread species may take their place. An extreme example would be the conversion of a cottonwood-willow stand to a healthy grassland-marsh complex. We would lose most of the riparian-forest obligate birds but would gain a large number of sparrows, waterbirds, and marshbirds, thereby possibly even increasing species diversity at the expense of some of the rarer species of concern. Perhaps it would be better to watch for consistent annual declines over a three-year period within species populations, within habitats, before there is a loss to species richness. Balancing wildlife species diversity is not simple and it should not be made to look like it is as in the Plan and EIS.

117-11 Water quality should be monitored immediately downstream from heavily used recreational sites and should not exceed the Arizona Department of Environmental Quality's (DEQ) established levels for aquatic and wildlife use and for full body contact. We are unclear as to what DEQ standards are being applied; drinking water standards are frequently less stringent than aquatic and wildlife protected uses. In addition, the Council recommends that BLM use aquatic and wildlife protected use standards to determine water quality instead of drinking water standards, as the former represents the reason for the EIS area's existence to begin with. Finally, the aquatic monitoring program recommends monitoring every five years with a 10% change in water quality over a three-year period. Please explain this discrepancy as well as what parameters will be used to determine water quality changes.

117-12 Other issues requiring better explanation under the monitoring plan include grazing (where is this?), native aquatic fauna (to include both fish and invertebrates), RNA inspections, ORV patrolling, and reintroduced wildlife establishment. Research natural areas should be inspected quarterly at a minimum. What do site inspections of a RNA include? With respect to ORV management what does "regular" patrol mean and please identify areas with high use potential on maps. We are unclear whether quarterly patrol of the remaining EIS area would be adequate. Overall, we ask for much more detail on inventory/monitoring plans so the public can review and provide comments to BLM. This plan should specify techniques and methods for surveys and better define the criteria for which changes in management will occur. We suspect that these plans are so vague because of an unclear financial commitment to maintain and support the EIS area. If this is true, the Council requests BLM to provide an explanation for both minimum and maximum efforts in monitoring the resources within the EIS area.

Specific Comments

Page 2-1 to 2-2, Lands - We fully support obtaining additional lands within the San Pedro boundaries and obtaining lands outside the boundaries for the protection and enhancement of resource values within the EIS area.

Page 2-2, Water - We concur with efforts identified by the BLM to protect surface and ground water rights and offer the assistance of the Council's Instream Flow Committee in support of these endeavors.

Overnight permits will be limited, but at this point the number of permits has not yet been determined. By monitoring the amount of use and the impacts from that use we will be able to set an acceptable level for the number of overnight permits.

BLM is committed to enforcement and monitoring to keep the impacts from recreational use to an acceptable level. The San Pedro staff includes a Law Enforcement Ranger and an Outdoor Recreation Planner to accomplish the enforcement and monitoring. The draft plan/EIS was written to be in accord with the Congressional legislation. Also, see Response 100-1.

Response No. 117-9. See General Response No. 7.

Response No. 117-10. See General Response No. 9.

Response No. 117-11. The text of the document has been changed to reflect the change of water quality standards from drinking water use to aquatic and wildlife protected use. The monitoring plan has been altered to correct the discrepancy.

Page 2-2, Wildlife Habitat - The Council recommends that BLM adopt mitigation procedures for wildlife habitat similar to those used by the U.S. Fish and Wildlife Service in its Mitigation Policy. This policy allows for various forms of mitigation from avoidance to compensation and various levels from complete in-kind replacement to out-of-kind partial replacement. Mitigation as defined by the Council of Environmental Quality involves five levels not just reduction.

117-13 There is no mention of management or improvement of the aquatic habitat. Historically, this area supported numerous native fishes which have since been extirpated. The BLM should stress habitat protection and enhancement of aquatic habitats.

117-14 Page 2-17, Recreation - Please explain what is meant by designating the EIS area as a special recreation management area and by " Limits of Acceptable Change?"

117-15 How many permits is BLM proposing to issue on a daily basis for all forms of camping, including primitive camping? To enforce campground restrictions we suggest developing and implementing a campground host/hostess program.

117-16 We are opposed to rebuilding any roads without analysis of direct, indirect, and cumulative impacts to the resources from making this area easily accessible to the public. The Council is not opposed to riparian area access in general, however, we are concerned that unlimited access, with no guidelines, would be detrimental to riparian resources in the long-term. The Council, therefore, requests BLM to provide appropriate analyses of potential recreation demands, needs, visitor use, and crowd control methods over the life of the plan and an in-depth environmental analysis of the direct, indirect, and cumulative impacts to natural resources within the EIS area.

117-17 Page 2-19, Lands - Restricting rights-of-way and other uses to areas where they would not significantly impact resources does not provide adequate mitigation. Rights-of-way and other uses should be placed where they 1) avoid impacting the resources, 2) minimize impacts, 3) rectify impacts, 4) reduce or eliminate impacts, and 5) compensate for the impacts.

Page 2-20, Wildlife Resources - The Council supports the planned actions and we offer the assistance of our Protection/Enhancement and Land Use Committees in the development of the Habitat Management Plan for this EIS area. We support additional revegetation actions than those described for reclaiming abandoned farm fields within the EIS area.

117-18 Page 2-21, Vegetation - The Council is concerned about the use of any non-native plant species for revegetation or wildlife enhancement. What criteria will be used to determine whether an exotic plant species is beneficial? What animal species are being targeted for enhancement with these revegetation plans? Are there animal species that historically did not occur in great numbers or not at all?

Response No. 117-12. See General Response No. 9. The EIS area was closed to all public use, including ORV use, when BLM obtained the land. Since that time BLM's law enforcement ranger has instituted patrols to determine if and where ORV use was occurring. The ranger's findings are that the EIS area contains only one location where intensive ORV use occurred, that being the area south of Charleston. The ranger checks this area regularly based upon the amount of illegal ORV use that occurs. Warnings and citations have been issued to ORV users found in the EIS area. There is no definitive answer to your inquiry about what the term "regular patrol" means. The ranger bases his patrol frequency on the evidence available to him. In addition to the ranger's patrols, other BLM employees on the San Pedro are also watching for any evidence of ORV use.

We feel that formal quarterly patrols by the ranger are adequate for the remainder of the EIS area. This is based on a lack of historic ORV use in the majority of the EIS area, coupled with no current use. Again, the other resource specialists also check for ORV use in the course of their work.

Response No. 117-13. Page 2-21 of the DEIS indicates three types of aquatic habitat improvements that will be authorized under the Preferred Alternative. In addition, the San Pedro Habitat Management Plan will further address these projects in more detail. See General Response No. 2.

A second objective should be to maintain any populations of rare plant species within the EIS area. Planned actions similar to those presented under the Wildlife Issue should be developed and included in this EIS.

117-19 Page 2-21, Soils/Watershed - The Council concurs with the objective to maintain and enhance the San Pedro watershed by reducing future soil erosion. However, we must ask for documentation of potential impacts to resources other than those for which proposed structures are planned. Such structures may enhance some sections of the system while degrading other section(s), therefore, these actions require a "cost-benefit" assessment.

117-20 Page 2-21, Fire - The BLM may want to repeat their planned use of prescribed fire to reduce fuel load in upland areas in this section. The Council requests the BLM to describe in more detail under what conditions would prescribed fire be used and what impacts there would be to habitats directly and indirectly affected.

117-21 Page 2-24, Visual - We were not able to find an assessment of how future recreation may impact visual and other aesthetic qualities of the San Pedro riparian system. The Council recognizes the fact that the healthier the riparian vegetation, the higher the visual quality will be which, in turn, results in attracting even more recreationists. How does BLM intend to maintain or enhance visual quality given the proposed intensity of recreation in the EIS area?

117-22 Page 3-11, Table 3-4 - The relict leopard frog should not be included in this table; this species was restricted to the Las Vegas, NV area and is now thought to be extinct. However, the lowland and Chiricahua leopard frogs should be included and are State-listed. Also, jaguar, ocelot, jaguarundi, aplomado falcon, and all native and introduced fishes should be included in this list.

117-23 Page 3-17 - "The riparian vegetation was mapped as two vegetation communities: ... cottonwood-Goodding willow... and... salt cedar... Associations. These are not range sites and not evaluated as such." The Council reminds the BLM that mesquite bosque and mesquite-dominated scrub (223.231 and 223.232 in Brown and Lowe) are very important riparian habitats as well, even though they also fall under the definition of range. Our understanding was that mesquite habitats were inventoried in 1986 as "riparian scrub." Please clarify your definitions of range and riparian in terms of mesquite-dominated habitats and make sure to include an assessment of mesquite habitats in addition to those for cottonwood-willow and saltcedar. Also, please include any plans for controlling or eliminating saltcedar encroachment.

117-24 Page 4-7 - "The level of recreation use may be less than some publics anticipate." Although this may be true, we still see much potential for conflicts between recreation and natural resources. The Council requests BLM to provide documentation for the above statement. Please address issues related to recreation and provide detailed analyses of potential impacts.

117-25 Page 4-7, Lands - How many acres of each vegetation type would be lost within these rights-of-ways and what mitigation would be required to offset these losses?

Response No. 117-14. Please refer to pages A-74 and A-72 in the DEIS for the definitions of these two phrases.

Response No. 117-15. See Response 117-8. We agree that a campground host/hostess program is desirable and have plans to implement it.

Response No. 117-16. Road reconstruction will be preceded by the preparation of an environmental assessment which will identify impacts and necessary mitigations. If the results of that analysis indicate the necessity of an EIS, then one will be prepared. (Also, see 117-8).

Response No. 117-17. See Response 111-9.

Response No. 117-18. See Response 70-3. The "targeted" species will be identified in the Habitat Management Plan.

Response No. 117-19. See Response 101-1.

117-26 Page 4-8, Wildlife - How many acres of habitat improvement projects would be implemented and what vegetation types would be planted?

117-27 Page 4-7, Areas of Critical Environmental Concern - We support the designation of the entire EIS area as an ACEC as well as the designation of the St. David Cienega, San Pedro River, and San Raphael as Resource Natural Areas. We are concerned, however, that some proposed activities will conflict with the resources being protected and enhanced such as hunting and other heavy recreational uses. Please analyze these potential conflicts in this EIS.

117-28 Page 4-9, Conclusion - The Council requests BLM to provide documentation for the statement regarding how the Preferred Alternative will result in minor to moderate benefits to wildlife, soils, vegetation, and water resources. Prior to the BLM's management, this area was closed to the public and limited grazing and aggregate mining was permitted. Although the conclusions may be accurate, the BLM has presented no data to substantiate this conclusion.

117-29 Page A-27, Table 6 - These recommended instream flow rates should be clarified as **minimum** instream flow rates which would only sustain the existing riparian habitat. Flows greatly exceeding these levels would be needed for riparian regeneration during critical times of the year.

The Council is concerned with the low flows BLM has requested as minimum instream flows. Flows at Palominas may result in classification of this segment as above the headwaters by the U.S. Army of Engineers. Please address and resolve this issue.

117-30 Page A-34 and A-35 - It is unclear whether BLM's water quality values reflect dissolved fractions or total form for each chemical tested which will affect how these data are interpreted. The Council requests BLM to provide standards for protected uses other, or in addition to, drinking water protected uses, such as those for aquatic and wildlife and for full-body contact in Attachment 3.

117-31 Page A-38, Attachment 3 - What are the units used for values on each chemical parameter? Should they be microgram per liter (mcg/l instead of mcl)?

117-32 Pages A-39 through A-51 - In Appendices 6, 7, and 8, no aquatic habitats other than cienega are listed. Many species listed as occurring in cottonwood-willow riparian are actually responding to open water and not necessarily vegetation. We suggest that the BLM add riverine and lacustrine to the list of habitats with the table header changed from "Vegetation Communities" to "Habitats." This realignment may take care of several species now listed under "Other." What other habitats are listed under "Other"?

117-33 Why is there no plant list? If plant inventory data are not available, then the Council strongly recommends that plant inventories be conducted as soon as possible and the results presented in the final Plan. If they are available they should be presented in future drafts.

117-34 Pages A-56 through A-63, Biological Assessment - In addition to those species presently treated in this section, the Council recommends to BLM that the

Response No. 117-20. The use of prescribed fire would be the selected method of vegetation control if the environmental analysis indicated it to be the preferred method. A site-specific fire plan would be developed which would take into account the types of fuel being burned, the time of year as well as many other factors. A prescription for burning would be developed which would describe the conditions which must be met before any fire could be deliberately set. Most of the fires which would be prescribed for the San Pedro EIS area would be relatively small so that large areas of habitat would not be directly affected. We know that there would be short-term impacts to the habitat. We also know that if the prescription is followed, long-term benefits will accrue.

Response No. 117-21. We do not anticipate significant impacts to visual or other esthetic qualities of the riparian area because no facilities are proposed in the riparian area. The only impacts will come from people walking through the area or riding horses. The management proposed for the riparian area disperses human use, limits overnight use, restricts campfires to designated locations, and educates the users. We do not feel that the trails that may develop over time will have more than a minor impact on visual and esthetic qualities.

following species also receive assessments as to their historical and present use of habitats within the EIS area:

Species	Federal Status
Colorado squawfish (Ptychocheilus lucius)	Endangered
Gila chub (Gila intermedia)	Category 2
Spikedace (Meda fulgida)	Threatened
Loach minnow (Tiaroga cobitis)	Threatened
Razorback sucker (Xyrauchen texanus)	Category 2
Sonoran topminnow (Poeciliopsis occidentalis occidentalis)	Endangered
Desert pupfish (Cyprinodon macularius macularius)	Endangered
117-34 Mexican garter snake (Thamnophis eques)	Category 2
Northern gray hawk (Buteo nitidus maximus)	Category 2
Western yellow-billed cuckoo (Coccyzus americanus occidentalis)	Category 2
Southwestern willow flycatcher (Empidonax traillii extimus)	Category 2
Jaguar (Panthera onca)	Endangered
Jaguarundi (Felis yagouaroundi tolteca)	Endangered
Ocelot (Felis pardalis)	Endangered

All of these species occur, occurred, or are thought to have occurred within the EIS area. The Council is particularly interested in BLM's plans to protect the riparian or aquatic habitats used by these species, plans to reintroduce any of these species, and plans to assess human recreational impacts that may affect individuals as well as habitats used by these species.

In conclusion, the Council wishes to stress that the San Pedro River EIS area was specifically acquired to protect and enhance a now unique riparian ecosystem. The BLM's mission is to allow no activity that will conflict with the unique biological and cultural resources within the EIS area. However, the Council does recognize the value of allowing the public some degree of access to the resources of the EIS area. We also recognize that BLM is a multiple-use agency and is required to address the many, often conflicting, needs from the public for the resources under their charge. We sincerely hope that our comments are helpful in resolving the many existing potential conflicts and that the next Draft Plan and EIS will be more specific in expressing BLM's intentions. If the Council can be of any assistance to you in developing future drafts please do not hesitate to contact us.

Sincerely yours,

Duncan T. Patten
President, Arizona Riparian Council

DTP/cdz

xc: ARC Steering Committee: Barrett, Baucom, Bayham, Burton, Hamilton, Jakle, Laurenzi, Roundy, Thornburg, Zube.

Maintenance of visual quality will occur through monitoring use and application of the Limits of Acceptable Change. Acceptable parameters are established in LAC for a variety of recreational uses. Monitoring will show when the LAC criteria are being exceeded. BLM can then respond with changes in recreation management before the problem becomes unacceptable.

Response No. 117-23. Range site guides are prepared by the USDA's Soil Conservation Service. The cottonwood-goodding willow and salt cedar associations are not considered by the SCS as range sites; therefore there are no guides prepared for these areas. SCS is currently in the process of preparing woodland site guides that will properly cover these areas.

Response No. 117-24. This statement was included in the DEIS in response to those people who anticipated unlimited recreation use on the San Pedro with no constraints on what could occur. Our intent is to limit recreation use of the San Pedro through a variety of methods. We intend, under the Preferred Alternative, to allow recreation use as long as the types and levels of use are acceptable. The LAC process will be used to determine what the acceptable levels are and if they are being exceeded.

Response No. 117-25. See Response 111-9.

Response No. 117-26. The acres and vegetation types that would be planted will be determined in the Habitat Management Plan that will be written after completion of the EIS.

Response No. 117-27. See Response 100-1.

Response No. 117-28. The discussion of impacts and benefits precedes the conclusion section. For example, the discussion states that the use of prescribed fire will result in benefits to soils, vegetation and wildlife in the long term by reducing fire size and intensity of future wildfires. The conclusion simply states that benefits would accrue to those resources through prescribed fire.

Response No. 117-29. The quantity of flow as given in the table for recommended instream flows was calculated at 60% of the average median of the daily flows for the summer period and 100% for the rest of the year over the period of flow record. The text only stated that the quantities were based on a percentage of median flows.

Response No. 117-30. The text has been changed to reflect the change of water quality standards from drinking water use to aquatic and wildlife protected use.

Response No. 117-31. The text has been changed to clarify whether the chemical parameters were analyzed for dissolved or total units. The units are expressed in milligrams per liter (mg/l).

Response No. 117-32. We agree. The FEIS reflects this change.

Response No. 117-33. Plant lists are being developed. The intent is to develop not only plant lists, but herbarium specimens available for research or studies. There is no real need for a complete plant list in a document such as this. See General Response No. 6.

Response No. 117-34. We are required to write Biological Assessments (BA) on all Threatened and Endangered or Federal Candidate species. BA's were prepared for the species submitted to us by the U.S. Fish and Wildlife Service. We do not, however, plan to write BA's on other species at this time. The proper place to do this is in the Habitat Management Plan.

118

The Nature Conservancy

225 E. Stuart Avenue
Post Office Box 1199 Lake Wales Florida 33853
(813) 676 0521

September 20, 1988

Jerrold Coolige, EIS Team Leader
Safford District Office
Bureau of Land Management
425 E. 4th St.
Safford, AZ 85546

Dear Mr. Coolige:

After review of the Draft San Pedro River Riparian Management Plan and Environmental Impact Statement, we would like to submit our comments on the plan. The plan and impact statement is a well prepared and thought out document. Our compliments to those who contributed to its completion.

Our comments and suggestions are as follows:

1. FIRE. We suggest keeping construction of firebreaks to a minimum. Any construction should be sensitive to soil disturbance and keep erosion to a minimum. Soil disturbance also opens the site to possible invasion by weedy plant species. We encourage the use of existing man-made and natural firebreaks in conjunction with prescribed burning to minimize the threat of wildfire. We applaud the consideration of lightning ignitions in your prescribed fire plan. Please send a copy of the final fire plan for the area.

2. VEGETATION. We strongly discourage the use of non-native vegetation to maintain and enhance the vegetation communities in the EIS area. Emphasis should be to enhance the natural communities and processes with native species only. 118-1

3. RECREATION. We feel the use of the old railroad has great potential both as a living history display and as a source of access to remote parts of the river. Consideration, however, should be given the scheduling of the train trips and the type of interpretation used. Early morning and late afternoon trips should be discouraged to avoid disruption of wildlife viewing in the prime hours of animal activity. Any interpretation activities that would be disruptive to wildlife or recreationists not on the train should also be avoided. 118-2

Response No. 118-1. See Response 70-3.

Response No. 118-2. See General Response No. 8.

It may be desirable to contact a Rails to Trails organization for input on use of railroad grade s for recreation. Also, separate equestrian and hiking/biking trails should be considered. We did not see any mention of
118-3 bicycle access. Fat-tired "mountain bikes" are becoming more and more common and should be considered in the plan.

4. WILDLIFE. Hunting and non-hunting areas should be
118-4 established to avoid conflicts between hunters and others seeking non-consumptive recreation.

We hope are comments are of help to you in preparing your final management plan. Thank you for the opportunity to participate in such an important process and we look forward to visiting the San Pedro again in the future.

Sincerely,

Geoffrey & Yvonne Babb

Geoffrey and Yvonne Babb,

Central Florida Land Steward, and
The Nature Conservancy
Lake Wales, Florida

Assistant Ecologist,
Terrasystems
Winter Haven, Florida

Response No. 118-3. The text has been updated to read that mountain bikes will be allowed on those roads open for public access.

Response No. 118-4. See General Response No. 7.

119

Dear Sir,

I have travelled through Arizona numerous times, and I am well aware of the overgrazing situation on BLM lands. For this reason, I urge you to choose the No Action Alternative regarding the 48,000 acres of land ajacent to the San Pedro River. This land needs to be restored to a state of true wilderness, as the San Pedro river is a hotspot (or cool spot, as the case may be) for animal activity which lives so precariously in this desert environment.

Thankyou,

Eric Haskell
2685 Topsfield St.
Pasadena, CA 91107

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Leslie Gardner Gustafson, M.H.
CERTIFIED NUTRITIONAL CONSULTANT

September 19, 1988

District Manager
Bureau of Land Management
425 E. 4th St.
Safford, AZ 85546

Greetings,

I wish to applaud the recent decision to disallow grazing of cattle at the San Pedro River property. I wish to add my voice in support of this positive step toward restoring one of the nicer large riparian communities in the desert Southwest.

In addition, I support the "no action" alternative upcoming decision and would like to see this area return to its natural beauty with your help.

Sincerely,

Leslie Gardner Gustafson

18 Loma Vista Dr.
Orinda, California 94563
(415) 254-4635

September 13, 1988

121

Bureau of Land Management
Safford District Office
425 E. 4th Street
Safford, Arizona 98846

Gentlemen:

I am a senior at Arizona State University and one of my current classes is Federal Land Public Policies (Wilderness Issues). One of my assignments is to choose an area and issue to write about as a 10-15 page report and I noticed a BLM Newsletter regarding San Pedro River.

I would really appreciate any and all information about the San Pedro Management Plan and Environmental Impact Statement. In particular, I would need a map of the area, size, and the issues involving this area. If there is any cost involved in obtaining any information, please let me know. I would also like a copy of the BLM Newsletter -- it seemed to contain a lot of the basic information and I was not able to obtain one.

Thank you very much for your time and consideration.

Sincerely,

Dianne Koble

Dianne Koble
2609 W. Southern, #339
Tempe, Arizona 85282
438-9214

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September 21, 1988

U. S. Department of the Interior
Bureau of Land Management
Safford District Office
425 E. 4th St.
Safford, Arizona 85546

Dear BLM:

Our family owns property with one-half mile of riparian rights on the San Pedro River in the Hereford, Arizona area. The following comments represent our views, feelings and wishes as to how we would like the BLM to develop the Riparian Management Plan and the riparian ecosystem.

1. We wholeheartedly support the effort of the BLM to develop the San Pedro riparian ecosystem, and to protect and develop the wildlife habitat of the area.

2. We support the effort to allow this San Pedro River area to restore to its natural state.

3. We also support the use of this total area as a sanctuary for use as a wide ranging nature study and for appropriate recreational and visiting purposes.

4. Specifically, we urge that this area be developed as a sanctuary for native plants and wildlife, with public accomodation areas which enable people to enjoy the total area for relaxation, study and appropriate recreation.

5. We also support a no hunting provision in the Plan in order that the people who come to the area may enjoy the native surroundings in safety and relaxation.

6. Our family is not against hunting per se. Our family is against hunters being intermixed in the sanctuary. In particular, out family is against the injury and death threatening potential which hunters pose to the other classes of visitors in the riparian park area. This is a narrow strip of land. Its wooded nature provides a line of sight shorter than the full trajectory of a bullet or an arrow. Thus the potential for injury or death to area visitors is real. The ultimate consequence being that if hunters are included as an eligible class of visitors to the area, they by their presence exclude or seriously diminish the attendance of other classes of people which will feel safe to enjoy the area.

7. So our family wholeheartedly supports the BLM sanctuary effort, and our family urges a no hunting provision in the area. If for some reason our wishes are not able to be honored, at the least we urge that the final plan call for no more than two strategically located hunting areas of four or five miles duration along the length of the riparian area. These areas can be clearly marked, and the other non-hunting areas can serve as a safe havens for whatever appropriate activity visitors might want to pursue in this unique and wonderful wildlife ecosystem.

8. Thank you for considering our request. We wish you well on your project.

Sincerely yours,

Loyd and Marky Pressel

Dr. Loyd and Marky Pressel and
family (6 adults and 5 grandchildren)
201 Cole Avenue
Bisbee, AZ 85603
Tel: 432-5361

LP:mk

123

UNITED STATES
DEPARTMENT OF THE INTERIOR
FISH AND WILDLIFE SERVICE
ECOLOGICAL SERVICES
3616 W. Thomas, Suite 6
Phoenix, Arizona 85019
September 21, 1988

MEMORANDUM

To: District Manager, Bureau of Land Management, Safford District Office, Safford, Arizona

From: Field Supervisor

Subject: San Pedro Riparian Management Plan and Environmental Impact Statement - Draft Review

The Fish and Wildlife Service (Service) has reviewed the draft San Pedro Riparian Management Plan and Environmental Impact Statement (EIS) and offers the following comments for your consideration.

General Comments

The Service commends the Bureau of Land Management's (BLM) efforts to provide for the protection and enhancement of the riparian ecosystem within the lands along and adjacent to the San Pedro River and its tributaries. As one of the last remaining healthy contiguous stands of cottonwood/willow riparian and perennial stream habitats in Arizona, it is imperative that the fish and wildlife resources maintained in this area be safeguarded and enhanced for present and future generations to appreciate, understand, and enjoy.

However, in reviewing the proposed alternatives in this draft EIS, the Service is concerned that the continued restoration and maintenance of this fragile riparian ecosystem may not be protected and enhanced as much as is practicable by the alternatives that are presented, including the Preferred Alternative. Protection and enhancement is the principal concern of management in this draft EIS and reiterated in the San Pedro National Riparian Conservation Area congressional legislation. The Service is unable to support the Preferred Alternative as written because the information presented in this draft EIS indicates that the Preferred Alternative would permit a high degree of recreational development and public utilization within the San Pedro lands. This use was not permitted by the former landowners and may be an important factor as to the reason the San Pedro River still has one of the last remaining contiguous healthy stands of various age classes of cottonwood/willow trees in the southwestern United States.

The Service believes that the draft EIS needs to specifically analyze actions under each alternative. Analyses of impacts to the various resources from implementation of each of the alternatives is not present.

123-1 The Preferred Alternative indicates that minor impacts are expected to water quality, wildlife, and vegetation from the development of recreational facilities. We believe that this analysis needs to also address how these resources will be impacted from recreational development.

Response No. 123-1. See Response 117-1.

Indirect impacts were not addressed with respect to these issues. For example, when a recreation site such as a campground is developed, a number of people are concentrated in an area and this development and use results in the loss of wildlife habitat at the campground. This habitat loss, however, is not confined to the border of the campground. The increased

123-2 human use and activity which radiates from the campground also results in lost or diminished wildlife habitat in areas adjacent to the campground. This and other direct and indirect impacts need to be quantified and addressed in this draft EIS.

Response No1 123-2. See Response 117-2.

123-3 The draft EIS also fails to provide a worst case analysis for implementation of the Preferred Alternative. Information needs to be provided for the potential public recreational use of the San Pedro River during peak periods, such as Memorial Day weekend which coincides with optimal time for bird breeding and bird watching. With people potentially using the area for hiking, picnicking, camping, bird watching, horseback riding, train riding, or exploring cultural and historic resources, there could be more than 10,000 people along the San Pedro River on a high use day. Another peak period would be Labor Day weekend when dove-hunting could be added to the activities mentioned above. We request that worst case analyses be conducted for peak periods of recreational use and that these analyses be documented thoroughly.

Response No. 123-3. See Response 117-3.

123-4 Maps should be provided which indicate locations for all proposed development for each of the alternatives including rights-of-way locations, campground and picnic area locations, trail sites, new road locations, parking lot and pullout locations, and roads that would be open for public use. This map should also indicate the boundaries for cottonwood-willow and honey mesquite riparian habitats, so that distances between these habitats and proposed developments can be better delineated for resource planning needs.

Response No. 123-4. See Response 117-5.

123-5 The grazing issue was identified by entities and the Service as an issue to be evaluated and discussed in this draft EIS, but this issue was dismissed because grazing will not be permitted during the 15-year period of the Plan. We believe that grazing still needs to be addressed in the draft EIS. The Service understands that BLM plans to monitor vegetation along the San Pedro River during this 15-year grazing moratorium to determine the potential effects of vegetation from the absence of grazing. This implies that grazing on the San Pedro River may be a future management alternative, and the plan could subsequently be amended to utilize grazing for management purposes. We believe that information needs to be presented regarding BLM methods to assess any changes in the terrestrial, wetland, and aquatic habitats with respect to the grazing moratorium. Will there be onsite and

Response No. 123-5. We have no record of the Fish and Wildlife Service having provided any input to the issue identification phase of this document. See General Response No. 5. If future grazing is considered it will likely be in response to other resource needs and determined through the monitoring process.

offsite comparisons both between and among the various vegetation associations identified in the draft EIS? What sampling methodology and sampling design will be used by BLM to assess both the direct and indirect impacts of livestock grazing on water, soil, vegetation, and fish and wildlife resources? A discussion of these questions is needed in the draft EIS.

The Service fully supports the designation of the entire draft EIS area as an Area of Critical Environmental Concern (ACEC) and designation of the three research natural areas (RNA) at St. David Cienega, San Pedro River, and San Rafael. Such a designation clearly assigns special resource value to these areas and should assist in the acquisition of adequate funding to properly manage these areas.

123-6 We further support the closure of most of the roads to the public and the designation of only a few roads within the draft EIS area for public use. We request that information be provided on a map that indicates the location of roads or which of these roads would remain open be provided on a map.

The BLM's efforts to develop natural resource education and research opportunities and facilities within the draft EIS area are fully supported by the Service. This should become a significant area in the southwestern United States for identifying riparian resource values through public education.

The reintroduction and subsequent management of the draft EIS area for federally endangered species, specifically the ocelot, jaguarundi, aplomado falcon, Colorado squawfish, spikedace, loach minnow, Gila topminnow, and desert pupfish should be components of the draft EIS and plan. We additionally recommend that the State-listed roundtail chub, Gila chub, speckled dace, and razorback sucker be considered for reintroduction, and the federally endangered bonytail chub for introduction.

123-7 The Service in cooperation with the Arizona Game and Fish Department (AGFD) has been looking for grow-out ponds for Colorado squawfish, razorback sucker, and bonytail chub. The Service and/or AGFD in cooperation with the BLM may want to request renovation of existing ponds within the draft EIS area and subsequent stocking with native fishes. Stocking interest may further include other native fishes, such as desert pupfish and Gila topminnow. Our office wants to work with the BLM on these efforts.

We also recommend that the habitat for the following Category 2 species be managed for protection and enhancement: Mexican garter snake, northern gray hawk, western yellow-billed cuckoo, and southwestern willow flycatcher.

One of the outstanding characteristics of this area is the high diversity of unique and peripheral birds, especially raptors and songbirds. Several species associated with the draft EIS area are Mexican or eastern species of the United States, whose range limits extend into this area of Arizona.

Response No. 123-6. See Response 117-5.

Response No. 123-7. The species identified in the DEIS reflect those submitted to us by the Fish and Wildlife Service. Reintroductions of additional species can be considered through coordination efforts between the Safford District, the Fish and Wildlife Service and the Arizona Game and Fish Department. This would be a part of the Habitat Management Plan or an approved Recovery Plan for T.& E.species..

123-23 Specifically, the acreage of vegetative types that could be impacted needs to be identified. Also, the anticipated indirect and cumulative impacts need to be identified in regard to impacts that recreational proposals could have on natural resources.

Also, permitting recreational use in the draft EIS area regardless of whether it is restricted to day use only or uncontrolled should result in moderate benefits to the nearby communities of Sierra Vista and Tombstone, due to the support services that the recreating public will require (e.g. motels, private campgrounds, restaurants, grocery stores, and gas stations).

123-24 "The level of recreation use may be less than some publics anticipate." Although this may be true, we still see much potential for conflicting uses between consumptive and non-consumptive uses and with both of these versus natural resources. Please address these issues and provide detailed analysis of potential impacts.

123-25 Page 4-7, Lands - The acreage of each vegetation type that would be lost within these rights-of-way and the mitigation that would be required to offset these losses needs to be identified for planning purposes.

123-26 Page 4-8, Wildlife - The acreage associated with habitat improvement projects that are implemented and the vegetation types would be planted, needs to be identified for planning purposes.

Page 4-7, Areas of Critical Environmental Concern - The Service supports the designation of the entire draft EIS area as an ACEC as well as the designation of the St. David Cienega, San Pedro River, and San Raphael as
123-27 RNAs. We are concerned, however, that some proposed activities will conflict with the resources being protected and enhanced, such as hunting and heavy recreational use. Please analyze these potential conflicts in this draft EIS.

Page 4-9, Conclusion - The Service does not conclude from the information presented in this draft EIS that the Preferred Alternative would result in minor to moderate benefits to wildlife, soils, vegetation, and water
123-28 resources. Prior to the BLM's management, this area was closed to the public and limited grazing and aggregate mining was permitted. Although the conclusions may be accurate, we believe that data in the draft EIS is insufficient at this time to substantiate this conclusion.

123-29 Page A-25 and A-26 - It is unclear whether BLM's water quality values reflect dissolved fractions or total form for each chemical tested which will affect how these data are interpreted.

123-30 Page A-27, Table 6 - These recommended instream flow rates should be clarified as minimum instream flow rates which would only sustain the existing riparian habitat. Flows greatly exceeding these levels would be needed for riparian regeneration during critical times of the year.

Response No. 123-23. Each of the alternatives (recreation section) lists the approximate acreage to be impacted by recreational developments. Most of these acres are in the miscellaneous vegetation type of agricultural lands that have been previously cultivated.

Response No. 123-24. See Response 117-24.

Response No. 123-25. See General Response No. 8.

Response No. 123-26. This level of detail will be displayed in the Habitat Management Plan. See General Response No. 2.

Response No. 123-27. See Response 100-1.

Response No. 123-28. See Response 117-28.

Response No. 123-29. The text has been changed.

Response No. 123-30. See Response 117-29.

These include common black-hawk, great black-hawk, gray hawk, green kingfisher, tropical kingbird, thick-billed kingbird, scissor-tailed flycatcher, elegant trogon, plain-capped starthroat, worm-eating warbler, varied bunting, painted bunting, Baird's sparrow, clay-colored sparrow, Botteri's sparrow, northern beardless tyrannulet, broad-winged hawk, and Tennessee warbler. Due to this unique assemblage of western, eastern, and Mexican species, the Service recommends that the draft EIS area be managed to maintain and enhance the habitats used by these species.

The San Pedro River draft EIS area was specifically acquired by the BLM to protect and enhance a unique riparian ecosystem of national significance. The purpose of the proposed action and its alternatives is to define a land use plan that will protect and enhance the riparian ecosystem. Because of the sensitive nature of the riparian ecosystem, BLM will stress certain traditional multiple-use activities and prohibit others. We believe there is great potential for conflicts to occur under the Preferred and Utilization Alternatives.

The Service agrees with the intent to not allow any prospecting, exploration, or mining within the sensitive portions of the draft EIS area. The Service believes that mineral activity needs to be prohibited within the entire draft EIS area. We believe that prospecting, exploration, or mining are incompatible uses within an ACEC and may establish an undesirable precedent. This designation would not prohibit mining operations in the Sierra Vista-Tombstone area. Rather it would restrict mining activities to those areas outside the approximate three-mile wide corridor along the San Pedro River. The Service considers tributaries of the San Pedro River with xeroriparian habitat and washes, that are used as wildlife movement corridors to and from the San Pedro River, to be sensitive portions of the draft EIS area and of management concern due to their contributive ecological function as travel corridors and other wildlife uses.

123-8 The Service believes that the alternative selected and implemented by the BLM should state that energy exploration or development will not be allowed within the draft EIS area, because it would conflict with the BLM's management objectives for this area. Such exploration and development would be insignificant to the industry while potentially harmful to other natural resources. We believe this is in consonance with concerns expressed in H.R. 568 and S. 252 with respect to mineral and geothermal leasing within the draft EIS area.

An area of potential conflict is the proposed recreational development and associated management. In both the House and Senate bills, recreation is listed as the last intent of the establishment of the San Pedro Riparian Conservation Area; recreational use follows the conservation, protection, and enhancement of the riparian area and the aquatic, wildlife, archeological, paleontological, scientific, cultural, and educational

123-9 resources of the draft EIS area. Yet in the Utilization and Preferred Alternatives, we believe that recreational development is stressed over riparian, aquatic, wildlife, archaeological, paleontological and other

Response No. 123-8. The entire study area has been withdrawn from all forms of mineral entry and leasing. This includes fluid minerals.

Response No. 123-9. See Response 117-8.

123-9 resource values. Public use would be available with little or no limitations. We found no data on potential recreational utilization. We also found no indication of commitment by the BLM to manage projected recreational activities, growth, and population utilization of the draft EIS area over the next 15 years. Overnight use would not be restricted to the campgrounds but would be allowed within the entire draft EIS area by obtaining a permit from the BLM. Maximum ceilings for permits to be issued need to be developed so that excessive use that deteriorates resources does not occur in the area. The Service believes this emphasis on recreational use and development within the draft EIS area without adequate enforcement and monitoring commitments could result in significant adverse impacts to the unique riparian, aquatic and cultural resources of the draft EIS area and is not in consonance with the intent of congressional legislation to

123-10 designate the area as a National Riparian Conservation Area. The intensity of proposed recreation development may further conflict with the proposed ACEC and RNA designations.

Because of the emphasis on both dispersed and developed recreation in the Preferred and Utilization Alternatives, the Service anticipates a conflict between non-consumptive and consumptive recreation. Unlimited public access is being permitted for picnicking, bird watching, camping, interpretive hiking, and hunting within a three-mile wide corridor. For example, on weekends during the late summer through winter, the potential exists for a large number of both hunters and other recreationists to overlap in both time and space in their use of the San Pedro River area. This may result in a liability problem if shooting accidents occur. Alternatives to minimize these potential conflicts could include designating with signed fences specific hunting areas or zones which are removed from areas where other recreational uses (including trails and primitive camping) occur. Another possibility would be to allow only archery hunting within the draft EIS area or establish special hunts within the draft EIS area to minimize these potential conflicts.

The Service is concerned that uncontrolled human use cannot be allowed within this draft EIS area without continued degradation to the habitat and wildlife that utilize these areas due to the high expected public use level. Impacts such as vegetation loss from hiking and clearing areas for camping, associated soil erosion, soil compaction from these activities and horseback riding, wood collection for campfires, and a decrease of wildlife populations in areas frequently used by people may occur. Additionally, wildlife including sensitive species such as the gray hawk and yellow-billed cuckoo would occur on the draft EIS area beyond the opening of the proposed hunting season of September 1. This time overlap may result in the loss of some of these individuals from hunting. The Service believes that the BLM should make commitments beyond that normally expected to extensively patrol areas receiving high recreational use within the riparian corridor.

The inclusion of a Monitoring Plan in this draft EIS is needed and helpful.

123-11 However, the information provided in the Monitoring Plan is general and unclear and therefore may appear to be inadequate. The Service can only

Response No. 123-10. See Response 100-1.

Response No. 123-11. The Monitoring Plan has been changed. The high percentage reflects anticipated larger changes in existing conditions due to the removal of livestock from the EIS area. In time, we anticipate this change will level out. (See Response 117-11).

123-11 assume as to the types of techniques that would be used, the data that would be collected, and the intensity of monitoring that would be made within the stated time frames. We believe that a change of 25 percent (%) is excessive for habitat diversity and a 10% loss of species from wildlife species diversity could suggest a serious irreversible problem. Perhaps, it would be better to watch for consistent annual declines over a three-year period within species populations before there is a loss to species richness. Water quality should be monitored immediately downstream from heavily used recreational sites and should not exceed the Arizona Department of Environmental Quality's (DEQ) established levels for aquatic use, wildlife use, and full body contact. We are unclear as to what DEQ standards are being applied; drinking water standards are frequently less stringent than aquatic and wildlife protected uses. The current aquatic monitoring program recommends monitoring every five years with a 10% change in water quality over a three-year period. Please further discuss this difference, and the parameters that would be used to determine water quality changes. Research natural areas should be inspected quarterly at a minimum. Off-road vehicle (ORV) management has the potential to become a serious environmental degradation problem. As a result, further definition of "regular" patrols needs to be provided in regard to BLM staff commitments. Overall, we request more detail on inventory and monitoring plans for the public to review and provide comments to the BLM. This plan should specify techniques and methods for surveys and better define the criteria for which changes in management will occur.

Specific Comments

Page 2-1, General - The Service would like to be included in the environmental assessment review process for site-specific projects and other actions which may affect the San Pedro River area.

Page 2-1 to 2-2, Lands - We fully support obtaining additional lands within the San Pedro River boundaries and obtaining lands outside the boundaries for the protection and enhancement of resource values within the draft EIS area.

Page 2-2, Water - We concur with these efforts identified by the BLM and offer our assistance and support in these endeavors.

Page 2-2, Wildlife Habitat - The Service recommends that the BLM adopt mitigation procedures for wildlife habitat similar to those the Service has within its Mitigation Policy. This policy allows for various forms of mitigation from avoidance to compensation and various levels from complete in-kind replacement to out-of-kind partial replacement. Mitigation as defined by the Council of Environmental Quality (CEQ) involves five levels.

123-12 There is no mention of management or improvement of the aquatic habitat. Historically, this area supported numerous native fishes which have since been extirpated. The BLM should stress habitat protection and enhancement of riverine and adjacent aquatic habitats.

123-13 Page 2-2, Vegetation - The taking of dead or down wood should also be restricted. The BLM should institute a program of instructing primitive campers on the importance of down wood to the ecosystem in preventing exploitation.

123-14 Page 2-17, Recreation - Please explain what is meant by designating the draft EIS area as a special recreation management area and the Limits of Acceptable Change?

123-15 In regard to designated campgrounds, outside the riparian area, the Service would prefer a no campfire policy with appropriate education and enforcement. However, if this is not feasible, the Service prefers a campfire policy where campers would provide their own firewood or it is provided by the BLM, possibly through concessionaires or other means.

In regard to primitive camping within the riparian area, we believe that a no campfire policy is needed to ensure long term protection of the limited timber in the riparian area. Hopefully, when primitive camping permits are issued, educational information can be provided to public users to positively enforce a no woodburning policy for otherwise such a traditional use

123-16 We believe that the estimated number of permits that the BLM is proposing to issue on a daily basis for all forms of camping including primitive camping needs to be provided. To enforce campground restrictions, we suggest developing and implementing a campground host/hostess program.

We recommend, that prior to rebuilding roads, that the BLM analyze the direct, indirect, and cumulative impacts to fish and wildlife resources which could result from high levels of public use. The Service further recommends that development within the existing railroad corridor or any other proposed recreation development be deferred until an analysis of potential recreation demands, needs, visitor use, and crowd control methods over the life of the plan is completed by the BLM. We believe that an indepth environmental analysis of the direct, indirect, and cumulative impacts to natural resources within the draft EIS area is required for these activities.

123-17 Page 2-19, Lands - We believe that restricting rights-of-way and other uses to areas where they would not significantly impact resources does not provide adequate mitigation. Rights-of-way and other uses should be placed where they 1) avoid impacting the resources, 2) minimize impacts, 3) rectify impacts, 4) reduce or eliminate impacts, and 5) compensate for the impacts. Each proposed right-of-way should be subjected to an environmental analysis.

Response No. 123-12. See Response 117-13.

Response No. 123-13. The taking of down and dead wood is considered to be woodcutting and would not be permitted. The plan has been revised to indicate this.

Response No. 123-14. Please refer to pages A-74 and A-72 in the DEIS for the definitions of these two phrases.

Response No. 123-15. The Preferred Alternative in the DEIS (page 2-17) says to "Restrict campfires to designated locations". We agree on the need for appropriate education and enforcement.

Response No. 123-16. See Responses 117-8 and 117-15.

Response No. 123-17. See General Response No. 8.

Page 2-20, Wildlife Resources - We support the planned actions and would like to be included in the development of the Habitat Management Plan for this draft EIS area. We support additional revegetation actions than those described for reclaiming abandoned farm fields within the EIS area.

123-18 Page 2-21, Vegetation - The Service is concerned about the use of any non-native plant species for revegetation or wildlife enhancement. Such use may be contrary to Executive Order 11987. What criteria will be used to determine whether a plant species is beneficial? What animal species are being targeted for enhancement with these revegetation plans? Are they animal species that historically did not occur in great numbers?

A second objective should be to maintain any populations of rare plant species within the EIS area. Planned actions similar to those presented under the Wildlife Issue should be developed and included in this draft EIS.

123-19 Page 3-11, Table 3-4 - The relict leopard frog should not be included in this table. However, the lowland and Chiricahua leopard frogs should be included and are State-listed. Also, the aplomado falcon should be included in this list.

Page 3-17 - Riparian vegetation communities are listed as cottonwood-Goodding willow and salt cedar. Mesquite dominated habitats (223.231 and 223.232 in Brown and Lowe, 1982) are very important riparian habitats as well and should be inventoried and monitored as such. Under range analysis, mesquite habitats should also be considered riparian as well as range.

123-20 Please clarify your definitions of range and riparian plant communities. Please include an assessment of mesquite habitats in addition to those for cottonwood-willow and salt cedar. Also, please include any plans for controlling or eliminating salt cedar encroachment.

Page 4-1, Basic Assumptions - The BLM needs to identify the numbers of additional personnel that will be required to successfully implement the Preferred Alternative to guarantee protection and enhancement of the riparian resource including adequate enforcement personnel with full law enforcement authority. The BLM should then make a commitment to staff the personnel needed to successfully implement the selected plan for the next 15 years. This information should be included in this draft EIS.

123-21 Page 4-1, Recreation - Because there would be no opportunities for recreation under the No Action Alternative and this does not represent a change from conditions under the previous owner, Tenneco, there would be no change and therefore no impact to recreation.

123-22 Page 4-7, Recreation - Please identify the minor impacts that would be expected to water quality, wildlife, vegetation, and soils from development of recreation facilities and overall recreation use. This information is basic to the Environmental Consequences section of this draft EIS.

Response No. 123-18. See Responses 70-3 and 117-18.

Response No. 123-19. The corrections have been made.

Response No. 123-20. See Response 117-23.

Response No. 123-21. We disagree. While Tenneco owned the property a large amount of ORV use occurred, as well as some limited sightseeing, birdwatching, hunting, picnicking and nature study. The No Action Alternative represents a change from these conditions in that no recreation use would occur. Therefore, there is an impact on recreation.

Response No. 123-22. The types and intensity of impacts were thoroughly analyzed by the interdisciplinary team during the development of the DEIS. No significant impacts were identified at that time. The Council on Environmental Quality (CEQ) regulations in 40 CFR 1502.2 (b) directs us to discuss impacts in proportion to their significance.

123-31 Page A-38, Attachment 3 - What are the units used for values on each chemical parameter? Should they be microgram per liter?

The Service notes that a plant list is not provided. If plant inventory data is not available, then the Service recommends that plant inventories be conducted as soon as possible and the results presented in the plan. If they are available, they should be presented in this draft EIS.

Summary

The Service supports the concept of the BLM to protect and enhance the riparian and aquatic habitats of the San Pedro River and their associated fish and wildlife resources. We further support the 15-year grazing moratorium and restriction on mineral activities. However, we are unable to support any of the proposed alternatives including the Preferred Alternative, because of the absence of data on resource impacts for the 15-year life of the plan especially with respect to fish and wildlife resources and recreation.

The National Environmental Policy Act (NEPA) and Council of Environmental Quality's (CEQ) regulations for implementation of the NEPA require that alternatives be adequately identified and described as to their effects on water quality, soils, vegetation, and fish and wildlife resources. The Service believes that this draft EIS may not sufficiently address these responsibilities in regard to Congressional intent and as a result, the draft EIS would warranty corrective revision.

If you have any questions regarding these comments or if the Service can be of assistance, please contact Ms. Judy Hohman or me (Telephone: 602/261-4720).

Sincerely,

Lesley A. Fitzpatrick

for Sam F. Spiller
Field Supervisor

cc: Regional Director, Fish and Wildlife Service, Albuquerque, New Mexico (Fish and Wildlife Enhancement)
Director, Arizona Game and Fish Department, Phoenix, Arizona

Response No. 123-31. The text has been changed to correct the error. The values should be in milligrams per liter (mg/l).

ROSE MOFFORD, Governor

Commission
LARRY D. ADAMS, Bullhead City, Chairman
FRANCES W. WERNER, Tucson
THOMAS G. WOODS, JR., Phoenix
PHILLIP W. ASHCROFT, Eagar
GORDON K. WHITING, Klondyke

Director
TEMPLE A. REYNOLDS

Deputy Director
DUANE L. SHROUFE

124

RECEIVED
BUREAU OF LAND MANAGEMENT
SEP 23 1988

ARIZONA GAME & FISH DEPARTMENT

2222 West Greenway Road Phoenix, Arizona 85023 942-3000

	ACTION	INFO	INITIAL	DATE
DIST. MGR.				
A.D.O.				
P.A.&E.				
DIST. REST.				
CH				
OHFPS				
GILA				
SAN SIMON				
FILE		DISCARD		

September 21, 1988

Mr. Jerrold Coolidge
EIS Team Leader
Bureau of Land Management
Safford District Office
425 East Fourth Street
Safford, Arizona 85546

Dear Mr. Coolidge:

Re: Draft San Pedro River Riparian Management Plan and Environmental Impact Statement

The Arizona Game and Fish Department has reviewed the above-referenced draft Management Plan and Environmental Impact Statement (EIS), and we offer the following comments.

We would like to commend the Bureau for recognizing the unique biological and cultural characteristics associated with the upper San Pedro River and for taking the initiative to acquire and protect this valuable riparian ecosystem. We fully support the development of a management plan which provides for the protection and enhancement of the upper San Pedro River area, while still providing opportunities for recreational use. We especially support recreational facilities which incorporate a comprehensive educational and interpretive function. The Arizona Game and Fish Department believes that the Preferred Alternative will best accomplish this balance of protection and public use.

The following comments are provided according to the 14 topics listed under each alternative, followed by a few specific, technical comments.

Recreation

In general, the Department supports the recreation objective of the Preferred Alternative. Because of the value of the EIS area for nesting migratory birds, particularly raptors, we support the proposed firearms and hunting limitations stated in the Preferred Alternative. However, as a result of our participation in the public meetings for this plan, we are aware of a vocal contingent which has spoken in support of a total closure of the area to
124-1 public hunting and/or discharge of firearms. Therefore, we

Response No. 124-1. See General Response No. 7.

An Equal Opportunity Agency

124-1 believe that opportunities for hunting do exist within the San Pedro River Area, and that properly regulated hunting can be compatible with other uses. The Department continues to be committed to working with the Bureau to develop a suitable framework for providing hunting opportunities within the EIS area. Further, we believe that the potential for javelina and deer hunting within the EIS area is at least equal to the potential for small game and migratory bird hunting. Therefore, we would not be willing to support a management alternative that limits hunting to shotgun only.

With regard to the proposed hunting closure, open and closed seasons can only be properly established through Arizona Game and Fish Commission Orders. While we have no objection to the proposed April 1 to August 31 hunting closure, we believe that the authority to enact such a closure properly rests with the Arizona Game and Fish Commission, and that Commission action may be required in order to enact such a closure or to issue other special hunting regulations.

124-2 Finally, because of the unique biotic features associated with the San Pedro River corridor, the Department believes that the operation of a tarkt train, with its attendant noise and pollution potential, would be counter to the protection objectives of the management plan.

Lands/Water

The Department supports the objective and planned actions of the Preferred Alternative.

Wildlife

Conceptually, we support the objectives and planned actions of this section; however, some clarification may be necessary. Any prohibitions on trapping may need to be authorized by and coordinated with the Arizona Game and Fish Commission. In addition, restriction of species collections to "administrative purposes" may prohibit activities that would otherwise lawfully be allowed with a hunting or fishing license. In fact, the Bureau's position on non-firearms related hunting and/or fishing within the EIS area is not well defined in the draft.

Vegetation

We recognize the importance of fire in the maintenance of habitat diversity and support the planned actions of the Preferred Alternative.

Response No. 124-2. See General Response No. 8.

Soils/Watershed

We support the Preferred Alternative, but believe that this may need to be more fully integrated with the vegetation activities in order to control erosion within the EIS area.

Fire

The Department supports the objectives and planned actions of the Preferred Alternative.

Cultural/Paleontological

We recognize that there are significant values associated with these resources and we support the objectives and planned actions of the Preferred Alternative.

Minerals

We concur with the Preferred Alternative.

Visual

We concur with the Preferred Alternative.

Areas of critical environmental concern (ACEC)

We support the objective and planned actions of the Preferred Alternative.

Administrative Facilities/Research

We support the objectives and planned actions of the Preferred Alternative.

Technical Comments

Page 3-10; Terrestrial wildlife, Game

124-3 At best, there could only be 6 game mammals expected to be found within the EIS area, not the 20 as indicated.

124-4 No species of herptile is classified as a game animal in Arizona.

Page 3-11; Table 3-4

The Arizona Game and Fish Commission recently adopted a revised list of Threatened Native Wildlife in Arizona. This list is currently being printed for distribution. If possible, during draft revision, we suggest that Table 3-4 be updated to correspond with the Department's new list.

Response No. 124-3. The text has been corrected.

Response No. 124-4. The text has been changed.

We appreciate the opportunity to provide comment on this draft Management Plan and EIS, and we look forward to continued cooperation in the development and implementation of the management plan for this unique natural area.

Sincerely,

Duane L. Shroufe
Deputy Director

DLS:RAG:cs

cc: T.W. Spalding, Supervisor, Tucson Regional Office
Arizona State Clearinghouse, AZ 88-80-0114

Ni Wanmei Sept. 20, 1988
Tree Ring Lab, West Stadium 105,
University of Arizona,
Tucson, Az 85721

125

Dear Dr. Erick Campbell:

I appreciate listning your talk in the evening of Sept. 12 and very intrest in your work.

After reading some parts of your Project Completion Report "Assesment of Water Conditions and Management Opportunities In Support of Riparian Values", I get some idea as follows.

1) In page 104, it is said "During the period of high flow, the stream recharge the floodplain aquifer...", but from the Fig. 33 to Fig. 40, it seems to me even when the high discharge of straem start and go up, the groundwater level still keep down. So I wonder the straeam does not discharge the aquifer and if there is any place happens, only a very limited narrow band (along the river bank) exist, and will disapear as soon as the flood peak having passed. From that can we say the stream discharge the groundwater all the time? Because I think the above concept will affect the policy of management of your riparian project. 125-1

2) Is there any possibility to make artifitial recharge of groundwater using surfacewater during the flood seasons? Based on the information of your book it seems the aquifer has some capacity to do so and may be that is one of the way to improve the problem of water table decline. 125-2

3) Is there anther way, for example, use tree ring studying to deal with the long term environmental changes and ecosystem in the riparian and vicinity area, to help make a more reasonable plan for the project?

It will be very plsure to me if the suggestion is usefull in your work.

Sincerely Yours,

Ni Wanmei.
Chinese Visting Research Specialist,
Engineer of hydrogeology.

Response No. 125-1. The figures graphically show that the floodplain aquifer rapidly recharges during flood stage. On the right hand side of each figure, the numbers reflect the level of the water depth in the well. As discharge diminishes, the depth from ground level to water surface in the well diminishes (goes up the scale). During flooding, the water surface in the well rises (comes down the scale). Each figure shows rapid response to the rapid change in flow.

Response No. 125-2. Recharge already occurs in the floodplain aquifer, as described above. Then it discharges over a short period of time, depending upon the receding storm flow in the channel.

126

5942 E. Waverly Place
Tucson, Arizona 85712
September 20, 1988

Erick Campbell
San Pedro Project Manager
Bureau of Land Management
P.O. Box 9853, RR 1
Huachuca City, AZ 85616

RE: Draft San Pedro River Riparian Management Plan and Environmental Impact Statement

In general we agree with and support the BLM's preferred options in planning for the San Pedro Riparian Area. We would like to see in the final management plan a few important points:

126-1 1. Hunting should be prohibited from the riparian corridor itself, to leave areas of refuge for wildlife.

2. Campgrounds should be allowed only in areas where they will not disturb wildlife, preferably not in the riparian area.

3. In general, areas of visitor use should be on one side of the river only; this will provide undisturbed areas of cover for wildlife.

4. Please keep visitor impact as low as possible on natural, historical and cultural areas, while allowing for educational interpretation.

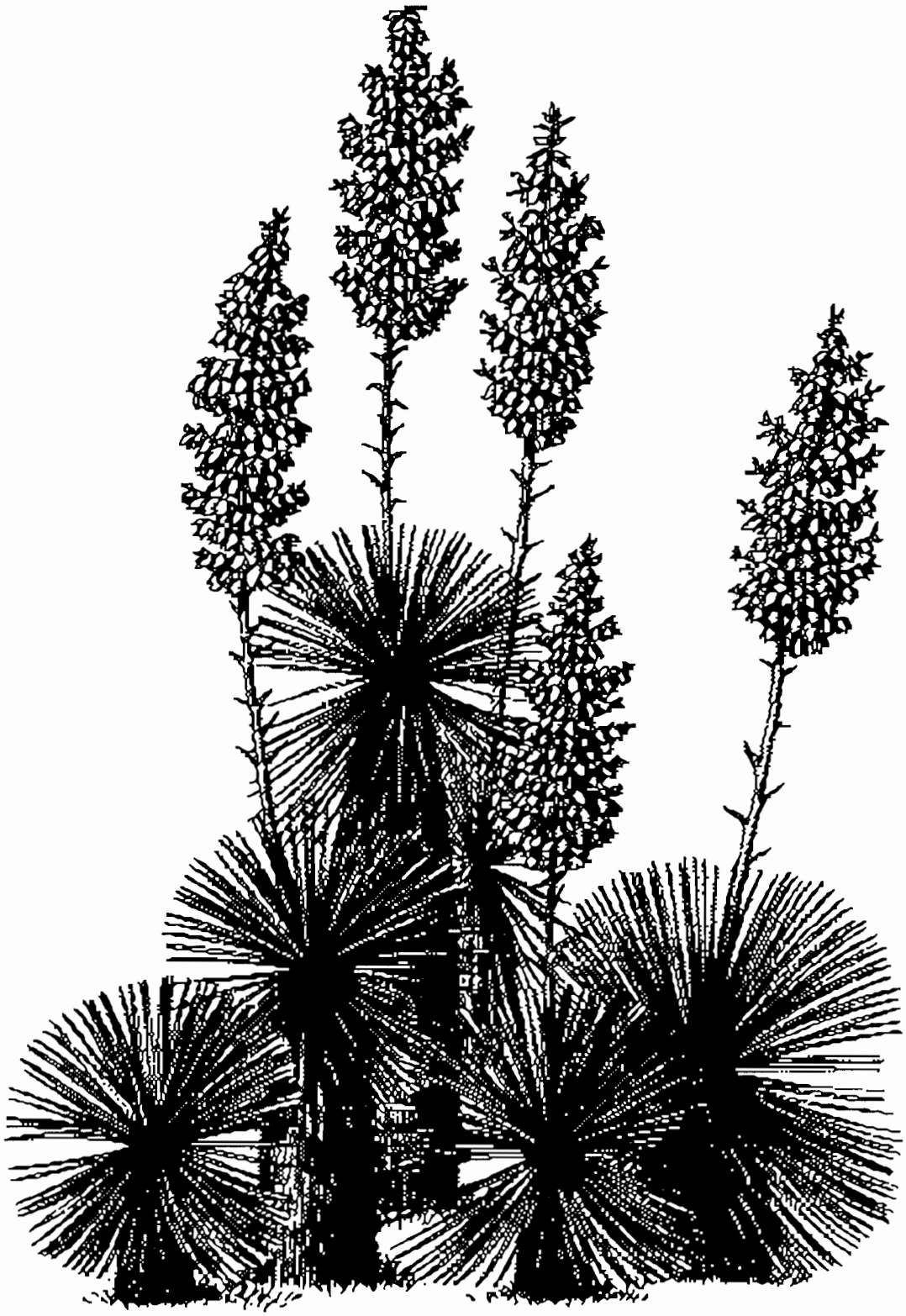
Thank you for your consideration.

Sincerely,

David W. Lazaroff
Cheryl S. Lazaroff

Response No. 126-1. See General Response No. 7.

APPENDICES



APPENDIX 1

CULTURAL RESOURCE MANAGEMENT OBJECTIVES

All cultural resource properties, both known and projected to be present, will be managed under each alternative according to the management objectives established for the property. The management objectives are determined by the type of values, e.g., scientific, public use, held by the property. A site may have more than one management objective assigned and the objectives do not have to be fully compatible. The management objectives established for a given site may be changed as new data is acquired or management goals change. The following management objectives were established for the EIS area.

1. Manage for Information Potential. Cultural resources included under this objective are capable of contributing useful scientific, historic, or management information. This information potential is to be protected to the extent needed, by physical or administrative means, until the potential has been realized through appropriate study.

2. Manage for Public Values. Cultural resources included under this objective possess identified socio-cultural, educational, recreational, or other public values. Their locations are to be managed in a manner that gives adequate consideration to these values.

3. Manage for Conservation. Cultural resources included under this objective have overriding scientific or historic importance. They are to be managed to maintain them in their present condition and to protect them from potential conflicting land or resource uses.

4. Manage on Interim Basis. Cultural resources included under this objective may possess a variety of values. Properties would be managed under this objective only under the No Action alternative. The goal would be to comply with legal requirements. Intensive management would not be implemented. Management would be strictly reactive and not proactive. Sites would be managed on a case-by-case basis to protect them from potentially conflicting uses as required by laws and regulations.

APPENDIX 2

CULTURAL RESOURCE USE CATEGORIES

Use will be allocated within the framework of the site's historic context. A site should generally be allocated to a single use-the primary intended use-and management prescriptions formed to allow nonconflicting uses. Sites of each historical context should be included in each applicable use category but equal representation of each use contegory in each historical context in not a goal. Use allocation will be deferred to Cultural Resource Management Plans (CRMP) except for sites that have been allocated in this management plan. The Bureau's Cultural Resource Use Categories are as follows.

A. Scientific Use is a category that applies to any cultural property determined to be *suitable* for consideration as the subject of scientific or historical study utilizing research techniques currently available, including study which would result in its physical alteration, and signifies that it need not be conserved in the face of an appropriate research or data recovery (mitigation) proposal. (Management Objectives: Manage for Information Potential).

B. Management Use is a category that may be applied to any cultural property considered *most useful* for controlled experimental study which would result in its physical alteration, to be conducted by the BLM or other entities concerned with the management of cultural properties. Expenditure of cultural properties or cultural resource data may be justified for purposes of obtaining specific information *which would ultimately aid in the management of other cultural properties. Experimental study may be aimed toward* a better understanding of kinds and rates of natural or human-caused deterioration, effectiveness of protection measures, and similar lines of inquiry. (Management Objective: Manage for Information Potential).

C. Public Use is a category that may be applied to any cultural property found to be *appropriate* for consideration as an interpretive exhibit-in-place, a subject of supervised participation in scientific or historical study, or related educational and recreational uses by members of the general public. (Management Objectives: Manage for Public Values).

D. Socio-cultural Use is a category to be applied to any cultural resource that is perceived by a specified social and/or cultural group as having attributes which contribute to maintaining the heritage or existence of that group. *This use category* signifies that the cultural resource is to be managed in a way that takes those attributes into account, as applicable. (Management Objective: Manage for Public Values).

E. Conservation for Future Use is a category reserved for any unusual cultural resource which, because of scarcity, a research potential that surpasses the current state of the art, singular historic importance or architectural interest, or comparable reasons, is not currently *appropriate* for consideration as the subject of scientific or historical study which would result in its physical alteration. It is considered worthy of segregation from other land or resource uses which would threaten the maintenance of its present condition, and it will remain in this use category until the following provisions are met in the future. (Management Objective: Manage for Conservation).

1. No other property exists that could yield the information required to meet the priority regional (southeast Arizona) research objectives.

2. All properties of this type allocated to public use have been developed to their greatest capacity for public use and no other property exists that could meet a high public need and demand for public use.

3. The change in allocation to another use is determined by the District Manager to be the best use of the property at the time to meet the District's and the Bureau's cultural resource management goals.

4. Another property has been discovered which would be as suitable for allocation to conservation use and it will be so allocated.

5. The property was allocated to conservation use because its research potential surpassed the current state of the art and research methodologies have developed to the point where the property's research values can now be appropriately recovered.

F. Discharged Use means either: 1) that a cultural resource that was previously qualified for assignment to any of the categories defined above no longer possesses the qualifying characteristics for that use or for assignment to an alternative use[1]; or 2) that a cultural property's scientific use potential was so slight that it was exhausted at the time the property was recorded, and no alternative use is appropriate [2]. Allocation to discharged use also means that records pertaining to the property represent its only remaining importance, and that its location no longer presents a management constraint for competing land uses.

1. A small, shallow rock-shelter could be fully excavated, thereby realizing its scientific use potential, or it could be completely looted, destroying its potential. Knowledge that it once existed is still important, and it would continue to be represented in the inventory records.

2. A small lithic scatter could be sufficiently recorded on discovery that no further field study could be needed. Because field inspection and recording of individual cultural properties must precede the recommendation and allocation, classes of unrecorded cultural properties may not be allocated to discharged use in advance of discovery.

APPENDIX 3

COMBINED PLANT COMMUNITIES

Brown, Lowe and Pase Communities	Combined Plant Communities* 1	2	3	4	5	6	7	8	9	10	11	12
143.123 Tobosa Mixed Scrub						X						
.141 Sacaton Association			X									
.142 Sacaton Mesquite Assoc.			X									
.152 Mixed Grass-Mixed Scrub							X					
.155 Mixed Grass-Mixed Scrub					X							
.156 Mixed Grass-Mixed Scrub					X							
.157 Mixed Grass-Whitethorn		X										
.163 Burroweed-Mesquite							X					
.164 Burroweed-Mixed Scrub							X					
153.243 Mesquite-Mixed Scrub				X								
153.261 Catclaw-Mixed Scrub								X				
.215 Mixed Chihuahuan Scrub								X				
.221 Whitethorn Association								X				
.272 Mixed Chihuahuan Saltbush								X				
154.213 Creosote-tarbush	X											
223.231 Mesquite Association										X		
.232 Mesquite Short-tree Assoc.										X		
.211 Cottonwood-willow Riparian									X			
233.210 Riparian Scrub								X				
.221 Salt Cedar Bosque											X	
243.321 Bullrush-Sedge Association												X

Source: District Files

*

1 Creosote-tarbush
2 Mixed Grassland-Whitethorn
3 Sacaton-Grassland Mixed Scrub
4 Mesquite-Mixed Scrub Association
5 Upland Scrub Grassland
6 Bottomland Scrub Grassland
7 Disclimax Grassland
8 Chihuahuan Desert Scrub
9 Cottonwood-willow Riparian
10 Mesquite Bosque
11 Salt Cedar Bosque
12 Cienega

APPENDIX 4

VISUAL RESOURCE MANAGEMENT

The Bureau of Land Management's Visual Resource Management (VRM) system provides a method for analyzing and managing visual resources on public lands.

The basis of the VRM system is an inventory of visual resources. The components of the inventory are determinations of scenic quality, numbers of viewers, public attitudes regarding maintenance or modification of the scenery, the distance from which areas are viewed, and the existence of special considerations such as natural area or wilderness designations. All of these components are incorporated into a formula used to determine VRM objectives.

The management objectives for each VRM class are:

Class I: Preserve the existing character of the landscape. This class provides for natural ecological change; however, it does not preclude very limited management activity. The level of change to the characteristic landscape should be very low and must not attract attention.

Class II: 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.

Class III: Partially retain the existing character of the landscape. The level of change to the characteristic landscape should be moderate. Management activities may attract attention but should not dominate the view of the casual observer. Changes should repeat the basic elements found in the predominant natural features of the characteristic landscape.

Class IV: Provide for management activities that require major modification of the existing character of the landscape. The level of change to the characteristic landscape can be high. These management activities may dominate the view and be the major focus of viewer attention. Every attempt should be made to minimize the impact of these activities through careful location, minimal disturbance, and repeating the basic elements.

The VRM objectives are accomplished through the application of visual contrast ratings. These ratings are completed for all proposed modifications of the landscape. They compare the before and after scenarios and determine whether a proposed modification meets the objectives for a particular location. The rating also determines the mitigation that may be needed to lessen or eliminate impacts to visual resources.

APPENDIX 5

WATER RESOURCES

1. Surface Water

The major source of surface water for the acquired lands is the San Pedro River. The river enters the Palominas lands from Mexico, in the NE¼NW¼, Sec. 19, T. 24 S., R. 22 E., and flows in a northeasterly direction until the river leaves the Palominas lands in NW¼NE¼, Sec. 4, T. 24 S., R. 22 E. The river then enters the lower end of land grants in the SW¼SW¼, Sec. 22, T. 23 S., R. 22 E., flowing in a north-northeasterly direction, and exits from the upper land grant in the NE¼, Sec. 32, T. 18 S., R. 21 E. In the three miles of land between the two land grants, the river flows in and out of the administrative boundaries, mostly outside of the boundaries. The river channel briefly reenters the northern lands in the NE¼SE¼, Sec. 29, T. 18 S., R. 21 E., and leaves the lands in the SE¼NE¼ of the same section.

The San Pedro River originates in desert grasslands of northern Sonora, Mexico, and flows about 140 miles north to enter the Gila River near Winkelman Arizona. Its watershed of over 4000 sq. mi. includes most major vegetational life zones of North America, ranging from coniferous forests on mountains higher than 7400 ft. above mean sea level to Sonoran desert scrub at 1800 ft. elevation near the river's mouth. Much of the mainstream flows through structural basins over valley fill approaching or exceeding 1000 ft. thick. Its floodplain is usually a half mile or more wide, except where bedrock outcrops approach the stream near the Charleston area. Bedrock near the surface also promotes emergence of subterranean water, insuring sections of perennial flow. Zones of strong artesian pressure occur in the vicinity of Palominas and Hereford, and St. David and Benson.

The total watershed area of the San Pedro River is 4,483 square miles, 696 square miles of which is in Mexico. Total watershed area at Palominas—just south of the BLM property—is 741 square miles. The watershed is 2,500 square miles at Benson, which is 10 miles north of the property.

The inner valley of the modern San Pedro River is part of an alluvial river system; that is, it is a river which is formed in fluvial sediments transported, deposited, and reworked by the river, itself. The river and its riparian zone are thus dynamic systems undergoing constant adjustments in response to changes in runoff, sedimentation rates, and channel and floodplain conditions.

The San Pedro River is an important and unique perennial desert stream. However, by most accounts the river system is degraded both in terms of historic hydrologic condition and habitat diversity. That degradation is associated closely with the episode of river entrenchment that occurred between about 1880-1920 and resulted in the loss of cienega reaches and further incised already-existing entrenched reaches. Entrenchment set into motion a number of important adjustment processes—geomorphic, hydrologic, and biologic. Most of those adjustments are continuing today and if permitted to proceed more or less naturally may have profound influence on resource conditions along the San Pedro River.

Most of the San Pedro River mainstream today is incised. Downcutting is greater than 9 to 13 ft. where floodplains are narrow, but erosion progressed laterally in wider places to create a broad channel occupied by a relatively small wetted area during drought, and filled during floods by a turbid, erosive river. Discharge at Charleston has averaged 59 cfs over 65 years. Flow patterns are distinct, with flooding in winter and summer separated by spring and autumn droughts. A large percentage of total water yield occurs during infrequent flooding events, as characteristic of most lower elevation Southwestern streams.

Incision has resulted in declines in local water tables and drying of former floodplain features like ox bow lakes and marshes not fed by springs. Areas classed as dense riparian vegetation, marshland, river channel, and streambed all have been substantially reduced in the past five decades and were even more extensive a century ago. Yet, some parts of the river remain relatively unincised, and riparian vegetation grows as a dense and viable corridor where not cleared for agriculture. Only a few cienegas, floodplain lakes, and spring-fed marshlands persist (see map for location).

Following the rapid sequence of entrenchment, which occurred between 1880 and 1925, the San Pedro River has, and is continuing, to undergo an evolution to a new dynamic equilibrium condition which reflects current hydrologic and land use conditions. That evolution consists primarily of widening, bar development and the creation of floodplains. Widening is the primary prerequisite for reestablishment of stable floodplains vegetation communities, which then (in turn), contribute to sediment deposition and the development of properly functioning floodplains.

Characteristics of the low flow channel are generally similar along the length of the reach. The channel is extremely shallow, wide, and sand bedded throughout most of its length. Sand continues to be transported as bedload even during low flood periods. As a result, the channel is devoid of any significant pools, and banks are often either poorly developed or partially inundated by sand. There are several reaches (specifically at Charleston and near the Tombstone gage) where bedrock influences channel characteristics and some structural features, including small pools and developed banks, exist.

Surface flows in the San Pedro River occur as both rainfall runoff and groundwater discharge. The highest annual flows occur in the July-September period in response to short-duration, high-intensity thunderstorms. These flows are "flashy" and are characterized by extremely rapid rises, high peak flow rates, and rapid declines back to base flow conditions. A secondary period of rainfall runoff in the

winter is less flashy than summer events and generally produce much lower peak flow rates. Annual low flow periods commonly occur in May to June and November. Base-flows represent discharge from the floodplain aquifer, which in turn is recharged both by the regional aquifer system and by rainfall induced high flows. The river is perennial from the Hereford area to just below the Charleston Hills due to the discharge of ground water to the stream. However, base flows in perennial reaches are highly variable depending upon distance downstream. During the hot, dry season, flow in segments of the channel north of the Fairbank area will disappear into the streambed and may reappear for short durations further downstream.

Discharge rates are not only influenced by the amount and timing of runoff and groundwater discharges but also by channel and floodplain characteristics, and losses due to evaporation, phreatophyte transpirations, groundwater recharge, and man-made diversions and withdrawals. At present, the only surface diversion is just upstream from the northern boundary of the BLM property and owned by the St. David Irrigation District.

The St. David Irrigation District diverts the river flow into their irrigation ditch by means of a dam across the main channel, in the NE¼SW¼, Sec. 4, T. 19 S., R. 21 E. The earthen dam is often breached during a flood and is quickly rebuilt by the Irrigation District, usually within a week. The dam diverts up to 99 percent of the surface flow, but side channels (called siphons) are constructed at various points along the main ditch to return excess flow back to the river channel.

All of the tributaries of the river confined within the acquired lands have ephemeral flow, except the Babocomari River. The segment of the Babocomari River that lies within the lands is considered to have intermittent flow, but the segment is usually perennial during wet years. This stream flows into the San Pedro River near the Fairbank site. Green Brush Draw is another of the important tributaries, with its confluence to the San Pedro River located just inside the southern boundary of the lands. The headwaters for Green Brush Draw originate south of Bisbee and east of Naco, Arizona and Naco, Mexico. The flow is essentially ephemeral (short duration), flow occurs only after intense or long-duration storms.

The other surface water sources consist of eight permanent springs, one stock pond and several holding ponds in the vicinity of the two active gravel operations. These latter ponds were created as holding ponds for fines from the gravel crushing and washing operation, and as a source of water for gravel crushing. The springs are all undeveloped.

Discharge Data

The U.S. Geological Survey has operated three stream gages in or adjacent to the study reach at Palominas, Charleston, and near Tombstone. Streamgage information and Period-of-Record for each gage is described in Table 1.

Two of the streamgaging stations are located within the lands, and are maintained by the U.S. Geological Survey. The two stations are Charleston, located at the Charleston Bridge, and Tombstone, two miles northeast of the Fairbank Administrative Site.

The Charleston gaging station has measured continuous flow since 1912. For the 75 years of streamflow record, the least amount of flow measured to date has been 0.3 CFS in July, 1982. The Tombstone site has been operational since April 1967. The U.S. Geological Survey ceased operation of this station at the end of the 1986 Water Year. There are usually a number of days (30 or more) each year when no flow is measured at this station. The period of no flow is dependent upon the duration of the short-term droughts and the amount of precipitation falling on the watershed upstream.

The other gaging station on the San Pedro River is located near the town of Palominas, two miles south of the acquired lands. The station measures intermittent flow because irrigation in the area would tend to dry up the stream. This station had 39 years of records under the guidance of the U.S. Geological Survey. Since October, 1981, the station has been maintained by the International Boundary and Water Commission, El Paso, Texas.

Mean annual discharge in the San Pedro River at Charleston averages about 60 cfs over the 72-year period of record. Since 1932, the mean annual discharge at Palominas averaged 33 cfs. The mean annual discharge at Tombstone (1967-1984) averaged 54 cfs. Annual flows at Charleston are 79 percent higher than at Palominas. This is due in part to the larger contributing watershed and the correspondingly larger peak flows at Charleston, and in part to the substantial groundwater contribution to the stream between Palominas and Charleston.

Thorough analysis of annual discharge is provided in Putman, et al, (1987). A summary of annual discharge, total runoff volume (acre-feet), and annual winter-period and summer period peak flows is provided in Table 2 for the river at Charleston. Statistical summaries of mean annual discharge and total runoff volume are provided in Table 3. Median annual flows are discussed below.

Flow Data Computations

Mean monthly flows at the three streamgages are summarized in Table 4. Mean monthly flows provide a good index of average monthly runoff volumes. As indicated by the range and standard deviation statistics, mean monthly flows are highly variable from year to year.

Median monthly flows for all three streamgages are given in Table 4. Average median monthly flow is a good indication of daily flows likely to be encountered in any given month. Because of the skewed nature of daily flow distributions, median monthly flows are considerably lower than the corresponding mean monthly flow. Median monthly flows are also highly variable from year to year, but are somewhat less variable than mean monthly flow.

Flow Data

Annual mean daily flow-duration curves were developed for the San Pedro River at Palominas, Charleston, and Tombstone stream gates, (see Attachment 1). The curves show discharge plotted against the average percent of the time (in terms of days in a year) that discharge was equaled or exceeded. Thus, the curves indicate the average duration of both high and low flows and the 50 percent discharge is equivalent to the median daily discharge over a one-year period.

Median daily flows averaged 2 cfs at Palominas, 14 cfs at Charleston, and 12 cfs at Tombstone. At Palominas, discharge is less than 1 cfs about 37 percent of the time, and greater than 100 cfs less than 5 percent of the time. At Charleston, discharge is less than 10 cfs about 30 per-

Table 1
U.S. Geological Survey Stream Gages
on or Near the BLM San Pedro River Properties
BUREAU OF LAND MANAGEMENT
Safford District, Arizona

Gage	Location	Period of Record	Drainage Area (in sq. miles)
094705.00 (at Palominas)	T23S, R22E, Sec. 33	1932-1981	741 (696 in Mexico)
094710.00 (at Charleston)	T21S, R21E, Sec. 11	1902-1986+	1219 (696 in Mexico)
094715.50 (near Tombstone)	T19S., R21E, Sec. 28	1968-1986	1740 (696 in Mexico)

Source: U.S. Geological Survey

Table 2
Charleston, Annual Flow Data
Bureau of Land Management
Safford District, Arizona

Water Year	Mean Discharge cfs	Total Runoff Ac - ft.	Peak Winter (Nov.-Mar.) Flow, cfs	Peak Summer (July-Sept.) Flow, cfs
1905	62	44,880	669	287
1913	32.8	23,710	211	846
1914	106	76,540	1120	3000
1915	206	149,300	3000	1090
1916	47.2	34,280	400	1760
1917	125	90,181	105	5180
1918	28	20,290	20	920
1919	128	93,010	56	6050
1920	57.2	41,760	590	860
1921	140	101,500	19	6700
1922	50.4	36,500	23	1900
1923	58.3	42,230	33	3080
1924	34.8	25,260	562	524
1925	50.8	36,790	14	2400
1926	170	122,700	38	28,800
1927	71.4	51,660	60	2050
1928	27.7	20,070	27	350
1929	74.7	54,070	64	3650
1930	73.9	53,500	65	3590
1931	89.7	64,960	476	4090
1932	63.3	45,940	717	1720
1933	38.9	28,140	102	1430
1934				
1935				2000
1936	61.6	44,700	630	3400
1937	77.3	55,980	38	3880
1938	47.8	34,610	58	22,901
1939	68.8	49,800	625	3080
1940	80.6	58,490	163	9100

Table 2 (continued)
Charleston, Annual Flow Data
Bureau of Land Management
Safford District, Arizona

Water Year	Mean Discharge cfs	Total Runoff Ac - ft.	Peak Winter (Nov.-Mar.) Flow, cfs	Peak Summer (July-Sept.) Flow, cfs
1941	56.3	40,730	1720	2530
1942	32.8	23,720	164	852
1943	65.8	47,620	21	2910
1944	33.5	24,300	43	1240
1945	52.2	37,800	31	3190
1946	46.3	33,490	25	3760
1947	44.6	32,290	20	2910
1948	45.7	33,170	24	1530
1949	65.2	47,180	263	1880
1950	43.4	31,430	72	1950
1951	27.2	19,660	19	1010
1952	26	26,140	16	1840
1953	39.2	28,400	60	3330
1954	120	86,730	16	5690
1955	120	86,910	23	4050
1956	28.2	20,500	25	1330
1957	31.0	22,430	73	1400
1958	103	74,740	29	3890
1959	60.9	44,070	30	3960
1960	33.5	24,300	1250	479
1961	30.9	22,390	21	1010
1962	18.3	13,280	156	457
1963	46.4	33,630	14	2130
1964	75.6	54,910	45	5510
1965	22.3	16,130	23	929
1966	50.5	36,590	508	1230
1967	32.6	23,720	16	1622
1968	35.6	25,850	2400	402
1969	24.0	17,360	15	861
1970	36.3	26,280	20	1780
1971	70.4	50,980	19	2200
1972	34.1	24,780	26	2060
1973	28.4	20,550	482	572
1974	53.2	38,530	26	3410
1975	30.7	22,230	18	1550
1976	35.2	25,530	67	1400
1977	35.0	25,330	25	841
1978	119	86,090	263	86,090

Table 2 (continued)
Charleston, Annual Flow Data
Bureau of Land Management
Safford District, Arizona

Water Year	Mean Discharge cfs	Total Runoff Ac - ft.	Peak Winter (Nov.-Mar.) Flow, cfs	Peak Summer (July-Sept.) Flow, cfs
1979	113	81,630	7750	482
1980	13.2	9,590	23	287
1981	25.6	18,530	11	656
1982	23.1	16,740	12	1830
1983	41.3	29,870	585	665
1984	122	88,870	524	2930
1985	70.5	51,050	6090	1950

Source: U.S. Geological Survey

Table 3
Charleston Annual Flow Summaries
BUREAU OF LAND MANAGEMENT
Safford District, Arizona

Discharge	Dates	No. of Samples	Mean	S.D.
Mean Annual Discharge, cfs.	1905-1930	19	81.29	50.83
Mean Annual Discharge, cfs.	1931-1985	53	52.83	28.66
Mean Annual Discharge, cfs.	1905-1985	72	60.34	37.63
Mean Total Runoff, Ac - ft.	1905-1985	72	43,707.22	27,242.57
Mean Total Runoff, Ac - ft.	1931-1985	53	38,277.17	20,765.38
Median Mean Annual Discharge, cfs.	1905-1985		49.1	
Median Mean Annual Discharge, cfs.	1931-1985		44.6	
Mean Winter Peak Flow	1905-1930	19	373.42	706.23
Mean Summer Peak Flow	1905-1930	19	3,866.05	6,334.84
Mean Winter Peak Flow	1905-1985	72	461.79	1,227.70
Mean Summer Peak Flow	1905-1985	73	3,781.85	10,384.58
Mean Winter Peak Flow	1931-1985	53	493.47	1,371.65
Mean Summer Peak Flow	1931-1985	54	3,759.96	11,526.84

Source: U.S. Geological Survey

cent of the time, and greater than 100 cfs less than 10 percent of the time. At Tombstone, discharge is less than 1 cfs over 10 percent of the time, and greater than 100 cfs about 7 percent of the time.

Low Flow Analysis

Annual 1-day, 7-day, 30-day, and 90-day low flows were analyzed for means, standard deviations, and trends over time at the Charleston and Palominas gages. The period of record at Tombstone gage was deemed to be too short for a meaningful low-flow analysis. In addition, mean monthly flows for May and November (the normal low flow months) were analyzed.

Mean annual low flows at Charleston for the 1931-1984 period ranged from 2.36 cfs for the 1-day low flow to 7.78 cfs for the 90-day low flow. For the entire 1914-1984 period of record mean annual low flows at Charleston ranged from 2.27-7.63 cfs, respectively, for the 1-day and 90-day low flow period. Low flows have declined over time at Charleston for both periods of record and for all low flow periods (1-day to 90-day). That decline is highly significant ($p = 0.99$) for all low-flow periods during the 1931-1984 period of record, and is also significant for the 1914-1984 period of record (see Attachment 2).

Mean annual low flows at Palominas for the 1932-1981 period ranged from 0.18 cfs for the 1-day low-flow period to 1.67 cfs for the 90-day low-flow period. As at Charleston, low flows are declining over time ($p = 0.99$) for all low flow periods. Since 1950 it is common to have zero flow for both the 1-day and 7-day periods, and not uncommon to have zero flow for the 30-day period.

May and November flows at Charleston average 8.96 cfs and 17.44 cfs respectively and also show significant declines over time. May flows at Palominas average 1.32 cfs and also show significant declines over time. Conversely, November flows at Palominas average 5.10 cfs and do not show a significant decline over the period of records.

It is only possible to speculate as to the causes of declining base flows in the river. However, since base flows are keyed to the discharge of groundwater to the stream from the floodplain aquifer, it is clear that less groundwater is finding its way to the stream channel. Reductions in groundwater inflow could be caused by: (1) reduced recharge of the floodplain aquifer by the regional aquifer; (2) reduced recharge of the floodplain aquifer by surface runoff (high flows); (3) increased use of the floodplain aquifer through pumping; (4) increased use of the floodplain aquifer by phreatophytes; or (5) increased loss of floodplain aquifer water to the regional aquifer.

It does not appear that declines in base flows can be attributed to declines in overall runoff in the basin. Also, it is unlikely that changes in phreatophyte use or losses to the regional aquifer have significantly affected base flows. Thus, it can be deduced that either groundwater pumping in the floodplain aquifer, reduced recharge from the regional aquifer, or a combination of both have contributed to the lower base flows recorded at both gages.

Gain-Loss Analysis

The analysis of the streamgage data at Palominas, Charleston and Tombstone suggests that the San Pedro River baseflows increase greatly between Hereford and Charleston, and then decreases somewhat by Tombstone. For example, the annual median flow at Palominas is 17,808 ac-ft; is 30,400 ac-ft at Charleston; and is 34,300 ac-ft at Tombstone (Putman, et al., 1987). Similarly, 1-day 7-day, 30-day, and 90-day low flows as well as mean May and November flows were shown above to increase greatly between Palominas and Hereford. Putman, et al. (1987) found the average monthly gain in the San Pedro River between Palominas and Charleston for December-March of the 1967-1981 period to be 635 acre-feet per month.

Putman, et al. (1987) suggest two reasons for the large gains in base flows between Palominas and Charleston. First, this is an area of recharge to the floodplain aquifer from the regional aquifer. In fact, several wells in the region which tap into the regional aquifer are under artesian conditions. Secondly, bedrock at the Charleston Hills immediately downstream of the Charleston gage is believed to serve as a barrier to shallow groundwater flow, thus forcing shallow groundwater to the surface.

The gain-loss analysis clearly indicates the close interdependency between surface water flows and the groundwater system.

To further quantify baseflow gains and losses within the study reach, seven locations were selected for regular stream gaging. The results, as of May 1986, of that gaging record suggest that the streamflows increase an average of 27 percent between Hereford and the bridge at Lewis Springs, and 49 percent between Lewis Springs and Charleston. From Charleston to a location just downstream of the Charleston Hills flows tended to decrease an average of 5.4 percent. Between Charleston Hills and the bridge at Fairbank flows tended to increase slightly by about 5.3 percent. Average discharge then increased by 9 percent between Fairbank and Tombstone gage, and decreased by 16.6 percent between the Tombstone gate and a point upstream of the St. David Diversion.

Quantification Study

In order to achieve a better understanding of the unique surface groundwater relationship occurring within the lands, and with an urgent need to quantify and evaluate water-related management strategies, the District Office (via the BLM State Office) submitted a request in mid-1986 to the BLM's Denver Service Center (DSC) to prepare a plan for a proposed water resources assessment project for the San Pedro lands. The plan was written and accepted by October. The purpose of the project was to assist district planning by providing water resource information for land use planning, and to quantify the relationship between surface and groundwater resources, while developing a strategy for the acquisition of an instream flow water right.

An interdisciplinary team was formed representing key water resource conditions, values, and issues. The objective was to develop expert analyses to various components of the water resources management issue, and to facilitate interaction between specialists in evaluating alternative management objectives and strategies. Disciplines represented on the project team included surface water hydrology/geomorphology, groundwater hydrology, fisheries, riparian vegetation, recreation, and water rights. Literature reviews and interviews with various professional contacts were conducted during November and December 1986. In December, the team of specialists from DSC toured the lands. The team, consisting of a Surface Groundwater Hydrologist, Hydrologist, Fisheries Biologist, Water Rights Specialist, and a Recreation Planner, was

accompanied by Arizona State Office and District personnel. The team members walked the length of the study area to subjectively evaluate conditions, processes, issues and interactions. Aerial photography of the entire study reach was acquired and used to help evaluate, stratify, and select field survey locations.

A detailed field survey was conducted in January 1987. A number of riparian area cross sections were surveyed, a series of riparian area watertable observation wells were installed, riparian vegetation was described and measured along cross sections, and bi-weekly stream gaging was initiated at various locations. Field sampling locations are located in Table 5. Throughout the study, information was collected on water rights affected by the San Pedro River.

The interdisciplinary team prepared a report on their findings that was issued in 1988. The report is titled "Assessment of Water Conditions and Management Opportunities in Support of Riparian Values: San Pedro River". Data is being continuously collected and analyzed, with a final report to be issued during 1988.

2. Groundwater

Hydrogeologic Setting

The Upper San Pedro Basin contains several hundred feet of consolidated and unconsolidated sedimentary deposits most of which are capable of transmitting ground water. These deposits may be more than a thousand feet thick in the southern part of the Upper San Pedro drainage basin, where Basin and Range type faulting has produced a deep graben structure allowing extremely thick deposits of sedimentary deposits to accumulate. The hydrostratigraphic units of importance in the study area are the lower and upper units of the basin fill, and the overlying floodplain deposits. These units form the regional and local aquifers, respectively.

The lower unit of the basin fill consists of interbedded sandstone and gravel that ranges in thickness from 250-500 ft. Gravels within this unit locally contain much silt and other fine-grained sediments; thus decreasing permeability in some zones. The upper basin fill overlies the lower basin fill, and consists of reddishbrown clayey and silty gravel beds near the mountains, changing laterally basinward into a more silty and sandy facies. The upper and lower basin fill behave as one hydrogeologic unit. Vertical and horizontal facies changes within these units result in a very heterogeneous system. This diminishes any hydrologic differences that might exist between the two units.

The floodplain alluvium consists of unconsolidated gravel, sand and silt derived from erosion of the surrounding pediment gravels and mountains and hills on either side of the San Pedro River. These alluvial deposits are about ¼ to 1½ miles wide, and are exposed along the San Pedro River and its major tributaries, such as the Babocomari River. The floodplain aquifer supplies shallow ground water to wells, and provides water to the San Pedro River. The flood plain aquifer is a thin unit; as thin as 10 ft. in some areas, and reaching a maximum thickness of perhaps 150 ft. Because of the unconsolidated character of this unit, its permeability is high, and water withdrawal by wells is rapidly replaced by recharge from infiltration of streamflow during periods of runoff. Most of the irrigation wells in the valley obtain water from this unit.

Artesian aquifers occur at both the north and south ends of the study area; in the Palominas-Hereford area (south of the study area), artesian conditions exist in zone about 1 mile wide and 10 miles long. In this area, beds of older alluvium contain at least seven sand and gravel members which are all overlain by confining clay beds which produce the artesian conditions. Further north, in the St. David area, artesian conditions exist over a larger area. In this area, there are actually two artesian zones. One zone is about 250 feet deep, and the other about 500 to 1,400 feet deep. The study area is primarily under unconfined (water table) conditions, and water freely moves into, or out of the San Pedro River, depending on the water level within the flood plain aquifer.

Perched aquifers are found locally within the basin fill aquifer. The ground water gradient along this section is 311 ft/mile, which is much too steep to be consistent with the regional ground water gradient, which is more on the order of 16 ft/mile. Perched aquifers are sufficient to provide water wells with limited yields, several ranches in the San Pedro Basin are supplied with water from these sources. Perched aquifers may be more common in this area than once surmised. Certainly the interbedded clay deposits which are common in this hydrogeologic setting, provides the framework for the existence of perched aquifers.

Ground Water/Streamflow Relationships

The saturated basin fill is an integral part of the ground water/streamflow regime in the Upper San Pedro Basin. Ground water contributes flow to the San Pedro River from two sources: (1) by contributions of flow from the basin fill, and (2) contribution from underflow within the floodplain aquifer which originates in the watershed in Mexico.

Groundwater recharge to the basin fill occurs in two ways: (1) percolation into the sediments along the mountain fronts, and (2) infiltration of precipitation into the flood plain aquifer from gullies and washes that have incised into the porous sediments of the floodplain aquifer. Ground water moves downgradient from the mountain fronts toward the San Pedro River which is the discharge point for most of the ground water system. Here the ground water flows into the San Pedro river channel and maintains its flow. Where artesian conditions exist, water is discharged to the San Pedro River from the basin fill via vertical leakage upward through overlying confining beds of clay and silty clay. This contribution to the flow of the San Pedro River is very minimal, because the hydraulic characteristics of the bedded sedimentary deposits such as those that are found here. The hydraulic conductivity of these deposits in the vertical plane is generally much lower than that horizontally, where water can easily flow laterally through very permeable gravel lenses. Movement of ground water vertically is severely limited by the intervening clay layers; flow across these layers is a function of how discontinuous or fractured they are.

Ground Water in the Riparian Zone

The riparian zone is part of the flood plain aquifer. The sediments of the floodplain aquifer are generally very porous, and water is easily transmitted through the gravel and sand of this unit. Permeability is considered to be much

Table 5
Field Sampling and Survey Locations
BUREAU OF LAND MANAGEMENT
Safford District, Arizona

Well Name	Legal Description	Distance From River
Hereford 1	T.23S., R.22E., Sec. 10 NESENE	128′
Hereford 2	T.23S., R.22E., Sec. 9 SWSESE	360′
Cottonwood 1	T.22S., R.22E., Sec. 17 SWSWNE	58′
Lewis Spring	T.21S., R.21E., Sec. 31 SESESE	242′
Boquillas 3	T.20S., R.22E., Sec. 22 SENENW	129′
Boquillas 2	T.20S., R.22E., Sec. 22 SENENW	178′
Boquillas 1	T.20S., R.22E., Sec. 15 SENWSE	139′
Contention	T.19S., R.21E., Sec. 21 NENESW	131′
Summers	T.19S., R.21E., Sec. 8 SWNESE	156′
Diversion Dam	T.19S., R.21E., Sec. 4 SESWSW	305′

Source: Safford District

higher in the floodplain sediments than in the basin fill deposits.

At the outset of the DSC study, it was not known at what depth the ground water existed within the floodplain aquifer on the San Pedro River. Very little research is available in the literature on specific studies of riparian ground water relationships. The ground water regime of the riparian zone and its relationship to the basin ground water system must be evaluated. The impact of nearby pumping for irrigation and for domestic and municipal water supplies are also of interest.

In order to evaluate and document the existence of ground water within the riparian zone, a total of 11 well points were installed along the river within the floodplain sediments between Hereford and St. David. Well points are an easy and inexpensive way to evaluate shallow ground water. Locations were selected which would provide ground water information to complement streamflow measurements and the geomorphic crosssections of the river bed. Well points were installed at locations close to the river as well as at a considerable distance away, at the edge of the riparian zone. The well point locations ranged from 58 to 1060 ft. from the river. Some well points were driven by hand into the floodplain aquifer, and some were installed into auger holes drilled for this purpose.

The well points were constructed of low carbon steel, having continuous slot, wire wound design, with a slot opening of .010 in. This design allows the unimpeded flow of water from the floodplain sediments into the well, and is an excellent method where sediments are soft. Because of the efficient design and large open area per foot of screen, they are useful in areas where the permeability may be low.

Ground water was found at each installed well point. Only one well point location was unsuccessful; this was because the well point encountered shallow bedrock which prevented penetration into the water table.

Ground water is flowing throughout the riparian zone, as demonstrated by the existence of ground water in each of the well points. Water was encountered at or near the river level in all cases, due to the water table being almost flat within the riparian zone. The depth to water in the well points ranged from 5.13 to 15.50 ft. below land surface. The floodplain sediments are saturated throughout their extent, providing water to riparian vegetation even at the most distant locations from the river, where very mature cottonwoods are established.

The existence of ground water throughout sediments in the riparian zone is consistent with the hydrogeologic framework of the flow system. Ground water flow in the basin-fill aquifer is toward the San Pedro River, and riparian zone, driven by the hydraulic gradient which has the river as its low-point. Evaluation of water levels in wells in the basin fill on both the west and east sides of the San Pedro River shows that ground water exists within the upper basin fill, at an elevation which is higher than the river. Thus, the ground water gradient is driving water laterally within the upper basin fill toward the river, draining into the floodplain aquifer, through direct hydraulic connection. Construction of a flow net based on water level contours of the basin fill aquifer, show the movement of ground water from the basin fill aquifer to the San Pedro River. Because of the high hydraulic conductivity of the floodplain sediments, water flows easily into these sediments from the basin fill aquifer.

Water levels in the floodplain aquifer respond rapidly to changes in stage of the San Pedro River. During periods of high flow, the stream recharges the floodplain aquifer, and during periods of high flow, the floodplain aquifer contributes water to the river, maintaining the base flow of the river. However, because of the very high permeability of the floodplain sediments, the flood flows rapidly dissipate, and the river returns to base flow within a few days. The floodplain aquifer does not store large amounts of water which is then available to sustain a higher base flow for any length of time. The thickness of deposits is not sufficient to store large amounts of ground water. The river base flow is quickly returned to the pre-flooding level. Most of the water from floods travels downstream either in the watercourse, or as underflow within the sediments of the floodplain aquifer.

Analysis of Floodplain Well Data

Floodplain well data were analyzed to determine: 1) the depth to groundwater within the riparian zone; 2) seasonal variations in riparian zone groundwater elevations; and 3) correlations (if any) between riparian one groundwater

elevations and streamflow. In addition, data from selected wells in the floodplain aquifer were analyzed to determine if any trends existed over time in groundwater elevations and if changes in groundwater elevation might correspond to changes in either mean monthly flow or to be base flows (defined as the 90-day annual low flow).

The analysis of well data is hindered by the short period of record available for the BLM-riparian zone observation wells, and by both the short periods of record and the erratic frequency of records (especially when compared to surface flow records) available for deeper wells in the floodplain aquifer. The short period of record makes trend analyses difficult. The erratic and intermittent frequency of data makes correlations with streamflow difficult to detect. In addition, the storage capacity of the floodplain aquifer makes it effective in buffering abrupt changes in streamflows, another factor which confounds relationships between stream discharges and water table elevations.

BLM Riparian Monitoring Wells

Since the installation, the monitoring wells and stream flow have been measured on a regular time schedule - twice a month for the flow and three times a month for the wells. The data has been submitted to DSC for analysis. The measurements of the groundwater and streamflow will continue for at least several years on a similar schedule, as discussed above.

As described above, all of the monitoring wells encountered the water table at approximately the same elevation as the stream water surface. During the February dormant vegetation season, small groundwater gradients toward the stream existed. These gradients support the notion that lateral inflows from the regional aquifer play an important, and measurable, role in maintaining base flows. As vegetation began to utilize water in March and April, riparian water tables began to decline and continued to decline until the late summer rains. These declines corresponded to general declines in streamflow. With the first storms, the water table quickly recovered. The depth to groundwater between wells varied, of course, depending upon the geomorphic position of the wells. Continued monitoring of well water elevations will be required to develop annual patterns of groundwater elevation change. The current data are too sparse to show any long-term trend, but the mechanisms of water use in the riparian zone is emerging.

Water Sources Inventory

To date, 28 wells have been located, inventoried, and mapped within the originally acquired lands. Two of the wells are unusable and two were installed by the Bureau of Reclamation for groundwater monitoring purposes. Eight wells are currently in use and the rest could be put into operation with the installation of pumping equipment or a power source and some maintenance. Ten of the wells supply water for irrigation; one is used for an industrial operation; four furnish water for domestic use and the rest have been or are being used for livestock watering. Most of the irrigation equipment is still in place. Where depth-to-water can be measured, the depth ranged between 12 to 35 feet. These measurements include several of the irrigation wells.

The eight springs and three ponds have also been inventoried and mapped. Those sources were described earlier in this section.

Since the acquisition of the original San Pedro lands, additional lands have been acquired and included within the boundaries since late 1987. Any existing water sources on the additional lands have not been inventoried to date. The inventory phase will continue until all sources are located and mapped. There are a number of wells and several stockponds known to exist on the recently acquired lands.

3. Water Quality

The quality of the surface water is generally considered good. Over the years, water quality of flow in the river has been measured by a number of entities (U.S. Geological Survey, Arizona Department of Health Services, Arizona Game and Fish Department, Arizona Governments Organization, U.S. Fish and Wildlife Service, and Gray Action Triangle Group), usually in response to the many pollution spills that have occurred in the upper watershed. Spills usually occur when intense rainstorms cause the holding ponds, for sewage or mining wastes, to overflow or breach. On occasion, the sewage and/or mining wastes may have been intentionally, or accidentally released, usually to create more storage capacity.

In December of 1978, an intense storm caused breaching of the holding ponds at the Cananea mining complex. The spill released highly acidic mining waste that extensively poisoned the entire length of the San Pedro River, to the confluence with the Gila River at Winkelman. The river was declared void of most, if not all, living organisms. One year after the disastrous spill, Southeastern Arizona Governments Organization (SEAGO), in cooperation with the Arizona Department of Health Services (ADHS), initiated water quality measurement of the river flow and of a number of selected wells located adjacent to the river. The area of measurement included the section of the river from Palominas to Winkelman. The measurements were taken monthly over a period of one year. A number of chemical and biological parameters, including heavy metals, were analyzed. A report was prepared in 1981. Although a number of smaller mining-related spills have been detected over the intervening years, the river system has fully recovered, and is considered relatively healthy.

Recovery from the 1979 event was surprisingly rapid. Invertebrates, fish (longfin dace), and acceptable water quality all were recorded four months after the mine spill subsided. According to Eberhardt (1981) problems associated with the event were corrected at the Cananea Mine.

Another water quality problem is the high suspended sediment load carried by the river during and after high intensity or long duration storms. This sediment load is largely derived from the on-going erosion of the surrounding desert lands. Some sediments are introduced into the river from returned irrigation waters and from industrial operations working on or adjacent to the river. The mean annual sediment discharge range between 0.5 to 1.0 acre-feet per square mile/per year.

On occasion, large amounts of organic materials have been observed floating down the main river, usually after high-intensity storms. Green Brush Draw is usually the suspected source of sewage-polluted water. This pollution

may come from overloaded or breached sewage holding ponds in the vicinity of the headwaters.

During Fiscal Year 1987, Geological Survey re-established a water quality monitoring station at the Charleston stream gaging site. They will periodically collect samples for analysis of a number of biological and chemical parameters. This monitoring is expected to continue for several years, if funding is available. The Bureau will participate in this effort by providing partial funding each year.

Personnel from the ADHS continue to collect water quality data along the segment of the river between Palominas and St. David. They collect the data on a bi-monthly schedule. Their data is entered into the Environmental Protection Agency's Computerized Management System which establishes a water quality data base. Their data is also entered into the Arizona Department of Environmental Quality agency's water data base.

During mid-1986, the District initiated a water quality program for the area. Water quality was measured for streamflow, and several wells and springs. The District contracted with a State-approved laboratory to analyze water samples for 23 biological and chemical parameters. In July, samples were collected from the two wells at the Fairbank Administrative Site and submitted to the laboratory. The analysis was undertaken to ensure the suitability of the water for human consumption when the administrative site became operational. In August, samples were collected from four sites on the main channel and from one on the Babocomari River. In September, samples were taken from two sites on the main river. The results of the above analyses are given in the appendix. For the samples collected on the river in August, only copper, lead, iron, and manganese exceeded established standards, by wide margins. The September samples were well within established limits. The samples from the wells were within the accepted standards.

During Fiscal Year 1987 the District collected additional data at most of the springs and from selected sites on the river at intermittent intervals. See the Attachment 3 for information on the District's data collection.

4. Water Rights

The Huachuca Audubon Society submitted an "Application for Permit to Appropriate Surface Water" to the Arizona Department of Water Resources in August of 1985 to acquire an instream flow water right. The water right was requested for the segment of the San Pedro River from Hereford to Benson. After the Bureau took ownership of the lands, the instream flow water right was reassigned to the Bureau. Because the river system is extremely important to the management of the lands, the Bureau will exert every effort to perfect an appropriate water right.

The San Pedro Watershed is currently undergoing an adjudication proceedings under the direction of the courts and with guidance from the Department of Water Resources. These proceedings will consider all submitted water claims and determine the apportionment of the existing water resources.

The Denver Service Center's report for the San Pedro acquired lands recommended specific quantities of flow for each month. Those quantities were based on a percentage of the median daily flows for each month of the year. Flows were recommended from the Palominas and Charleston/-Tombstone gaging stations. See Table 6 for the recommended instream flows. Please refer to the DSC report for the explanation of the recommended quantities of flow.

The St. David Irrigation District's water right for the diversion dam dates back to the 1890's. The diversion of water which is located on the northern end of the lands, has averaged 500 acre-feet per month during the irrigation season. There is no other appropriation of surface water on the segment of the river south of St. David, other than this diversion.

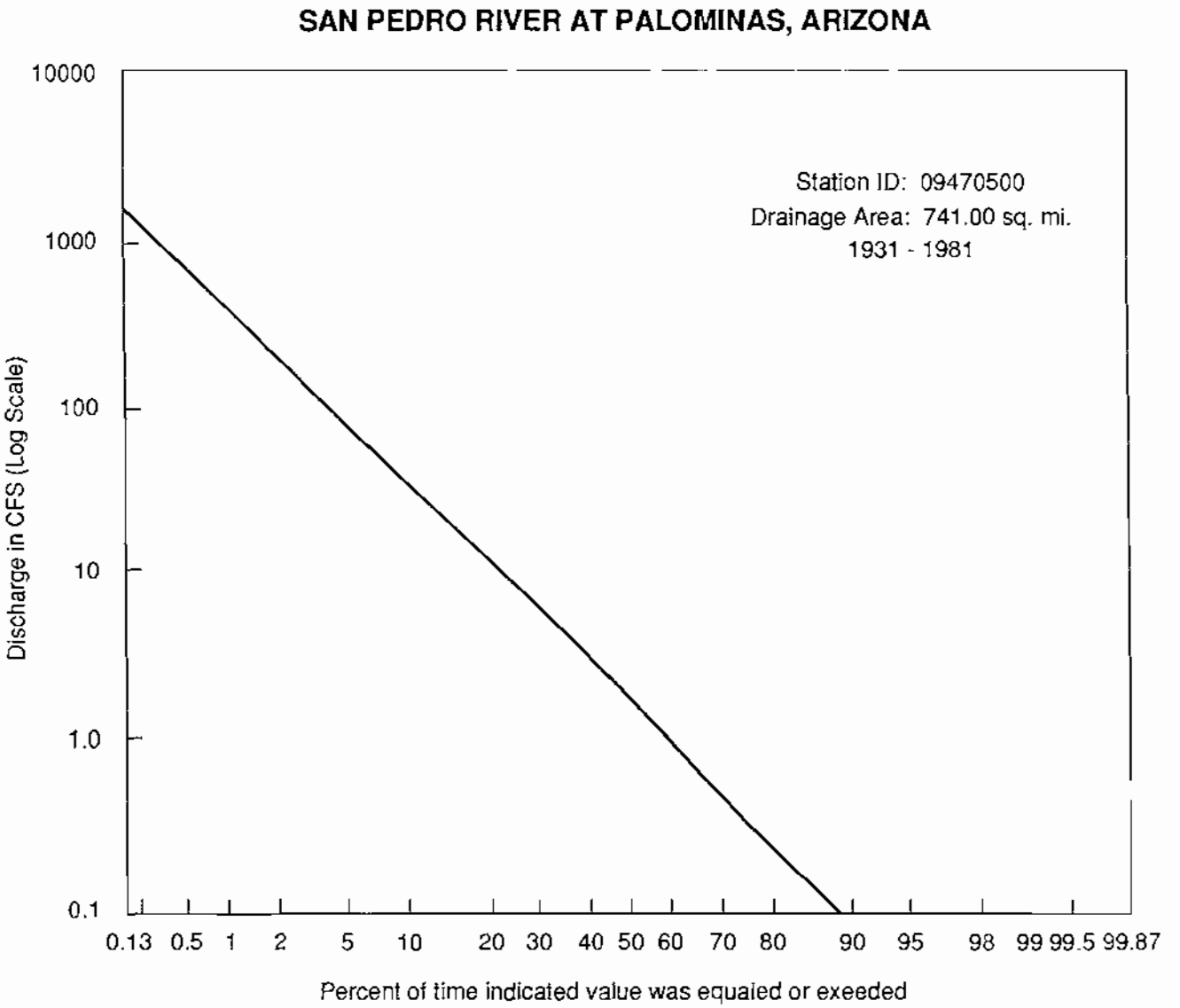
Of the 28 water-supply wells inventoried to date, the ownership of 21 wells has been reassigned to the Safford District. The District is waiting for the remaining assignment forms from the previous owners. The Certificate of Water Rights for each of the eight springs have been reassigned by the former owners.

TABLE 6
Recommended Instream Flows for the BLM San Pedro River Properties
BUREAU OF LAND MANAGEMENT
Safford District, Arizona

		Flow Recommendation, cfs	
Period	Month	Palominas	Charleston/ Tombstone
Fall	Oct.	3.7	11.0
	Nov.	3.6	12.2
Winter	Dec.	5.5**	17.1**
	Jan.	7.2**	19.5**
	Feb.	8.6**	20.3**
	Mar.	6.3**	18.9**
Spring	April	2.5	12.2
	May	1.2	7.9
	June	0.6	4.2
Summer	July	7.0*	19.0*
	August	7.0*	19.0*
	Sept.	7.0*	19.0*

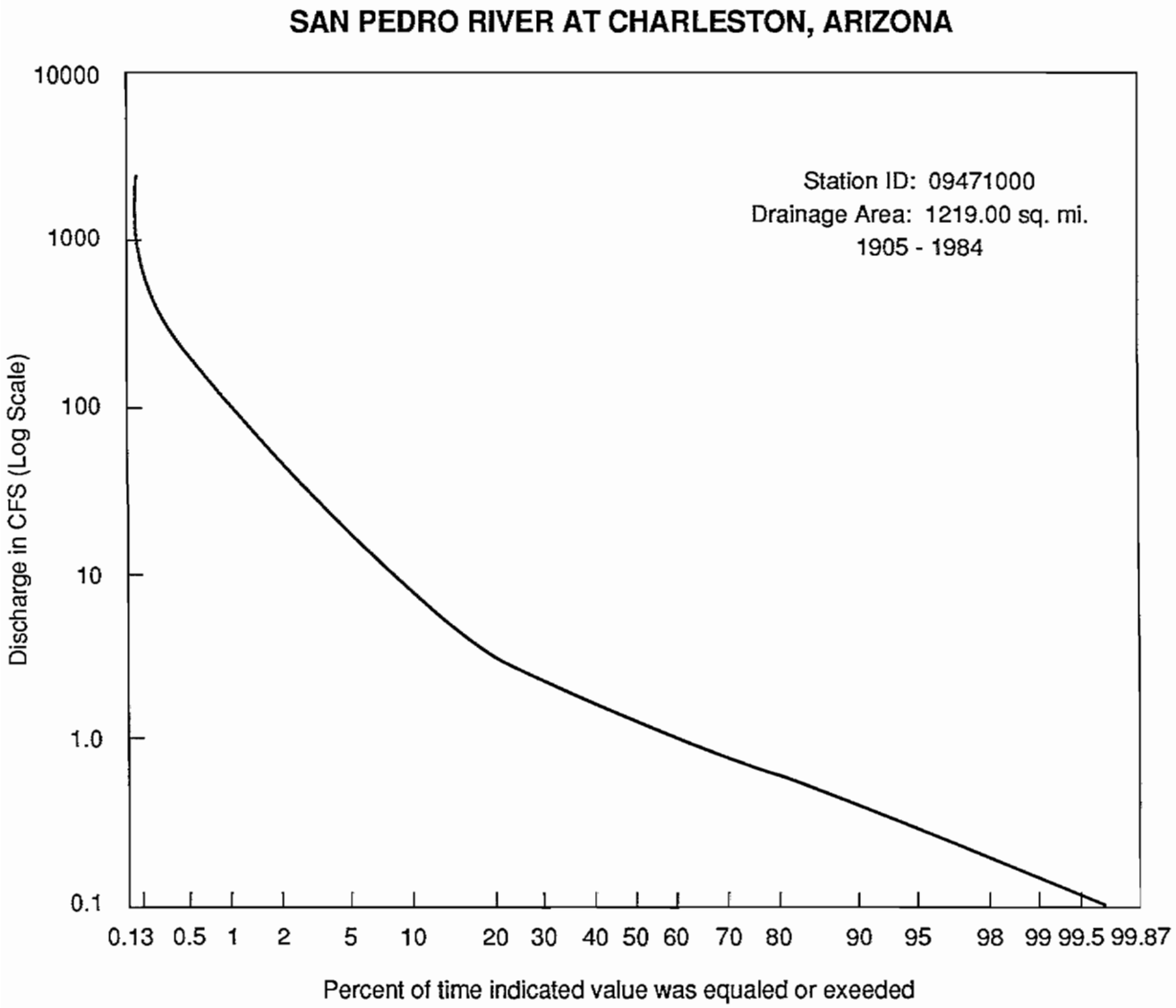
Source: BLM, Denver Service Center
* This value or 60% of the instantaneous flow, whichever is greater.
** This value or 80% of the instantaneous flow, whichever is greater.

FIGURE 1



SOURCE: U.S. Department of Interior - Bureau of Land Management. 1987. Assessment of Water Conditions and Management Opportunities in Support of Riparian Values: San Pedro River (Draft) Denver, Colorado: BLM Denver Service Center.

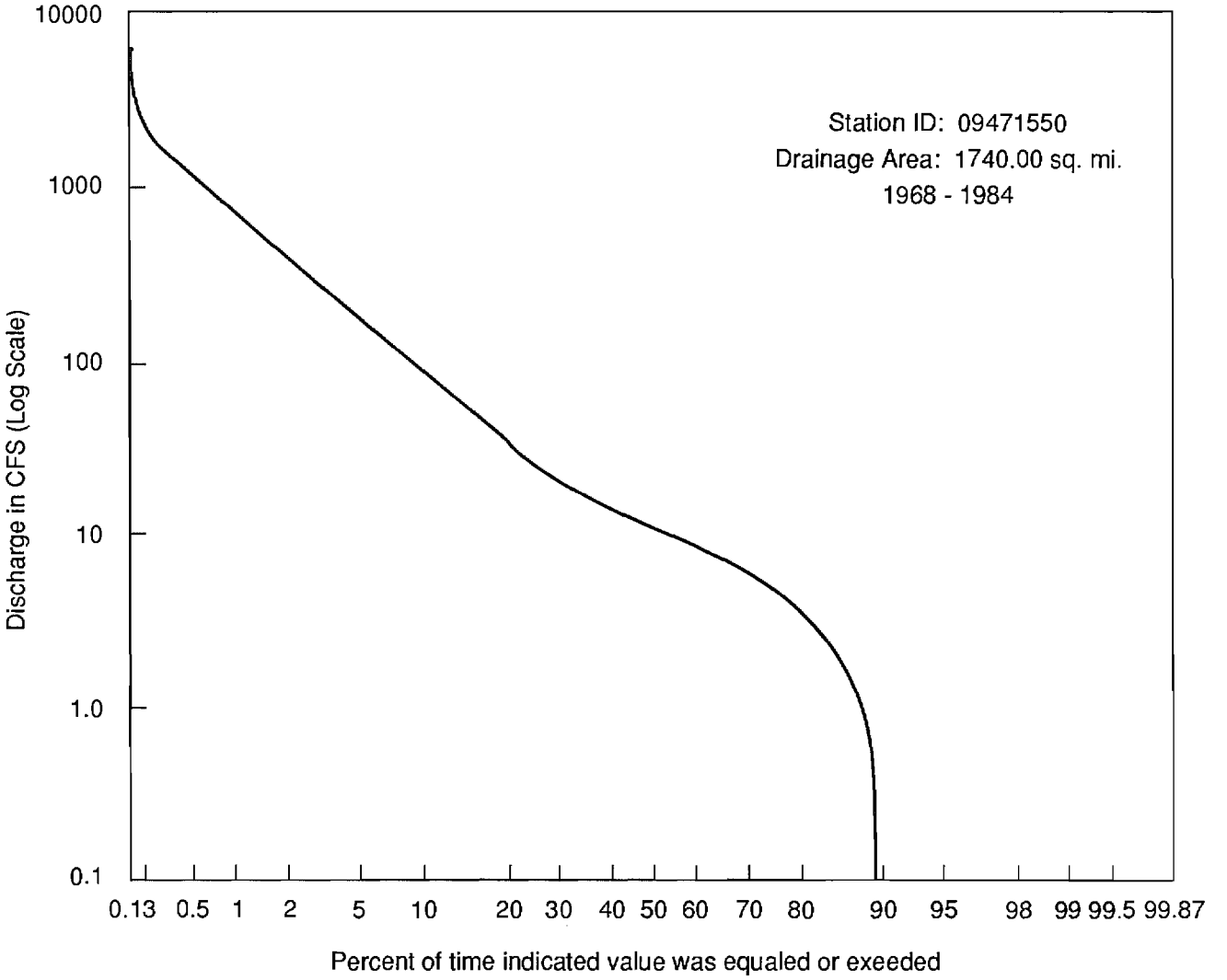
FIGURE 2



SOURCE: U.S. Department of Interior - Bureau of Land Management. 1987. Assessment of Water Conditions and Management Opportunities in Support of Riparian Values: San Pedro River (Draft) Denver, Colorado: BLM Denver Service Center.

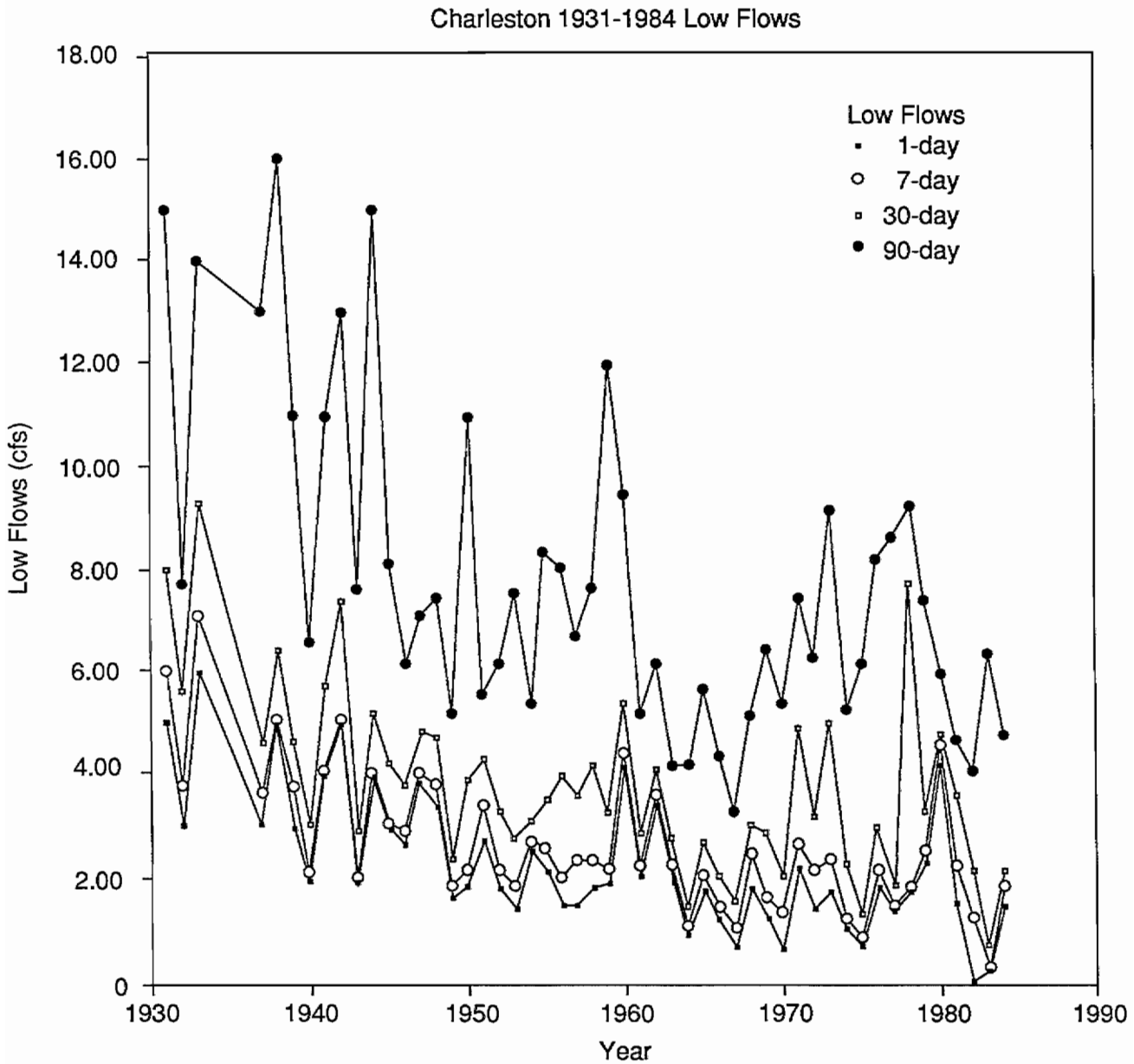
FIGURE 3

SAN PEDRO RIVER NEAR TOMBSTONE, ARIZONA



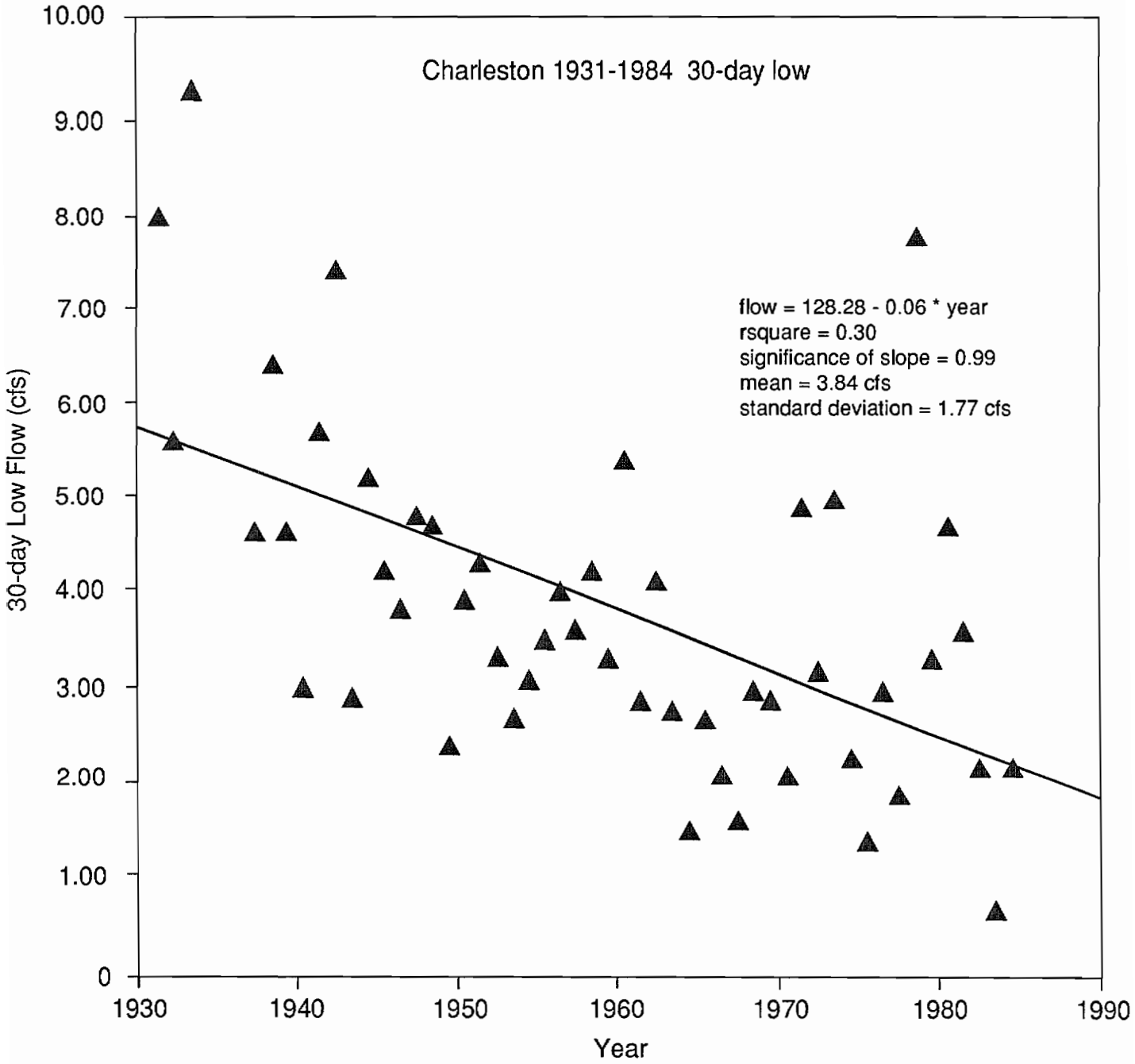
SOURCE: U.S. Department of Interior - Bureau of Land Management. 1987. Assessment of Water Conditions and Management Opportunities in Support of Riparian Values: San Pedro River (Draft) Denver, Colorado: BLM Denver Service Center.

FIGURE 4



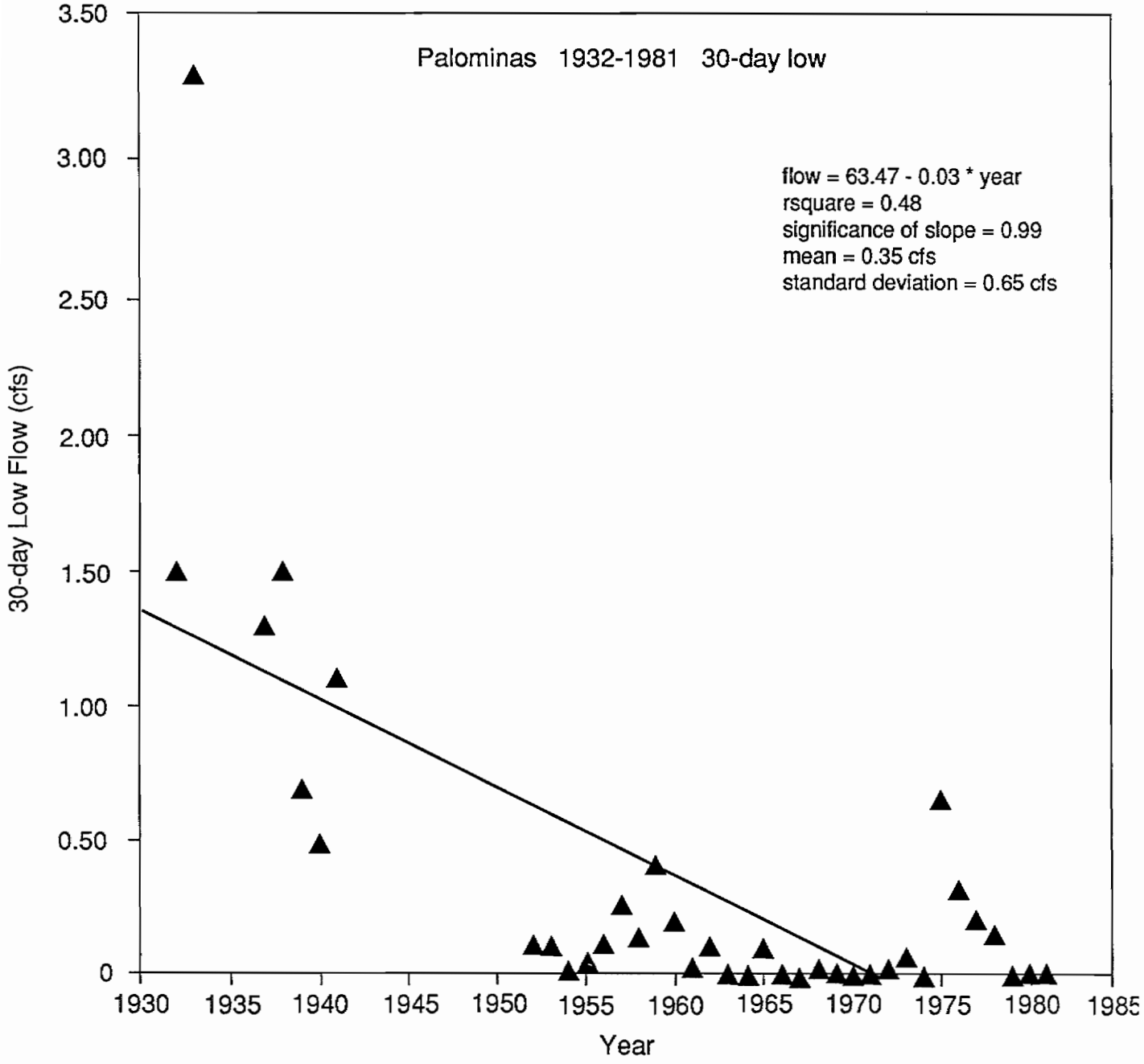
SOURCE: U.S. Department of Interior - Bureau of Land Management. 1987. Assessment of Water Conditions and Management Opportunities in Support of Riparian Values: San Pedro River (Draft) Denver, Colorado: BLM Denver Service Center.

FIGURE 5



SOURCE: U.S. Department of Interior - Bureau of Land Management. 1987. Assessment of Water Conditions and Management Opportunities in Support of Riparian Values: San Pedro River (Draft) Denver, Colorado: BLM Denver Service Center.

FIGURE 6



SOURCE: U.S. Department of Interior - Bureau of Land Management. 1987. Assessment of Water Conditions and Management Opportunities in Support of Riparian Values: San Pedro River (Draft) Denver, Colorado: BLM Denver Service Center.

ATTACHMENT 3
San Pedro River Water Quality Analysis, 1986
Safford District, Arizona

Dates	08/20					09/23		11/19	
Sample Types	Above Green Brush Draw	Hgwy. 90	Charleston Bridge	Baboco-mari River	Fairbank Bridge	Above Green Brush Draw	Summers Well	Above Green Brush Draw	Standard
Flow CFS	35 est.	38 est.	55 est.	2.5 est.	75 est.	3.8	4.3	7.8	—
pH Field	—	—	—	—	—	8.3	8.1	8.1	
Lab	7.6	7.9	8.0	8.0	8.0	8.1	7.9	—	9.0 Max.
Total Susp. Solids	272	256	292	30	410	6	1	—	—
Hardness	181.0	1730	1546	145.5	149.7	215.0	184.6	—	—
Total Dissol. Solids	152	165	165	268	165	388	344	—	500.0 mg/L
Sulfate	100.5	128	85.5	29.9	120	102.9	85.5	—	250.0 mg/L
Copper	0.262	0.26	0.09	0.06	ND	0.03	0.02	—	0.05 mg/L
Manganese	0.084	ND	ND	ND	0.25	0.01	0.02	—	0.05 mg/L
Arsenic	0.006	0.008	0.006	ND	0.008	ND	ND	—	0.05 mg/L
Cadium	0.032	ND	ND	ND	ND	ND	ND	—	0.01 mg/L
Chromium	0.019	0.024	0.018	0.04	0.003	0.03	0.03	—	0.05 mg/L
Lead	0.040	0.141	0.15	0.174	ND	ND	ND	—	0.05 mg/L
Selenium	ND	ND	ND	ND	ND	ND	ND	—	0.01 mg/L
Silver	ND	ND	ND	ND	ND	ND	ND	—	0.05 mg/L
Zinc	1.88	ND	ND	ND	0.11	0.006	ND	—	5.0 mg/L
Iron	4.10	0.301	0.60	.70	13.0	ND	0.008	—	0.3 mg/L
Mercury	ND	ND	ND	ND	ND	0.004	ND	—	.002 mg/L
Chloride	4.2	3.0	2.3	6.7	2.6	8.1	7.4	—	250mg/L
Phosphates	15	5	15	2	16	180	10.5	—	—
Nitrates	1.5	1.0	1.3	0.22	1.5	0.52	ND	—	10mg/L
									Potable 0/100 ml
Fecal Coliform	540	220	350	140	540	180	22	—	FBC 1000/100 m
Conductivity									
Field	460	410	390	390	350	490	490	345	—
Lab	381	351	323	327	300	346	366	—	—
Chlorin Herbicide	ND	ND	—	ND	ND	ND	Trace Silvex	——	
Chlorin Pesticide	ND	ND	—	ND	ND	ND	ND	—	—
Organophosphates	ND	ND	—	ND	ND	ND	ND	—	—

ND - Not Detected *MPN/100 ml
Lab Analysis performed by American Analytical Laboratories, Tucson, Arizona. All measurements taken on San Pedro River except Babocomari and springs.

ATTACHMENT 3 (contd.)
San Pedro River Water Quality Analysis, 1986-87
Safford District

Dates	11/19	01/06	01/06	01/06	01/08	01/08	01/14	01/14
Sample type	Above Green Brush Draw	Here-ford Bridge	Hgwy. 90	Charleston Hills	Tombstone Gage	Charleston Bridge	Summers Well	Diversion Dam
Flow, CFS	7.8	13.6	17.7	21.0	12.4	19.4	—	—
pH Field	8.1	8.6	8.6	8.6	8.8	8.8	8.1	8.7
Lab	—	—	—	—	—	—	—	—
Conductivity Field	540	500	500	410	490	510	320	500
Alkalinity (Hach Kit)	—	240	220	200	200	200	160	180
Dissolved Oxygen (Hach Kit)	—	12	12	11	10	12	—	9

All measurements taken on San Pedro River except Babocomari and springs.

ATTACHMENT 3 (contd.)
San Pedro River Water Quality Analysis, 1987
Safford District

Dates	01/15	01/15	10/15	10/14	10/14	10/14	10/14	10/14	
Sample type	Diversion Dam	Little Joe Spring	Summer Well	Fairbank Bridge	Charleston Bridge	Hgwy. 90	Hereford Bridge	Hgwy. 92	Standard
Flow, CFS	—	—	1.2	4.6	7.4	3.3	2.4	0.1	—
pH Field	8.7	7.7	8.0	8.5	8.5	8.4	8.0	8.0	—
Turbidity Hardness (Hach Kit)	180	260	—	—	—	—	—	—	—
Conductivity Field	500	920	500	450	420	510	560	590	—
Alkalinity (Hach Kit)	180	140	—	—	—	—	—	—	—
Dissolved Oxygen (Hach Kit)	9	—	—	—	—	—	—	—	—

ND - Not Detected
*MPN/100 ml

Lab Analysis performed by American Analytical Laboratories, Tucson, Arizona. All measurements taken on San Pedro River except Babocomari and springs.

ATTACHMENT 3 (contd.)
San Pedro River Water Quality Analysis, 1987
Safford District

Dates	10/14	11/02	11/02	11/13	11/13
Sites Sample Type	Babocomari River	Lewis Spring (S)	Lewis Spring (N)	2 Cienega Spring	Little Joe Spring
Flow, CFS	0.1	0.1	0.6	0.1	0.1
pH Field	8.7	7.6	5.3	8.0	7.4
Conductivity Field	450	630	600	910	1000

ATTACHMENT 3 (contd.)
San Pedro Water Quality Analysis, March 1987
by Gray Triangle Action Group

	Hereford Road	Highway 90	Private Well*	Standard (MCL)
Arsenic	0.02	0.02	0.02	0.05
Barium	0.11	0.11	0.1	1.0
Cadmium	0.005	0.005	0.005	0.01
Chromium	0.02	0.02	0.02	0.02
Fluoride	0.4	0.3	0.2	1.4-2.0
Lead	0.02	0.02	0.02	0.05
Mercury	0.001	0.001	0.001	0.002
Nitrates	0.8	0.4	0.2	10.0
Selinium	0.01	0.01	0.01	0.01
Silver	0.02	0.02	0.02	0.05
Alkalinity	188	180	145	—
Calcium	75	72	45	—
Chloride	9	8	2	—
Copper	0.05	0.05	0.05	—
Hardness	223	221	129	—
Iron	0.2	0.3	0.1	—
Magnesium	11	10	4	—
Manganese	0.05	0.05	0.05	—
pH	8.2	8.1	8.2	—
Sodium	41	40	10	—
Sulfate	81	84	5	—
TDS	324	330	154	—
Zinc	0.05	0.05	0.05	—
Cyanide	0.05	0.05	0.05	—

*North of Ramsey Road and E of Moson Road. Approx. 1 mi. from river.
Source: Safford District

APPENDIX 6

Species List - Birds
BUREAU OF LAND MANAGEMENT
Safford District, Arizona

Terrestrial Wildlife Species	Vegetation Communities*												
	1	2	3	4	5	6	7	8	9	10	11	12	13
Least Grebe													X
Pied-billed Grebe									X				
Eared Grebe													X
Double-crested Cormorant													X
Olivaceous Cormorant													X
American Bittern									X				
Least Bittern									X				
Great Blue Heron									X				X
Great Egret													X
Snowy Egret													X
Little Blue Heron													X
Cattle Egret													X
Green-backed Heron									X				
Black-crowned Night Heron									X				
White-faced Ibis													X
Black-bellied Whistling Duck									X				X
Greater White-fronted Goose													X
Snow Goose													X
Ross' Goose													X
Canada Goose													X
Wood Duck									X				
Green-winged Teal									X				
Mallard									X				
Northern Pintail									X				
Blue-winged Teal													X
Cinnamon Teal									X				
Northern Shoveler									X				
Gadwall									X				X
American Wigeon									X				X
Canvasback													
Redhead													X
Ring-necked Duck													X
Lesser Scaup													X
Common Goldeneye													
Bufflehead													X
Common Merganser									X				X
Red-breasted Merganser									X				X
Ruddy Duck													X
Turkey Vulture	X	X	X	X	X	X	X	X	X	X	X		

Source: District Files

*
1 Creosote-tarbush
2 Mixed Grassland-Whitethorn
3 Sacaton-Grassland Mixed Shrub
4 Mesquite-Mixed Shrub Association
5 Upland Scrub Grassland
6 Bottomland Scrub Grassland
7 Disclimax Grassland
8 Chihuahuan Desert Scrub
9 Cottonwood-willow Riparian
10 Mesquite Bosque
11 Salt Cedar Bosque
12 Cienega
13 Riverine/Lacustrine

Terrestrial Wildlife Species	Vegetation Communities*												
	1	2	3	4	5	6	7	8	9	10	11	12	13
Black-shouldered Kite						X						X	
Mississippi Kite													
Sharp-shinned Hawk									X	X			
Cooper's Hawk									X	X			
Red-tailed Hawk	X	X	X	X	X	X	X	X	X	X	X	X	X
Swainson's Hawk		X	X		X	X			X				
Zone-tailed hawk									X				
Rough-legged Hawk						X	X						
Ferruginous Hawk						X	X						
Gray Hawk									X				
Harris' Hawk									X				
Black Hawk									X				
Great Black Hawk									X				
Bald Eagle													X
Golden Eagle	X				X			X					
Northern Harrier	X	X	X	X	X	X	X	X		X			X
Osprey													
Crested Caracara						X			X				X
Peregrine Falcon				X					X				X
Prairie Falcon	X	X	X	X	X			X					
Aplomado Falcon			X										
Merlin	X								X	X			
American Kestrel				X	X	X			X				
Broad-winged Hawk									X				
Scaled Quail		X	X					X					
Gambel's Quail			X	X			X		X				
Montezuma Quail									X				
Wild Turkey													
Sandhill Crane						X							
Virginia Rail												X	
Sora												X	
Purple Gallinule													X
Common Moorhen									X				X
American Coot									X				
Semipalmated Plover													X
Killdeer									X				X
Greater Yellowlegs									X				X
Lesser Yellowlegs									X				X
Solitary Sandpiper													X
Willet													X
Spotted Sandpiper									X				X
Long-billed Curlew						X							X
Marbled Godwit													X
Semipalmated Sandpiper													X
Western Sandpiper									X				X
Least Sandpiper									X				X
Baird's Sandpiper													X
Pectoral Sandpiper													X
Stilt Sandpiper													X
Short-billed Dowitcher													X
Long-billed Dowitcher													X

Terrestrial Wildlife Species	Vegetation Communities*												
	1	2	3	4	5	6	7	8	9	10	11	12	13
Common Snipe									X				X
Black-necked Stilt													X
American Avocet													X
Wilson's Phalarope													X
Red-necked Phalarope													X
Ring-billed Gull													X
Franklin's Gull													X
Forster's Tern													X
Black Tern													
Bonaparte's Gull													X
Rock Dove													
White-winged Dove									X	X	X		
Mourning Dove	X	X	X	X	X	X	X	X	X	X	X		
Inca Dove													X
Common Ground Dove									X				
Yellow-billed Cuckoo									X				
Greater Roadrunner	X	X	X		X			X		X			
Common Barn Owl									X				
Flammulated Owl													X
Western Screech Owl									X	X			
Great Horned Owl									X	X			
Elf Owl										X			
Burrowing Owl													X
Long-eared Owl									X				
Short-eared Owl													X
Lesser Nighthawk	X	X	X	X	X	X	X		X				
Common Nighthawk	X							X					
Common Poorwill	X				X			X					
Whip-poor-will									X				
Vaux's Swift	X							X					X
White-throated Swift													X
Broad-billed Hummingbird										X			X
Plain-capped Starthroat									X				
Black-chinned Hummingbird				X					X	X	X		X
Anna's Hummingbird									X				X
Costa's Hummingbird													X
Calliope Hummingbird									X				X
Broad-tailed Hummingbird									X				X
Rufous Hummingbird									X				X
Allen's Hummingbird									X				X
Elegant Trogon									X				
Belted Kingfisher									X				
Green Kingfisher									X				
Acorn Woodpecker									X				
Gila Woodpecker				X					X	X			
Yellow-bellied Sapsucker									X				
Rad-naped Woodpecker									X				
Ladder-backed Woodpecker				X					X	X			
Hairy Woodpecker									X				
Northern Flicker									X	X	X		
Olive-sided Flycatcher									X				
Greater Peewee									X				
Western Wood-Peewee									X				

Terrestrial Wildlife Species	Vegetation Communities*												
	1	2	3	4	5	6	7	8	9	10	11	12	13
Willow Flycatcher									X				
Least Flycatcher									X				
Hammond's Flycatcher									X				
Dusky Flycatcher									X				
Grey Flycatcher				X					X	X			
Western Flycatcher									X				
Black Phoebe									X				
Eastern Phoebe									X				
Say's Phoebe	X	X	X	X	X	X	X	X	X	X	X		
Vermilion Flycatcher									X				X
Dusky-capped Flycatcher									X				
Ash-throated Flycatcher				X					X	X			
Brown-crested Flycatcher									X				
Northern Beardless Tyrannulet									X				
Thick-billed Kingbird									X				
Tropical Kingbird									X				
Cassin's Kingbird									X	X			
Western Kingbird									X				
Horned Lark								X					
Purple Martin									X				
Tree Swallow									X				
Violet-green Swallow			X						X				
Northern Rough-winged Swallow			X						X				
Bank Swallow									X				X
Cliff Swallow									X				
Barn Swallow													X
Steller's Jay									X				
Scrub Jay	X								X	X			
Pinyon Jay													X
Chihuahuan Raven	X	X	X	X	X	X	X	X	X	X	X	X	
Common Raven	X	X	X	X	X	X	X	X		X	X	X	
Bridled Titmouse									X				
Bushtit				X					X	X			
Verdin				X									
Red-breasted Nuthatch									X				
White-breasted Nutchatch									X				
Brown Creeper									X				
Cactus Wren				X					X	X			
Rock Wren	X			X				X					
Canyon Wren									X				X
Bewick's Wren	X	X	X	X	X	X	X	X	X	X	X		
House Wren									X	X			
Winter Wren									X				
Marsh Wren		X											X
Northern Mockingbird			X	X					X	X			
Sage Thrasher				X						X			
Brown Thrasher									X				
Bendire's Thrasher				X									
Curve-billed Thrasher				X	X	X	X		X	X			
Crissal Thrasher			X	X					X	X			

Terrestrial Wildlife Species	Vegetation Communities*												
	1	2	3	4	5	6	7	8	9	10	11	12	13
Gray Catbird									X				
Western Bluebird									X				X
Mountain Bluebird									X				X
Townsend's Solitaire									X				
Swainson's Thrush									X				
Hermit Thrush									X				
American Robin									X				
Eastern Bluebird									X				X
Blue-grey Gnatcatcher	X	X		X				X	X				
Golden-crowned Kinglet									X				
Ruby-crowned Kinglet									X				
Black-tailed Gnatcatcher	X	X		X				X		X			
Water Pipit									X				
Sprague's Pipit						X							
Cedar Waxwing									X				
Bohemian Waxwing									X				X
Phainopepla				X						X			
Loggerhead Shrike	X	X	X	X	X	X	X	X				X	X
European Starling									X				
Bell's Vireo									X	X			
Solitary Vireo									X				
Hutton's Vireo									X				
Warbling Vireo									X				
Philadephia Vireo									X				
Gray Vireo									X				
Hermit Warbler									X				
Tennessee Warbler									X				
Orange-crowned Warbler									X				
Nashville Warbler									X				
Virginia's Warbler									X				
Lucy's Warbler				X					X	X			
Northern Parula									X				
Yellow Warbler									X				
Black-throated Blue Warbler								X					
Townsend's Warbler									X				
Pine Warbler									X				
Yellow-rumped Warbler									X				
American Redstart									X				
Worm-eating Warbler									X				
Northern Water Thrush									X				
MacGillivray's Warbler				X					X	X			
Common Yellowthroat			X	X					X				
Wilson's Warbler									X				
Red-faced Warbler									X				
Painted Redstart									X				
Yellow-breasted Chat			X	X					X	X			
Black-throated Green Warbler									X				
Eastern Meadowlark		X	X		X	X						X	
Red-winged Blackbird									X			X	X
Yellow-headed Blackbird												X	X
Rusty Blackbird									X				
Brewer's Blackbird									X				X
Great-tailed Grackle													X
Bronzed Cowbird				X					X	X			
Brown-headed Cowbird		X	X	X	X	X	X	X	X	X	X	X	

Terrestrial Wildlife Species	Vegetation Communities*												
	1	2	3	4	5	6	7	8	9	10	11	12	13
Orchard Oriole													X
Hooded Oriole									X				
Northern Oriole			X	X		X				X	X		
Scott's Oriole				X	X	X				X			
Western Meadowlark	X	X			X		X	X					
American Crow									X				X
Hepatic Tanager									X				
Summer Tanager									X				
Scarlet Tanager									X				
Western Tanager									X				
Northern Cardinal				X					X	X			
Pyrrhuloxia				X						X			
Rose-breasted Grosbeak									X				
Black-headed Grosbeak									X				
Blue Grosbeak			X	X					X	X	X		
Lazuli Bunting			X	X					X				
Indigo Bunting			X	X					X	X			
Varied Bunting										X			
Painted Bunting									X				
Dickcissel						X							
Green-tailed Towhee		X	X	X	X	X			X	X	X		
Rufous-sided Towhee									X	X	X		
Brown Towhee				X					X	X			
Abert's Towhee									X	X	X		
Baird's Sparrow													X
Botteri's Sparrow			X			X							
Cassin's Sparrow			X			X							
Rufous-winged Sparrow													X
Rufous-crowned Sparrow	X		X			X							X
Chipping Sparrow				X					X	X			
Clay-colored Sparrow	X												X
Brewer's Sparrow		X	X	X	X	X			X	X			
Black-chinned Sparrow													
Vesper Sparrow						X			X				
Lark Sparrow						X							X
Black-throated Sparrow	X	X			X			X					
Sage Sparrow	X				X								
Lark Bunting					X	X							
Savannah Sparrow			X			X							
Grasshopper Sparrow			X			X							
Fox Sparrow			X						X				
Song Sparrow									X				
Lincoln's Sparrow				X					X	X			
Swamp Sparrow	X								X				
White-throated Sparrow									X	X			
Golden-crowned Sparrow													X
White-crowned Sparrow		X	X	X	X	X			X	X	X		
Harris Sparrow				X									X
Dark-eyed Junco									X	X			
McCown's Longspur						X							
Chestnut-collared Longspur						X							
Purple Finch													X
Cassin's Finch													X
House Finch	X	X	X	X	X	X		X	X	X	X		
Red Crossbill									X				

Terrestrial Wildlife Species	Vegetation Communities*												
	1	2	3	4	5	6	7	8	9	10	11	12	13
Pine Siskin									X				
Lesser Goldfinch									X	X		X	
Lawrence's Goldfinch						X			X			X	
American Goldfinch									X				X
House Sparrow													
Bobolink													X

Source: Safford District

APPENDIX 7

Species List - Mammals
BUREAU OF LAND MANAGEMENT
Safford District, Arizona

Terrestrial Wildlife Species	Vegetation Communities*												
	1	2	3	4	5	6	7	8	9	10	11	12	13
Vagrant Shrew		X		X							X	X	
Desert Shrew			X						X	X			
Peter's Leaf-chinned Bat	X	X		X	X			X		X			
California Leaf-nosed Bat	X	X		X	X			X		X			
Sanborn's Long-nosed Bat	X	X		X	X			X		X			
Mexican Long-tongued Bat	X	X		X	X			X		X			
Yuma Myotis			X	X	X	X	X		X				
Cave Myotis	X	X		X	X			X	X				
Fringed Myotis	X	X	X	X	X	X		X		X			
Long-legged Myotis					X				X				
Long-eared Myotis				X								X	
Silver-haired Bat		X	X		X	X			X			X	
Southwestern Myotis		X	X		X	X							
California Myotis	X	X	X	X	X			X		X			
Small-footed Myotis		X	X		X	X							
Western Pipistrelle	X	X	X	X	X	X	X	X	X	X	X		
Big Brown Bat	X	X	X	X	X	X							
Red Bat			X		X				X				
Hoary Bat						X			X	X			
Townsend's Big-eared Bat		X	X		X	X							
Pallid Bat	X	X	X	X	X	X	X	X	X	X			
Allen's Lappet-browed Bat		X	X		X	X							
Southern Yellow Bat	X	X	X	X	X	X	X	X		X			
American Free-tailed Bat	X	X	X	X	X	X		X	X	X			
Pocketed Free-tailed Bat			X		X		X						
Western Mastiff Bat									X				
Big Free-tailed Bat			X		X		X						
Spotted Bat									X	X			
Antelope Jackrabbit								X		X			
Black-tailed Jackrabbit	X	X		X	X		X	X					
Desert Cottontail		X	X	X	X	X			X	X			
Spotted Ground Squirrel					X								
Rock Squirrel					X								
Harris' Squirrel	X	X			X		X	X					
Round-tailed Ground Squirrel							X						
Black-tailed Prairie Dog						X							
Gunnison's Prairie Dog													
Botta's Pocket Gopher			X	X									

Source: District Files

*
1 Creosote-tarbush
2 Mixed Grassland-Whitethorn
3 Sacaton-Grassland Mixed Shrub
4 Mesquite-Mixed Shrub Association
5 Upland Scrub Grassland
6 Bottomland Scrub Grassland
7 Disclimax Grassland
8 Chihuahuan Desert Scrub
9 Cottonwood-willow Riparian
10 Mesquite Bosque
11 Salt Cedar Bosque
12 Cienega
13 Riverine/Lacustrine

X = Occurs or expected to occur

Terrestrial Wildlife Species	Vegetation Communities*												
	1	2	3	4	5	6	7	8	9	10	11	12	13
Silky Pocket Mouse							X						
Hispid Pocket Mouse												X	
Desert Pocket Mouse			X				X	X	X	X	X		
Rock Pocket Mouse					X								
Banner-tailed Kangeroo Rat					X								
Merriam's Kangeroo Rat	X												
Bailey's Pocket Mouse					X			X		X			
Ord's Kangaroo Rat			X		X		X	X					
Great Basin Pocket Mouse			X		X								
Beaver									X				
Northern Grasshopper Mouse			X				X	X					
Southern Grasshopper Mouse			X		X		X	X		X	X		
Plains Harvest Mouse			X				X					X	
Western Harvest Mouse			X		X	X		X	X	X	X	X	
Fulvous Harvest Mouse					X		X	X	X		X	X	
Northern Pigmy Mouse						X							
Cactus Mouse					X		X	X	X	X	X		
Deer Mouse	X		X	X	X	X	X	X	X	X	X	X	X
White-footed Mouse			X			X	X	X	X	X	X	X	X
Brush Mouse									X				
Fulvous Cotton Rat			X			X				X		X	
White-throated Woodrat	X		X		X		X	X	X	X	X	X	
Arizona Cotton Rat			X			X				X		X	
Porcupine						X			X	X			X
House Mouse	X	X	X			X	X	X	X	X	X		
Hispid Cotton Rat			X			X			X	X			
Yellow-nosed Cotton Rat					X							X	
Muskrat									X				
Coyote	X	X	X	X	X	X	X	X	X	X	X	X	X
Kit Fox							X						
Gray Fox	X			X		X			X	X		X	
Ringtail Cat													
Raccoon										X	X	X	X
Coati										X			X
Long-tailed Weasel			X			X		X					
Badger	X	X	X	X	X	X	X	X	X	X	X		
Spotted Skunk			X		X	X			X	X			
Striped Skunk			X		X	X			X	X			
Hooded Skunk			X		X	X			X	X			
Hog-nosed Skunk									X				
Black Bear									X				
Mountain Lion					X				X				
Bobcat					X				X	X			
Collared Peccary			X	X		X			X	X			
Mule Deer		X	X	X	X	X			X				
White-tailed Deer						X			X				

APPENDIX 8

Species List - Herptiles
BUREAU OF LAND MANAGEMENT
Safford District, Arizona

Terrestrial Wildlife Species	Vegetation Communities*												
	1	2	3	4	5	6	7	8	9	10	11	12	13
Southern Spadefoot Toad	X	X	X	X	X		X	X		X			
Couch's Spadefoot Toad	X	X	X	X	X		X	X	X	X			
Southwestern Woodhouse's Toad	X	X	X	X	X	X	X	X	X	X			
Great Plains Toad		X			X		X						
Sonoran Desert Toad			X	X			X						
Red-spotted Toad	X		X	X									
Bullfrog		X				X	X						
Desert Box Turtle	X	X	X	X	X	X	X		X	X		X	
Sonoran Mud Turtle		X				X							
Texas Spiny Softshell		X											
Clark's Spiny Lizard			X										
Tucson Banded Gecko	X				X								
Southwestern Earless Lizard	X			X	X		X						
Zebra-tailed Lizard	X		X										
Large Spotted Leopard Lizard	X				X								
Twin-spotted Spiny Lizard	X			X	X		X						
Southern Prairie Lizard		X	X	X	X	X	X		X	X			
Tree Lizard	X			X	X	X	X						
Regal Horned Lizard	X			X	X		X						
Texas Horned Lizard	X			X	X		X						
Arizona Desert Whiptail	X			X	X		X						

Source: District Files

*
1 Creosote-tarbush
2 Mixed Grassland-Whitethorn
3 Sacaton-Grassland Mixed Shrub
4 Mesquite-Mixed Shrub Association
5 Upland Scrub Grassland
6 Bottomland Scrub Grassland
7 Disclimax Grassland
8 Chihuahaun Desert Scrub
9 Cottonwood-willow Riparian
10 Mesquite Bosque
11 Salt Cedar Bosque
12 Cienega
13 Riverine/Lacustrine

X = Occurs or expected to occur

APPENDIX 9

LAND GRANT OWNERS
BUREAU OF LAND MANAGEMENT
Safford District, Arizona

San Juan de Las Boquillas y Nogales		San Rafael del Valle	
1827	Grant applied for by Capt. Ignacio Elias Gonzalez and Nepomucino Felix - $240.	1827	Grant applied for by Rafael Elias Gonzalez - $240.
1833	Title issued to Gonzalez and Felix.	1832	Title issued to Gonzalez. Grant left to his widow and three sons.
		1862	Mortgaged to Camou brothers.
		1869	Camou brothers acquired deed.
1880	Last of grant purchased by George Hill Howard. Transferred half to wife Janet G. Howard and half to George Hearst		
1881	Transfer approval recommended.		
1889	George Hearst purchased J. Howard's half.	ca. 1901	Camou grant confirmed by U.S. for 17,474.93 acres.
1899	Phoebe (also Pheba) Hearst (George's widow) and son William Randolph Hearst petition to Court of Private Land Claims.	1905	Cornell Greene purchased grant.
		1912	After Greene's death, Greene Cattle Co. sold land to the Boquillas Land and Cattle Co.
1901	Patent issued to Hearsts. 17,355.86 acres.	WWII	U.S. bought 2,000 acres on south end for $11,000.
1901	Sold to Boquillas Land and Cattle Co. of Bakersfield, CA.		
1958	Kern County Land and Cattle Co. acquired Boquillas Land and Cattle Co. and the land grant.	1958	Kern
1967	Kern Co., consolidated with Tenneco, Inc.	1967	Tenneco
1971	Tenneco West, Inc.	1971	Tenneco West
1986	H.B. Bell Investments (AZ), Inc.	1986	H.B. Bell Investments (AZ), Inc.
1986	U.S. acquires land	1986	U.S. acquires land
1986-Present	Public land managed by Bureau of Land Management.	1986-Present	Public land managed by Bureau of Land Management.

Source: Early Arizona: Prehistory to Civil War. Jay J. Wagoner. 1975. University of Arizona Press, Tucson, AZ.

APPENDIX 10

San Pedro Monitoring Plan
BUREAU OF LAND MANAGEMENT
Safford District, Arizona

Items Monitored	Monitoring Method	Monitoring Frequency	Changes Requiring Reevaluation
Vegetation			
Upland Vegetation	Permanent photo points	Yearly for 3 yrs., 5 yr. intervals.	Evaluate every 5 yrs.
Upland Vegetation	Pace frequence	5 yrs.	Evaluate every 5 yrs.
Riparian Vegetation	Permanent photo points	Yearly for 3 yrs., then 5 yr. intervals	Evaluate every 5 yrs. to determine needs.
Riparian Vegetation	Low level aerial photography	Yearly for 3 yrs., then 5 yr. intervals	Evaluate needs for Prescribed burns to maintain vegetation diversity.
Riparian Vegetation	Riparian Inventory	Every 5 yrs.	Evaluate need for riparian tree plantings, including management of areas.
Riparian Vegetation	Photo plot studies	Every 5 yrs.	Determine changes necessary in riparian management.
Wildlife			
Habitat Diversity	Acres per community type	Every 5 yrs.	25% from existing conditions for the first.
Wildlife Species Diversity	Inventory	Annually	10% loss in existing numbers within key wildlife species
Riparian Habitat	Inventory	Every 5 yrs.	10% loss in acres/plant community
Aquatic	Survey	Every 5 yrs.	10% change in water quality over a 3 yr. period.
			25% change in physical changes (changed stability, etc.).
Reintroductions of	No. of species	Annually	Less than 25% of Native Wildlife Species
Habitat Improvements	Acres accomplished	Annually	Less than 25% of planned projects done in first 5 yrs.
Reseeding Success	Acres	Once	Less than 75% success in revegetation.
Research Natural Areas			
RNA Condition	Site inspections	Annually	Trends indicating increased disturbance

Items Monitored	Monitoring Method	Monitoring Frequency	Changes Requiring Reevaluation
Recreation			
ORV Management	Patrol	Regular patrol of areas with high use potential, quarterly patrol of rest of area.	Discovery of violations
Special Recreation Management Area	Patrol, visitor registration, traffic counters, estimates.	Weekly patrol and biweekly check of registers and counters.	Collected data indicates increased visitor use or sustained use requiring additional or improved facilities or controls.
Limits of Acceptable Change	Evaluation of prescribed criteria and sites.	As prescribed	Exceeding prescribed limits.
Water Resources			
Surface and Ground Water Levels	Streamflow gaging at selected sites along segment of river. Measure groundwater fluctuation at selected sites adjacent to river, recording and non-recording equipment.	2-month surface water, ¾-month groundwater yearlong.	Drastic change in surface flow and monitoring wells that appear to be a trend.
Water Quality	Systematic sampling using District equipment, state-approved laboratory analysis.	Minimum 4 times yr., surface flow. Bi-yearly, springs and selected wells.	Pollution levels consistently exceeding and remaining above state's maximum contaminant level for major contamination.
Cultural Resources			
Compliance	Review clearance reports and project files for each ground disturbing project.	Bi-annually	Non-compliance with laws and regulations.
Site Condition	Patrol susceptible significant sites; establish photo stations at standing buildings/site conditions.	Bi-annually	Sites being damaged/destroyed by unauthorized uses, natural agents, or visitor use.
Paleontological Resources			
Fossil Exposure	Check known sites and collect exposed fossils.	3-5 years	Fossils being destroyed through prolonged exposure.
Undiscovered Fossils	Check high potential areas periodically to determine if fossils are exposed.	10 years	Numerous fossils discovered.

APPENDIX 11
BIOLOGICAL ASSESSMENT

INTRODUCTION

Under the requirements of Section 7 of the *Endangered Species Act* (ESA), as amended, BLM requested a list of Threatened and/or Endangered or proposed species from the U.S. Fish and Wildlife Service (FWS).

The FWS requested that BLM consider the peregrine falcon, aplomado falcon, Mexican wolf, and Sanborn's long-nosed bat, all Federally listed as endangered.

PEREGRINE FALCON

Overview

The information on peregrine falcons came from the *American Peregrine Falcon Recovery Plan (Rocky Mountain/Southwest population)*, dated December 14, 1984. The U.S. Fish and Wildlife Service prepared this plan in cooperation with American Peregrine Falcon Recovery Team.

Mearns collected a peregrine falcon (*Falco peregrinus anatum*) near Tucson in 1885. He speculated that it was nesting in the Santa Catalina Mountains at that time. The first reports of actual peregrine falcon nesting in Arizona was by Mearns in 1890 at Fort Verde. Later reports of peregrine nesting came from Brant who reported peregrine nesting in the Chiricahua Mountains during the summers of 1947 and 1948. Phillips et al, reported that peregrines nested throughout the state in 1964, but gave no locations.

In 1975, there were three pairs of peregrines nesting in Arizona. As of 1981, there were 54 known territories in Arizona.

Peregrine Falcon Recovery Plan

The overall emphasis of the Recovery Plan for the southwest populations of the peregrine falcon is "...monitoring and protection...".

The *American Peregrine Falcon Recovery Plan (Rocky Mountain-Southwest Populations)* emphasizes three major items in the protection and recovery of the peregrine falcon:

1. direct protection of the peregrines and their habitat,
2. action to increase natural productivity (restrict use of pesticides, etc.), and
3. a captive breeding and release program.

In addition, there are five major recovery actions to consider.

1. Identify and maintain existing and potential hunting and nesting habitat and evaluate previously unsurveyed habitats,
2. Monitor population trends, site occupancy and productivity of wild pairs,
3. Monitor pesticide contamination in breeding peregrines,
4. Continue management actions to maintain normally producing wild pairs and increase those wild populations with documented reproductive difficulties, and
5. Continue release efforts to establish wild breeding pairs in Colorado, Idaho, Montana, Utah and Wyoming.

The Bureau has direct responsibilities in the three major protection and recovery items mentioned above. Additionally, the first recovery action pertains to BLM's responsibilities under Section 7 of the ESA.

Critical/Essential Habitats for the Peregrine Falcon

The Recovery Plan made no recommendations to the Secretary of the Interior regarding critical habitat. The San Pedro EIS area is not essential to the recovery of the peregrine falcon.

Peregrine Falcon Habitat

The San Pedro EIS area does not contain any suitable nesting sites (eyries) for the peregrine falcon. It may, however, be suitable hunting habitat. The most likely peregrine use of the EIS area would be as a migration corridor.

Potential nesting habitat probably exists outside the EIS area in the Huachuca Mountains to the west, the Mule Mountains to the east, or to the south in Mexico.

Peregrine Falcon Sightings

Bureau personnel have reported three sightings of peregrines within the San Pedro EIS area (one in 1987 and two in 1988). All of the sightings were thought to be of a migratory nature.

Determination of Effect

Proposed management activities will not have an effect on peregrine falcons or their habitat. The following factors were used to make this determination:

- The EIS area may be used as a foraging area by resident and non-resident peregrines. It is most likely, however, that peregrines use the area as a migration corridor. None of the proposed actions will significantly impact the use of this area as a migration corridor.

  None of the alternatives considered in detail will result in a significant change in the vegetation or animal communities. Thus, there will be no effect on the potential hunting use of the area by peregrines.

As mentioned before, the San Pedro EIS area does not contain suitable nesting habitat for the peregrine falcon.

These factors contribute to the accomplishment of major item number 1 and recovery action number 1.

Major items 2 and 3 as well as recovery actions 2 through 5 are beyond the scope of this planning process.

- Federal law requires BLM to comply with Section 7 of the ESA. BLM will begin consultation with FWS in the event of any changes in peregrine activities or Bureau actions not included in the San Pedro Management Plan/EIS.

APLOMADO FALCON

Overview

The northern aplomado falcon (*Falco femoralis septentrionalis*) was federally listed as an endangered species in 1986. This was the result of published evidence of population declines in eastern Mexico and the apparent extirpation of the falcon from the United States.

The description of the northern aplomado falcon is based on specimens collected by Bendire in 1892 (published in 1916 by Todd). Bendire collected specimens at Fort Huachuca, about 12 air miles from the San Pedro EIS area.

Only two authenticated reports of the falcon exist since 1910. The last known sighting was at St. David, AZ in 1940. St. David is near the northern boundary of the EIS area. According to personnel in the Arizona Game and Fish Department (AGFD), the aplomado falcon is extinct in Arizona and extirpated in the United States.

Aplomado Falcon Recovery Plan

The Bureau recently reviewed the Technical/Agency Review Draft *Northern Aplomado Falcon Recovery Plan* (Hector et al 1988). This document identified several areas in the Safford District for consideration as possible reintroduction sites for the falcon. The identified areas in southeastern Arizona are: Fort Huachuca Military Reservation, the Research Ranch (near Elgin, AZ), the San Simon Valley and the San Pedro EIS area.

Three major problems are thought to influence the aplomado falcon population:

- habitat loss,
- pesticide contamination, and
- human disturbance.

The Bureau's responsibilities include activities that influence all three of these problems.

Critical/Essential Habitat for the Aplomado Falcon

The Draft Recovery Plan did not make any recommendations regarding critical/essential habitat. The Draft Recovery Plan, however, did recommend consideration of the EIS area as a potential reintroduction site.

Aplomado Falcon Habitat

The Draft Recovery Plan identified the EIS area as habitat suitable for a reintroduction site. The Draft also states:

> "Northern portions of this refuge are bound by creosote flats and mesquite encroached floodplains. Some potential release sites, however, might be located to the south, near the Mexican border. Much of this land is publicly owned and would be available for release activities. In addition, continued acquisition of grassland to the north should steadily improve the quality of this site. Although aplomado falcons apparently did nest along gallery woodlands (Grayson in Lawrence 1874, and Henshaw 1875), initial releases should be accomplished in grassland sites."

The San Pedro EIS area does contain desert grasslands that may be suitable hunting habitat for the aplomado falcon. Nesting habitat, requiring nests constructed in trees or shrubs by other species of birds, may be lacking. The riparian areas along the San Pedro River may, however, provide some nesting habitat.

Aplomado Falcon Sightings

Avian inventories, ongoing since 1986, have not reported any sightings in the EIS area. In addition, local birdwatchers and the Huachuca Audubon Society have not made any sightings.

Determination of Effect

Proposed management activities will not have an effect on aplomado falcons or their habitat. The following factors were used to make this determination:

- Management actions will not significantly change the amount, condition, or quality of the existing vegetation communities. Therefore, habitat losses to the aplomado falcon will be minimal.
- Pesticide use on the public lands in the San Pedro EIS area is prohibited. Therefore, pesticide use in the area will not be a factor where BLM has jurisdiction.
- Policies from the planning process, legal mandates and BLM policies can control human disturbance. The following objectives and planned actions (by EIS alternative) relate these controls.

Management Practices Common to All Alternatives

Establish mitigation procedures to reduce impacts to wildlife and wildlife habitat.

No Action Alternative

Close the EIS area to all public use, including birdwatching and hunting, and limit administrative uses.

Preservation Alternative

Close all roads to public use but allow continued BLM administrative use of roads. The ORV designation is "closed".

Close the EIS area to the discharge of firearms.

Utilization Alternative

Protection of the wildlife resources, cultural and paleontological resources, vegetation and water quality/quantity is a major component of this alternative.

Allow public vehicular use on designated roads only. The ORV designation is "Limited to Designated Roads".

Close the EIS area to the discharge of firearms except those associated with regulated hunting.

Allow hunting but limit the season to the period of September 1 through March 31.

Preferred Alternative

Allow public vehicular use on designated roads only. The ORV designation is "Limited to Designated Roads".

Allow hunting but limit the season to the period of September 1 through March 31.

Close part of the EIS area (Charleston Road to the Hereford area) to the discharge of firearms.

Allow overnight use by permit only.

Protect important raptor areas and heron rookeries identified through the planning process. Identify special management in the Habitat Management Plan.

Minimize public and administrative activities around important wildlife areas, such as active nest sites, during the breeding/fledging season.

MEXICAN WOLF

Overview

The information on the Mexican Wolf came from the Mexican Wolf Recovery Plan, U.S. Fish and Wildlife Service (1982).

One subspecies of the gray wolf, *Canis lupus baileyi*, occupied most of the extreme southeast corner of Arizona and extreme southwestern New Mexico. Another subspecies (*C. l. mogollonensis*) occupied the areas of the White and San Francisco Mountains in Arizona and was found in west central New Mexico. A third subspecies, *C. l. monstrabilis* occupied southeastern New Mexico and most of western Texas. Recent studies on the gray wolf in the southwestern United States and northern Mexico, have recommended reclassifying all three southwestern subspecies of the gray wolf as one subspecies, *C. l. baileyi*.

Brown (1983) believed the wolf to be extirpated from the southwestern United States and Mexico by 1970 and 1982 respectively. The Mexican Wolf Recovery Plan (1982), however, lists at least three different reports of wolves in Arizona in the early 1970's through 1973, (even later reports are on record for New Mexico).

Mexican Wolf Recovery Plan

The prime objective for the Mexican Wolf Recovery Plan is:

"To conserve and ensure the survival of *Canis lupus baileyi* by maintaining a captive breeding program and re-establishing a viable self-sustaining population of at least 100 Mexican wolves in the middle to high elevations of a 5,000 square mile area within the Mexican wolf's historic range."

The Recovery Team developed a "step-down plan" in order to attain the prime objective of the Mexican Wolf Recovery Plan. Portions of this step-down plan apply to federal agencies and their responsibilities under Section 7 of the Endangered Species Act of 1973, as amended.

Most of the items listed in the step-down plan apply to state, regional or national efforts. These steps will be addressed at higher levels of management by the various agencies. Several items may be addressed at local levels, as follows:

- Ensure legal protection of wild wolves in Mexico, Arizona, New Mexico and Texas.

  Seek vigorous enforcement of laws protecting Mexican wolves and imposition of maximum legal penalties for intentional violations of these laws.

  Increase population of wild prey species important to wolves.

  Continue to improve and protect habitat and its associated prey base.

  Attempt to foster favorable attitudes towards wolves among the public.

Critical/Essential Habitats for the Mexican Wolf

The Mexican Wolf Recovery Plan did not specifically identify an area to establish as Critical Habitat. The Plan stated areas in Mexico would be first priority. The San Pedro EIS area has not been identified as essential habitat.

Mexican Wolf Habitat

Habitats the Mexican wolf prefers are pine-clad mountains, oak woodlands, pinyon-juniper forests and grasslands above 4,500 feet in elevation. Wolves are reportedly absent from the desert scrub and semi-desert grasslands of the Chihuahuan and Sonoran deserts.

Habitat in the San Pedro EIS area is, at best, marginal for the wolf. The only preferred wolf habitat that may be in the area are the high elevation grasslands.

Wolves used mountain ranges to travel from Mexico to the southwestern United States. These travel routes are referred to as runways. One major runway occurs to the east of the San Pedro EIS area. It includes the Mule Mountains, Dragoon Mountains, the east side of the Winchester and Galiuro Mountains, and then north into Aravaipa Canyon (Brown 1983). The Huachuca Mountains to the west may also have good potential as a wolf runway.

Mexican Wolf Sightings/Reports

Historically, there have been many wolf reports in the Chiricahua, Mule, and Dragoon Mountains to the east, the Winchester and Galiuro Mountains to the north, and the Pinaleno (Graham) Mountains to the northeast of the San Pedro EIS area.

Wolf Reports

1898 east slope of Galiuro Mountains, specimen collected

1917 Ft. Huachuca, specimen collected

1924 Parker Canyon, specimen collected

1937 Chiricahua Mountains, two wolves trapped

1937 Peloncillo Mountains in Cochise county, wolf trapped

1940-1950's Huachuca Mountains

1947 Graham (Pinaleno) Mountains, two wolves trapped

1951,1953 Graham (Pinaleno) Mountains, wolf sightings

1961 Red Rock Canyon (Santa Cruz County), specimen killed & collected

1970 Aravaipa Canyon, specimen killed and collected

1972 Galiuro Mountains (Pinal-Graham county line), depredation report

1973 Elgin, AZ, sighting report

1973 Santa Rita Experimental Range (Pima County), wolf sighting

? east of Douglas, AZ, sighting

1949 Ft. Huachuca, AZ, one male wolf and pups killed, female escaped (may be the same report as the 1940-1950's report for the Huachuca Mtns.)

This list is not complete but is shows the habitats and range of wolf reports since the late 19th century and through the present.

Determination of Effect

Proposed management activities will not have an effect on the Mexican Wolf or its habitat. The following factors were used to make this determination:

- There are no known wolf reports from the San Pedro EIS area, indicating a lack of preferred habitat. Although much of the EIS area is above 4,500 feet in elevation, very little is in the preferred wolf habitat of grasslands. Most of the EIS area is Chihuahuan Desert scrub.
- The area has no suitable topography for use as a wolf runway.
- Federal law requires BLM to conserve federally listed Threatened and Endangered species. Future wolf sightings in the EIS area will cause BLM to comply with and vigorously enforce the Endangered Species Act. This will fulfill part of the Mexican Wolf Recovery Plan.
- Management actions identified in the San Pedro Management an/EIS will result in more favorable habitat available for the wolf. The recent removal of livestock from the EIS area will improve habitat for the wolf's prey (javelina, mule deer and whitetail deer). This will help meet part of the Recovery Plan.

SANBORN'S LONG-NOSED BAT

Overview

Not much was known about the Sanborn's long-nosed bat *(Leptonycteris sanborni)* until recently. A literature search of Hall and Kelson (1959) and Burt and Grossenheider (1964) revealed no listing for the species in these publications. Further investigation revealed the species has also been called *Leptonycteris yerbabuenae*. Barbour and Davis identified the "little long-tongued bat" as *Leptonycteris sanborni* (Bats of America, 1969).

Apparently, Sanborn's long-nosed bat is confused with its very close relative, the Mexican long-nose bat *Leptonycteris nivalis*). The Fish and Wildlife Service listed both species as endangered in the *Federal Register* on September 30, 1988.

Sanborn's long-nosed bat is one of the nectar feeding bats.

Sanborn's Long-nosed Bat Recovery Plan

There has not been a recovery plan prepared for this bat.

Critical/Essential Habitats for the Long-nosed Bat

None Identified

Long-nosed Bat Habitat

The long-nosed bat feeds in the desert scrub communities that have a preponderance of agave's, organ-pipe cactus, yuccas or sahuaro cactus. The bats roost and raise their young in caves or abandoned mine tunnels. They are most likely found at the base of mountains near these plants.

Sanborn's long-nosed bat does not hibernate. Apparently the bat migrates into Mexico in late September and returns in mid-May.

Yellow-stained fecal material on the floors of caves, and tunnels identifies nectar feeding bat roosting/maternity sites.

The San Pedro EIS area does not have the necessary caves or mining tunnels necessary for roosting/maternity sites. In addition, the area does not provide much, if any, feeding habitat due to the low density of yuccas and agaves (There are no sahuaro or organ-pipe cactus in the area). The area may function as a migration corridor during the spring and fall migrations.

Long-nosed Bat Sightings

Recently, most of the reports in southeastern Arizona have been from the Huachuca, Chiricahua, Pinaleno and Galiuro Mountains. The Huachuca Mountains are closest, just west of the San Pedro EIS area. The Chiricahua Mountains are about 50 miles east, Galiuro Mountains about 50 miles north, and the Pinaleno Mountains about 70 miles to the northeast. There have been no reports or sightings of the bat within the EIS area.

Determination of Effect

Proposed management activities will not have an effect on Sanborn's long-nosed bats or their habitat. The following factors were used to make the determination:

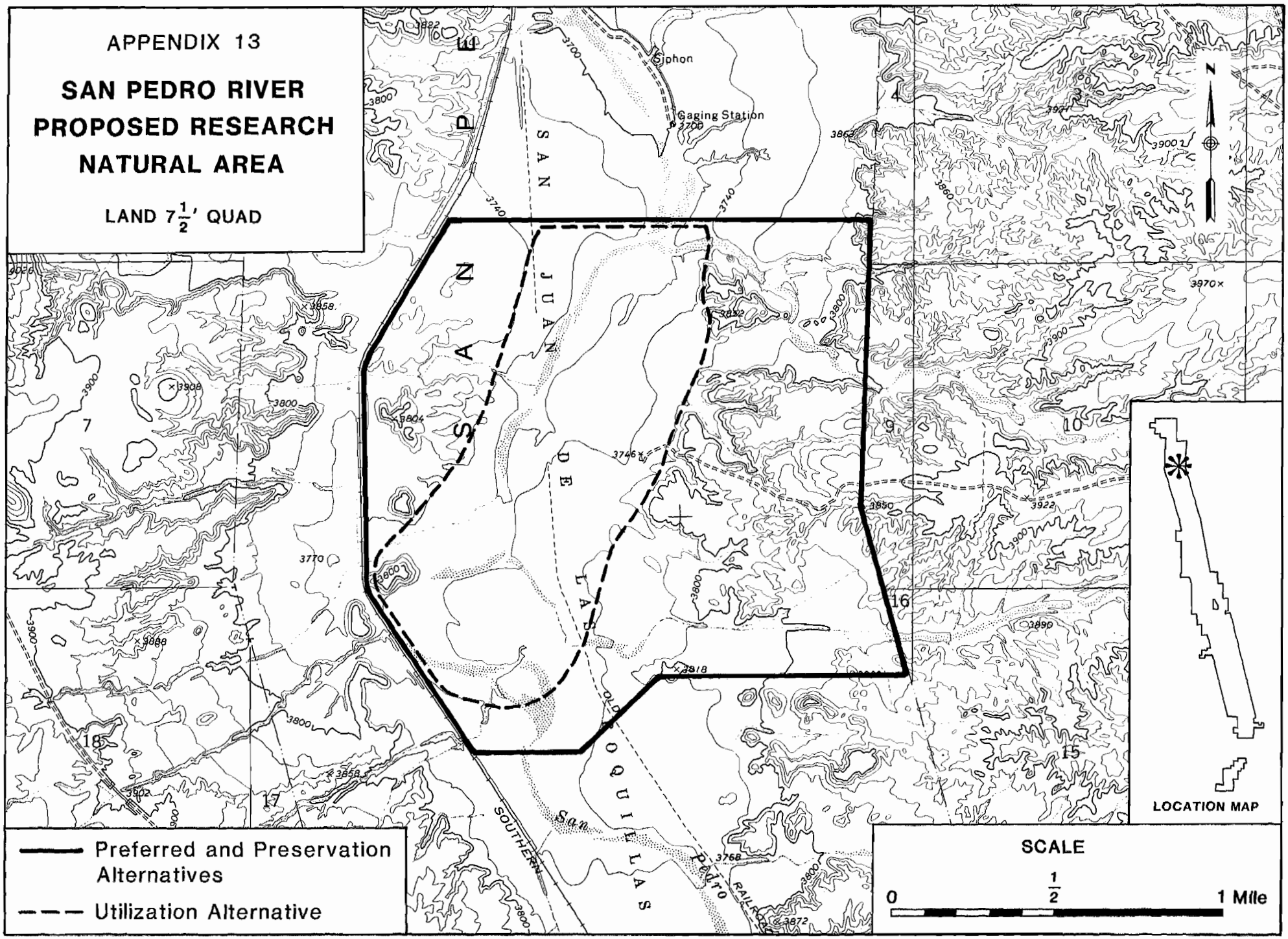
- Use of the EIS area for foraging by resident and nonresident bats may occur. This use is minimal due to the absence of good forage species density.
- Bats may use the EIS area as a migration corridor between Mexico and roosting/maternity sites in Arizona. The EIS area does not contain caves and/or tunnels suitable for the long-nosed bat. Nothing proposed in the Plan will effect the use or adequacy of the area as a migration corridor.
- Long-nosed bat habitat is limited in the EIS area. There was a reported skeleton of Sanborn's long-nosed bat found within the EIS area during 1988.

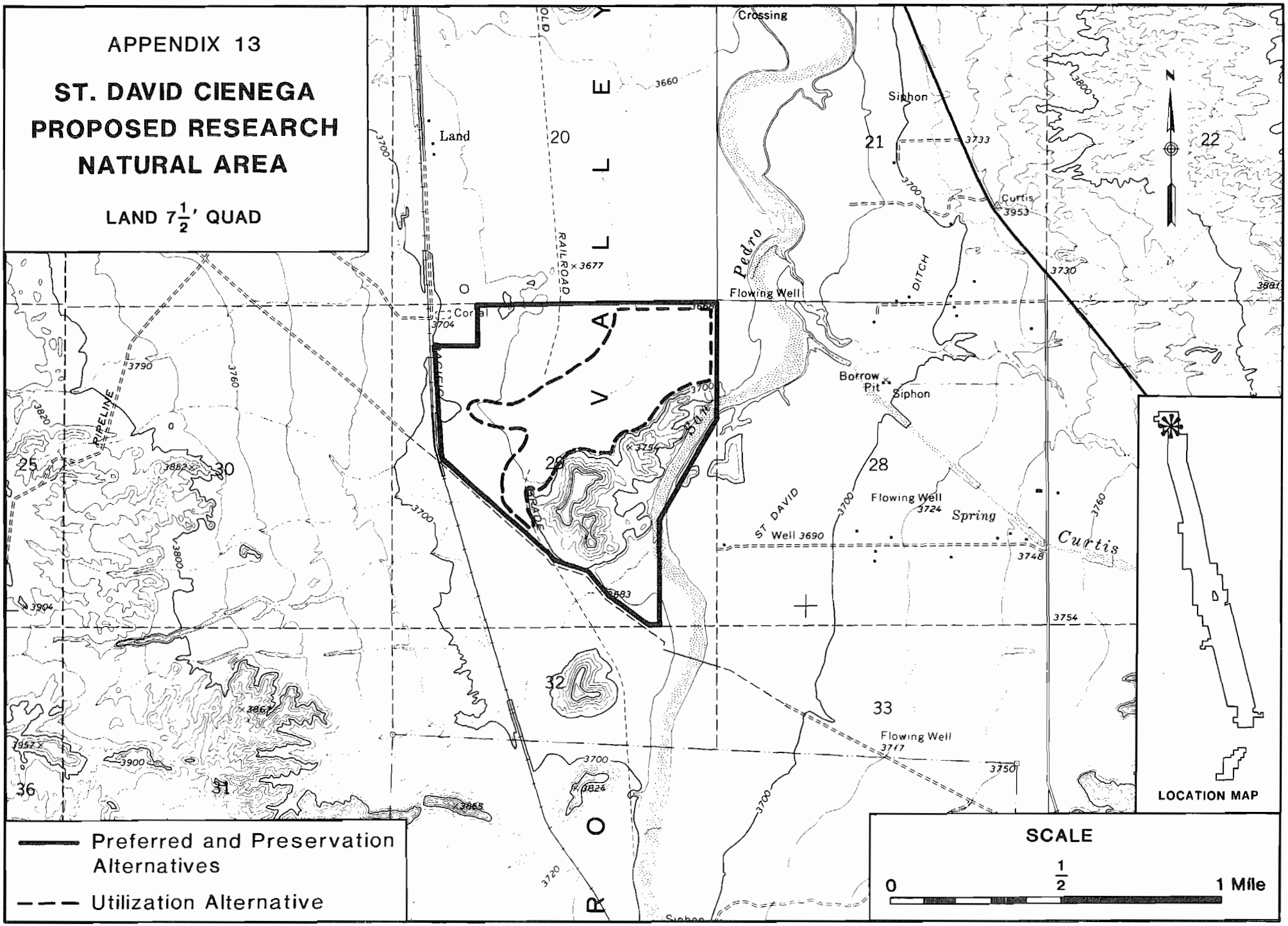
Appendix 12

Inventoried Water Sources on Acquired Lands

Source Name	Legal Description ½½, Sec.,	T.S.,	R.E.	Use	Condition
Stonehouse Well	SWNE 19	18	21	Livestock	Usable
Pipeline Tank	NWSW 19	18	21	Livestock	Good
Little Joe Spring	SWNE 19	18	21		Good
Two Cienega Spring	NESW 19	18	21		Good
Curtis Flat Well	SWSW 33	18	21	Livestock	Usable
Summers Well	NWSW 9	19	21	Livestock	Usable
Contention Well	NWSE 21	19	21	Livestock	Usable
Unnamed Well	NWSE 21	19	21	Railroad	Unusable
Fairbank 1 Well	NESW 3	20	21	Dom/lvstck	Usable
Fairbank 2 Well	SENW 3	20	21	Livestock	Usable
Chinese Grdn 1 Well	SWSW 3	20	21	Livestock	Unusable
Chinese Grdn 2 Well	SWSW 3	20	21	Livestock	Unusable
Boquillas Rnch Well	SWNW 14	20	21	Dom/Lvstck	Usable
Graveyard Glch Well	SESW 2	21	21		Good
Moson Spring	NENW 13	21	21		Good
Murray Spring	SENW 25	21	21		Good
Horsethief Draw Spring	SESE 36	21	21		Good
Lewis Spring	SWNW 29	21	22		Good
Ernest Pond	SESW 5	22	22		Good
Wolf Well	SENE 6	22	22	Dom/Lvstck	Usable
Wolf Well	NESE 6	22	22	Irrigation	Usable
Garden Cnyn Spring	NWNW 7	22	22		Good
Young Block Sump Pond	NENW 8	22	22	Industrial	Good
Wolf 2 Well	NWSW 8	22	22	Irrigation	Usable
Snake Well	SWNW 17	22	22	Irrigation	Usable
Cottonwood 1 Well	NESW 17	22	22	Irrigation	Usable
Sierra Rdy Mx Well	SWNW 21	22	22	Industrial	Usable
Sierra Rdy Mx Pond	SWNW 21	22	22	Industrial	Good
Cottonwood 3 Well	SWNE 29	22	22	Irrigation	Usable
River Well	SESE 9	23	22	Irrigation	Usable
Hereford Well	SESW 10	23	22	Domestic	Usable
Unnamed Well	SESW 10	23	22	Railroad	Unusable
Schoolhouse Well	SESW 10	23	22	Livestock	Usable
Shugart 1 Well	NESW 10	23	22	Irrigation	Usable
Whitehouse Well	SENE 16	23	22	Irrigation	Usable
Cobb House Well	SWNE 16	23	22	Irrigation	Usable
North Cobb Well	SWNE 16	23	22	Irrigation	Usable
Cobb Place Well	NESE 21	23	22	Irrigation	Usable
Unnamed Well	NWNW 3	24	22	Domestic	Usable
No. 9 Well	NWNW 3	24	22	Irrigation	Usable
No. 11 Well	NESW 4	24	22	Irrigation	Usable
No. 8 Well	SENW 9	24	22	Irrigation	Usable
No. 7 Well	NWSW 9	24	22	Livestock	Usable
No. 12 Well	NWSW 8	24	22	Irrigation	Usable
No. 14 Well	SWSW 8	24	22	Irrigation	Usable

No. 4 Well	NENW	17	24	22	Irrigation	Usable
No. 5 Well	SENW	17	24	22	Irrigation	Unusable
No. 6 Well	NWSW	17	24	22	Irrigation	Usable
No. 10 Well	NWSW	17	24	22	Irrigation	Usable
No. 6 Tank	SENE	17	24	22	Livestock	Good
No. 7 Tank	SENE	17	24	22	Livestock	Good
No. 8 Tank	SENE	17	24	22	Livestock	Good
No. 16 Well	NENE	19	24	22	Irrigation	Usable
No. 15 Well	NWNW	20	24	22	Irrigation	Usable
No 15a Well	NENW	20	24	22	Livestock	Usable


APPENDIX 13
SAN PEDRO RIVER
PROPOSED RESEARCH
NATURAL AREA
LAND 7½' QUAD
Siphon
Gaging Station
SAN JUAN DE LAS OLOQUILLAS
San Pedro
SOUTHERN RAILROAD
N
LOCATION MAP
SCALE
0
½
1 Mile
Preferred and Preservation Alternatives
Utilization Alternative


APPENDIX 13
ST. DAVID CIENEGA
PROPOSED RESEARCH
NATURAL AREA
LAND 7½' QUAD
Preferred and Preservation Alternatives
Utilization Alternative
SCALE
0
½
1 Mile
LOCATION MAP
N
Crossing
Siphon
Land
Corral
Flowing Well
Borrow Pit
Siphon
Flowing Well
Flowing Well
Flowing Well
Well 3690
Spring
Curtis
Pedro
DITCH
RAILROAD
OLD
RIPELINE
ST DAVID
20
21
22
25
28
29
30
31
32
33
36
3660
3677
3704
3733
3953
3730
3790
3760
3820
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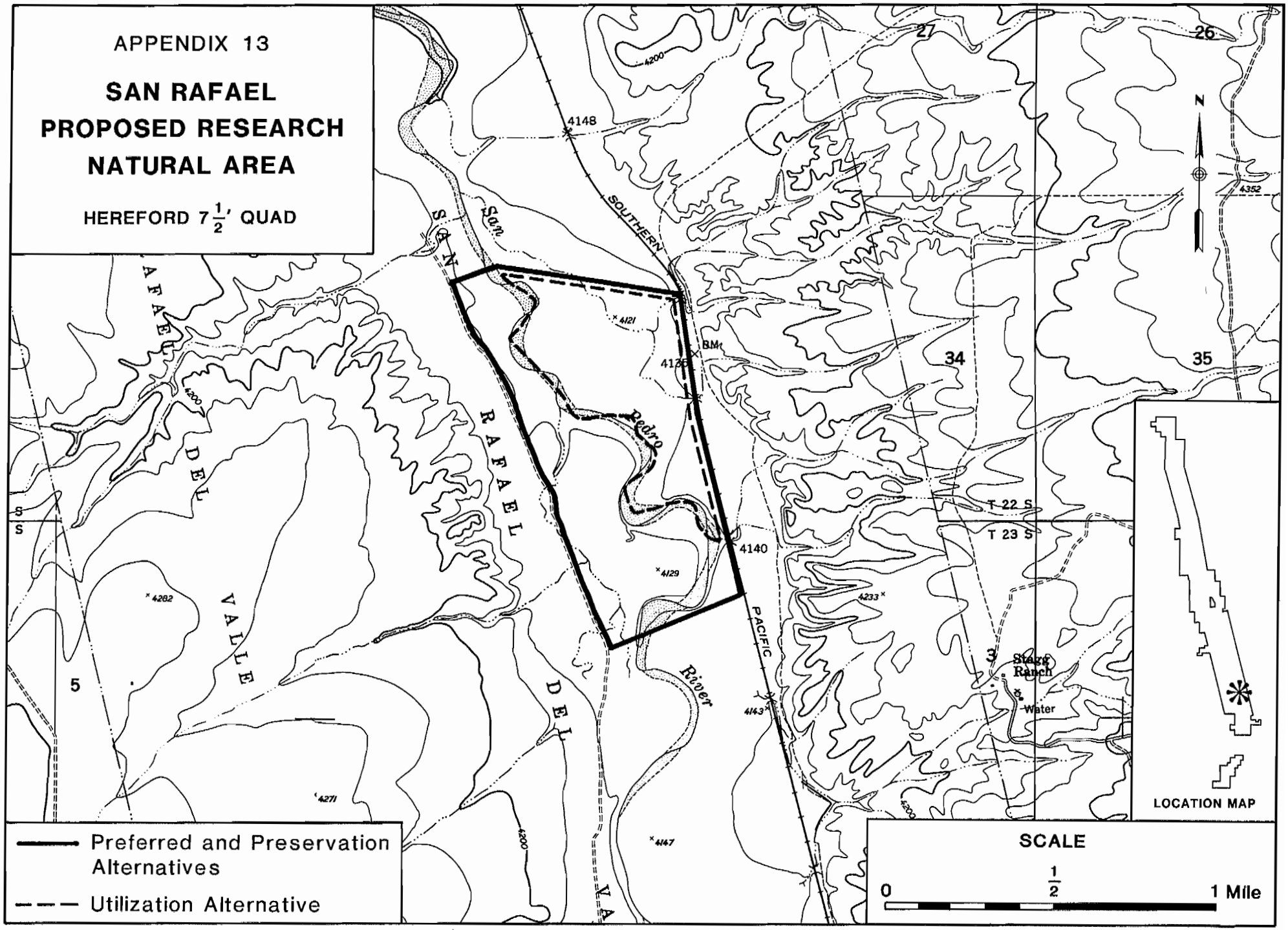
APPENDIX 13
SAN RAFAEL
PROPOSED RESEARCH
NATURAL AREA
HEREFORD 7 1/2' QUAD
Preferred and Preservation Alternatives
Utilization Alternative
SCALE
0
1/2
1 Mile
LOCATION MAP
N
SOUTHERN PACIFIC
San Pedro River
SAN RAFAEL DEL VALLE
Stagg Ranch
Water
T 22 S
T 23 S
26
27
34
35
3
5
4148
4140
4121
4129
4147
4143
4233
4282
4271
4200
4352
BM

GLOSSARY

The following abbreviations are used in this document.

ACEC	Area of Critical Environmental Concern
AD	Years after Christ
AGFD	Arizona Game and Fish Department
AIRFA	American Indian Religious Freedom Act of 1978
ARPA	Archaeological Resources Protection Act
BC	Years before Christ
BLM	Bureau of Land Management
BP	Years before the present
CFS	Cubic feet per second
CRM	Cultural resource management
CRMP	Cultural Resource Management Plan
EIS	Environmental Impact Statement
FLPMA	Federal Land Policy and Management Act
HMP	Habitat Management Plan
LAC	Limits of Acceptable Change
NHPA	National Historic Preservation Act
ORV	Off-road vehicle
RNA	Research Natural Area
ROW	Right-of-way
VRM	Visual resource management
MY	Million years ago

ACTIVE MANAGEMENT AREA. A watershed or segment of watershed designated as a special management area to provide protection for the ground and surface water resources. The 1980 Groundwater Management Act specifies that the Director of the Arizona Department of Water Resources may create a new Active Management Area if it is determined that any of the following conditions exist: (1) active management practices are necessary to preserve the supply of groundwater for future needs, (2) land subsidence or fissuring is endangering property or potential groundwater storage capacity, or (3) use of groundwater is resulting in actual or threatened water quality degradation.

ACTIVITY PLAN. A more detailed and specific plan or program of actions to implement planning decisions over some specified time period. Examples include allotment management plans, recreation area management plans, habitat management plans, and cultural resource management plans.

ADVERSE EFFECT. Alteration of the characteristics that contribute to the use(s) determined appropriate for a cultural resource or that qualify a cultural property for the National Register to such a degree that the appropriate use(s) are diminished or precluded or the cultural property is disqualified from National Register eligibility. Criteria in the regulations of the Advisory Council guide the determination of adverse effect.

ALLOCATION. The division of limited resource capabilities or supplies among the competitors for use.

ALLUVIAL. Soil or earth material which has been deposited by running water.

ALLUVIAL FAN. The alluvial deposit of a stream where it issues from a gorge upon a plain or of a tributary stream at its junction with the main river.

AMERICAN INDIAN RELIGIOUS FREEDOM ACT OF 1978. Among its provisions, the Act provides for American Indian access to religious sites and the use and possession of sacred objects. The Act requires that (1) the views of Indian leaders be obtained and considered when a proposed land use might conflict with traditional Indian religious beliefs or practices, and that (2) unnecessary interference with Indian religious practices be avoided during project implementation, but specifying that (3) conflict need not necessarily bar federal agencies from adopting proposed land uses that are in the public interest.

AQUATIC. Of or pertaining to water. Living or growing in water.

ARCHAEOLOGICAL RESOURCES PROTECTION ACT OF 1979. The Act provides felony level penalties for the unauthorized excavation, removal, damage, alteration, defacement, sale, purchase, exchange, transportation, receipt, or offering of archaeological resources found on public land or Indian land. Definitions, permit requirements, and criminal and civil penalties are established. The Act overlaps with and partially supercedes the Antiquities Act. It is implemented by uniform regulations at 43 CFR Part 7.

ARCHAIC TRADITION. A pattern of life generally associated with a pre-ceramic, pre-agricultural stage of prehistory. The Cochise Culture of southeast Arizona followed this tradition. The Archaic Tradition dates from about 8000 B.P. to about A.D. 1.

AREA OF CRITICAL ENVIRONMENTAL CONCERN. An area of public land that requires special management attention in order to protect and prevent irreparable damage to important historic, cultural or scenic values, fish and wildlife resources or other natural systems or processes, or to protect life and safety from natural hazards.

ARTESIAN FLOW. Groundwater that is confined under pressure beneath impervious earthen material until penetration of the impervious material with a well hole that allows the groundwater to rise to the surface and flow continuously.

AVIAN. Of or pertaining to birds.

AVOIDANCE. A potential adverse effect is prevented from occurring by the partial or complete redesign or relocation of a proposed land use.

BASE FLOW. That portion of streamflow that is sustained from groundwater flow into the river channel.

CANDIDATE SPECIES. Species not protected under the Endangered Species Act but under consideration by the Fish and Wildlife Service for inclusion on the list of federally threatened or endangered species.

CATCHMENT. A structure built to collect and retain rainwater from an upstream drainage area. It typically consists of a gently sloping impervious surface (apron) onto which rainwater collects before flowing into a storage tank. A slickrock catchment uses a natural slickrock surface as an apron.

CHANNEL STABILITY. A relative term describing erosion or movement of the channel walls or bottom due to overflow.

CLIMAX COMMUNITY. Highest ecological development of a community on a given site determined primarily by climate but also influenced by soil, topographic, vegetative, fire and animal factors.

COCHISE CULTURE. Prehistoric culture of southeast Arizona and southwest New Mexico believed to have begun over 8,000 years ago and to have lasted until 500 B.C. or later. The Cochise culture's economy was based on gathering wild plant foods and hunting small game. Settlements were temporary.

COMMUNITY. A group of plants and animals living together in a common area and having close interactions.

CONSERVATION FOR FUTURE USE. A cultural resource will be separated and protected from noncompatible land uses and preserved in place because (1) that particular site type is scarce or unique, (2) its information potential cannot be realized through available archaeological methods, or (3) it represents an outstanding example of a particular site type.

CRITICAL WILDLIFE HABITAT. The area of land, water and airspace required for the normal needs and survival of an endangered species. Critical wildlife habitat is designated by the Secretary of the Interior.

CRUCIAL HABITAT. Crucial habitat includes portions of the habitats of officially designated BLM sensitive species or special status species that, if destroyed or adversely modified, could result in their being listed as threatened or endangered pursuant to the Endangered Species Act, or in some category implying endangerment by a state agency or legislature.

CUBIC FOOT PER SECOND. The expression for one cubic foot of water passing a given point in one second. One CFS equals 7.48 gallons per second.

CULTURAL PROPERTY. Any definite location of past human activity, habitation or use identified through a field inventory, historical documentation or oral evidence. This term may include (1) archaeological or historic sites, structures and places and (2) sites or places of traditional cultural or religious importance to a specific group, whether or not represented by physical remains. Cultural properties are managed by the system of inventory, evaluation, protection and use.

CULTURAL RESOURCE. The fragile and nonrenewable remains of human activity, occupation or use, reflected in districts, sites, structures, buildings, objects, artifacts, ruins, works of art, architecture and natural features that were of importance in past human events. These resources consist of: (1) physical remains, (2) areas where significant human events occurred, even though evidence of the event no longer remains, and (3) the environment immediately surrounding the resource.

CULTURAL RESOURCE INVENTORY. A descriptive listing and documentation of cultural resources, including photographs and maps; the processes of locating, identifying, and recording sites, structures, buildings, objects and districts through library and archival research; information from persons knowledgeable about cultural resources; and on-the-ground field surveys of varying levels of intensity. (See Cultural Resource Inventory Classes.)

CULTURAL RESOURCE INVENTORY CLASSES. Class I - library, archival, and literature research with consultation to identify known cultural resources. Class II - a sampling field inventory of an area, systematically designed to provide a predictive model of the nature and distribution of the cultural resources in an area. Class III - an intensive field search of all surface-evident cultural resources in an entire area.

CULTURAL RESOURCE MANAGEMENT PLAN. A relatively brief activity plan in which determinations (management objectives) made in resource management plans are more fully developed. Use allocations and related protection priorities are established in the CRMP and scientific research objectives are identified by historic context. These plans may be prepared for individual sites, for a group of sites, for each historic context, or for a geographic area.

CULTURAL RESOURCE SITE. A physical location of past human activities or events. Sites vary in size, ranging from the location of a single cultural resource object to a cluster of cultural resource structures with associated objects and features.

DEGRADATION. The removal of channel bed materials during floods through downcutting of the natural stream channels.

DISCHARGE. The quantity of streamflow, usually stated in cubic feet per second as a unit of measurement.

DIVERSITY. A measure of the number of different terrestrial or aquatic communities, vegetational structures and physical parameters within these communities that lead to many different wildlife habitats.

ECOLOGICAL SUCCESSION. See Succession, Plant.

ECOSYSTEM. A complex self-sustaining natural system which includes living and nonliving components of the environment and the interactions that bind them together. Its functioning involves the circulation of matter and energy between organisms and their environment.

EFFECT. Any change in the characteristics that contribute to the use(s) determined appropriate for a cultural resource or to the qualities that qualify a cultural property for the National Register. Determination of effect is guided by criteria in the regulations of the Advisory Council.

ENDANGERED SPECIES. An animal or plant whose prospects of survival and reproduction are in immediate danger of extinction throughout all or part of its range. Defined by the Endangered Species Act, as amended. Endangered species are designated by the Secretary of the Interior.

ENTRENCHMENT. Downcutting of a stream channel during flooding.

ENVIRONMENT. The surrounding conditions, influences or forces that affect or modify an organism or an ecological community and ultimately determine its forms and survival.

ENVIRONMENTAL IMPACT STATEMENT. An analytical document developed for use by decision-makers to weigh the environmental consequences of a potential decision. An EIS should accurately portray potential impacts on the human environment of a particular course of action and its possible alternatives.

EPHEMERAL FLOW. Flow occurring in a channel in response to an intense or long duration storm, usually ceasing one to two days after the end of the storm.

EROSION. The wearing away of the soil and surface by running water, wind, ice or other geological agents.

EVALUATION. The analysis of cultural resource inventory records, the application of professional judgement to identify characteristics that contribute to possible uses for recorded cultural resources, and the recommendation of appropriate use(s) for each resource or group of resources. National Register eligibility criteria are interpreted through or with reference to Bureau evaluation criteria.

EXCHANGE. Acquisition and disposal of lands and interests therein for the benefit of the public through land exchange with the state or private sector.

EXOTIC. Not native to the place where found; pertains to plants and animals.

EXTIRPATED. Refers to species that once occupied an area but have since been eliminated from that portion of their range.

FEDERAL LAND POLICY AND MANAGEMENT ACT OF 1976. The Act gives BLM the legal authority to establish public land policy; to establish guidelines for administering such policy; and to provide for the management, protection, inventory, development and enhancement of the public lands.

FIREARMS. A gun or rifle, etc., from which a projectile is fired.

FLOODPLAIN. The nearly level lowland (alluvial plain) that borders a stream or river and is subject to inundation during high water periods; the relatively flat area or lowlands adjoining a body of standng or flowing water which has been or might be covered by floodwaters.

FLOODPLAIN AQUIFER. A body of groundwater existing within the floodplain area. The quantity of water in storage is influenced by the fluctuation of surface flow.

FOSSIL. Any remains, trace or imprint of an ancient plant or animal that has been preserved by natural processes.

GRABEN. A depressed segment of the earth's crust bounded on at least two sidesby faults.

GRADED ROAD. A regularly maintained (bladed) dirt road with drainages and generally available to passenger vehicles.

GRAVELED ROAD. A regularly maintained (bladed) road with a gravel surface and drainages, available for use by passenger vehicles.

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

HABITAT MANAGEMENT PLAN. A written and officially approved plan for a specific geographic area that identifies wildlife habitat and related objectives, establishes the sequence of actions for achieving objectives and outlines procedures for evaluating accomplishments.

HERON ROOKERY. A breeding and/or nesting area for a colony of herons.

HERPTILE. An amphibian or reptile.

HISTORIC RESOURCES. Cultural resources that date after the arrival of Europeans in the Southwest (about A.D. 1700 to the present).

HOHOKAM CULTURE. A prehistoric culture in southern Arizona dating from about 300 B.C. to about A.D. 1450. It is not known whether they were indigenous to the area or originated in Mexico. They are known for their extensive irrigation farming.

INDIGENOUS. Being native to an area.

INTERMITTENT FLOW. Flow that occurs for longer than several weeks after a major storm but ceases flowing during an extended dry season. Any flow lasting less than 11 months in any year.

LAND GRANT. Parcels of land granted by the Spanish and Mexican governments to individuals.

LIMITS OF ACCEPTABLE CHANGE. A process for establishing acceptable and appropriate changes in recreation settings.

MAMMAL. A class of vertebrates that possess fur (hair) and suckle young on their mothers milk.

MITIGATION. The lessening of a potential adverse effect by applying appropriate protection measures, the recovery of data or other measures.

MITIGATION MEASURES. Methods or procedures committed to by BLM for the purpose of reducing or lessening the impacts of an action.

MOGOLLON CULTURE. A prehistoric culture in west-central and southwest New Mexico and east-central and southeast Arizona that was largely contemporaneous with the Anasazi and Hohokam (300 B.C. - A.D. 1200) and shared some traits with both cultures, particularly the Anasazi. The Mogollon economy was to a great extent based on agriculture and the gathering of wild plant foods.

NATIONAL HISTORIC PRESERVATION ACT. The Act expands the National Register of Historic Places, and establishes the Advisory Council on Historic Preservation, State Historic Preservation Officers, and a preservation grants-in-aid program. Section 106 directs all federal agencies to take into account effects of their undertakings (actions and authorizations) on properties included in or eligible for the National Register of Historic Places. Section 110 sets inventory, nomination, protection, and preservation responsibilities for federally owned cultural properties. Section 106 of the Act is implemented by regulations of the Advisory Council on Historic Preservation.

NATIONAL REGISTER OF HISTORIC PLACES. The Register is authorized by the Historic Sites Act and the National Historic Preservation Act and is expanded and maintained by the Secretary of the Interior. The Register lists cultural properties found to qualify for inclusion because of their local, state or national significance. Eligibility criteria and nomination procedures are in 36 CFR Part 60. Administrative responsibility for the Register is delegated to the National Park Service.

NATIONAL REGISTER QUALITY SITE. A cultural resource site determined to be eligible for nomination to the National Register of Historic Places by virtue of its local, state or national significance.

NATIVE AMERICAN VALUES. Native Americans hold specific and traditional values for sites or areas that may not contain cultural artifact or feature remains. Such sites or areas include but are not limited to places where hunting or gathering has occurred, or special areas considered sacred in their religious beliefs.

NATURALNESS. Quality of generally appearing to have been affected primarily by the forces of nature, with human influence largely unnoticeable.

NONGAME. Wildlife and fish species that are not hunted, fished or utilized for human consumption.

OFF-ROAD VEHICLE. Any motorized, tracked or wheeled vehicle designed for cross-country travel over any type of natural terrain.

OFF-ROAD VEHICLE DESIGNATIONS: The land use planning process identifies the following categories:

Open - Designated areas and trails where ORVs may be operated (subject to operating regulations and vehicle standards set forth in BLM Manuals 8341 and 8343).

Limited - Designated areas and trails where the use of ORVs is subject to restrictions, such as limiting the number or types of vehicles allowed, dates and times of use (seasonal restrictions); limiting use to existing roads and trails or limiting use to designated roads and trails. Combinations of restrictions are possible, such as limiting use to certain types of vehicles during certain times of the year.

Closed - Designated areas and trails where the use of ORVs is permanently or temporarily prohibited. Emergency use of vehicles is allowed.

PALEO INDIAN. The term applied to the first people who occupied the Americas. Present evidence shows they entered North America from the north at least 11,000 years ago. They hunted large mammals that are now extinct, such as mammoth, mastodon, and bison. The earliest known Paleo Indians were the Clovis people.

PALEONTOLOGY. The science that deals with the life of past geologic ages. It is based on the study of the fossil remains of organisms and in a restricted sense is the study of fossils.

PALEONTOLOGICAL RESOURCES. Fossils; the remains of animals and plants that provide information about life in past geologic ages.

PERENNIAL STREAM. A stream that flows throughout the year.

PHREATOPHYTE. A deep-rooted plant obtaining water from an aquifer (water table).

PLANNING UNIT. A geographical subdivision of a resource area.

PLIOCENE. The geologic epoch at the end of the Tertiary period, which lasted from 12 million to one million years ago.

PREHISTORIC RESOURCES. Cultural resources that predate the arrival of Europeans in the Southwest (about A.D. 1700).

PRIMITIVE AND UNCONFINED RECREATION. Nonmotorized, nondeveloped types of outdoor recreation, that can be dispersed and do not require facilities. Some examples are hiking, backpacking, fishing, hunting, spelunking, horseback riding, rock climbing, river running, cross-country skiing, snowshoeing, canoeing, photography and nature study.

PRIORITY USE AREA. An area where a particular resource, such as wildlife habitat, would receive management emphasis or priority. The areas are either unique, significant or best suited for the development, management, use or protection of a resource. The principles of multiple use and sustained yield would be maintained in each priority use area. Many different uses would be allowed in these areas but the priority use would have the most emphasis. Other land uses would have limits placed on them to prevent conflicts with the priority resource. In some instances, a use totally incompatible with the priority resource would be excluded.

PROPOSED LAND USE. Any use of lands or resources that requires an authorized officer's formal approval, whether proposed by the Bureau or by an outside applicant.

PUBLIC LAND. Federal lands administered by the Bureau of Land Management.

RANGE CONDITION. The present state of vegetation of a range site in relation to the climax plant community (natural potential) of that site. Range condition is basically an ecological rating of the plant community. Air-dry weight is the unit of measure used in comparing the composition and production of the present plant community with that of the climax community.

RANGE CONDITION TREND. Direction of change, whether stable, toward (upward), or away (downward) from the site's potential.

RAPTOR. A bird of prey with sharp talons and strongly curved beaks, e.g., hawks, owls, vultures, eagles.

RECREATION AND PUBLIC PURPOSES ACT. An act authorizing the Secretary of the Interior to lease or convey public lands for recreational and public purposes under specified conditions to states or their political subdivisions and to non-profit corporations and associations.

REGIONAL AQUIFER. A body of groundwater underlying an entire watershed, excluding the floodplain aquifer. The regional aquifer is usually recharged along the base of mountains, with the excess groundwater in storage discharged into a natural stream channel.

RESEARCH NATURAL AREA. A natural area established and maintained for research and education, that may include: (1) typical or unusual plant or animal types, or associations or other biotic phenomena or (2) characteristic or outstanding geologic, soil, or aquatic

features or processes. The public may be excluded or restricted from such areas to protect studies.

RESOURCE AREA. The smallest administrative subdivision of a BLM district.

RIGHT-OF-WAY CORRIDOR. A parcel of land either linear or areal in character that has been identified by law or Secretarial Order, through the land use planning process or by other management decision, as being a preferred location for existing and future right-of-way grants and suitable to accommodate more than one type of right-of-way or one or more rights-of-way which are similar, identical or compatible.

RIPARIAN AREA. An area where the vegetation shows the effects of open water or water very close to the surface of the ground. This includes the shores of lakes and reservoirs, intermittent or perennial streams, desert washes, springs, and rivers.

ROADLESS. The absence of roads that have been improved and maintained by mechanical means to ensure relatively regular and continuous use. A way maintained solely by the passage of vehicles does not constitute a road.

RUNOFF. The water that flows on the land surface from an area in response to rainfall or snowmelt. As used here, runoff from an area becomes streamflow when it reaches a channel.

SALADO CULTURE. A prehistoric culture that probably originated in the Tonto Basin of Arizona and spread throughout southeast Arizona from about 1200 to 1450 A.D. The Salado economy was based on agriculture.

SCOPING. An early and open process for determining the scope of issues to be addressed in an EIS and for identifying the significant issues related to a proposed action. Scoping may involve public meetings, field interviews with representatives of agencies and interest groups, discussions with resource specialists and managers, and written comments in response to news releases, direct mailings and articles about the proposed action and scoping meetings.

SECTION. A 1-square mile area forming one of the 36 subdivisions of a township.

SECTION 106. Section 106 of the National Historic Preservation Act of 1966, as amended.

SENSITIVE SPECIES. A designation that is (1) applied to species not yet officially listed but which are undergoing a status review or are proposed for listing according to Federal Register notices published by the Secretary of the Interior or the Secretary of Commerce or in accordance with comparable state documents published by state officials; (2) applied to species whose populations are consistently small and widely dispersed or whose ranges are restricted to a few localities, such that any appreciable reduction in numbers, habitat availability, or habitat condition might lead toward extinction; or (3) applied to species whose numbers are declining so rapidly that official listing may become necessary as a conservation measure.

SHERD. A fragment of a pottery vessel.

SKEWED. A curve is skewed when populations do not follow a normal "Bell Curve" distribution but have a preponderance of measurements on one side of the mean as compared to the other.

SOBAIPURI CULTURE. A protohistoric culture living in the San Pedro Valley from about A.D. 1450 to about 1770. They spoke a Piman language, subsisted primarily on farming, and were eventually forced out of the valley by the Apache.

SOCIO-CULTURAL VALUE. The importance attributed to an object (including flora and fauna), structure, place, living thing, lifestyle, or belief by a group based on the group's perception of the object's role in maintaining their heritage or their existence as a group. Usually expressed in qualitative rather than quantitative terms.

SOIL HORIZON. A layer of soil, approximately parallel to the surface, that has distinct characteristics produced by soil-forming processes.

SOLITUDE. The state of being alone or remote from habitations; isolation.

SPECIAL RECREATION MANAGEMENT AREA. An area requiring explicit recreation management to achieve the Bureau's recreation objectives and to provide specific recreation opportunities. Special recreation management areas are identified in management plans, which also define the management objectives for the area. BLM's recreation investments are concentrated in these areas.

SPECIAL STATUS SPECIES. Animals that are not federally listed but are on state lists as needing protection.

SPECIES COMPOSITION. Proportions of various plant species in relation to the total on a given area; may be expressed in percentages based on weight, crown cover or basal intercept.

STABILIZATION. Protective techniques applied to historic structures and ruins to maintain their existing condition and prevent further deterioration, for example, capping adobe brick walls with adobe mortar.

STATE HISTORIC PRESERVATION OFFICER. The official who is appointed by the Governor to be responsible for administering the State Historic Preservation Program pursuant to the National Historic Preservation Act.

SUCCESSION, PLANT. The process of one plant community being replaced by another until a climax community is reached.

THREATENED SPECIES. Any plant or animal species likely to become an endangered species in the foreseeable future throughout all or a significant portion of its range. Defined by the Endangered Species Act, as amended. Threatened species are designated by the Secretary of the Interior.

TOPOGRAPHY. The exact physical features and configuration of a place or region; the detailed and accurate description of the landforms of a place or region.

UNAUTHORIZED USE. Intentional or unintentional use of public lands without proper authority.

UPLAND HABITAT. Plant communities not usually associated with riparian or floodplain habitats. Found in higher elevations.

VEGETATION TYPE. A plant community with distinguishable characteristics described by the dominant vegetation present.

VEHICLE WAY. A vehicle route established and maintained solely by the passage of motor vehicles.

VISUAL RESOURCES. The visible physical features on a landscape (e.g., land, water, vegetation, animals, structures, and other features).

VISUAL RESOURCE MANAGEMENT. The planning, designating and implementing of management objectives to provide acceptable levels of visual impacts for all BLM resource management activities.

VISUAL RESOURCE MANAGEMENT CLASSES. Classification containing specific objectives for maintaining or enhancing visual resources, including the kinds of structures and modifications acceptable to meet established visual goals.

Class I areas (preservation) provide for natural ecological changes only. This class includes wilderness areas, some natural areas, some wild and scenic rivers and other similar sites where landscape modification activities should be restricted.

Class II (retention of the landscape character) includes areas where changes in any of the basic elements (form, line, color or texture) caused by management activity should not be evident in the characteristic landscape.

Class III (partial retention of the landscape character) includes areas where changes in the basic elements (form, line, color or texture) caused by management activity may be evident in the characteristic landscape. The changes, however, should remain subordinate to the visual strength of the existing character.

Class IV (modification of the landscape character) includes areas where changes may subordinate the original composition and character; they should, however, reflect what could be a natural occurrence within the characteristic landscape.

WATER QUALITY. The chemical, physical and biological characteristics of water with respect to its suitability for a particular use.

WATERSHED. The region draining into a river, river system, or body of water.

WILDERNESS. An area formally designated by Congress as a part of the National Wilderness Preservation System.

WILDERNESS CHARACTERISTICS. Identified by Congress in Section 2(c) of the Wilderness Act of 1964, "A wilderness, in contrast with those areas where man and his own works dominate the landscape, is hereby recognized as an area where the earth and its community of life are untrammeled by man, where man himself is a visitor who does not remain. An area of wilderness is further defined to mean in this Act an area of undeveloped Federal land retaining its primeval character and influence, without permanent improvements or human habitation, which is protected and managed so as to preserve its natural conditions and which (1) generally appears to have been affected primarily by the forces of nature, with the imprint of man's work substantially unnoticeable; (2) has outstanding opportunities for solitude or a primitive and unconfined type of recreation; (3) has at least five thousand acres of land or is of sufficient size as to make practicable its preservation anduse in an unimpaired condition; and (4) may also contain ecological, geological, or other features of scientific, educational, scenic, or historical value."

WILDLIFE. Animals living in the wild that have not been domesticated by man.

WILDLIFE WATERS. Artificial sources of water for wildlife, including a variety of projects such as catchments, masonry dams with storage tanks and drinkers and spring developments. Water for wildlife may even be piped off existing livestock storage tanks.

WITHDRAWAL. An action that restricts the use of public land and segregates the lands from the operation of all or some of the public land or mineral laws.

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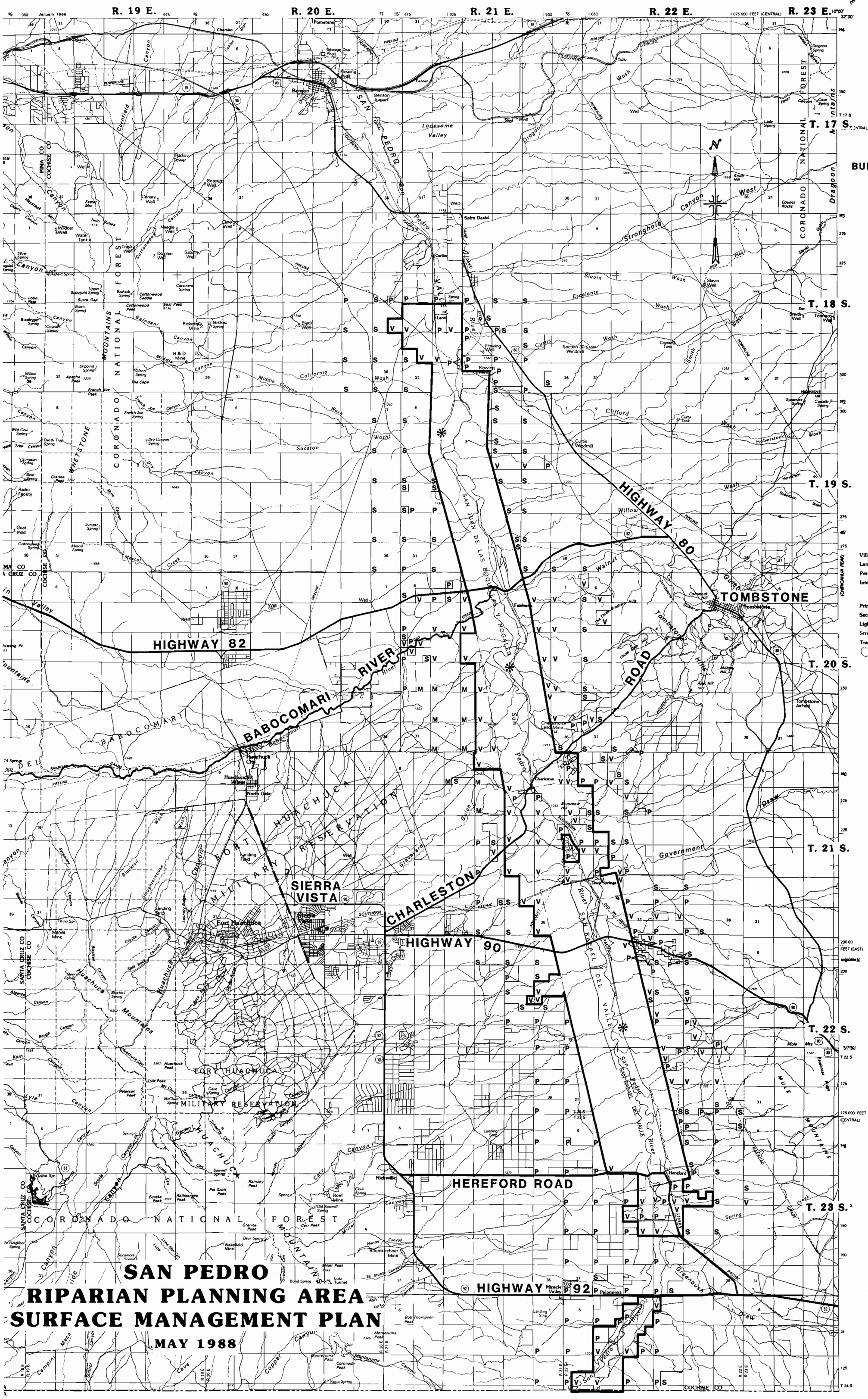


SAN PEDRO RIPARIAN PLANNING AREA SURFACE MANAGEMENT PLAN

MAY 1988

BUREAU OF LAND MANAGEMENT

LAND STATUS LEGEND

PUBLIC LAND - - - - - V
PRIVATE LAND - - - - - P
STATE LAND - - - - - - S
MILITARY LAND - - - - M

✱ **NOTE:** A railroad corridor (from 100'-200' wide) runs the entire length of the planning area.

LEGEND

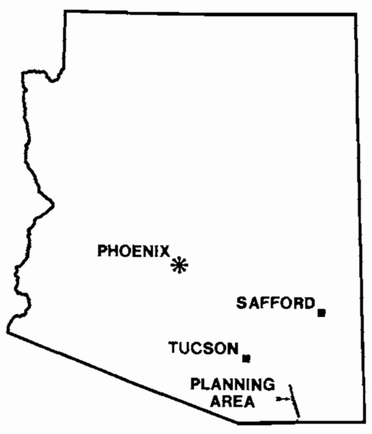
Village or locality
Landmark building
Perennial stream, lake
Intermittent stream, lake

ROAD CLASSIFICATION

Primary highway, hard surface
Secondary highway, hard surface
Light-duty road, hard or improved surface
Street or other road
Trail
Interstate Route — U.S. Route — State Route

NOTE TO MAP USERS

The surface and minerals management status overprints are published as general planning and management tools. Some of the lands, surface and mineral rights, may have been shown as patented lands due to the lack of information available to BLM with respect to the nature of acquisition. Tracts less than 40 acres are usually omitted because of the map scale. Access through private lands may be restricted. The official land records in the respective offices of the Bureau of Land Management or other responsible Federal agencies should be checked for up-to-date status on any specific tract of land. Inadequacies in the BLM maps should be reported to the respective Bureau of Land Management offices from which the maps were obtained.



LOCATION MAP

SCALE 1:100 000

KILOMETERS

MILES

FEET

ELEVATIONS SHOWN IN METERS

NATIONAL GEODETIC VERTICAL DATUM OF 1929

To convert meters to feet multiply by 3.2808

To convert feet to meters multiply by 0.3048

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