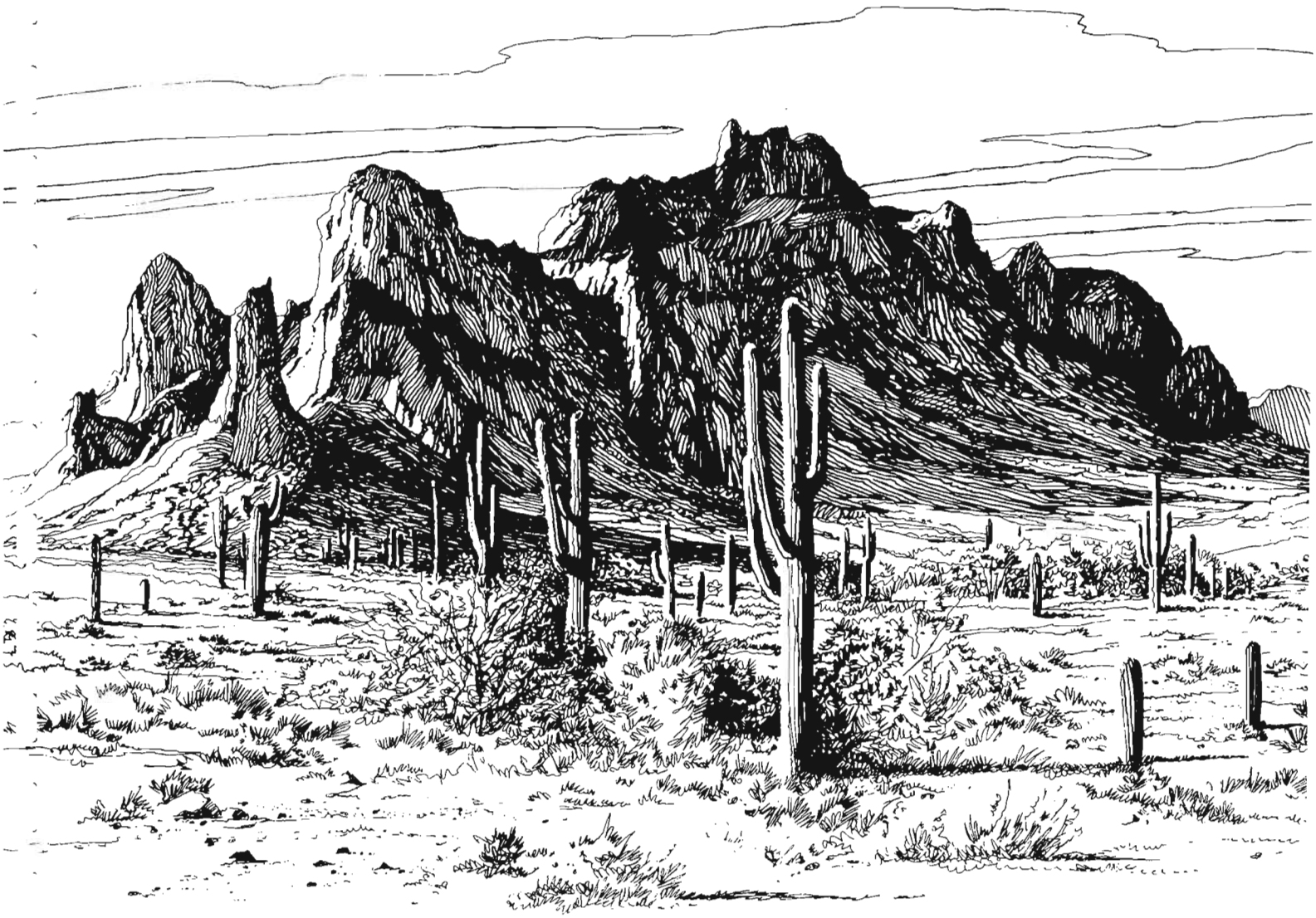
LOWER GILA SOUTH

Resource Management Plan
Environmental Impact Statement
Phoenix District, Arizona

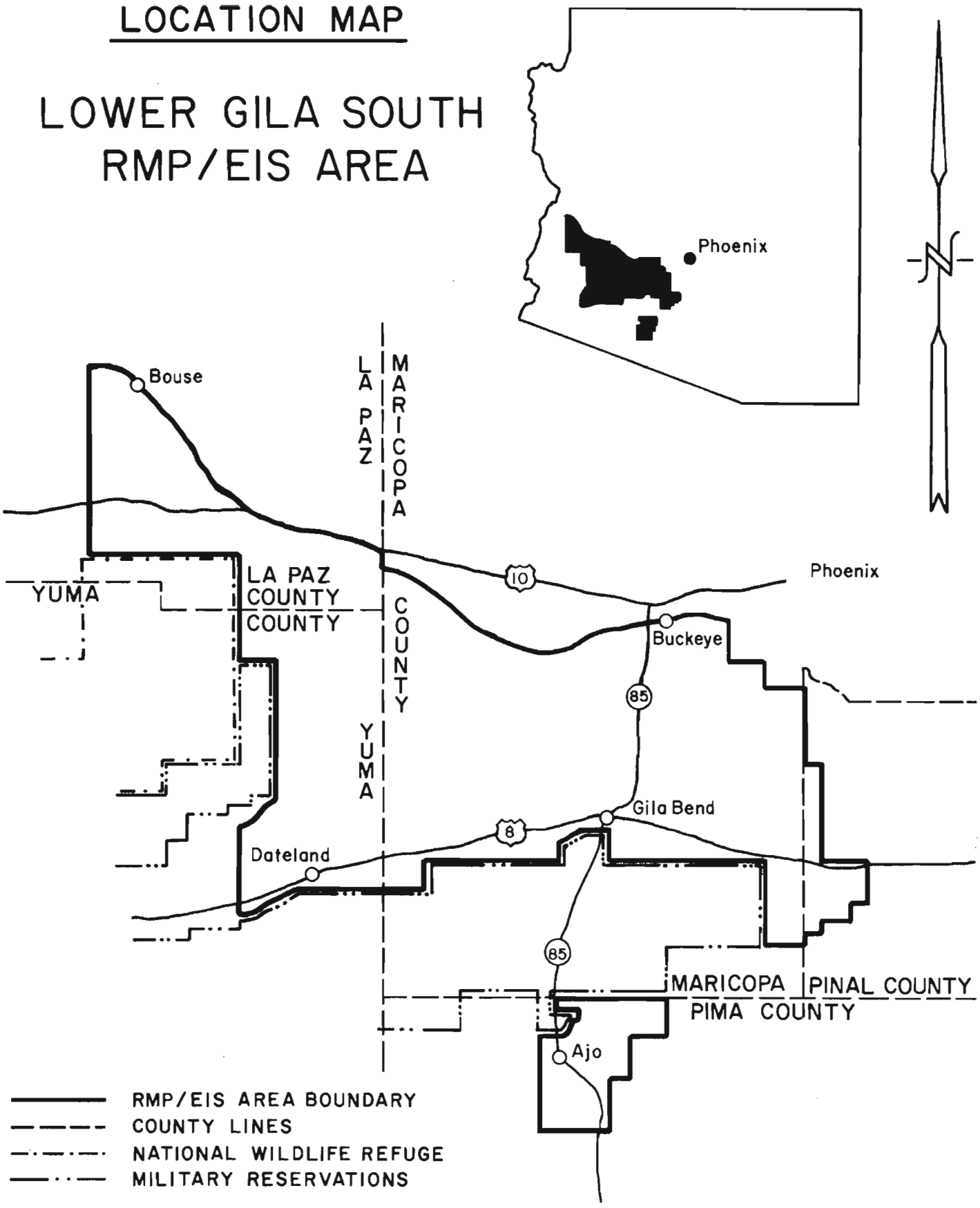
Final



PHOENIX DISTRICT OFFICE
U.S. Department of the Interior
Bureau of Land Management
Arizona

LOCATION MAP

LOWER GILA SOUTH RMP/EIS AREA



IN REPLY REFER TO:

United States Department of the Interior

BUREAU OF LAND MANAGEMENT
Phoenix District Office
2015 West Deer Valley Road
Phoenix, Arizona 85027

August 1985

Enclosed for your review is the final environmental impact statement (FEIS) for the Lower Gila South Resource Management Plan (RMP). The draft environmental impact statement (DEIS) was published in February 1985, and the 90-day public comment period ended May 2, 1985. Changes based on public comments and new information have been incorporated into this FEIS and all portions of the draft, excluding the wilderness supplement, have been reprinted in order to portray those changes. This FEIS contains the proposed (preferred) resource management plan, which is a refinement of the proposed alternative in the draft. The proposed plan is the BLM's proposed action.

The RMP/EIS will not recommend whether WSAs are suitable or nonsuitable for inclusion in the National Wilderness Preservation System (NWPS). These recommendations will be reported in the final wilderness EIS for the Lower Gila South planning area through the Director of the Bureau of Land Management (BLM) to the Secretary of the Interior and to the President. Designation of an area as wilderness can only be made by Congress.

With the exception of wilderness recommendations, all parts of this proposed plan may be protested. A separate wilderness environmental impact statement is required and will be prepared. Non-wilderness related protests should be sent to the Director (202), Bureau of Land Management, U.S. Department of the Interior, 18th and C Streets NW, Washington D.C. 20240, within the 30-day protest period (ending date stamped on title page). Protest statements should contain the following information:

- The name, mailing address, telephone number and interest of the person filing the protest.
- A statement of the issue being protested.
- A copy of all documents addressing the issue or issues that were submitted during the planning process by the protesting party or an indication of the date the issue or issues were discussed for the record.
- A short concise statement explaining why the BLM State Director's decision is believed to be wrong.

At the end of the 30-day protest period, the proposed plan, excluding any portions under protest, shall become the final. Approval shall be withheld on any portion of the plan under protest until final action has been completed on such protest. The Final Resource Management Plan and record of decision will be published in late 1985.

Sincerely,

Marlyn V. Jones
District Manager

FINAL

RESOURCE MANAGEMENT PLAN/ ENVIRONMENTAL IMPACT STATEMENT

for the

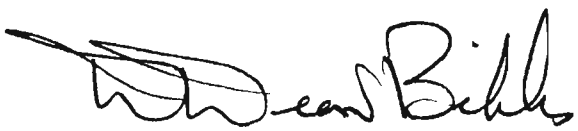
LOWER GILA SOUTH RMP/EIS AREA

La Paz, Maricopa, Pima, Pinal, and Yuma Counties, Arizona

Prepared by

THE DEPARTMENT OF THE INTERIOR

BUREAU OF LAND MANAGEMENT
PHOENIX DISTRICT



State Director

Arizona State Office

This Final Resource Management Plan/Environmental Impact Statement (RMP/EIS) describes and analyzes five alternatives for managing the public lands in the Lower Gila South RMP/EIS area: (1) *Proposed Action,* (2) *No Action,* (3) *Resource Production,* (4) *Resource Protection,* and (5) *Environmental Protection.* A concise description of the affected environment and an analysis of the environmental consequences resulting from the Proposed Action and each alternative are included in this document.

For Further Information Contact:
Bill Carter, Phoenix District, Bureau of Land Management, 2015 W. Deer Valley Road, Phoenix, Arizona 85027 or call (602) 863-4464.

Date statement was made available:
Draft - February 1, 1985
Final -
Protest period Ends -

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SUMMARY

SUMMARY

PURPOSE AND NEED

The Bureau of Land Management (BLM) is under congressional mandate to provide for orderly use and development of the public lands and to preserve the land and its resources from destruction. The *Federal Land Policy and Management Act of 1976* (FLPMA) directs BLM to periodically inventory the lands and to project present and future uses in land use plans. These plans, management framework plans (MFPs) and resource management plans (RMPs), ensure that public lands are managed on a multiple use and sustained yield basis and that the quality of natural resources is preserved.

Section 603 of FLPMA directs the Secretary of the Interior to review roadless areas of 5,000 acres or more having wilderness characteristics, and by 1991 to recommend to the President the suitability of such areas for preservation as wilderness. Within two years after receiving a recommendation, the President must send a report to Congress. Congress, however, has no time limit for acting on the President's recommendations.

This RMP/EIS (resource management plan/environmental impact statement) analyzes the impacts of implementing one of five alternative land use plans or a combination of two or more alternative plans for the Lower Gila South Planning Area. The five alternatives for the management of public lands in the Lower Gila South RMP/EIS Area have been developed and analyzed through the Resource Management Plan Action Steps outlined in Appendix 1. The alternatives respond to the major issues identified early in the planning process.

Each alternative is a land use plan that would provide a framework within which future, more site-specific decisions would be made, such as directing the management intensity of various resources, developing activity plans (grazing management plans, habitat management plans, recreation management plans, and wilderness area management plans), or issuing rights-of-way, leases, or permits. The five alternatives are summarized as follows.

ALTERNATIVES AND THEIR CONSEQUENCES

Proposed Action

This alternative provides for a balanced level of production while protecting important resource values. The goal of this alternative is to meet statutory requirements and policy commitments and to resolve the issues in a manner that is cost efficient, that is based on sound resource management and biological principles, and that prevents any significant impairment of the land's productivity and products. This alternative analyzes portions of four WSAs (190,391 acres) and the impacts on other resource values if these areas were found suitable for wilderness designation.

Consequences

The *Proposed Action* may result in a two percent increase (1,376 AUMs) from the current authorized grazing preference (from 60,524 to 61,900 AUMs).

Long-term increases in available forage would be the result of new rangeland developments in previously unused or lightly grazed areas. These developments would cost approximately $371,345 for construction and materials. Slight improvement in rangeland condition and trend would occur in the long term as a result of new rangeland developments, rangeland monitoring studies, and adjustments in grazing use when studies indicate a need for adjustments.

Under this alternative livestock operators would receive a slight economic benefit. Net revenues and ranch values would increase slightly for medium and large ranches, whereas no changes would occur on small ranches.

Wilderness designation of portions of four WSAs (190,391 acres) would ensure preservation of wilderness and related cultural, botanical, wildlife, scenic, and recreation values. Wilderness designation would ensure protection of 147,090 acres of desert bighorn sheep habitat and 10,520 acres of desert tortoise habitat. Designation would also benefit cultural resources because 103,815 acres likely to contain cultural resources would be protected. Motorized vehicle use would be prohibited on 190,391 acres. The remaining eight WSAs and portions of four proposed WSAs would be released by Congress from wilderness study.

The lands program proposes to dispose of 73,123 acres of isolated parcels of land that are difficult and uneconomical to manage. In addition, 36,845 acres of private and state lands proposed for acquisition would benefit wildlife, botanical, and wilderness values. Designation of 10 utility corridors would be somewhat beneficial to wildlife, botanical, cultural, and watershed resources by limiting future disturbance in other areas.

Minerals and energy exploration and development would be adversely impacted by closing portions of four WSAs (190,391 acres) to mineral entry, mineral leasing, and oil and gas leasing. In addition, 199 mining claims within the four WSAs would be affected by wilderness designation.

No Action

This alternative is the current management direction, assuming no changes in policy or funding. It provides a baseline for comparison with other alternatives. There would be no areas analyzed for wilderness designation. Currently, the Lower Gila South RMP/EIS Area lacks formal management direction established through an approved land use plan.

Consequences

The *No Action* alternative would not impact livestock operations within the RMP/EIS area. No change in stocking rates are proposed and livestock grazing would continue at present levels. Current trends in rangeland condition would eventually stabilize. Areas currently overused by livestock would reduce the ability of the rangeland to produce forage to sustain present grazing levels. As palatable forage decreases, so would livestock performance. The overall quantity and quality of the vegetation produced on public lands would remain essentially unchanged on some sites, and in the long term would decline slightly on others.

The financial situation depicted by the typical ranch budgets is expected to continue. No changes would occur in ranch values or with the rancher's ability to borrow operating and long-term capital.

The *No Action* alternative would have adverse affects on wildlife habitat values in the long term. Nondesignation of 12 WSAs would reduce the protection of habitat for two threatened and endangered species (desert bighorn sheep and desert tortoise). Other wildlife habitat conditions would continue along existing trends. Wilderness protection for high botanical values within the 12 WSAs would not occur.

Cultural resources could be adversely impacted in the long term because they would not be afforded the added protection of wilderness designation. Surface-disturbing projects would be allowed in the 12 WSAs.

The lands program would not be impacted by this alternative. No lands would be proposed for acquisition or disposal, and all land actions would be handled on a case-by-case basis. No utility corridors would be designated, and BLM would handle requests for powerlines and pipelines on a case-by-case basis.

No impacts to mineral and energy exploration and development or to ORV use would result from the *No Action* alternative.

Resource Production

This alternative emphasizes increased production and development of resources that would contribute to the economy of the region. Environmental values would be protected to the extent required by laws, regulations, and policies. The issues would be resolved in a manner that would place highest priority on livestock forage utilization, leaving all areas open to mineral development and oil and gas leasing. There would be no areas analyzed for wilderness designation.

Consequences

The *Resource Production* alternative initially reduces livestock grazing by 10 percent from the authorized grazing preference (from 60,524 AUMs to 54,315 AUMs). This would have slight impacts to some livestock operators in the short term but would not be significant. In the long term a six percent (4,023 AUMs) increase over the authorized preference (60,524 AUMs) would result from the implementation of eight allotment management plans involving 531,400 acres of public land.

Rangeland vegetation would benefit from implementation of the eight AMPs. Initial reductions would improve vigor of preferred forage plants. In the long term vegetation would improve the most on allotments with AMPs.

This alternative would be financially beneficial to livestock operators in the medium and large ranch classes. Long-term losses would result for the small ranch operators.

Wilderness and associated values could potentially be degraded without the wilderness designation of the 12 WSAs. Wildlife habitat (desert bighorn sheep, desert tortoise, and Sonoran pronghorn) would improve slightly on the eight allotments with implemented AMPs. The degree of benefit would depend on the contents of the proposed AMPs. Cultural resources could be adversely impacted in the long term because they will not be afforded the additional protection provided by wilderness designation. Surface-disturbing projects could be allowed in the 12 WSAs.

As under the *Proposed Action*, this alternative proposes to dispose of 73,123 acres of isolated parcels that are difficult and uneconomical to manage. In addition, acquisition of 22,842 acres of private and state lands would benefit wildlife and botanical values. Designation of 10 utility corridors would also benefit wildlife, botanical, cultural, and watershed resources by providing established routes for new powerlines and pipelines.

All 12 WSAs would remain open for mineral and energy exploration and development and for ORV use under the *Resource Production* alternative.

Resource Protection

The *Resource Protection* alternative emphasizes protection and enhancement of other resources such as cultural, botanical, wildlife, and wilderness while implementing a lower level of livestock grazing. Mineral and energy exploration would be allowed only to the extent that it is compatible with resource protection. The objectives of this alternative are to facilitate the improvement and recovery of wildlife habitat on 16 allotments where wildlife and livestock compete for forage. Special emphasis would also be placed on the acquisition of prime mesquite and saltcedar habitat along the Gila River. Portions of seven WSAs (326,551 acres) would be analyzed as suitable for wilderness designation.

Consequences

This alternative would result in significant adverse impacts to livestock operators. A 47 percent reduction from the current authorized grazing preference is proposed (from 60,524 to 31,914 AUMs). Livestock forage would improve significantly in the long term from the reduction in livestock use. Improvement would occur most rapidly in areas displaying upward apparent trends in rangeland condition and less rapidly in areas with low potential for vegetation production. Competition between livestock and wildlife would be reduced through reductions in livestock grazing use.

Economic impacts to livestock operators would be adverse under this alternative. Ranch values and net revenues would be substantially reduced. These reductions would affect the ability of livestock operators to replace equipment and pay existing debts.

Wilderness designation of portions of seven WSAs (326,551 acres) would ensure that wilderness and related values are protected from surface-disturbing projects. The remaining five WSAs and portions of the seven WSAs would be released by Congress from wilderness study.

Wilderness designation of portions of seven WSAs (326,551 acres) would protect 241,170 acres of desert bighorn sheep and 17,570 acres of desert tortoise habitat. Approximately 45 percent or 145,513 acres likely to contain cultural resources would also be protected by wilderness designation under this alternative. Motorized vehicle use would be prohibited on portions of the seven WSAs (326,551 acres).

As under the *Proposed Action* the lands program proposes to dispose of 73,123 acres of isolated parcels that are difficult and uneconomical to manage. In addition, acquisition of 42,505 acres of private and state lands would benefit wildlife, botanical, cultural, and wilderness values. The designation of 10 utility corridors would conflict with about five miles of the Eagletail Mountains WSA.

Minerals and energy exploration and development would be adversely impacted by closing portions of seven WSAs (326,551 acres) to mineral entry, mineral leasing, and oil and gas leasing. In addition, 666 mining claims within designated wilderness would be affected.

Environmental Protection

This alternative would eliminate livestock grazing in the Lower Gila South RMP/EIS area and analyzes the impacts of removing livestock from public lands. All other issues, except wilderness, would be resolved the same as in the *Resource Protection* alternative. This alternative analyzes all 12 WSAs (621,931 acres) as suitable for wilderness designation.

Consequences

Livestock operators would be adversely impacted by cancellation of all grazing privileges on public lands within the Lower Gila South RMP/EIS area. The livestock industry would lose 60,524 AUMs of livestock forage annually. Eliminating livestock grazing in this alternative would be beneficial to the vegetation resources. Vegetation would improve in vigor and production. All livestock-wildlife conflicts would be eliminated.

Livestock operators in the Lower Gila South RMP/EIS area would no longer be able to remain in business under this alternative. In addition, livestock operators who owe money on their ranch operations would be encumbered with no income available to repay their debts.

Designating 12 WSAs (621,931 acres) would have short- and long-term beneficial impacts on wilderness and associated resource values (botanical, cultural, wildlife, and watershed). Motorized vehicle use would be prohibited on 621,931 acres. Some manageability problems might result from development of nonfederal inholdings and valid mining claims and motorized vehicle use.

Wildlife habitat would benefit significantly from this alternative. In addition, 373,850 acres of bighorn sheep habitat and 46,770 acres of desert tortoise habitat would be protected from surface-disturbing activities by the designation of 12 WSAs.

Cultural resources would benefit significantly by wilderness designation of 12 WSAs. Approximately 218,560 acres likely to contain cultural resources would be protected as a result of this alternative.

The lands program proposes to dispose of 73,123 acres of isolated parcels that are difficult and uneconomical to manage. In addition, 47,198 acres of private and state lands proposed for acquisition would benefit wildlife, botanical, and wilderness values. The designation of 10 utility corridors under this alternative would result in conflicts with 59.5 miles of eight WSAs proposed for wilderness designation.

This alternative would have significant adverse impacts on mineral and energy exploration and development by closing 621,931 acres within 12 WSAs to mineral entry, mineral leasing, and oil and gas leasing. In addition, 3,152 mining claims within the 12 WSAs would be affected.

Table 2-3, located at the end of Chapter 2 of this document, summarizes impacts by resource and by alternative.

Chapter 1

PURPOSE AND NEED

CHAPTER 1

PURPOSE AND NEED

INTRODUCTION

The *Resource Management Plan* (RMP) is designed to guide and control future management actions and the development of more detailed and limited scope activity plans for resources and uses. The activity plans that will be developed for the Lower Gila South Planning Area will be site specific and will involve input from other federal, state and local agencies and the interested public. Activity plans may be prepared for allotments, wildlife areas, recreation areas, designated wilderness areas, and for other resources such as cultural resources and threatened and endangered species.

Many comments received on the Lower Gila South RMP/EIS requested more detailed and site-specific data. This plan was not designed to address site-specific actions nor the impacts of those actions. The site-specific actions and impacts will be analyzed in the activity plans and associated environmental assessments.

The RMP will guide the development of the activity plans and the implementation of those and other actions in the planning area.

The *Lower Gila South Resource Management Plan/Environmental Impact Statement* (RMP/EIS) was prepared to provide a comprehensive framework for managing and allocating public land and resources in BLM's Lower Gila South RMP/EIS Area in southwestern Arizona.

The contents of this RMP/EIS are focused on resolving key issues that were developed through public input. The issue identification and public participation phases for this document began in November 1980 with mailouts and public meetings and continued through June 1983 when writing of this document began. (See *Chapter 5, Scoping and Public Participation,* for specific details.)

Several statutory or court-ordered requirements will be met when the decisions proposed in this plan are approved. As required under Section 603 of the *Federal Land Policy and Management Act of 1976* (FLPMA), this document analyzes preliminary wilderness suitability recommendations for 12 wilderness study areas (WSAs). The RMP/EIS will not recommend whether WSAs are suitable or nonsuitable for inclusion in the *National Wilderness Preservation System* (NWPS). These recommendations will be reported in the final wilderness EIS for the Lower Gila South planning area through the Director of the Bureau of Land Management (BLM) to the Secretary of the Interior and to the President. Designation of an area as wilderness can only be made by Congress.

On April 18, 1985 U.S. District Court Judge Lawrence Karlton, for the Eastern District of California, ruled in the Sierra vs. Watt that mineral estates are to be considered for wilderness. Certain mineral estate lands were deleted from wilderness review in 1982 and 1983. The above decision restores these lands to wilderness study. There were 14,374 acres of these lands within the WSAs studied in the draft EIS. This final EIS incorporates the 14,374 acres in the WSAs analyzed. Also, one WSA within the planning area was deleted from wilderness study in 1983, the Sierra Estrella, and will be studied in a state-wide wilderness EIS to begin in 1986 and to be completed in 1987. This RMP/EIS also analyzes alternatives for livestock grazing on public land, as required under a court-ordered agreement based on a 1973 lawsuit filed against BLM by the Natural Resource Defense Council (NRDC).

This document will address possible future management of the area for the next 10 or more years. When necessary, revisions will be made to the RMP to keep it current with resource management needs and policies.

SETTING

The Lower Gila South RMP/EIS area is in the Lower Gila Resource Area in southwestern Arizona. It includes portions of Maricopa, Pinal, Pima, Yuma, and La Paz Counties. BLM has management responsibilities on approximately 2,009,232 surface acres and 1,946,485 acres of subsurface minerals.

The primary economic uses of lands in the RMP/EIS area are agriculture, livestock grazing, mining, and recreation.

Except for approximately 63,000 acres along the Fred J. Weiler Green Belt (Gila River) most of the public lands in the area are in consolidated blocks. Population centers include Buckeye, Gila Bend, and Ajo. Phoenix is the major population center nearest to the RMP/EIS area.

PLANNING PROCESS OVERVIEW

BLM's planning process, as described in 43 CFR 1600, involves nine action steps and requires using an interdisciplinary team for the completion of each step. The

Lower Gila South RMP Action Steps listed below are described in detail in Appendix 1.

1. Inventory Data and Information Collection
2. Identification of Issues
3. Development of Planning Criteria
4. Analysis of Management Situation
5. Formulation of Alternatives
6. Estimation of Effects of Alternatives
7. Selection of the Preferred Alternative
8. Selection of the Resource Management Plan
9. Monitoring and Evaluation

The Lower Gila South RMP/EIS is designed to resolve three of the five public issues and BLM management concerns. The Fred J. Weiler Green Belt issue will be resolved through a management plan developed in cooperation with the U.S. Fish and Wildlife Service, Arizona Game and Fish Department, and BLM. The wilderness recommendations will be made in the final wilderness EIS for the Lower Gila South area.

The five planning issues (rangeland management, wilderness, land tenure, utility corridors, and the Fred J. Weiler Green Belt) were identified based on input from public land users, assigned BLM interdisciplinary team specialists, and city, county, state, and other federal government agencies. These issues were then reviewed by BLM managers. Responses to the issue identification step were obtained through public meetings and brochure mailings to help identify the five major issues of concern. The issues have been examined and alternative ways to resolve the issues have been developed.

ISSUES ANALYZED

These specific issues resulted from public input at scoping meetings, from brochure mailings, from BLM resource specialists, and input from other government agencies. The following is a brief description of the issues analyzed in Chapter 4.

Issue 1: Rangeland Management

The Lower Gila South RMP/EIS area has 48 grazing allotments on public land. Present rangeland management actions need to be reviewed in order to balance resource use opportunities and to aid in stabilizing the livestock industry through management actions. Rangeland developments, level of management, and results of monitoring studies are needed to improve trends in rangeland condition and/or maintain good rangeland conditions. Resolution of these issues should satisfy the requirement of the court-ordered agreement between BLM and the Natural Resource Defense Council (NRDC).

Issue 2: Wilderness

The *Federal Land Policy and Management Act* (FLPMA) of October 21, 1976, directed BLM to inventory, study, and then report to Congress (through the Secretary of the Interior and the President) the public lands suitable for inclusion into the National Wilderness Preservation System (NWPS).

As required by Section 603(a) of FLPMA, this resource management plan analyzes for wilderness suitability 12 wilderness study areas (WSAs) in the Lower Gila South RMP/EIS area (Table 1-1 and Map 1-1). For these WSAs, the RMP will make only preliminary recommendations as to whether they are suitable or nonsuitable for inclusion in the NWPS. Needed resolutions include:

- Which WSAs or portions of WSAs should be recommended to Congress as suitable for inclusion in the NWPS?
- Which WSAs or portions of WSAs should be recommended to Congress as nonsuitable for wilderness designation?
- How will areas not designated wilderness be managed?
- What are the environmental impacts of nondesignation on wilderness values?
- What identified or potential mineral and energy resource values could be forgone or adversely affected by wilderness designation?
- What other resource uses or values could be forgone or adversely affected by wilderness designation?
- What resources will benefit from wilderness designation?
- What are the local social and economic impacts of designation?

TABLE 1-1
WILDERNESS STUDY AREAS--LOWER GILA SOUTH RMP/EIS
Bureau of Land Management, Phoenix District, Arizona

WSAs	Unit Numbers	Acreage
New Water Mountains	AZ-020-125	40,600
Little Horn Mountains West	AZ-020-126A	13,800
Little Horn Mountains	AZ-020-127	91,930
Eagletail Mountains	AZ-020-128	119,700
East Clanton Hills	AZ-020-129	36,600
Face Mountain	AZ-020-136	27,575
Signal Mountain	AZ-020-138	20,920
Woolsey Peak	AZ-020-142/144	73,930
North Maricopa Mountains	AZ-020-157	75,483
South Maricopa Mountains	AZ-020-163	72,004
Butterfield Stage Memorial	AZ-020-164	9,566
Table Top Mountains	AZ-020-172	39,823
TOTAL		621,931

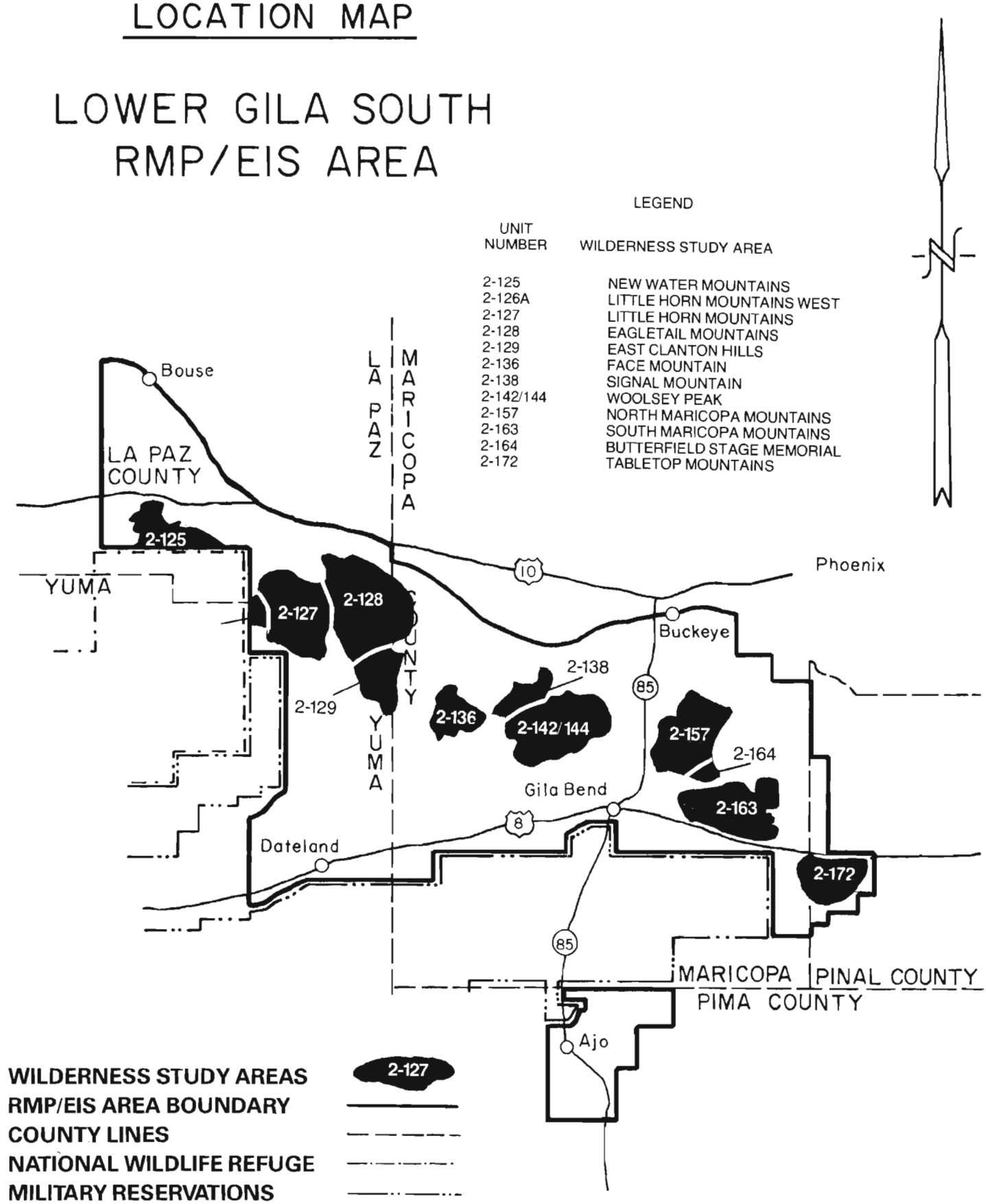
SOURCE: Phoenix District files

A separate final wilderness legislative EIS and wilderness study report will be prepared as a result of the RMP/EIS planning effort. These documents will be forwarded to Washington, D.C. for review by the BLM

MAP 1-1

LOCATION MAP

LOWER GILA SOUTH RMP/EIS AREA



Director and the Secretary of the Interior before the recommendations in this plan are submitted to the President and Congress.

FLPMA requires the Secretary of the Interior to report his recommendations to the President by October 21, 1991, and the President has until October 21, 1993, to send his recommendations to Congress. Only Congress can designate a WSA as wilderness, but Congress has set no time limit for acting on the President's recommendations.

The analysis of WSAs described in this RMP/EIS result from the application of BLM's *Wilderness Study Policy* (Federal Register, 47:23, February 3, 1982) during the preparation of the Lower Gila South Management Situation Analysis (MSA). The Wilderness Study Policy directed BLM to apply certain criteria and quality standards to each WSA to ensure that wilderness suitability recommendations are (1) based on full consideration of all multiple resource values of public lands, (2) consistent with established national policy, and (3) that all interested and affected members of the public and state and local governments are made aware of the study and given adequate opportunity to comment and otherwise be involved in the study process.

Issue 3: Land Tenure Adjustment

Special attention is needed for identified areas where land ownership patterns pose a problem for proper management of the federal lands. Some land ownership adjustments such as exchanges, sales, state selections, and acquisitions would be beneficial to the management of wilderness, crucial wildlife habitat, and other resources. Special attention would be given to administrative costs, location, manageability, and resource values of all areas selected for land ownership adjustments.

Needed resolutions include (1) which lands should be retained in federal ownership, (2) which lands should be disposed of through either exchange or sale, (3) which private, state, or federal land exchanges would be used to consolidate ownership to benefit wilderness, wildlife, and cultural resources, and (4) where nonfederal surface or subsurface acreage should be acquired to benefit specific BLM programs?

Split Estate. The split estate issue is one not confined to the Lower Gila South RMP/EIS Area, but is a statewide problem. Therefore, it is important to identify those areas where the split estate occurs in order to help facilitate the statewide program.

Disposal of those federal minerals that underlie either state or private lands may be accomplished by exchanges or sales in accordance with Section 209 of the *Federal Land Policy and Management Act*. Acquisition of the state or private mineral estates that underlie federal surface would be accomplished by exchange.

Issue 4: Utility Corridors

Private and public utility companies and other agencies need to know where utility corridors would be designated so they can develop their plans based on known, approved corridors dedicated primarily for the use and construction of their structural facilities. Other public land users also need to know where future powerlines and pipelines will be located. If WSA boundaries are not adjusted to allow for utility corridor expansion, there could be conflicts between five utility corridors and eight WSA boundaries. This RMP/EIS identifies 10 existing utility rights-of-way that should be designated to serve as utility corridors and recommends that each of these corridors be one-mile-wide. The proposed corridors are (1) El Paso Natural Gas, (2) Palo Verde-Devers, (3) San Diego Gas and Electric Interconnect, (4) Palo Verde-Kyrene, (5) Liberty-Gila Bend, (6) Gila Bend-Ajo, (7) Santa Rosa-Gila Bend, (8) Tucson Electric Power, (9) Interstate 8, and (10) Interstate 10 (Map 1-2).

The Interstate 10 corridor, because of resource concerns, will have a restriction regarding overhead lines. Due to the close proximity of important bighorn sheep waters and lambing grounds north of the Interstate and because of terrain features north of the Interstate, overhead transmission lines will not be allowed north of I-10 between townships 16 W. and 18 W.

Currently there are two communication sites in the RMP/EIS area, Oatman Mountain west of Gila Bend and Guadalupe Mountain east of Quartzsite, both of which have room for expansion. Other potential sites would be studied on a case-by-case basis, and a communication site plan would be developed before construction could begin.

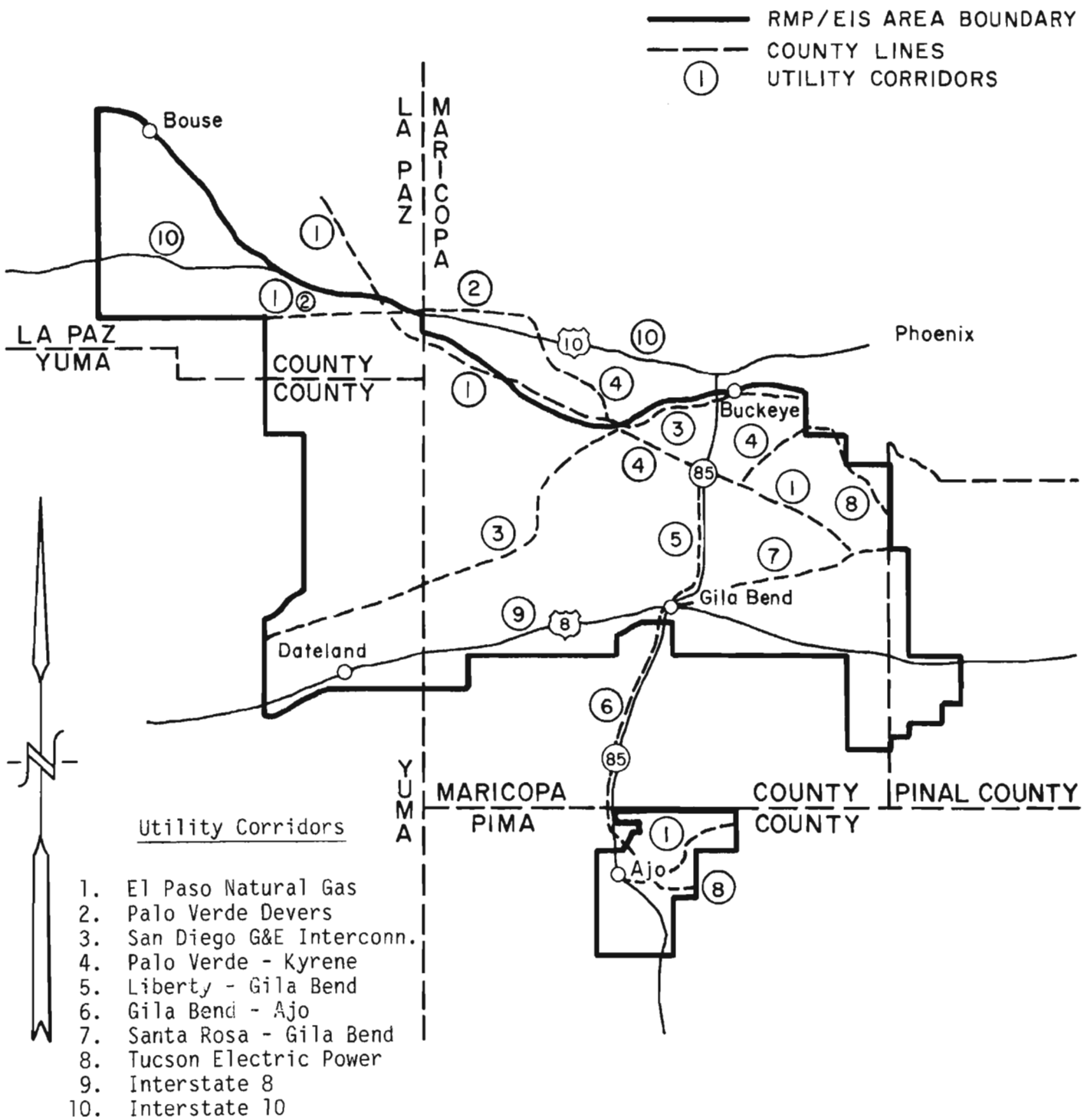
Issue 5: Fred J. Weiler Green Belt (Will Not Be Analyzed In This RMP/EIS)

Approximately 63,000 acres of public land are within the Fred J. Weiler Green Belt, which extends along the Gila River from the Sierra Estrella Park on the eastern edge of the RMP/EIS area boundary to 12 miles west of Dateland, Arizona. Following is a brief history of land use in this area.

Within the area now known as the Green Belt, Public Land Order 1015 withdrew 6,896 acres of land in 1954 to the U.S. Fish and Wildlife Service (FWS). At this time, the FWS entered into a cooperative management agreement with the Arizona Game and Fish Department for these withdrawn lands. These lands were segregated from all forms of appropriation under the public land laws, including the mining laws but not the mineral leasing laws.

In 1970 approximately 63,000 acres were studied and it was determined that they would be retained under the Classification for Multiple Use Act of 1964. A classification for multiple use was placed on the subject lands segregating the 63,000 acres (Fred J. Weiler Green Belt)

MAP 1-2



LOWER GILA SOUTH
RMP/EIS AREA

from appropriation under the public land and mining laws. Mineral leasing, however, was not excluded. The multiple use classification was established to allow for the management of wildlife habitat, flood and erosion control, and recreational values.

Currently there is no management plan for the Fred J. Weiler Green Belt. BLM will develop a management plan for the Green Belt in cooperation with the Arizona Game and Fish Department and the U.S. Fish and Wildlife Service. The issues which need to be resolved are (1) how should the area be managed, (2) are the present boundaries adequate, (3) are there lands that should be deleted from the area, (4) are there lands that should be added to the area, and (5) what uses should be allowed and what uses restricted or prohibited?

An environmental assessment will be developed and made available to the public. This issue will not be discussed or analyzed in Chapters 2 and 4 of this document.

Chapter 2

ALTERNATIVES

CHAPTER 2

DESCRIPTION OF THE ALTERNATIVES

INTRODUCTION

Chapter 2 describes in detail five alternatives, including the *Proposed Action*. These alternatives have been developed to resolve the issues that were identified in Chapter 1. The main purpose of this chapter is to identify the various combinations of public land uses and resource management practices that respond to the five major planning issues. All the alternatives will be described in relation to long-term impacts, except where impacts are noted as short-term. The short term would cover the five years after the filing of the final RMP, and the long term would cover the 25 years following the implementation of an action. The alternatives are the *Proposed Action, No Action, Resource Production, Resource Protection,* and *Environmental Protection.*

THE PROPOSED PLAN

The proposed plan was selected by a team composed of the District Manager, Area Manager and Resource Specialists. It was reviewed by the State Director. It was selected based on (1) issues raised throughout the planning process, (2) public input received during the 90-day comment period and at meetings, and (3) the environmental analysis developed on the previously formulated alternatives in the draft environmental impact statement (DEIS).

The Proposed Action of this chapter describes the proposed management and objectives by issue, the recommendations or actions required to obtain those objectives and the rationale for selecting a particular alternative level.

The *Proposed Action* of this chapter describes the proposed management and objectives by issue, the recommendations or actions required to obtain those objectives and the rationale for selecting a particular alternative level.

HOW THE PROPOSED PLAN WILL BE IMPLEMENTED AND MONITORED

A record of decision will be issued following publication of this final environmental impact statement on the proposed resource management plan (RMP). The record of decision will include the final RMP which will describe the decisions on all land use issues, except for the wilderness issue. Wilderness recommendations will be reported in the final wilderness EIS for the Lower Gila South. The record of decision will also contain implementation criteria and a monitoring plan.

The implementation criteria will guide the order in which projects are implemented. Those criteria will be tied to the budget process and will be applied annually to determine the projects that will be accomplished first, second, etc. The monitoring plan will outline monitoring programs for evaluating the effectiveness of plan proposals such as forage allocations and wildlife improvements. Monitoring will determine whether assumptions were correctly applied and impacts correctly predicted. Monitoring will also help to establish long-term use and condition trends for the planning area and will provide valuable information for future planning.

The record of decision will be the approval authority for implementing the land use allocations and other actions contained in the final RMP.

ALTERNATIVE FORMULATION

Both the *National Environmental Policy Act* (NEPA) regulations and the BLM resource management planning regulations require the formulation of alternatives. Each alternative represents a complete and reasonable plan to guide future management of public lands and resources. One alternative must represent no action, which means a continuation of present levels of resource use. The other alternatives must provide a range of choices from resource protection to resource production.

The basic goal in formulating alternatives is to identify combinations of public land uses and resource management practices that respond to the issues.

Alternatives to resolve the five issues were formed around five general themes: proposed action, no action, full multiple use consideration (resource production), resource protection, and environmental protection (this is the no livestock grazing alternative with all 12 WSAs recommended for designation).

Issues dictated the way in which alternatives were formulated. Those lands, resources, and programs not affected by the resolution of any issue will be managed in the future essentially as they are at present. Future changes will be permitted based on a case-by-case analysis and in accordance with applicable laws, regulations, and policies.

MANAGEMENT GUIDANCE COMMON TO ALL ALTERNATIVES

General Guidance

Areas containing special and/or significant resource values will be evaluated to determine if special management practices are needed. Through these evaluations it may be necessary to restrict certain uses or designate Special Management areas.

Rangeland Management

Allotment Categorization. All grazing allotments in the Lower Gila South RMP/EIS area have been assigned to two of the three management categories outlined in BLM's current grazing management policy. See Appendix 12 for a detailed definition of the grazing allotment categories. Except for the *Environmental Protection* alternative, all allotments and grazing leases would be categorized as follows for all alternatives. Categorization for the 22 allotments designated perennial-ephemeral would place 12 allotments in the Maintain category and 10 allotments in the Custodial category. The remaining 18 ephemeral allotments and eight Section 15 perennial-ephemeral grazing leases would be placed in the Custodial category (see Table 2-1). The Maintain category allotments generally would be managed to maintain current satisfactory resource conditions, and Custodial category allotments would be managed to prevent resource deterioration.

Categorization for any or all allotments may change when objectives are met or new conflicts are identified as a result of monitoring studies.

Rangeland Developments. Proposed developments would be approved or authorized by one of two methods under all the alternatives: (1) range improvement permits or (2) cooperative agreements. A range improvement permit authorizes a privately owned project (a corral, fence, well) that aids in the handling of livestock and is paid for by the permittee. All developments on public land must meet the same environmental and engineering standards as those constructed by BLM (Appendix 13). For a cooperative agreement, BLM may fund all or part of the development and the title remains with the United States. Cooperative agreements specify maintenance responsibility and division of cost and labor between BLM and the permittee. Developments constructed primarily to benefit resources other than livestock would be maintained by BLM or non-livestock cooperators through agreement. Under BLM policy, permittees maintain structural developments such as fences, wells, troughs, springs, reservoirs, pipelines, and cattleguards installed primarily to benefit livestock grazing. BLM maintains nonstructural developments not assigned to permittees.

TABLE 2-1
PERENNIAL-EPHEMERAL ALLOTMENT CATEGORIZATION
Bureau of Land Management, Phoenix District, Arizona

Maintain Category	
Beloat	Hazen
Bighorn	Ranegras Plain
Cameron	Sentinel
Childs	South Vekol
Crowder-Weisser	Table Top
Eagle Tail	Vekol

Custodial Category	
Clem	A Lazy T**
Conley	Amavisca**
Coyote Flat	Arnold**
Gable-Ming	Artex**
Gila Bend Indians	Dendora Valley**
Hansen	Gable Peterson**
Kirian	Gila River Community**
Lower Vekol	Gillespie**
Ward	Hazen Sheppard**
Why	Jagow Kreager**
Amavisca*	Layton**
Bagwell*	Mariani**
Bagwell*	Mumme**
Arizona Title & Trust*	Painted Rock**
C. Hill & J. Palmer*	Palomas**
Jojoba Plantation Prod. Inc.*	Powers Butte**
K.K. Skousen (Caliente Farms)*	Sevey**
White Wing Ranch Co.*	Stout**

* Sec. 15 grazing leases outside grazing boundary.
** Ephemeral allotments.
SOURCE: Phoenix District grazing records

Rangeland Monitoring Program. BLM's monitoring program provides information critical to managing and refining the grazing program and provides a basis for making needed adjustments. A rangeland monitoring plan was prepared in June 1981 and outlines the studies to be conducted for each allotment. Detailed monitoring plans have also been developed for each allotment and are described in allotment files at the Lower Gila Resource Area Office.

On selected perennial-ephemeral allotments, monitoring studies would include (1) actual yearly livestock use, (2) forage utilization, (3) trend in rangeland condition, and (4) precipitation. Monitoring studies on allotments classified as ephemeral would consist of photopoints at selected key areas. BLM would also design studies to ensure that wildlife requirements in riparian areas were being met. Special emphasis would be placed on monitoring riparian habitat along the Gila River (Fred J. Weiler Green Belt), as well as the habitats of federal- and state-listed species which include Sonoran pronghorn, desert bighorn sheep and desert tortoise.

Grazing Administration. BLM would supervise livestock grazing throughout the year under all alternatives except the *Environmental Protection* alternative where all livestock would be removed from the public land. Should livestock trespass be discovered, BLM would have the unauthorized livestock removed and require the operators responsible for the trespass to pay for the forage consumed and damages incurred.

Twenty-two grazing allotments and eight grazing leases are classified as perennial-ephemeral and are allowed to graze a base herd on a yearlong basis. Livestock operators on perennial-ephemeral allotments would be offered 10-year permits that state the number and kind of livestock and the period of use for each allotment. Flexibility in livestock numbers could be allowed for years of high or low forage production, availability of water, early or late rangeland readiness, and variations in ranching operations. Flexibility would be allowed as long as actual use did not exceed the initial livestock preference. Additional livestock use would be authorized by issuing a supplemental grazing permit when such use would not conflict with management objectives and the perennial vegetation would not be damaged. Temporary permits for ephemeral grazing would generally be issued for at least 30 days, and only if the overall rangeland condition were fair or better. Grazing authorizations for ephemeral forage on perennial-ephemeral allotments would be issued to qualified applicants only if such forage were assured.

The remaining 18 allotments are designated as ephemeral allotments and are managed in accordance with the Special Ephemeral Rule (See Appendix 2A, 33 FR 238, 12/7/68). In general, these allotments are grazed three years intermittently out of 10 years. Grazing use by livestock is based on 50% of the available and potential ephemeral forage crop. During dry years when little ephemeral forage is present, grazing is not authorized on ephemeral allotments. When wet years occur and it is determined by an authorized officer that enough forage is available for both wildlife and livestock, grazing may be authorized on a case-by-case basis and would be subject to management requirements.

Protected Plants

Before construction or soil-disturbing activities are allowed, BLM conducts site evaluations for protected plants. If possible, projects are located to avoid impacts to large numbers of protected plants or their habitats. Where significant impacts to protected plants are possible, plants are salvaged and transplanted or the project is abandoned. BLM notifies the Arizona Commission of Agriculture and Horticulture 30 days in advance of actions that would affect plants protected under the Arizona Native Plant law (Arizona, State of, 1981).

Wilderness Resources

All 12 wilderness study areas will continue to be managed in compliance with BLM's *Interim Management Policy* (BLM, (revised) July 12, 1983) until wilderness suitability recommendations are reviewed and acted on by Congress. Areas being studied for wilderness will be managed to meet the nonimpairment standard. In cases where valid mining rights occur, areas would be managed to prevent unnecessary and undue degradation of the land.

Public land within areas added by Congress to the National Wilderness Preservation System would be managed in compliance with BLM's *Wilderness Management Policy* and the *Wilderness Act of 1964*. Site-specific wilderness management plans would be developed for such areas within two years after designation by Congress.

WSAs reviewed by Congress but not added to the National Wilderness Preservation System would be managed in accordance with applicable guidance provided by the approved Lower Gila South RMP.

Copies of BLM's *Interim Management Policy, Wilderness Management Policy,* and the *Wilderness Act of 1964* are available to the public at the Phoenix District Office.

Land Tenure

Lower Gila Resource Area processes a variety of land actions in the Lower Gila South RMP/EIS area—rights-of-way, communication sites, easements, permits, and unauthorized occupancy. All land cases would continue to be evaluated on a case-by-case basis. Communication site plans will be developed on all existing sites and will be prepared prior to any new site approval or development.

A. The main methods of disposal will be through sales (FLPMA, Section 203) or exchanges (FLPMA, Section 206) or both. Other forms of disposal such as Recreation and Public Purpose (R&PP) would also be appropriate forms of disposal.

B. In addition to the above disposal criteria, all public lands within the RMP/EIS area (with the exception of public lands that are withdrawn, classified, under wilderness study, or designated as wilderness) will be available for disposal to accommodate the following actions:

1. State exchanges - these exchanges will allow the BLM to acquire lands that will help support wildlife, wilderness, recreation values on the public lands. It will also reduce costs and improve public land management and allow the State and BLM to develop a better land ownership pattern.
2. State in-lieu selections - these selections need to occur in order for the U.S. to pay its land debt to the State of Arizona.
3. Special legislation that calls for the disposition of public lands - these programs are Congressionally mandated and usually have short time-frames in which to accomplish the work.

In all three types of actions it must be determined that the action is in the public's interest. This will be done through the required site-specific Environmental Assessment/Land Report.

All lands not identified for disposal will be retained unless needed to accommodate the above mentioned actions.

C. Lands to be acquired by BLM primarily through exchanges should:

1. facilitate access to public lands and resources,
2. maintain or enhance public uses and values,
3. facilitate implementation of other aspects of the Lower Gila South RMP, and
4. provide for a more manageable land ownership pattern.

Cultural Resources

BLM is mandated by Congress to play a stewardship role in the preservation of cultural values on public land. BLM would continue to manage cultural resources for their cultural values. Certain significant sites or areas may be protected and preserved for future use as funds become available.

The following measures apply to all actions in the RMP/EIS area involving ground disturbance or transfer of title. Before proposals involving surface disturbance or transfer of title are approved, site-specific cultural resource evaluations will be completed within areas which have not been previously evaluated for cultural remains. A Class I literature review, as well as a Class III intensive field inventory or an adequate Class II sample survey will be conducted as appropriate (BLM Manual 8111).

BLM in consultation with the Arizona State Historic Preservation Office (SHPO) has developed a Memorandum of Agreement (MOA) which permits an adequate Class II cultural inventory on BLM lands proposed for exchange with the state, instead of an intensive Class III inventory. If any historic or archaeological properties are found, their eligibility for inclusion in the *National Register of Historic Places* will be determined in consultation with the SHPO (36 CFR 1204). Whenever feasible BLM will avoid impacts to cultural resources by redesigning or relocating the project. If impacts: are unavoidable, BLM will consult with the SHPO to develop mitigating measures to reduce or eliminate adverse impacts to cultural resources. BLM will consult with the Advisory Council on Historic Preservation as appropriate in accordance with 36 CFR 800. In addition, BLM will consult with appropriate Native American groups which have aboriginal or historic ties to lands within project areas concerning known areas of traditional cultural and/or religious significance. Impacts to cultural resources will be mitigated before project construction begins. If buried cultural remains are found during construction, the construction will stop and BLM will be notified. BLM Manual 8141 (Arizona Supplement) provides details on agency-specific guidelines for both long-term and interim physical and administrative protection of cultural resources. These measures will ensure compliance with the *National Historic Preservation Act of 1966* and the *National Environmental Policy Act of 1969.*

Fire Management

The Phoenix District has developed a fire plan that is designed to manage fires as they occur in all areas of the district. The plan identifies areas suitable for prescribed burns, modified suppression areas, intensive control areas, and rehabilitation measures. Objectives are to maintain desired plant communities, recycle nutrients, and prepare seed beds.

Minerals

Private industry is encouraged to explore and develop federal minerals to satisfy national and local needs. This policy provides for economically and environmentally sound exploration, extraction, and reclamation practices. Public lands are open and available for mineral exploration and development unless withdrawn or administratively restricted. Mineral development may occur along with other resource uses.

Locatable Minerals. Exploration and development in the RMP/EIS area would continue to be administered in accordance with existing surface and mineral management regulations (43 CFR 3809 and CFR 3802).

Saleable Minerals. Demand for saleable minerals would be met by sales or free-use permits on a case-by-case basis.

Leasable Minerals. Leasable minerals would be managed under the leasing regulations.

Recreation Program

Although recreation in the Lower Gila South RMP/EIS area was not identified as a major issue, the impacts to recreation use will be analyzed in this document as they relate to the wilderness issue.

The recreation program will continue to participate in environmental assessments and resource activity plans in order to address and mitigate impacts on recreation resources. Visual resource management, management of off-road vehicle (ORV) use, and other recreation resource management will continue as recreation programs. Public lands in the planning area have not been designated as open, limited, or closed to ORVs.

Off-Road Vehicle Use. Limitations on or closure of public lands to motorized off-road vehicle use will be established for specific roads, trails, or areas where problems are identified. The following criteria would be considered before restricting or closing any area to ORV use.

- the need to promote user enjoyment and minimize use conflicts;
- the need to minimize damage to soil, watershed, vegetation, or other resource values;

- the need to minimize harassment of wildlife or significant degradation of wildlife habitats; and
- the need to promote user safety.

Wilderness areas established by Congress in the Lower Gila South area would be closed to motorized vehicle use.

The Lower Gila Resource Area's recreation program will continue to prepare environmental assessments and ORV races will be permitted as appropriate.

Visual Resource Management. Visual resources will continue to be evaluated as a part of activity and project planning and areas not presently designated according to BLM Visual Resource Management Classification will be designated in the future. These evaluations would consider the significance of a proposed project and the visual sensitivity of the affected area. Stipulations are to be attached as appropriate to assure compatibility of projects with management objectives for visual resources.

Visual resources were not identified as an issue in the Lower Gila South EIS/RMP, therefore, visual resource management (VRM) classes for all public lands in the area have not been established. On BLM-administered lands in Arizona where classes have not been established, the lands will be managed as VRM Class III. All wilderness study areas are managed as VRM Class II and designated wilderness areas as VRM Class I.

VRM classes, their objectives, and required management practices are as follows.

Class I — Class I provides primarily for natural ecological changes only. It is applied to primitive areas, some natural areas, and similar situations where management activities are to be restricted.

Class II — Changes in any of the basic elements (form, line, color, or texture) caused by a management activity should not be evident in the characteristic landscape.

Class III — Changes in the basic elements caused by a management activity may be evident in the characteristic landscape, but the changes should remain subordinate to the visual strength of the existing character.

Class IV — Changes may subordinate the original composition and character but must reflect what could be a natural occurrence within the characteristic landscape.

Class V — Change is needed. This class applies to areas where the naturalistic character has been disturbed to a point where rehabilitation is needed to bring it back into character with the surrounding countryside. This class would apply to areas identified in the scenery evaluation in which the quality class has been reduced because of unacceptable intrusions. It should be considered an interim short-term classification until one of the other objectives can be reached through rehabilitation or enhancement. The desired visual quality objective should be identified.

Wildlife Program

BLM's wildlife program in the Lower Gila South RMP/EIS area was not identified as a major issue. Wildlife objectives will continue to be analyzed in environmental assessments or resource activity plans to ensure the consideration of wildlife needs and values and to mitigate any adverse impacts to wildlife habitat. BLM would continue to place wildlife escape ramps in water troughs and construct or maintain new wildlife waters in coordination with state and other federal agencies and according to the following specifications.

1. New livestock waters to be located within two miles from crucial tortoise habitat and/or crucial desert bighorn sheep habitat will be analyzed on a case-by-case basis to determine potential impacts. Significant impacts will be mitigated with appropriate stipulations on site relocation.
2. Before installing facilities, BLM will conduct a site evaluation for state-protected animals and will develop mitigation to protect these species and their habitats. Such mitigation might include project relocation, redesign, or abandonment.
3. BLM will initiate formal Section 7 consultation with the U.S. Fish and Wildlife Service on all actions that may affect federal listed threatened and endangered species or it's critical habitat as required by the Endangered Species Act of 1973 as amended.
4. During construction of rangeland developments, vehicles will use existing roads and trails wherever possible for access to sites. Where feasible or where no roads exist, vehicles will travel cross-country to avoid the need for road building. Where new roads must be built, roadbeds will be no wider than needed for reliable access; BLM specifications will also be used to reduce erosion and gullying.
5. During construction of all rangeland developments, surface resources will be disturbed as little as possible. After construction, disturbed surfaces will be restored to a natural condition as far as is practicable.
6. Fences proposed in big game habitat will be designed to reduce adverse impacts to big game movement. Specifications in BLM Manual 1737 and in local BLM directives will be used. BLM will consult with the Arizona Game and Fish Department on the design and location of new fences.

7. Where existing fences in big game habitat do not meet BLM specifications, they will be modified according to BLM Manual 1737 when they are scheduled for replacement or major maintenance.
8. As a general practice, new roads will not be bladed for use in fence construction. Vehicles will travel overland, or fences will be built by hand.
9. All livestock waters will provide safe, usable water for wildlife. As funding and opportunities permit, existing facilities will be modified for safe wildlife use. The following standards apply to design and modification of livestock waters.
   - The above-ground height of livestock troughs and tanks will not exceed 20 inches. BLM will install wildlife escape ladders in each facility and provide ramps for small bird and mammal access. Storage tanks will have either a metal or floating vinyl cover to reduce evaporation and prevent wildlife from drowning.
   - Ground-level wildlife water developments will be established on livestock waters where feasible. An exclosure of three to seven acres containing the water source, storage, and related riparian habitat will be built to exclude livestock. Where terrain permits, livestock water will be provided at least 0.25 miles outside of the fenced exclosure.
   - Developed spring storage and adjacent riparian habitat will be fenced to exclude livestock.
   - Where practical, water troughs and tanks will be kept full year-round to provide a continuous water supply for wildlife.
10. Domestic sheep grazing would not be allowed on allotments containing bighorn sheep habitats to avoid transmittal of diseases.
11. BLM will initiate a cooperative Habitat Management Plan with Arizona Game and Fish Department to address critical wildlife habitat needs in the Lower Gila South Planning Area.

Woodcutting Permits

The Lower Gila Resource Area would continue to issue woodcutting permits on a case-by-case basis.

PROPOSED ACTION

The *Proposed Action* provides for a balanced level of production while protecting important resource values. The goal of this alternative is to meet statutory requirements and policy commitments and to resolve the issues in Chapter 1 in a manner that is cost efficient, is based on sound management and biological principles, prevents any significant impairment of the land's productivity, and protects the wilderness values on 190,391 acres.

Rangeland Management Issue

Level of Grazing Management. The *Proposed Action's* grazing management objectives would be to maintain ecological rangeland condition currently in good to excellent condition and to improve those areas in poor to fair condition. BLM would not initially adjust livestock numbers on the 22 perennial-ephemeral allotments and eight perennial-ephemeral grazing leases. Authorized grazing use on the perennial-ephemeral allotments would remain at 60,524 AUMs on 1,592,278 acres. In addition, supplemental permits could be issued if sufficient ephemeral forage were known to exist and there were no conflicts with other resources. The remaining 18 allotments are designated as ephemeral allotments and do not have grazing preferences (AUMs) attached to them (Appendix 2). The 18 ephemeral allotments (416,954 acres) would continue to be administered in accordance with the Special Ephemeral Rule (*Federal Register*, Vol. 33, No. 238, December 7, 1968) (See Appendix 2 and 2A).

Rangeland Developments. Objectives for new rangeland developments would be to improve livestock distribution and the trend in rangeland condition. Improvement and maintenance of the rangeland would be accomplished through the construction of new rangeland developments (see Table 2-2) and through livestock adjustments if needed. Environmental assessments for specific developments would be prepared and approved before implementation to assure that all resources are adequately considered. The following rangeland developments would be constructed to implement the *Proposed Action*: 47 miles of fence, 10 reservoirs, and seven wells. Total cost of construction of these rangeland developments would amount to approximately $371,345. Procedures for authorizing and maintaining rangeland developments are discussed in this chapter under Management Guidance Common to All Alternatives.

Rangeland Monitoring. The Lower Gila Monitoring Plan (on file at the Lower Gila Resource Area Office) would provide guidance for all allotments to be monitored in the RMP/EIS area. Needed adjustments in livestock numbers would be based on the results of up to five years of rangeland monitoring data. Upward adjustments would only be authorized if five years of monitoring showed a sustained yield of forage production and only if other resources were considered. If monitoring shows that a reduction is needed, the adjustment would be implemented over a five-year period through a signed agreement or by a decision (see Management Guidance Common to all Alternatives—Rangeland Monitoring Section). Monitoring will be more intensive on Maintain allotments and allotments indicating high browse use, as well as crucial Sonoran

TABLE 2-2
PROPOSED RANGELAND DEVELOPMENTS
Bureau of Land Management, Phoenix District, Arizona

PROPOSED ACTION					
Allotment				Wells	Fence
Number	Name	Category	Reservoirs	(Equipped)	(Miles)
3007	Beloat	Maintain	--	1	15
3009	Bighorn	Maintain	--	1	7
3013	Cameron	Maintain	--	--	5
3016	Childs	Maintain	1	--	--
3017	Clem	Custodial	--	--	--
3018	Conley	Custodial	2	--	--
3020	Coyote Flat	Custodial	--	--	--
3022	Crowder-Weisser	Maintain	2	1	--
3028	Eagle Tail	Maintain	1	1	7
3032	Gable-Ming	Custodial	--	--	--
3035	Gila Bend Indians	Custodial	--	--	--
3039	Hansen	Custodial	--	--	--
3042	Hazen	Maintain	--	1	--
3046	Kirian	Maintain	1	--	--
3047	Ranegras Plain	Maintain	--	--	--
3053	Lower Vekol	Custodial	--	--	--
3076	Sentinel	Maintain	--	1	--
3080	South Vekol	Maintain	1	--	13
3083	Table Top	Maintain	--	1	--
3085	Vekol	Maintain	1	--	--
3086	Ward	Custodial	1	--	--
3091	Why	Custodial	--	--	--
	TOTALS		10	7	47

RESOURCE PRODUCTION ALTERNATIVE					
Allotment				Wells	Fence
Number	Name	Category	Reservoirs	(Equipped)	(Miles)
3007	Beloat	Maintain	--	1	15
3009	Bighorn	Maintain	--	1	7
3013	Cameron	Maintain	--	1	5
3016	Childs	Maintain	--	--	--
3017	Clem	Custodial	--	--	--
3018	Conley	Custodial	2	--	--
3020	Coyote Flat	Custodial	--	--	--
3022	Crowder-Weisser	Maintain	2	1	--
3028	Eagle Tail	Maintain	2	2	12
3032	Gable-Ming	Custodial	1	--	--
3035	Gila Bend Indians	Custodial	--	--	--
3039	Hansen	Custodial	1	--	--
3042	Hazen	Maintain	1	1	5
3046	Kirian	Maintain	1	--	--
3047	Ranegras Plain	Maintain	--	--	10
3053	Lower Vekol	Custodial	--	--	--
3076	Sentinel	Maintain	--	1	--
3080	South Vekol	Maintain	1	1	13
3083	Table Top	Maintain	--	1	--
3085	Vekol	Maintain	1	--	--
3086	Ward	Custodial	--	--	--
3091	Why	Custodial	--	--	--
	TOTALS		12	10	67

SOURCE: Phoenix District grazing files

pronghorn, desert tortoise and bighorn sheep habitat and less intensive on Custodial allotments.

At a minimum, the monitoring studies would include actual yearly livestock use, forage utilization, trend in rangeland condition, and precipitation data. Actual livestock use figures supplied by the operators would be the foundation for grazing management adjustments. Rangeland specialists would evaluate condition and trend studies every three to five years to determine if conditions were improving, declining, or stable. Trend would be measured using plant frequency and cover data, and this data would be correlated to rangeland condition and compared with previous years' figures. BLM would also design studies to ensure that wildlife habitat management objectives were being met. Special emphasis would be placed on monitoring approximately 63,000 acres of riparian habitat along the Gila River (Green Belt).

Implementation. BLM would begin thorough consultation with livestock operators, affected landowners, and federal, state, and local agencies after completion of the final RMP/EIS.

After the filing of the final RMP/EIS, BLM would prepare a burro capture plan in consultation with appropriate government agencies and interest groups. All burros would be removed from the Painted Rock Reservoir area. Details for the burro capture program would be outlined in a herd management area plan (HMAP).

Normally a five-year monitoring period is required before any adjustments in livestock numbers are implemented. However, if two or three years of monitoring data, solely or in combination with the rangeland inventory data, indicate a change is necessary, adjustments would be implemented through a decision or by an agreement issued by the Lower Gila Resource Area Manager.

Wilderness Issue

The *Proposed Action* analyzes as wilderness portions of the New Water Mountains, Eagletail Mountains, Woolsey Peak, and Table Top Mountains WSAs (totaling 190,391 acres). Should these areas be designated wilderness, they would be managed to preserve their naturalness, solitude, and primitive recreation opportunities in accordance with BLM's Wilderness Management Policy and the Wilderness Act of 1964. A wilderness management plan would be developed and implemented for each area following wilderness designation by Congress.

Eight entire WSAs and portions of the four remaining WSAs would not be designated wilderness. The lands not designated (431,540 acres) would be released from the wilderness review process. After release by Congress, these lands would be managed according to provisions in the approved Lower Gila South RMP and would return to other multiple use management (see Glossary). Suitable and nonsuitable acreage for each WSA and the surface and mineral rights recommended for acquisition through land exchange are described in Table 2–3.

Acquisition through land exchange of 2,643 acres of surface and mineral lands and 561 acres of nonfederal mineral rights within the Eagletail Mountains WSA would facilitate wilderness management and enhance wilderness and related values. Acquisition of nonfederal mineral estate would allow BLM-administered surface lands above such parcels to be incorporated into the proposed wilderness.

Land Tenure Issue

Disposal (Exchange or Sale). Approximately 73,123 acres of public land within the RMP/EIS area have been proposed for disposal. Most of these lands are isolated parcels that are difficult and uneconomical to manage. Additionally, some of these parcels are well suited for community expansion, agricultural development, and management by the Arizona State Land Department. These characteristics meet the disposal criteria described in Section 203 and 206 of *Federal Land Policy and Management Act*(FLPMA).

Lands recommended for disposal would be retained if significant resource values were found. These determinations would be made during the development of the environmental assessment and land report that is required on every disposal action.

These lands would be made available through state and private exchanges and sales (including recreation and public purpose patents and state selections). Land exchanges would be the preferred method of disposal.

Appendix 3 shows the legal description of those lands that are proposed for disposal. Table 2–4 shows a summary of recommended disposal lands by alternative.

Acquisition. Approximately 36,845 acres of nonpublic lands have been identified for acquisition. Acquisition of these lands would benefit wildlife, botanical, wilderness, and multiple use values. Appendices 4 through 8 list the benefiting resource programs and the legal descriptions of the lands to be acquired. Table 2–5 shows a summary of acres recommended for acquisition by alternative and the benefiting resource or program.

Split Mineral Estate. The split mineral estate problem must be resolved by a statewide program. In the Lower Gila South RMP/EIS area there are approximately 23,645 acres of federal minerals that underlie either state or private lands and approximately 112,160 acres of federal surface estate where the underlying minerals are owned by either state or private interests. This situation causes confusion and creates problems with the individual or agency owning or managing the surface estate. Therefore, it is recommended that BLM acquire approximately 112,160 acres of state and private mineral estate and dispose of approximately 23,645 acres of federal minerals that underlie state or privately owned surface estates. The mineral estate

TABLE 2-3
WSA RECOMMENDATIONS BY ALTERNATIVE
Bureau of Land Management, Phoenix District, Arizona

WSA	Public Land Acres: Suitable Acres	Public Land Acres: Nonsuitable Acres	Recommended Land Acquisition*: Surface and Mineral Ownership	Recommended Land Acquisition*: Mineral Estate Only
PROPOSED ACTION				
New Water Mountains	24,200	16,400	0	0
Little Horn Mountains West	0	13,800	0	0
Little Horn Mountains	0	91,930	0	0
Eagletail Mountains	70,791	48,909	2,643	561
East Clanton Hills	0	36,600	0	0
Face Mountain	0	27,575	0	0
Signal Mountain	0	20,920	0	0
Woolsey Peak	61,000	12,930	0	0
North Maricopa Mountains	0	75,483	0	0
South Maricopa Mountains	0	72,004	0	0
Butterfield Stage Memorial	0	9,566	0	0
Table Top Mountains	34,400	5,423	0	0
TOTALS	190,391	431,540	2,643	561
NO WILDERNESS/NO ACTION				
New Water Mountains	0	40,600	0	0
Little Horn Mountains West	0	13,800	0	0
Little Horn Mountains	0	91,930	0	0
Eagletail Mountains	0	119,700	0	0
East Clanton Hills	0	36,600	0	0
Face Mountain	0	27,575	0	0
Signal Mountain	0	20,920	0	0
Woolsey Peak	0	73,930	0	0
North Maricopa Mountains	0	75,483	0	0
South Maricopa Mountains	0	72,004	0	0
Butterfield Stage Memorial	0	9,566	0	0
Table Top Mountains	0	39,823	0	0
TOTALS	0	621,931	0	0
ENHANCED WILDERNESS ALTERNATIVE				
New Water Mountains	24,200	16,255	0	0
Little Horn Mountains West	0	13,800	0	0
Little Horn Mountains	50,460	41,470	440	520
Eagletail Mountains	90,261	29,439	2,643	1,601
East Clanton Hills	0	36,600	0	0
Face Mountain	26,390	1,185	0	0
Signal Mountain	0	20,920	0	0
Woolsey Peak	61,000	12,930	0	0
North Maricopa Mountains	39,840	35,643	0	0
South Maricopa Mountains	0	72,004	0	0
Butterfield Stage Memorial	0	9,566	0	0
Table Top Mountains	34,400	5,423	0	0
TOTALS	326,551	295,380	3,083	2,121
ALL WILDERNESS ALTERNATIVE				
New Water Mountains	40,600	0	0	225
Little Horn Mountains West	13,800	0	(40)	1,140
Little Horn Mountains	91,930	0	1,360	1,500
Eagletail Mountains	119,700	0	4,836	2,635
East Clanton Hills	36,600	0	0	40
Face Mountain	27,575	0	0	0
Signal Mountain	20,920	0	0	1,280
Woolsey Peak	73,930	0	0	0
North Maricopa Mountains	75,483	0	(160)	4,830
South Maricopa Mountains	72,004	0	0	684
Butterfield Stage Memorial	9,566	0	0	0
Table Top Mountains	39,823	0	0	1,855
TOTALS	621,931	0	6,396	14,189

* All parcels recommended for acquisition through exchange are State of Arizona lands, except parcels in parentheses that are privately owned.

SOURCE: Phoenix District Office files

to be acquired is shown in Appendix 9, and the mineral estate to be disposed of is shown in Appendix 10.

Utility Corridor Issue

Over the past 10 years there has been an increase in major utility systems within the RMP/EIS area. This increase is largely because of the Palo Verde Nuclear Generating Station (PVNGS) that lies in the northeastern portion of the area. Because ownership of the PVNGS is divided among Arizona, California, New Mexico, and Texas utility companies, there is a need for transmission systems to accommodate the out-of-state owners. Other interstate systems include two interstate highways and oil and gas elines. Along with the interstate systems there are also various intrastate systems that affect the RMP/EIS area.

In order to accommodate the existing systems and provide for the orderly development of future systems, the *Proposed Action* would designate 10 corridors (each one-mile-wide) (see Map 1-2). This would provide space for construction of future utility projects and allow for multiple occupancy by compatible users. Section 503 of FLPMA authorizes the formal designation of utility corridors.

NO ACTION ALTERNATIVE

The *No Action* alternative is the current management direction, assuming no changes in policy or funding, and it provides a baseline for comparison with the other alternatives. Currently, the Lower Gila South RMP/EIS area lacks formal management direction established through approved land use plans.

Rangeland Management Issue

Level of Grazing Management. Under the *No Action* alternative, yearlong grazing would continue on 1,592,278 acres of public lands on 22 perennial-ephemeral allotments and eight perennial-ephemeral custodial leases. Livestock numbers would continue to be authorized on the perennial-ephemeral allotments and leases up to the present active preference of 60,524 animal unit months (AUMs). The remaining 18 ephemeral allotments involving 416,954 acres of public land would continue to be managed in accordance with the Special Ephemeral Rule. These allotments do not produce enough perennial forage on a sustained yield basis to issue yearlong grazing permits. On the perennial-ephemeral allotments, supplemental permits could be issued for ephemeral forage if the forage were known to exist and ephemeral grazing did not conflict with other resources.

Rangeland Developments. BLM would not construct new rangeland developments and would not maintain existing developments. Operator-built developments would be authorized by either cooperative agreements or range improvement permits on a case-by-case basis as needed to facilitate livestock management.

Implementation. Since existing grazing management would continue, a specific implementation of this alternative would not be required. BLM would develop a wild burro capture plan to remove all existing burros from the Painted Rock Reservoir Herd Management Area.

Wilderness Issue

No designated BLM wilderness areas currently exist in the RMP/EIS area. Under the *No Action* alternative none of the 12 WSAs would be analyzed for designation as wilderness. All 621,931 acres (Table 2-3) would be managed under multiple use management principles with no wilderness restrictions. Subsequent management actions would be guided by laws, regulations, BLM policy, and the approved Lower Gila South RMP. This alternative represents the *No Wilderness* alternative required by BLM Wilderness Study Policy.

Land Tenure Issue

Disposal (Exchange or Sale). No lands would be proposed or offered for disposal. This in effect would require the retention of all public lands in the RMP/EIS area and no change of ownership pattern would occur (see Table 2-4).

TABLE 2-4
SURFACE ACREAGE SUITABLE FOR DISPOSAL BY ALTERNATIVE
Bureau of Land Management, Phoenix District, Arizona

Proposed Action	No Action	Resource Production	Resource Protection	Environmental Protection
73,123	0	73,123	73,123	73,123

SOURCE: Phoenix District maps and files

Acquisition. Lands would not be acquired under this alternative. There would be no change in ownership pattern, and no areas would be acquired for resource enhancement (see Table 2-5).

TABLE 2-5
ACREAGE SUITABLE FOR ACQUISITION BY ALTERNATIVE
Bureau of Land Management, Phoenix District, Arizona

Benefiting Resource or Program	Proposed Action	No Action	Resource Production	Resource Protection	Environmental Protection
Wilderness	2,643	0	0	3,083	6,396
Wildlife	11,120	0	2,200	16,340	17,840
Botanical	2,440	0	0	2,440	2,440
Multiple Use	20,642	0	20,642	20,642	20,642

SOURCE: Phoenix District files

Split Mineral Estate. There would be no changes proposed in the mineral ownership pattern in the RMP/EIS area.

Utility Corridor Issue

This alternative would not propose designation of utility corridors for powerline and pipeline construction. Rights-of-way applications would be considered on a case-by-case basis.

RESOURCE PRODUCTION ALTERNATIVE

This alternative emphasizes increased production and development of resources that would contribute to the economy of the region. Environmental values would be protected to the extent required by laws, regulations, and policies. The issues would be resolved in a manner that would place highest priority on livestock forage utilization, leaving all areas open to mineral development and oil and gas leasing.

Rangeland Issue

Level of Management. Grazing management objectives for this alternative would be the same as the *Proposed Action*. As a result of this alternative, areas currently underutilized would become available for livestock grazing by the construction of new rangeland developments.

BLM would initially authorize 54,315 AUMs (a 10 percent reduction from the current authorized preference of 60,524 AUMs) on the 30 perennial-ephemeral allotments and leases, based on the 1980–1981 rangeland inventory survey (see Appendix 11). Allotment management plans (AMPs) would be developed on eight allotments (see Table 2–6) where potential exists for improving livestock distribution and trends in rangeland condition on approximately 531,400 acres of public land. The 18 ephemeral allotments would not change current grazing management and would continue to be managed in accordance with the Special Ephemeral Rule published in the December 1968 *Federal Register*.

TABLE 2-6
PROPOSED ALLOTMENT MANAGEMENT PLANS (AMPs)
UNDER RESOURCE PRODUCTION ALTERNATIVE
Bureau of Land Management, Phoenix District, Arizona

Allotment Number	Allotment Name	Allotment Number	Allotment Name
3007	Beloat	3046	Kirian
3009	Bighorn	3076	Sentinel
3013	Cameron	3080	South Vekol
3016	Clem	3083	Table Top

SOURCE: Phoenix District files

Rangeland Developments. As in the *Proposed Action*, management objectives under the *Resource Production* alternative would be to improve livestock distribution and trend in rangeland condition through the proper placement and construction of new rangeland developments. Developments proposed in this alternative would also accommodate increased numbers of livestock, if monitoring data indicated that increases were justified. Implementation of the *Resource Production* alternative would entail the following rangeland development: 67 miles of fence, 12 reservoirs, and 10 wells (Table 2–2). Total cost of construction of these rangeland developments would amount to 23,045. Procedures for authorizing and maintaining rangeland developments would be the same as those listed in the *Proposed Action*.

Rangeland Monitoring. Detailed monitoring plans would be developed for each allotment scheduled for an allotment management plan (AMP). These plans would assess the effectiveness of the rangeland developments and grazing treatments. At a minimum, monitoring data for the perennial-ephemeral allotments would include actual use, forage utilization, trend in rangeland conditions, and precipitation data. Ephemeral allotments would be monitored through photo-points (photographs taken every other year at the same location). BLM would coordinate monitoring plans with allottees, other interested parties (universities), and other state and federal agencies.

Implementation. Implementing this alternative would require up to five years of monitoring before actual adjustments in livestock numbers would be made. Total AMPs developed under this alternative would depend on livestock operator cooperation and funds provided for rangeland developments. Priorities for AMPs would be based on (1) potential for improvement (livestock distribution and improved utilization of the range), (2) impacts on existing operations, (3) other resource requirements, and (4) economic return on investment. BLM would develop a burro capture program as in the *Proposed Action* to remove all existing wild burros from the Painted Rock Reservoir Herd Area.

Wilderness Issue

None of the 12 WSAs, involving 621,931 acres, would be analyzed for designation as wilderness under the *Resource Production* alternative (Table 2–3). This alternative is identical to the *No Action* alternative.

Land Tenure Issue

Disposal (Exchange or Sale). This alternative recommends disposing of the same lands that were identified under the *Proposed Action*. See Appendix 3 and Table 2–4.

Acquisition. Approximately 22,842 acres of nonpublic lands would be identified for acquisition, which would benefit wildlife and multiple use values. Appendices 4 and 5 list the benefiting resource program and the legal description of the lands to be acquired. Also see Table 2-5 for a summary of lands to be acquired.

Split Mineral Estate. Same as the *Proposed Action.*

Utility Corridor Issue

Same as the *Proposed Action.*

RESOURCE PROTECTION ALTERNATIVE

The *Resource Protection* alternative emphasizes protection and enhancement of natural resources (cultural, botanical, wildlife, and wilderness) while implementing a lower level of livestock grazing. Mineral and energy exploration would be allowed only to the extent that it is compatible with resource protection. The objectives of this alternative are to facilitate the improvement and recovery of wildlife habitat on 16 allotments (Arnold, Powers Butte, Table Top, South Vekol, Vekol, Kirian, Lower Vekol, Bighorn, Conley, Coyote Flat, Why, Cameron, Childs, Hazen, Beloat, and Eagle Tail) where wildlife and livestock compete for browse (false mesquite, jojoba, and range ratany). Special emphasis would also be placed on the acquisition of prime mesquite and saltcedar habitat along the Gila River (Green Belt).

Rangeland Management Issue

Level of Grazing Management. This alternative proposes a 47 percent reduction in authorized livestock use over five years (from 60,524 AUMs to 31,914 AUMs) on 22 perennial-ephemeral allotments (see Appendix 11). Grazing management of the 18 ephemeral allotments and eight perennial-ephemeral grazing leases would be the same as the *Proposed Action.*

The level of livestock use in this alternative may be adjusted in the future to reflect new resource information gathered by monitoring or other studies. Allotments with the greatest potential for wildlife habitat improvement would have the first priority for livestock adjustments.

Rangeland Developments. No new rangeland developments would be proposed under this alternative, except for resource protection purposes. Construction of rangeland developments would be allowed only when other natural values—watershed, wildlife, wilderness—also benefit. Before specific developments are approved, environmental assessments would be prepared to assure that all resources were adequately considered. All rangeland developments used to facilitate livestock would be maintained by livestock operators.

Rangeland Monitoring. BLM specialists would place a higher number of monitoring plots on the 16 allotments displaying competition for forage between livestock and wildlife than on allotments with no conflicts. The remaining allotments would be monitored as described in the *Proposed Action.* Intensity of the monitoring studies would vary depending on the level of conflicts or controversy in resource use. If monitoring data show that adjustments in livestock use are needed, changes in permanent livestock use would be implemented over a period not to exceed five years.

Implementation. Under the *Resource Protection* alternative, reduction in livestock use levels would be phased in over a five-year period. More immediate wildlife habitat improvement and increases in wildlife populations would occur than under the *Proposed Action.* BLM would not develop AMPs under this alternative but could prepare habitat management plans (HMPs) in cooperation with the Arizona Game and Fish Department to provide for faster recovery and protection of wildlife habitat. HMPs would be implemented first on allotments with the greatest potential for improvement of aquatic and terrestrial wildlife habitat, watershed, and/or vegetation.

Wilderness Issue

The *Resource Protection* alternative would analyze for designation portions of the New Water Mountains, Little Horn Mountains, Eagletail Mountains, Face Mountain, Woolsey Peak, North Maricopa Mountains, and Table Top Mountains WSAs (326,551 acres). As wilderness, these areas would be managed for preservation of their natural character, solitude, and primitive recreation opportunities in accordance with BLM's Wilderness Management Policy and the Wilderness Act of 1964. A wilderness management plan would be developed and implemented for each area following wilderness designation by Congress.

Five entire WSAs and portions of the seven WSAs, totaling 295,380 acres, would not be designated wilderness. After release from wilderness review by Congress, these lands would be managed for their multiple use resource values according to the decisions reached in the approved Lower Gila South RMP. WSA suitable and nonsuitable acreage and recommended land acquisition for each area are described in Table 2-3.

Acquisition through land exchange of 3,083 acres of surface and mineral estate and 2,121 acres of nonfederal mineral rights within or adjacent to the WSAs would facilitate wilderness management and enhance wilderness and related values under this alternative. Acquisition of nonfederal minerals would allow BLM-administered surface lands to be incorporated into the proposed wilderness areas.

Land Tenure Issue

Disposal (Exchange or Sale). This alternative would dispose of the same lands that were identified under the *Proposed Action*. See Appendix 3 and Table 2–4.

Acquisition. Approximately 42,505 acres of nonpublic lands would be identified for acquisition, which would benefit wildlife, botanical, wilderness, and other multiple use values. Appendices 4 through 8 list the benefiting resource program and the legal description of the lands to be acquired. Also see Table 2–5 for a summary of lands to be acquired.

Split Mineral Estate. Same as the *Proposed Action.*

Utility Corridor Issue

Same as the *Proposed Action.*

ENVIRONMENTAL PROTECTION ALTERNATIVE

This alternative would eliminate livestock grazing in the RMP/EIS area and analyzes the impacts of removing livestock from public lands. All other issues would be resolved the same as in the *Resource Protection* alternative. This alternative was developed to show the impacts of removing livestock from public rangelands and to provide managers with a full range of options to study.

Rangeland Management Issue

Level of Management. BLM would cancel all grazing permits on the 30 perennial-ephemeral allotments and grazing leases. All forage would be reserved for wildlife and other benefiting resources. Livestock grazing would be phased out over a five-year period after the filing of the final RMP. No ephemeral grazing licenses would be issued for the 18 ephemeral allotments.

Rangeland Developments. BLM would build or maintain rangeland developments only to benefit wildlife, watershed, and other benefiting resources. Livestock operators with investments on public lands would be entitled to project salvage rights. To prevent cattle from straying onto public lands, 700 miles of fence, 200 cattleguards, and 150 gates would be required.

Monitoring. BLM would monitor wildlife habitat conditions, watershed conditions, and periodically inspect public lands to detect livestock trespass.

Implementation. Livestock grazing would be phased out over a five-year period after grazing decisions became final. A burro capture plan would be developed to remove all wild burros from the Painted Rock Reservoir Herd Area.

Wilderness Issue

The *Environmental Protection* alternative would analyze for designation as wilderness all 12 WSAs, totaling 621,931 acres. This alternative would preserve wilderness values in all WSAs. A wilderness management plan would be developed and implemented for each area following wilderness designation by Congress. This alternative represents the *All Wilderness* alternative required by BLM's *Wilderness Study Policy*. Suitable acreage and recommended land acquisition for each WSA are shown in Table 2–3.

Acquisition through land exchange of 6,396 acres of surface and mineral lands and 14,189 acres of mineral rights within or adjacent to the WSAs would facilitate wilderness management and enhance wilderness and related values. Acquisition of nonfederal minerals would allow the BLM-administered surface lands to be incorporated into the proposed wilderness areas.

Land Tenure Issue

Disposal (Exchange or Sale). This alternative would dispose of the same lands that were identified under the *Proposed Action*. See Appendix 3 and Table 2–4.

Acquisition. Approximately 47,198 acres of nonpublic lands would be identified for acquisition, which would benefit wildlife, botanical, wilderness, and other multiple use values. Appendices 4 through 8 list the benefiting resource program and the legal description of the lands to be acquired. Also see Table 2–5 for a summary of lands to be acquired.

Split Mineral Estate. Same as the *Proposed Action.*

Utility Corridor Issue

Same as the *Proposed Action.*

SUMMARY OF IMPACTS

The analysis of the environmental consequences of the *Proposed Action* and alternatives reveals that none of the alternatives would measurably impact geology, topography, soils, water resources, protected plants, visual resources, air quality, climate, wild burros, social conditions, or fire management. Impacts would occur to rangeland management, vegetation, wilderness, land uses, minerals and energy, wildlife habitat, cultural resources, recreation, and economic conditions. Table 2–7 summarizes impacts by alternative. For a more detailed analysis of impacts, see Chapter 4.

TABLE 2-7
IMPACT SUMMARY TABLE BY ALTERNATIVE
Bureau of Land Management, Phoenix District, Arizona

Resources Impacted	Proposed Action	No Action	Resource Production	Resource Protection	Environmetal Protection
Rangeland Management					
Allocated AUMs	60,524	60,524	54,315	31,914	0
Change From Authorized Grazing	0	0	-10%	-47%	-100%
Distribution of Livestock Grazing	Improve	No Improvement	Improve	Improve	No Impact
Livestock Operators	No Impact	No Impact	Beneficial	Adverse	Adverse
Allotments Overlapped by WSA	11	0	0	19	33
Allotment Management Plans	0	0	8	0	0
Vegetation					
Acres Acquired (Botanical T&E)	2,440	0	0	2,440	2,440
Rangeland Condition & Trend	Slight Improvement	Static	Improve	Improve	Improve
Wilderness					
WSAs Recommended	4	0	0	7	12
WSA Acres Recommended	190,391	0	0	326,551	621,931
WSAs Not Recommended	8	12	12	5	0
WSA Acres Not Recommended	431,540	621,931	621,931	295,380	0
Acres to be Acquired	2,643	0	0	3,083	6,396
Land Uses					
Acres Recommended for Disposal	73,123	0	73,123	73,123	73,123
Acres Recommended for Acquisition	36,845	0	22,842	42,505	47,198
Split Mineral Estate Acquisition	112,160	0	112,160	112,160	122,160
Split Mineral Estate Disposal	23,645	0	23,645	23,645	23,645
Utility Corridors					
Number of Corridors Proposed	10	0	10	10	10
WSA Boundary-Corridor Conflicts	0	0	0	1	5
Wildlife					
Acres Protected by Wilderness Design.					
Desert Bighorn Sheep	147,090	0	0	241,170	373,850
Desert Tortoise	10,520	0	0	17,570	46,770
Acres Acquired	11,120	0	2,200	16,340	17,840
Mineral and Energy Resources					
Acres Closed to Mineral Entry	189,750	0	0	324,350	607,557
Acres Closed to Mineral Leasing	189,750	0	0	324,350	607,557
Acres of Oil & Gas Leasing Affected	189,750	0	0	324,350	607,557
Mining Claims Affected Within WSAs	199	0	0	666	3,152
Cultural Resources					
Acres Protected by Wilderness Design.	103,818	0	0	145,513	218,560
Recreation					
Acres Closed to ORVs	190,391	0	0	326,551	621,931
Economic Conditions					
Net Revenue (Long Term $)					
Small Ranch	3,743	3,743	3,040	2,512	0
Medium Ranch	12,424	11,588	13,112	6,037	0
Large Ranch	36,251	34,863	36,427	13,419	0
20-Year Net Revenue (Present Value $)					
Small Ranch	37,094	37,094	30,126	25,440	0
Medium Ranch	117,890	114,839	113,403	59,908	0
Large Ranch	350,612	345,498	323,661	135,899	0
Ranch Values (Long Term $)					
Small Ranch	72,000	72,000	61,500	57,000	0
Medium Ranch	255,000	241,500	273,000	127,500	0
Large Ranch	909,000	894,000	925,000	445,500	0

SOURCE: Phoenix District files

Chapter 3

AFFECTED ENVIRONMENT

CHAPTER 3

AFFECTED ENVIRONMENT

INTRODUCTION

The purpose of this chapter is to serve as a baseline for identifying and evaluating the impacts of five alternatives. The impacts will be discussed in Chapter 4. Some impacts to certain resources would be negligible or nonexistent, therefore descriptions are correspondingly brief or are not included.

More detailed descriptions of the resources in the Lower Gila South RMP/EIS area may be found in the Lower Gila South Management Situation Analysis (BLM, 1983). Copies of this document may be reviewed at BLM's Phoenix District Office.

PHYSICAL SETTING

The RMP/EIS area located in southwestern Arizona lies mostly within the Basin and Range physiographic province and consists of broad desert basins bound by relatively low desert mountain ranges. Principal mountain ranges are the Plomosa, New Water, Little Horn, Eagletail, Sierra Estrella, Gila Bend, and Maricopa Mountains in the northern half of the area and the Batamote, Table Top, and Little Ajo Mountains in the southern half of the RMP/EIS area. Granite mountains dominate the area, which is drained by the Gila River. Elevations in the RMP/EILS area range from about 100 feet at the western edge along the Gila River to approximately 4,300 feet at the eastern edge near the Sierra Estrella Mountains.

The RMP/EIS area's climate is influenced by the Pacific and Gulf of Mexico air masses during the warm months and by middle latitude storms from the North Pacific during the cooler months. The average annual temperature varies from 61°F to 71°F for most of the area. An extreme low of 9°F was recorded at various locations and an extreme high of 126°F was recorded near Mohawk on the western edge of the RMP/EIS area.

Average annual precipitation varies from 3.03 inches at Dateland to 10 inches at Coffee Pot Mountain near Ajo. An annual low precipitation of 0.58 inch has been recorded at Dateland and an extreme high of 17.08 inches was recorded at Buckeye in 1941 (Sellers and Hill, 1974).

RANGELAND MANAGEMENT

Livestock Grazing

The Lower Gila Resource Area currently authorizes grazing on 48 grazing allotments (22 perennial-ephemeral and 18 ephemeral allotments and eight perennial-ephemeral grazing leases) in the Lower Gila South RMP/EIS area on approximately 2,009,232 acres. Grazing leases occur on small, scattered parcels of public land and account for small percentages of private livestock grazing operations.

Thirty allotments (including the eight grazing leases) are designated as perennial-ephemeral allotments and are authorized for 60,524 AUMs of livestock forage annually. As shown in Table 2-6, 12 perennial-ephemeral allotments are in the Maintain category and 18 are in the Custodial category. The perennial-ephemeral allotments are generally cow-calf operations which also graze steers during years of favorable ephemeral forage growth (generally three of 10 years). Additional livestock grazing use can be authorized for ephemeral forage under a supplemental grazing license when sufficient annual forage is present and such use does not conflict with other resources or damage the perennial vegetation base.

Eighteen allotments encompassing 416,954 acres are designated as ephemeral allotments and are administered in accordance with the Special Ephemeral Rule published in December 1968. All 18 ephemeral allotments are in the Custodial management category. Ephemeral range does not consistently produce forage but periodically provides annual vegetation suitable for livestock grazing. Favorable years are highly unpredictable and the season is short-lived. Under the Special Ephemeral Rule, livestock grazing is permitted on ephemeral allotments only when sufficient precipitation and temperatures provide the probability of an ephemeral forage crop to exist. Currently no allotment management plans (AMPs) have been developed for any of the allotments in the RMP/EIS area.

Range Vegetation

Four vegetative rangeland types are in the Lower Gila South RMP/EIS. Of these four types, the three that make

up 98 percent of the RMP/EIS area are creosotebush-bursage, paloverde-cactus shrub, and the riparian zone of the Gila River and desert dry washes (Norris, 1984). The fourth type—grass-shrub—is not typical of the RMP/EIS area, which is the westernmost edge of the galleta-shrub type where galleta is mixed with various woody shrubs.

The largest and most extensive of these vegetation types is the creosotebush-white bursage rangeland, which provides a large portion of the RMP/EIS area's ephemeral forage and generally occurs in broad valleys common to the region. The white bursage area extends above the broad valley floors, whereas the creosotebush area continues to hold a position on the uppermost bajadas and on into the mountains (Turner and Brown, 1982). Other plants associated with this vegetation type include ironwood, ratany, wolfberry, Mormon tea, and big galleta.

The next most extensive range type is the paloverde-cacti-mixed shrub, which is dominated by little leaf paloverde and the large columnar saguaro. This plant community is best developed away from the valley floors on bajadas and mountainsides (Turner and Brown, 1982). Other species associated with this type include acacia, jojoba, ratany, *Opuntia* sp., and buckwheat.

The third and perhaps the most important is the riparian vegetation type, which grows along stream banks of the Gila River and along dry washes throughout the area. This type, although comprising a lower percentage of the area, receives the bulk of use from livestock grazing and wildlife and is the most diverse of the rangeland types. For vegetation analysis both broadleaf and mesquite types are grouped under the general heading of riparian.

Ephemeral Vegetation

Ephemeral (annual) vegetation occurs in all four vegetation types. Desert ephemerals germinate rapidly and mature early under the proper combination of favorable temperature and adequate moisture. The life cycle of many species lasts only from five to six weeks (Shreve, 1942). Annuals such as filaree, Indian wheat, Mediterranean grass, red brome, and fiddleneck provide most of the RMP/EIS area's ephemeral forage (BLM, 1983). During years with above-average rainfall, production of ephemeral vegetation can be many times the yearly perennial production. These ephemerals provide almost all of the forage on ephemeral allotments and are also important forage producers on perennial-ephemeral allotments during years of above-average rainfall.

Rangeland Condition

Rangeland condition estimates were based on comparing existing plant species composition on range sites with presumed climax plant composition as described in range site guides developed jointly by BLM and the Soil Conservation Service. The closer a range site is to its climax stage, the higher is its condition rating. Management plans are generally designed to improve the condition of the rangeland towards climax, but a climax state is not always desirable. Range specialists must determine whether the climax plant community is the most productive or the most desirable condition to be achieved. Management plans may then be designed to produce the desired condition. The methodology for determining rangeland condition is described in Appendix 14.

The range site system used an ecological approach to evaluate a specific site. In the RMP/EIS area, nine percent of the public rangelands is in excellent condition, 51 percent is in good condition, 30 percent is in fair condition, and 10 percent is in poor condition. Appendix 15 shows rangeland condition by allotment.

Apparent Trend

Rangeland trend is the direction of change in rangeland condition. The present ecological rangeland condition rating alone does not show whether the plant community is improving or deteriorating in relation to its potential. Trend is a separate determination needed to assess what is happening to the plant community. The present rangeland condition is a result of a sustained trend over time. Trend is a much more sensitive indicator of change than condition.

Rangeland trend is developed from data collected over a period of time. Since trend studies have not been completely established within the area, apparent rangeland trend was determined during the rangeland inventory conducted in 1980 and 1981. Methodology for determining apparent trend is found in Appendix 14.

The apparent rangeland trend information represents only a single year's observations and thus may not reflect the actual long-term trend of an area. BLM determined apparent trend to facilitate analysis and to identify allotments needing special attention during development of management or monitoring plans. The rangeland inventory showed that apparent trend in condition of public lands within the RMP/EIS area is 85 percent static, 10 percent up, and five percent down. Appendix 15 shows the apparent trend by allotment.

Protected Plants

No officially documented, federally listed threatened or endangered plant species are known to occur in the Lower Gila South RMP/EIS area. The Fish and Wildlife Service has recently proposed the *Mammillaria thornberi* (Thornberi fishhook cactus) for inclusion on the list of threatened or endangered species. In addition BLM has determined that 19 species are considered to be sensitive in the RMP/EIS area (Table 3-1). These species also appear on the Arizona Natural Heritage Program's list of special

TABLE 3-1
PROTECTED PLANTS--LOWER GILA SOUTH RMP/EIS AREA
Bureau of Land Management, Phoenix District, Arizona

Scientific Name	FWS Candidate Species	Listed By BLM	Listed By Arizona Natural Heritage Program	Listed By Arizona Commission of Agric. & Hort.	Affected By Grazing
Acalypha pringlei		X	X		X
Allium parishii		X	X	X	
Bacopa routndifolia		X	X		
Colubrina californica			X		X
Euphorbia trachysperma		X	X		
Graptopatalum rusbyi		X	X	X	
Malvastrum bicuspidatum		X	X		
Mammillaria thornberi	X	X	X	X	X
Nemacaulis denudata var. gracilis		X	X		
Neoevansia striata		X	X	X	
Neolloydia erectocentra var. acunensis	X	X		X	X
Opuntia wigginsii	X	X		X	
Peniocereus greggii	X	X		X	
Pilostyles thurberi		X	X		
Selaginella eremophila		X	X		
Stenocereus thurberi		X	X	X	X
Stephanomeria schottii		X	X		
Stillingia linearifolia		X	X		
Tumaunoca macdougalii	X	X	X		

SOURCE: Bureau of Land Management, Fish and Wildlife Service, Arizona Natural Heritage Program, and Arizona Commission of Agriculture and Horticulture data.

plants and are listed by the Arizona Commission of Agriculture and Horticulture. Five of the species are negatively affected by the grazing and trampling of livestock, wild burros, and wildlife.

In addition, four areas have been identified as containing significant botanical values.

1. Table Top Mountains feature a well developed Sonoran desert scrub plant community that includes species such as *Croton sonorae, Haplophyton crooksii* (cockroach plant) and *Ayonia microphylla* that approach the northern extent of their distribution in the area. The essentially pristine upper slopes and summit of Table Top support a diversity of native grasses, 21 species, as well as relict populations of *Quercus turbinella* (turbinella oak) and *Juniperus*. Such areas are important in studies of the recent evolutionary history of plant communities within the Sonoran Desert region. The Arizona Academy of Science recognizes the research potential of this area and has proposed Table Top Mesa as a Natural Area (Smith, 1946).

2. The Coffeepot Mountain area includes the northern portions of the Sauceda and Sikort Chuapo Mountains and the intervening valley. The Sonoran-desertscrub community in this area is diverse, comprised of over 285 plant taxa, many of which have very limited distributions in the United States. Five special status plant species also occur in the Coffeepot Mountain area, namely, *Acalypha pringlei, Graptopetalum rusbyi,*

Neolloydia erectocentra var. *acunonsis, Peniocureus greggii* and *Stenocereus thurbori.*

3. The Sierra Estrella Mountains area encompasses the central portion of the range from Montezuma Peak northwestward to Butterfly Mountain. This extremely rugged range features essentially pristine Sonoran desertscrub vegetation with a diversity of native grasses and restricted populations of six chaparral-oak woodland species in protected north facing sites. Populations of *Bursora microphylla* (elephant tree) on the arid west slopes are near the northeast limit of the species' distribution. The Sierra Estrellas have research potential for studies of past distributions of plant communities within the Sonoran Desert region.
4. The Eagletail Mountains have an impressively complex topography of Sawtooth ridges, sheer cliff faces, natural arches and canyons. A relatively undisturbed Sonoran desertscrub vegetation occurs throughout with scattered populations of *Colubrina californica* (California snakebush) and relict juniper and oak in protected sites. The Arizona Academy of Science recognizes the research, education and recreation potential of this area and has proposed a portion of the Eagletail Mountains as a Natural Area (Smith, 1976).

Refer to the Lower Gila South MSA (BLM, 1983) for additional information on protected plant species and significant botanical areas.

Wild Burros

Wild burros are found in one location in the Lower Gila South RMP/EIS area near the Painted Rock Reservoir area along the Gila River. Use of the Lincoln Index Inventory Method in June of 1980 estimated 15 to 25 burros inhabited the Painted Rock Herd Area (Caughley, 1975). Crucial habitat for wild burros in the Lower Gila South RMP/EIS area is mainly river bottom along the Gila River below Painted Rock Dam.

During summer months when the Gila River is dry, burros enter private agricultural fields for forage and water. They also pose a problem to the state recreation area below the dam. No burro capture plans have been prepared at this time.

WILDERNESS VALUES

Arizona's BLM Wilderness Inventory (BLM, 1979 and 1980) identified 13 wilderness study areas (WSAs) within the Lower Gila South RMP/EIS area. Twelve WSAs are addressed in this RMP/EIS, the Sierra Estrella WSA will be addressed in a future EIS planned for 1986 and 1987. A detailed discussion of each WSA and its resources is presented in the Lower Gila South Wilderness Supplement, which accompanies this RMP/EIS. The Wilderness Values section of this document discusses the 12 WSAs in terms of:

1. *Wilderness Quality.* Each area's mandatory characteristics of size, naturalness, and outstanding opportunities for solitude and/or primitive recreation are examined. Also described are ecological, geological, scientific, educational, scenic, or historical features which enhance the area's wilderness values.
2. *Diversity in the National Wilderness Preservation System (WPS).* This section describes the extent to which designation of any area under study would contribute to expanding the diversity of the NWPS. Ecosystems, landform groups, and the geographic distribution of wilderness areas are described. In addition, the opportunities for solitude or primitive recreation within a day's driving time (five hours) of major population centers are assessed.

INDIVIDUAL WSA DESCRIPTIONS AND WILDERNESS VALUES

New Water Mountains (AZ-020-125) 40,600 Acres

The New Water Mountains WSA is in La Paz County, 13 miles east of Quartzsite, Arizona, and borders a U.S. Fish and Wildlife Service proposed wilderness. The area is characterized by rugged volcanic mountains dissected by narrow canyons and sandy washes. A sparse paloverde and saguaro cactus plant community covers most of the WSA.

The study area is essentially natural because 20.75 miles of vehicle ways, several range and wildlife water developments, and some mine prospects are widely scattered, are screened by terrain and vegetation, and therefore are not substantially noticeable.

Opportunities for solitude and primitive and unconfined recreation are outstanding because of the area's size, numerous canyons, ravines, and rugged, craggy peaks. Hiking, backpacking, wildlife observation, and rock collecting opportunities are excellent. Supplemental wildlife and prehistoric cultural features contribute to the WSA's wilderness values. Much of the area is crucial desert bighorn sheep habitat, including a lambing ground.

Little Horn Mountains West (AZ-020-126A) 13,800 Acres

This WSA is in La Paz and Yuma Counties, 30 miles southeast of Quartzsite, Arizona, and is adjacent to a U.S. Fish and Wildlife proposed wilderness area. The Little Horn Mountains within the WSA are characterized by basalt hills and numerous volcanic features. Drainages in the area are shallow and rocky. Vegetation consists of paloverde and saguaro on the hills and mixed desert scrub in the lower areas.

The WSA is essentially natural because a one-mile fence line, several historic adits, and three short vehicle ways are not substantially noticeable. The jumbled arrangement of hills and low mountains separated by small canyons provide outstanding opportunities for solitude. Good but not outstanding opportunities for primitive and unconfined recreation also exist.

Two special features enhance the WSA's wilderness values. The entire WSA is crucial desert bighorn sheep habitat and about half the WSA is likely to contain some prehistoric archaeologic sites.

Little Horn Mountains (AZ-020-127) 91,930 Acres

Little Horn Mountains WSA lies in La Paz and Yuma Counties, 38 miles southeast of Quartzsite, Arizona. This WSA includes the greater part of the Little Horn Mountains, a large portion of the Ranegras Plain, and small portions of the Palomas Plain and Nottbusch Valley.

The area around the Little Horn Mountains is a rugged Sonoran Desert range of basalt and volcanics cut by two 800-foot-deep canyons and numerous small canyons. The red, buff, and yellow canyons show a striking geologic color contrast. Creosotebush covers the desert plains and saguaro, ocotillo, and cholla grow on the mountains.

The WSA is essentially natural and has been primarily affected by the forces of nature. In addition to three cherrystem roads accessing Arizona Game and Fish Department water catchments, the WSA has 38 miles of vehicle ways, five miles of fenceline, and three mining sites. These imprints do not individually nor cumulatively affect the WSA's naturalness because they are screened by terrain and vegetation, and one can take extensive hikes without seeing any sign of human activity.

The vastness of the WSA, coupled with the jumbled arrangement of basalt mesas, hills, and low mountains separated by canyons, offers an outstanding opportunity for solitude. In addition, the WSA has several striking volcanic features, geologic color contrasts, hunting opportunities, and extensive vistas that contribute to outstanding recreational opportunities. Cultural (prehistoric archaeological sites) and wildlife resources (important desert bighorn habitat) are supplemental features present in the WSA and contribute to its wilderness values.

Eagletail Mountains (AZ-020-128) 119,700 Acres

The Eagletail Mountains WSA lies 65 miles west of Phoenix in Yuma, La Paz, and Maricopa Counties. The northern part of the WSA consists of a 15-mile segment of the Eagletail Mountains, the central portion a desert plain, and the southern part an elongated mountain range called Cemetery Ridge. Topography in the Eagletail portion varies from flat or greatly undulating to strikingly incised and dissected. Spectacular landforms—natural arches, high spires, monoliths, and almost vertical sawtooth ridges—are relatively common. Saguaro and paloverde dot the foothills of the Eagletails and creosotebush covers the desert plains. The Eagletail Mountains' ridgeline is barren with only sparse plant cover. Numerous north-south trending washes cross the desert plain.

The Eagletail Mountains WSA is essentially natural and appears to have been primarily affected by the forces of nature. While the WSA contains a variety of human imprints (106 miles of vehicle ways, prospects, old mine workings, well sites, and old campsites), none are considered significant enough to affect the WSA's apparent naturalness. The area's large size, varied terrain, and plant cover screen the imprints from view.

The WSA's large size, the dense vegetation cover on the desert bajadas, the plains, and the dramatic topographic relief of the mountains offer outstanding opportunities for solitude. The area's size, diversity, and complex topography also create outstanding opportunities for primitive and unconfined recreation, such as hiking, backpacking, camping, hunting, cultural and botanical sightseeing, and horseback riding.

Cultural, wildlife, botanical, and scenic values contribute to the WSA's wilderness character. Archaeological sites include petroglyphs and rockshelters. Portions of the WSA are important desert bighorn sheep and desert tortoise habitat. The Eagletail Mountains have been proposed as a scientific and/or scenic natural area by the State of Arizona's Office of Economic Planning and Development because of the area's remote, pristine nature, undisturbed Sonoran Desert vegetation, and wildlife habitats.

East Clanton Hills (AZ-020-129) 36,000 Acres

Along the Yuma-Maricopa County boundary, the East Clanton Hills WSA lies 25 miles southwest from the town of Tonopah, Arizona. The western portions of the Gila Bend Mountains, sometimes referred to as the East Clanton Hills or the Picacho Hills, are within this WSA. The WSA's southern portion includes a small part of Hyder Valley. Sparse paloverde, saguaro, and creosotebush dot the area. Some dense stands of paloverde and ironwood line the washes.

The WSA appears to be primarily affected by the forces of nature with the human imprints substantially unnoticeable. Several insignificant imprints do occur, but they do not affect the WSA's apparent naturalness because of terrain and vegetation screening. These developments include an Arizona Game and Fish Department water catchment, a water tank built in a canyon, 35 miles of vehicle ways, an unserviceable reservoir, several unintrusive mine prospects, and 12 miles of seismic lines.

The outstanding opportunities for solitude throughout most of the WSA are a result of the WSA's size, its complex and diverse topography, and the tall, dense vegetation in some areas. The WSA's mountainous terrain, combined with colorful hills and dramatic desert vistas, provide outstanding opportunities for a primitive and unconfined recreation. Supplemental cultural resources and wildlife values also exist.

Face Mountain (AZ-020-136) 27,575 Acres

Face Mountain WSA is in southwest Maricopa County, 33 miles southwest of Buckeye, Arizona. Face Mountain is a steep and rugged prominence that dominates the flat Hyder Valley and the highly dissected Dendora Valley that surround it. The vegetation varies throughout the WSA from a sparse creosotebush-bursage to dense paloverde-saguaro to cholla thickets at the mountain's ridgetop.

The WSA is predominantly natural with few noticeable human intrusions. The entire WSA provides outstanding opportunities for solitude. Dense desert wash and plain plant cover, badlands, and rolling terrain offer ample opportunities to avoid the sights and sounds of others and to experience isolation. There are no recognized outstanding opportunities for primitive and unconfined recreation. Also, no known special features are present.

Signal Mountain (AZ-020-138) 20,290 Acres

Situated in the central part of the Gila Bend Mountains in Maricopa County, Signal Mountain WSA lies 18 miles northwest of Gila Bend, Arizona. Signal Mountain is in the center of the WSA and is surrounded by steep-walled canyons, washes, ridges, and sharp peaks. The WSA's edge consists of bajadas, small peaks, and washes originating from Signal Mountain. Saguaro, paloverde, creosotebush, and bursage dot the rugged terrain while dense desert riparian plants line the washes.

The WSA is essentially natural because the imprints of man—vehicle ways, a prospect site, and a concrete foundation—are not substantially noticeable.

The complex topography of numerous small valleys, canyons, and ridges around Signal Mountain and the rolling hills and open washes in the rest of the WSA provide outstanding opportunities for solitude. These topographic features and the densely vegetated washes, sheer canyon walls, and rich colors of the area offer outstanding primitive and unconfined recreation opportunities, including backpacking, rock climbing, hiking, hunting, nature study, and photography. Cultural, wildlife, and scenic resource values add to the wilderness character of the area.

Woolsey Peak (AZ-020-142/144) 73,930 Acres

The Woolsey Peak WSA is in southwest Maricopa County, 16 miles southwest of Buckeye, Arizona. Woolsey Peak dominates the WSA and is surrounded by a variety of topographic features including a lava flow, a dozen mesas, and numerous rugged peaks. Sparse paloverde-saguaro and creosotebush-bursage associations are the primary vegetation.

The Woolsey Peak WSA is essentially natural because its human imprints are not substantially noticeable. Several vehicle ways, tracks, small borrow pits, prospects, an Arizona Game and Fish Department catchment, and two spring developments are found in the WSA. These imprints are well dispersed and screened by either vegetation or topography.

Opportunities for both solitude and primitive recreation are outstanding. Solitude can be experienced throughout because of the WSA's large size, excellent topographic screening, and variety of access points. The size, diversity, and ruggedness of the WSA also provide outstanding opportunities for primitive and unconfined recreation. Extensive backcountry packing, hiking, horseback riding, camping, and sightseeing opportunities would be available for many users without a loss of solitude.

Wildlife (desert bighorn sheep habitat) and cultural sites (rock rings, alignments, chipping stations) are supplemental features that contribute to the WSA's wilderness values.

North Maricopa Mountains (AZ-020-157) 75,483 Acres

The North Maricopa Mountains WSA is located along the northern end of the Maricopa Mountains, 12 miles northeast of Gila Bend, Arizona. The WSA has within its borders a 10-mile-long portion of the Maricopa Mountains as well as extensive portions of the surrounding desert plain. This plain is dissected by numerous washes, some of which are quite sizeable and display a wide diversity of vegetation. The vegetation is primarily a paloverde and saguaro community with creosotebush, mesquite, and some dense stands of cholla. Ironwood is common in the drainages.

The WSA is natural with human influences largely unnoticeable. About 35 miles of vehicle ways, a wildlife water catchment, and a one-fourth mile eline are within the WSA. All these imprints are small, scattered, and screened by terrain and plant cover.

The size, diverse and rugged terrain, and the general wildness of the WSA provide outstanding opportunities for solitude and primitive and unconfined recreation. Numerous hikers, backpackers, campers, and sightseers could pursue outstanding primitive recreation activities without losing a sense of isolation.

Portions of the WSA have supplemental wildlife and cultural resource values that contribute to its wilderness character. Large portions of the WSA provide habitat for desert bighorn sheep and desert tortoise.

South Maricopa Mountains (AZ-020-163) 72,004 Acres

The South Maricopa Mountains WSA is eight miles east of Gila Bend, Arizona. The South Maricopa Mountains (a small rugged mountain range) are surrounded by gently rolling desert and are dissected by numerous washes. Vegetation consists of creosotebush and some saguaro on the mountain slopes, dense paloverde and ironwood stands along the washes, and creosotebush and bursage on the flats between the washes.

The entire WSA is essentially natural. Little evidence of human activity exists except for vehicle ways, an old mine, some old cars, and cattle trails. Outstanding solitude and primitive and unconfined recreation opportunities exist throughout much of the WSA because of the mountainous terrain, plant cover, and the area's large size. Primitive recreation opportunities include hiking, camping, backpacking, and plant and animal sightseeing.

Supplemental wildlife resource values (desert tortoise and desert bighorn sheep habitat) and cultural resources (historic and prehistoric sites) enhance the wilderness values of the WSA.

Butterfield Stage Memorial (AZ-020-164) 9,566 Acres

The Butterfield Stage Memorial WSA is 15 miles east of Gila Bend, Arizona. This area has a central core of rugged mountains that form the southern tip of the North Maricopa Mountains. Vegetation is primarily paloverde, saguaro, cholla, and bursage.

The WSA is essentially natural with human activity substantially unnoticeable. The diversity of terrain and vegetation combine to provide an outstanding opportunity for solitude. While opportunities exist for primitive and unconfined recreation, these are not outstanding because of the area's small size.

Wildlife and cultural resource values (historic and prehistoric) contribute to the WSA's wilderness qualities. Portions of the WSA provide crucial desert bighorn and crucial desert tortoise habitat.

Table Top Mountains (AZ-020-172) 39,823 Acres

The Table Top Mountains WSA is 45 miles south of Phoenix and 20 miles west of Casa Grande, Arizona in Maricopa and Pinal Counties. The rugged mountainous terrain is dominated by 4,373-foot Table Top Mountain. Bajadas and their complex drainages surround the core of the WSA. Vegetation is primarily paloverde and saguaro with riparian species such as ironwood and mesquite along the washes. Table Top Mountain supports a desert grassland community.

The entire WSA has outstanding opportunities for solitude and primitive and unconfined recreation. Hikers, backpackers, day hikers, sightseers, and horseback riders could cross the WSA's rugged terrain with little likelihood of encountering others. Dense plant cover, a variety of access routes, and the area's size all contribute to a visitor's ability to escape the sights and sounds of human activity and experience outstanding primitive recreation.

Botanical, cultural, and wildlife values (important desert bighorn sheep and desert tortoise habitat) enhance the WSA's wilderness characteristics. Table Top Mountain has a 40-acre isolated grassland community with possible scientific and educational value. Much of the WSA is considered likely to contain archaeological sites.

Diversity In The National Wilderness Preservation System

Ecosystem Diversity and Ecotype/Landform. The Bailey-Kuchler system (Kuchler and Bailey, 1978) was used to classify all existing and potential units of the National Wilderness Preservation System (NWPS) into ecotype/landform types. Table 3-2 shows the Bailey-Kuchler potential natural vegetation types within each WSA.

TABLE 3-2
WSA ACRES BY VEGETATION TYPE
Bureau of Land Management, Phoenix District, Arizona

WSAs	Bailey-Kuchler Vegetation Types: Creosote Bush-Bursage (3220-36) Acres	% of WSA	Palo Verde-Cactus Shrub (3220-37) Acres	% of WSA
New Water Mountains	6,055	15	34,545	85
Little Horn Mountains West	0	0	13,800	100
Little Horn Mountains	18,930	21	73,000	79
Eagletail Mountains	7,000	6	112,700	94
East Clanton Hills	14,665	40	21,935	60
Face Mountain	0	0	27,575	100
Signal Mountain	0	0	20,920	100
Woolsey Peak	0		73,930	100
North Maricopa Mountains	20,125	25	55,358	75
South Maricopa Mountains	14,948	21	57,056	80
Butterfield Stage Memorial	0	0	9,566	100
Table Top Mountains	14,498	36	25,345	64
TOTALS	96,221	15	525,710	85

SOURCE: BLM, Profile 2, Wilderness Diversity Computer Reports, Phoenix District files

Table 3-3 describes these vegetation types as they are represented in designated and administratively endorsed wilderness and areas under wilderness review.

Solitude or Primitive Recreation Opportunities

The Lower Gila South RMP/EIS area lies within 250 miles of five standard metropolitan statistical areas (SMSAs) as defined by the Bureau of the Census. The SMSAs are Phoenix and Tucson, Arizona, Las Vegas, Nevada, and Riverside and San Diego, California. A

TABLE 3-3
EXISTING AND POTENTIAL REPRESENTATIONS OF ECOSYSTEM TYPES
Bureau of Land Management, Phoenix District, Arizona

Bailey-Kuchler Vegetation Type	Statutory Wilderness		Administratively Endorsed for Wilderness by the President		Potential Sources of Representation--Areas Under Study*	
	No. Areas	Acres	No. Areas	Acres	No. Areas	Acres
Creosote Bush-Bursage	5	344,217	3	430,150	48	1,401,259
Palo Verde-Cactus Shrub	4	265,450	3	847,600	41	1,396,142

* Includes areas being studied for wilderness by the Forest Service, Fish and Wildlife Service, National Park Service, and Bureau of Land Management.
SOURCE: BLM, Profile 2, Wilderness Diversity Computer Reports, Phoenix District files

number of both designated and administratively endorsed wilderness areas lie within a day's driving time of all five SMSAs. A breakdown of the number of areas providing solitude or primitive recreation opportunities to residents of the five SMSAs is provided in Appendix 16.

Geographic Distribution of Wilderness Areas

Designated and administratively endorsed wilderness areas are distributed throughout Arizona and the region. Table 3-4 shows the acreage of designated and administratively endorsed wilderness areas and the number of areas under study in Arizona and the southwest region. For the most part, the region considered in this analysis encompasses areas within approximately 300 miles of Phoenix, Arizona.

Existing and administratively endorsed wilderness areas within Arizona are listed in Appendix 16 by status and agency.

LAND USES

The Lower Gila South RMP/EIS area has 2,009,232 acres of public land in Yuma, La Paz, Pima, Maricopa, and Pinal Counties. The majority of the public lands in the area are well blocked and easily managed. Isolated parcels primarily occur around the population centers and along the Gila River. Isolated tracts of state and private lands within large blocks of public lands occur throughout the RMP/EIS area.

The major population centers within the area are Bouse, Buckeye, Gila Bend, Dateland, and Ajo, Arizona. Ajo is the only community landlocked by public lands, and future community expansion would be difficult.

The most common land uses on private and state land in the area are ranching, agriculture, and commercial uses. Ranching occurs throughout the area, but agricultural uses are primarily along the Gila River and Harquahala and Ranegras Plains. Jojoba is also being developed as a cash crop in these areas. In this RMP/EIS area commercial uses are generally confined to the population centers, with the exception of the hazardous waste facility that will be constructed at T. 4 S., R. 1 W., Section 32.

The environmental impact statement and decision record for the hazardous waste facility calls for a buffer zone that extends a half mile beyond the section lines around Section 32. Prior to any land use authorizations, the State of Arizona will be contacted and it will be determined if the proposal is or is not compatible with the operation of the facility. Land uses found to be incompatible with the management of the facility will be restricted within this buffer zone.

Land use demands for public acreage in the RMP/EIS area are mainly for road and utility rights-of-way. These rights-of-way normally accommodate private land owners who need utilities and legal access to their property. Major utility and transportation systems also cross the area (interstate highways, pipelines, and ultra-high voltage transmission lines—230-kV and above). Because of increased ulation growth and the development of the Palo Verde Nuclear Generating Station, additional uses along these existing rights-of-way can be expected. There are 10 areas (corridors) in the RMP/EIS area where this expansion can be anticipated.

Within and adjacent to the RMP/EIS area are four Indian Reservations (Gila River, Gila Bend, Ak-Chin, and Papago), two military reservations (Luke-Williams and the Yuma Proving Grounds), two wildlife refuges (Cabeza Prieta and Kofa), and the Organ Pipe National Monument. Several withdrawals associated with the Gila River are also within the area: the Painted Rocks withdrawal to the Corps of Engineers, several power site withdrawals to the Bureau of Reclamation, and a withdrawal to the Fish and Wildlife Service covering approximately 6,896 acres of the Fred J. Weiler Green Belt. There is only one classification for multiple use (CMU) in the area which covers the Fred J. Weiler Green Belt. This CMU segregates approximately 63,000 acres from all forms of appropriation including appropriation under the mining laws. The lands remain open to mineral leasing under the mineral leasing laws.

TABLE 3-4
GEOGRAPHIC DISTRIBUTION OF WILDERNESS AND POTENTIAL WILDERNESS
Bureau of Land Management, Phoenix District, Arizona

	BLM		FWS		FS		NPS		STATE		TOTAL	
Type of Area	No. Areas	Acres	No. Areas	Acres	No. Areas	Acres	No. Areas	Acres	No. Areas	Acres	No. Areas	Acres
Arizona												
Existing	8	286,270	0	0	35*	1,288,085	4	431,550	0	0	47	2,005,905
Endorsed	0	0	4	1,318,710	0	0	0	0	0	0	4	1,318,710
Study	72	2,100,135	0	0	3	67,930	0	0	0	0	75	2,168,065
Region												
Existing	8	286,270	0	0	43	2,220,580	5	898,790	16	310,610	72	3,716,250
Endorsed	0	0	5	2,761,810	13	171,582	3	156,624	0	0	21	3,090,016
Study	258	8,112,950	0	0	14	193,636	15	877,930	0	0	287	9,184,516

* Includes one BLM area (8,850 acres) in Kanab Creek.
BLM = Bureau of Land Management, FWS = Fish and Wildlife Service, FS = Forest Service, STATE = State of California
SOURCE: BLM, Profile 2, Wilderness Diversity Computer Reports, Phoenix District files

WILDLIFE

The Lower Gila South RMP/EIS area is composed primarily of two terrestrial habitat types: creosotebush-bursage and paloverde-mixed cacti. Other habitats include tobosa grass-scrub in South Vekol Valley and saltbush, mesquite thickets, and disclimax tamarisk habitats—all associated with the Gila River floodplain.

Wildlife Habitat Types	*Acres*
Tobosa Grass - Scrub	400
Creosote - Bursage	1,305,900
Paloverde - Mixed Cacti	749,400
Saltbush	17,900
Sonoran Deciduous Swamp Riparian Scrub. (Includes Mesquite Bosque, Arrowweed Scrub, and disclimax Tamarisk)	18,600
TOTAL	2,092,200

This section individually discusses key wildlife species (federal threatened or endangered, state threatened, unique, or high-economic value species) if they are significantly impacted by the *Proposed Action* or any of the alternatives. The focus will be on habitat factors that influence wildlife survival and are affected by the *Proposed Action* or the alternatives.

Threatened and Endangered Species

Two federallLy listed endangered species occur within the Lower Gila South RMP/EIS area: the Yuma clapper rail (*Rallus longirostris yumanensis*) and the Sonoran pronghorn (*Antilocapra americana sonoriensis*).

The clapper rail is a secretive shorebird preferring tamarisk or cattail thickets near water. The Gila River channel is rail habitat although flood control channelization and water diversion have reduced habitat value. Rails have been documented in the Gila River upstream from Gillespie Dam (BLM, Phoenix District files).

The Sonoran pronghorn is found in creosotebush-bursage and paloverde-mixed cacti habitats southwest of Ajo. A small population ranges mostly into Organ Pipe Cactus National Monument, Cabeza Prieta National Wildlife Refuge, and Luke-Williams Gunnery Range. Much historic habitat has been lost to agriculture, human habitation, overgrazing, and poaching in the United States and Mexico (Arizona Game and Fish Department, 1981). A long-term recovery effort is under way involving the U.S. Fish and Wildlife Service, Arizona Game and Fish Department, National Park Service, Department of Defense, and Bureau of Land Management.

Seven state-listed threatened and four BLM-listed sensitive species are found within the Lower Gila South RMP/EIS area, but these are not listed as federal endangered species. These eleven species and their habitats are shown in Table 3-5.

Riparian Habitat (Fred J. Weiler Green Belt and PLO-1015 Withdrawal)

Virtually all riparian habitat along the Gila River channel is in the form of saltcedar and mesquite thickets and saltbush flats (Haase, 1972). Native cottonwoods (*Populus fremontii*) and willows (*Salix* sp.) grow in limited numbers, intermixed with saltcedar. A total of 6,896 acres of public land riparian habitat were withdrawn in 1954 under Public Land Order 1015 for use as waterfowl habitat. These lands are along the Gila River from Monument Hill to Gillespie Dam and provide recreation areas for a large segment of the hunting public.

Saltcedar, an introduced plant, provides excellent nesting grounds for white-winged doves (*Zenaida asiatica*) and mourning doves (*Zenaida macroura*) (Cottam and Trefethen, 1968). Mesquite thickets provide good habitat for dove, Gambel's quail (*Lophortyx gambelii*), sharp-shinned hawk, Cooper's hawk, and other species (Anderson, Engel-Wilson, Wells, and Ohmart, 1977).

TABLE 3-5
STATE-LISTED THREATENED SPECIES AND BLM-LISTED SENSITIVE SPECIES
FOUND IN THE LOWER GILA SOUTH RMP/EIS AREA
Bureau of Land Management, Phoenix District, Arizona

Species	Habitat	Threatened By	Group*
State Threatened Species			
Desert Tortoise (Gopherus agassizii)	paloverde-mixed cacti, rocky, broken topography	pet collectors, habitat loss, heavy grazing, & off-road vehicles	III
Mohave Desert fringe-toed lizard (Uma Scoparia)	creosotebush-bursage, sandy dunes near Quartzsite & Parker	off-road vehicles & agricultural development.	III
Osprey (Pandion Haliaetus)	Gila River particularly around Painted Rock Reservoir	loss of habitat and pesticides	III
Great Egret (Casmerodius albus egretta)	roosts and breeds along rivers	river channelization & drying of Gila River	IV
Snowy Egret (Egretta thula brewsteri	roosts and breeds along the Gila River	river channelization & drying of Gila River	IV
Black Crowned Night-Heron (Nyticorax nyticorax hoacatle	roosts and breeds along the Gila River	river channelization & drying of Gila River	IV
Desert Bighorn Sheep (Ovis canadensis mexicana)	paloverde-mixed cacti, mountainous topography (all major mountain ranges in LGS)	introduced diseases, livestock competition, urbanization, road construction, mineral development, & poaching	III
BLM Sensitive Species			
Gila Monster (Heloderma suspectum)	all native habitats in LGS	loss of habitat to agricultural & urban development	S
Kit Fox (Vulpes macrotis)	open creosotebush-bursage	loss of habitat to agricultural & urban development	S
Cooper's Hawk (Accipiter cooperi)	riparian areas and mesquite thickets	loss of habitat	S
Sharp-shinned hawk (Accipiter striatus)	riparian areas and mesquite thickets	loss of habitat	S

* Group III: Species or subspecies which have suffered heavy population loss and could be in danger of elimination from Arizona in the future.
Group IV: Species for which there is a moderate threat to habitat. No recent population declines.
S: BLM maintains a list of wildlife species which are likely to become federal- or state-listed if habitat deterioration is not halted or reversed.

SOURCE: Phoenix District files, Arizona Game & Fish Department, and Arizona Natural Heritage Program

The mixture of riparian vegetation, agricultural lands, and upland paloverde-mixed cacti habitat results in higher mule deer populations. Water diversion projects dry up the river for considerable periods of time. However, periodic flooding, City of Phoenix sewage discharge, and wastewater from nearby irrigated fields provide open water and cattail habitat for waterfowl, raptors, and shorebirds (Yuma clapper rail, osprey, great and snowy egret, and black-crowned night heron).

Game Birds and Small Game

Three species—mourning doves, white-winged doves, and Gambel's quail—live in the Lower Gila South RMP/EIS area. Saltcedar thickets provide nesting habitat for white-winged and morning doves, with the highest nesting production occurring in stands with canopy height of 12 feet or more. Doves will also nest in paloverde, mesquite or ironwood in other habitats and in citrus orchards. Mesquite thickets make excellent roosts and escape cover for Gambel's quail which, though found in all habitats, are most abundant in mesquite. Quail populations are closely correlated to winter/spring rainfall (Galliziolli, 1960). When rainfall is high, females lay large egg clutches (up to 15) in expectation of abundant seed and insect production. Conversely, when winter/spring rainfall is scarce, quail limit reproductive activity or curtail it altogether.

Desert cottontail rabbit is the only small game mammal in the RMP/EIS area. It is most often found near brush piles or thickets in all habitats. Rabbits are most abundant in riparian areas and near agricultural fields.

Big Game

Desert Bighorn Sheep. Desert bighorn sheep, a state-listed threatened species, inhabit all major mountain ranges in the Lower Gila South RMP/EIS area with the largest herds occurring in the Plomosa and New Water Mountains. Bighorn sheep prefer the rugged mountainous terrain, however, they require large tracts of desert habitat around the mountains, which are free of human development and offer open migration routes between mountain ranges. Nearly equal percentages of edible forbs, grasses (annual and perennial), and browse make up the bighorn sheep's diet.

Bighorn sheep are threatened by introduced diseases, livestock competition, poaching, and human intrusions (urbanization, roads and powerline construction, mineral development, and off-road vehicle recreation). Bighorn sheep are hunted on a limited basis with six permits issued each year in the RMP/EIS area.

Mule Deer. Mule Deer are the most common big game species in the RMP/EIS area and are found in all habitats. Even so, deer are very sparse, limited by water and forage. Population densities average 5.3 square miles per deer in creosotebush-bursage habitat and 1.3 square miles per deer in paloverde-mixed cacti habitat (Fredlake and Lucas, 1982). The latter habitat provides deer with a greater variety of forage plants (globe mallow, slender janusia, range ratany, false mesquite, Mormon tea, and jojoba), more topographic relief, and vegetation cover.

The desert washes which meander through creosotebush-bursage habitat can provide excellent cover and forage and this is most evident in the Palomas Plain area where lack of livestock use has allowed surprisingly lush plant growth to occur. Within the Lower Gila South RMP/EIS area, mule deer are most abundant near the Eagletail Mountain, Little Horn Mountain, Cemetery Ridge, and Palomas Plain.

Javelina. Small javelina herds are found in the vicinity of Ajo, east of Gila Bend and south of Buckeye. Javelina prefer paloverde-mixed cacti habitat and consume a variety of cactus, fruits, agave, mesquite beans, roots, and tubers. Javelina are virtually nonexistent in the western half of the RMP/EIS area due to lack of preferred foods and sparse summer rainfall.

Waterfowl, Shorebirds, Aquatic Wildlife

Twenty-one species of waterfowl and 36 species of shorebirds routinely use the Gila River for migration in spring and fall. A lesser number of species inhabit the area year-round.

Most stock reservoirs dry out in late spring or summer or because of heavy cattle grazing and therefore do not have enough shoreline plant cover to provide nesting habitat. Some stock reservoirs (such as those in Vekol Valley) would provide good waterfowl habitat if fenced to allow development of shoreline vegetation.

Native minnow, sucker, and topminnow species have long since disappeared from the lower Gila River. Due to influx of treated sewage, however, the river is highly productive in terms of fish pounds per surface acre of water. Dominant species include carp, tilapia, mosquitofish, catfish, and various sunfish (BLM, Phoenix District files). These fish provide the food base for the herons, egrets, and osprey mentioned in the Threatened and Endangered Species section.

Nongame Animals

The Gila River riparian habitat attracts bird species in a diversity not found in adjacent desert habitats. Warblers, phoebes, vireos, and other birds feed on the abundant insect fauna and nest in mesquite, willow, and cottonwood trees which are intermixed in the predominant saltcedar habitat.

Several reptiles live in unique habitats on Table Top and Estrella Mountains and in South Vekol Valley. A small

grassy mesa top on Table Top Mountain provides habitat for two species not found elsewhere in the RMP/EIS area: the giant spotted whiptail lizard (*Cnemidophorus burti*) and the Ajo Mountain whipsnake (*Masticophus bilineatus lineolatus*) (Jones, 1983).

The Vekol Wash tobosa grassland provides excellent habitat for a variety of amphibians such as the green toad (*Bufo debilis*), narrow mouth toad (*Gastropharyne olivacea*), Colorado River toad (*Bufo alvarius*), burrowing tree frog (*Ptenophyla fodiens*), and Sonoran green toad (*Bufo retiformis*). The combination of clay soil and dense grass cover offers habitat conditions not found elsewhere in RMP/EIS area.

MINERALS AND ENERGY

The Lower Gila South RMP/EIS area lies entirely within the extensive Basin and Range province. This province consists of a series of northwest to southeast trending mountains and intervening valleys. Recent studies in the area indicate most of the mineralization resulted from volcanism and other geological events starting about 60 million years ago and continuing to the present time. Maps of known mineralization reveal a belt extending from southeastern to northwestern Arizona that includes the RMP/EIS area. Intense erosion during this time span tended to concentrate many of the minerals and has left exposed the evidence of recent geological history (Keith, 1984; Haxel, 1984; Scarborough, 1984; Wilt, 1984; Woodward, 1984; Bureau of Geology Maps, 1965, 1969, and 1983; AGS Digest, Vol. XV, 1984).

Leasable Minerals

The possibility that an overthrust belt extended under Arizona sparked an era of oil and gas leasing that covered most federal lands (AGS Digest, 1981). To date, no exploratory wells have led to production in the planning area.

Geothermal

The map of Geothermal Energy Resources of Arizona (1978) indicates several areas in the Lower Gila South RMP/EIS area that have a high heat flow and good prospects for geothermal resources. Forty-two temperature gradient holes of 300 feet have been drilled in this area. No geothermal leases are currently in effect.

Saleable Minerals

There is little demand for mineral material sales in the planning area. Many free-use permits (FUP) have been issued to political entities and are currently in use. The area has many deposits of good aggregates.

Locatable Minerals

The pattern of mining claims depends on many factors besides high mineral potential. Some of these factors are access to mineralized zones, types of deposits, the nature of country rock, current demand, present market prices and degree of difficulty in mining, milling, benefacting and marketing. The range of minerals known in the RMP area is wide and includes precious metals, nearly all minerals on the strategic metals list, and most minerals used domestically. Trace elements also have been located within the areas. Present exploration activity has located new deposits. Most of these locations and minerals are propriety in nature.

WATER RESOURCES

Surface Water

The RMP/EIS area is in the Lower Colorado River region. The majority of the area is in the Gila River basin, with the northwestern portion in the Bouse Wash basin. Perennial streamflow occurs only in the Gila River from its point of entry into the area near Liberty to its impoundment at Painted Rock Reservoir. Controlled releases from the reservoir are conveyed in the river channel to its point of exit from the area near Mohawk. There is a minimum flow yearlong above the reservoir because of the introduction of irrigation and treated sewage effluents along its course from Phoenix to near Arlington.

Streamflow varies greatly in other parts of the area. Peak flows occur in normally dry channels from high-intensity summer thunderstorms or long-duration winter storms. Few other surface water sources are found in the area, although some springs and earthen reservoirs provide a dependable supply of water to livestock and wildlife during most of the year.

Groundwater

Wells are the most dependable source of water in the area. The most important aquifers are the valley and fan deposits of alluvial fill in the Salt River Valley, Gila Bend, Harquahala, Ranegras Plain, and Lower Gila basins. Wells in these basins yield up to several hundred gallons per minute. Other sources of groundwater are wells along fractures in crystalline and metamorphic rock formations. These wells yield from five to 10 gallons/minute as an average. There are no known artesian wells. Most grazing allotments in the area have at least one well supplying water to livestock and wildlife.

Water Quality

Surface water quality data is limited to the Gila River and Painted Rock Reservoir. Data from the U.S. Geological Survey and Arizona Department of Health Services' water quality stations illustrate the influence of irrigation and sewage effluents on the condition of the river and reservoir. Recent discovery of toxic pollutants has generated concern for public health and the ecology of the river. Other contaminants, such as sediments and nutrients, resulting from activities on public lands in the area may become introduced to the Gila River but their effects are unknown.

Groundwater quality in the major aquifers is generally good for most uses in the area, except along the Gila River where irrigation occurs. Total dissolved solids (TDS) for the area's groundwater range from 200 to 1,000 milligrams per liter. Some wells along the river have TDS values near 10,000 milligrams per liter (mg/l). This corresponds to an increased salinity of irrigation water that returns to the groundwater reservoir. Throughout the area, groundwater quality is highly variable due to local geologic and recharge conditions of the wells.

SOILS

The Lower Gila South RMP/EIS area covers parts of five counties where soils greatly vary in chemical and physical characteristics and occur in complex patterns. The Soil Conservation Service recently compiled detailed soils information for Maricopa and Pima Counties and most of Yuma County.

Because soils and soil erosion are not major issues in the RMP/EIS area, only significant problem soils and severe-critical erosion areas will be discussed and analyzed.

Desert Pavement Soils

About 150,000 acres of fragile desert soils are in the RMP/EIS area. A major portion of these fragile soils (desert pavement) is in the western portion of the area. The Crowder-Weisser, Eagle Tail, and Palomas grazing allotments contain large areas of these soils: Ts. 1, 2, 3 N.; Ts. 1, 2, 3, 4 S., and Rs. 12, 13, 14, 15, 16 W. The Bighorn grazing allotment southeast of Gila Bend, Ts. 6, 7 S.; Rs. 3, 4 W., and the Artex grazing allotment west of the Painted Rock(L Mountains, Ts. 5, 6 S., and Rs. 6, 7 W., have moderate amounts of desert pavement soils.

The Cristobal-Ligurta-Chuckwalla soils (desert pavement soils) have a surface layer of dense, varnished desert pavement over a fluffy, strongly saline subsoil. These deep, well-drained soils are on broad, old alluvial fan and fan terraces with slopes from two to 10 percent. Vegetation consists primarily of Turkshead and few annual grasses. Very little livestock use occurs on these soils due to the lack of ephemeral forage.

These soils are stable in their present environment. When the very gravelly, loamy surface layer (two inches thick) is destroyed, these soils are subject to severe wind and water erosion. The potential for severe water and wind erosion in the desert pavement substratum layers is caused by the soil's low soil strength, loamy soil textures, and its high soluble salt content. If the fragile soil's substratum is exposed, severe water erosion and soil blowing occur rapidly. It is estimated that less than one percent or about 1,500 acres of the desert pavement areas within the RMP/EIS area are currently in a severe erosion class.

Soil Erosion and Productivity

Soil erosion from water in the EIS area is generally low due to low precipitation and the gravelly-cobbly soil surface that protects the soil from raindrop splash and channel runoff. The amount and intensity of rainfall greatly vary, making soil erosion and sedimentation levels difficult to calculate or predict. Sheet and streambank erosion during high-intensity storms cause most soil movement. Most severe-critical erosion conditions exist along the Gila River, Upper Vekol, Cuerda de Lena, and Rio Cornez Washes. Because of excess water flow and heavy livestock use, most allotments in the RMP/EIS area have small areas of eroded soils in and adjacent to drainageways.

Wind erosion in the Lower Gila South RMP/EIS area is a major problem. The areas along and adjacent to the Gila River—Gila Bend, Theba, Mobile, and north of Agua Caliente, Arizona—have severe wind erosion problems. The soils have less than 15 percent vegetative cover and little or no gravel to protect them from the erosive power of wind. The soils generally have a surface layer of sandy loam to clay loam. Weather records show that wind gusts from 40 to 60 miles per hour commonly occur in the summer months in this area. Since most of the soils in the area have moderate amounts of lime in the surface layer, this contributes to soil blowing. Lime in the soil makes the soil particles more easily airborne.

CULTURAL RESOURCES

Existing Information

A Class I cultural resource inventory report covering southwestern Arizona (McGuire and Schiffer, 1982), the Phoenix District site report files, cultural resource reports from district projects, and permit applications are the sources for existing cultural resource data referred to in this document. Both the 1980 Paleontological Inventory of the Phoenix District and the Geology, Energy, and Mineral (GEM) reports indicate no fossil localities of

significant importance or interest in the RMP/EIS area (BLM, 1980; Geoexplorers, Inc., 1982). (See Glossary for an explanation of cultural resource classes.)

As of the middle of 1984, about 24,000 acres or 1.2 percent of the Lower Gila South RMP/EIS area had been inventoried at a Class III level, while an additional 12,000 acres or 0.06 percent of the RMP/EIS area had been inventoried at a Class II (sample) level. In total, about 36,000 acres have received some formal inventory work. Approximately 390 sites have been recorded within the RMP/EIS area (this does not include sites recorded on non-BLM lands).

Sensitive site-specific information on archaeological resources is exempt from the disclosure requirements of the *Freedom of Information Act* and will be made available only to qualified persons with legitimate research interests. For this reason, this narrative does not discuss precise site locations, nor particulars of specific sites.

Cultural Resource Site Types

The following information on site types is largely based on information from the *Yuma District RMP/EIS* (BLM, 1985). Cultural resources within the RMP/EIS area generally can be divided into three categories: prehistoric, historic, and traditional cultural/religious areas. Any location with physical remains or evidence of activity by aboriginal peoples prior to European contact is considered a prehistoric site; those with evidence of Euro-Asian peoples to modern times are historic. Traditional cultural or religious sites are generally Native American in origin, range in age from prehistoric to modern, and are important for their socio-cultural and religious values. Appendix 17 lists site types, with abbreviated descriptions, according to the above three categories.

There are major gaps in the cultural historic sequence of the Lower Gila South vicinity because of two factors. First, there is a lack of known sites with stratigraphy—a number of stratified layers with cultural remains built up over time. A lack of these sites is partly because a large proportion of sites are found on desert pavements or heavily patinated (varnished) gravel areas. These unique surfaces do not permit much silt or soil deposition. Thus, many sites or desert pavements are open terrace surface sites where a variety of cultural periods represented by artifacts and features are mingled together on the surface.

Secondly, very few studies have reported a testing program to locate subsurface cultural resources in areas likely to contain buried deposits or in desert pavement areas. Areas with a high likelihood of containing stratified sites include, but are not limited to, the upper banks of the Gila River and nearby bajadas. Due to the lack of stratigraphy and subsurface sampling, very little chronological data is available for the RMP/EIS area.

An archaeological testing program to locate buried cultural resources along the Gila River was conducted by BLM in 1982 (Simonis, 1982). Both terraces and the flood plain were sampled near Dateland, Arizona, but no buried cultural resources were found. However, this study did not conclude that buried cultural resources do not exist here along the Gila River since the sample unit size and number of samples were very small.

Existing Agents of Site Deterioration

Table 3-6 lists a number of agents of site deterioration noted during a Class II sample inventory of the 12 WSAs in the Lower Gila South RMP/EIS area.

TABLE 3-6
EXISTING AGENTS OF SITE DETERIORATION
Bureau of Land Management, Phoenix District, Arizona

Agent of Deterioration	Existing Level of Deterioration to Cultural Resources
Erosion	Moderate
Vandalism	Moderate
Livestock Trampling	Low
Road/Utility Construction	Moderate
Off-Road Vehicle Use	Low
Mining	High
Rangeland Developments	Low

SOURCE: Phoenix District files

Evaluation of Cultural Resources

BLM evaluates cultural resources according to their current and potential uses. Cultural resources can be allocated to one or more of the following seven use categories: (1) public use, (2) socio-cultural use, (3) management use (4) potential scientific use, (5) conservation for future use, (6) current scientific use, and (7) discharged use. These use categories are defined in the Glossary. Any cultural resources discovered in the future will be evaluated using these same categories. BLM also evaluates cultural resources according to the *National Register of Historic Places* criteria (36 CFR 60).

Frequencies of Sites and Areas Likely to Contain Cultural Resources

Based on existing inventory records, an average of 0.01 sites per acre were recorded for all Class III inventoried acres. Projected over the entire RMP/EIS area this figure suggests that approximately 20,350 sites exist here. However, there are no sites within the RMP/EIS area that are listed on the *National Register.*

The one percent Class II sample survey of 607,532 acres within 12 WSAs resulted in the designation of 218,560 acres having a high probability of yielding cultural resources. Based on these results, 36 percent of the WSA acres are likely to contain cultural resources. Areas in WSAs with a high probability of containing cultural resources have been delineated on maps in the *Lower Gila South MSA* (BLM, 1983). However, due to a lack of summary reports on survey data, specific areas likely to contain a high density of historic and prehistoric sites within the entire RMP/EIS area have not been determined.

In addition to numerous prehistoric and historic properties within the Lower Gila South RMP/EIS area, a variety of traditional cultural/religious sites have been noted during ethnological studies conducted for the Palo Verde Nuclear Generating Station, and Palo Verde to Devers and APS Interconnect rights-of-way. Based on a number of interviews with Maricopa, Pima, Papago, Yavapai, Cocopah, and other Native Americans, some general areas were defined as having traditional cultural religious significance (Woods, 1982; Westec, 1980, 1982; Cultural Systems Research, Inc., 1978). Traditional cultural/religious sites include both artifacts or features which may be impacted on the ground, as well as resources of concern to existing tribes. (See Table 4–7).

Several sites of significance in the RMP/EIS area are worthy of mention. One extensive petroglyph and ceremonial site along the Gila River has been inventoried by several rock art field schools of the American Rock Art Research Association and is eligible for a major public interpretive exhibit-in-place. This site is currently being studied under a cultural Resource Management Plan (CRMP) which will determine how the site will be managed and protected. Also, there are a number of trail and shrine sites in the Bouse area which have been identified as having traditional cultural/religious significance to the Colorado River Indian tribes.

RECREATION

Based on input from public land users and BLM, city, county, state, and other government agencies, recreation was not considered to be an issue in the Lower Gila South RMP/EIS area. Consequently, BLM recreation visitor use inventories necessary for the calculation and quantification of visitor use data for the entire RMP/EIS area were not completed. Recreation visitor use, however, is estimated for the 12 WSAs in the RMP/EIS area. The miles of vehicle ways and roads within the WSAs have also been calculated.

Present recreation use is estimated to be 10,000 visitor days per year in the 12 WSAs, which contain 366.50 miles of vehicle ways and 7.35 miles of roads.

Although much of the RMP/EIS is considered to be relatively remote and sparsely populated, extensive recreation use does occur. Most of the dispersed recreation is in the form of off-road vehicle use, hunting, hiking, camping, sightseeing, or rock collecting. The RMP/EIS area is undesignated relative to off-road vehicles and is therefore considered open for use by this activity. Concentrated recreation activity is predominant in or near the population centers of Buckeye, Gila Bend, and Ajo, Arizona where sites have been developed specifically for recreational pursuits.

ECONOMIC CONDITIONS

To describe the economic conditions relating to the *Proposed Action* and its alternatives, BLM specialists identified an area surrounding the Lower Gila South RMP/EIS area in which residents might be economically impacted. Named the economic study area (ESA), this area includes Maricopa, Pima, and Yuma Counties, Arizona.

Employment

In 1982, 995,000 persons were employed in the ESA, representing 83 percent of Arizona's total employment of 1.20 million. Employment in the ESA is heavily dependent on the economies of Phoenix and Tucson in Maricopa and Pima Counties, respectively. Employment in Maricopa and Pima Counties represents 96 percent of the total employment in the ESA.

An analysis of the ESA's 1982 employment sectors shows that the services sector is the largest employment sector with 20 percent, followed by the retail trade sector with 17 percent, and the government sector with 17 percent. The mining sector employs 5,000 persons and represents less than one percent of the total employment in the ESA (Table 3–7).

Earnings

In 1982, earnings in the ESA amounted to 16.8 billion, representing 84 percent of the state's total employment earnings of $19.9 billion. Earnings in Maricopa and Pima Counties represent 97 percent of the total 1982 earnings in the ESA. The 1982 total earnings from various employment sectors in the ESA are shown in Table 3–8.

Tourism and Travel

Tourism and travel expenditures in the ESA amounted to $2.47 billion in 1980 (Valley National Bank, 1983), representing 68 percent of the total spent statewide. A BLM study showed that wilderness recreationists in Arizona spend an average of $7.64 per 24-hour wilderness visitor day and the average trip length to visit Arizona

TABLE 3-7
1982 EMPLOYMENT BY COUNTY
Bureau of Land Management, Phoenix District, Arizona

	Maricopa		Pima		Yuma*		3-County Totals	
	Persons	%	Persons	%	Persons	%	Persons	%
Proprietors (Farm & Non-Farm)	53,680	7	17,215	8	3,326	8	74,221	7
Farm	5,716	1	590	1	3,856	8	10,162	1
Agriculture Services & Forestry	7,002	1	898	1	5,208	13	13,108	1
Mining	456	1	4,555	2	56	1	5,067	1
Construction	44,304	6	11,855	5	1,810	4	57,969	6
Manufacturing	111,522	15	25,863	12	1,547	4	138,932	14
Transportation & Utilities	32,191	4	8,731	4	1,184	3	42,106	4
Wholesale Trade	40,112	5	5,871	3	1,666	4	47,649	5
Retail Trade	129,083	17	36,853	17	5,777	14	171,713	17
Finance, Insurance, & Real Estate	50,834	7	8,839	4	824	2	60,497	6
Services	149,746	20	46,696	21	5,052	13	201,494	20
Government	114,707	16	47,745	22	10,078	25	172,530	17
TOTALS	739,353	100	215,711	100	40,384	100	995,448	100

* La Paz County was not created until January 1, 1983; therefore these 1982 statistics for Yuma County include the La Paz County totals.
SOURCE: Regional Economic System, Bureau of Economic Analysis

TABLE 3-8
1982 EARNINGS BY INDUSTRY (IN THOUSANDS)
Bureau of Land Management, Phoenix District, Arizona

	Maricopa		Pima		Yuma*		3-County Totals	
	Earnings	%	Earnings	%	Earnings	%	Earnings	%
Farm	143,713	1	4,910	1	60,977	12	209,600	12
Agriculture, Services & Forestry	71,002	1	12,303	1	36,068	7	119,373	1
Mining	10,138	1	157,747	4	1,357	1	169,242	1
Construction	1,053,794	8	225,412	6	41,370	8	1,320,576	8
Manufacturing	2,671,980	20	644,927	18	24,149	5	3,341,056	20
Transportation & Utilities	885,272	7	233,770	7	30,266	6	1,149,308	7
Wholesale Trade	892,911	7	115,379	3	28,437	5	1,036,727	6
Retail Trade	1,512,637	12	395,702	11	61,384	12	1,969,723	12
Finance, Insurance, & Real Estate	984,675	8	150,218	4	12,490	2	1,147,383	7
Services	2,558,201	19	719,686	21	73,505	14	3,351,392	20
Government	1,998,564	16	848,054	24	152,790	29	2,999,408	18
TOTALS	12,782,887	100	3,508,108	100	522,793	100	16,813,788	100

* La Paz County was not created until January 1, 1983; therefore these 1982 statistics for Yuma County include the La Paz County totals.
SOURCE: Regional Economic System, Bureau of Economic Analysis

wilderness was found to be 2.47 days (BLM, 1983a). No data is available on existing recreation use in any of the twelve WSAs analyzed in this RMP/EIS.

Ranch Economics

The total allowable animal unit months (AUMs) in Section 3 Lower Gila South RMP/EIS area allotments amount to 63,974 of which 59,012 or 94 percent are from BLM land. The other six percent are state and privately owned lands—also termed "controlled" lands. The five-year (1976–1981) average licensed use on federal, state, and private lands amounts to 39,950 AUMs of which 37,185 or 93 percent are from public lands. The allowable use AUMs on public lands amount to 25 percent of the Phoenix District total (BLM, 1979).

The economic analysis of ranch enterprises in the RMP/EIS area will be through the use of representative ranch budgets. These budgets are used to determine the economic effect various RMP/EIS alternatives will have on area ranchers and the surrounding ESA (Yuma, Pima, and Maricopa Counties).

Ranch Size Classes. Ranchers in the RMP/EIS area were divided into three size classes based on their authorized grazing preference on fede,Lral, state, and private lands. The following size classes were used: 0–99 head per ranch (42 cows typical), 100–299 head (140 cows typical), and 300 head and over (518 cows typical). Information pertaining to each size class is shown in Tables 3–9 and 3–10 and in Appendix 18.

TABLE 3-9
OPERATOR SIZE CLASSES--LOWER GILA SOUTH RMP/EIS AREA
Bureau of Land Management, Phoenix District, Arizona

Size Class (Number of Cows)	Number of Operators	Number of Allotments	Authorized Grazing Preference		BLM Dependency (Percent)
			Federal & Controlled	Federal	
Small (0 - 99)	4	4	2,268	1,882	83
Medium (100-299)	6	7	11,623	11,164	96
Large (300-over)	7	11	50,083	45,966	92
TOTALS	17	22	63,974	59,012	92

SOURCE: Phoenix District files

TABLE 3-10
TYPICAL RANCH INFORMATION--LOWER GILA SOUTH RMP/EIS AREA
Bureau of Land Management, Phoenix District, Arizona

Production Parameters	Size Class		
	Small (0-99)	Medium (151-300)	Large (301-Over)
Herd Parameters			
Brood Cows (Number)	42	140	518
Bulls (Number)	3	10	34
Replacement Rate	17%	16%	15%
Cow Death Loss	5%	5%	4%
Calf Death Loss	5%	5%	6%
Calving Percentage	79%	76%	70%
Source of Feed (AUMs)			
BLM	465	1,855	6,077
State	50	30	357
Private	67	47	718

SOURCE: Lower Gila South Ranch Budgets

Ranch Budgets. Budget and time limitations prevented BLM from gathering specific information about ranch operating costs and returns in the RMP/EIS area. For this reason, it was necessary to use cost and return information gathered during the Lower Gila North planning effort to develop the Lower Gila South ranch budgets. In addition, personnel from the Lower Gila Resource Area and RMP/EIS area ranchers provided information where necessary.

Table 3-11 and Appendix 19 present the representative ranch budgets that were prepared for the RMP/EIS area ranchers. Gross revenue, cash costs, noncash costs, and various income measures are shown for each of the three size classes.

TABLE 3-11
REPRESENTATIVE RANCH BUDGETS[1]
(Existing Situation)
Bureau of Land Management, Phoenix District, Arizona

Item	Ranch Size		
	Small (42 Cows)	Medium (140 Cows)	Large (518 Cows)
Revenue[2]	$7,698	$24,668	$80,099
Cash Costs[3]	3,955	13,080	45,236
Net Revenue	3,743	11,588	34,863
Less Family Labor	(2,164)	(12,000)	(12,000)
Net Income	1,579	(-412)	22,863

[1] A more detailed version of these budgets is included in Appendix 19.
[2] Revenue is derived from the sale of calves, yearlings, and cull cows.
[3] Cash costs include grazing fees, salt and mineral purchases, veterinary medicine, trucking, marketing, hired labor, machinery fuels and repairs, and interest on operating capital.
SOURCE: USDA Economic Research Service

The ranch budgets focus on net revenue, which is calculated by subtracting the revenue derived from the sale of cattle (gross revenue) from the ranch cash costs. Net revenue estimates the amount of cash available to the rancher to provide for the living expenses of the ranch family, to purchase new machinery and improvements, and to service outstanding long-term debts. Also shown on the budgets is the value of family labor. This represents the dollar value of the ranch family's labor used to operate the ranch for one year. Connected with the value of family labor is the return above net revenue and family labor which estimates the ranch's net income after the cash costs and the value of family labor are subtracted.

Small Ranch. The representative small ranch in the 0–99 head size class was found to market an average of 24 calves and five cows per year. Gross revenue from the sale of these cattle amounts to $7,698 per year. Cash costs amount to $3,955, producing a net revenue of $3,743. The charge for family labor amounts to $2,164 for the typical small ranch. Subtraction of the value of family labor leaves a net income of $1,579 which is left for the rancher to purchase new machinery and range improvements and pay off existing long-term debts.

Medium Ranch. The representative medium ranch in the 100-299 head size class was found to market 79 calves and 15 cows per year. Gross revenue from the sale of these cattle amounts to $24,668. Cash costs amount to $13,080, producing a net revenue of $11,588. Subtraction of a family labor charge of $12,000 leaves a net loss of $412 per year.

Large Ranch. The representative large ranch operation in the 300 or larger head size class sells 262 calves and 57 cows per year. Gross revenue for this operation amounts to $80,099 and cash costs amount to $45,236, producing a yearly net revenue of $34,863. Family labor for this operation amounts to $12,000 yearly. Subtraction of this charge from the net revenue leaves a net income of $22,863.

Ranch Finance. The rancher's ability to borrow money is determined by many factors, including assets, current liabilities, and the ranch's profitability. BLM grazing leases are commonly bought and sold. These leases are valued based on the number of animal units that can be stocked on that grazing lease. The current market value of leases in the RMP/EIS area is estimated to be $125 per AUM or $1,500 per cow yearlong. Although BLM does not recognize the right to treat grazing permits as real property, these permits are bought and sold and used as collateral for loans. At a value of $1,500 per animal unit, the value of the typical small ranch in the RMP/EIS area would amount to $72,000. The typical medium-size ranch would be valued at $241,500 and the typical large ranch would be valued at $894,000.

Regional Economics

Total gross receipts from the sale of livestock for the 17 livestock operators on the 22 perennial-ephemeral allotments in the RMP/EIS area amount to $739,493 annually. Ranches in the RMP/EIS area produced less than one percent of the total livestock products produced in the three-county ESA, which amounted to $428 million in 1979 (Arizona Crop and Livestock Reporting Service, 1980). Annual operating expenditures of the RMP/EIS area ranches amount to $410,952, leaving a total yearly net revenue of $328,541 (Appendix 20).

Ranch labor requirements for the 17 perennial-ephemeral ranches in the RMP/EIS area amount to 13.8 work years (Appendix 21), which represents less than one percent of the 10,162 persons employed on farms in the three-county ESA.

SOCIAL ELEMENTS

This section discusses two types of social elements—population and public attitudes—that could be affected by the proposed wilderness alternatives. These social elements are described on two levels of generalization, local and regional. The local level consists of the residents of the Lower Gila South (LGS) RMP/EIS area. The LGS RMP/EIS area is in portions of six census county divisions (CCDs) within Maricopa, Yuma, La Paz, Pima, and Pinal Counties. Census county divisions are geographically based population units on which the U.S. Census Bureau maintains detailed statistics.

A comparison of the CCD map with the LGS RMP/EIS area reveals that only a portion of each of the six CCDs is contained in the RMP/EIS area. An estimate of the total population in this area was made by approximating the number of people who live in the portion of the CCDs included in this area. The region considered here for the Lower Gila South RMP/EIS area comprises the total five county populations (Maricopa, Yuma, La Paz, Pima, and Pinal). This region includes the two standard metropolitan statistical areas (SMSAs) of Phoenix and Tucson. Table 3-12 shows population data for the local and regional levels. Population data displayed in this table indicate that the region in 1980 had more than two million residents while the local population had 18,710 residents.

TABLE 3-12
LOCAL AND REGIONAL POPULATION 1980
Bureau of Land Management, Phoenix District, Arizona

County Census Division	1980 Population	Percent in the LGS Planning Area	Total LGS Population
Buckeye	11,223	70	7,856
Gila Bend	4,902	60	2,940
Wellton	6,508	15	976
Parker	11,467	05	573
Ajo	5,978	90	5,380
Maricopa-Stanfield	3,940	25	985
Totals	44,018		18,710

County	1980 Population
Maricopa	1,508,030
Yuma	78,067
La Paz*	12,487
Pima	531,263
Pinal	90,918
Total Regional	2,220,765

* Created January 1, 1983 from northern part of Yuma County.
SOURCE: Lower Gila South Management Situation Analysis, Phoenix District files

Public Attitudes and Expectation

This description of public attitudes and expectations was obtained from several sources and is documented in the Lower Gila South Management Situation Analysis (MSA). Information comes from published BLM and other federal agency documents, material produced by state and county agencies, and informal interviews with residents in the CCDs.

In general the residents of the local area have a high regard for ranching, are concerned for its future, and do not feel it represents any kind of problem for public land use. Residents of the local area tend to favor efforts that would reduce the amount of land in federal administrative ownership. Generally, they feel that private ownership would be more beneficial. They also feel that development in the area, particularly in the Buckeye and Gila Bend

CCDs, is going to place increasingly severe pressure on the federal agencies to release land for expansion.

Table 3-13 identifies the location of the 12 WSAs by CCD. Contacts were made with residents of each of the CCDs with the purpose of determining how "people in the area" felt about wilderness and the specific WSAs. Most of the comments from residents were general questions about the reasons for wilderness and revealed that even though there was no evidence of support, no strong opposition existed either, except in a general sense of resenting what was perceived as "government restrictions."

TABLE 3-13
WSA LOCATIONS IN LOWER GILA SOUTH CCD
Bureau of Land Management, Phoenix District, Arizona

Census County Division	Wilderness Study Area
Wellton	2-125 (New Water Mountains)
	2-126A (Little Horn Mountains West)
	2-127 (Little Horn Mountains)
Wellton-Buckeye	2-128 (Eagletail Mountains)
	2-129 (East Clanton Hills)
Buckeye	2-136 (Face Mountain)
	2-138 (Signal Mountain)
	2-142/144 (Woolsey Peak)
Gila Bend	2-157 (North Maricopa Mountains)
	2-163 (South Maricopa Mountains)
	2-164 (Butterfield Stage Memorial)
Gila Bend-Maricopa/Stanfield	2-172 (Table Top Mountains)

SOURCE: Lower Gila South Management Situation Analysis, Phoenix District

Interest in WSAs was stronger on the regional level than locally. Some expression of general support came from contacts in the Phoenix metropolitan area who were concerned about the increasing demand for land as a result of population growth.

Native American people in the area indicated that wilderness is not a Native American concept, but any effort to preserve land in a natural state was important.

The public involvement phases of this plan also indicated the diverse attitudes toward WSAs at the regional and local levels. Seven hundred and forty-nine letters and contacts were received from groups and individuals. Many of the letters were of a general nature indicating the writer's preference for or opposition to setting public land aside as wilderness.

The data from the BLM registered voter questionnaire (BLM, 1983a) indicated that respondents in the LGS RMP/EIS area are less supportive of wilderness expansion than is the case statewide. This information is generally consistent with the observations drawn from the informal, unstructured interviews of residents in the RMP/EIS area.

Chapter 4

ENVIRONMENTAL CONSEQUENCES

CHAPTER 4

ENVIRONMENTAL CONSEQUENCES

INTRODUCTION

Chapter 4 discusses the environmental consequences of the five alternatives described in Chapter 2. The Lower Gila South Resource Management Plan/Environmental Impact Statement (RMP/EIS) interdisciplinary team determined that none of the alternatives would significantly impact geology, air quality, topography, or climate. The team also determined that impacts to protected and sensitive plant species are difficult to define because of a lack of site-specific project information. Therefore impacts on protected plants will not be analyzed in this chapter. These plant species are protected by laws and regulations and will be examined in future site-specific environmental assessments.

Management actions will be analyzed in terms of their short- and long-term impacts to the environment. The analysis is designed to provide an overview of the direct or cumulative impacts of the alternatives on each resource and on the RMP/EIS area as a whole. The analysis addresses the impacts associated with particular management actions to resolve the following four issues: rangeland management, wilderness, land tenure, and utility corridors. Site-specific environmental assessments will be performed prior to approval of all projects.

GENERAL ASSUMPTIONS FOR ANALYSIS

In order to analyze the impacts from the management actions of each alternative it was necessary to make general and specific assumptions for the issues.

1. BLM will have the funding and work force to implement and supervise the selected alternative.
2. Impacts are direct unless otherwise noted.
3. Impacts will be monitored and management adjusted as necessary, based on new data from evaluation and monitoring procedures.
4. Short-term impacts occur within five years and long-term impacts occur from five to 25 years after implementation of the plan.
5. All impacts are long-term unless otherwise stated.
6. Environmental assessments (including categorical exclusions) will be conducted prior to implementing any activity plans.

SPECIFIC ASSUMPTIONS

Rangeland Management

1. Adjustments in livestock numbers would be based on data gathered from the rangeland monitoring program in coordination and consultation with the livestock operator and other affected groups.
2. Projected increases in available livestock forage are based on improved livestock distribution which would result from new rangeland developments.
3. Prior to the construction of specific range developments a benefit/cost analysis would be completed to determine the usefulness and feasibility of the developments.
4. Allotment Management Plans (AMPs) may be developed if monitoring evaluations determine the need for activity plans.

Wilderness

1. Wilderness impact conclusions are based on reasonable probabilities and do not necessarily represent a worst case situation.
2. WSAs will be managed under BLM's Interim Management Policy until either designated wilderness or released by Congress.
3. Lands recommended as preliminarily suitable for wilderness preservation will undergo a U.S. Geological Survey/Bureau of Mines (USGS/BM) mineral survey, the results of which will be received before a final recommendation concerning wilderness suitability is forwarded to the President.
4. Lands recommended as nonsuitable for wilderness preservation will be released from wilderness review by Congress.
5. If an area is designated wilderness, the Wilderness Management Policy will be used as a guide for those activities that are permissible. A wilderness management plan will be developed within two years after a WSA is designated wilderness.
6. Any area designated wilderness will be withdrawn from all forms of appropriation under the mining laws as of the date of designation, but would still be subject to valid existing rights.

7. All state or private land inholdings or nonfederal minerals within an area designated wilderness may be acquired by BLM through purchase or exchange if the state or private land owners agree to the acquisition. BLM must allow access to such inholdings or minerals, but can regulate routes and modes of access to reduce adverse environmental impacts.
8. BLM will manage designated wilderness areas to meet visual resource management Class I objectives, while considering valid existing rights.
9. BLM will not recommend reclassification of air quality standards for wilderness areas from the existing Class II to the more restrictive Class I. Air quality classifications are the responsibility of the state.
10. Livestock grazing in wilderness areas will be maintained at present levels unless adjusted for reasons prescribed through range management.
11. Range, wildlife, and other facilities installed or maintained by customary methods may be allowed when site-specific environmental assessment shows wilderness resources will not be impaired.

Wildlife

It is assumed that BLM's land disposal proposals will not include land needed for:

1. management of habitat for federally listed threatened and endangered species or state-listed threatened species, including Gila River riparian habitat which supports: Yuma clapper rail, osprey, great and snowy egret, and black-crowned night heron;
2. sonoran pronghorn habitat which lies west of State Route 85; and
3. crucial desert bighorn sheep habitat, crucial desert tortoise habitat, land needed for space requirements of bighorn sheep or land which if developed would block important sheep migration routes.

Soils and Water

1. The ecological condition and trend of the rangeland is an indicator of condition and trend of the associated watershed.
2. Demand for more water will continue to grow with the economy of the region, which will increase the need to protect the quality and quantity of the resource for all uses. BLM would stabilize the 1,500 acres of desert pavement soils currently in a severe erosion class as funding becomes available.
3. Floodplain management and protection of wetlands will continue in accordance with Executive Orders 11988 and 11990 and Bureau Manuals 6740 and 7260.
4. Changes in water quality of runoff are proportional to the changes in erosion and runoff (water quality refers principally to sediment production).
5. Water rights necessary for protecting the Bureau's uses and needs of water for public land management purposes are secure under state law and administrative procedures.

Minerals and Energy

None of the proposals for rangeland management and utility corridor issues would impact the minerals program in the RMP/EIS area. Therefore, only the impacts from the wilderness and land tenure issues will be further discussed in this analysis.

Ranch Economics

The ranch economics section assumes that ranchers will stock cattle up to their authorized grazing preference and all figures given in the analysis are based on authorized grazing preference numbers.

PROPOSED ACTION

Impacts on Rangeland Management

The number of livestock or season of use would not be altered on any of the Maintain or Custodial allotments (60,524 AUMs), thus causing no significant short-term impacts to livestock operations in the Lower Gila South RMP/EIS area. Rangeland specialists would evaluate rangeland condition and trend studies at the end of up to a five-year monitoring phase. The results of rangeland monitoring would help determine if grazing adjustments would be needed to meet key species' physiological requirements or if downward trends have reversed on allotments showing downward trends in rangeland condition. All adjustments would be approved only when compatible with other resources.

The construction of new rangeland developments (Table 2-1) would improve livestock distribution on 14 allotments involving 1,161,157 public acres. These developments would reduce livestock stress, eliminating the need to trail long distances to and from water sources. Improved livestock distribution would also increase the availability of livestock forage which may result in an increase of approximately 1,376 animal unit months (AUMs) in the long term (see Appendix 11) and provide for the improvement of areas now displaying downward trends but that have potential to respond to changes in grazing management.

TABLE 4-1
PERCENTAGES OF ALLOTMENTS WITHIN WSAS BY ALTERNATIVE
Bureau of Land Management, Phoenix District, Arizona

WSAs Allotments	Allotment Designation*	Proposed Action	No Action/ Resource Production	Resource Protection	Environmental Protection
New Water Mountains					
Crowder-Weisser	P-E	10	0	10	17
Little Horn Mountains West					
Crowder-Weisser	P-E	0	0	0	3
Eagle Tail	P-E	0	0	0	2
Ranegras Plain	P-E	0	0	0	2
Little Horn Mountains					
Crowder-Weisser	P-E	0	0	0	3
Eagle Tail	P-E	0	0	25	30
Ranegras Plain	P-E	0	0	3	30
Eagletail Mountains					
Eagle Tail	P-E	37	0	37	56
Ranegras Plain	P-E	1	0	1	5
Clem	P-E	0	0	0	2
East Clanton Hills					
Eagle Tail	P-E	0	0	0	6
Palomas	E	0	0	0	23
Face Mountain					
Amavisca	E	0	0	34	34
Mariani	E	0	0	13	14
Gable-Ming	P-E	0	0	13	14
Signal Mountain					
Gable-Ming	P-E	0	0	0	17
Woolsey Peak					
Gable-Ming	P-E	11	0	11	11
Gila River Community	E	52	0	52	57
Hazen-Sheppard	E	0	0	0	77
Dendora Valley	E	19	0	19	19
Jagow Kreager	E	34	0	34	34
North Maricopa Mountains					
Conley	P-E	0	0	7	7
Hazen	P-E	0	0	30	41
Beloat	P-E	0	0	17	21
Bighorn	P-E	0	0	11	14
South Maricopa Mountains					
Conley	P-E	0	0	0	22
Bighorn	P-E	0	0	0	26
Lower Vekol	P-E	0	0	0	43
Butterfield Stage Memorial					
Conley	P-E	0	0	0	3
Bighorn	P-E	0	0	0	4
Table Top Mountains					
Conley	P-E	50	0	50	50
Bighorn	P-E	19	0	19	23
Lower Vekol	P-E	23	0	23	41

* E = Ephemeral; P-E = Perennial-Ephemeral
SOURCE: Phoenix District files.

This proposal identifies four areas (190,391 acres) as suitable for wilderness designation. Portions of seven perennial-ephemeral allotments and four ephemeral allotments overlap into the wilderness study area (WSA) boundaries (Table 4–1). Any rangeland developments proposed within wilderness boundaries must meet the criteria in BLM's *Wilderness Management Policy*. Construction of new rangeland developments is permissible when it is determined to be necessary for the purpose of effective management of the rangeland. To reduce the visual impacts, new rangeland developments in WSAs may have to be built and maintained with natural materials. Construction and maintenance cost would thus increase, depending on the type of development and its location.

Conclusion. No adverse impacts to livestock operators would occur from implementing the *Proposed Action*. No livestock adjustments are proposed initially until rangeland monitoring studies are completed. Construction of new rangeland developments would allow for an increase of 1,376 AUMs in the long term. Wilderness designation would not significantly impact those portions of seven perennial-ephemeral and four ephemeral allotments that overlap the four WSAs.

Impacts on Vegetation

Changes in rangeland condition vary over time, depending on trend, site potential, climatic conditions, natural seed sources, and the effectiveness of rangeland developments.

Currently only 10 percent or 154,500 acres of the perennial-ephemeral allotments are in poor condition (Appendix 15). These are areas that have been historically grazed and represent areas surrounding existing water sources.

Thirteen perennial-ephemeral allotments displaying upward apparent trends in rangeland condition (Appendix 15) would continue to improve under present grazing management until their potential is reached. Rates of improvement would depend on trend, site potential, climatic conditions, natural seed sources, and the effectiveness of rangeland developments. New rangeland developments on 14 perennial-ephemeral allotments (Table 2–1) would improve livestock distribution and reduce grazing pressure on areas currently exhibiting poor or downward apparent trends (five percent or 69,600 acres) in rangeland condition in the long term.

Rangeland condition on the 18 ephemeral allotments (Custodial) would not change under this alternative in the short or long term. These allotments are grazed only during years when ephemeral forage has the potential to become available.

Conclusion. No significant impacts to vegetation would result from implementing the *Proposed Action*. Allotments displaying poor rangeland conditions and downward apparent trends would improve through the construction of new rangeland developments.

Impacts on Wilderness Values

Wilderness designation of 24,200 acres of the New Water Mountains WSA, 70,791 acres of the Eagletail Mountains WSA, 61,000 acres of the Woolsey Peak WSA, and 34,400 acres of the Table Top Mountains WSA would ensure the protection and preservation of their wilderness and associated resource values.

Wilderness designation of these four areas would have short- and especially long-term beneficial impacts on their wilderness and associated resource values by providing protection from most surface-disturbing activities. Withdrawal from mineral exploration and development, closure to motorized vehicles, and prohibition of new rights-of-way, disposal or other land actions would preserve their natural character. Opportunities for outstanding solitude and primitive recreation experiences in a natural setting would be maintained and protected for nonmotorized recreationists. Hiking, backpacking, camping, walk-in hunting, sightseeing, and nature study would be the primary activities benefited by wilderness designation.

Protection of wilderness values in these four areas would also benefit supplemental resource values present. The quality of wildlife habitat, cultural resources, soils, vegetation, protected plant species, and scenic and visual resources would be maintained. Long-term benefits would be provided by preserving lands to permit natural ecological processes to continue with little or no human interference.

Crucial desert bighorn sheep habitat would be maintained in all four areas, while crucial desert tortoise habitat would be preserved in the New Water Mountains and Table Top Mountains. Desert pavement soils, vegetation, and protected plants found in all four areas would be protected by the restriction or elimination of mining and motorized vehicle use. Two significant Sonoran Desert botanical areas, located in the Table Top and Eagletail Mountains WSAs, would be enclosed by wilderness, thus ensuring their continued long-term value for nature study and scientific and educational use. Scenic and visual values would be preserved by a visual resource management (VRM) Class I designation. Class I objectives and management requirements allow little to no change in the natural landscape.

Designation of the four areas would add to the diversity of the National Wilderness Preservation System (NWPS) in Arizona. Wilderness would provide increased solitude and primitive recreation opportunities for residents of five standard metropolitan statistical areas (SMSAs). The

geographic distribution of wilderness within Arizona would also be enhanced by the placement of four areas in southwest Arizona. The Organ Pipe Wilderness (National Park Service) is the only wilderness presently in this area.

Designation of the four areas as wilderness would not add new ecosystems to the NWPS but would contribute additional areas and acreage to two American Desert province ecosystem types: paloverde-cactus shrub and creosotebush-bursage.

All four areas analyzed for wilderness designation are considered manageable as wilderness over the long term. Mining activities could affect wilderness values, but mining would be restricted to valid claims with valid existing rights at the time of wilderness designation. ORV use might occur in some portions of the Eagletail Mountains and Table Top Mountains WSAs due to the absence of terrain or plant features along some boundaries to preclude such activity. The impacts of such uses are considered insignificant to wilderness values over the long term.

Parcels of nonfederal surface and mineral inholdings lie within the suitable boundary of the Eagletail Mountains. If these lands were developed in the future, it would have adverse effects on surrounding wilderness values. Another potential impact exists because access must be provided. Acquisition through land exchange of 2,643 acres of state surface and mineral lands and 561 acres of state mineral rights within the Eagletail Mountains WSA will facilitate wilderness management of the area and enhance botanical, wildlife, wilderness, and related multiple resource values. Acquisition of the above acreage would allow such parcels to be incorporated into the Eagletail Mountains wilderness proposal.

Nondesignation and a return to multiple use management of eight entire WSAs (Little Horn Mountains West, Little Horn Mountains, East Clanton Hills, Face Mountain, Signal Mountain, North Maricopa Mountains, South Maricopa Mountains, and the Butterfield Stage Memorial) and portions of four WSAs (New Water Mountains, Eagletail Mountains, Woolsey Peak, and Table Top Mountains) could result in the loss or damage of their wilderness values over the long term. Land uses detrimental to wilderness and supplemental values could be permitted, including mineral and energy development, rights-of-way and other land actions, and motorized vehicle use.

Mineral exploration and development could occur in all these areas as they would remain open to mineral entry. Existing and future mining claims and leases would not be subject to wilderness constraints. Surface disturbances caused by road construction, exploration, and assessment work are possible. If development occurred, there could be adverse long-term impacts to wilderness resources.

Motorized vehicle use, new rights-of-way, and other land actions could diminish the natural character of nondesignated areas. New access roads could allow vehicles into previously inaccessible areas. Over the long term utility lines could be constructed across portions of the New Water Mountains, Little Horn Mountains, Eagletail Mountains, Face Mountains, Signal Mountains, Butterfield Stage Memorial, and South Maricopa Mountains. Outstanding opportunities for solitude and primitive recreation experiences could be reduced or permanently lost in these areas.

The areas not designated wilderness will revert to VRM Class II, III, or IV visual management protection objectives. These VRM classes pose fewer restrictions on layout, design, and construction of proposed developments than the Class I objectives required by wilderness. Contrasts in the landscape resulting from developments will be more noticeable since projects affecting the scenery might be allowed. Small scale projects for livestock and wildlife could slightly impair the wilderness values because they would be installed without wilderness constraints on placement and design.

The ability of nondesignated areas to contribute to the present diversity of the NWPS would be lost. Additional opportunities for solitude and primitive recreation for residents of five SMSAs would be forgone by nondesignation of these areas as well.

Conclusion. The eight entire WSAs and portions of four others not analyzed as suitable for wilderness designation (431,540 acres) have a moderate potential for damage or loss of natural values if not designated wilderness, primarily a result of mineral development, motorized vehicle use, and rights-of-way development. These areas' natural character, opportunities for solitude and primitive recreation, and special features could be damaged or lost over the long term.

For the portions of four WSAs (190,391 acres) analyzed suitable for wilderness designation (New Water Mountains, Eagletail Mountains, Woolsey Peak, and Table Top Mountains) there would be short- and long-term beneficial impacts to the wilderness resource by preserving the natural values, outstanding opportunities for solitude and primitive recreation, supplemental values, and by enhancing the geographic diversity of the NWPS in Arizona.

Impacts on Land Uses

Conclusion. The *Proposed Action* would not conflict with any current land uses. However, designation of portions of four WSAs (New Water Mountains, Eagletail Mountains, Woolsey Peak, and Table Top Mountains—190,391 acres) would preclude some future land uses from these areas (rights-of-way for roads, powerlines, pipelines, and communication sites).

The *Proposed Action* would benefit the lands program by designating utility corridors and by allowing the BLM and State of Arizona to pursue the land tenure adjustments needed to develop a more manageable ownership pattern.

Impacts on Wildlife

Rangeland Management Issue

Mule Deer. The *Proposed Action* would maintain existing levels of yearlong grazing. The major conflict under existing circumstances is between cattle and mule deer in desert washes which interlace creosotebush-bursage habitat. Cattle congregate in washes for shade and consume most of the quality forage growing along the banks. Deer move to areas of low livestock use, usually in the foothills of major mountain groups. Ongoing conflict between cattle and mule deer for forage represents a long-term negative impact, especially on the following allotments where use on browse is high: Conley, Beloat, Cameron, Lower Vekol, and Bighorn (Fredlake and Lucas, 1982). Under the proposed action long-term monitoring will be instituted in areas of mule deer and livestock competition. Use adjustment may be necessary to reduce or eliminate forage conflict, hence long-term beneficial impacts may occur.

Ten wells and seven reservoirs are proposed for development under the *Proposed Action.* These would provide additional watering points for mule deer and hence provide a marginal benefit. In order for wells to be beneficial, corral fences around troughs must allow deer (especially fawns) easy access, and water must be available during the hot summer months.

Reservoirs in the RMP/EIS area, with few exceptions, dry up in summer months and are not significantly valuable for big game. Cattle congregate in large numbers around waters, resulting in overuse of quality browse (false mesquite, jojoba, ratany, janusia) and trace perennial grasses (bush muhly, slim tridens, three awn). This area of overuse may extend up to a mile from the water source and represents a negative impact on the forage base of big game.

Desert Bighorn Sheep. Forage conflicts occur between cattle and desert bighorn sheep when large numbers of steers are released under ephemeral permits in winter seasons. Steers, unfamiliar with terrain, can drift into bighorn sheep habitat and locate around important bighorn waterholes, thereby competing with sheep for forage and water or transmitting disease.

Bighorn in the RMP/EIS area have been exposed to viral diseases such as blue tongue, epizootic hemorrhagic disease, contagious ecthema, and para-influenza III (DeVoss, 1984). These diseases are transmitted by biting midge flies or direct contact from cattle to bighorn; the more cattle grazing on an allotment with bighorn (even on an ephemeral basis), the greater the likelihood that bighorns will be exposed to disease (Post, 1976). Viral diseases lie dormant in the blood stream and become active when sheep are submitted to undue environmental stress (drought, harassment, competition with cattle), and result in severe mortality in a short period of time. Potential for an outbreak of disease due to livestock use would continue to have a long-term adverse impact to sheep populations.

The following allotments have the potential for bighorn-cattle disease transmission:

Crowder-Weisser	Eagle Tail	Ranegras Plain
Clem	Gable-Ming	Jagow Kreager
Layton	Gila River	Dendora Valley
Artex	Community	Gila Bend
Mumme	Hazen Sheppard	Indians
Conley	Powers Butte	Hazen
Childs	Beloat	Cameron
Vekol	Bighorn	Lower Vekol
Kirian	South Vekol	Table Top

Livestock wells, not used by bighorn sheep to any extent, would not be beneficial. If placed within one to two miles of bighorn habitat, livestock wells could increase bighorn/cattle contact and the likelihood of disease transmission to bighorn. This increased contact would be a negative impact.

Proposed fencing could become a significant barrier to migration if constructed perpendicular to routes commonly traveled by bighorn sheep between mountain ranges (Helvie, 1971). Bighorn sheep tend to panic when crossing through barbed wire and can entangle their curved horns, severely lacerating themselves. Unlike deer, bighorns rarely jump fences but try instead to crawl under the bottom strand or step between intermediate strands. There are no particularly good fence designs that deter cattle and allow safe crossing by bighorns.

Overall, long-term impacts of range improvements to desert bighorn sheep would be adverse.

Sonoran Pronghorn. Pronghorn and cattle compete for habitat and perennial forage on the Cameron allotment. At current grazing levels pronghorn habitat value will continue to decline. Under the *Proposed Action* long-term monitoring studies will be instituted on the Cameron allotment. Use adjustment may be necessary to reduce or eliminate pronghorn and cattle forage conflict, hence, long-term positive impact may occur.

Sonoran pronghorn will not be affected by rangeland developments recommended in the *Proposed Action.* Pronghorn have not been observed drinking free water and appear to satisfy their requirements in the moisture content of their forage (Arizona Game and Fish Department, 1981). If placed in pronghorn habitat in an area of low livestock use, wells and reservoirs would draw in more cattle and significant forage competition could result.

Javelina. Javelina do not compete significantly with cattle for forage and hence would not be affected by the *Proposed Action.* Two wells proposed for Table Top and Bighorn allotments could slightly benefit javelina if constructed so that this species would have unimpeded access to water, and if the water were available yearlong. This would entail building troughs less than one foot high so young javelina as well as adults could drink.

Desert Tortoise. Desert tortoise primarily inhabit major mountain ranges, foothills, and bajadas. When tortoise awake from hibernation, they rely on winter-spring annuals to provide energy for reproduction, especially when perennial forage is scarce. Drought and heavy livestock use lessen available annuals and threaten tortoise reproduction (Berry, 1978).

When annuals are not present in the spring, perennial grasses and forbs become an extremely important source of forage, and competition from cattle becomes even more critical. Competition between cattle and tortoise is most evident around the fringes of mountains and less evident on steep slopes. No short-term improvement of tortoise habitat is expected. Monitoring studies will be instituted in areas of tortoise and livestock competition. Use adjustment may be necessary to reduce or eliminate forage conflict, hence long-term beneficial impacts may occur.

The following allotments have a high potential for cattle/tortoise forage conflicts:

Beloat	Hazen	Conley
Bighorn	Kirian	Vekol
Gable-Ming	Eagle Tail	Crowder-Weisser
Palomas		

Wells and reservoirs, if constructed in desert tortoise habitat, would result in an increase in forage use by cattle and a decrease in forage available for tortoise. This could cause a long-term decline in tortoise habitat in localized areas and would be a significant long-term adverse impact.

Riparian Habitat. Cattle use riparian habitat along the Gila River extensively, browsing on mesquite, willow, and cottonwood trees. Cottonwood reproduction is primarily limited by fluctuating water tables, vegetation clearing, floods, fire, and salt accumulation in the soil, but cattle grazing is also a factor. Cattle do not appear to inhibit establishment of willows and aid in mesquite reproduction, consuming seed pods and depositing scarified seeds in dung. Mesquite seeds, supplied with a rich supply of fertilizer, will sprout and grow, ultimately providing valuable wildlife cover.

Cottonwood trees would probably become slightly more numerous along the Gila River channel if stocking rates were reduced as a result of monitoring studies (Duff, 1978; Platts, 1979; Rickard and Cushings, 1982). Increase in cottonwood trees would provide added foraging areas and nesting areas for nongame birds, nesting habitat for sharp shinned hawks, Cooper's hawks, and other raptors and roosting habitat for egrets and herons (Anderson, Engel-Wilson, Wells, Ohmart, 1977). If rangeland monitoring studies indicate that a reduction in livestock use is necessary, reduced livestock use would result in a slightly beneficial impact to wildlife.

Game Birds and Small Game. The construction of seven livestock wells would result in some benefit to dove and quail by providing additional watering points. Open top storage tanks, and troughs (unless equipped with escape ramps) can cause small game drownings, however, and no evidence indicates that waters themselves result in significant ulation increases in quail or doves.

Reservoirs could provide long-term benefits to quail and doves. Mesquite trees establish themselves around the shore regardless of grazing intensity and grow more rapidly than those in the surrounding desert. Excellent dove nesting habitat and quail escape cover is the net result. Cottontail rabbits also benefit from the thorny escape cover. Overall, long-term impacts to small game would be slightly positive.

Shorebirds and Waterfowl. Reservoirs provide some benefit for shorebirds and waterfowl by serving as resting points during seasonal migration; however, few reservoirs hold water yearlong and so do not provide waterfowl nesting habitat. Overall, long-term impacts to shorebirds and waterfowl would be slightly positive.

Nongame in Vekol Valley Grassland. Due to long-term concentrations of livestock in Vekol Valley grassland ground cover has been reduced and soil erosion has increased. This is a negative long-term impact to the habitat of amphibian Luna in the area. If monitoring studies indicate a need for adjusting livestock use in the area then significant positive impacts to amphibian habitat will result.

Conclusion. Table 4–2 summarizes the long-term impacts to wildlife from rangeland management under the five alternatives. Rangeland monitoring will be instituted in allotments where wildlife and livestock conflicts occur and, ultimately, use adjustments will be made to reduce or eliminate resource conflicts.

Wilderness Issue

State-Listed Threatened Species (Bighorn Sheep and Desert Tortoise). Table 4–3 shows acres of crucial bighorn habitat and crucial tortoise habitat in each WSA and by alternative.

Desert bighorn sheep would benefit by designation of four WSAs in the Lower Gila South RMP/EIS area. Bighorn sheep require large tracts of habitat relatively undisturbed by human activity. Mining is particularly detrimental since it involves blading roads into mountainous areas previously accessible only on foot or horseback. Once constructed, roads become permanent routes for recreationists, miners, or poachers, and desert bighorn sheep habitat quality is severely degraded.

Limiting mining and other human activities would enhance the desert tortoise by preventing piecemeal habitat destruction. Wilderness designation would also afford some protection from overcollection or vandalism.

Other Wildlife Species. The Arizona Game and Fish Department maintains numerous rainwater catchments within the WSAs' boundaries. These facilities provide water for mule deer, quail, dove, nongame birds, rabbit,

TABLE 4-2
LONG-TERM IMPACTS TO WILDLIFE FROM THE RANGELAND ISSUE BY ALTERNATIVE
Bureau of Land Management, Phoenix District, Arizona

Rangeland Issue Long-Term Impacts	Proposed Action			No Action			Resource Production			Resource Protection			Environmental Protection		
	LM	RD	RM*	LM	RD	RM*	LM	RD	RM*	LM	RD	RM*	LM	RD	RM*
Sonoran Pronghorn	2	-1	2	-3	0	-3	2	-1	2	2	0	2	3	0	2
Desert Bighorn	1	-2	1	-3	0	-3	1	-2	1	1	0	1	2	1	2
Mule Deer	2	0	2	-2	0	-2	2	0	2	2	0	2	3	-1	0
Desert Tortoise	2	-2	2	-2	0	-2	2	-2	2	2	0	2	2	0	2
Riparian Habitat	1	0	1	0	0	0	1	0	1	1	0	1	1	0	0
Waterfowl	0	1	0	0	0	0	0	1	0	0	0	0	0	-1	0
Vekol Valley Grassland	2	0	2	-2	0	-2	2	0	2	2	0	2	2	0	2
Small Game	0	1	0	0	0	0	0	1	0	0	0	0	0	-1	0
Javelina	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0

*LM = Level of Grazing Management
RD = Rangeland Developments
RM = Rangeland Monitoring
-3 = Highly significant adverse impact
-2 = Significant adverse impact
-1 = Slightly adverse impact
3 = Highly significant beneficial impacts
2 = Significant beneficial impact
1 = Slightly beneficial impact
0 = Neutral, no impact
SOURCE: Phoenix District files
Note: BLM will initiate monitoring studies in areas where livestock and wildlife conflicts exist.

and predators. Wilderness designation would still allow for periodic maintenance of these existing catchments and hence result in no impact to wildlife. Construction of new catchments within wilderness areas would be analyzed on a case-by-case basis.

TABLE 4-3
ACRES OF HABITAT PROTECTED UNDER THE PROPOSED ACTION
Bureau of Land Management, Phoenix District, Arizona

WSAs	Crucial Desert Bighorn Sheep Habitat*	Crucial Desert Tortoise Habitat**
New Water Mountains	24,120	5,820
Eagletail Mountains	41,950	0
Woolsey Peak	58,240	0
Table Top Mountains	22,780	4,700
TOTAL	147,090	10,520

* Crucial desert bighorn sheep habitat: habitat necessary to maintain current bighorn populations. Population density varies.
** Crucial desert tortoise habitat: habitat with tortoise population densities of 50 tortoise per square mile or greater. All WSAs contain tortoise populations.
SOURCE: Phoenix District files

Conclusion. Designation of four WSAs would benefit desert bighorn sheep and desert tortoise. A total of 147,090 acres of crucial bighorn sheep habitat and 10,520 acres of crucial tortoise habitat would be protected under the *Proposed Action.* Table 4-4 summarizes the relative impacts of each alternative to desert bighorn and desert tortoise. Because vehicle access into wilderness areas would be restricted, desert wildlife would suffer less human disturbance and receive a slight positive benefit.

TABLE 4-4
IMPACTS TO SPECIES UNDER EACH ALTERNATIVE
Bureau of Land Management, Phoenix District, Arizona

Species	Proposed Action	No Action	Resource Production	Resource Protection	Environmental Protection
Desert Bighorn Sheep	1	-2	-2	2	3
Desert Tortoise	1	-2	-2	2	3

3 = highly beneficial impacts
2 = significant beneficial impacts
1 = slightly beneficial impacts
-3 = highly adverse impacts
-2 = significant adverse impacts
-1 = slightly adverse impacts
SOURCE: Phoenix District files

Land Tenure Issue

Disposal. In order to analyze long-term impacts of disposal of public lands in the Lower Gila South RMP/EIS area it is assumed that tracts identified for disposal eventually would be sold or exchanged and that these lands would ultimately be subject to development for agricultural, residential, or industrial purposes.

Land disposal would result in three types of development: agricultural, industrial, and high- or low-density residential. High-density residential, agricultural, or industrial developments permanently destroy the habitat. Low-density residential development (i.e., houses constructed one-eighth to one-fourth mile apart with native vegetation left somewhat undisturbed) results in the emigration of large game animals from the area. Because of human disturbance, smaller species such as quail, cottontail, grey fox, nongame birds, and desert tortoise experience a drop in population. At least one species, coyote, does not seem to be affected by low-density housing.

Some benefits to wildlife might be gained through the land disposal program by trading isolated parcels of BLM land for valuable wildlife habitat in the state. This impact cannot be fully assessed at this time.

Two sensitive species will be unavoidably affected by disposal action and subsequent development Gila monster and kit fox. The Gila monster is found in all habitats in the Lower Gila South RMP/EIS area. Development of any parcel would result in some loss of habitat for this species. Kit foxes are present in low numbers in the creosote bush-bursage habitat, and land developments would result in unavoidable loss of habitat for this species. Loss of kit fox and Gila monster habitat could be minimized by limiting land disposal to BLM land surrounded by developed land or land on the fringes of development.

Some unavoidable loss of habitat would occur for kit fox and Gila monster under the *Proposed Action*. Habitat loss for other species would be minimal.

Acquisition. Under the *Proposed Action* 8,920 acres of riparian habitat in the Fred J. Weiler Green Belt would be acquired from the State of Arizona or private individuals. These lands would then be protected from clearing for agricultural uses and continue to provide habitat for dove, quail, nongame birds, and endangered or threatened species such as Yuma clapper rail, osprey, great and snowy egret, and black-crowned night heron. This would provide substantial benefits for these species.

Under this alternative, a total of 2,200 acres of crucial desert bighorn sheep habitat would also be acquired by exchange from the state. This acquisition would increase management options for sheep habitat on public lands and benefit that species.

Split Mineral Estate. By acquiring state and private mineral estate underlying BLM lands, more control would be gained over mining activity on those lands. This could be a benefit to wildlife in that certain stipulations could be placed on mining plans of operation to protect or restore wildlife habitat. Site-specific impacts to wildlife habitats in the Lower Gila South RMP/EIS area cannot be further assessed at this time.

Conclusion. Impacts due to land disposal would be slightly adverse. Impacts due to land and mineral acquisition would be beneficial, although the benefit cannot be quantified at this time.

Utility Corridor Issue

Conclusion. The impact of designating corridors along existing routes would be somewhat beneficial for wildlife by limiting future disturbance in other areas. Designating corridors would avoid disrupting habitat and wildlife in new areas.

Impacts on Minerals and Energy

Conclusion. The *Proposed Action* would negatively impact mineral exploration and development in portions of four WSAs (190,391 acres) that are proposed for wilderness designation. Areas designated as wilderness would be closed to mineral entry and mineral leasing. No new prospecting, exploration, or mining would be allowed. A total of 190,391 acres of oil and gas leases and 199 mining claims would be affected. This alternative proposes to drop eight WSAs and portions of four WSAs (417,807 acres) from wilderness study, return these areas to other multiple use management, and allow mineral exploration and development in accordance with the mining regulations (CFR 3802 and 3809). Under multiple use management, exploration and mining are encouraged. Environmental protection is insured by required reclamation. Stipulations insure preservation of all environmental concerns.

Acquisition of 36,845 acres would be beneficial to mining interests because these areas would be open to mineral exploration and development. Acquiring 112,160 acres of state and private mineral estate would be beneficial by consolidating the split surface and mineral estate of lands in the Lower Gila South RMP/EIS area.

Impacts on Soils

Most of the RMP/EIS area's severe erosion areas are in and adjacent to the drainageways and the Gila River that are heavily used by livestock. Proposed soil disturbance projects in areas with high soil-blowing and severe-erosion problems would be evaluated on a case-by-case basis in the environmental assessment process. Mitigating measures would be applied as appropriate.

Conclusion. Soils would not be significantly impacted under the *Proposed Action*. Any other proposed soil disturbance project on the fragile soils would be evaluated using site-specific environmental assessments on a case-by-case basis.

Impacts on Cultural Resources

Rangeland Management Issue

Under the *Proposed Action* inadvertent or indirect impacts primarily from rangeland developments may occur. Rangeland developments may affect cultural resources in the following ways: (1) loss of the spatial relationships between cultural materials and their surroundings; (2) loss of entire site elements such as artifacts, features, or portions of site areas; (3) loss of historical context, especially information on occupation dates and prehistoric environment; and (4) reduction in the cultural resource base after salvage. The nature and degree of these impacts has not been adequately monitored and documented.

A limited study by Roney (1977), however, found that cattle trampling during livestock grazing significantly damages lithic sites and artifacts. In addition, lithic scatters, rock circles, intaglios, rock alignments, and extensive prehistoric trails typically found in desert pavement areas can be destroyed by cattle trampling (BLM, 1982).

Conclusion. Significant direct impacts from the rangeland management issue on cultural resources would be avoided or mitigated since cattle disturbance from range developments constitutes a ground disturbing action. A Class I literature search, as well as a Class III intensive field inspection for significant cultural resources, will be conducted for any ground disturbing action (see Chapter 2, Page 21). Concentrated trampling by livestock would have the greatest effect on sites with surface features and structures, which include most of the sites in the EIS area. The significance of these impacts on cultural resources would vary according to the location and condition of the site.

Wilderness Management Issue

Wilderness designation of portions of four WSAs (190,391 acres) would generally benefit cultural resources in these WSAs by decreasing vandalism, road/utility construction, ORV use, and mining. Table 4-5 lists a number of agents of site deterioration and the probable effect of wilderness designation compared to the existing situation for each type of deterioration.

TABLE 4-5
IMPACTS ON CULTURAL RESOURCES*
Bureau of Land Management, Phoenix District, Arizona

Agent of Deterioration	Existing Situation	Impacts of Wilderness Designation
Erosion	Moderate	No Change/ Low Decrease
Vandalism	Moderate	Moderate Decrease
Livestock Trampling	Low	No Change
Road/Utility Construction	Moderate	High Decrease
ORV Use	Low	High Decrease
Mining	High	Moderate Decrease
Range Developments	Low	Moderate Decrease

* Impacts compared to existing situation:
SOURCE: Phoenix District files, Lower Gila South MSA

All of the direct impacts to cultural resources, except vandalism, can be mitigated. Vandalism would generally increase with an increased number of visitors in the four designated wilderness areas, however, the overall destruction to sites would probably be much less than that associated with development under multiple use management (BLM, 1982).

Table 4-6 summarizes the acres likely to contain cultural resources that would be protected under each alternative.

Approximately 55 percent or 103,818 acres proposed for wilderness designation under this alternative may contain cultural resources which would be beneficially affected by having added protection (see Table 4-6). In addition, one petroglyph site in the Eagletail Mountains, eligible for the National Register of Historic Places, would have added protection, as well as those portions of the Eagletail Mountains having important significance to the Yavapai and Maricopa Indian groups.

Designation of wilderness would limit the potential for surface disturbance and protect cultural resources. Because mining, road construction, and vandalism have caused moderate to high levels of disturbance to known cultural resources, this alternative would be highly beneficial to the protection of these resources. Public education efforts, as part of wilderness management, would tend to enhance visitor appreciation of cultural resources. BLM's Wilderness Management Policy provides for inventorying and monitoring historic or prehistoric sites with structures in wilderness areas. These inventories and monitoring studies would determine if such sites have scientific and socioeconomic uses. This would help fill the existing data gaps in the current knowledge of permanent or semi-permanent historic and prehistoric habitations.

Conclusion. Impacts on cultural resources from the *Proposed Action's* wilderness management issue would be beneficial in general, with added protection for a site eligible to the National Register. Traditional cultural/religious significant areas within the Eagletail Mountains and 103,818 acres with a high probability of containing cultural resources would also have added protection.

Land Tenure Issue

Conclusion. Under this alternative the impacts of management decisions from the land tenure issue on cultural resources would be minimal or nonexistent after all pertinent laws, regulations, and current policies are followed (see Chapter 2). Class I, III, and/or II cultural resource inventories will be conducted prior to the transfer of title of lands, thereby eliminating or reducing adverse impacts to significant cultural properties. Furthermore, cultural resources of National Register significance could be brought under federal protection through land ownership adjustments, thereby bringing consolidated areas of prehistoric and historic use under cultural resource management.

TABLE 4-6
ACRES LIKELY TO CONTAIN CULTURAL RESOURCES
PROTECTED BY WILDERNESS DESIGNATION UNDER EACH ALTERNATIVE*

WSA	Proposed Action	No Action	Resource Production	Resource Protection	Environmental Protection
New Water Mountains	14,050	--	--	14,050	15,330
Little Horn Mountains West	--	--	--	--	7,180
Little Horn Mountains	--	--	--	28,655	31,535
Eagletail Mountains	55,428	--	--	55,428	62,340
East Clanton Hills	--	--	--	--	11,725
Face Mountain	--	--	--	8,800	9,180
Signal Mountain	--	--	--	--	3,490
Woolsey Peak	21,145	--	--	21,145	26,585
North Maricopa Mountains	--	--	--	4,160	17,880
South Maricopa Mountains	--	--	--	--	14,040
Butterfield Stage Memorial	--	--	--	--	4,480
Tabletop Mountains	13,195	--	--	13,195	14,795
TOTAL ACRES	103,818	--	--	145,513	218,560
% OF ACRES LIKELY TO CONTAIN CULTURAL RESOURCES	55%			45%	36%
% OF SENSITIVE ACRES PROTECTED BY ALTERNATIVE	48%			66%	100%

SOURCE: Phoenix District files

Utility Corridors Issue

Future use of 10 corridors (each one-mile-wide) for utility projects and rights-of-way would impact areas which are known to contain cultural and ethnological resources. Several of the utility corridor surveys, as well as BLM Class II and Class III inventories, have recorded a number of significant archaeological sites and Native American cultural/religious areas of significance within the proposed corridor areas.

Impacts on a number of these archaeological sites have been mitigated along several utility corridors for previous projects. Archaeological inventory and mitigation work would eventually be reduced when all corridors have been surveyed and the impacts on all sites mitigated (see Chapter 2).

The proposed utility corridors could impact a number of traditional cultural/religious areas of significance to Native American groups (see Table 4-7). An irreversible and irretrievable impact to these resources would occur if it were determined that other considerations outweighed the value of protecting such areas.

Conclusion. If other management considerations take priority, impacts from the 10 proposed utility corridors could be adverse to primarily six large areas having cultural/religious significance to Native Americans (Table 4-7).

Impacts on Recreation

Conclusion. Under the *Proposed Action* 93.55 miles of vehicle ways, 6.0 miles of roads, and 190,391 acres would be closed to vehicle use (Table 4-8). An estimated increase of 4,650 visitor days/year of recreation use is expected under this alternative.

Impacts on Economic Conditions

This section describes the *Proposed Action's* economic impacts on the RMP/EIS area ranchers and economy of the three-county (Maricopa, Pima, and Yuma) economic study area (ESA). Impacts from expected changes in rancher income, recreational use, and oil and gas lease revenues will be described.

Impacts to RMP/EIS are a ranch operators are analyzed through the use of three representative ranch budgets. Data from these ranch budgets are then used to analyze the impacts to the economy of the ESA. Representative ranch budgets by alternative are shown in Appendix 19. Economic impacts resulting from the *Proposed Action* on the mining industry cannot be quantified in many cases because of a lack of information about the mineral and energy resources.

TABLE 4-7
SIGNIFICANT TRADITIONAL CULTURAL/RELIGIOUS AREAS WHICH MAY BE AFFECTED BY UTIITY CORRIDORS
Bureau of Land Management, Phoenix District, Arizona

	Significant Traditional Cultural/Religious Areas					
Utility Corridors	Maricopa Mountains	Mohawk Mountains	Arlington Quad-Palo Verde Hills So. to Gillespie	Gila Bend & Smurr Quads	Gila Bend Mountains*	Painted Rock Mountains
Interstate 10			X			
Interstate 8		X		X		X
Palo Verde-Devers			X			
Santa Rosa-Gila Bend	X					
El Paso Natural Gas			X			
APS-Interconnect			X		X	
Palo Verde-Kyrene			X			
Liberty-Gila Bend				X		
Native American Tribes That Determined Areas	Pima, Sand Papago, & Maricopa	Pima, Sand Papago & Maricopa	Maricopa	Kavelcadom, San Simon	Yavapai, Maricopa, N. Pima, & Papago	Yavapai, Maricopa, & Papago

*Indicates very high significance.
SOURCE: Phoenix District files

Ranch Budgets

Small Ranch. Under the *Proposed Action* the short- and long-term herd size of the typical small ranch would remain equal to its authorized grazing preference—42 cows. Net revenue (gross revenue minus cash costs) would thus remain at $3,743. See Table 4-9 for revenue figures for all alternatives.

Because net revenue on the small-size ranch would not be impacted by the *Proposed Action*, the present value of 20 years of net revenue would also not be impacted. See Table 4-10 for the 20-year net revenue figures for all alternatives.

Medium Ranch. Under the *Proposed Action* the herd size of the typical medium-size ranch would remain at its authorized grazing preference level—140 cows. Long-term forage increases, however, would allow the typical medium-size ranch to stock 147 cows, a five percent increase over existing stocking rates. Yearly net revenue would initially remain at $11,588 but would gradually increase by seven percent to $12,424 over 20 years. The present value of 20 years of net revenue on the medium-size ranch under present management amounts to $114,839, whereas such revenues under the *Proposed Action* amount to $117,890 or a three percent increase.

TABLE 4-8
SURFACE ACRES AND MILES OF VEHICLE ACCESS OPEN OR CLOSED
TO ORV USE BY THE WILDERNESS ISSUE
Bureau of Land Management, Phoenix District, Arizona

Alternative	No. of Wilderness Areas Designated	Acres to be Closed to ORV Use	Acres to Remain Open to ORV Use	Miles of Vehicle Ways to be Closed to ORV Use*	Miles of Vehicle Ways to Remain Open to ORV Use*	Miles of Roads to be Closed to ORVs**
Proposed Action	4	190,391	431,540	93.55	272.95	6.00
No Action	0	0	621,931	0.00	366.50	0.00
Resource Production	0	0	621,931	0.00	366.50	0.00
Resource Protection	7	326,551	295,380	170.45	196.05	6.00
Environmental Protection	12	621,931	0	366.50	0.00	7.35

* Miles of vehicle ways determined not to meet the definition of a road were approximated through the use of topographic quadrangle maps and a Model 2986 K&E Double Face Map Measure.
** Existing road within WSAs (see Glossary for definition of a road).
SOURCE: Phoenix District files

TABLE 4-9
RANCH ECONOMIC IMPACTS BY ALTERNATIVE
Bureau of Land Management, Phoenix District, Arizona

Ranch Impacts	Existing Situation	Proposed Action		No Action		Resource Production		Resource Protection		Environmental Protection	
		Short Term	Long Term	Short Term	Long Term	Short Term	Long Term	Short Term	Long Term	Short Term	Long Term
Net Revenue ($)*											
Small (0-99 Head)	3,743	3,743	3,743	3,743	3,743	3,040	3,040	2,512	2,512	0	0
Medium (100-299 Head)	11,588	11,588	12,424	11,588	11,588	10,460	13,112	6,037	6,037	0	0
Large (Over 300 Head)	34,863	34,863	36,251	34,863	34,863	30,432	36,427	13,419	13,419	0	0
Ranch Values ($)**											
Small (0-99 Head)	72,000	72,000	72,000	72,000	72,000	61,500	61,500	57,000	57,000	0	0
Medium (100-299 Head)	241,500	241,500	255,000	241,500	241,500	222,000	273,000	127,500	127,500	0	0
Large (Over 300 Head)	894,000	894,000	909,000	894,000	894,000	796,500	925,000	445,500	445,500	0	0

* Net revenue is defined as gross revenue minus cash costs. Net revenue is the amount remaining to pay for owner/operator labor, buy new equipment, and pay off existing ranch debts.
** Ranch values are calculated on the basis of the ranches carrying capacity at a value of $1,500 per cow.
SOURCE: Lower Gila South Ranch Budgets, Phoenix District files

Large Ranch. Under the *Proposed Action* the herd size of the typical large ranch would remain equal to its authorized grazing preference—518 cows. Long-term forage increases, however, would allow the typical large ranch to stock 531 cows, a three percent increase over existing stocking rates. Yearly net revenue would initially remain at $34,863 but would gradually increase by four percent to $36,251 after 20 years. The present value of 20 years of net revenue on the typical large ranch under present grazing management amounts to $345,498, whereas such revenues under the *Proposed Action* amount to $350,612 or a two percent increase.

Designating the four wilderness areas under the *Proposed Action* may slightly impact ranch net revenue. Ranchers may be required to build and maintain range improvements in a fashion that would not impair wilderness values. This may result in increased construction and maintenance costs on these improvements. These impacts, however, are expected to be minimal because several of the analyzed wilderness areas are now inaccessible to motorized vehicles.

Ranch Finance

Ranch values are based on a ranch's authorized grazing preference at an estimated $125 per animal unit month (AUM) or $1,500 per animal unit (BLM, 1982). Under the *Proposed Action* the value of the typical small ranch would remain at $72,000. On the typical medium-size ranch, values would initially remain at $241,500, but would gradually increase by six percent to $255,000 after 20 years. The value of the typical large ranch would initially remain at $894,000, but would gradually increase by two percent to $909,000. See Table 4-9 for short- and long-term changes in ranch values for all alternatives.

Under this alternative the financial condition of ranches would not be impacted in the short term. Long-term forage increases would slightly increase ranch values and thus improve a rancher's ability to borrow operating capital. Operating profits would also be expected to increase slightly in the long term because of increases in ranch carrying capacities.

TABLE 4-10
TOTAL NET RANCH REVENUE OVER A 20-YEAR PERIOD*
Bureau of Land Management, Phoenix District, Arizona

Ranch Size	Existing Situation	Proposed Action	No Action	Resource Production	Resource Protection	Environmental Protection
Small	37,094	37,094	37,094	30,126	25,440	0
Medium	114,839	117,890	114,839	113,403	59,908	0
Large	345,498	350,612	345,498	323,661	135,899	0

* All values are discounted at a rate of 7.875 percent.
SOURCE: Lower Gila South Ranch Budgets, Phoenix District files

Regional Economics

Under the *Proposed Action* annual gross receipts from the sale of livestock would remain at $739,493 in the short term. Long-term forage increases, however, would increase livestock sales by four percent to $766,493 (Table 4–11). Both the short- and long-term sales figures account for less than one percent of the total livestock sales in the ESA.

Ranch labor requirements would remain at 13.8 workyears in the short term but increase to 14.2 workyears in the long term. Earnings from this employment would remain at $173,189 in the short term but increase to $178,181 after 20 years. Both the short- and long-term earnings would be less than one percent of the ESA's total agricultural related earnings.

Wilderness designation would prohibit mineral entry in the four areas analyzed for designation. Also, development of mineral rights established prior to the designation date would be subject to increased regulation of access and reclamation in order to protect wilderness values. This may result in additional costs to mine operators and therefore discourage development.

The four areas analyzed for designation are all classified as having a low potential for oil and gas development. A number of oil and gas leases have been established in the WSAs, but to date no production has occurred. Currently the lessees pay the government one dollar per acre per year for these oil and gas leases. One-half of the lease revenue is then returned to the state. Under the *Proposed Action* 190,391 designated acres would be withdrawn from BLM's oil and gas leasing program. The loss of this acreage from the leasing program would result in a loss of potential lease revenues for both BLM and the state. Table 4–12 shows the acres which would be withdrawn from oil and gas leasing and the potential losses in lease revenue. Under this alternative BLM and the state would each potentially lose $95,875 per year. When compared to the total oil and gas lease collections BLM receives nationally, the loss of this revenue would be less than one percent.

TABLE 4-11
REGIONAL ECONOMIC IMPACTS BY ALTERNATIVE
Bureau of Land Management, Phoenix District, Arizona

Regional Impacts*	Existing Situation	Proposed Action		No Action		Resource Production		Resource Protection		Environmental Protection	
		Short Term	Long Term	Short Term	Long Term	Short Term	Long Term	Short Term	Long Term	Short Term	Long Term
Ranch Receipts ($)	739,493	739,493	766,493	739,493	739,493	664,078	778,239	383,882	383,882	0	0
Ranch Expenditures ($)	410,952	410,952	422,775	410,952	410,952	376,134	432,418	243,679	243,679	0	0
Ranch Net Revenue ($)	328,541	328,541	343,280	328,541	328,541	287,944	345,821	140,203	140,203	0	0
Ranch Employment (Z)** (Workyears)	13.8	13.8	14.2	13.8	13.8	13.0	14.6	9.6	9.6	0	0
Ranch Employment Related Earnings ($)**	173,189	173,189	178,181	173,189	173,189	162,652	182,516	120,652	120,652	0	0

* Figures shown are cumulative for all 17 RMP/EIS area ranches.
** Excludes owner/operator employment and earnings; one workyear = 2,600 hours
SOURCE: Lower Gila South Ranch Budgets, Phoenix District files

Recreation Economics

Designating portions of four WSAs as wilderness is expected to increase visitor use in the RMP/EIS area by 4,650 visitor days. Annual recreation related expenditures by visitors would thus increase by $17,763. These increases would amount to less than one percent of the total 1982 tourism and travel expenditures made in the ESA.

Mineral Economics

Portions of the four WSAs analyzed for designation under this alternative contain deposits of various metallic and nonmetallic minerals, but reliable reserve estimates for these commodities are not known. Some of the deposits of gold, silver, and copper may prove economically viable. However, it is nearly impossible with existing information to estimate the impact that extraction of these and other mineral commodities would have on the local economy and work force.

TABLE 4-12
POTENTIAL OIL AND GAS LEASE REVENUES FORGONE BY WILDERNESS DESIGNATION
Bureau of Land Management, Phoenix District, Arizona

Alternative	Acres Under Lease*	Yearly Revenue	Amount Returned To The State**
Proposed Action	190,391	$190,391	$ 95,196
No Action	0	0	0
Resource Production	0	0	0
Resource Protection	326,551	326,551	163,276
Environmental Protection	621,931	621,931	310,966

* Assumes all nonsuitable acres would be leased.
** One-half the lease revenue collected by the BLM is returned to the state.
SOURCE: Phoenix District files

Conclusion. No significant economic impacts to RMP/EIS area ranchers or to the economy of the ESA would result from the *Proposed Action*. Economic impacts to the minerals industry under this alternative cannot be determined because of the lack of any specific development plans for the minerals present in each WSA. Wilderness designation of portions of four WSAs would withdraw these areas from mineral entry and would potentially have long-term negative impacts to the ESA's economy. Further unemployment of miners and mine workers in an already depressed area would result in decreased economy of the local areas.

Impacts on Social Elements

Conclusion. Under the *Proposed Action* a few ranches would have an increase in income and permit value in the long term. It is assumed that the attitude of the affected ranchers toward this alternative would be neutral to positive.

NO ACTION ALTERNATIVE

Impacts on Rangeland Management

No adjustments in livestock AUMs (60,524) are proposed under this alternative. Applications for nonuse, supplemental use, and change in kind or class of livestock would be approved or disapproved on an annual basis. Existing grazing use patterns and management practices would be allowed to continue without change and therefore would not impact livestock grazing operations. Existing rangeland developments would be maintained and new developments would be constructed by livestock operators for the orderly use of the rangeland. Grazing management on the 22 perennial-ephemeral allotments and on eight perennial-ephemeral grazing leases would remain unchanged. The 18 ephemeral allotments would continue to be managed in accordance with the Special Ephemeral Rule published in December 1968.

Under this alternative all WSAs are analyzed as being unsuitable for wilderness designation (Table 4–1). Until the 12 WSAs are released by Congress and returned to other multiple use management, however, all new rangeland developments constructed within WSAs would have to meet the criteria set forth in the Interim Management Policy for Land Under Wilderness Review.

Conclusion. No impacts to livestock operators would occur from the *No Action* alternative. Existing grazing use patterns and management practices would continue without change. All WSAs would be returned to other multiple use management and wilderness restrictions would not affect livestock operations.

Impacts on Vegetation

The short-term impacts on vegetation would be the continuation of present trends in rangeland condition. Changes in trend in rangeland condition are subtle in the Sonoran desert and therefore difficult to assess without any long-term data. Because this alternative proposes no changes in management practices, there would be a negligible impact on livestock forage.

The downward apparent trend in rangeland condition on five percent (69,600 acres) of 11 perennial-ephemeral allotments (Appendix 15) would eventually stabilize as would the 160,670 acres (10 percent of the Lower Gila South RMP/EIS area) exhibiting an upward apparent trend. Rangeland condition would decline in areas closest to water sources because of the continued grazing and lack of minimum rest periods. Overall, rangeland condition and trend would remain in static condition with rangeland condition in the fair to good condition class. Rangeland condition on the 18 ephemeral allotments (Custodial) would not change in this alternative. These allotments are grazed only when ephemeral forage has the potential to become available.

Conclusion. Because this alternative proposes no changes in grazing management practices, there would be a negligible impact on livestock forage. Downward and upward apparent trends in rangeland condition would eventually stabilize. Rangeland condition would decline in areas closest to water sources. Overall, rangeland condition and trend would remain static with rangeland condition in the fair to good condition class.

Impacts on Wilderness Values

None of the 12 WSAs in the Lower Gila South RMP/EIS area would be designated as wilderness under the *No Action* alternative. All 621,931 acres would be returned to multiple use management. Wilderness and associated resource values present in the WSAs might be damaged or permanently lost over the long term because land uses detrimental to wilderness could be permitted. Resource uses that could adversely impact the wilderness character of the WSAs are mining and energy development, motorized vehicle use, and rights-of-way and other utility uses.

Developing mineral and energy resources could damage wilderness values by disturbance of natural landscapes, resulting in the loss of an area's naturalness. Road construction, extraction, and installation of facilities could further cause a loss of solitude and primitive recreation opportunities. Mining activity could cause long-term, irreversible and adverse impacts to wilderness and supplemental resource values.

Issuing rights-of-way for roads or new utility uses would cause a decline or loss of wilderness values in areas so affected. Utility lines could cross portions of the New Water Mountains, Little Horn Mountains, Eagletail Mountains, Face Mountains, Signal Mountain, Butterfield Stage Memorial, South Maricopa Mountains, and North Maricopa Mountains WSAs. Public lands in some WSAs could also be subject to disposal actions over the long term. Mining, rights-of-way, and other developments would result in new or increased access into previously remote or unvisited areas. This could lead to increased motorized vehicle use.

Continued and increased motorized recreation use would occur in all WSAs. The attractiveness of these 12 areas for solitude and nonmotorized types of primitive recreation could decline as motorized recreation use increases or spreads to previously unused areas. Supplemental wildlife, cultural, scenic, and botanical resource values would also be adversely affected by increased access of motorized vehicles into remote areas.

Small scale projects for wildlife and livestock management (fences, waters, corrals) could slightly impair wilderness values because they would be installed without wilderness constraints on placement and design. In addition, all the WSAs would be managed under VRM Class II, III, or IV standards, which afford less protection to visual resources than the Class I standards required by wilderness.

Conclusion. The *No Action* alternative would not designate any areas as wilderness. Over the long term the wilderness values presently existing would be lost because of mineral development, motorized vehicle use, and other land uses.

Impacts on Land Uses

Conclusion. This alternative would have little or no impact on the every day land actions. It would preclude the formal designation of the proposed utility corridors and the proposed land tenure adjustments. This would force major rights-of-way to be considered on a case-by-case basis and would also interfere with the plans of the State of Arizona and BLM to develop a more manageable land ownership pattern.

Impacts on Wildlife

Rangeland Management Issue

Under the *No Action* alternative no rangeland developments are proposed, but developments would be allowed on a case-by-case basis. Possible impacts are the same as those identified under *Proposed Action.* BLM would address specific impacts of all future developments on wildlife and attempt to mitigate them as described in the Wildlife Management Guidance section in Chapter 2.

Mule Deer. Under the *No Action* alternative long-term adverse impacts would continue to occur on a site-specific basis to mule deer. BLM inventory studies indicated that browse vigor is very low on Conley, Lower Vekol, Cameron, Bighorn, and Beloat allotments (Fredlake and Lucas, 1982). Mule deer habitat would continue to decline on these allotments without monitoring studies to indicate need for management action.

Desert Bighorn Sheep. Bighorn sheep disease exposure would continue throughout the Lower Gila South RMP/EIS area at current grazing levels. This constitutes a serious long-term negative impact to bighorn.

Sonoran Pronghorn. Continued forage conflict would exist between Sonoran pronghorn and livestock on the Cameron allotment, constituting highly significant, long-term adverse impacts. Pronghorn habitat in the Lower Gila South RMP/EIS area would continue to decline.

Desert Tortoise. No long-term improvement would be expected in desert tortoise habitat. Since no monitoring is planned under this alternative, BLM would have no data to identify allotments where serious forage conflicts occur, and no remedial action could be taken. An adverse long-term impact to tortoise would result.

Riparian Habitat. This alternative would result in no impact to riparian habitat along the Gila River. No significant degradation in riparian habitat would result at current stocking levels.

Nongame Habitat in Vekol Valley Grassland. Under the *No Action* alternative loss of perennial grass cover and soil in Vekol Valley will continue unabated. This represents a long-term negative impact to amphibian habitat in the grassland area.

Conclusion. The short-term impacts to Sonoran pronghorn, desert bighorn sheep, desert tortoise, mule deer, and riparian habitat would be substantially the same as the *Proposed Action.* No monitoring is proposed under this alternative, thus BLM will be unable to identify or correct conflicts between wildlife and livestock. This represents an adverse impact to Sonoran pronghorn, desert bighorn sheep, mule deer, and desert tortoise. Under the *No Action* alternative, no beneficial, long-term impacts would occur to wildlife.

Wilderness Issue

Conclusion. Under this alternative, no wilderness would be designated. Desert bighorn sheep and desert tortoise would continue to suffer human disturbance and habitat loss. This constitutes an adverse impact.

Land Tenure Issue

Conclusion. Under the *No Action* alternative, no impacts to wildlife would occur from the land disposal proposal or from the split mineral estate issue. Nonacquisition could cause a slight long-term adverse impact on public lands along the Fred J. Weiler Green Belt where riparian habitat could be converted from valuable bird habitat to low-value disturbed land.

Utility Corridor Issue

Conclusion. The impacts to wildlife from not designating corridors would be somewhat detrimental because new areas previously untouched by utility line construction could be significantly damaged in terms of wildlife habitat values.

Impacts on Minerals and Energy

The *No Action* alternative would have a positive impact on the development of minerals and energy resources. All WSAs (621,931 acres) now under study would be recommended as unsuitable for wilderness designation and would be returned to other multiple use management. All areas in the Lower Gila South RMP/EIS area would remain open for mineral entry in accordance with the mining regulations. Mineral exploration, identification and development is encouraged under multiple-use management. Preservation of the environment is assured under the laws and regulations presently in effect.

Conclusion. Under this alternative, all lands would be retained in federal ownership and no changes in the lands or minerals programs would be proposed. There would be no significant impact to the minerals program from this alternative.

Impacts on Soils

Soil erosion would continue to accelerate in the severe condition areas, drainageways, and the Gila River. Any proposed soil-disturbing projects in the high soil-blowing and severe-erosion condition areas would be evaluated on an individual basis using the environmental assessment process. Mitigating measures would be applied as appropriate.

Conclusion. Soils would not be significantly impacted under this alternative. Any soil-disturbing projects in the desert pavement areas would be evaluated under the environmental assessment process on a site-specific basis.

Impacts on Cultural Resources

Cultural resources would not be impacted by the proposed range issue since no rangeland developments are proposed under the *No Action* alternative. Impacts to cultural resources would be evaluated in environmental assessments on a case-by-case basis.

Conclusion. Under the *No Action* alternative adverse impacts from mining, ORV use, and road construction could occur on 218,560 acres (within 12 WSAs) likely to contain cultural resources. One site eligible for the National Register and one extensive archaeological district nominated to the National Register would not have additional protection offered by wilderness designation under this alternative. The Gila Bend, Eagletail, and Maricopa Mountains, which are significant to a number of Native Americans, would not have the added protection afforded by wilderness designation.

Impacts on Recreation

Conclusion. Under this alternative, there would be no impacts to recreation use, and all 621,931 acres would remain open to ORV use. The visual resources on 621,931 acres would be less protected under the Class II, Class III, and Class IV guidelines than if they were managed under the more restrictive guidelines of Class I under wilderness designation.

Impacts on Economic Conditions

Ranch Budgets

Under the *No Action* alternative, ranches in the RMP/EIS area would keep their authorized grazing preference. Thus, ranc hes would be allowed to stock cattle up to this grazing preference and the financial situation depicted by the typical ranch budgets would be expected to continue (Tables 4–9 and 4–10).

No wilderness areas would be designated under the *No Action* alternative. Thus, ranchers would be allowed to continue present maintenance and construction practices on new range improvements. Therefore, no increased costs for constructing and maintaining range improvements would be expected.

Regional Economics

Livestock sales, livestock related employment, and earnings are expected to remain at existing levels, and the No Action alternative would not impact the ESA's economy (Table 4–11).

Recreation Economics

Recreation use as well as expenditures made by recreationists visiting the RMP/EIS area would be expected to continue along present trends.

Mineral Economics

The *No Action* alternative would allow mineral entry in the WSAs under rules established by the 1872 mining law. Thus, this alternative would not af fect mine operating costs. Oil and gas leasing would continue along present trends, therefore, this alternative would not affect the yearly revenue collected by BLM for oil and gas leases. BLM would also continue returning one-half of the oil and gas lease collections to the State of Arizona (Table 4–12).

Conclusion. No significant economic impacts to RMP/EIS area ranchers or the economy of the ESA would result from the *No Action* alternative. The minerals industry would be free from wilderness restrictions under *No Action* and would be allowed to locate and develop minerals under the 1872 mining laws. Thus, the minerals industry would not be economically impacted by this alternative.

Impacts on Social Elements

Conclusion. The *No Action* alternative would maintain the current grazing situation; therefore, no social impacts to ranchers would occur.

RESOURCE PRODUCTION ALTERNATIVE

Impacts on Rangeland Management

The *Resource Production* alternative would initially reduce livestock numbers on public land by 10 percent to 54,315 AUMs from the authorized grazing preference of 60,524 AUMs. This alternative proposes to develop eight allotment management plans (AMPs) on eight perennial-ephemeral Maintain allotments encompassing approximately 531,400 acres of public land (Table 2–5). These are allotments that exemplify a moderate to high potential for rangeland improvement. The remaining 14 perennial-ephemeral allotments and eight grazing leases in the Maintain and Custodial categories would not have AMPs developed for them, but rangeland developments could be constructed if needed for the orderly use of the rangeland. Ephemeral allotments would not be impacted by this alternative and would continue to be administered in accordance with the Special Ephemeral Rule.

Construction of new rangeland developments in previously unused areas would result in more usable forage becoming available for livestock and wildlife (see Table 2–1). The allotments with developed AMPs would generally shift from continuous or sporadic grazing to grazing systems with periodic rest and seasonal deferment.

Over time, key forage species production and vigor would improve, increasing the quality and quantity of forage grazed by livestock. In the long term (5–25 years) an increase of 4,023 AUMs above the current authorized grazing preference (from 60,524 to 64,547 AUMs) could be expected from implementing this alternative.

This alternative would increase livestock operator workloads and expenses but would cause short-term impacts. Increased maintenance costs would result in the long term from the construction of new rangeland developments. Fencing of pastures and allotment boundaries would permit greater control over livestock and help in detecting trespass.

Under this alternative all WSAs are analyzed as being unsuitable for wilderness designation (Table 4–1). Until the 12 WSAs are released by Congress and returned to other multiple use management, however, all new rangeland developments constructed within WSAs would have to meet the criteria set forth in the Interim Management Policy for Land Under Wilderness Review.

Conclusion. The *Resource Production* alternative initially reduces livestock numbers in the Lower Gila South RMP/EIS area to 54,315 AUMs, a 10 percent reduction from the authorized preference of 60,524 AUMs. AMPs would be developed for eight perennial-ephemeral allotments, resulting in an estimated increase of 4,023 AUMs above the authorized preference (from 60,524 to 63,549 AUMs). In the long term a small increase in maintenance costs to the operator would result. All WSAs would be returned to other multiple use management and would not affect livestock grazing operations.

Impacts on Vegetation

Implementation of eight AMPs on 531,400 acres of public land involving eight livestock operators would benefit livestock forage. Grazing treatments and new rangeland developments would improve livestock distribution and improve the availability of livestock forage, thereby improving seedling establishment, vigor and reproduction of key forage plants. Downward apparent trend on approximately 40,000 acres on eight Maintain allotments with AMPs would be reversed or stabilized with the construction of new rangeland developments.

In the short term, initial reductions would slightly improve the vigor of the preferred forage plants. In the long term, vegetation would improve in a shorter time in high-response areas and at a slower rate on low response sites on those allotments with implemented AMPs.

Rangeland developments for Maintain and Custodial allotments without AMPs would also improve livestock

distribution and stabilize or improve downward trends in rangeland condition. Vegetation on the remaining 18 ephemeral allotments and eight grazing leases in the Custodial category would not change in the long term under this alternative.

Conclusion. Beneficial impacts to the vegetation resources would occur by implementing this alternative. Allotment management plans (AMPs) would be developed for eight allotments involving 531,400 acres of public land. In the short term, initial reductions and new rangeland developments would slightly mprove the vigor of the preferred forage plants. In the long term, vegetation would improve most rapidly on allotments with implemented AMPs.

Impacts on Wilderness Values

Conclusion. Under the *Resource Production* alternative, impacts would be identical to those described under the *No Action* alternative. All 12 WSAs (621,931 acres) would be returned to other multiple use management.

Impacts on Land Uses

Conclusion. The *Resource Production* alternative would be the most beneficial for the lands program. Because there would be no designated WSAs, future rights-of-way would not be precluded in these 12 areas. Additionally, this alternative allows for the development of utility corridors and the development of the land tenure adjustment program.

Impacts on Wildlife

Rangeland Management Issue

Under the *Resource Production* alternative desert tortoise, bighorn sheep, and mule deer habitat conditions could improve on those allotments proposed for allotment management plans (AMPs). The degree of benefit depends on the specific contents of the plans and cannot be further assessed at this time. Sonoran pronghorn habitat conditions could improve as a result of the AMP proposed for Cameron allotment, again depending on the specific content of the plan.

If monitoring studies indicated a need for reduction in stocking rates then significant long-term benefits would result for mule deer, Sonoran pronghorn, desert tortoise, and desert bighorn sheep.

More fencing, wells, and reservoirs are proposed but this will not necessarily be more detrimental (in the case of desert tortoise and desert bighorn) or more positive (in the case of small game and waterfowl). Impacts of specific development proposals would be analyzed on a case-by-case basis.

Conclusion. Overall, impacts to wildlife would be similar to the *Proposed Action*, except for impacts to Sonoran pronghorn. Sonoran pronghorn would be beneficially impacted to an unquantified extent (Table 4-2).

Wilderness Issue

Conclusion. Impacts to wildlife under the *Resource Production* alternative would be the same as the under *No Action* alternative (Table 4-4).

Land Tenure Issue

Conclusion. Land disposal and split mineral estate impacts to wildlife under the *Resource Production* alternative would be the same as under the *Proposed Action*. A total of 2,200 acres of bighorn sheep habitat is proposed for acquisition under this alternative. This acquisition would benefit bighorn sheep only. Because of nonacquisition, nonpublic lands along the Fred J. Weiler Green Belt would be susceptible to conversion from valuable wildlife habitat to low-value disturbed land. Slight long-term adverse impacts would result.

Utility Corridor Issue

Conclusion. The impacts to wildlife under this alternative would be the same as under the *Proposed Action*.

Impacts on Minerals and Energy

Conclusion. The *Resource Production* alternative would have a beneficial impact on the development of mineral resources in the RMP/EIS area. All 12 WSAs would return to other multiple use management and exploration, prospecting, and mining would be encouraged. Ninety percent of all mining activity in these areas is carried out by small mine operators. The local economy would be beneficially impacted and large scale explorations would be encouraged.

Acquisition of 22,842 acres under the *Resource Production* alternative would be beneficial to mining interests because these areas would be open to mineral exploration. Acquiring 112,160 acres of state and private mineral estate acres to consolidate split mineral estates would be beneficial because BLM would control both surface and subsurface lands. Protection of the environment is assured by the adequacy of the present laws and regulations.

Impacts on Soils

Conclusion. Any proposed soil-disturbing projects in the fragile soil areas would be evaluated using the environmental assessment process on a case-by-case basis. The short-term reduction and greater distribution of livestock would be beneficial in reducing soil erosion in and adjacent to the drainageways and the Gila River that are heavily used by livestock.

Impacts on Cultural Resources

Conclusion. Under the *Resource Production* alternative the impacts to cultural resources for all issues would be the same as those described under the *No Action.*

Impacts on Recreation

Conclusion. Under this alternative the impacts to ORV use and recreation visitor use would be the same as those described under the *No Action* alternative.

Impacts on Economic Conditions

This section describes the economic impacts of the *Resource Production* alternative on the RMP/EIS area ranchers and the economy of the three-county economic study area (ESA). Impacts from expected changes in outdoor recreation use and oil and gas lease revenues will also be described.

Ranch Budgets

Small Ranch. Under this alternative the herd size of the typical small ranch would be reduced by 16 percent from 42 cows to 35 cows in the short term and would remain at this level over the long term. Yearly net revenue would decrease by 19 percent from an existing level of $3,743 to $3,040 (Table 4–9).

The present value of 20 years of net revenue under present management amounts to $37,094, whLereas such revenues under the Resource Production alternative amount to $30,126 (Table 4–10).

Medium Ranch. Under this alternative the herd size of the typical medium-size ranch would initially be reduced by nine percent from 140 cows to 128 cows. Long-term forage increases, however, would allow the typical medium-size ranch to increase its herd size to 158 cows (a 13 percent increase over existing levels). Yearly net revenue would decrease in the short term by 10 percent from $11,588 to $10,460, but over a 20-year period under the projected forage increases for the *Resource Production* alternative the yearly net revenue would gradually increase 13 percent over existing levels to $13,112.

The present value of 20 years of net revenue on the typical medium-size ranch under present grazing management amounts to $114,839, whereas such revenues under the *Resource Protection* alternative amount to $113,403.

Large Ranch. Under this alternative, the herd size of the typical large ranch would be reduced by 10 percent from 518 cows to 465 cows. Long-term forage increases, however, would allow the typical large ranch to increase its herd size four percent over existing levels to 541 cows. Yearly net revenue would decrease in the short term by 13 percent from $34,863 to $30,432, but over a 20-year period yearly net revenue would gradually increase four percent over existing levels to $36,427.

The present value of 20 years of net revenue on the large ranch under present grazing management amounts to $345,498, whereas such revenues under the *Resource Production* alternative amount to $323,661.

Ranch Finance

Ranch values are based on authorized grazing preference figures at an estimated value of $125 per AUM or $1,500 per animal unit (BLM, 1982). The *Resource Production* alternative would reduce the authorized grazing preference in the short term, but gradually increase this preference in the long term to a higher level than now exists.

The value of the typical small ranch would decrease 15 percent from an existing value of $72,000 to $61,500 and remain at this level. The value of the typical medium-size ranch would decrease from an existing value of $241,500 to $222,000 in the short term. Long-term AUM increases, however, would gradually raise the value of the medium-size ranch to $273,000, 13 percent higher than existing levels. The value of the typical large ranch would decrease from an existing value of $894,000 to $796,500 in the short term, but after 20 years gradual increases in grazing authorizations are expected to raise the value to $925,000, a three percent increase from existing levels.

The overall impact of the *Resource Production* alternative on RMP/EIS area ranchers would vary from ranch to ranch. Generally, the short-term reduction in ranch values would adversely affect the asset base of the rancher, making it more difficult to borrow money. Long-term increases in ranch value, however, would improve this condition.

Regional Economics

Under the *Resource Production* alternative, annual gross receipts from the sale of livestock would be reduced by 10 percent from $739,493 to $664,078 in the short term. Over the long term gross receipts would increase five percent over existing levels to $778,239. Livestock sales from

the RMP/EIS area ranchers, however, would still be less than one percent of total livestock sales in the three-county ESA.

Ranch labor would decrease from 13.8 workyears to 13 workyears in the short term and increase to 14.6 workyears over the long term. The reduction in ranch hired labor would not significantly affect the economy of the ESA.

Recreation Economics

Recreation use as well as recreation expenditures would continue along present trends under the *Resource Production* alternative. There might be a slight increase in hunter use in the RMP/EIS area because of the additional water developments proposed under this alternative, but expenditures made by these hunters would not significantly affect the economy of the ESA.

Mineral Economics

No wilderness study areas would be designated under the *Resource Production* alternative. Mineral entry would be allowed under the 1872 mining laws, and thus mine operating costs would not be affected by this alternative. Oil and gas leasing revenues collected by the BLM would not be impacted nor would the amount of revenue returned to the State of Arizona (Table 4–12).

Conclusion. Under the *Resource Production* alternative RMP/EIS area ranchers would experience a slight economic loss in the short term. Over the long term, however, ranchers would realize a slight economic benefit from the projected increase in forage. The economy of the ESA would not be impacted under this alternative. The minerals industry would be free from wilderness restrictions and would be allowed to locate and develop minerals under the 1872 mining laws. Thus, the minerals industry would not be economically impacted by this alternative.

Impacts on Social Elements

Conclusion. The *Resource Production* alternative would improve the long-term income and permit value of some ranchers. It is assumed that the attitudes of the affected ranchers would be positive.

RESOURCE PROTECTION ALTERNATIVE

Impacts on Rangeland Management

This alternative proposes a 47 percent reduction in the authorized grazing preference from 60,524 AUMs to 31,914 AUMs on 30 perennial-ephemeral allotments and Section 15 grazing leases (see Appendix 11). This reduction is based on the enhancement of other resources such as wildlife, threatened and endangered (T&E) plant habitat, and watershed. Another factor used to determine stocking rates was the amount of browse hedging in 16 allotments with high wildlife values (Table 4–13). The remaining eight perennial-ephemeral Section 15 grazing leases and the 16 ephemeral allotments would be managed the same as under the *No Action* alternative. The eight perennial-ephemeral allotments without significant browse hedging would be reduced to their five-year average licensed use (1976–1981). These adjustments would result in short- and long-term significant adverse impacts to livestock grazing operations in the Lower Gila South RMP/EIS area. Livestock permittees would have to secure alternate pastures on private or state lands in order to continue at their existing levels of operation, or be forced out of the cow-calf operation business. Except for phasing in most of the reductions in AUMs over a five-year period, very little can be done to mitigate the adverse impacts these reductions would have on livestock operators.

TABLE 4–13
ALLOTMENTS WITH SIGNIFICANT BROWSE HEDGING
Bureau of Land Management, Phoenix District, Arizona

Arnold*	Eagle Tail
Powers Butte*	Hazen
Beloat	Kirian
Bighorn	Lower Vekol
Cameron	South Vekol
Childs	Table Top
Conley	Vekol
Coyote Flat	Why

*Ephemeral Allotments
SOURCE: Phoenix District files

Proposing 326,551 acres as suitable for wilderness designation would not significantly impact livestock grazing on 14 perennial-ephemeral and six ephemeral allotments under this alternative (Table 4–1). No new rangeland developments are being proposed and would be allowed only if they were necessary for the protection of other resources such as wildlife, botanical, watershed, or wilderness protection and enhancement.

Conclusion. Implementation of the *Resource Protection* alternative would adversely impact livestock operators in the Lower Gila South RMP/EIS area. Initially, livestock numbers would be reduced to 31,914 AUMs, a 47 percent reduction from the authorized grazing preference of 60,524 AUMs. The reduction is based on enhancement of other resources and on browse hedging on allotments with high wildlife values.

Since livestock numbers would be significantly reduced and would remain at those low levels, livestock grazing would not be impacted by designating portions of seven WSAs on 14 perennial-ephemeral and six ephemeral allotments.

Impacts on Vegetation

Implementing the *Resource Protection* alternative would be beneficial to vegetation on 14 perennial-ephemeral allotments and two ephemeral allotments involving 946,366 acres. Vegetation on the remaining six perennial-ephemeral allotments (Clem, Crowder-Weisser, Hansen, Sentinel, South Vekol, and Ward) would also improve as a result of reducing AUMs to the five-year average licenses (1976–1981). Vegetation on the remaining 16 ephemeral allotments and eight Section 15 allotments would not be impacted. They would continue to be managed the same as under the *No Action* alternative.

Allotments displaying stable or upward apparent trends in rangeland condition would improve most rapidly in high response areas where significant reductions in livestock numbers occur and where browse competition between livestock and mule deer are highest. Vegetation improvement would not be significant in areas already showing satisfactory condition. Declining apparent trend in rangeland condition on approximately 70,000 acres of public land would either stabilize or be reversed.

Reductions in livestock numbers on perennial-ephemeral allotments would decrease grazing pressure around permanent waters used yearlong. Improvement would be most significant in areas currently in poor and fair rangeland condition that have high potential to respond to a reduction in livestock grazing. Rate of improvement is also highly dependent on precipitation and soils.

Conclusion. Vegetation on 22 perennial-ephemeral allotments would benefit from the significant reduction in livestock numbers. The remaining 18 ephemeral allotments and eight Section 15 allotments would not be impacted since no reductions are proposed.

Impacts on Wilderness Values

Wilderness designation of 24,200 acres of the New Water Mountains, 50,460 acres of the Little Horn Mountains, 90,261 acres of the Eagletail Mountains, 26,390 acres of Face Mountain, 61,000 acres of Woolsey Peak, 39,840 acres of the North Maricopa Mountains, and 34,400 acres of the Table Top Mountains would ensure the protection and preservation of their wilderness values in both the short and the long term.

Protection of wilderness values on 326,551 acres would, in turn, benefit wildlife, botanical, soils, and scenic resource values. Long-term benefits would be provided by preserving lands in which natural ecological processes would continue with little or no human interference.

A total of 241,170 acres of crucial bighorn sheep habitat would be protected by wilderness in the New Water Mountains, Little Horn Mountains, Eagletail Mountains, Woolsey Peak, North Maricopa Mountains, and Table Top Mountains. Desert tortoise habitat (17,570 acres) would be protected from surface disturbances in the New Water Mountains, North Maricopa Mountains, and Table Top Mountains WSAs. Two significant Sonoran Desert botanical areas, proposed as natural areas by the Arizona Academy of Sciences in the Eagletail Mountains and Table Top Mountains, would be maintained in their natural state by wilderness. Wilderness would ensure their continued value for nature study and scientific or educational use.

Desert pavement soils, vegetation, and protected plants would be protected in all areas due to the restriction of mining, utility construction, and motorized vehicle use across 326,551 acres.

The scenic and visual values in seven varied Sonoran Desert landscapes would be preserved and managed under VRM Class I objectives. Class I objectives and management requirements allow little or no change in the natural landscape.

Designation of these seven areas would enhance the diversity of the NWPS in Arizona and the region. Residents of five SMSAs would have additional opportunities for solitude and nonmotorized recreation activities. The geographic distribution of wilderness in southwest Arizona would be enhanced by the establishment of seven wilderness areas. The Organ Pipe Wilderness is presently the only wilderness area in southwest Arizona. Designation of these seven areas would add no new ecosystems to the NWPS but would create additional representatives of the paloverde-cactus shrub and creosotebush-bursage vegetation types.

All seven areas analyzed suitable are considered manageable as wilderness over the long term. Minor manageability problems include nonfederal surface and mineral inholdings, possible mining claim development, and motorized vehicle use. The overall impacts of these problems on wilderness values and manageability are considered insignificant.

Acquisition through land exchange of 3,083 acres of state surface and mineral lands and 2,141 acres of state mineral rights within the seven WSAs would facilitate wilderness management of the area and enhance botanical, wildlife, wilderness, and related multiple resource values. Acquisition of the above acreage would allow such parcels to be incorporated into the wilderness proposals.

Nondesignation of five entire WSAs (Little Horn Mountains West, East Clanton Hills, Signal Mountain, Butterfield Stage Memorial, and South Maricopa Mountains) and portions of the seven other WSAs would return these lands to multiple use management. This action could result in a loss or damage of wilderness values over the long

term. Land uses detrimental to wilderness and supplemental values could be permitted, including mineral and energy development, rights-of-way and other land actions, and motorized vehicle use.

Mineral exploration and development could occur in all areas not designated wilderness as they would remain open to mineral entry. Surface disturbance could occur from assessment work, road construction, exploratory activities, and small-scale mining operations. If development occurred, there could be adverse impacts to wilderness resources.

Motorized vehicle use, new rights-of-way, and other land actions could diminish or eliminate the natural character of nondesignated areas. Utility lines could be constructed through portions of the New Water Mountains, Littlehorn Mountains, Signal Mountain, North Maricopa Mountains, South Maricopa Mountains, and Butterfield Stage Memorial WSAs. Outstanding opportunities for solitude and primitive recreation experiences could decline or be permanently lost in such areas.

The areas not designated wilderness would revert to VRM Class II, III, or IV visual management protection objectives. These VRM classes pose fewer restrictions on layout, design, and construction of proposed developments than the Class I objectives required by wilderness. Contrasts in the landscape resulting from developments could be more noticeable since projects affecting the scenery could be allowed. Small scale projects for wildlife and livestock could slightly impair natural values because they would be installed without wilderness constraints on placement and design.

The ability of nondesignated areas to enhance the present diversity of the NWPS would be lost. Additional wilderness opportunities for residents of five SMSAs would be forgone by nondesignation of these areas.

Conclusion. For the portions of seven WSAs analyzed suitable for wilderness designation (New Water Mountains, Little Horn Mountains, Eagletail Mountains, Face Mountain, Woolsey Peak, North Maricopa Mountains, and Table Top Mountains) there would be short- and long-term beneficial impacts to the wilderness resource by preserving the natural values, outstanding opportunities for solitude and primitive recreation, supplemental values, and enhancing the diversity of the NWPS in Arizona.

For those five entire and seven partial WSAs analyzed nonsuitable for designation, there could be long-term loss or damage to the wilderness resources because of mineral development, motorized vehicle use, and rights-of-way construction.

Impacts on Land Uses

Conclusion. The *Resource Protection* alternative would not impact the routine lands program except that designation of seven WSAs (New Water Mountains, Little Horn Mountains, Eagletail Mountains, Face Mountain, Woolsey Peak, North Maricopa Mountains, and Table Top Mountains—326,551 acres) would preclude future land actions within these areas. This alternative would allow the development of the land tenure adjustment program and the development of utility corridors with the exception of the El Paso corridor. If this alternative is accepted, the Eagletail WSA (2-128) would conflict with approximately five miles of the proposed EL Paso corridor.

Impacts on Wildlife

Rangeland Management Issue

Conclusion. Under this alternative competition between cattle and mule deer would be somewhat alleviated by reductions in stocking rates on Beloat, Bighorn, Cameron, Conley, and Lower Vekol allotments. This represents a significant long-term benefit for mule deer. A 612-AUM reduction in livestock use on Cameron allotment would also significantly benefit Sonoran pronghorn. Slight benefits to desert bighorn sheep and desert tortoise would also occur. No change would occur in riparian habitat condition immediately, but a slight beneficial impact may result because of reductions called for under this alternative.

Wilderness Issue

Conclusion. Under the *Resource Protection* alternative 241,170 acres of crucial desert bighorn sheep habitat and 17,570 acres of crucial desert tortoise habitat would be protected under wilderness designation (Table 4-14). This represents almost a two-fold increase in protected acreage for both species over the *Proposed Action*. This alternative provides significant beneficial impacts to both species.

TABLE 4-14
ACRES OF HABITAT PROTECTED UNDER THE RESOURCE PROTECTION ALTERNATIVE
Bureau of Land Management, Phoenix District, Arizona

WSAs	Crucial Desert Bighorn Sheep Habitat*	Crucial Desert Tortoise Habitat**
New Water Mountains	24,120	5,820
Little Horn Mountains	45,320	0
Eagletail Mountains	62,520	0
Face Mountain	0	0
Woolsey Peak	58,240	0
North Maricopa Mountains	28,190	7,050
Table Top Mountains	22,780	4,700
TOTAL	241,170	17,570

* Crucial desert bighorn sheep habitat: habitat necessary to maintain current bighorn populations. Population density varies.
** Crucial desert tortoise habitat: habitat with tortoise population densities of 50 tortoise per square mile or greater. All WSAs contain tortoise populations.
SOURCE: Phoenix District files

Land Tenure Issue

Conclusion. Land disposal and split mineral estate impacts would be the same under the *Resource Protection* alternative as under the *Proposed Action.* In addition to the wildlife habitat acquired by the wilderness issue, BLM would acquire 14,140 acres of riparian habitat along the Gila River for protective management for a total of 16,340 acres. This would increase the benefits for riparian bird species over that provided under the *Proposed Action.* Lands exchanged for desert bighorn sheep habitat management would remain the same as under the *Proposed Action.*

Utility Corridor Issue

Conclusion. Utility corridor impacts to wildlife under the *Resource Protection* alternative would be the same as under the *Proposed Action.*

Impacts on Minerals and Energy

Conclusion. The *Resource Protection* alternative would impact mineral exploration in portions of seven WSAs (326,551 acres) that are analyzed as being suitable for wilderness designation. This represents approximately 16 percent of the RMP/EIS area that would be withdrawn from mineral entry. A total of 666 mining claims and 326,551 acres of oil and gas leases would be adversely affected. Five entire WSAs and portions of seven WSAs would be analyzed as unsuitable for wilderness designation and would be returned to other multiple use management.

Acquisition of 42,505 acres would be beneficial to miners and the mining industry because this land would be open to mineral exploration. Acquiring 112,160 acres of state and private mineral estate would be beneficial because BLM would control both the surface and subsurface lands.

Impacts on Soils

The reduction of livestock would be beneficial in reducing soil erosion in and adjacent to the heavily used drainageways along the Gila River. Any proposed soil-disturbing project in the high soil-blowing and severe-erosion areas would be evaluated before being authorized.

Conclusion. Soils would not be significantly impacted under this alternative, although the reduction of livestock would be beneficial to the fragile desert soils (desert pavement). Any proposed soil disturbance project would be evaluated using site-specific environmental assessments on a case-by-case basis.

Impacts on Cultural Resources

Conclusion. Under the *Resource Protection* alternative, all impacts to cultural resources for all issues except the wilderness issue will be the same as under the *Proposed Action.* Designating portions of seven ESAs (326,551 acres) as wilderness would have the same general impacts as those described in the *Proposed Action.* Approximately 45 percent of the proposed WSA acres or 145,513 acres may contain cultural resources which would be beneficially affected (see Table 4–6).

In addition, several more significant cultural sites and areas would have added protection, including a portion of the Maricopa Mountain (which has significance to the Pima, Sand Papago, and Maricopa Indians), the Butterfield Stage Route, and a portion of the Dendora Valley Archaeological District.

Impacts on Recreation

Conclusion. Under the *Resource Protection* alternative a total of 170.45 miles of vehicle ways, six miles of roads, and 326,551 acres would be closed to vehicle use (Table 4–8). An estimated increase of 5,900 visitor days/year of recreation use is expected under this alternative.

Impacts on Economic Conditions

This section describes the economic impacts of the *Resource Protection* alternative on RMP/EIS area ranchers and the economy of the economic study area (ESA). Impacts from expected changes in outdoor recreation use, and oil and gas lease revenues will also be described.

Ranch Budgets

Small Ranch. Under the *Resource Protection* alternative the herd size of the typical small-size ranch would be reduced by 24 percent from 42 cows to 32 cows and would remain at this level over the long term. Yearly net revenue would decrease by 33 percent from $3,743 to $2,512 and would remain at that level over the long term (Table 4–9). The present value of 20 years of net revenue under present management amounts to $37,094, whereas such revenues under the Resource Protection alternative would amount to $25,440 (Table 4–10).

Medium Ranch. Under this alternative the herd size of the typical medium-size ranch would be reduced by 47 percent from 140 cows to 74 cows and would remain at this

level over the long term. Yearly net revenue would decrease by 54 percent from $13,112 to $6,037 and remain at that level over the long term. The present value of net revenue under present management for the medium-size ranch amounts to $114,839, whereas such revenues under the *Resource Protection* alternative amount to $59,908.

Large Ranch. Under this alternative the herd size of the typical large-size ranch would be reduced 50 percent from 518 cows to 260 cows and would remain at this level over the long term. Yearly net revenue would decrease 62 percent from $34,863 to $13,419 and remain at that level over the long term. The present value of net revenue under present management amounts to $345,498, whereas such revenues under the Resource Protection alternative amount to $135,899.

Ranch Finance

Ranch values are based on a ranch's authorized grazing preference figures at an estimated $125 per AUM or $1,500 per animal unit (BLM, 1982). The *Resource Protection* alternative would severely reduce the authorized grazing preference and thus the value of ranches in the RMP/EIS area. The value of the typical small ranch would decrease 21 percent from an existing value of $72,000 to $57,000 and remain at that value over the long term. The value of the typical medium-size ranch would decrease 47 percent from an existing value of $241,500 to $127,500 and remain at that value over the long term. The value of the typical large-size ranch would decrease 50 percent from an existing value of $894,000 to $445,500 and remain at that level over the long term.

Regional Economics

Under the *Resource Protection* alternative annual livestock sales of RMP/EIS area ranchers would be reduced 48 percent from $739,493 to $383,882 and remain at that level over the long term (Table 4–11). Ranch hired labor would decrease from 13.8 workyears to 9.6 workyears. The reductions in livestock sales and ranch hired labor are not expected to significantly impact the ESA.

Recreation Economics

Designating seven WSAs as wilderness is expected to increase visitor use in the RMP/EIS area by 5,900 visitor days. Annual recreation related expenditures would thus increase by $22,538, an insignificant amount when viewed on a regional level.

Mineral Economics

The seven WSAs analyzed for designation under this alternative contain deposits of various metallic and nonmetallic minerals, but reliable reserve estimates for these commodities and their locations are not known. Some of the deposits of gold, silver, and copper may prove economically viable. However, it is nearly impossible with existing information to estimate the impact that extraction of these and other mineral commodities would have on the local economy and work force.

Wilderness designation would prohibit mineral entry in the seven WSAs analyzed for designation. Also, development of mineral rights established prior to the designation date would be subject to increased regulation of access and reclamation in order to protect wilderness values. This may result in additional costs to mine operators and therefore discourage development.

The seven WSAs analyzed for designation are all classified as having a low potential for oil and gas development. A number of oil and gas leases have been established in the WSAs, but to date no production has occurred. Currently the lessees pay the government one dollar per acre per year for these oil and gas leases. One-half of the lease revenue is then returned to the state. Under the *Resource Protection* alternative 326,551 designated acres would be withdrawn from BLM's oil and gas leasing program. The loss of this acreage from the leasing program would result in a loss of potential lease revenues for both BLM and the state. Table 4–12 shows the acres which would be withdrawn from oil and gas leasing and the potential losses in lease revenue for BLM and the state. Under this alternative BLM and the state would each potentially lose $163,276 per year. When compared to the total oil and gas lease collections BLM receives nationally, the loss of this revenue would be less than one percent.

Conclusion. The overall economic impact of the *Resource Protection* alternative on RMP/EIS ranches would be great. Ranches now operating at their authorized grazing preference would be required to reduce their herd sizes dramatically. Ranches now operating efficiently would have excess equipment and range improvements. Fixed costs on a per cow basis would increase and possibly many large- and medium-sized ranches would be forced out of business. Ranch values would decrease sharply, thus reducing a rancher's asset base and making it difficult to borrow money. In addition, net revenue would decrease, making it difficult for the ranch operation to pay family living expenses, replace equipment, and pay off existing debts. Although individual ranchers would suffer under this alternative, the economy of the ESA would not be significantly impacted.

Under the *Resource Protection* alternative the impacts to the minerals industry cannot be determined because of the lack of any specific development plans for the minerals present in each WSA. The withdrawal of seven WSAs from mineral entry would potentially cause long-term impacts to the ESA's economy.

Impacts on Social Elements

Conclusion. Under the *Resource Protection* alternative ranchers would be negatively impacted due to losses in income and permit value. Those with a high dependency on BLM AUMs would be most affected. (See economics section.) The attitude of affected ranchers would be expected to be negative toward the BLM.

ENVIRONMENTAL PROTECTION ALTERNATIVE

Impacts on Rangeland Management

Livestock grazing would be phased out on 2,009,232 acres (30 perennial-ephemeral allotments and grazing leases and 18 ephemeral allotments) in the Lower Gila South RMP/EIS area over a five-year period. No ephemeral licenses would be issued on the 30 perennial-ephemeral allotments and leases or the 18 ephemeral allotments. The livestock industry would annually lose 60,524 AUMs of livestock forage and an undetermined amount of ephemeral forage. Livestock production would be reduced by more than 5,000 head of cattle.

Livestock operations would be adversely impacted if there were no more grazing allowed on public lands in this RMP/EIS area. Perennial-ephemeral allotments would be most significantly impacted since they are permitted to graze livestock throughout the year. Ephemeral allotments would also be adversely impacted but not to the same extent. These allotments do not consistently produce enough perennial forage to sustain a base herd on a yearlong basis and are not grazed on a regular basis from year to year.

Conclusion. All livestock grazing would be phased out in the Lower Gila South RMP/EIS area. Livestock operators would be adversely impacted by cancellation of all grazing privileges on public lands. The livestock industry would lose 60,524 AUMs of livestock forage annually.

Impacts on Vegetation

Eliminating livestock grazing on 2,009,232 acres would beneficially impact vegetation. Forage species grazed by livestock would be allowed to complete growth and reproduction. Vegetation would improve in vigor and production.

Complete yearlong rest of public lands would provide the opportunity for completion of growth and reproductive cycles. The initial rate of change would depend on current rangeland condition and trend, range site productivity, and plant vigor. The most significant increase would occur in high response areas with productive soils and higher rainfall. Low response areas would not improve in the short term, and more than 25 years might be needed for measurable improvement.

Rangeland condition on allotments with stable or upward apparent trends would improve as a result of eliminating grazing pressure on key forage species. Condition would stabilize once the potential of the various areas was reached. Condition on allotments with downward apparent trends would either stabilize or reverse from the yearlong rest. The rate of improvement would depend on plant vigor and climatic conditions. The lower a plant's vigor the slower its rate of recovery. Plant composition would also change in the long-term as condition improves, but to a small extent.

Conclusion. Eliminating livestock grazing under this alternative would be beneficial to the vegetation resources. Vegetation would improve in vigor and production.

Impacts on Wilderness Values

The *Environmental Protection* alternative would designate all 12 WSAs (621,931 acres) as wilderness. Wilderness designation would have short- and long-term beneficial impacts on wilderness and associated resource values by providing protection from most surface-disturbing activities. Withdrawal from mineral exploration and development, closure to motorized vehicles, and prohibition of new rights-of-way, disposal, or other land actions would preserve the natural character of extensive and relatively undisturbed Sonoran Desert basin and range landscapes. Opportunities for outstanding solitude and primitive recreation experiences in a natural setting would be significantly increased and protected for nonmotorized recreationists. Hiking, backpacking, camping, walk-in hunting, sightseeing, and nature study would be the primary activities benefited by wilderness.

Protecting the wilderness resource values would in turn benefit other related resource values such as wildlife, cultural, soils, vegetation, protected plants, scenic, and visual resources. Designating these lands as wilderness would provide long-term benefits by preserving land to permit the natural ecological processes to continue with little or no human interference. Two important wildlife habitat areas would be protected by wilderness: 373,850 acres of crucial desert bighorn habitat and 46,770 acres of crucial tortoise habitat. All 218,560 acres in the 12 WSAs likely to contain cultural resources would be maintained in an essentially undisturbed condiLtion.

By eliminating soil disturbances associated with mineral operations and ORV use, fragile desert pavement soils would remain undisturbed. Also, wilderness designation would have long-term positive impacts on vegetation and populations of four protected plants by precluding development activities possibly detrimental to their habitats.

Scenic and visual resources would also be maintained. All areas would be designated as VRM Class I areas.

Development proposals in Class I areas are more restricted, and the objectives and management requirements permit little or no evident changes in the landscape.

Wilderness values (solitude and naturalness) could be preserved with overall positive impacts due to removing most human influences associated with livestock grazing.

Wilderness designation of the 12 areas would contribute to the diversity of the NWPS in Arizona. Additional opportunities for solitude and primitive recreation would become available for residents of five SMSAs. The geographic distribution of wilderness in Arizona would also be enhanced by the establishment of 12 wilderness areas in southwest Arizona, an area which presently has one National Park Service wilderness (Organ Pipe). The two ecosystems in the WSAs are already represented in the NWPS. While designation would not add new ecosystem types, it would greatly increase existing areas and acreage representing the American Desert Province by adding 96,221 acres of creosotebush-bursage ecosystem and 525,710 acres of paloverde-cactus shrub ecosystem.

Acquisition through land exchange of 6,396 acres of surface and mineral lands and 14,189 acres of mineral rights within or adjacent to the WSAs is recommended. Acquisition will facilitate wilderness management of the areas and enhance botanical, wildlife, and related multiple resource values. Acquisition of the above acreage would allow such parcels to be incorporated into the wilderness proposals.

Impacts on wilderness values from mining claim development, ORV use, cherrystem boundaries, and the presence of nonfederal surface/mineral and mineral inholdings might occur in some WSAs with the selection of the *Environmental Protection* alternative. The foremost manageability question is the possible conflict with development of valid mining claims that could occur in some WSAs.

Conclusion. Under the *Environmental Protection* alternative all 12 WSAs (621,931 acres) would be designated wilderness and included in the NWPS. There would be short- and long-term beneficial impacts on wilderness and associated resource values. Opportunities for solitude and primitive recreation would be maintained in a wide variety of natural landscapes. Substantial acreage of crucial desert bighorn sheep and desert tortoise habitat would be protected from surface disturbance. Scenic and visual resources would be preserved unimpaired by human activity. Cultural resources and protected plant habitats would be sustained. The diversity of the NWPS in Arizona would be enhanced by the designation of 12 wilderness areas in southwest Arizona.

The *Environmental Protection* alternative does not include any consideration of manageability. Some wilderness boundaries may require constant patrolling and artificial barriers to maintain wilderness values. Some damage to wilderness values might result from development of nonfederal inholdings, motorized vehicle use, and development of valid mining claims.

Impacts on Land Uses

Conclusion. This alternative would not affect the routine lands program except that designation of 12 WSAs would preclude further land actions within these areas. Under this alternative a land tenure adjustment program would be developed but several proposed utility corridors would be impacted. Table 4–15 shows each proposed corridor, the wilderness area that would conflict with the corridor's designation, and the extent of the conflict (miles).

TABLE 4-15
UTILITY CORRIDOR AND DESIGNATED WILDERNESS AREA CONFLICTS
Bureau of Land Management, Phoenix District, Arizona

Proposed Corridor	WSAs	Miles of Conflict
1. I-10	2-125, New Water Mountains	4.5
2. El Paso	2-127, Little Horn Mountains	4.0
3. El Paso	2-128, Eagletail Mountains	15.0
4. El Paso	2-157, N. Maricopa Mountains	8.0
5. Liberty - Gila Bend	2-157, N. Maricopa Mountains	6.0
6. San Diego Interconnect	2-136, Face Mountain	5.5
7. San Diego Interconnect	2-138, Signal Mountain	6.0
8. Gila Bend - Santa Rosa	2-164, Butterfield Stage Memorial	6.0
9. Gila Bend - Santa Rosa	2-163, S. Maricopa Mountains	4.5

SOURCE: Phoenix District files

Impacts on Wildlife

Rangeland Management Issue

Mule Deer and Sonoran Pronghorn. Under the *Environmental Protection* alternative all existing forage competition between cattle and mule deer would be eliminated. Long-term improvement in browse condition could occur in those areas now heavily used by livestock. This would be a significant long-term benefit to mule deer. Similarly this alternative represents a significant long-term benefit to Sonoron pronghorn. Competition on Cameron allotment would be totally eliminated.

Desert Bighorn. Desert bighorn sheep exposure to livestock transmitted diseases would be eliminated under this alternative because all livestock grazing would be eliminated.

Desert Tortoise. Competition for annual and perennial forage between cattle and tortoise would be totally eliminated. This would be a significant long-term benefit.

Riparian Habitat. Some increase in cottonwood reproduction is possible if this alternative is implemented. Some decrease of mesquite reproduction is possible due to the elimination of cattle as a dispersion agent of mesquite seeds.

This alternative would result in significant improvement of Vekol Valley grassland (which provides habitat for six varieties of amphibians), and the dike system (which provides significant waterfowl habitat within Vekol Valley). Grass cover would increase significantly, providing increased habitat for amphibians, and shoreline vegetation

would increase around the reservoirs (see Chapter 3, Waterfowl section), thus providing increased escape cover for waterfowl.

Some loss of waterfowl resting points and watering points for mule deer and small game would occur if livestock wells and reservoirs would not be maintained. As a result, long-term adverse impacts may occur to these species of wildlife. Short-term loss of some watering points for mule deer and small game would occur if wells were deactivated by ranchers.

Sonoran pronghorn would not be significantly affected by loss of livestock waters nor would bighorn sheep, since neither species use livestock waters to any great extent.

Some additional fencing would be needed to prevent livestock trespass but in many areas fencing could be removed, particularly between allotments; hence bighorn sheep would have fewer impediments to migration and gain a slight benefit.

Conclusion. Wildlife would significantly benefit under this alternative, because improvement of habitat would occur in the long term.

Wilderness Issue

Conclusion. Under the *Environmental Protection* alternative, 373,850 acres of crucial desert bighorn sheep habitat and 46,770 acres of crucial desert tortoise habitat would be protected by wilderness designation (Table 4–16). This represents a significant benefit for both species.

Land Tenure Issue

Conclusion. Land disposal and split mineral estate impacts would be same under the *Environmental Protection* alternative as under the *Proposed Action*. Under this alternative BLM would acquire 15,640 acres of riparian habitat. This acreage, in addition to existing BLM lands within the Gila River channel, comprises virtually all the valuable habitat (saltcedar, cattail, or mesquite thickets). This would provide the greatest degree of protection for riparian habitat of all the alternatives. Lands exchanged for desert bighorn sheep habitat management would remain the same as under the *Proposed Action*.

Utility Corridor Issue

Conclusion. Utility corridor impacts to wildlife would be the same as under the *Proposed Action*.

TABLE 4-16
ACRES OF HABITAT PROTECTED UNDER THE ENVIRONMENTAL PROTECTION ALTERNATIVE
Bureau of Land Management, Phoenix District, Arizona

WSAs	Crucial Desert Bighorn Sheep Habitat*	Crucial Desert Tortoise Habitat**
New Water Mountains	34,320	6,860
Little Horn Mountains West	12,660	0
Little Horn Mountains	59,680	0
Eagletail Mountains	70,200	0
East Clanton Hills	18,280	5,480
Face Mountain	0	0
Signal Mountain	7,860	980
Woolsey Peak	59,680	0
North Maricopa Mountains	39,280	7,050
South Maricopa Mountains	42,800	17,830
Butterfield Stage Memorial	6,310	2,870
Table Top Mountains	22,780	5,700
TOTAL	373,850	46,770

* Crucial desert bighorn sheep habitat: habitat necessary to maintain current bighorn populations. Population density varies.
** Crucial desert tortoise habitat: habitat with tortoise population densities of 50 tortoise per square mile or greater. All WSAs contain tortoise populations.
SOURCE: Phoenix District files

Impacts on Minerals and Energy

Conclusion. The *Environmental Protection* alternative would have a significant adverse impact on the minerals industry. Designating 12 WSAs as wilderness would withdraw 621,931 acres from mineral entry. This represents approximately 30 percent of the Lower Gila South RMP/EIS area that would be closed to any type of mineral exploration and development. This withdrawal would adversely affect 3,152 mining claims and 621,931 acres of oil and gas leases. Several areas of high mineral potential will be withdrawn. Since most minerals of any value lie within the mountain ranges, this alternative would essentially lock up the most significant areas where mining would most likely take place.

Acquisition of 47,198 acres would be beneficial because these areas would be open to mineral exploration and development. Acquiring 112,160 acres of state and private mineral estate would be beneficial, allowing BLM to control both surface and subsurface lands in this RMP/EIS area.

Impacts on Soils

The elimination of livestock would be beneficial in reducing soil erosion in and adjacent to the major drainageways and the Gila River. Any proposed soil-disturbing projects in the high soil-blowing and the severe-erosion drainageways would be evaluated on a case-by-case basis.

Conclusion. The elimination of livestock grazing would be beneficial to the fragile desert soils (desert pavement). Any proposed soil-disturbing projects in the fragile desert soil areas would be evaluated using site-specific environmental assessments on a case-by-case basis.

Impacts on Cultural Resources

Conclusion. Under the *Environmental Protection* alternative impacts to cultural resources for all issues except wilderness would be the same as the *Proposed Action.* Designating 12 WSAs (621,931 acres) as wilderness would result in added protection for more than twice as many acres with a high probability of containing cultural resources than under the *Proposed Action.* Approximately 36 percent of the analyzed WSA acres (218,560 acres) may contain cultural resources which would be beneficially affected (see Table 4–6). In addition the historic Butterfield Stage Route and additional acres in the Maricopa and Gila Bend Mountains with cultural/religious significance would be beneficially affected.

Impacts on Recreation

The cumulative impacts of the *Environmental Protection* alternative would close 621,931 acres, 366.50 miles of vehicle ways, and 7.35 miles of road to ORV use. In addition, there would be a shifting of the types of recreation use now occurring, including an estimated increase in recreation use of 5,200 visitor days/year.

Impacts on Economic Conditions

This section describes the economic impact of the *Environmental Protection* alternative on RMP/EIS area ranchers and the economy of the three-county economic study area. Impacts from expected changes in outdoor recreation use and oil and gas lease revenues will also be described.

Ranch Budgets

Small, Medium, and Large Ranches. Under the *Environmental Protection* alternative the authorized grazing preference on all ranches would be cancelled. RMP/EIS area ranchers are from 86 to 96 percent dependent on BLM forage. Because of the high dependency it is assumed that all RMP/EIS area ranchers would no longer be in business under this alternative.

Ranch Finance

Under the *Environmental Protection* alternative ranches in the EIS area would no longer be economic units, thus their value would be reduced to zero. The typical small rancher would lose $72,000 in ranch value, the typical medium-size rancher would lose $241,500, and the typical large-size rancher would lose $894,000. Ranch operators who owe money on their ranch operation would be encumbered with no method to repay this debt other than to seek outside employment.

Regional Economics

The *Environmental Protection* alternative would eliminate all livestock sales and hired labor on all RMP/EIS area ranches. The 17 RMP/EIS area ranches' $739,493 annual contribution to the ESA's total livestock sales would be lost. In addition, the 13.8 workyears of hired labor now used on the RMP/EIS area ranches would no longer be needed. The loss of the RMP/EIS area's ranch operations, however, would not significantly impact the economy of the ESA.

Recreation Economics

Designating 12 WSAs as wilderness under the *Environmental Protection* alternative is expected to increase visitor use in the RMP/EIS area by 5,900 visitor days. Annual recreation related expenditures would thus increase by $19,864, an insignificant amount when viewed on a regional level.

Mineral Economics

The 12 WSAs analyzed for designation under this alternative contain deposits of various metallic and nonmetallic minerals, but reliable reserve estimates for these commodities and their locations are not known. Some of the deposits of gold, silver, and copper could prove economically viable. However, it is nearly impossible with existing information to estimate the impact that extraction of these and other mineral commodities would have on the local economy and work force.

Wilderness designation would prohibit mineral entry in the 12 WSAs analyzed for designation. Also, development of mineral rights established prior to the designation date would be subject to increased regulation of access and reclamation in order to protect wilderness values. This could result in additional costs to mine operators and therefore discourage development.

The 12 WSAs analyzed for designation are all classified as having a low potential for oil and gas development. A number of oil and gas leases have been established in the WSAs, but to date no production has occurred. Currently the lessees pay the government one dollar per acre per year for these oil and gas leases. One-half of the lease revenues is then returned to the state. Under the *Environmental Protection* alternative 621,931 designated acres would be withdrawn from BLM's oil and gas leasing program. The loss of this acreage from the leasing program would result in a loss of potential lease revenues for both BLM and the state. Table 4–12 shows the acres which would be withdrawn from oil and gas leasing and the potential losses in lease revenue for BLM and the state. Under this alternative BLM and the state would each potentially lose $310,966. When compared to the total oil and gas lease collections BLM receives nationally, the loss of this revenue would be less than one percent.

Conclusion. Under the *Environmental Protection* alternative individual ranchers in the RMP/EIS area would no longer be able to remain in business. In addition, ranch operators who owe money on their ranch operations would be encumbered with that debt with no ranch income available to repay that debt. The loss of the employment and earnings derived from RMP/EIS area ranch operations would not significantly impact the economy of the ESA.

Under this alternative economic impacts to the minerals industry cannot be determined because of the lack of any specific development plans for the minerals present in each WSA. The withdrawal of the 12 WSAs from mineral entry would potentially have long-term impacts to the ESA's economy.

Impacts on Social Elements

Conclusion. Under the *Environmental Protection* alternative ranchers in the short and long term would be negatively impacted due to losses in income and permit value. Ranchers with a high dependency on BLM AUMs would be severely affected due to the loss of all BLM AUMs. The attitude of affected ranchers would probably be extremely negative toward the BLM and this alternative.

MITIGATING MEASURES

The Management Guidance Common to All Alternatives section in Chapter 2 identifies by resource the measures that will be taken to mitigate possible impacts to the natural environment of the area. Management is committed to following the practices and procedures listed in an effort to protect the environment of the Lower Gila South RMP/EIS area.

The interdisciplinary team did not identify additional mitigating measures needed to avoid adverse impacts of the *Proposed Action* or the alternative..

UNAVOIDABLE ADVERSE IMPACTS

Unavoidable adverse impacts are the adverse impacts of the *Proposed Action* that cannot be mitigated. Such impacts are often referred to as residual impacts. They are unavoidable because the *Proposed Action* directly conflicts with other values.

The unavoidable adverse impacts of the *Proposed Action* are as follows.

- Wilderness values may be lost on 431,540 acres as a result of mineral development, motorized vehicle use, and rights-of-way development.
- The *Proposed Action* would close 190,391 acres to mineral entry. No prospecting, exploration, or mining would be allowed, subject to valid existing rights. A total of 190,391 acres of oil and gas leases and 199 mining claims would be affected.
- Off-road vehicle use would be affected by the closure of 93.55 miles of vehicle ways, 6.0 miles of roads, and 190,391 acres of wilderness.

IRREVERSIBLE AND IRRETRIEVABLE COMMITMENTS OF RESOURCES

This section identified the irreversible and irretrievable commitment of resources resulting from the *Proposed Action.* The term irreversible refers to what is incapable of being reversed; once something is started, it would continue. The term irretrievable means irrecoverable; once something is used, it cannot be replaced.

The *Proposed Action* proposes no irreversible or irretrievable commitment of resources other than the possible loss or damage of 431,540 acres of natural and wilderness values within those areas not designated wilderness.

RELATIONSHIP BETWEEN LOCAL SHORT-TERM USES OF MAN'S ENVIRONMENT AND MAINTENANCE AND ENHANCEMENT OF LONG-TERM PRODUCTIVITY

The short-term uses of man's environment will not change significantly from the present. In the long term, 147,090 acres of desert bighorn sheep and 10,520 acres of desert tortoise habitat will be protected within those areas designated wilderness under the *Proposed Action.* This will maintain or improve the habitat areas protected.

Chapter 5

CONSULTATION AND COORDINATION

CHAPTER 5

CONSULTATION AND COORDINATION

INTRODUCTION

The *Lower Gila South Resource Management Plan/Environmental Impact Statement* (RMP/EIS) was prepared by an interdisciplinary team of resource specialists from the Lower Gila Resource Area, Phoenix District, and Arizona State Office. Writing of the RMP/EIS began in September 1983, following a complex process that began in 1978. This process included wilderness and rangeland inventories, public participation, interagency coordination, and preparation of the management situation analysis (on file in the Phoenix District Office). Consultation and coordination with agencies, organizations, and individuals occurred in a variety of ways throughout the planning process.

SCOPING AND PUBLIC PARTICIPATION

The Phoenix District Office and the Lower Gila Resource Area Office invited public participation throughout the development of this RMP/EIS. The following list summarizes the actions taken.

1978–1979	Initial wilderness inventory and public comment period.
1979–1980	Intensive wilderness inventory and public comment period.
November 1980	Mailout and news release to inform the public and invite public participation in the planning process.
November 1980	Notice of Intent to Prepare the Lower Gila South Resource Management Plan published in the *Federal Register.*
December 1980	Issue identification mailout to interested parties.
December 1980	Special issue identification mailout to five Indian tribes in area.
January 1981	District Multiple-Use Advisory Council briefing.
January 1981	Public scoping meetings conducted in Ajo, Gila Bend, Quartzsite, Buckeye, and Phoenix.
March 1981	Public meeting summaries mailed to meeting attendees.
March and April 1981	Local, state, and federal government officials contacted individually for their contribution to issue identification.
April 1981	District Multiple-Use Advisory Council briefing on status of issue development.
April 1983	Scoping material mailed to concerned individuals and agencies.
May 24 to 26, 1983	Public meetings held in Gila Bend, Phoenix, and Tucson.
June 10, 1983	Notice of Intent to Prepare an EIS for the Lower Gila South Planning Area published in the *Federal Register.*
June 15, 1983	Letters sent to Indian tribal leaders.
February 1, 1985	Draft made available to public
March 11 to 14, 1985	Public meetings in Quartzsite and Ajo, Arizona
March 12 to 13, 1985	Public hearings in Phoenix and Gila Bend, Arizona
May 2, 1985	Public comments ended.

In addition, BLM specialists met many times in the field and at other locations with interested parties. BLM representatives consulted with the Soil Conservation Service, Arizona State Land Department, and Arizona Game and Fish Department to check resource data, coordinate methodologies, and exchange information.

LIST OF AGENCIES, ORGANIZATIONS, AND PERSONS TO WHOM COPIES OF THIS STATEMENT HAVE BEEN SENT

BLM will request comments on the draft EIS from all affected grazing permittees, interested individuals, federal and state agencies, and interest groups. Due to the size of the mailing list (800), the following is a partial list of those receiving the document.

Federal Agencies

Advisory Council on Historic Preservation
Environmental Protection Agency
Department of Agriculture
    Forest Service
    Soil Conservation Service
Department of Defense
    Army Corps of Engineers
    U.S. Air Force
Department of Energy
Department of the Interior
    Bureau of Mines
    Bureau of Indian Affairs
    Bureau of Reclamation
    Fish and Wildlife Service
    Geological Survey
    National Park Service
Department of Transportation
    Federal Aviation Administration

Arizona State Agencies

Arizona Commission of Agriculture and Horticulture
Arizona Department of Health Services
Arizona Department of Library, Archives, and Public Records
Arizona Department of Transportation
Arizona Game and Fish Department
Arizona Natural Heritage Program
Arizona Office of Economic Planning and Development
Arizona Oil and Gas Commission
Arizona Outdoor Recreation Coordinating Commission
Arizona State Clearinghouse
Arizona State Historic Preservation Officer
Arizona State Land Commissioner
Arizona State Parks Board
Arizona Water Resources Department
Bureau of Geology and Mineral Technology
Governor of Arizona
Governor's Commission on Arizona Environment
Mineral Resource Department

Local Agencies

Central Arizona Association of Governments
City of Buckeye
City of Gila Bend
City of Phoenix
City of Tucson
District IV Council of Governments
District V Council of Governments
La Paz County Board of Supervisors
La Paz County Planning and Zoning Department
Maricopa Council of Governments
Maricopa County Board of Supervisors
Maricopa County Planning and Zoning Commission
Pima Association of Governments
Pima County Board of Supervisors
Pima County Planning and Zoning Department
Pinal County Board of Supervisors
Pinal County Planning and Zoning Department
Yuma County Board of Supervisors
Yuma County Planning and Zoning Department

Indian Tribes and Councils

Fort Mojave Tribal Council
Chemehuevi Tribal Council
Quechan Tribal Council
Cocopah Tribal Council
Colorado River Indian Tribes
Havasupai Tribal Council
Hualapai Tribal Council
Tonto Apache Indian Tribal Council
Yavapai-Apache Community Council
Yavapai-Prescott Board of Directors
White Mountain Apache Tribal Council
Hopi Tribal Council
Kaibab Band of Paiute Indians
Papago Council
Fort McDowell Mohave-Apache Community Council
Pascua Yaqui Tribal Council
Ak-Chin Indian Community
Gila River Indian Community
Salt River Pima-Maricopa Community Council
San Carlos Apache Tribal Council
Navajo Tribal Council

Other Organizations

Arizona Cattle Growers Association
Arizona Desert Bighorn Sheep Society
Arizona Mining Association
Arizona Mining and Prospecting Association
Arizona Prospectors and Small Mine Operators Association
Arizona Wildlife Federation
Arizona Wool Growers Association
Arizona 4-Wheel Drive Association
Audubon Society
Defenders of Wildlife
Desert Tortoise Council
League of Women Voters
Legal Organizations
Mining Companies
Phoenix District Advisory Council
National Audubon Society
National Council of Public Land Users
Natural Resources Defense Council, Inc.
News Media

Oil and Gas Companies
ORV Clubs
Phoenix-Lower Gila Resource Areas Grazing Advisory Board
Public Lands Council
Rockhound Clubs
Sierra Club (Local and National)
The Wilderness Society
Utility Companies
Wild Burro Protection Association
Wildlife Society

Elected Representatives

Federal

Senator Dennis DeConcini
Senator Barry Goldwater
Representative John McCain
Representative Jim McNulty
Representative Eldon Rudd
Representative Bob Stump
Representative Morris K. Udall

State

Senator Jones Osborn
Senator Polly Getzwiller
Senator Peter Rios
Senator S.H. "Hal" Runyon
Representative Bob Denny
Representative Henry Evans
Representative Jim Hartdegen
Representative Roy Hudson
Representative Frank McElhaney
Representative Robert McLendon
Representative Richard Pacheco
Representative James Ratliff

LIST OF PREPARERS

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BS in Agronomy, Kansas State University. Bill wrote Chapter 5 of this RMP/EIS and served as Technical Coordinator. He has worked 19 years for BLM.

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Hank Molz, Surface Protection Specialist*
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Jeanette Pranzo, ASO Social Analyst
BA Economics, Hunter College; MA Economics, University of Pittsburgh. Jeanette wrote the Social Elements sections of the RMP/EIS and the Economics and Social Elements sections of the Wilderness Supplement. She has worked for BLM for eight years.

Mark E. Van Der Puy, Hydrologist*
BS, Calvin College; BSF, University of Michigan; MS, Watershed Management, University of Arizona. Responded to comments on draft RMP/EIS. He has worked six years for BLM.

* Responded to comments on draft and helped prepare final RMP/EIS.

ASO and PDO ASSISTANCE

The following people from the Arizona State Office provided technical assistance and review for this RMP/EIS and Wilderness Supplement.

Stan Wagner, Environmental Coordinator
Keith Pearson, Planning Coordinator
Bob Abbey, Wilderness Specialist
Bob Archibald, Realty Specialist
Ray Brady, DSD Mineral Resources
John Castellano, Wildlife Biologist
George Ramey, Range Conservationist
Darlene Wishart, Office Automation Specialist

The following people from the Phoenix District provided technical assistance and review for this RMP/EIS and Wilderness Wilderness Supplement Supplement.

Marlyn Jones, District Manager
Bill Childress, Area Manager
Mary Barger, Archaeologist
Ted Cordery, Wildlife Biologist
Frank Daniels, Realty Specialist
Lee Higgins, Range Conservationist
Bob Mitchell, Range Conservationist

Review Process

The draft RMP/EIS was filed with the Environmental Protection Agency and their notice of receipt was published in the Federal Register on February 1, 1985. The 90 day comment period began February 1, 1985 and extended through May 2, 1985. The Bureau of Land Management's notice of availability and announcement of public hearings and meetings were published in the Federal Register on February 4, 1985.

More than 1,200 copies of the draft RMP/EIS were distributed to federal, state and local government agencies, organizations and individuals for review and comment. News releases from Washington and Phoenix provided information about obtaining copies of the draft RMP/EIS.

The Bureau of Land Management (BLM) held public hearings to receive oral testimony from the interested public on the draft RMP/EIS in Phoenix and Gila Bend, Arizona on March 12 and 13, 1985, respectively. Nine people spoke at Phoenix and five spoke at Gila Bend. Public meetings were held in Quartzsite and Ajo, Arizona on March 11 and 14, 1985, respectively. Approximately 300 individuals attended both the 3:00 p.m. and the 7:00 p.m. meetings at Quartzsite. The 3:00 p.m. meeting was a question and answer session and at the 7:00 p.m. meeting about 50 individuals spoke, but only 25 registered. The theme of most of the speakers at the Quartzsite meeting was that they didn't want wilderness or any more restrictions placed on the public or state lands in the Quartzsite area. The Ajo meetings were also held at 3:00 p.m. and 7:00 p.m. There were no speakers at either meeting. The individuals who spoke with the Bureau representatives at the Ajo meetings voiced no problems with the draft RMP/EIS.

The Gila Bend hearing was recorded by an official court reporter. A GSA contract court reporter was hired for the Phoenix hearing, but did not show to record the hearing. The hearing was recorded on a small recorder and transcribed by a district secretary. The recorded tape and written copies of the speakers' testimony were used to prepare the transcript published in this document.

The RMP/EIS team and management reviewed all comments and responded to those questioning the analysis or raising issues related to the environmental impacts of the Proposed Action and alternatives. All comments, however, will be considered by BLM managers in making the decisions for future management of the Lower Gila South Planning Area.

Three hundred and one written comments were received on the draft RMP/EIS during the public comment period. A number of comments were received too late to be published in the final RMP/EIS but will be considered in the decisions for future management of the Lower Gila South Planning Area.

5 - CONSULTATION AND COORDINATION

LOWER GILA SOUTH PUBLIC HEARING

OPENING STATEMENT

MR. McHENRY: Ladies and gentlemen, this public hearing will now come to order. My name is Lawrence McHenry, I am an attorney in the Solicitor's Office, Department of the Interior.

I have been appointed by the State Director, Bureau of Land Management, to conduct this public hearing, under the authority of the Secretary of the Interior regarding the Resource Management Plan for the Lower Gila South Area for the Bureau's Phoenix District.

Most of you undoubtedly signed the attendance sheet as you came into the hearing room. If you have not done so, I would ask that you sign in now. If you plan to make a statement, be sure to check the appropriate space on the attendance card so we can add your name to the list of speakers.

Representatives from the Lower Gila South Resource Area here tonight are:

Bill Childress	-Area Manager
Richard Hansen	-Wilderness Coordinator
Bill Carter	-Team Leader
Tim Sanders	-Assistant Team Leader

This public hearing is being held to obtain testimony and information relating to the

that are being studied by the Bureau of Land Management in the Lower Gila South Resource Area Management Plan. A draft environmental impact statement EIS has been published and is available here tonight for those of you who have not already received a copy.

The Lower Gila South RMP/EIS is based on information from public workshops, rangeland and wilderness inventory records, and other sources, including federal, state, and local agencies, private organizations, and interested individuals. The purpose of the RMP/EIS is to disclose in advance the probable environmental impacts of the Proposed Action and its Alternatives, and to insure that these factors are considered along with economic and other considerations in the decision making process.

In arranging for this public hearing, notices were sent to United States Senators Goldwater and DeConcini, U.S. Representatives Stump and Udall as well as Governor Babbit and other elected officials.

Notices have also been mailed to federal, state, and local government agencies and to organizations and individuals known to be interested in this planning effort.

A few words regarding 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-or other information pertinent to the Resource Management Plan.

There will be no cross-examination from the audience, but if anyone fails to understand a statement of any speaker, you may direct a clarifying question to me, I will make a determination whether it is pertinent.

I will call on Bill Childress, Area Resource Manager, to explain the proposed plan and findings in the draft environmental impact statement. Then I will call on the speakers in the order they registered to speak.

Bill Childress, Lower Gila South Resource Manager will now explain the BLM's proposed plan.

BILL CHILDRESS: First I would like to summarize the Quartzsite, Arizona Meeting held March 11, 1985, regarding our Draft Lower Gila South Resource Management Plan (RMP) and Environmental Impact Statement (EIS). The meeting was broken into two (2) sessions.

The first session started at 3:00 PM which constituted a brief opening statement, we invited the group to look at and discuss with the BLM personnel our draft document. Approximately 300 people attended this session which lasted approximately till 5:30 PM.

The second session started at 7:00 PM in which we allowed individuals to make comments/statements regarding our draft document in an open forum. We encouraged those who wished to speak to sign the Visitor Roster. Of the 50 people who spoke only 24 signed the Visitor Roster (Exhibit A). Approximately 300 people attended this session of which 150 were new

attendees. This session lasted approximately till 9:00 PM. In both sessions, only one issue was of concern to the group. That issue regarded Wilderness designations. The 50 people who spoke were against designation of any future wilderness study areas and particularly the New Water Mountain WSA discussed in our draft document. It was apparent that those who did not speak at sessions one and two (with the exception of two individuals) were also against future Wilderness designations. This was felt by speaking to individuals at sessions one and in two occasions a show of hands in session two. The group opposed future Wilderness designations for three basic reasons:

1. It would eliminate multiple-use as it is known today.

2. It would cause an economic burden to the community.

3. It is a discriminatory action against the elderly who cannot physically walk into remote areas.

Others felt that a) we should not have a plan, b) we should leave things in status quo, and c) feel that Wilderness designations are another step toward complete closure of the public lands.

In both sessions, I encouraged the group to document their concerns and comments by letter to our Phoenix District Office by May 2, 1985.

Now I would like to take a few minutes to bring you up to date on where we are to this point and where we are going in reparation of the Lower Gila South Resources Management Plan (RMP) and Wilderness Study Area (WSA) Environmental Impact Statement (EIS) process.

As summarized on Page 91 of the Draft document, we began work on the plan in 1978 with inventories and public meetings on Wilderness. In 1980 we issued a public Notice of Intent to prepare the Lower Gila south RMP. Between 1980 and 1981 we worked with local, state and federal officials to identify issues to discuss in the plan. On May 24-26, 1983, we held public meetings to help formulate the five issues addressed in this document. On February 1, 1985 we published the Draft Lower Gila South RMP and Wilderness EIS for public review.

The Draft RMP part of this document discusses the following five issues:

1. Rangeland Management

2. Wilderness

3. Land Tenure Adjustment (Disposals and Acquisitions)

4. Utility Corridors

5. Fred J. Weiler Greenbelt.

Each of the issues, other than the Fred J. Weiler Greenbelt, is analyzed under a Proposed Action and four alternatives.

The Draft Wilderness EIS Supplement part of this document analyzes in detail each of the 12 WSA's under a Proposed Action and three alternatives.

As Lawrence McHenry stated, this hearing is to obtain comments and information regarding this document in an open forum. In addition, we will accept written comments on the document through May 2, 1985. At the conclusion of the comment period on the Draft document, the RMP and wilderness Supplement will be separated and processed individually.

As summarized on Page 231 of this document, the next step (Step No. 8) in completing the RMP will be for the Phoenix District Manager to review the comments and information received through our public hearings and meetings, and written comments received by May 2, 1985. Then the District Manager will select a proposed RMP and publish it along with a Final EIS on all the issues except Wilderness. A final decision will be made on the RMP after the completion of the appeal period or successful review of any appeal received.

The Wilderness Supplemental EIS will be reviewed in light of the comments received through the public hearings and meetings, and written comments reviewed by May 2, 1985. Then the Phoenix District Manager will prepare a Preliminary FEIS and submit it to the BLM Director in Washington for review, approval and filing. Following the approval of the PFEIS, we will make our

recommendation on Wilderness Designation to the Arizona State Director, BLM Director and the Secretary of Interior. In turn, the Secretary, by 1991 will make a recommendation to the President who has till 1993 to submit to Congress for a final decision.

Thank you, Mr. McHenry.

MR. McHENRY: Unfinished statements may be supplemented by written comment. You may also submit written comments up until May 2, 1985. These comments will be considered fully in developing the final proposed plan and environmental impact statement. Written comments should be addressed to:

District Manager

U.S. Dept. of Interior

Bureau of Land Management

2015 W. Deer Valley Road

Phoenix, AZ 85027

After public comment period closes on May 2, 1985, there will be a thorough review of the draft EIS. The Bureau of Land Management's Phoenix District Manager will evaluate your comments concerning the planning issues and recommends a final proposed plan and environmental impact statement to the BLM State Director. The State Director will then review and later approve and publish the plan and EIS.

Your comments will be considered by the BLM State Director in making his recommendations to the BLM Director in Washington, who must then make a recommendation to the Secretary of the Interior. After due consideration, the Secretary will transmit his recommendation to the President. The president in turn will transmit his recommendation to Congress. After appropriate consideration, the Congress will accept, reject, or modify the President's proposal. Only Congress can designate an area as wilderness, and only Congress can release a BLM wilderness study area from its study status.

As you can see the BLM preliminary proposal before you will undergo a comprehensive review. This public hearing and your comments and views are a very important part of that review.

This is not an adversary proceeding--any questions asked would be in order to clarify a point or issue roused by the speaker or the plan and EIS. Direct your questions to me and I will make a determination as to whether it will be answered or not.

JACK PURSLEY: I am Jack Pursley, Director of Public Affairs of the Arizona Mining Association. The Association represents the 15 major mining companies that produce most of the copper, molybdenum, silver and gold in the state.

I am commenting here today because the Association is seriously concerned about the continuing actions of the Federal government to remove and

restrict public lands from productive use. Approximately two-thirds of all public lands in the United States are now effectively withdrawn from mineral development. In Arizona, exisiting wilderness areas total 2,000,000 acres and it has been determined that approximately 30 million additional acres (two-thirds of the Federal lands in Arizona) are unavailable or highly restricted to mineral resource development by other withdrawals including BLM Wilderness Study Areas, Forest Service Wilderness Study Areas, Primitive Areas, Scenic Areas, Game Preserves and Refuges, Parks and Monuments, Defense Department withdrawals, Indian lands and numerous other withdrawals. Each of these categories has been formed by individual withdrawal actions with little or no consideration to the cumulative effect of all withdrawals in Arizona. The Association feels that this cumulative effect must be addressed and considered in this EIS.

The Draft Lower Gila South, Resource Management Plan (RMP), proposed action recommends 4 Wilderness Study Areas (WSA); New Mountain, totaling 189,750 acres suitable for wilderness. The draft lists 3 of the areas as having high mineral potential or mineral potential development and one having medium mineral potential. The draft also points out that these areas do not represent unique ecosystems: The creosote-bursage habitat and the paloverde mixed cacti habitat are already protected in 104 wilderness areas of over 4.5 million acres. These WSA clearly qualify for multiple uses. It is the Association's position that these areas should be deleted from wilderness recommendations because of their mineral potential.

Association recommends that all four areas listed under the proposed action be deleted from further wilderness consideration due to their substantial mineral potential.

We appreciate this opportunity to submit comments.

MS. BOBBIE HOLADAY: I recommend that all of the areas addressed in the Lower Gila South Environmental Impact Statement be designated for wilderness areas.

While some acreage may be unsuitable for wilderness management, such as the southern plains of the East Clanton Hills WSA, major portions of all areas have acreage which meet the wilderness criteria for naturalness, outstanding opportunities for solitude and primitive and unconfined recreation.

While this statement recommends that portion of four of the areas, New Water Mountains, Eagletail Mountains, Woolsey Peak, and Table Top Mountains as wilderness, large acreage cuts are recommended which would severely degrade the wilderness integrity of the areas. Plant and wildlife would suffer and the quality of life particularly for the bighorn sheep would be seriously impacted.

The main conflict appears to be in the mining operations. It is difficult for me to understand the growing need for more and more areas for minerals and energy resources in Arizona, when this industry is already depressed in established mines. What is the continued need for discovering more and more possible ore bodies, when this industry can't handle the operation of existing mines?

Large portions of the eight areas dropped from wilderness consideration should be recommended for this designation. Releasing them for multiple use would be damaging to many fragile desert mountain landscapes and many special-status plant species. These areas all contain significant habitat for several desert wildlife species. Opening these areas to mining activities and motorized recreation would seriously impact the desert bighorn sheep because they cannot reproduce in disturbed areas and their populations would decrease rapidly.

Many of the areas in the Gila Lower South have important historic value and excellent opportunities for archaeological studies. Many sitings have been made of petroglyphs, broken pottery, and other indications of prehistoric dwellings. If these sites go unprotected by the wilderness designation they are subject to vandalism and their values will be lost for all time.

I congratulate the BLM for producing a thorough and comprehensive statement on the Lower Gila South. My hope would be that further consideration be given to reinstating the dropped areas and in reestablishing the acreage in the four recommended areas to preserve them for wildlife habitat, primitive recreation, solitude, and scientific study.

JONI BOSH: My name is Joni Bosh, mailing address is Box 16-673, 2515 E. Thomas Road, Phoenix, Arizona 85016. I'm speaking tonight as vice chair for the Grand Canyon Chapter of the Sierra Club and as coordinator for the Arizona Wilderness Coalition. My comments are directed at the wilderness component of the plan.

First, some general comments. Clearly the BLM has picked outstanding areas to recommend for wilderness. The agency deserves strong support for including areas offering sizeable acreage and various topography. It's clear that the Phoenix District appreciates that wilderness can be horizontal as well as vertical, and that there are many remarkable cultural. wildlife, ecological and recreational values in the District that can be protected through wilderness designation.

We are sorry, however, that just a fraction of these special values would be saved under the draft recommendations. The BLM is missing a great opportunity here -- one that might not come again.

Too often our public lands are fragmented by development or mixed ownership into parcels that, even if saved, are only small oases of protection. In the Lower Gila South, there are clusters of WSAs that still provide the chance to protect significant wildlife ranges, viewsheds and ecosystems. And it's unusual indeed for so much wild land to be so close to one of our nation's largest metropolitan areas. The future recreational benefits from this open country should weigh heavily in favor of generous wilderness proposals.

We strongly urge the BLM to recognize these opportunities at hand and to act now to save these values for the future by significantly increasing your wilderness proposals.

Some of the impacts of various wilderness proposals are displayed on page 113 of the draft plan. The numbers here suggest the same points I've just tried to make.

Notice that even the so-called "resource protection" alternative, which adds three more areas to your wilderness proposal, still only protects roughly half of the desert tortoise and bighorn sheep habitat, and sensitive cultural resource areas. Your WSAs are among the last remaining places that can protect these values, and yet only a few of these areas are recommended for wilderness.

In contrast, even the raw numbers show relatively little development potential would be foregone even under an all-wilderness alternative. These development opportunities fade even more in insignificance when you figure that ranching can continue in wilderness, and that the existence of mining claims bears little relation to the likelihood of mineral development.

The problems of inholdings and split mineral estates are land management problems that will plague the BLM with or without wilderness. Proposing an area for wilderness can help focus attention from the Governor's office and for the Land and Water Conservation Fund to help clear up these problems.

In short, there are lots of reasons for more wilderness than is proposed in the plan, and we hope the BLM will take another hard look and increase their recommendations.

(87-B)

Now I'd like to turn to a few individual areas.

The New Water Mountains proposed wilderness makes a wonderful neighbor to the contiguous Kofa National Wildlife Refuge to the south. However, it's very disturbing that 10,000 acres of crucial bighorn sheep habitat are excluded from the recommendation. The proposed wilderness boundary should be modified to include more of the New Water and Dripping Springs lambing areas, and should be extended north to the freeway to provide a protected route for sheep travel north and south.

The BLM notes that almost the entire WSA is now protected under a temporary mineral withdrawal because there is a pending proposal to include this area into the Kofa Refuge. If the BLM won't protect more of the bighorn habitat in this area, turning this area over to the Fish and Wildlife Service may be the best solution.

The BLM says that neither Little Horn Mountains West nor Little Horn Mountains contain very spectacular wilderness values. Then the BLM describes two areas that contain such features as window arches, two 800-foot deep canyons, colorful volcanics and crucial desert bighorn refuge habitat. And all of this borders the Kofa National Wildlife Refuge wilderness proposal on one side, and the BLM's proposed Eagletail wilderness on the other.

Here is a perfect opportunity to provide protection for major parts of an important bighorn sheep range by typing some mountains and basins together.

The BLM should seriously consider adding acreage to a wilderness proposal which would connect the Eagletails with Kofa for the benefit of the sheep as well as the wilderness visitor who seeks an extended trip. The mineral potential is unimpressive and localized, and so it should be easy to add significant acreage without noticeably harming the mineral industry.

The Eagletail Mountains are an outstanding area, and the BLM deserves high praise for recommending for wilderness not just the mountainous areas but the broad basin in-between as well. We encourage the BLM to seek to trade or buy out the inholdings and split estates with the State and other owners to tidy up land management problems.

We suggest the BLM take a look at some specific boundary modifications, too.

The proposed wilderness should include Courthouse Rock, a prominent and well-known feature to recreationists and sightseers on the north side of this area.

The "resource protection" boundary would expand the area to include more crucial bighorn range, and also would bring the wilderness down next to the road dividing this area from the Little Horns. These would be important adjustments to make to further protect the values here, the BLM has obviously seen are of wilderness quality.

The East Clanton Hills offer an opportunity to extend the Eagletail/Little Horn wilderness complex to the south to include some additional bighorn

habitat in the Gila Bend Mountains. We strongly urge the BLM to look at this series of WSAs from the New Waters to the East Clanton Hills as a whole, and as a unique chance to save an entire range for bighorn sheep.

Face Mountain, in contrast to other areas in Lower Gila South, seems to have too much solitude for the BLM to recommend for wilderness. We think Face Mountain deserves protection because it is remote, it is rugged and the conflicts are negligible. The BLM notes that the eastern quarter of this area has been nominated to the National Register in recognition of the archaeological resources there. Wilderness designation would be an excellent protection for this area because it would close the area to mineral entry and thereby discourage surface-disturbing exploration activities that might destroy the cultural sites.

Working with the State to trade out the state lands on the south side of the area could provide additional access and recreational sites that could enhance the WSAs attraction as a wilderness recreation spot.

Woolsey Peak and Signal Mountain should be considered as one wilderness unit. The BLM has recognized the prime wilderness values of Woolsey, but should complement that by proposing protection for the de facto north part of the area, Signal Mountain.

Both are crucial habitat areas for bighorn sheep, and both areas are noteworthy in part for the vistas they provide of one another. It just makes sense to think of them together as one unit.

One final note. The Phoenix District seems to have a thing about trains. You say that the noise they make detracts from the wilderness experience in Face Mountain and Signal Mountain.

Some of my best friends, and might even argue that they enhance the outdoor experience. Certainly their temporary noise is no greater an impact than the more constant sound of passing cars driving by the existing Red Rock-Secret Mountain Wilderness Area and the Superstition Wilderness area. Besides, the rail line past Face and Signal Mountain is lightly used compared to the main line next to South Maricopas and Butterfield Stage, for which you mentioned no train noise impact whatsoever. Train noise, like airplane noise, should not be a factor in considering these areas for wilderness.

The North Maricopas and Butterfield Stage Memorial WSAs deserve wilderness protection also. They really are one area, and should never have been separated. They are a spectacular and rugged range within easy traveling time of Phoenix. They contain crucial habitat for desert tortoise and bighorn sheep. Once on top, the hiker can enjoy commanding views of valleys and ranges in all directions. The BLM should at least try to protect the mountainous core and crucial tortoise areas. We strongly urge the BLM to relook at these two areas and propose a wilderness boundary to protect the important scenic, recreational and wildlife values there.

The South Maricopa Mountains are worthy of wilderness, too. For the same wilderness reasons and others, however, the BLM's description of this area is a little confusing.

Page 151 says "there are no known mineral occurrences of economical proportions in the WSA. The mineral potential is low..". Page 108 on the other hand says the area is not recommended for wilderness, in part, because of its mineral potential.

Page 108 also goes on to say that the area was not recommended because it lacks "superior wilderness characteristics" and because it's "a relatively flat bajada offering little to the primitive recreationist." Contrast those statements to some found on page 151: "Outstanding opportunities for solitude exist throughout the WSA" due in part to its "complex topography". "Outstanding opportunities for primitive and unconfined recreation exist in the South Maricopa Mountains.... The topographic relief found in this WSA provides the backpacker, horseman and photographer with a variety of places to explore...". Its all part of that book. And finally on page 108, the BLM reminds us that "The National Wilderness Preservation System has 609,667 acres of land with similar characteristics already designated, and 1.3 million acres of similar lands administratively endorsed as wilderness."

The BLM doesn't seem to know whether there are really minerals here or not. Nor does the BLM know whether this area is flat or undesirable to hikers. But the BLM is certain that it doesn't like the area for wilderness. As support for its case, the BLM cites how much Congress and the President do like wilderness areas such as South Maricopa Mountains, which we have about over two million acres.

This doesn't make any sense. What does make sense is to protect the known wilderness values there.

Last but not least is Table Top Mountain, and there is little we can say beyond a "bravo" for the BLM's strong wilderness recommendation here. This is one of the most remarkable areas in Arizona, and no BLM wilderness proposal would be complete without it.

We praise the BLM for choosing protection over mining in this area, and we will strongly oppose any effort to reduce the area recommended for wilderness protection.

To wrap it up, the BLM has proposed some very deserving areas for wilderness, and we will advocate designation for them to the best of our ability. But however valuable these places are to the wilderness system, they will be even more so as a part of a larger complex of wild areas comprised of much of the other WSA acreage.

We hope the BLM will choose to make the beginnings of good recommendations into great recommendations. Then it will be worth taking the proposals to Congress.

Thank you for this opportunity to comment on the draft plan.

TOM WRIGHT: My name is Tom Wright. My address is 6947 E. Sixth Street, Apt. 4, Scottsdale, Arizona 85251. I'm happy to see that four superb natural and scenic areas have been recommended for wilderness designation in the Lower Gila South. Each of these areas has its own distinctive character and all have important wilderness, wildlife, and recreational values. The

New Water Mountains, Eagletail Mountains, Tabletop Mountain, and Woolsey Peak all have my strong support for designation as Wilderness Areas. I am especially pleased that the proposed boundaries for Woolsey and the Eagletails include not only the rugged peaks, but also the wide valleys and flatlands that surround and lie between the peaks. Few such areas still exist in a pristine state and the BLM is wise to suggest that they be preserved while the opportunity still exists.

I was disappointed, however, that several additional areas did not receive favorable wilderness recommendations.

The Little Horn Mountains, which are split by a road into the two units, are a showcase of intriguing volcanic features. Opportunities for geological study are outstanding, and the harshly beautiful landscape is a superb setting for many forms of wilderness recreation including hiking, photography, and nature study. The Little Horns are also adjacent to the Kofa National Wildlife Refuge and contain important bighorn sheep habitat which would be protected from disruptive activities under wilderness designation.

Signal Mountain, separated from Woolsey Peak only by a primitive road, is nevertheless strikingly different. Woolsey is a broad volcanic dome with long, smooth slopes and a rounded summit, all composed of dark basalt boulders. Signal Peak, on the other hand, is a colorful and chaotic jumble of sharp peaks and ridges which present an entirely different and contrasting type of landscape to the wilderness visitor. It is, therefore, an important area if we are to preserve a truly representative sampling of Sonoran desert features in western Arizona.

Face Mountain, a volcanic mesa cut by numerous canyons, is described on page 108 of the EIS as lacking "outstanding primitive recreation opportunities" and "special features or unique resource values". The Wilderness Act does not require special or unique features, and whether or not recreational opportunities are "outstanding" is a highly subjective matter. The Act states that Wilderness Areas should have "outstanding opportunities for solitude or a primitive and unconfined type of recreation". Note the "or". The EIS admits (page 108) that Face Mountain does qualify in terms of size, isolation, and opportunities for solitude. Therefore, there is no basis for dropping this unit except for purely subjective ones. To those I would reply that any remote and rugged area of significant size and naturalness is "outstanding" in a state that is growing so rapidly and an ecosystem that has been abused so wantonly. No such area should be dropped from further consideration as wilderness without an excellent set of site-specific reasons, and no such reasons are given for Face Mountain.

The Maricopa Mountains, which are split by roads into two large units and a small one, were also dropped due to an alleged lack of unique or outstanding wilderness qualities. The EIS even goes so far as to say that the South Maricopas are "not particularly scenic". Compared to what, and in whose opinion? (The implications of this judgement are astonishing but I will not pursue them here.) The three Maricopa Mountains units together comprise about 150,000 acres of rugged Sonoran desert wildlands. Granted that they lack the awesome features, of say, the Superstitions, or the variety of the Mazatzal Wilderness Area, they still remain a major wilderness and recreational resource within an hour's drive of the largest city in the

American Southwest. This is not a fact to be taken lightly. The cherrystemmed roads, mineral inholdings, and ORV trails mentioned in the EIS are common problems in nearly every wilderness proposal statewide, and they can generally be worked out once a sincere effort to do so has been undertaken. I urge you to take a second look at all three of these units.

I would also like to comment on the East Clanton Hills, but it is the one unit in the EIS with which I am totally unfamiliar. I glimpsed it once from a distance and was impressed by what I saw, but I cannot speak to the area's particular values or conflicts. I will say, though, that any large-scale development or scarring in this unit would be easily visible from the Eagletail Mountains and perhaps from the Kofa Wildlife Refuge, diminishing the wilderness qualities in each of those areas. This should be kept in mind during the planning process for the East Clanton Hills area.

Thank you for your consideration of my comments.

Thank you, the next speaker is Lloyd Clark.

LLOYD CLARK: Mr. Chairman, Mr. McHenry, I am Lloyd Clark, P. O. Box 13344, Phoenix, 85002. I am a History Instructor for Rio Salado Community College, founder of the Counselor's National Military Post, which has been the National Organization interested in the identification, location, preservation, memorialization of old Military sites. In this area I refer to the map that's accompanying your very thorough study.

In Section 33, Township 5 South, Range 12 West, is Camp Horn. Camp Horn was one of those sites selected by General Patton in the outset of World War II, for one of the Desert Training areas. Camp Hire, Section 1, Township 5 South, Range 11 West, was another.

Camp Bow which is not included in this study, however is on the map, Township 8 North, Range 14 West. It is that Cunningham Wash Area that is shown on the map, however is outside the boundaries of the studied areas. These are three that were in the California, Arizona maneuver areas, which was also known as the Desert Training Center. Camp Bow is the one which is not included, is the only one that has real historic artifacts, if you wish to call it that, in the form of outlying accomplishments. The command circles, some of the bases for the buildings that were there. Bow's was a top secret base during World War II and it was where they planned to have illumination of the battlefield at night. They used searchlights, not enough by the remoteness kept it from being protected from the other areas around. It is the only one that really has something left there to preserve, with the exception perhaps, of Camp Horn, where there is still a perimeter marker that was left there fortunately by the Agricultural Interest Team near . What was there was put into cotton and other agriculture. But that marker still designates and memorializes the names of the nine soldiers who lost their lives during the training during World War II.

Camp Hire which is in the private area or private land in the interests of the only record of gates that are there besides the railroad tracks. Within the past six months all of the country streets, the old land circles .....

(Tape ended.).....

Not on any federal or state land. That area is identified as Aqua Caliente it was a ranch at Woolsey. Woolsey being its name is the site where wheat was first grown in what is now Arizona. The southside of the river before they got it from the purchase of Mexico. And the reason the forces did not go out from Fort Yuma to try and followup the persons who committed the open massacres, the Indians, is because they fled to Mexico. This is one of those historic areas, and you address that rather virtually in the study and I just urge you to give it a little closer attention because it is a very historic period.

Were there any questions on what I have said?

Thank you very much, you have done an outstanding job and I appreciate all your full attention. Thank you.

Our next speaker is Landis Aden, Representing Honeywell Sportsman Club

1739 North 15 Drive, Phoenix 85026

Gentlemen, I'd like to say that I'm representing the Honeywell Sportsmen Club where a fairly large and varied amount club activities and outdoors. We enjoy hunting and fishing as well as our lakes and we've been generally in favor of wilderness areas, although we do have some serious concerns and reservations about the condition they are in this state.

First, as many of these areas seem to be as blessed and glorious quality and place you can establish for that. In the last year there has been about a million acres in wilderness taken out of Arizona and already in some places where you can find difficulty in access to existing areas, especially in the southeast part of the state where most of us have our activities also in the mountain zones.

Those of us who are not Congressmen or government officials and don't have access to helicopters have problems of finding places to part trailers on weekends or sometimes even getting through on access roads, such as they are. These problems are of course compounded on weekends for those of us who only have weekends off, which is your average working guy.

Also, regards to the Kofa area and Big Horn Chief Range, several of our members are members of the Big Orange Chief Society and we generally support their activities also. The addition of the New Water Mountains and the Little Horn Mountain areas could possibly make these access problems to the Kofa more difficult than they are now. The Kofa is one of my favorite areas. I do some wildlife photography there on the side. We appreciate the Kofa and we like it but we would like to know a little about it.

In conclusion, I would say that the wilderness quality areas probably aren't sufficiently in Arizona, and those of us who do have many interest in the outdoors besides just backpacking and photography, we also like hunting and fishing and going roaming in the desert or mountains and we would like to be left a place in Arizona to continue this interest.

Thank you for your consideration.

The next speaker is Leroy Ackerman representing American Indian Nations.

LEROY ACKERMAN: Mr. Chairman, Members of the District, my name is Leroy Ackerman and my box number is 349, Congress, Arizona and zip code is 85332.

I represent Small Miners Association of Arizona, miners prospectors and the Indian Nations of North and South America Central.

All I have to say is that I've worked in the area where your antelope were several years ago in mining some plains and animals were getting close to the machinery so what I had to do was get some alfalfa from the farmers below and the farmers would just take it up there so it could be hauled away. It got real bad, so I instructed my boy these animals you'd put signs up and they couldn't read. So I instructed my boy, Mike, to start night class to try to get these burros and mountain goats to come from Mexico up cross the trail they couldn't understand and so they in a few weeks, he come to me and be said "Well I've done the best I can do." I said o.k. and so one day I there was working and got off the machine, and I felt nudge in my back there and there was this donkey pushing me around the and he learned to talk and he said to me he said, "I need so many hardhats with two holes that can talk." Well I said "What do you mean?" He said, "Well I have taken over your job." And I thought well what am I going to do and so ..... Arizona Wester College was over to the west so I went over there and talked to the Professor of Psychology. He said, "Mesa get out a map and study the

map and then, he said you may be wondering what to do." So I did and I went back and all I could do was mover all the way and the lesson I learned was if you give an inch they'll take a mile and that was a hard lesson to learn there so I left the area and I went back and started again and then two years ago they weren't interested in it so I took in another area and got out of there so that stands to reason that would be the same here, in that in the more area you take, the more you want and the less there will be for Mike and then when there is no Mike in the area and your natural resource is all produced then the communist will come in. And I can tell you one thing there, that's one thing I deal with instant hate is communism. When they hit the borders here, the north or south I'll grant you they don't go far up over the Mexican border. And that's what can happen if you close off all resources and then you're still that has to be shipped in from other countries and used and that's more cost to the people here.

I think, I believe in being fair with the wilderness and I don't believe in destroying it in as far as that goes. The reason is, I suppose is, that I have Indian blood in me on both side of the famile and also I have blood from eastern states and some other people from there that you have probably heard of . The Indian part I suppose helped me to appreciate the wilderness there, and the mountain area. I do have, when you go into the mountains, whether its New Mexico, Arizona or Colorado, for a mountain lion that followed me after awhile, and I had them when I lay the blankets and study your mountain areas in all of these states around and I mean I get out and walk with and study and see what's there from mineral and otherwise.

They'll follow me and as I lay still in the lights of night in your excluded areas in Sycamore Canyon the mountain lions come up to my blankets, touch me and then go away stay over and sleep 60 feet from me, talk the night and never bother me. If I was afraid the animals were every going to hurt me I wouldn't have done it. So there. I believe in having so much land for mining and so much of it for wilderness, and I think you have quite a bit. Land now for your wilderness, works best. You're going to have to have more personnel than what you have now to handle that business and more budget in your work.

And I know that there is good men in your office and that when this proposal goes before Congress there will be men there that money could sway the other way and would vote down your proposal, or vote for it, one way or the other. I do know that the good members of the committee good and bad, as your senators and representatives on the committee. Of course they may have a personal opinion of the area and people didn't know it and they kid of went around to different places and studied this thing and my area and other areas there and spots picked out and we will personally go to them in washington before this vote is all and meet with them and I will talk with the President of the United States on this business and see what the decision will be and how it goes. But many of us will keep on mining so that it will help the economy of this country and keep every man in America living not under communism and there ruling ways. Its the best way I know because I have been to Siberia under different conditions years ago when I was young and escaped across the waters back to Alaska. Bad hands and a little bit of torture, and I know what that can be, so I appreciate talking with you.

The next speaker is Edward Elton representing the small miners.

My name is not Edward, to get the records straight. It is Eugene Dee. Now that Edward comes from my initials E D as everybody calls me Ed. That is not the official name. I live in Congress, Arizona, 303 West Highway 71, 85332, Congress.

If you will look back at history, study history. You will find that history repeats itself. It is happening that way today. History is repeating, and if you don't benefit from the lessons learned from history, you're doomed to fall in the same pit.

Now some of you here remember 1929, I do. Some of you don't and it is you might say mythology to them because they haven't studied history. It is coming again, the same process. First National City Bank, Chemical Bank are all (someone coughed) loan. They are all going at a day to day pace, they can close up any time. You won't see it in the news media, but when you get behind the news media, you will find that is the truth, where you'll hear some of it. When that happens, when they close up, then 1929 is going to look like a Sunday picnic.

Further on down, right here in Arizona, I've talked to many old timers say we made our living by drywashing here, we made it, we had a little mine up here we made for our families, we supported our families, that is how they got by. When or if this all put into a wilderness area again, or not again, but if it is put into a wilderness area, when it does blow up, which it will

do; these small miners, the individual is going into those hills if he knows where the place he is going to look for a place and when he finds that place, he is going to mine it. Because he has a family to feed. Now he isn't going to back up and say Mr. Billy Doe this is yours, my family can starve. He will be violating the law, which we put him for arrest. Then what will his family do when he is in jail for trying to provide for his family.

The welfare system now is tremendous. It is more than they can handle. So that will just create more, there will be no money, there will be no taxes because nobody will have any money. But here you will make a violator out of a man that is just trying to provide for his family and his people. There is a lot of land already in wilderness areas, I don't know how well it is managed, but to the best of the ability.

Now these persons that want this wilderness area put in here. It's those states that no motor vehicle is allowed in that area. Now if any of them had the opportunity to go to Quartzsite in every winter, every February, and see the thousands of people that come there to enjoy those areas, they are not able to flock into that area. They'd have to drive a vehicle. If they can't drive they don't see it. They, just off the top of my hear are 60% of the people that enjoy those wilderness areas that are proposed.

These that want this, are suppressing there children. Maybe a lot of these children won't be able to walk, in that time they won't be able to drive either or they won't have the money for the gasoline. They will not be able

to enjoy what their folks are trying to preserve for them. It's a lost cause. Here's this area, says you can't go in here, alright that's fine right now. But when it comes to the bottom line if it is restricted, then nobody will enjoy that, they can't get to it. The small miner, the prospector, or even you might say some of the your city dudes that will enventually go to the hills to seek gold because there is always a quest for gold, a quest for silver. That has been tightened and suppressed for years, since time memorial, they have tried to play down gold and silver and precious metals. But yet today, that is a basis to the economy.

If they suppress all this mining, if there was no mining people would be still eating out of clay dishes. Mining is a basis for all prosperity and all economy. If there wasn't mining, there wouldn't be anything we'd be using bow and arrows yet. And there is a lot of suppression of the mining right now, right in this country by the foreigners, the foreign market flooding this right here.

I am very opposed to putting anymore land into a restricted area, because how many acres does a Bighorn sheep need to feed on? I don't know what it is around here, but they usually range around a 20 miles. Your mountain lions range roughly around 20 miles. Your deer, your coyotes, 20 miles area. And I venture to say there is more land taken out already that each Bighorn sheep will probably have 50 miles to range in. I have been told that the Bighorn sheep are in poor health, they're wormy, so why preserve the whole area just for a few?

I'm just opposed to that because I see in the future where it is going to be the necessity for survival of many of us to go wherever possible and make a living for your family, wherever you can and whatever you can without having the threat of arrest or a jail term hang over your head.

Thank you.

The next speaker is Princess Teni-Ciache Ackerman representing the American Indian Federation.

We are totally opposed to this wilderness. We have seen, we have heard the phrase "As long as the sky is blue the water runs, the grass grows." Poopy Doo! We are down to less, than a fourth of this nation, even less than that, and it keeps getting worse each and every day.

I have seen the Bighorn Sheep of the Kofa Mountains, and I can tell you this. They're wormy, they're mangy, they are in the most defect health. There supposed to be being protected, huh? There supposed to being managed, yet nobody is caring for their health, that's not management.

You talk about the rangeland instead and people want all of this wilderness. The kind that it won't hurt. It will hurt, it'll hurt the ranchers, it will take out jobs. If they can't graze and they have to start buying feed, hay and all. Hay is going for $4.75 a bale, for decent hay that you feed your animals. The cost of that and if you have to take out land from other banks, from your cattle to put it into crops, you're going to lose, you're going to go in the hole.

Right now canner beef is running $25.00 a hundred pounds. A hundred pounds, to get it up to that, is going to run you close to $150. I tell you somebody is going in the hole someplace. Because about the energy and economy impact, it's going to be one mean impact, because people are going to start losing their jobs, their income. When people have to be laid off its a chain reaction, it's just right down the road. I am beginning to wonder who this, what right is final with this country. I thought the U.S.A. was for all free men. I can the constitution says "For the people and by the people.." it does nowhere state "...for the few, by the few, or by the bureaucracy." It's about time that people start caring. I care about the Bighorn sheep, you can ask anybody from Congress on, ask them if they want to cross the creek on my mining claims and shoot at an animal. It's a well known fact that it's open season on hunters. We feed the animals up there. There isn't a miner wonder that. Each and every day, when I lived down by Yuma, I moved into the Kofa on horseback. Hauling hay for sheep, cause they would come up and eat out of my hands. They were the most real thing. I spent over $200 in one year getting worm medicine, which wasn't easy to get. I had to send back east for it because I couldn't find a place to tell me how to treat them here. So I called the Wildlife Association, State of Oklahoma, Mr. C. Viego was working there then. He told me just what to use and he said, "I could send you some." I paid him for it, because he couldn't afford to take it out of their bank to send out here.

I have called the Wildlife Association here, I have called the Field and Management and everything, and I was referred from one agency to another. A

big run around because nobody wanted to answer any questions, everybody was afraid. I don't know what they're afraid of, but it is about time we all started fighting for the same thing. We do need wilderness, but we don't need this much.

It was stated yesterday at Quartzsite about a landing area, like Mr. Elton said, say around 20 miles, I have seen this. Now how much ground does it take for one mule to lay around? Maybe a bigger square as that table if your lucky, and yet you want all these thousands and thousands of acres.

People like me, I'm also a Viet Nam vet. My hips are messed up and if you want I can bring reports from a commander of the military at Fort Whipple, Arizona. I cannot go into those areas because I cannot walk right. It could pinch the nerve and cripple me for life, if I fall right or have to step over too high an inc. And if I am in that condition in my hips, how much will the older people, if I remember correctly that there is a law against discrimination. And that would be out and out discrimination on the ones that can't that can't get in there. They love the scenery, they love the animals and the beauty just as well as any of us. But when they have to be restricted to a little area, you got to look at it from here you can't take a vehicle in there, it might scare up sheep. Those sheep aren't scared of us, because if they were they would not be on that bombing range three-fourths of the time. And they are on it.

The military has had to hold up their bombing so many times it's pathetic, for the simple reason that the sheep are out there. And the sheep wasn't

the leaat bit scared, so human beings aren't going to hurt them. Human beings have too much of a tendency to love something wild and want to protect it. Well not all of this works. If this nonsense keeps up, the wilderness out and no minerals to be dug out of this country, just like our rights today. Ninety-nine percent of it comes from the Soviet Union. That is on a letterhead that came out a few years ago from the Department of the Interior, when they wanted to open more minerals it was proven that platinum claims that there is none in this state for instance. It comes from the Soviet Union. Our ore and stuff is coming from Soviet block countries and back country. I'm not supporting no Communist!

The people came to this country for one reason, that was to get away from the suppression and everything else. They didn't care if they had freedom, they could live, they could work, they could support their families and nobody could tell them no. Well, if anyone can step back and look back at Poland, they had wilderness control, they had gun control and look at them now. I'm not giving up without a fight, for anybody. It is my right as a human being and this is America, to be able to mine. And if I want to go and look at the Bighorn sheep and I can't walk, I'm going to drive and I might get arrested, but I guarantee you I'll fight you to the Supreme Court on it.

Thank you

Thank you very much. Are there anyother persons in the audience who would like to make a comment? Submit any statements?

Mr. McHenry let me just add a p.s. to one thing else.

Would you please give us your name again?

Yeah, Lloyd Clark. And I forgot to mention the area down there in land which is immediately, its in the area we have a pipeline on but immediately north (Unable to make out recording.)

Thank you sir. I've been told by the District Manager at the close of the meeting to ..... staff they'll be available. If there are no other persons who wish to make any public comments. The meeting is now closed. Thank you very much for your participation, we'd like to thank the Maricopa County Board of Supervisors for letting us use this auditorium and we'd like to thank the public for showing up tonight.

BEFORE THE

BUREAU OF LAND MANAGEMENT

PUBLIC HEARING ON THE

LOWER GILA SOUTH PLANNING AREA

OF THE PHOENIX DISTRICT

Gila Bend, Arizona
March 13, 1985

Prepared For:

THE BUREAU OF LAND MANAGEMENT

(ORIGINAL)

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By: BONNIE SUMIDA

BE IT REMEMBERED that the above-entitled matter came on regularly to be heard before the Bureau of Land Management, at the Gila Bend Community Center, 202 North Euclid Avenue, Gila Bend, Arizona, on the 13th day of March 1985, commencing at 7:10 p.m.

Presentations were made on behalf of the Bureau of Land Management by Beaumont C. McClure, Deputy State Director for Lands and Renewable Resources; William Childress, Area Manager for the Lower Gila Resource Area; Richard B. Hanson, Recreation Planner in the Phoenix District; and Timothy L. Sanders, Acting Chief of Planning in the Phoenix District.

MR. McCLURE: Ladies and gentlemen, this public hearing will now come to order. My name is Beau McClure. I am the Deputy State Director for Lands and Renewable Resources in the State of Arizona for the Bureau of Land Management. I have been appointed by the Arizona State Director of the Bureau of Land Management to conduct this public hearing under the authority of the Secretary of the Interior concerning the resource management plan for the Bureau's Lower Gila South planning area of the Phoenix district.

Most of you have already signed the attendance sheet as you came into the room. If you have not done

so, I would like to encourage you to sign in now so that we can have a written record of tonight's attendance.

If you plan to make a statement this evening, 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 this evening is Bonnie Sumida. She is seated to my left. She will prepare a verbatim transcript of everything that is said at the hearing this evening. If you wish to obtain a copy of the transcript, you should make your own arrangements with the reporter.

This public hearing is being held to obtain information relating to the five planning issues and five planning alternatives that are being studied by the Bureau of Land Management in the Lower Gila South resource management plan. A draft environmental impact statement, an EIS, has been published, and is available here in this room for those of you who have not already received a copy.

This hearing centers on two aspects of the plan. First are the range of alternatives and proposed planning decisions adequate? The Phoenix district is particularly interested in information concerning the suitability or nonsuitability of the 12 wilderness study

areas for wilderness designation. Your views and any information you can offer with respect to the alternatives will be greatly appreciated.

Second, is the draft environmental impact statement adequate? Your comments and suggestions on this aspect of the study will also be appreciated.

In arranging for this public hearing, notices were sent to United States Senators Goldwater and DeConcini; U.S. Representatives Udall and Stump; Governor Babbitt and other elected officials. Notices also have been sent to federal, state and local governmental agencies and organizations and individuals known to be interested in this planning effort.

Now, for a few words about 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, or other information pertinent to the resource management plan we're considering tonight. 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 whether it is pertinent. This may seem overly formal, but it is intended to give everyone a fair and reasonable opportunity to present his or her view.

When I finish my opening statement, I will call on a Phoenix district representative to explain the process that has occurred to date. That presentation will take about five or ten minutes. Then I will call on any elected government officials present who wish to make a statement. After that, we will proceed with other speakers.

In view of the small number of people who wish to speak tonight, I am not going to set a time limit. Any written statements submitted here tonight will be included in full in the transcript, and will be considered on the same basis as the oral comments. You may also submit written comments until May 2, 1985, and these also will be considered fully in developing the final proposed plan and environmental impact statement. Written comments should be addressed to the District Manager, Bureau of Land Management, Phoenix District Office, 2015 West Deer Valley Road, Phoenix, Arizona 85027.

The publication and distribution of the draft EIS completes the first part of BLM's resource management planning for the Lower Gila South planning area. Now, it is the public's opportunity to comment on the matter.

After the public comment period closes on May 2nd, 1985, there will be a thorough review of the draft

EIS. The Phoenix district manager will evaluate your comments concerning the four planning issues that do not relate to wilderness, and recommend a final proposed plan and environmental impact statement to the BLM state director. The state director will then review, approve and publish the plan and final environmental impact statement.

The procedures for the wilderness portions of the resource management plan differ somewhat from those for the other four planning issues. The BLM state director will consider your comments in making his recommendations to the BLM director in Washington, who must then make a recommendation to the Secretary of the Interior. After due consideration, the Secretary will transmit his recommendation to the President. The President, in turn, will transmit his recommendation to the Congress. After appropriate consideration, the Congress will accept, reject or modify the President's proposal. Only Congress can designate an area as wilderness, and only Congress can release a BLM wilderness study area from its study status.

As you can see, the BLM preliminary proposal before you this evening will undergo comprehensive review, and this public hearing and your views are a very important part of that review process.

Now, I would like to introduce Bill Childress, who is area manager for the Lower Gila resource area on my right. Also, next to him is Rich Hanson, Phoenix District Recreation Planner, and Tim Sanders, Acting Chief of Planning in the Phoenix District. Mr. Childress will now explain the Bureau of Land Management's planning process to you, but, first, I would like to explain again, that this is not an adversary proceeding. If you want to ask a question in order to clarify a certain point, please feel free to do so. Direct your questions to me, and I will determine whether it is pertinent.

Bill?

MR. CHILDRESS: Thank you, Mr. McClure. I would like to take a few minutes to bring you up-to-date on where we are on this plan, and where we are going in preparation of the Lower Gila South resource management plan and wilderness study area environmental impact statement process.

As summarized on page nine of the draft document, we began work on the plan in 1978 with inventories and public meetings on wilderness. In 1980 we issued a notice of intent to prepare the Lower Gila South resource management plan. Between 1980 and 1981 we worked with local, state and federal officials to identify issues to discuss in the plan. On May 24

through 26, 1983 we held public meetings to help formulate the five issues addressed in this document. On February 1, 1985 we published the draft Lower Gila South resource management plan and wilderness environmental impact statement for public review.

The draft resource management plan part of this document discusses the following five issues: Rangeland management, wilderness, land tenure adjustment, which is disposals and acquisitions, utility corridors, and the Fred J. Weiler greenbelt.

Each of the issues, other than the Fred J. Weiler greenbelt, is analyzed under a proposed action and four alternatives.

The draft wilderness environmental impact statement supplement part of this document analyzes in detail each of the 12 wilderness study area's under a proposed action and three alternatives.

As Mr. McClure stated, this hearing is to obtain comments and information regarding this document in an open forum. In addition, we will accept written comments on the document through May 2, 1985. At the conclusion of the comment period on the draft document, the resource management plan and wilderness supplement will be separated and processed individually.

As summarized on page 231 of the draft

document, the next step, which will be step no. 8, in completing the resource management plan, will be for the Phoenix district manager to review the comments and information received in this public hearing and meetings, that we are holding, and written comments received by May 2, 1985. Then the district manager will select a proposed resource management plan, and publish it along with a final environmental impact statement on all the issues except wilderness. A final decision will be made on the resource management plan after the completion of the appeal period or successful review of any appeal received.

The wilderness supplement environmental impact statement will be reviewed in light of the comments received through the public hearings and meetings and written comments also received by May 2, 1985. Then the Phoenix district manager will prepare a preliminary final environmental impact statement, and submit it to the BLM director in Washington for review, approval and filing.

Following the approval of the preliminary final environmental impact statement, we will make our recommendation on wilderness designation to the Arizona State Director, BLM Director and the Secretary of the Interior. In turn, the secretary by 1991 will be required to make a recommendation to the President. The

President has until 1993 to submit to Congress his recommendation for a final decision.

Thank you, Mr. McClure.

MR. McCLURE: Thank you, Bill. Is there anyone here representing Governor Babbitt or any members of Congress or any of the State legislature?

MRS. ACKERMAN: Do you mean for the State of Arizona?

MR. McCLURE: Do you represent the governor?

MRS. ACKERMAN: Do you mean any of the senators for the State of Arizona?

MR. McCLURE: Yes, ma'am.

MRS. ACKERMAN: Our group is representing Senator Bradley, who is over energy and commissions on wilderness and such from New Jersey.

MR. McCLURE: Would you like to speak?

MRS. ACKERMAN: I spoke at the Phoenix hearing, me and my husband, both last night. Mr. Rogers might.

MR. ROGERS: Yes.

MR. McCLURE: Would you like to speak now?

MR. ROGERS: Well, yes.

MR. McCLURE: Would you like to come up to the podium?

MR. ROGERS: I think I can talk loud enough for everyone to hear me without it.

MR. McCLURE: Would you state your name and proceed.

MR. ROGERS: I am Roy Rogers of Wickenburg, and I have been working in that area of mining almost 31 years. However, I'm a miner from the age of about 14 over various parts of the country, including Alaska, Canada, several other parts of the country.

Now, I wonder about this land situation. We have heard a lot of pros and cons about it. Of course, a lot of it may not be true; a lot of it may have just a smattering of truth, of taking out this, that and the other thing. Well, miners in our area get along beautifully with the cattle owners, and as far as bothering any wildlife, I have worked out in the desert there for months at a time. I have dug ditches, and looked right up there. I have seen these cubs playing along the edge of where I was working, and rabbits and quail, you have to almost step on them to get them out of the way, and I don't think I have ever had any trouble or seen any of the wildlife up there that was disturbed.

Now, we have pretty good-sized deer and bucks running through various parts of our ranges, and I have them come over and drink water right out of the tubs where I leave on the outside. We see the footprints the next morning when I come out, and I got to where I leave

little scraps out for the little mountain lion and their cubs.

As far as the other night -- I should not bring this up, I suppose, at Quartzsite, but there was a heck of a bunch of people over there. I believe it was more than they expected. It seemed like everybody there, or the majority of them, was all shook up over the land; said they did not quite understand it.

A lot of the people coming down from the north go out and look around, pick up stones and so forth. The only complaints I got, which is a few, I never have objected to any individual coming out and just picking up souvenirs, because I have always thought it was good for the country.

People come up to that part of the country. They take home little, ol' rocks. Gee-whiz. You would have to have a truck out there with several tons to hurt anything in that area. Take those rocks home. Tell them: We got this from Arizona, wherever it was, put it upon the mantle piece. It may not be gold or anything, not that Pyrite stuff, but 90 percent of them don't know the difference.

So as far as I am concerned, I would like to have the land, as far as the miners and ranchers, stay just as it is, and I think that we will, with just a

little more understanding and a little better communication, that landowners and miners and everybody else can get along just fine.

Now, there is one thing I do object to as far as the miners goes, and that is the way they do their cyaniding. Now, I went over and worked two years to find out how to do cyaniding properly by one of the best men in the State of Arizona. Ted Houseley is recognized as such, and I went over, and I would have paid him to actually work for him, to find out what was actually going on. I read a lot on it, but that reading and actually doing it is two different things, and I worked for him there for almost three years, and was glad to do it. I thought it was equivalent to a college education.

I guess that is about all I have got to say. I could stand up here, and talk a long time and not say a bit more than what I have said. So I want to thank you for this opportunity.

MR. McCLURE: Thank you, Mr. Rogers. Our next speaker is Janel Smith.

MS. SMITH: Thank you, Mr. McClure. My name is Janel Smith. I am a member of the organization which represents the precious metals industry, including the independent mining companies, exploration and development companies, consulting firms and oil; gas and research and

exploration companies. I am also the state president of the Arizona Small Mine Owners Association, which was founded in 1938, and is the oldest mining organization in the world.

Before I begin my comments on the environmental impact statement, we have some concerns with this, and would like to share them with you concerning the procedure used on the Lower Gila South meetings and hearings.

Evidently, because of a lack of communication between the State Public Affairs Office and the Phoenix District, the Arizona Update publication, which is an in-house publication of BLM, left a lot of people in the western portion of this resource area with the impression that Monday's meeting at Quartzsite would be both an open house and a meeting for comment beginning at 7:00 p.m., similar to those conducted at the Yuma district, which they attended a week ago. There were 272 people at the open house at 3:00 p.m. on Monday, who were informed that the BLM would be interested in their comments at 7:00 p.m., but they would not be for the record except in a similar capacity because no reporter was present. Mr. Childress indicated these names would be entered into the record at the Phoenix hearing on Tuesday with a summary of comments; that the people should also write letters.

I have been informed today by my people there was no reporter present last night, either, and a tape recorder was used. However, they weren't sure if Monday's speakers all got into the record or not, although a summary of the record was taped.

We must confess, we are confused as to why the Phoenix district cannot get their act together for these hearings. Monday night was inexcusable insofar as the public was concerned. Regardless of which office of the BLM made the error, since the error was made, Lower Gila should have been able to receive these comments into the record. Since the tape recorder was used on Tuesday, why couldn't one be used on Monday?

Another problem we are having trouble dealing with is the use of vested interest personnel at these meetings and hearings. We believe that management alone has an obligation to conduct not only the meetings but the open houses so that all user groups are treated equally.

I refer to comments specifically Monday night by a member of the inventory staff that the 3802 and the 3809 regulations were an amendment to the 1872 mining laws promulgated in 1980. For anyone who is not familiar with the regulation, 3802 and 3809 were a result of FLPMA, and came down by secretarial order, not as a

law.

It would appear that the Phoenix District either needs to have all of its disciplines represented at these meetings and hearings or none of them. This information on the part of any agency concerned with managing the public land creates an element of mistrust, and doubts of the credibility of the documents you are presenting. Insofar as the document itself is concerned, we find very little of substance in the minerals report. It appears you did not see fit to use material supplied in your own contract of gem reports. Since I did not receive this information until February 22nd, it has been impossible for us to collect the proprietary information available to support our mineral position. That information, therefore, will be forthcoming before the end of the comment period. Consequently, tonight we will give you an overview only of our position.

First of all, New Water Mountains, they carry high mineral potential according to USGS and independent results, some of which you already have, geological inference of economic mineral deposits. They are presently in official withdrawal. In addition to a wilderness study area, this is a popular area for winter visitors from the Quartzsite and Yuma areas for rock collecting, camping and other uses.

Minerals in the area include silver, gold, copper, lead, zinc, tungsten, barite, manganese, molybdenum and iron. This area has been actively prospected and mined since the mid-1800s. Two years ago the Bureau of Land Management patented two of the Ramsey claims, which are just north of the present boundary.

As I advised the official Wildlife Service at their hearing last Wednesday in Lake Havasu City, if the Bureau of Land Management and Fish and Wildlife intend to persevere for wilderness or other withdrawal for this area, we are going to have no alternative but to take this WSA and the withdrawal through the courts. This area, in our estimation, has never met the criteria mandated for wilderness because of the minerals, and if, in fact, your primary concern is wildlife, those sheep have been getting along with the mining and miners since before the Bureau of Land Management, General Land Office, Official Wildlife Service were mandated.

The Table Top area preliminary geophysical and petrographic data from my company supports the possibility of a major discovery for copper through the middle of this WSA, probably averaging over one percent. Producing mines in the Antelope Peak area in 1955 made copper values better than one percent.

We have been recently notified by one of our

companies that a new silver discovery along the north half of the WSA and preliminary data indicate that the probability of economic value will warrant going into production. Woolsey Peak has past production of gold, silver, copper, lead, zinc, perlite, and tough building stone. There is a high potential for both geothermal wells and uranium occurrences.

The Signal Mountains area is a gold and copper area for building stone. Exploration in the past has shown geologic inference of massive sulphite deposits. Face Mountain has past production records of silver, lead, zinc, uranium, which could be an economic producer. The East Clanton Hills mineral occurrences are in gold, copper, silver, lead, and molybdenum, also, fluormica and uranium. There has been past productions from the gold mines.

Eagle Tail: This area contains gold, silver, copper, lead, manganese, barium and molybdenum, and has a favorable potential for economic development.

Little Horn Mountains West and the Little Horn Mountains all run together. They have had deposits in the occurrences of gold, silver, lead, copper, manganese, iron and some molybdenum. South Maricopa has the possibility of uranium and copper occurrences. North Maricopa, there has been granite quarries in the

northwest corner, I believe it is, and geologic information indicates the possibility of uranium deposits at depth.

In summary, I would like to say that our capability for production and development, our domestic resource development, depends in part upon our access to areas where these minerals are or may be present with the possible exceptions of the inner most portions of the Maricopa WSA. Most of these areas look down on to developed roads, freeways, ranches, freeways and settlements.

It is difficult to visualize the rationale of someone climbing Black Mesa for solitude, only to find -- or an excellent view of Brenda or Quartzsite or Little Horn Peak to communicate with nature -- and count the semis at the Arco Truck Stop. We do not believe the inventory of these areas are meeting the criteria for wilderness.

Thank you very much.

MR. McCLURE: Thank you, Ms. Smith. Yes? Yes, ma'am? You may come to the podium. Please state your name.

MS. ACKERMAN: I believe Mr. Childress thinks it is all my idea, but I have talked to Senator Bradley since the last few meetings we have had all this week, all

week, as a matter of fact, and he expressed the same concern that I have. I have been disabled in the Vietnam War. Since Senator Bradley wears braces also -- He was in the war. He was a commander there, and our main concern, on a lot of this, not just the minerals, but if I cannot walk in those mountains, any doctor can tell you I could not. If we cannot, there is people like Mr. Pfrimmer here that there is no way they can go and see it without a vehicle, and he feels, as I do. It would be discrimination against elderly and the handicapped.

Thank you.

MR. McCLURE: Thank you. Is there anyone else who wishes to speaks? Yes, sir.

MR. ACKERMAN: Mr. Chairman, and members of the board, my name is LeRoy Ackerman. What I have to say here, this last year there is companies we had interested here in the areas west of here. About two years ago I took them out, and did not pay any attention to them. Geologists came and looked at it. I sent them to different states. I don't remember where. In your meeting, companies in development of minerals and the copper companies and so on did not think too much about it.

Finally we got word that they were interested in this mineral. They wanted to know where this and that

and what as far as what the development of plants to process the mineral and the feasibility of getting the minerals out of the state, at the easiest way, or to ship and so on.

So what I told them is that this mineral was in an area where they have got access to the Southern Pacific Railroad, and the feasibility of getting it out without damaging the land; land would be stripped and land put back in place, and had Interstate 8 here to take it out, all this mineral.

I walked these mountains all the way through all the time; walked them, slept in them; stayed there for weeks at a time up in here, and come into Wellton or Tacna or wherever, Yuma, to get supplies, and that is why I know what I'm talking about, because the mineral interested them. They wanted to put a plant in here. I thought it would make more work in this area here, say, for the copper industry down in Ajo and different places and around here. It should help in some ways; then should make some taxes for state and, naturally, the federal government in these areas that there was several minerals of value they wanted.

I cataloged 24 minerals myself. I am no geologist. I am just a person. I have been around oil and gas, and worked in the coal mines of our own at home

in order to get our coal out we need, and worked in agriculture because we had farms. I have owned construction equipment of different types and semitrucks. So I know a lot. I trucked for the industrial areas in steel and also appliances and that. So I have a little knowledge of that end there, too, but while I worked in the mountains there, I tried to preserve your areas so that there would not be a big lawsuit on my part for the work I done in there.

When we first went in there, we went in, a group of businessmen in there, and opened up this land, and they were interested in what they had to do to get through this, and I told them we had to put in a plan of intent.

So we went to the Yuma office and stayed there. They went up, just like they was in the oil and gas business, and stated what they was going to use it for, and they asked: What are they going to use for, and they said they were going to take in D-8s and whatnot, bigger equipment. Right away the man -- Naturally, if I was in the same predicament, if I was in his shoes, flew off the handle. He said: Well it will be a $1,000,000 bond to start with, and so I expected it, the way they went in and talked to them.

So we went down the hall, after we got our

maps, and looked at the area; explained what we were going to do. I did government work back when, in Colorado and other states there in the high mountains, as high as -- close to 11,000 foot on roads and other work for the benefit for industries and forestries and parks, for cattle grazing and so on, access to the area.

And so after we talked it over awhile, then, I wrote out a plan of intent there, and I figured out that -- That was new to me at that time, for this state here. I knew what it was in Colorado; there for certain areas, and so he looked it over. He okayed it. Then he dropped the bond, and we never had any trouble with the BLM or anybody from that time on.

So I was satisfied there, but we have covered that area. We had gone out with a vehicle. Usually we run the washes in there as near as we could. I could see where Patton's men had worked on their maneuvers across that land; would still show up, but as long as you travel the washes and that, and did not tear up too much --

Your BLM representative here at the time was Lance was his first name. His last name is hard to pronounce; you remember him, though, at that time, but we got along good. I seen your helicopter and the Army planes and helicopter would fly over. I knew they could check the area; see what was going on, and I think they

were satisfied with that work so far, because when they put the powerline across there, the area, through the mountain range and across here to the power plant or the nuclear plant, they used the same roads we built through there. They improved them.

I was afraid at the time that I was cutting too much. When they went in, they cut where they bring the semis in, and trim the way they wanted to, that wide. So I thought, well -- I felt a little better after they went through and seen what they done.

When I worked at home, I had a man working for me. I expected his tracks for the machine to be evened out, no cuts. When you back off of a yard or industrial lot, you grade it down to blacktop or whatever. A lot of men had a habit of turning the machine around real quick when they loaded it out. They did more damage than they meant to do when they loaded it out. I seen that happen in these mountains where the men was careless. I seen other work done over the years and miners have done with the equipment was good. I mean, they were careful. That is one thing I do know in that area there. My people do a lot of your work in this area, now, on Interstate 10, on sewer, water and buildings and the proposed ag construction company and some ag companies in there. I forgot their names. It is under that.

So I have learned a lot through that other work through there. So all I can say is we need this land around that area as near as we can to develop for mining, and hope that taxes will override what the wilderness benefits would be, and they can themselves take care of the land.

That is all I have to say.

MR. McCLURE: Thank you, Mr. Ackerman. Yes, sir. Do you wish to speak?

MR. PFRIMMER: Yes.

MR. McCLURE: Sure.

MR. PFRIMMER: Paul Pfrimmer is my name. I am from old Stantonville, the old ghost town of Stanton, 10 miles east of Congress. I get my mail out of Congress. So it is not quite so bad.

The one think I am interested in here is oil and gas in Arizona. It is supposed to be a dry state, but it isn't. I have found seven gushers plumb full of oil, and I want to open up one this summer sometime if things come through like I expect it, and this I think all but one structure will rival the East Texas oilfield, which is 10 miles wide and 40 miles long. That covers 40 sections.

Now, this big one, that is here in Arizona, will cover 140 sections once we get started. That is a

lot of oil and natural gas; will cover 500 sections. It is tremendous. That is all there is to it, and what I'm worried about is: How much wilderness areas will cover some of these places.

Now, I think I better quit. This is the first time I ever got up before anybody.

MR. McCLURE: Thank you, Mr. Pfrimmer.

MR. PFRIMMER: I think I better sit down.

MR. McCLURE: Is there anyone else who wishes to speak this evening? If not, I want to thank all of you for attending. Your views will be part of the permanent record, which will remain open for further statements or letters until May 2nd, 1985.

Again, if you wish to write, you should address your letter to the District Manager, Bureau of Land Management, Phoenix District Office, 2015 West Deer Valley Road, Phoenix, Arizona 85027.

This hearing is hereby closed.

(The hearing adjourned at approximately 7:45 p.m.)

I HEREBY CERTIFY that I was present at the public hearing before the Bureau of Land Management in the matter of the Lower Gila South Planning Area of the Phoenix District; that I made a stenographic record of all proceedings had and adduced before said Bureau upon said hearing; and the foregoing 26 pages constitute a full, true and accurate transcript of the same, all to the best of my skill and ability.

DATED this 15th day of March, 1985.

BONNIE SUMIDA
Court Reporter

1

UNITED FOUR WHEEL DRIVE ASSOCIATIONS
of U.S. and CANADA
6900 E. Camino de Anza Tucson, AZ 85704

Mr. Marlyn V. Jones, District Manager
Bureau of Land Management Phoenix District - USDI
2015 W. Deer Valley Rd.
Phoenix, AZ 85027

Feb. 12, 1985

Dear Mr. Jones:

I have just completed a review of your "Lower Gila South Draft RMP & EIS". Although you apparently used sound professional judgement in many of your resource management decisions there are some decisions that illustrate a preponderance of political servitude. I am of course referring to your recommendations for "wilderness". You recommend "wilderness" in 4 WSA's (2-125, 2-128, 2-142/144 & 2-172) totalling more than 189,750 acres. These decisions do not reflect the same objectiity you displayed in evaluating the suitability of WSA's that you rejected from wilderness consideration. The same objective criteria that you used to find other WSA's as "unsuitable" exist in these 4 WSA's that you say are "suitable". Each of these WSA's has significant mineral/gepthermal potential and many miles of "roads". Most of areas are severely intruded by "roads" and two of the units at least are absolutely bisected by roads while another is nearly bisected by a "cherrystemmed" "road". 1-1

In view of the recently enacted AZ Wilderness Act these 4 WSA's add little to the diversity of the existing NWPS. By your own admission "no new ecosystems would be added to the NWPS". So why are you even suggesting that these poor grade WSA's be considered for "wilderness"? Is it because you have been given some qouta of wilderness to dream up? Is it political pressures demanding a minimum wilderness for BLM?

I believe these WSA's be left under multiple-use management. In this way the existing 93.55 miles of "vehicle ways" and 6 miles of "roads" could be utilized by a much larger segment of the public. You estimate that some "4650 visitor days/year of recreation use" will occur with "wilderness". From other BLM studies (Yuma Dist. Draft RMP/EIS 1985) vehicular recreational uses exceed 1.8 million visitor days/year. You indicate that wilderness recreation would relate to "$17,763 annual expenditures". Whereas other vehicular recreational estimates indicate a gross revenue of some 6820 million (BLM 1985). Your own estimates indicate that "10,000 visitor days use within the WSA's now" and I assert that 90% of this is vehicular recreation from your decisions of 366.5 miles of "ways" and 7.35 miles of "roads". Your estimate of each "wilderness" visitor spending $7.64/day" may be accurate and your total value of "wilderness" recreation of $17,763/year may be accurate. Tell I assure you that 10,000 vehicular recreationists will spend more than $7.64/day, but even at that you have a value of over $76,000. 1-2

Lastly, you seem to have gone to a great deal of effort to detail "wilderness" in this EIS and how multiple-use will be totally detrimental. If I didn't know better I could say you showed prejudice. We both know that with today's laws and regulations governing multiple-use your professional expertise would adequately protect any "unique" qualities these "wilderness areas" may possess.

Thank you for hearing me out. I hope my comments are taken as constructive criticism. If there are any questions, or I can be of any assistance please call on me at any time.

Sincerely,
Stu Benson
Stu Benson, Director Land-Use

CC: AZ Assoc. 4WD Clubs
Dean Bibles, State Dir.

RESPECT...PROTECT...AND ENJOY: LAND, WATER, MOUNTAINS, AND SUN RESOURCES

Response - Letter 1

1-1 The Bureau acted in accordance to law and established policy in recognizing the need for "cherrystemming" roads or other man-made features. Though the boundaries of a WSA containing "cherrystems" may be irregular as a result of such corridors, Section 603(a) of FLPMA did not specify a particular shape for an area that may be recommended for wilderness designation.

1-2 Information contained in BLM's "Wilderness Public Opinion Survey" published October 1983 revealed that wilderness visitors spent an average of $18.86 per person on wilderness trips lasting an average of 2.47 days. Thus, each person was found to spend an average of $7.63 per 24 hour visitor day. On a 12 hour visitor day basis, expenditures would amount to $3.81 per 12 hour visitor day which was rounded to $4.00 per 12 hour visitor day in this EIS.

2

601 E. 10th St
Casa Grande, Az
85222

2/19/85

I'd I would like to see the Tabletop mountain area designated a wilderness reserve.

Christy Walton
William E Dante Pg

Casa Grande, Ariz
Casa Grande, AZ

Rec'd 2/20/85

3

February 23, 1985

Mr. Marlyn V. Jones
District Manager, Bureau of Land Management
Phoenix District Office
2015 W. Deer Valley Road
Phoenix, Arizona 85027

Re: The Lower Gila South Draft
Resource Management Plan

Dear Mr. Jones,

The acreage the BLM plans to recommend for designation as wilderness in the Lower Gila South Area is grossly inadequate. The BLM proposal would provide neither adequate recreation for Arizona's burgeoning population nor adequate habitat to protect the area's unique ecosystems. I most strongly urge you to adopt the Environmental Protection alternative, which would confer wilderness status to all 12 Wilderness Study Areas. At the very least, the 380,000 acres containing crucial desert bighorn and desert tortoise habitat should be granted wilderness status.

Before discussing the BLM recommendations for the individual Wilderness Study Areas, I would like to make several general points regarding the BLM draft.

1. During the next two decades, the population of Arizona's major metropolitan areas will double or triple. The areas protected by wilderness status must therefore be vastly increased if the state's residents are to be able to enjoy these desert lands in near-pristine conditions. Even now, the wilderness areas immediately accessible to residents of Phoenix and Tucson are overtaxed; the Superstition Wilderness, the Pusch Ridge Wilderness, and Saguaro National Monument are all overrun by hikers, except in the very worst weather. This excessive pressure both endangersthe ecosystems involved and degrades the visitors' wilderness experience. Obviously, we need a great expansion of the wilderness system, and the BLM areas are particularly important in this regard because of their proximity to Phoenix, Tucson and Southern California. As a practical matter, most wilderness trips are taken on a day off or, at best, on a spare weekend, which is enough time to visit Lower Gila South wilderness areas but not enough time to visit, say, the Grand Canyon.

2. In the draft Resources Management Plan the BLM rejects wilderness status for most areas because "they do not have unique wilderness values" or "other wilderness areas are planned nearby." Such illogical arguments are a variation on the "If you've seen one tree, you've seen them all" philosophy and fail to address the basis issues at hand:

a) As noted by many sources, including the National Wildlife Federation, habitat loss is the greatest threat to American wildlife, and this is especially

true in the fast-growing Southwest. Establishment of small, isolated preserves provides very little long term protection for the ecosystems and individual species. For instance, desert bighorns must have free access across bajadas and valleys separating individual mountain ranges in order to maintain diversity in the gene pool and protect against catastrophic destruction of individual populations (e.g. by disease). It is therefore critically important that large, near-contiguous areas have wilderness protection.

b) The recreational value of wilderness areas is critically dependent on the availability of sufficient wilderness areas and acreage to handle the people who wish to use them. The presence or absence of "unique features" is irrelevant when a visitor spends his whole trip falling over fellow hikers. Since solitude in a natural setting is the great benefit of a wilderness trip, it is again the size and availability of wilderness areas that counts.

3. The BLM recommends against wilderness status in several study areas because trains could occasionally be heard. That's silly. The East and West sections of Saguaro National Monument (both wilderness areas) are constantly being overflown by commercial airliners approaching or leaving Tucson International Airport. Because of the aircraft, the wilderness experience is less than perfect, but it is infinitely better than no wilderness experience at all. Wilderness areas close to population centers, railways, and major highways will naturally tend to be affected by the sounds of civilization, but even so, these wilderness areas are by far the most important source of wilderness recreation to most people, since they can be visited frequently. My wife and I greatly value the week we spend each year in the Grand Canyon backcountry, but as a practical matter, we derive far more pleasure and relaxation from the Pusch Ridge and Saguaro National Monument wilderness areas, despite their less-than-pristine character, simply because we can visit them twice a week on spare afternoons.

3-1 4. In the proposed Resource Management Plan, the BLM frequently excludes from wilderness areas acreage which "may be difficult to manage because of . . . easy accessibility." Here the BLM is taking the wrong point of view: Having a wilderness area which is imperfectly protected is infinitely preferable to abandoning the area to long-term ecological disaster.

3-2 5. The BLM RMP consistently excludes bajadas and valleys from proposed wilderness areas, claiming that they do not offer the recreational opportunities that mountains do, on the assumption that "rugged topography" is an intrinsic virtue. Such a view is extremely shortsighted. The bajadas and valleys are ecologically interesting in their own right and provide tremendous recreational opportunities for hikers, bird and animal watchers, and photography buffs who want to spend a few leisurely hours amid the wonders of the Sonoran Desert. Older persons and those with limited physical capacity can easily enjoy such areas.

Bajada and valley areas also allow hikers to find solitude easily, even during heavy visitor use, since one can wander up a wash or across country. In the mountains, on the other hand, off-trail travel is difficult and tends to cause erosion and damage to vegetation.

Response - Letter 3

3-1 BLM's Wilderness Study Policy states that an area must be capable of being effectively managed to preserve its wilderness character. Only those areas which can be managed as wilderness over the long term will be recommended as wilderness. Areas with easy ORV access and a lack of natural or man-made barriers will be difficult to manage as wilderness over the long term.

3-2 Large portions of WSA's with desert bajada and valleys have been recommended as suitable for wilderness in the Proposed Action. Large acreages of this desert landform are found in the Eagletail Mountains, Woolsey Peak and Tabletop Mountains WSAs.

6. In the proposed RMP, some areas are deprived of wilderness designation because of potential mineral deposits. That is unjustified. All of the wilderness study areas in the Lower Gila South area combined constitute less than one percent of the land area of Arizona, so closing these areas to mining or other development certainly would cause no significant economic loss. The recreation and habitat protection which would be provided by wilderness designation are vastly more important.

Comments on the BLM's Proposed Action for each of the individual Wilderness Study Areas follow.

New Water Mountains: The Proposed Action would only protect two-thirds of the WSA's crucial bighorn habitat, even though "This WSA has the highest bighorn density of the 12 WSAs studied" (p. 130). The area also provides outstanding hiking and backpacking opportunities and is contiguous with the proposed Kofa Wilderness. The entire New Water Mountains WSA should be protected as wilderness.

Little Horn Mountains West: The entire WSA is crucial bighorn sheep habitat and should be given wilderness protection, especially since it is contiguous with the much larger Little Horn Mountains WSA.

Little Horn Mountains: The BLM itself notes that this WSA offers outstanding opportunities for both solitude and primitive recreation, contains strikingly scenic geologic features, and is a major bighorn use area. I therefore find incomprehensible the BLM's recommendation against wilderness designation. The entire 90,430 acreas should be protected as wilderness.

Eagletail Mountains: The BLM's Proposed Action would return 46,835 acres to multiple use to "improve manageability." Forget manageability -- imperfectly protected wilderness is vastly preferable to no protection at all. The entire WSA should be recommended for wilderness status.

3-3 East Clanton Hills: The BLM's Proposed Action recommends against protection for the WSA because of alleged mining potential and because the southern portion of the WSA is not mountainous and therefore lacks "primitive recreational opportunities." I thoroughly disagree, and the BLM's own data contradict their assessment of this area. In Table S-4 of the RMP, the potential for mineral development in this area is described as "low." The potential economic benefits of development are therefore inconsequential, while wilderness designation for the area would protect crucial desert bighorn and tortoise habitat and provide outstanding wilderness recreation. The BLM's assertion that valleys and bajadas aren't worth protecting is wrong. As I noted earlier, unspoiled bajadas and valleys provide tremendous recreational opportunities, and at least part of the BLM resource staff apparently agrees: "The (Hyder) valley's vegetation, desert swales, and numerous washes provide excellent screening. In addition, the size of this expansive plain provides the hiker with a sense of total seclusion" (p. 140). That's just the right kind of place for a leisurely hike in the desert. It should be protected as wilderness.

3-3 The EIS stated that the most out
primitive recreation opportuniti
found in the WSA's northern hal

Face Mountain: The BLM justifies the Proposed Action with the statement that "the opportunity for solitude alone does not justify" wilderness status. I disagree. Solitude is the primary goal of most wilderness visitors, and the Face Mountain WSA provides it in abundance. In addition, visitor access is good and "visitor use concentrations are unlikely" (p. 142). Since the WSA includes no significant potential mineral deposits, no existing or pending rights-of-way, and no great grazing conflict, the best use of the area would be realized by granting it wilderness protection.

Signal Mountains: The BLM concedes that this WSA meets all wilderness criteria, provides outstanding solitude and primitive recreational opportunities, and contains crucial bighorn and tortoise habitat. Furthermore, wilderness designation would cause no significant mining or livestock grazing conflicts. The BLM's refusal to recommend wilderness status is therefore completely incomprehensible. The arguments provided by the BLM for their multiple-use recommendation are all either specious or inconsequential, as noted below (all quotes from p. 108):

a) "All (wilderness characteristics) are found to an equal ... degree in other Lower Gila South WSAs recommended for designation. . . Wildlife habitat for desert tortoise and desert bighorn also occur in more abundance in other WSAs." Totally irrelevant. Both the recreational enjoyment of wilderness visitors and the survival of bighorn and tortoise populations are critically dependent on the amount of acreage devoted to wilderness, as noted earlier. The paucity of acreage recommended by the BLM for wilderness status is inadequate to meet the recreational needs of Arizona's growing population and will guarantee the demise of bighorn and tortoise populations isolated by development and habitat degradation.

b) "Moreover, solitude is frequently disrupted by the noise of numerous trains along the WSA's northwest border." This statement conflicts with the BLM's own statement (p. 145) that "Solitude opportunities are occasionally disrupted by the sounds of passing trains." It also demonstrates the absence of any reasonable justification for the BLM's proposed action.

Signal Mountain would be an outstanding addition to the nation's wilderness system and should certainly be recommended for wilderness status.

Woolsey Peak: The entire WSA should be given wilderness protection. The 12,930 acre eastern border which the BLM recommends for multiple use should be included in the wilderness area, if only as a buffer zone to protect against adverse impacts from development of the private lands to the east.

North Maricopa Mountains: This WSA richly deserves wilderness designation. It offers outstanding opportunities for solitude, hiking, backpacking, and wildlife observations within a short distance of Arizona's major metropolitan areas. In addition, wilderness status would protect 40,000 acres of crucial desert bighorn and desert tortoise habitat. The BLM's argument that this WSA would be difficult to manage as wilderness is unconvincing: As noted earlier, imperfect protection is a vast improvement over no protection. Even with no active enforcement, wilderness designation alone can have a salutary effect toward environmental protection.

South Maricopa Mountains: This area should certainly be given wilderness status. This WSA provides outstanding recreational opportunities close to the state's major metropolitan areas. Furthermore, it contains 42,800 acres of crucial bighorn and tortoise habitat. The contention in the Proposed Alternative that appreciable "mineral potential" is present is wrong. In table S-4 both "Mineral Potential" and "Mineral Development Potential" for this WSA are rated as "low," and on p. 151 it is noted that "there are no known mineral occurrences of economic porportions in the WSA." Apparently, the BLM recommendation against wilderness status is simply based on a feeling among the officials in charge that "the NWPS has 609,667 acres of land with similar characteristics already designaged, and 1.3 million acres of similar lands administratively endorsed as wilderness," and that should be enough. Such reasoning is clearly false, as noted earlier. Further wilderness areas are required both to provide recreational opportunites for Arizona's growing population and to protect the remaining undamaged Sonoran Desert ecosystems in southern Arizona.

In the Proposed Alternative it is also contended that "Much of the WSA is relatively flat bajada offering little to the primitive recreationist." That is totally wrong. As I noted above, the South Maricopa bajadas can offer tremendous recreational opportunities, and this is confirmed on p. 151 of the RMP/EIS: "Opportunities for hiking are found in densely vegetated flatter areas as well as on the more difficult, rocky mountain slopes . . . The topographic relief found in the WSA provides the backpacker, horseman and photographer with a variety of places to explore with a minimal chance of encountering others."

Butterfield Stage Memorial: This WSA, which is essentially contiguous with the North Maricopa and South Maricopa WSAs, should be given wilderness status to provide continuity between the two larger WSAs. This would increase the value of all three areas to the indigenous bighorn and tortoise populations and would increase recreational opportunities for backpackers. Since this WSA has a low potential for minerals, no record of mineral production, no inholdings, no proposed utility corridors, and no significant rangeland developments, wilderness designation would cause absolutely no adverse impacts.

In summary, I strongly urge that all 12 WSAs be recommended by the BLM for wilderness designation. Protection of these last unspoiled tracts of Sonoran desert would ensure continued hiking, camping, and "nature-watching" opportunities for Arizona's growing population while providing a chance of survival for the unique species inhabiting these areas. No significant negative economic impact would result from such wilderness designation, as demonstrated by the tables in the RMP/EIS. On the other hand, releasing these areas for development would inevitably result in the destruction of many of the most beautiful and awesome areas of the desert southwest.

Sincerely,

Dr. Paul Hintzen
5750 Camino Esplendora #237
Tucson, Arizona 85718

4

March 4, 1985

P.O. Box 6

Aguila, Arizona 85320

District Manager,

Bureau of Land Management

Phoenix, District Office

2015 W. Deer Valley R.D.

Phoenix, Arizona 85027

Dear Sir:

I belive all of this land should stay Multiple use.

Here's Why:

As a Taxpayer, who used to live in the Desert (25 years R 15 W T 1 S) who pumped or pulled water by hand for the Wildlife (thats not there since you people closed the wells down) Bighorn Sheep, in the Hot dry spells came to our well to drink. Deer came right up to the House if the tank was empty, to get a drink!

Birds were all over! Snakes & Gila Monsters came to drink!

Now you can go out there, (I was last May;) there were No Deer, no Dove, no Bighorn, no Snakes or Gila Monsters, just two or three Birds.

If you are wondering who I am, I'm Sandra Hovatter, We Built Hovatter road, Maintained it by hand, when the grader didn't make it. Also I have a Father and a Sister buried out there, and I want to be able to go see their graves!

So I think this Country should be open to the people. I like space as much or more than anybody. But have you looked at a State Map latey? You have State land, National Parks, State Parks, National Game Ranges, Military Ranges, Indian lands, so when you get through that doesn't leave much land to just go out and do your thing on!

So MULTIPLE USE IT SHOULD BE !!!

Sincerely

Sandra L. Moore

Sandra L. Moore - Formerly Sandra L. Hovatter

5

3-4-85
Po Box 6
AGUILA, AZ
85320

DISTRICT MANAGER
BUREAU OF LAND MANAGEMENT

DEAR SIR,

I'AM OPPOSED TO THE CONFISCATION OF ANY MORE LAND FROM THE PUBLIC DOMAIN FOR WILDERNESS AREAS. YOUR EXCUSES FOR DENYING THE GOOD NO YOUR CITIZENS ENTRY ARE DEPLORABLE AND WEAK. WHEN YOU GET THROUGH WITH BOTTLYING PEOPLE UP IN THEIR HOUSES YOU WILL HAVE COMPLETLY REGIMENTED THEM. DICTATORSHIP - INEVITABLY FOLLOWS,

PROVIDED YOU ACCOMPLISH THE ABOVE (PRESUMED) GOAL, EVEN THOUGH YOU MAY NOT BE AT PRESENT BE AWARE OF WHAT YOU ARE REALLY DOING, I MUST TELL YOU THIS. FOR THOSE OF YOU FORTY YEARS YOUNGER, YOU WILL LIVE TO SEE THE DAY THAT YOU WILL BE THE [illegible] OR THE [illegible]

RECEIVED
BLM
PHOENIX, ARIZONA

ENSLAVED BUREAUCRAT (MULTIPLE USE THINK ABOUT IT. PLEASE.)

SINCERELY YOURS,
[illegible]
Box 6
Aguila Az. 85320

6

Aguila Ariz,
March 5. 1985

District Manager
Bureau of Land Management
Phoenix District Office
2015 W Deer Valley Rd.
Phoenix, Arz

Dear Sir.

I wish to State that I do not approve of all the Area Around Ariz being put under a Wilderness Area!

As a Native Arizonian it seems we already have many parks, Indian reservations - ect - I do belive a certain Amount Should be set aside but not So much in Any One Area. also I Cannot See what Multiple use Hurts the Land if properly Supervised. It is really a help to the native game & Birds to Have the Cattle Men in the Area - because of the Water. Of Course I believe the Ranchers Should Have to Maintain a Base well or More than

P.O. Box 164
Aguila,
Arizona
85320

March 4, 1985

District Manager
Bureau of Land Management,
Phoenix District Office,
2015 W Deer Valley Rd.,
Phoenix, Arizona 85027

Dear Sir:

Re your plans to place much of our desert-type land acquire - into Wilderness Areas:

It is Public Domain now and should so remain!

I lived out in the desert - the southwest side of the highest peak of the Littletown Mountains, 42 miles from our nearest neighbor — for 25 years. We hiked miles around, learned to know the desert and its designs. I still crave getting out there. We are part of the desert. Enjoy its beauty, peace and serenity.

My first daughter and husband are buried there. Naturally like to go out to "commune"

that enjoy & they should have respect for the game of the area.

Thank You Sincerely
Julia M Powell
Box 202
Aguila Ariz
85320

with time and cut to the graves. If your present plans go through, I could no longer do so.

Arizona has Indian lands, reserves of all kinds, parks, game refuges, military ranges, etc, which is fine. But you don't need Wilderness Areas! Your plans are to keep "we the people" crowded us constantly, and not be permitted to go out in the relaxing desert away from noise, congestion, traffic pollution and farm pollution - dust, chemical drift etc. — so we can breathe fresh pure air.

Please! Do not do this to us! It is evidence of the rankest discrimination against "we the people"!

Yours truly,

(Mrs) Barbara C. Howatter

8

March 7, 1985

RECEIVED
BLM, PHOENIX DIST. OFF.
PHOENIX, ARIZONA
MAR 11 1985
AM 7|8|9|10|11|12|1|2|3|4|5|6 PM

District Manager
Bureau of Land Management
2015 W. Deer Valley Rd.
Phoenix, Arizona 85027

Dear Sir,

I have studied your RMP/EIS for the Lower Gila South Planning area, and would like these comments to be included in the official record for this EIS.

It is obvious that these public lands are within a days drive of the major cities of Phoenix and Tucson. A large and growing number of the residents of these cities are demanding wilderness type experiences to balance the stresses of big city living.

The traditional users of public lands have been the mining and livestock industries. They have left our lands overgrazed and scarred, with severely damaged wildlife and water resources. Thankfully, these industries are now on the wane in Arizona, and it would be foolish to subsidize them further with the No Action and Resource Production alternatives in this EIS.

I believe the only acceptable alternatives are

the Resource Protection and Environmental Protection alternatives. My recommendation is the Environmental Protection alternative because I feel that the majority of the present and future residents of this state want their public lands managed for their wilderness values.

As a matter of fact, to back up this statement, please refer to a recent survey by the University of Arizona which shows that Arizonans by a wide margin regard maintenance of wildlife and recreation values as highest priorities for public land management programs. (article in Landscape Architecture, November-December 1984, by Dr. Erwin Zube and Charles Law, School of Renewable Natural Resources, U of A).

To sum up, I strongly recommend for the Lower Gila South management area the adoption of the Environmental Protection alternative, calling for the wilderness protection of 12 WSA's totalling 607,557 acres. As a second alternative, I would support the Resource Protection plan.

Sincerely,
James E. Posedly
P.O. Box 411
Oracle, Az 85623

9

BLM PHOENIX DISTRICT

MAR 12 '85

___ DM
___ ADM
___ PA
___ ADMIN
___ OPS
___ MINS
___ RES
___ P&EA
___ PRA
___ LGRA
___ KRA
___ CF
Action By
Due Date

6 516 W. Fillmore
Phoenix, Arizona 85043

March 11, 1985

District Manager
Bureau of Land Management
Phoenix District Office
2015 W. Deer Valley Road
Phoenix, Arizona 85027

Dear Sir:

I wish to comment on the proposed "conversion" of public, or multiple-use, lands into wilderness areas.

First, let me state that I spent eighteen years of my life living out in the desert, with our nearest neighbors being 42 miles away. Hence, I know firsthand of what I write.

The Wilderness Act as originally written would prohibit most, if not all, of this land being declared wilderness. Most areas have roads, mining, etc., in them; what is left is too small an acreage. Has the law been "reinterpreted" to allow this theft of our lands?

This state already has much land withdrawn into State Land, Wilderness, Refuges, Parks, and Preserves of all types. Why should what little is left be effectively taken from the people? Nearly all of this land is inaccessable by any means except the automobile; how is anyone going to be able to enjoy the serenity, the beauty, of the desert, if this land is stolen through being illegally seized as wilderness?

I thought our government was " by the people, for the people." How is this either by or for the people?! Please, PLEASE do not allow this to happen!

Most Sincerely,

Jean Speer

Jean Speer (Hovatter)

17

Hickenbury Az 8535
3/14/85

To B.L.M.,

I don't think you need any more Wilderness land. I am a miner and my mind is my income. If you take in my mind into Wilderness you can put me on your welfare lines and take care of me. The miners have water out at all times. ~~they~~ the Arizona Miners will not hurt the animals.

And we miners want to be left alone.

Thank You
Violet Regan
Box 1786
Hickenbury Az 85358

21

MARCH 17, 1985

DISTRICT MANAGER
B.L.M.
PHOENIX DISTRICT OFFICE
2015 W. DEER VALLEY RD.
PHOENIX, ARIZONA, 85027

DEAR SIR,

I WOULD LIKE TO RESPOND TO THE PROPOSED CONVERSION OF PUBLIC & MULTIPLE USE LANDS INTO WILDERNES AREAS. HAVING AN INTEREST IN MINING, HIKING, HUNTING, GEOLOGICAL EXPLORATION & HISTORY I AM TOTALLY AGAINST "WILDERNESS AREAS" IF THOMAS JEFFERSON HAD LISTENED TO THE PEOPLE WHO WANTED THE "WILDERNESS" OF THE LOUISIANA PURCHASE LEFT ALONE WE WOULDN'T HAVE PART OF THIS COUNTRY. ALASKA WOULDN'T BE HERE IN THE U.S.A. ~~THE~~ GA MUCH OF THE WEST WOULDN'T BE SETTLED IF PEOPLE HADN'T BEEN ALLOWED TO GO WHERE THEY WANTED, WHEN THEY WANTED, HOW THEY WANTED. TO MUCH LAND IS ALREADY DENIED ACCESS TO IN THE FORM OF CURRENT WILDERNESS AREAS, PARK, MILITARY GUNNARY RANGES, PRIVATE LAND, ETC. LEAVE WHAT'S LEFT TO THOSE WHO HAVE EARNEST DESIRE TO EXPLORE, HUNT, MINE OR USE AS THEY SEE BEST.

SINCERELY,
Kenneth F. Spear
KENNETH F. SPEAR
6516 W. FILLMORE

6516 W. Fillmore
Phoenix, AZ 85043

24

March 21, 1985

Phoenix District BLM
2015 W. Deer Valley Road
Phoenix, Arizona 85027

Dear Sirs:

We need more Wilderness areas in Western United States, especially in Arizona where the population is growing at a fantastic rate.

I support wilderness recommendations for:

White Canyon Mt. Wilson Coyote Mountains
Picacho Mountains Baboquivari Peak Hells Canyon
Little Horn Mountains North Maricopa Mountains
Eagle Tail Mountains Signal Mountain South Maricopa Mountains
Woolsey Peak Tabletop Mountain

FGS

Thank you very much,

Robert J. Schmidli
Robert J. Schmidli
6220 S. 8th Place
Phoenix, Arizona 85040

ARIZONA
OFFICE OF THE GOVERNOR
BRUCE BABBITT

OFFICE OF
ECONOMIC PLANNING AND DEVELOPMENT

Beth S. Jarman, Ph.D., Executive Director • (602) 255-5371

RECEIVED
B.L.M. PHOENIX DIST. OFF.
PHOENIX, ARIZONA
MAR 25 1985
AM 7 8 9 10 11 12 1 2 3 4 5 6 PM

MEMORANDUM

TO: Bureau of Land Management, Phoenix District Office

FROM: Arizona State Clearinghouse

DATE: March 22, 1985

RE: DRAFT ENVIRONMENTAL IMPACT STATEMENT FOR THE LOWER GILA SOUTH RESOURCE MANAGEMENT PLAN - RMP/EIS
SAI NO: AZ 85-80-0011

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.

The Standard Form 424 is attached along with any comments that were received for submission with the project.

Attachments

cc: Arizona State Clearinghouse
Applicant

Executive Tower 4th Floor • 1700 West Washington • Phoenix, Arizona 85007

SIGNOFF EXHIBIT A 67

OMB Approval No. 0348-0008

FEDERAL ASSISTANCE

1. TYPE OF SUBMISSION (Mark appropriate box): ☐ NOTICE OF INTENT (OPTIONAL) ☐ PREAPPLICATION ☐ APPLICATION
2. APPLICANT'S APPLICATION IDENTIFIER: a. NUMBER: RMP/EIS; b. DATE: MAR 22 1985
3. STATE APPLICATION IDENTIFIER; ASSIGNED BY STATE
4. a. NUMBER: 85-80-0011; b. DATE ASSIGNED: FEB 08 1985

5. LEGAL APPLICANT/RECIPIENT
a. Applicant Name: Bureau of Land Management
b. Organization Unit: Phoenix District Office
c. Street/P.O. Box: 2015 West Deer Valley Road
d. City: Phoenix
e. County:
f. State: Arizona
g. ZIP Code: 85027
h. Contact Person (Name & Telephone No.): Bill Carter, (602) 863-4464

6. EMPLOYER IDENTIFICATION NUMBER (EIN)

7. PROGRAM (From CFDA): a. NUMBER: 15.226; MULTIPLE ☐; b. TITLE: DOI/BLM

8. TITLE OF APPLICANT'S PROJECT (Use section IV of this form to provide a summary description of the project.): DRAFT ENVIRONMENTAL IMPACT STATEMENT FOR THE LOWER GILA SOUTH RESOURCE MANAGEMENT PLAN - This draft EIS describes and analyzes five alternatives for managing the public lands in the Lower Gila South RMP/EIS area.

9. TYPE OF APPLICANT/RECIPIENT: FEDERAL AGENCY [K]

10. AREA OF PROJECT IMPACT (Names of cities, counties, states, etc.): La Paz, Maricopa, Pima, Pinal & Yuma Co.'s, Arizona

11. ESTIMATED NUMBER OF PERSONS BENEFITING:

12. TYPE OF ASSISTANCE

13. PROPOSED FUNDING: a. FEDERAL $ .00; b. APPLICANT .00; c. STATE .00; d. LOCAL .00; e. OTHER .00; f. Total $ .00

14. CONGRESSIONAL DISTRICTS OF: a. APPLICANT; b. PROJECT

15. TYPE OF APPLICATION [A]

16. PROJECT START DATE (Year month day): 19

17. PROJECT DURATION: months

18. TYPE OF CHANGE (For 16 or 17): DATE DUE TO FEDERAL AGENCY (Year month day): 19

19. FEDERAL AGENCY TO RECEIVE REQUEST: Bureau of Land Management

20. EXISTING FEDERAL GRANT IDENTIFICATION NUMBER

a. ORGANIZATIONAL UNIT (IF APPROPRIATE): Phoenix District Office
b. ADMINISTRATIVE CONTACT (IF KNOWN): Bill Carter
c. ADDRESS: 2015 West Deer Valley Road, Phoenix, Arizona 85027

21. REMARKS ADDED ☐ Yes ☐ No

SECTION A—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

24. APPLICATION RECEIVED (Year month day): 19

25. FEDERAL APPLICATION IDENTIFICATION NUMBER

26. FEDERAL GRANT IDENTIFICATION

SECTION B—FEDERAL AGENCY ACTION

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 day): 19

31. CONTACT FOR ADDITIONAL INFORMATION (Name and telephone number)

32. ENDING DATE (Year month day): 19

33. REMARKS ADDED ☐ Yes ☐ No

NSN 7540-01-008-8162 PREVIOUS EDITION IS NOT USABLE

424-102

STANDARD FORM 424 PAGE 1 (Rev. 4-84) Prescribed by OMB Circular A-102

ARIZONA DEPARTMENT OF TRANSPORTATION

HIGHWAYS DIVISION

206 South Seventeenth Avenue Phoenix, Arizona 85007

BRUCE BABBITT
Governor

WILLIAM A. ORDWAY
Director

CHARLES L. MILLER
State Engineer

February 28, 1985

Ms. Louise Fehr
Arizona State Clearinghouse
1700 West Washington Street
Room 505
Phoenix, Arizona 85007

Re: Bureau of Land Management
Lower Gila South Resource
Management Plan/
Environmental Impact Statement
Phoenix District, Arizona - Draft
(SAI#85-80-0011)

Dear Ms. Fehr:

Please find attached the completed State Clearinghouse comment form on the referenced document. The Arizona Department of Transportation has preliminarily reviewed this RMP/EIS and plans to attend the March 12, 1985, public hearing in Phoenix.

The Bureau of Land Management's proposed action does not appear to affect existing ADOT Maintenance and Five-Year Construction Programs. The four Wilderness Study Areas, New Water Mountains, Eagletail Mountains, Woolsey Peak, and Table Top Mountains proposed for designation appear to have boundaries sufficiently removed from existing highways so as to not affect possible future roadway widenings or realignments. ADOT does have long range concerns regarding proposed land disposal of parcels along the State Highway routes and designating utility corridors following highway alignments.

Following the public hearing, ADOT will provide detailed written comments to the Bureau of Land Management.

Very truly yours,

PHILIP A. SHUCET, Manager
Environmental Planning Services

PAS:MRD:eh

Enclosure

cc: Bob Darr, TPD

HIGHWAYS • AERONAUTICS • MOTOR VEHICLE • PUBLIC TRANSIT • ADMINISTRATIVE SERVICES • TRANSPORTATION PLANNING

Comment Form To Be Completed by Reviewing Agency

State Application Identifier (SAI)

FEB 06 1985

State AZ No. 85-80-0011

TO:

Robert J. Darr
Advanced Planning Section
Department of Transportation
206 S. 17th Ave., Room 310B
Phoenix, AZ 85007

Transportation
Mineral Res.
Game & Fish
Ag. & Hort.
Health
Water
Parks
Land

FROM: Arizona State Clearinghouse
1700 West Washington Street, Room 505
Phoenix, Arizona 85007

Region I,II,IV, V

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
(See attached letter)
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

Date 2/28/85

Title Manager, Environmental Planning Services

Telephone 255-7767

TO:

Director
Agriculture & Horticulture Dept.
421 Capitol Annex West
Phoenix, AZ 85007

FROM: Arizona State Clearinghouse
1700 West Washington Street, Room 505
Phoenix, Arizona 85007

State Application Identifier (SAI)
FEB 06 1985
State AZ No. 85-80-0011

Transportation
Mineral Res.
Game & Fish
Ag. & Hort.
Health
Water
Parks
Land

Region I,II,IV, V

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.

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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):
BLM Continues to work with the Commission on all Protected Native Plants ARS-3-901-910 - See Page 20 statement - Protection Statute

Reviewers Signature R. Abernathy-man
Date 2-12-85
Title Director, Western Region
Telephone 255-4373

-115-

ARIZONA STATE PARKS

1688 WEST ADAMS STREET
PHOENIX, ARIZONA 85007
TELEPHONE 602-255-4174

BRUCE BABBITT
GOVERNOR

STATE PARKS BOARD MEMBERS

PRISCILLA ROBINSON
CHAIR
TUCSON

GWEN ROBINSON
VICE CHAIR
YUMA

REESE G. WOODLING
SECRETARY
TUCSON

ELIZABETH A. DRAKE
PHOENIX

OUANE MILLER
MOONA

RAY MOLERA
NOGALES

ROBERT K. LANE
STATE LAND COMMISSIONER

MICHAEL A. RAMNES
DIRECTOR

ROLAND H. SHARER
DEPUTY DIRECTOR

February 8, 1985

Mr. Marlyn V. Jones.
District Manager
Bureau of Land Management
Phoenix District Office
2015 W. Deer Valley Road
Phoenix, AZ 85022

Lower Gila South Planning Area
Re: Draft Resource Management Plan and EIS
DOI-BLM

Dear Mr. Jones:

I have reviewed the draft report submitted for the above project. The report appears to consider adequately the cultural resources of the project area at this stage of investigation. Pursuant to 36 CFR, Part 800 of the Advisory Council's regulations ("Protection of Historic and Cultural Properties"), we look forward to continuing the consultation process regarding the cultural resources of this project.

We appreciate your cooperation with this office in complying with the historic preservation requirements for federal undertakings. If you have any questions about any of this, please contact me at (602) 255-4174.

Sincerely,

Teresa L. Hoffman
Archaeologist

for Donna J. Schober
State Historic Preservation Officer

TLH:rmj

CONSERVING AND MANAGING ARIZONA'S HISTORIC PLACES, HISTORIC SITES, AND RECREATIONAL, SCENIC AND NATURAL AREAS

COMMENTS AND RESPONSES

Comment Forms To Be Completed by Reviewing Agency

TO:

State Application Identifier (SAI)
FEB 06 1985
State AZ No. 85-80-0011

. SHPO
Arizona State Parks Board
1688 W. Adams, Rm. 109
Phoenix, AZ 85007

Transportation
Mineral Res.
Game & Fish
Ag. & Hort.
Health
Water
Parks
Land

FROM: Arizona State Clearinghouse
1700 West Washington Street, Room 505
Phoenix, Arizona 85007

Region I,II,IV, V

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~~ on back

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 Teresa L. Hoffman for Donna Schafer, SHPO Date 2-12-85

Title Archaeologist Telephone 255-4174

29

3/22

I am writting to you to plead with you to protect our wilderness in Arizona.

One Special area to me is Gila (Tonto) South. It's very beautiful there and it is an important habitat for bood bigehorn Sheep and the desert tortoise.

Please help to preserve this wilderness.

Sincerely,

Shelley Kline
4540 E. Beryl Ave #11
Phoenix, AZ 85008

RECEIVED
MAR 25 1985
ARIZONA ST. OFF.
PHOENIX, ARIZONA

CUTLERY WORLD
Colonnade Mall
Phoenix, AZ 85016
274-6900

30

E. Anderson.
7671 E. Tanque Verde Rd.
Tucson, Az. 85715

3/18/85

Dear Sirs,

I would like to comment on the Lower Gila RMP-EIS. This area has been used for mining and agricultural purposes since Arizona joined the United States. The idea that this is suitable for wilderness is a little hard to fathom. I feel if there are certain plant and animal species in this area that need protection than measures can be taken to restrict certain uses within various parts of this region, rather than closing the entire thing to the overwhelming majority of Americans who are dedicated hikers and back packers.

RECEIVED
BLM PHOENIX DIST. OFF.
PHOENIX, ARIZONA
MAR 22 1985

Sincerely

31

R.T. Alexander
725 S. Abrego Dr.
Green Valley Az 85614
March 13, 1985

Re: Lower Gila RMP-EIS

Gentlemen:

I am opposed to wilderness designation for any of the WSA's covered in the Lower Gila South report. These parcels have been used for years for mining and agricultural activities and will serve the future better by continuing management as multiple-use areas.

Sincerely,
Richard Alexander

RECEIVED
BLM PHOENIX DIST. OFF.
PHOENIX, ARIZONA
MAR 22 1985

32

March 21, 1985

Phoenix District BLM
2015 W. Deer Valley Road
Phoenix, AZ 85027

The designation of wilderness can be our gift to future generations. I support wilderness recommendations for the following:
PHOENIX DRAFT EIS
White Canyon should be included because of its unique beauty.

Mt. Wilson provides crucial habitat for bighorn sheep and is surrounded by lands on three sides already proposed for wilderness in the Lake Mesa Recreational Area. It has important wilderness characteristics.

Coyote Mountains. This natural area not only fulfills all the important wilderness characteristics, but also has 7 special status wildlife species and 8 protected plant species.

Baboquivari Peak. This area has broad public support, the peak is sacred to the Papago Indians, it has outstanding natural qualities, and contains an abundance of wildlife. You plan to acquire state land to the east to enlarge this unit. We approve your recommendation of the entire WSA as wilderness.

We hope you will also include Hell's Canyon and the Picacho Mountains in your wilderness recommendations.

LOWER GILA SOUTH DRAFT EIS

Little Horn Mountains/Little Horn Mountains West. These two areas contain remarkable volcanic features and two deep canyons. Little Horn West is contiguous to the Kofa National Wildlife Refuge area. These two areas form important habitat for both bighorn sheep and desert tortoise.

Signal Mountain. This rugged area should be included in spite of the threat of mineral development.

North Maricopa Mountains/Butterfield Stage Memorial. These areas contain crucial habitat for bighorn sheep and desert tortoise, and also an abundance of prehistoric cultural sites. The areas are threatened by off-road vehicles, especially in riparian washes.

We also would like you to include the following areas in your wilderness recommendations: Tabletop Mountains, Woolsey Peak, New Water Mountains, Eagletail Mountains, East Clanton Hills, Face Mountain, and South Maricopa Mountains.

Thank you for your consideration in these matters.

Sincerely,

Janice C. Luepke
3401 E. River Road
Tucson, AZ 85718

RECEIVED

33

Dear Sirs,

I am writing this letter to voice my support for wilderness designations for the White Canyon, A.T. Wilson, Coyote Mtns, Baboquivari Peak, Hell's Canyon, and the Picacho Mtns. Also I support wilderness status for the Little Horn Mtns, Little Horn Mtns-West, Signal Mtn, North Maricopa Mtns, Butterfield Stage Memorial, Tabletop Mtns, Woolsey Peak, New Water Mtns, Eagletail Mtns, East Clanton Hills, Face Mountain, and the South Maricopa Mtns.

Thank You,
Don Ayers E.I.T.

RECEIVED

35

928 E. Cavalier Dr.
Phoenix, AZ 85014
March 21, 1985

Phoenix District BLM
2015 W Deer Valley Rd.
Phoenix, AZ 85027

Dear Reader:

I am writing in support of wilderness recommendations for the following areas which I understand you have not included in your proposed recommendations:

White Canyon
Mt. Wilson
Coyote Mountains
Baboquivari Peak
Little Horn Mountains
Little Horn Mountains/West
Signal Mountain
North Maricopa Mountains/Battlefield Stage Memorial

I have personally been in the White Canyon, Little Horn Mountains and North Maricopa Mountains/Battlefield Stage Memorial areas and feel it would be a real tragedy if these areas are not included. We are not electing any more potential wilderness areas. They will be part until future generations and it is important that we preserve these areas while we still have the opportunity. Please include all of the above areas in your recommendations.

Sincerely,
Frank S Loulan
Frank S Loulan

37

March 22, 1985

Phoenix District
Bureau of Land Management
2015 W. Deer Valley Road
Phoenix, Arizona 85027

Dear Sir:

It has just come to my attention that the Bureau of Land Management has released its recommendations for wilderness designation for certain areas in Arizona, and that public comment on these is being solicited.

I am a native of Arizona and have lived here for most of my 65 years. The changes during that period, especially the pressures of population growth, have been tremendous. With that in mind I urge you to include not only very large areas for wilderness designation such as the Little Horn Mountains, North and South Maricopa Mountains, Woolsey Peak, Eagletail Mountains, but also smaller areas like White Canyon, Coyote Mountain, and Baboquivari Peak (this should also include 3245 acres of state land that should be acquired by trade), and Signal Mountains.

Since population is exploding with no end in sight, we must act now to preserve as much wildlife habitat, scenic areas, and recreational opportunities as we possibly can. Possible potential for copper production, oil and gas leases (not producing) should not stand in the way of protecting Arizona's unique wild areas. Off road vehicles and grazing should be strictly controlled so that these beautiful areas are not destroyed for the pleasure or profit of a few.

Yours truly,
Lillian Longley
Lillian Longley
1729 W. State
Phoenix, Arizona 85021

38

Dr. Walter A. McCleneghan
8512 East Virginia Avenue
Scottsdale, Arizona 85257

March 22, 1985.

Phoenix District BLM,
2015 W. Deer Valley Rd.,
Phoenix, AZ 85027

Dear Sirs:

Having read the Environmental Impact Statements on areas in the Phoenix District authority, I am amazed and chagrined to find that your office -- or, at least, the BLM -- is recommending against 6 out of the 7 be denied Wilderness classification. I am writing to urge that all of these specific areas BE INCLUDED in favorable recommendation.

I refer to those designated as: WHITE CANYON, Mt. Wilson, Coyote Mountains, Baboquivari Peak, Lower Gila South, including Little Horn Mountains and Little Horn Mountains West, Signal Mountain, and the North Maricopa Mountains.

Having lived in Arizona from 1936 to 1939 and continuously from 1955 to the present, I know something of the areas under consideration. While I am now of an age where I cannot get out and enjoy those places in person I surely believe that they should be kept from being commercialized and/or despoiled. Their commercial development would soon run out and leave only despoiled areas. Their preservation can bring joy and love of nature for generations to come.

I strongly urge your favorable action on each and all of them.

Yours for the future of Arizona,

Walter A. McCleneghan

Dr. Walter A. McCleneghan

39

Tucson General Hospital
Your Community Osteopathic Hospital
JOHN T. WINTER, D.O.

3/22/85

Northwest Emergency Center
1601 West Ina Road
Tucson, Arizona 85704
602-742-1101

Dear Sir,

I am writing to add my support for wilderness recommendations for:

Phoenix EIS (White Canyon, Mt. Wilson, Coyote Mtns, Baboquivari Peak, Hell's canyon and Picacho Mountains).

Lower Gila South EIS (Little Horn Mtns and West, Signal Mtn, North Maricopa Mountains and Bickerfield Stage Mountains, Table top Mtns, Woolsey Peak, New Water Mtns, Eagletail Mts, East Clanton Hills, Four Peaks, S. Maricopa Mtns.).

The Baboquivari Peak Wilderness (one of my favorite hiking spots) should also include the 3,245 acres of contiguous state land.

Thank you. Help protect our wilderness

40

Michael L. Wunder
1919 E. Libra
Tempe, Ariz
85283

Phoenix District BLM
2015 W. Deer Valley Rd
Phoenix, Az 85027

Dear Sirs:

I am writting to state my support for areas which are not presently wilderness, but which have been reveiwed by your department. I have particular interests in these areas and feel that each has features that make it unique and valuable and would like to see them finally reach wilderness designation. Please consider the following for wilderness designation.

1) White Canyon - although small this area is close to Phoenix for weekend trips and its canyons and slick rock areas transport hikers out of their everyday lives and into another time. This area is a quick refresher for working adults.

2) Coyote Mountains

3) Baboquivori Peak

4) Signal Mountain

5) North Maricopa Mountains - This area's size, terrain, and need to be protected from off-road vehicle damage and intrusion make it a prime candidate for wilderness inclusion.

I appreciate the opportunity to make my recommendations known, and hope that you will seriously consider them.

Sincerely,

Michael L. Wunder

RECEIVED
MAR 2 1982
BLM PHOENIX DIST. OFF.
PHOENIX, ARIZONA

41

William S. Finkelstein
401 E. Lawton St.
Tucson, Az 85704
March 23, 1985

U.S.D.I Bureau of
Land Management
Phoenix District
2015 W. Deer Valley Road
Phoenix, Az 85027

To Whom It May Concern:

This letter is in response to the request for comments on the Phoenix and Lower Gila South Environmental Impact Statements concerning wilderness recommendations for Bureau land in Arizona. I am concerned that the Bureau has only seen fit to recommend wilderness status for such limited acreage in Southern Arizona. The growing population and development of the state means growing impact on its wildlands.

My concern is not for recreational areas, though this is important. I am concerned about the impact on the decreasing wildlife habitat and with the protection of watersheds. Since the Bureau is now mandated with the responsibilities of multiple-use management it is important that it take a holistic approach to it resource management. Wilderness management is an important component of this. Because of this I support the inclusion of the White Canyon, Mt. Wilson, Coyote Mountains, Little Horn Mountains and Little Horn Mountains West, Signal Mountain and the North Maricopa Mountains and Butterfield Stage Memorial into the U.S. Wilderness System.

I also support the expansion of the proposed Baboquivari Peak Wilderness area by the acquisition of State land.

Decisions made now will have a very important far-reaching effect. I hope your decisions concerning these proposed Wilderness areas will be the first steps toward responsible wilderness management for the Bureau.

Sincerely,
William S. Finkelstein

RECEIVED

43

5121 N. 12th Ave
Phoenix, Az. 85013
March 24, 1985

Phoenix District BLM
2015 N. Deer Valley Rd.
Phoenix, Az. 85027

Gentlemen:

This is to indicate my support for the wilderness recommendations for the Phoenix EIS. I definitely feel the White Canyon should be included. Also are Mt Wilson and Coyote Mountains. The Bobogunan Peak Wilderness should be greatly enhanced by the addition of the contiguous state 3,245 acres.

Because of its nearness to the Kofa Refuge, why can't the Little Horn Mountains be included?

I would also like to see the Signal Mountains and North Maricopa Mountains/Butterfield Stage Memorial added.

These rich wildlife areas are threatened and need to be preserved. To act now is imperative. Once these landscapes lost, a heritage of wilderness is gone forever.

Very truly yours,

Rose Marie King
(Mrs. C. B. King)

-123-

45

District Manager
BLM, Phoenix District Office
Phoenix, AZ 85027

23.03.85.

Subject: Comments about the Draft RMP/EIS for Lower Gila South.

Summary conclusion: I support the No Action Alternative

Comments: Your Planning Team is biased in favor of wilderness type recreation to an unbalanced degree. Their Proposed Action recommends a whopping 189,750 acres for wilderness and at the same time do not designate or propose to manage a single acre for intensive use ORV area. On page 1 you just dismiss and brush aside the whole special ORV high use or a designation issue with a single sentence: " No areas have been identified in the RMP/EI
45-1 area for ORV designation." The Planning Team does not even bother to give any rationale in support of this negative statement. Other BLM Districts have in their Draft RMP's designated some go for high use ORV play areas. Why not Phoenix District? Suitability for Wilderness recreation is discussed in great detail/ This does not come as surprise since the Phoenix District Outdoors Planners have not published any ORV recreation promoting pamphlets in the past, only ones promoting other types of recreation.

Your report mentions the ORV-related visitor days/year to see that will occur in areas you recommend for wilderness designation (p.197 for example) but without any planning effort to designate where these displaced ORV recreationists will be sent. Despite that BLM regonizes ORV recreation as a matter of policy the Planning Team has adopted a sort of "get lost" attitude towards the ORV recreationist in their Draft RMP.

Also significant is the absence from the Draft an ORV Management Plan and Map. Could this omission be caused by lack of specific first hand expertise in ORV recreational activities among your Planning Team members?

Sincerely, Harry Melts

Harry Melts
Box 64
Porthill, ID 83853

Response - Letter 45

45-1 **ORV high use area designation was not identified as an issue in the RMP. However, we will address site specific needs for ORV designation on a case by case basis. Please refer to Chapter 1, Planning Process Overview, pages 1 and 2, Lower Gila South Draft RMP/EIS. In addition, see Chapter 2, page 21 and 22, Recreation Program.**

47

3/23/85
Box 675
Bisbee, Az.
85603

Phoenix District BLM
2015 w. Deer Valley Rd.
Phoenix, Az. 85027

Dear Sirs:

I am writing out of deep concern over below named Wildnerness areas in Arizona which are threatened and must be preserved for all of our well being:

White Canyon - copper production is immaterial compared to our need to preserve wild lands, small tho the area may be.

Mt. Wilson - This area is known for its outstanding scenic value as well as providing excellent opportunities for solitude (a vanishing resource these days) and provides a crucial habitat for Bighorn Sheep.

Coyote Mts. - Smallness in size is an oversight to consider when you take into consideration the many benefits of these Mts. - eg. - 7 speicial status wildlife species, 8 protected plant species, 250 culturally sensitive acres containing a classic period Hohokam cendian compound.

Baboquivari Peak - I strongly recommend the entire WSA as wilderness - this is a popular hiking & climbing area, a sacred peak to the Papago cendidna, an abundance of wildlife proliferates, with outstanding natural qualities.

In addition I feel it is essential to preserve Needle Canyon & the Picacho Mts., Little Horn Mts, Signal Mts. & N. Maricopa Mts.

I urge you to strongly consider these requests. We must never forget the eternal value of wilderness which was so long in the making & can be so quickly destroyed and lost forever.

Maintenance of natural lands are essential to the survival of man.

Thank you.

Sincerely,

Sara Traum

SARA TRAUM

50

March 25, 1985

Phoenix District BLM
2015 W. Deer Valley Road
Phoenix, AZ 85027

Dear BLM:

We are presently observing and photographing the wildlife and scenery in the vicinity of Signal Mountain and Woolsey Mountain, consisting of 19,640 acres.

It would be devastating to the bighorn sheep, not to mention the various other species of wildlife and plantlife, if this land is not preserved.

Please continue to protect our beautiful wilderness, not only in the above-mentioned area, but also in the following areas:

- White Canyon
- Mt. Wilson
- Coyote Mountains
- Baboquivari Peak
- Hells Canyon
- Picacho Mountains

(over)

It will prove to be a far more valuable resource than any minerals that may be discovered in those areas, if the wildlife and wilderness are left untouched.

Thank you.

Sincerely,

Dianne M. Zahnle
Naturalist
Joseph + Zahnle
naturalist photographers
Shelia B. Zahnle

COMMENTS AND RESPONSES

51

2407 N. Palomino Court
Chandler, Arizona 85224
March 23, 1985

Phoenix District Bureau of Land Management
2015 W. Deer Valley Road
Phoenix, Arizona 85027

Dear Sir:

I support wilderness recommendations for the Phoenix EIS and the Lower Gila South EIS.

I am particularly interested in the Baboquivari Peak wilderness study area and support acquisition of the adjacent state land for wilderness designation.

It is important to me that as much wilderness area in Arizona as possible be preserved.

Thank you.

Sincerely,

Dorothy Lees Riddle

Dorothy Lees Riddle

54

Gentlepeople,

My wife, Julie Riley, and I both strongly support wilderness recommendations:

1. White Canyon - South of Superior - 6,968 acres.
2. Mt. Wilson area - This area is a home for bighorn sheep, 24,821.
3. Coyote Mtns. - 5,080 acres.
4. Baboquivari Peak - Great place for a hike 2,065 acres.
5. Little Horn Mountains - 90,430 acres.
6. Signal Mountain - 19,640 acres.
7. North Maricopa Mountain - Butterfield Stage Memorial.

We are Tempe residents who enjoy the beauty + solitude of the Sonoran desert. Designating this area as wilderness will make/keep our state the wonderful place it is. Please act on these recommendations.

Sincerely,

Jim Marley

Julie L. Riley

3/26/85

L.H. Chatham
1322 S. Camino Del Sol
Green Valley, AZ 85614

Dear Sirs

We urge you to recommend for wilderness designation the following areas: White Canyon, Coyote Mountains, Baboquivari Peak, Mt Wilson, Little Horn Mountains & Little Horn Mountains West & North Maricopa Mountains.

We are fairly new Arizona residents but deeply concerned for the preservation of wilderness areas & wildlife habitats.

Sincerely

Mr & Mrs L H. Chatham
1322 S Camino Del Sol
Green Valley AZ 85614

MR. RICHARD FAITH
4502 NO. CAMINITO ESTE
TUCSON AZ 85718

Phoenix District BLM
2015 W. Deer Valley Rd.
Phoenix, Az. 85027

Dear Sirs:

Please accept my support for the protection of the following -

White Canyon
Mt. Wilson
Coyote Mountains
Little Horn Mountains
Signal Mountains
North Maricopa Mountains
Table Top Mtns.

Baboquivari Peak
Hells Canyon
Picacho Mtns.
Woolsey Peak
New Water Mtns.
Eagletail Mtns.
Ezzo Clanton Hills
Face Mountain
South Maricopa Mtns.

Thank you, Richard Faith

COMMENTS AND RESPONSES

58

3/24

DEAR BLM,

I AM WRITING TO EXPRESS MY STRONG SUPPORT FOR WILDERNESS AREAS BEING DESIGNATED TO THE FOLLOWING AREAS:

PHOENIX EIS

WHITE CANYON	PICACHO MOUNTAINS
MT WILSON	COYOTE MOUNTAINS
HELL'S CANYON	BADO QUIVARI PEAK

LOWER GILA SOUTH EIS

TADILETOS MOUNTAINS	EAGLE MOUNTAINS
SIGNAL MOUNTAIN	EAGLETAIL MOUNTAINS
N. MARICOPA MTS/BUTTERFIELD STAGE	WOOLSEY PEAK
LITTLE HORN MOUNTAINS/LITTLE H. W.	NEW WATER MOUNTAINS
SOUTH MARICOPA MOUNTAINS	EAST CLANTON HILLS

ARIZONA WILDERNESS SHOULD BE PRESERVED ~~[illegible]~~ FOR SOLITUDE PURPOSES AND TO PROTECT WILDLIFE. ALLOWING COMMERCIAL DEVELOPMENT OF THESE AREAS WOULD BE A BIG MISTAKE.

SINCERELY,

CARROLL KLEIN

6702 N. 11 AVE.

PHOENIX, AZ 85013

RECEIVED

59

Phx EIS
+
Yuma RMP/EIS

P.O. Box 613
Cave Creek
Az. 85331
March 25, 1985

Phoenix District BLM

We are glad to learn that the BLM plans to aquire 3,245 acres of state land which will enlarge the proposed Baboquivari Peak wilderness area.

We wish to support wilderness status for the WSA's of Mt. Wilson, the Coyote Mountains, White Mountain, Little Horn Mountains and Little Horn Mountains West, the N. Maricopa Mountains/Butterfield Stage Memorial, and Signal Mountain.

Each of these areas, as you know, has many unique features which qualify it for wilderness protection. We do encourage you to make such recommendations.

2.

With the rapidly expanding population in Arizona, and the enormous increase in the use of destructive off-road vehicles in recent years, it is important to act before it is too late. Our wilderness areas are one of the most valuable legacies we can leave to future generations.

Yours sincerely,

Flynn C. & Jeanne Kelly

61

Phoenix District BLM
2015 W. Deer Valley
Phoenix, Az.
85027

Dear Sirs:

The purpose of this letter is to voice our ~~my~~ support for the following wilderness recommendations

White Canyon	Tabletop Mts
Mt. Wilson	Woolsey Peak
Coyote Mountains	New Water Mts.
Baboquivari Peak	Eagletail Mts.
Hell's Canyon	East Clanton Hills
Picacho Mountains	Face Mt.
Little Horn Mts	South Maricopa Mt.
Signal Mt.	Butterfield Stage
North Maricopa Mts	Little Horn Mts. West

Thank You

Eddie Bennett
Karen M. Bennett

30-230th SAC
FLAG, AZ, 86001

COMMENTS AND RESPONSES

62

3/25/85

To whom it may concern,

BARA & SCOTT SAMUELS
2007 N. FORGEUS
TUCSON, ARIZONA 85716

I am writing to you in support of wilderness recommendations for the following areas: White Canyon (6,968 acres), Mt Wilson (24,821 acres) Coyote Mountains (5,080 acres), Baboquivari Peak (2,065 acres, + 3,245 acres of contiguous State land that should be acquired by trade) Hells Canyon (9,329 acres), Picacho Mtns (6,400 acres), Little Horn Mountains (& West), Signal Mtn, North Maricopa Mtn, Butterfield Stage Memorial, Tabletop Mtns, Woolsey Peak, New Water Mtns, Eagletail Mtns, East Clanton Hills, Face Mt., and South Maricopa Mountains. These areas are a spectacular part of the Sonoran desert and must be preserved.

Thank you for your time.

Dara Newman-Samuels

74

STERLING VINSON, Photography

Construction
News • Sports
Archaeology

1940 East 2nd Street
Tucson, Arizona 85719
(602) 326-8583

27 March 1985

Phoenix District, BLM
2015 W. Deer Valley Road
Phoenix, AZ 85027

Gentlemen:

I am writing as a concerned member of the Sierra Club in response to their letter to members of 18 March.

I wish to draw your particular attention to Baboquivari Peak, now a Wilderness Study Area, with further land accuisition planned by you, and to the Picacho Mountains. Since I am a resident of Tucson, these areas are especially important to me, because they offer me a chance to get into the wilderness on weekends. There I can get a bit of peace and quiet and can refresh my spirit through contact with the natural world. For Baboquivari Peak, I hope that you do acquire the additional 3,245 acres of land east of the Wilderness Study Area. As for the Picacho Mountain area, this is a zone nationally known for its desert wildflowers and also has important historical significance as the site of Arizona's only battle of the Civil War.

Both areas deserve protection in and of themselves and the citizens of Tucson deserve these bits of nearby wilderness.

Thanking you, I remain

Sincerely yours,

Sterling Vinson

Sterling Vinson

84

3434 W. Sandalwood Dr.
Tucson, AZ 85745
April 1, 1985

Phoenix District BLM
2015 W. Deer Valley Rd.
Phoenix, AZ 85027

Dear Sir,

I am writing to be included in public comment on additional wilderness designations in Arizona. I particularly support the additions for Baboquivari Peak and the Picacho Mountains. I have visited both of these areas and can understand their potential as areas for preservation of the plant and animal life as well as the natural terrain.

Other areas being considered. I have not visited but am well aware of the need for wilderness designation of as many areas as possible in order not to lose the incalculable value of the flora and fauna we have in Arizona.

Sincerely,

(Mrs.) Peggie Vincent

85

415 So. Eastbourne Ave.
Tucson, Arizona 85716
March 29, 1985

Phoenix District BLM
2015 W. Deer Valley Rd.
Phoenix, AZ 85027

Gentlemen:

I am writing to comment on the draft EIS for wilderness study areas in the Phoenix district.

I wish to strongly support the allocation of large areas for wilderness designation. More particularly, the following areas:

White Canyon - 6,968 acres
Mt. Wilson -24,821 acres
Coyote Mountains - 5,C8C acres
Baboquivari Peak - 2,065 acres
Picacho Mountains - 6,400 acres

Your consideration of this recommendation is appreciated.

Very truly yours,

Joseph K. Califf, Jr.

87

Good Morning!

I am strongly in favor of establishing BLM Wilderness areas at White Canyon, Mt. Wilson, Baboquivari Peak, Coyote mountain, and elsewhere. Arizona NEEDS protected wilderness areas and NOW is the time to set areas aside for protection — NOW, before population pressures, mining, real estate developers, and other problems make wilderness designation impossible. We lost Glen Canyon, we lost the once beautiful Phoenix valley, we lost the whole East Coast. Let's not postpone the protection of plenty of wilderness areas in Arizona — while we still have the time, and while they are still wild.

Bob Wirth
Po Box 3228
E Flagstaff AZ 86003

88

blue moon photography

HERB McREYNOLDS

Phoenix District BLM
2015 W. Deer Valley Rd.
Phoenix, Arizona 85027

To Whom it May Concern:

This letter is in support of wilderness recommendations for the following:

White Canyon
Mt. Wilson
Coyote Mountains
Baboquivari Peak
Hells Canyon
Picacho Mountains

Sincerely,

Herb McReynolds

Herb McReynolds
550 Blackbird Roost, #4
Flagstaff, Az 86001

91

1220 W. Las Lomitas
Tucson, Arizona 85704
2 April 1985

Phoenix District BLM
2015 W. Deer Valley Road
Phoenix, AZ 85027

Re: Phoenix Wilderness EIS

Gentlemen:

I have been out of the city and unable to forward my statement concerning the above mentioned EIS and trust I may still be included with the group that has offered their support.

This is to advise that I support for wilderness designation the following:

1. #2-01A, Mt. Wilson, 24,821 acres.
2. #2-187, White Canyon, 6,968 acres.
3. #2-119, Hell's Canyon, 9,379 acres.
4. #2-202, Coyote Mountains, 5,080 acres.
5. #2-203B, Baboquivari Peak, 2,065 acres.
   A. I likewise recommend the acquiring of additional 3,245 acres of state land that is east of the WSA to enlarge the size of this small unit and give added protection to same.

I also support full wilderness status for all of the areas in the Lower Gila South EIS.

Sincerely,

Gene I. Wendt

GIW/mb

92

744 Lee St.
Thatcher, AZ 85552
April 3, 1985

Phoenix District Bureau of Land
Management
2015 N. Deer Valley Rd.
Phoenix, Arizona 85027

Gentlemen;
I would like to express my support for the wilderness designation of the following areas: White Canyon, Mt. Wilson, Coyote Mountain, Baboquivari Peak, Hell's Canyon and the Picacho Mountains.

The natural habitat of these areas represents a valuable resource to Arizona. Some are immediately adjacent to already protected land or areas for which protection is proposed. The Baboquivari Peak area is also important for religious and cultural reasons to the Papago Tribe. Although some of these areas are small, the wildlife habitat provided by them is an important consideration.

I thank you for your attention.

Yours truly,
Melinda Weisser Lee.

93

April 3-1985
MARLYN Jones Dist MGR
PHX Dist Blm 2015 N Deer Valley RD.
Phoenix Az 85342.
Re. Lower G.L.R. South. WSR.S
Does Not meet The Criteria
Of Wilderness Act.

2. Multiple Use = Mining
Cattle RAising - Winter Visitors

3. To Follow Them = would cause
Economic disaster to our Area
Merchants - Motels, miners & the
whole way of life - Cattle men

George W Campbell Sr
PO Box 501
Salome Az 85348

93-1

Response - Letter 93

93-1 The economic impacts of each of the alternatives chosen for study were identified in the draft RMP/EIS on pages 66-69, 75-77, 81-82, and 86-87. No significant impacts to the economy of the Economic Study Area are anticipated from any of the alternatives analyzed in the RMP/EIS.

98

United States Department of Agriculture | Forest Service | Region 3 | 517 Gold Avenue, SW Albuquerque, NM 87102

Reply To: 1920

Date: APR 0 5 1985

Marlyn V. Jones, District Manager
Bureau of Land Management
Phoenix District Office
2015 W. Deer Valley Rd.
Phoenix, Arizona 85027

Dear Ms. Jones:

The Southwestern Region has reviewed the draft EIS for the Resource Management Plan on the Lower Gila South Area. The Plan is not in conflict with management of National Forest lands, and we have no comments.

Sincerely,

for Marlin D. Hughes
JAMES C. OVERBAY
Deputy Regional Forester

RECEIVED

FS-6200-28(7-82)

102

Greater Arizona Bicycling Association

P.O.BOX 3132 | TEMPE, AZ 85281 | (602) 277-6716

APRIL 4, 1985

LOWER GILA SOUTH
RMP/EIS
BUREAU OF LAND MANAGEMENT

DEAR BILL CARTER,

AS PRESIDENT OF GREATER ARIZONA BICYCLING ASSOCIATION, PHOENIX CHAPTER, I'M WRITING TO YOU IN THE INTERESTS OF OUR MEMBERS.

WE WOULD LIKE TO SEE BICYCLES (ALL-TERRAIN OR MOUNTAIN BICYCLES IN ADDITION TO REGULAR BICYCLES) BE ALLOWED TO CONTINUE TO USE EXISTING ROADS AND TRAILS IN THE LOWER GILA SOUTH WILDERNESS STUDY AREAS. THESE VEHICLES DO NOT POLLUTE NOR DO THEY MAKE LOUD NOISES TO SCARE WILD LIFE. 102-1

WE RECENTLY HAD A LARGE TOUR IN ONE OF THE PRIMITIVE DESERT AREAS OF THE STATE AND REALLY ENJOYED THE BEAUTY OF THE AREA. FROM THE EXISTING PAVED ROAD. NO MATERIAL (PAPERS) OR DEBRIS (ALUM. CANS) WAS LEFT TO SPOIL THE ENVIRONMENT.

IT WILL BE FORTUNATE IF OTHER CONSIDERATE BICYCLISTS CAN EXPERIENCE ADDITIONAL FUTURE TOURS.

SINCERELY,

FRANCES CHUBINSKI
PRES. G.A.B.A. PHOENIX

Response - 102

102-1 Any activity that is considered nonimpairing to the existing wilderness characteristics of a Wilderness Study Area is allowed.

BOB STUMP
3D DISTRICT, ARIZONA

211 CANNON BUILDING
WASHINGTON, DC 20515
(202) 225-4576

DISTRICT OFFICE
5001 FEDERAL BUILDING
PHOENIX, AZ 85025
(602) 261-6923

Congress of the United States
House of Representatives
Washington, DC 20515

ARMED SERVICES COMMITTEE

PERMANENT SELECT COMMITTEE ON INTELLIGENCE

VETERANS' AFFAIRS COMMITTEE

April 4, 1985

Marlyn Jones
Director Manager
BLM Phoenix District
2015 W. Deer Valley Rd.
Phoenix, AZ 85027

Dear Marlyn:

Enclosed please find a copy of a letter from Mr. and Mrs. W.H. Douglass concerning wilderness in the Lower Gila South. Would appreciate your including their comments in the public record on the proposal.

Best wishes.

Sincerely,

BOB STUMP
Member of Congress

BS:ll
Enclosure

P.O. Box 1100
Superstite, Az.
85.346
3-30-85

US Congressman, Bob Stump

Dear Sir:

We are writing in opposition to the bill to be introduced ~~into~~ Congress making the Lower Gila South or New Water area of B.L.M. land into a Wilderness Area. This is near Superstite. It would then be restricted to all vehicles.

We feel this is not fare to disabled and Senior Citizens who are not able to Walk long distances over rough, but beautiful terrain. They should not be deprived of the beauties of nature just because they can't walk, but should be able to drive on roads through such places.

We are not thinking just of "Snow Birds" who come from other states in the winter but older residence of the state who have always enjoyed getting out in the desert mountains, too.

So, please vote to keep these areas open to the public with instructions to conserve and protect nature, leaving it as it is.

Yours truly,
Mr. & Mrs. W.H. Douglass

106

555 N Pantano Rd,#228
April 8,1985

Phoenix District BLM
2015 Deer Valley Rd.
Phoenix, Az, 85027

Gentlemen:

When commercial interests such as mining and oil and gas extraction overshadow cultural and historic values, our country is going down the tube. Our grandchildren, yours and mine will have nothing left to be proud of. When we go to foreign countries, we see buildings and preserved ruins that are thousands of years old. The Indian artifacts in this country are fast disappearing, as are primitive areas which so well describe our geological heritage. the White Canyon area and Little Horn Mts/Little Horn Mts West are such areas, and should be preserved.

I urge the BLM to acquire these areas for posterity.

Sincerely yours

Constance Reed

108

Rk. Seidemann
2801 N. Forgeus
Tucson, Az. 85716

Dear friends,

Areas which are kept in natural and pristine states are much needed. They ensure places where people can get away from the hussle and bussle of city life and also the more used tourist spots. Being new (relatively) to Arizona I have not had the chance, yet, to hike any of your proposed wilderness areas. But from information attained from friends and other sources I feel some worthwhile areas which are being proposed for wilderness designation are not being recommended by your office. More specifics I mean White Canyon, Mt. Wilson, and the Coyote Mountains from the Phoenix Draft EIS, and the Little Horn mountains, Signal Mountain, and North Maricopa mountains from the Lower Gila South Draft EIS. As the population of Arizona and surrounding states grows more and more pressure will be put on state lands. Now is the time to ensure that they are kept in the most natural state as possible for our present enjoyment and future generations

Thank You

Rick Seidemann

115

Wickenburg Gem + Mineral Soc.
P.O. Box 2461
Wickenburg, Az. 85358

We the undersigned of the Wickenburg Az. Gem and mineral Society petition the closing of the area described as the Eagle Tail mountains and also the proposed closing of the Lower Gila Wilderness South of [illegible]

Helen V Dudley	P Box [illegible]	Wickenburg AZ 85358
Barbara Binion	P Box [illegible]	" "
Clare M Wilson	Hwy C	" "
Betty Manner	P.O. Box 1102	" " "
Al Manner	" "	" " "
Erma M. Roe	P.O. Box 459	Congress, Az 85332
Al H. Roe	"	" "
Katharine Davis	Star Rt. Box 11A	Morristown Az. 85342
Virgil F Davis	" "	" " "
Grace Davis	P.O Box 1702	Wickenburg AZ
Burton Moore	P.O. Box 2058	" 85358 "
Dora Moore	P.O Box 2058	" 85358 "
Don Pinkney	P.O Box 2377	Wickenburg AZ.
Ethel Pinkney	P.O Box 2377	Wickenburg Az. 85358
Raymond Raymond Jr Meyer	P.O. Box 1417	Wickenburg AZ 85358
Margaret Meyer	P.O. Box 1417	Wickenburg Az. 85358
Jamie E Middleton	Box 1925,	Wickenburg AZ 85358
Ann Middleton	Box 1925,	Wickenburg Az. 85358
Dana Boyles	Box 20878	Wickenburg Az. 85358
Billy W Boyles	Box 20878	Wickenburg AZ 85358

Lewis Bemus	P.O. Box 2461	Wickenburg Az. 85358
Dorothy Bemus	P.O. Box 2461	" " "
Mary Ellen Hays	P.O. Box 1329	Wickenburg AZ 85358
Thos G Collins	P.O. Box 306	Wickenburg Az 85358
Esther Collins	"	" "
Evelyn Purcell	Box 2554	Wickenburg Az 85358
Alfred Purcell	" "	" " "
Reva Perkins	Star Rt.	Morristown, Az. 85342

Dorothy Bemus, Sec.

116

Honeywell

RECEIVED
BLM, PHOENIX DIST. OFF.
PHOENIX, ARIZONA
APR 15 1985
AM 7 8 9 10 11 12 1 2 3 4 5 6 PM

HONEYWELL INFORMATION SYSTEMS INC.
P.O. BOX 8000
PHOENIX, ARIZONA 85066
E-24

April 8, 1985

Mr. Marlyn V. Jones, District Manager
Bureau of Land Management
Phoenix District Office
2015 W. Deer Valley Road
Phoenix, AZ 85027

Dear Sir:

It is my understanding that on March 12, 1985, BLM held a Public Hearing on Public Lands, specifically the Lower Gila South District. I do not have complete information on the agenda specifics but apparently the question of wilderness status of the area was debated.

It has been brought to my attention that a member of the public testifying at the hearing may have represented himself as speaking for the Honeywell Hikers, a private employee club of Honeywell, Inc. in Phoenix, Arizona. The Honeywell Hikers normally do not take sides on public issues although some members are deeply involved, as private individuals, on both conservation and recreational issues.

No one from the Honeywell Hikers club was authorized to represent the club at the March 12th BLM hearing. It would be appreciated if this position could be attached to the public record of that meeting.

Please let me know if I can be of any assistance or if you need more clarification on this matter.

Sven Hedin

Sven Hedin, President
Honeywell Hikers

SH/cg

cc: B. Holaday
Honeywell, Inc.
P. O. Box 8000 M.S. Z68
Phoenix, AZ 85066

124

BUREAU OF LAND MGT.
PHOENIX DISTRICT OFFICE
2015 W. DEER VALLEY RD.
PHOENIX, AZ 85027

APRIL 9-85

REF., LOWER GILA SOUTH

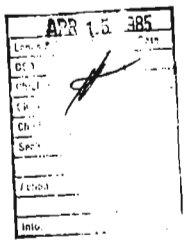
PLEASE DO NOT CHANGE THIS AREA
LEAVE AS MULTIPLE USE.

I WILL BE CLOSELY MONITORING THIS.
I HAVE SOME MINING CLAIMS IN THIS AREA BUT EVEN IF I DID NOT I WOULD BE AGAINST ANY WILDERNESS AREA SINCE THIS IS DISCRIMINARY USE OF PUBLIC LANDS.

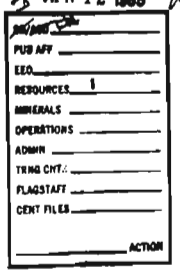
SINCERELY,
JACK DOLAN
Jack Dolan

J. DOLAN
5954 W. INDIAN SCHOOL #2069
PHOENIX, AZ. 85031

131



Bob Abbey
Send [illegible] a copy



March 28, 1985

Mr. D. Dean Bibles,
State Director
U.S. Dept. of the Interior
Phoenix District BLM
2015 W. Deer Valley Rd.
Phoenix, AZ 85027

Dear Mr. Bibles,

I understand that your agency is currently considering wilderness designation for some areas in Arizona. I would like to comment on your recommendations. I would appreciate your consideration of these comments before final designations are made.

In your recommendation you say that the White Canyon area is small and has "moderately favorable" potential for copper production. Given the well known troubles in our domestic copper industry I don't think moderately favorable potential warrants the destruction of part or all of even a small area of what remains of the wilderness in this country.

Since three sides of the Mt. Wilson area adjoin the Lake Mead National Recreation Area and given the needed habitat for wildlife such as the bighorn sheep it seems this area is ideally suited for designation. You say the area doesn't have "important" wilderness areas unique to the area. Are we only to preserve areas as unusual as Yosemite or the Grand Canyon? With the little that remains, all wilderness areas are unique.

The Coyote Mountains area is also called too small. The area contains some important archeological areas and great natural beauty. Who would recommend that we raze Mt. Vernon or Monticello simply because they cover small areas?

I believe you have recommended wilderness designation for the Baboquivari Peak area. I strongly concur. While there are many justifications for the designation, one of the most important is the religious significance to Papago Indians.

The two Little Horn Mountain areas should also be designated as wilderness areas. They adjoin the Eagletail Mountains area you propose to designate and the wildlife in the area already have enough threats to their survival without shrinking their living area.

Signal Mountain also adjoins an area currently designated. For all the good reasons I've already mentioned it should be added. Does new mineral exploration truly justify making changes we can never undo?

Finally, I urge you to reconsider your recommendations for the adjoining North Maricopa and Butterfield Stage Memorial areas. The mere fact that they are separated by the old stage route does not support separate consideration for the two. The area is now in danger of being ruined as a wildlife shelter by powered vehicles. Wilderness designation would, of course, preserve them intact.

I hope you will consider my comments favorably. You have a great responsibility here: decisions made today will affect countless future generations, and once we make changes to these areas we can never undo the damage.

Sincerely,

James S. Greene

James S. Greene
8125 E. Buena Terra Way
Scottsdale, AZ 85253

132

Paul and Pamela Bosch
944 W. Main #1038
Mesa, AZ 85201
April 12, 1985

Phoenix District BLM
2015 W. Deer Valley Rd.
Phoenix, AZ 85027

Dear Sirs,

We are writing to urge you to strongly support wilderness recommendations for those area that have been proposed for wilderness designation within the Phoenix district. As the population of the Phoenix area expands, and as people from all over the country seek areas of natural beauty for recreation and enjoyment, it becomes increasingly important to protect the remaining wild and scenic areas within the state.

Many of the proposed wilderness areas contain important wildlife habitat, areas for hiking, camping, and climbing, and spectacular scenic beauty, which should be preserved for the current and future generations. Wilderness designation also makes good economic sense, since it attracts tourists to a resource that maintains its quality indefinately, instead of providing short-term and destructive economic gain.

Some key wilderness study areas that we urge you to help preserve include those within White Canyon, Mt. Wilson, Coyote Mountains, Baboquivari Peak, Little Horn Mountains, Signal Mountain, and North and South Maricopa Mountains.

Please support recommendations for wilderness in those areas proposed in both the Phoenix Draft E.I.S. and the Lower Gila Draft E.I.S.

Thank-you very much for your time and any efforts you make to preserve what is left of the wilderness in Arizona!

Sincerely,

Paul C Bosch

Paul C. Bosch

Pamela R Bosch

Pamela R. Bosch

133

Morristown, Az.
April 16, 1984

Bureau of Land Managment.
Dear Sirs,

We are very much against making wilderness areas out of the following: Gila River Wilderness South, Hassayampa area and the Eagle Tail Mts.

We are Senior Citizens and members of the Wickenburg Gem & Mineral Society and are unable to hike into these areas. You should note, so called "Rock Clubs" are very much conscious of these areas and take care in protecting them when they use them.

Sincerely
Mr. & Mrs. Virgil Davis
Star Rt. Box 11A
Morristown, Az.
85342

VIRGIL F. DAVIS
STAR RT BOX 11-A
MORRISTOWN, ARIZ.
85342

134

835 E. Orange Grove Rd.
Tucson, Arizona 85718

April 14, 1985

Marlyn V. Jones, District Manager
Bureau Of Land Management
Phoenix District Office
2015 West Deer Valley Road
Phoenix, Arizona 85027

RE: Lower Gila South Planning Area (RMP/EIS)

Dear Mr. Jones:

This desert of southwestern Arizona contains a rich and interesting region of low rugged and picturesque mountains. Its potential use for wilderness and protection is most deserving as bighorn inhabit much of this region.

I encourage you to give environmental protection through wilderness designation to the following areas:

2-125	New Water Mountains
2-126A	Little Horn Mountains West
2-127	Little Horn Mountains
2-128	Eagletail Mountains
2-129	East Clanton Hills
2-136	Face Mountain
2-138	Signal Mountain
2-142/144	Woolsey Peak
2-157	North Maricopa Mountains
2-163	South Maricopa Mountains
2-164	Butterfield Stage Memorial
2-172	Tabletop Mountains

As the west continues to expand, areas such as these which have wilderness potential will shrink and cease to exist completely. It is only through efforts such as wilderness designation that the natural character of the land will remain for future generations to enjoy.

Sincerely,

Dan Fischer

135

BLM PHOENIX DISTRICT

APR 19 '85

DM
ADM
PA
ADMIN
OPS
MINS
RES
P&EA
PRA
LGRA
KRA
CF
Action By
Due Date

Southern California Edison Company

P.O. BOX 410
100 LONG BEACH BOULEVARD
LONG BEACH, CALIFORNIA 90801

R. J. JULIFF
MANAGER
OF
REAL PROPERTIES DEPARTMENT

District Manager
Bureau of Land Management
Phoenix District Office
2015 W. Deer Valley Road
Phoenix, Arizona 85027

Gentlemen:

SUBJECT: Lower Gila South Planning Area
Draft Resource Management Plan/
Environmental Impact Statement (RMP/EIS)

Based on our review of the subject RMP report and our current information, we have the following comments and recommendations for your consideration.

We are pleased to see the recognition by the planning team of future corridor needs as an issue in the RMP. Corridor designation is a critical element of land use planning and is necessary to insure that routes are available for the orderly and efficient development of communication, energy and transportation systems to serve the public. We concur with the corridor element of the proposed action alternative; however, we recommend that it be revised to designate that corridors be a minimum of three miles in width.

135-1

Designation of the corridors described in the Proposed Action will provide the organizations responsible for developing communication, energy, and transportation systems for the public, a means of providing these services in an economical and dependable manner. In addition, a minimum corridor width of three miles will enable flexibility in siting facilities to avoid environmentally sensitive areas.

As you may be aware, Edison plans to construct an additional transmission line paralleling the existing Palo Verde-Devers 500kV T/L. The map (Map 102) shown within the text of the subject RMP, however, does not indicate the locations of the corridors in relation to the WSAs, known as 2-125, 2-127 and 2-128. We would, therefore, need to review a combined map with

all wilderness designations and utility corridors prior to making a more definitive statement regarding the availability of future transmission lines within your designated corridors.

Thank you for inviting our comments. We hope you will give them your full consideration. If further details are needed, please contact Mr. J. R. Wilson at (213) 491-2844.

Very truly yours,

DALE L. WOODWARD
LAND PROJECT SUPERVISOR

JRWilson/djd/

Response - Letter 135

135-1 There are three reasons why our utility corridors are proposed to be one mile wide. First, there has not been any indication that there is enough demand to justify the designation of three-mile wide corridors. Secondly, corridor designations of more than one mile in width would produce serious resource conflicts with wildlife habitats, wilderness study areas, etc. The third reason for designating one-mile wide corridors is that these corridors will directly link up with the corridors being proposed in the Yuma District BLM.

136

United States Department of the Interior
BUREAU OF MINES
P. O. BOX 25086
BUILDING 20, DENVER FEDERAL CENTER
DENVER, COLORADO 80225
Intermountain Field Operations Center

April 19, 1985

Memorandum

To: District Manager, Phoenix District Office, Bureau of Land Management, 2015 W. Deer Valley Road, Phoenix, Arizona 85027

From: Chief, Intermountain Field Operations Center

Subject: Review of Draft Resource Management Plan and Environmental Impact Statement (RMP/EIS) for the Lower Gila South Planning Area, Arizona

We have reviewed the Lower Gila South Planning Area draft RMP/EIS as you requested and offer the following comments.

The Bureau of Minea interest in the proposed plan concerns potential impacts on mineral resources and their development. We consider the overall presentation of mineral-related data in the report to be excellent. The relative impacts on mineral exploration and development under each alternative are clearly stated and easily found in the text. Of the alternatives considered, the No Action and the Resource Production (No Wilderness) plans are clearly the most favorable for future mineral development. The Proposed Action, however, would have less negative impact on minerals than any of the remaining plans, and, in our opinion, offers a reasonable compromise among the competing land uses.

The Proposed Action plan recommends four areas (189,750 acres) for inclusion in the National Wilderness System. Areas favorable for mineral occurrences have been identified in all four. Generally, areas likely to contain locatable minerals or geothermal resources shown in the RMP/EIS agree well with favorable mineral areas identified by this office during preparation of the Land Use Restraints on Exploration and Mining (LUREM) report for Arizona.

Boundary adjustments recommended in the proposed action plan would mitigate some of the adverse impacts on mineral exploration and development caused by conflict with existing Wilderness Study Areas (WSA). We suggest similar adjustments where other favorable mineral areas occur along WSA boundaries. Although adjustments may not always be possible, such as in the New Water Mountains WSA where most of the lands favorable for mineral occurrences are included in a withdrawal application to enlarge the Kofa Game Range, they should be considered and implemented where feasible.

We have no objections to the document as written.

William Cochran

William Cochran

137

Kenneth J. Eckstein
P.O. Box 1446
Payson AZ 85547

April 18, 1985

Phoenix District Blm
2015 W. Deer Valley Rd.
Phoenix, AZ 85027

Dear Sirs:

I am writing to express my support for designating several Blm study areas as federal wilderness. Many of these areas, I realize, are not being proposed as wilderness by your agency, but I believe that there are compelling reasons for including them in your wilderness recommendations.

The rapidly increasing recreational population in Arizona, coupled with the unbelievable popularity of 2, 3, and 4-wheel "all terrain" vehicles mandates protecting these study areas, regardless of size. I am concerned about erosional damage, littering, and disturbance of sensitive wildlife, besides disruption of solitude and primitive recreation via noise pollution and careless intrusions.

In particular, I strongly support the Blm recommendation that the Baboquivari Peak study area become legally designated wilderness, and also the 3245 acres of contiguous state land, should it be aquired. The White Canyon area should also be given wilderness protection for its dramatic, rugged features. As the American copper industry may never recover from foreign competition, I believe any moderate potential for copper production in this area will never, in the long run, equate with the value inherent in the land left unexploited commercially.

The study area known as Mt. Wilson near Hoover Dam has always fascinated me with its austere, mysterious landforms and still viable bighorn sheep populations. It deserves legal wilderness designation. Another area I support for designation is the Coyote Mountains. Regardless of size, it encompasses much that warrants preservation – prehistoric Indian ruins, sensitive wildlife species, and 8 species of protected plants, besides having "outstanding opportunities for both solitude and primitive recreation."

Areas within the Lower Gila South Draft EIS, that I favor for wilderness protection include the Little Horn Mountains and Little Horn Mountains West, Signal Mountain and the North Maricopa Mountains / Butterfield Stage Memorial for similar reasons. These areas should be reserved for future generations before off-road vehicle use or mineral exploration or development scars them.

Collectively, all these areas represent only a modest percentage of Arizona's Blm land, and in my opinion, the benefits to be derived from wilderness designation – scientific study, preservation of crucial wildlife habitat, and opportunities for solitude – far outweigh possible short-term, exploitative returns.

Thank you for considering my perspective.

Sincerely,

Kenneth J. Eckstein

Kenneth J. Eckstein

138

APRIL 18, 1985

Phoenix District BLM
2015 W. Deer Valley Road
Phoenix, AZ 85027

We would like to learn more about the BLM's recommendations for wildernesa designations in Arizona. We heard that White Canyon, Mt. Wilson, Coyote Mts., Little Horn Mts., Signal Mt., North Maricopa Mts., Swansea, Trigo Mta., Muggins Mta., East Cactus Plain were not conaidered for wilderness areas. We feel that these areaa ahould be included due to the scenic and unique wildlife value this areas provide. We are happy that Baboquivari Peak is considered for wilderness designation and we support strongly the planned land acquisition to enlarge the wildernesa area.

Please let us know how we can participate in the fate of the spectacular wild country we have in Arizona. We would appreciate more information about the proposed wilderness areas and the above mentioned areas which were not proposed for wilderness designation.

Sincerely,

Vincent + Barbara Roth

Vincent and Barbara Roth
BOX G
PORTAL AZ 85632

[redacted]

139

L Cunningham
2001 W. Cedarbrook Ave
Phoenix, AZ 85023

4/13/85

[redacted]

Dear Sirs,
I'm writing to inform you that I want White Canyon, Hell's Canyon, Mt. Wilson, Coyote Mountains, Picacho Mountain and Baboquivari Peak designated as Wilderness Areas. I have been to a few of these places and enjoyed their beauty greatly. We should save as much undisturbed (or little disturbed) areas as we can for future generations. This is how we pay our debt for have distroyed so much already.

Sincerely
Lisa Cunningham

140

UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

APR 17 1985

Mr. William Carter
Phoenix District Office
Bureau of Land Management
2015 W. Deer Valley Road
Phoenix, Arizona 85027

Dear Mr. Carter:

In response to a request from W. Dean Bibbs, Arizona State Office Director, Bureau of Land Management, we have reviewed the Draft Resource Management Plan/Environmental Impact Statement for the Lower Gila South RMP/EIS Area. Our review was directed to whether the action described in the draft document involved matters within our jurisdiction by law or special expertise or had any impact on NRC licensed facilities.

Our comments are related to the Palo Verde-Devers and Palo Verde-Kyrene transmission lines associated with the Palo Verde Nuclear Generating Station (PVNGS) located near Buckeye, Arizona. As shown on Page 5 of the EIS, portions of these lines traverse BLM lands. We have addressed the construction and operational environmental impacts of the PVNGS and transmission line system as part of the NRC licensing review process. We are pleased to note that BLM proposes to designate one-mile wide corridors to accommodate existing and new utility systems. The use of existing corridors for new utility projects should result in fewer environmental impacts than allowing utility corridor development in new areas. The discussion of environmental consequences of the proposed action (Chapter 4, page 63) should be expanded to include information on anticipated impacts to vegetation and wildlife from construction and maintenance of utility corridors. A discussion of the impacts of utility corridor access roads also should be included. To gain a better understanding of impacts from implementing the utility corridor concept, information is needed on additional utility projects planned for the 10 one-mile wide corridors identified on page 4 of the EIS.

140-1

Thank you for the opportunity to review the draft document. Please contact Mr. Edwin Pentecost (FTS 492-8099) if you have questions concerning our comments.

Sincerely,

James P. Knight, Acting Director
Division of Engineering
Office of Nuclear Reactor Regulation

Response - Letter 140

140-1 Because there are no specific proposals at this time, it is difficult to anticipate the actual placement, number, and types of systems within these corridors. Without this information it is not possible to discuss specific impacts to vegetation, wildlife, etc., in this document. These impacts will be addressed during the specific environmental assessment/EIS for the individual proposals.

142

DENNIS C. JENNINGS
Box 1498
Wickenburg, AZ 85358
April 19, 1985

Marlyn V. Jones, Manager
Phoenix District
Bureau of Land Management
2015 W. Deer Valley Road
Phoenix, Arizona 85027

Subject: Comments on Lower Gila South RMP/EIS Draft

As a former student of the University of Arizona and constant searcher for minerals, I would like to comment on your Lower Gila South RMP/EIS Draft.

I spent much time in the New Water Mountains and consider them and the area as a highly mineralized part of Arizona. Any good geologist will tell you the same thing. It seems to me to be a crime against the public to lock this area up simply because it is an area of 5,000 acres or more of sparcely occupied land. My common sense makes me think you couldn't possibly be foolish enough to do such a thing.

Please return New Water Mountains and the Area to Resource Production so we can all benefit now and forever!

Very truly yours,

Dennis C. Jennings

Dennis C. Jennings

cc: file

143

DOROTHY DEVAULT
P. O. Box 1498
Wickenburg, Arizona 85358

April 21, 1985

District Director
Phoenix Office
Bureau of Land Management
2015 W. Deer Vslley Road
Phoenix, AZ 85027

Reference: LOWER GILA SOUTH New Water Mts.
Eagletail Mountains
Woolsey Peak
Table Top Mountains

Dear Sir:

I agree with the recommendation that a number of WSA's are unsuitable for wilderness. But that's not all. The above four areas are only wilderness by virtue of the fact that they are sparcely settled or developed. We may have discovered most of the surface minerals that are visible. But the potential for discovery of new minerals and energy resources is great because of the state's historically proven record of mineral and energy-resource production. Let's not lock up the areas but place them in resource production.

In resouce production we can all benefit-ranchers, hikers, miners, tax payers, retired older explores and people like me who are too tired or smart to hike in the desert.

Very truly yours,

Dorothy Devault

Dorothy Devault

145

JACK DEVAULT
Box 1498
Wickenburg. Az 85358
April 21. 1985

District Manager
Bureau of Land Management
2015 W. Deer Valley Rd
Pheenix. Az 85027

Re: Lower Gila South
Re: 1) New Water Mountains
2) Eagletail Mountains
3) Woolsey Peak
4) Table Top Mountains

Dear Sir:

Thank you for your above draft. I take exception to your recommendations for the above four areas. There's no adequate mineral report and to my knowledge there's especially a lot of mineralized areas in the New Water Mountains. And even if there were no minerals there's other reasons for not locking up the areas. I am only one of the high percentage of people in Arizona that has no business hiking in the desert. But I have driven on the old roads and trails and expect to again as long as I live — providing I am not locked out.

We have lost enough land to withdrawls already. We need resource production in Arizona. Let Wilderness be created east of the Mississippi to balance their own areas.

Thank you.

Sincerely.
Jack Devault

245

Cecil A. Devault
P. O. Box 1498
Wickenburg, AZ 85358

April 20, 1985

DISTRICT MANAGER
Phoenix District
Bureau of Land Management
2015 W. Deer Valley Road
Phoenix, Arizona 85027

Re: LOWER GILA SOUTH RMP/EIS - New Water Mts., Eagle Tail Mts., Woolsey Peak, and Table Top Mountains.

Dear Sir:

245-1 For more than 20 years I have prowled the back roads in search of new adventures, new flora and fauna and different rocks and formations. Many times I left my vehicle and hiked over the ridges. In reading your draft report it seems as if you are trying to take this privilege away altogether. Also I cannot find where an adequate mineral report has been made. If this is ever made into a wilderness area officially, there is no need to ever visit or stay in the towns nearby.

Please return these areas to Resource Production so that we may have the pleasure of driving on the old roads and trails and ever exporing what is beyond the next turn or ridge.

Sincerely,
Cecil A. Devault
Cecil A. Devault

Response - Letter 245

245-1 Wilderness designation of all lands recommended for wilderness under the Proposed Action would close 190,391 acres to ORV use. This acreage represents 9.4% of the public lands in the Lower Gila South Planning Unit. Other lands could remain open to ORV use with no ORV designations. All nonmotorized recreation uses could continue in wilderness, including rockhounding and nature study.

246

April 22, 1985

PHOENIX DISTRICT BLM
2015 W. Deer Valley Rd.
Phoenix, AZ 85027

As a concerned citizen and active hiker I believe it is crucial to preserve Arizona's unique public lands. Contrary to popular belief many of these lands are under the control of the BLM. I feel it is necessary to designate these unique lands as wilderness areas for two reasons. One, to preserve their natural beauty and offer opportunities for recreational experiences. And two, to maintain the BLM'S reputation as a multiple-use agency, not as an agency controlled by the ranchers.

Although I have not visited all of the areas being considered for wilderness designation, I do recommend that they all be so designated. These areas include the lands listed in the Phoenix draft environmental impact statement and those listed in the Lower Gila South draft environmental impact statement. I realize that probably all these lands cannot be designated as wilderness, however I strongly recommend that at least Mt. Wilson, Baboquivari Peak, White Canyon, the Coyote Mountains, Signal Mountain, Little Horn Mountains and Little Horn Mountains West, North Maricopa Mountains and the Butterfield Stage Memorial be added to Arizona's wilderness. Your consideration of this matter is greatly appreciated.

Sincerely,

Charles J. Campbell

Charles J. Campbell
1024 S. Dorsey Ln. - #1
Tempe, AZ 85281

247

UNITED STATES
DEPARTMENT OF THE INTERIOR
FISH AND WILDLIFE SERVICE

KOFA NATIONAL WILDLIFE REFUGE
P.O. BOX 6290
YUMA, AZ 85364

April 26, 1985

Mr. Marlyn Jones, District Manager
Bureau of Land Management
Phoenix District Office
2015 W. Deer Valley Rd.
Phoenix, AZ 85027

Mr. Jones:

I have reviewed the draft of the Lower Gila south RMP/EIS with particular interest in how the plan relates to Kofa National Wildlife Refuge. The U.S. Fish and Wildlife Service has a withdrawal application (A7950) for an area that includes BLM's Wilderness Study Area 2-125. The Service is interested in having this area withdrawn and added to Kofa NWR. We would not want the RMP creating a conflict with our withdrawal application or causing management conflicts should this area be added to the refuge. Designation of a portion of WSA 2-125 as wilderness would be compatible with our withdrawal and wilderness proposal.

247-1 Map 1-2 appears to indicate that utility corridors 1 (El Paso Natural Gas) and 2 (Palo Verde Devers) leave Lower Gila South Area and enter Kofa National Wildlife Refuge. We feel utility corridors are not compatible with the purpose of the refuge and new facilities should not be permitted. There are facilities along this route at this time, however, we feel it should not be designated as a utility corridor and request the RMP be changed to indicate this.

There is a considerable amount of movement of desert bighorn sheep between the refuge and the Plomosa and New Water Mountains of the Lower Gila South Planning Area. Adverse impacts to bighorn sheep in either of these mountain ranges has the potential to adversely effect sheep within the refuge. Both mountain ranges are included within BLM's grazing allotment number 3022. The RMP/EIS diacusses the conflict for forage between cattle and bighorn sheep, and the threat of diseases being transmitted from cattle to sheep. The plan also indicates 50% of the allotment is in poor to fair conditions (Appendix 15). Based on this information we recommend reducing or eliminating livestock grazing in those areas used by bighorn sheep and areas of poor range condition.

Thank you for the opportunity to comment on the RMP/EIS.

Sincerely,

Milton Haderlie

Milton Haderlie
Refuge Manager

Response - Letter 247

247-1 Currently there are three pipelines and one 500 KV transmission line that parallel each other within these proposed corridors. According to BLM Manual 1275, Appendix 2, page 12 -item 28, three parallel rights-of-way are by definition a corridor and are to be designated on the public land records as such. Additionally, we feel there is ample room to allow more systems in these proposed corridors, and the subject land is suitable for this use. It should also be noted that designation would only apply to the BLM administered lands and not those lands within the confines of the KOFA Wildlife Refuge.

248

ARIZONA MINING ASSOCIATION

C. J. HANSEN
President

2702 N. Third Street · Suite 2015 · Phoenix, Arizona 85004 · (602) 266-4416

BLM PHOENIX DISTRICT

APR 29 '85

April 25, 1985

DM
ADM
PA
ADMIN
OPS
MINS
RES
P&EA
PRA
LGRA
KRA
CF
Action By
Due Date

Mr. Marlyn V. Jones
District Manager
2015 W. Deer Valley Road
Phoenix, Arizona 85027

Dear Marlyn:

I thought you may be interested in the enclosed copy of the letter I submitted in connection with the oversight hearing on BLM wilderness. I had not intended to submit comments, but after reading some of the statements by environmental groups that were sent to me by Jean Toohey, I decided we needed to say something in defense of both mining and the BLM.

With kindest regards,

Sincerely,

C. J. Hansen

CJH/jc

ARIZONA
MINING ASSOCIATION

C. J. HANSEN
President

April 24, 1985

The Honorable John F. Seiberling
Chairman
Subcommittee on Public Lands
Committee on Interior & Insular Affairs
U.S. House of Representatives
Washington, D.C. 20515

Dear Mr. Chairman:

I regret that I was unable to appear personally at the hearing conducted by the Subcommittee on the wilderness program of the Bureau of Land Management. This matter is one of substantial interest to the mining interests in Arizona, and I hope you will give some consideration, if not official inclusion in the hearing record, to my views.

The Arizona Mining Association represents 15 major mining companies which produce from their operations in this State two thirds of the nation's copper, and much of the molybdenum, silver and gold produced in the U.S.

Our concerns are directed to any and all governmental actions that would create additional wilderness areas or create further withdrawals of locatable mineral lands from the public domain. We believe this industry acted with responsibility and reasonableness in our presentations on the Arizona RARE II wilderness bill that was enacted by the Congress. We made a considerable effort to limit our objections to those areas (and even areas within areas) that had a proven potential for mineral development.

Our basic problem is with the cumulative effect of these withdrawals. Taken piecemeal, each single area has some justification for being assigned a special use. However, when all of these uses are added up, be they for wilderness, wildlife refuges, national park expansions, national monuments, bombing ranges, military reservations, reclamation sites or whatever, there is a staggering infringement upon the public domain and a continuing shrinkage of the portion that remains open to exploration and location under the mining laws.

2702 N. Third Street · Suite 2015 · Phoenix, Arizona 85004 · (602) 266-4416

In Arizona, for instance, the existing wilderness areas already total some 2 million acres and it is estimated that about 30 million additional acres in this State have been put "off limits" to mining uses, either by outright prohibition or extremely restrictive requirements. On a national basis, approximately two thirds of all public lands are effectively withdrawn from the development of mineral resources.

For these reasons, we oppose any undue pressure upon the Bureau of Land Management to increase or modify the recommendations it has formulated from its base of wilderness study areas (WSAs). Various environmental and pro-wilderness groups have criticized BLM for eliminating this or that area, and the major accusation is that the BLM recommendations do not include sufficient acreage.

It is the position of this Association that the personnel of the Bureau have performed a difficult job very well. Let us remember that it is the BLM staff that has the professional expertise to evaluate these areas; they have the familiarity and the knowledge of the characteristics and resources of the lands involved, and they are better equipped to make objective judgments regarding the suitability of those areas for wilderness values. Granted, advocates of more wilderness will disagree with these recommendations and insist upon the inclusion of many more parcels; our industry has objections to some of the areas recommended as wilderness because of what our studies show as a good potential for mineral development. It is assumed that the proper place for airing these disagreements lies more properly within the public hearing and comment procedures scheduled by the BLM to consider specific objections regarding the inclusion or exclusion of particular areas.

There also have been questions raised about the BLM's attitude toward wilderness and its diligence on enforcement of its role as a custodian of public lands. On the first point, I believe this agency has been completely even handed in its approach to whether specified areas truly contain those unique values that qualify as wilderness potential. The fact that BLM recognizes valid uses of its land for other purposes should not be construed as any bias toward wilderness. We also are told that the BLM is lax in protecting public lands against misuse by miners, grazing people and off-road vehicles, among others. I'm sure that for every example of enforcement lapses cited by environmentalists, our respective industries could cite considerably more instances of overregulation and unduly harsh restrictions.

The BLM is confronted with the extremely difficult task of attempting to administer and regulate tremendous acreages of public lands with very limited manpower and other resources. They have performed well and in a professional fashion that is far more deserving of praise than criticism.

Finally, as with the RARE II process, there are those who want to resolve their dissatisfaction with more study and more review. Let us hope that these BLM lands do not spend years and years in the limbo of governmental indecision. The BLM has proceeded with its formulation and evaluation of wilderness study areas in a good and timely fashion. We need to go forward with this process and complete the determination of which lands should be designated as wilderness and which lands should be released for other uses.

Respectfully submitted,

C. J. Hansen
President
Arizona Mining Association

CJH/jc

pc: Representative Udall
Representative McCain

250

Department of Energy
Western Area Power Administration
Boulder City Area Office
P.O. Box 200
Boulder City, NV 89005

Refer To: G1010

APR 25 1985

District Manager
Bureau of Land Management
Phoenix District Office
2015 W. Deer Valley Road
Phoenix, Arizona 85027

Dear Sir:

We appreciate the opportunity to review the draft Lower Gila-South Resource Management Plan and Environmental Impact Statement. Western's directive to meet public demand for Federal power using Federal transmission lines will best be met by close coordination between our agencies. Our comments regarding your document are as follows:

250-1

* Western agrees with protecting the resources of an area. We think an approach for a mix of natural and commercial resource uses while minimizing disruption of the human environment is the best approach to resource management.

* Therefore, Western is agreeable to the corridor concept of utility sitings. We notice that your proposed action (Map 1-2) does not provide corridors where several Western transmission lines are existing. Since your office is not providing appropriate corridors, Western cannot support your proposed action or the other alternatives as presented in the DRMP/EIS except the no action alternative.

* Experience has shown that corridors of only 1 mile in width are too restrictive for proper planning and siting of transmission lines. The state of the art corridor widths are from 3 to 5 miles. The proposed restrictive 1 mile wide corridors force impacts to resource which could be avoided by the appropriate width corridors. In addition, the National Electrical Safety Code dictates proper spacing of transmission lines. Forcing transmission lines close together causes many technical problems which increase costs and threatens the reliability of the system. Due to the rapid population growth in the Southwest, Western along with other utilities will be required to provide power including Federal power that is available to these customers thus the need for future transmission lines. Otherwise, the siting of transmission lines on a case by case basis would be acceptable.

* The text only indicates two existing communications sites. However, if other new sites are evaluated on a case by case basis that is acceptable. Communication sites are chosen based on paths of direct line of sight. Any physical blockage of this line of sight forces new paths. Western will use the existing sites whenever possible but technical requirement directs that flexibility must be allowed for Western to meet its directives. Sites have to be selected for non-interference (line of sight) from new facilities to the best vantage point for the system.

Our conclusion is that some of your proposals are too restrictive for proper administration. If your office would adjust the corridor widths to 3 to 5 miles wide, allow for proper technical siting of communication sites, and include all Western's existing transmission lines in corridors then Western could support your preferred alternative. Otherwise, Western has to support your no action alternative.

Sincerely,

G. J. Giles
Assistant Area Manager
for Management Services

cc: Gary Frey (A04[illegible])
Environmental Manage
Western Area Power Administration
Golden, CO

Response - Letter 250

250-1 The proposed corridors have been based on existing major transmission systems within the planning area. Some of these systems include large pipelines, ultra-high voltage transmission lines, and interstate highways. These systems mainly form interstate routes that will continue to be desirable for additional systems in the future. We do not feel it is in the best interest of multiple-use management to designate a three- to five-mile wide corridor around the multitude of smaller transmission systems throughout the planning area. These types of systems can be dealt with on a case by case basis; therefore, we feel the proposed corridors are adequate.

Currently there has not been enough demand predicted to justify the designation of 3-5-mile wide corridors. We feel that the current 1-mile wide widths are adequate for current and future utility needs. Also, there are resource values in the planning area such as wilderness, visual, etc., that preclude the designation of corridors as large as you recommend.

251

David Lutz
6931 W. Arrow
Tucson, Az 85746
Apr 21, 1985

Phoenix District B.L.M.
2015 West Deer Valley Rd.
Phoenix, Az. 85027

Dear Sirs,

I am writing to you concerning the BLM's Lower Gila South EIS. I strongly urge you to prevent further development in this area especially mining. In a fragile desert mining leaves scars that are hard to erase. The areas that are roadless should remain as such. No more roads should be built in this area! We are running out of wild lands. Too much of our public lands have been scarred by mining and other developments. I urge you to declear as wilderness all the land in this area that is still wild and roadless.

Sincerely yours

David Lutz

RECEIVED
BLM PHOENIX DISTRICT OFFICE
PHOENIX, ARIZONA
APR 29 8 AM '85

252

National Parks & Conservation Association

1701 Eighteenth Street, N.W. • Washington, D.C. 20009

RUSSELL D. BUTCHER
Regional Representative
SOUTHWEST & CALIFORNIA
Box 67
Cottonwood, AZ 86326
(602) 634-5758

(202) 265-2717

April 25, 1985

RE: Lower Gila South Resource
Management draft EIS

Mr. Marlyn Jones
District Manager
Phoenix District Office
Bureau of Land Management
2015 W. Deer Valley Road
Phoenix, Arizona 85027

Dear Marlyn:

We appreciate this opportunity to offer some comments on the Lower Gila South Resource Management Plan draft Environmental Impact Statement. May we offer the following thoughts:

We are particularly enthusiastic about the Eagletail Mountains (AZ-020-128) and New Water Mountains (AZ-020-125) being proposed for wilderness areas. These are outstanding areas. The Eagletails are an especially scenic, boldly upthrusted rocky ridge of mountains. We realize there are some man-made impacts along the northeasterly side of the mountains that appear to require a less than ideal wilderness boundary. We urge that every effort be made to evaluate the array of impacts to determine if perhaps some of them at least can be viewed as non-impairing to the overall quality of the proposed wilderness area in the long-term. We hope it may prove possible to refine and improve upon that stretch of boundary.

Regarding the New Water Mountains, not only is this unit deserving of wilderness status on its own merits, with its interesting topographical/geological features; but it should perfectly complement anticipated wilderness designation in the adjacent Kofa National Wildlife Refuge. As with the Eagletail boundary, we hope that every effort will be made, along the northern edge of the proposed wilderness area, to exclude only those human impacts that are truly significant impairments in the long term. We understand there may be some valid (?) mineral claims and mineral exploration activities in the northern part of the WSA that apparently preclude that area from being included in the proposed wilderness. Is there no way to exchange out at least some of those mineral interests where there is, as yet, no significant impact upon the land?

252-1

252-1 Although we are not personally familiar with the Woolsey Peak area (AZ-020-142/144), this unit appears to have merit as a wilderness proposal. We notice that there are some 240 mineral claims (valid?) within the area with a "medium" potential for development. Is there any chance of exchanging out any of those valid mineral interests? Also, we wonder about the status of the "vehicle way" running through the middle of

252-2 the proposed wilderness area. What is the nature of that route? Will it be possible to effectively close this way at the wilderness boundaries or beyond?

We are likewise unfamiliar with Table Top Mountains (AZ-020-172). But judging from the description in the EIS and descriptions of the area by those who've visited the area, we agree with the recommendation for wilderness. The "40-acre isolated grassland community" gives this unit a special added natural feature that is almost unique in the entire Southwest. Again, we wonder if the mineral claims (valid?) can be exchanged out of the proposed wilderness area, particularly as they are characterized as having "high" mineral potential.

252-3 One of the WSAs recommended as nonsuitable for wilderness, that we seriously question, is the Little Horn Mountains (AZ-020-127). From information available to us, this area appears to deserve the special protection that wilderness designation affords. Particularly the part of this WSA shown witbin a "Resource Protection Boundary"(map on page 117) seems to us to merit wilderness protection--as both outstandingly scenic and fundamentally free of the impacts of man. If there are valid mineral claims that could pose a conflict with wilderness protection, is it not possible to pursue mineral exchanges?

Some of our contacts have suggested that Signal Mountain (AZ-020-138) deserves wilderness protection, and that more information is needed regarding the location of "gold" that "may be supreme in nature and worthy of mining." Perhaps special negotiations or exploratory talks between those having such a potential mining interest, the wilderness proponents of the area, and the BLM staff could at least determine whether the location(s) of such gold resources could pose a serious threat to the integrity of the most important part of the Signal Mountain area. This appears to possibly be one of those minerals versus wilderness conflicts that might be resolvable through open direct dialogue by the various interests.

Regarding the North and South Maricopa Mountains, we are wondering, if these areas do not become part of the wilderness system,

252-4 what measures will the BLM implement to safeguard the array of pre-Columbian sites?. If ORV activity increases throughout this area, will it be possible to protect the cultural resources from ORV damage?

We appreciate this chance to comment on the draft EIS document for Lower Gila South. We regret our Association lacks greater personal familiarity with the majority of these WSAs, but hope the above thoughts and suggestions may be helpful.

Please let us know, Marlyn, if we can be of further help.

With best regards.

cc: D. Dean Bibles

Russell D. Butcher
Southwest & California Representative
Box 67, Cottonwood, AZ 86326

Response - Letter 252

252-1 There is no statutory nor regulatory provisions to allow exchanging of unpatented mining claims.

252-2 The vehicle way is a primitive route crossing the unit for 8 miles. Its presence is not considered to pose a wilderness management problem since opportunities exist to control access. The route does not access any range developments or claims and ends in Painted Rock Reservoir.

252-3 See response 252-1.

252-4 It is our intention to analyze those areas not designated as wilderness for possible ORV designation and for special management areas. The Maricopa Mountains could be included in this analysis. Also see response 45-1.

253

ARIZONA DESERT BIGHORN SHEEP SOCIETY INC.

P. O. Box 5241 · Phoenix, Arizona 85010

April 26, 1985

Mr. Marlyn V. Jones, District Manager
Phoenix District
Bureau of Land Management
2015 West Deer Valley Road
Phoenix, Arizona 85027

Re: Draft Lower Gila South Resource Management Plan and Environmental Impact Statement

Dear Mr. Jones:

The Arizona Desert Bighorn Sheep Society, Inc. would like to make the following comments on the Draft Lower Gila South Resource Management Plan and Environmental Impact Statement. Please include our comments as part of the official review record.

The Arizona Desert Bighorn Sheep Society supports the Resource Protection alternative.

The Lower Gila South RMP/EIS area contains the majority of the state's desert bighorn sheep habitat. We feel the measures proposed under the Resource Protection alternative make it the best package of the five alternatives for the long term benefit of desert bighorn sheep.

The Rangeland Management [illegible] the Resource Protection alternative proposes a 47% reduction in authorized grazing preference. While we are concerned with possible livestock use and possible competition with bighorn sheep, we are equally concerned with the grazing of stocker cattle under ephemeral permit authorization. More attention must be paid by the BLM to animal numbers and dates of use under ephemeral permits. Stocker animals left on the range past the time of annual forage availability and utilization as this forage source becomes depleted. Bighorn sheep are also stressed for the same reason. Viral diseases which [illegible] bighorn sheep become active when sheep are subjected to the stress of forage competition with cattle. The result can be severe mortality in a short period of time. For this reason, we urge the BLM to pay particular attention to the OFF date of ephemeral grazing permits by not allowing authorization past the time annual forage is green and edible.

Another problem associated with ephemeral permits is stocker animals, unfamiliar with terrain, drifting into bighorn sheep habitat and locating around important bighorn waterholes, thereby competing with bighorn for forage and water and transmitting disease. A classic example of this occurs in the Vekol Valley whenever stocker animals are put on the South Vekol allotment. Because there is no west boundary fence on the allotment, stocker animals drift into the Sand Tank Mountains. The wayward animals find their way to the best permanent water on the mountain. This is the AZBSS's Indian Spring Pothole development. The owners of the livestock do not make an effort to gather these animals unless they are contacted by concerned Sheep Society members. If the livestock elude the cowboys they spend the summer at Indian Spring and cause a definite competition problem for the bighorn sheep in the Sand Tanks. We suggest one of the Bureau's top range and wildlife priorities should be fencing the west boundary of the South Vekol allotment from the Papago Indian Reservation on the south to the White Hills on the north. This is a distance of about nine miles. Gates should be placed on the roads leading into the Sand Tanks to provide access for the general public.

253-1

The Resource Protection alternative would designate portions of seven wilderness study areas (WSAs) for recommendation toward inclusion into the national wilderness system. Of those on the New Water Mountains, Little Horn Mountains, and Eagletail Mountains contain the best bighorn sheep populations. The remaining three areas have sheep populations which will require help to assure their stability.

The AZBSS has concerns with wilderness designation. These are: 1.) our ability to have continued reasonable vehicular access to our waterhole project sites for construction and maintenance; 2.) our ability to continue to use hand held gas powered drilling devices and portable welders for construction and maintenance of waterhole projects; 3.) the ability to use helicopters to transport the necessary tools and equipment to, and remove them from, the project sites; 4.) the continued use of helicopters and motorized equipment in the capture of bighorn sheep for transplant purposes; and 5.) allowing reasonable vehicular access to these areas by legally licensed and permitted bighorn sheep hunters, and associated guides, for the purpose of pre-season scouting and actual sheep hunting.

253-2

If all of the above concerns do not fall within the guidelines of the BLM's Interim Management Policy, we would like for them to be so included. The Society's watehole development and transplant work is important enough to the desert bighorn the BLM should facilitate our efforts on the sheep's behalf.

We support the concept of wilderness designation for the seven WSAs proposed under the Resource Protection alternative and believe wilderness designation will serve the best interests of bighorn sheep habitat protection over the long term.

Designating utility corridors is a sensible way to address existing and future energy systems in an orderly way. We feel particular attention must still be paid to planning each project on a case-by-case basis so construction during critical times of the year, such as bighorn lambing, can be avoided.

Thank you for the opportunity to comment on the plan. With the proper implementation and funding of the Resource Protection alternative, the Arizona Desert Bighorn Sheep Society, Inc. feels, [illegible] benefits to desert bighorn sheep within the EIS area will be secured.

Sincerely,

Jim Fiedler

Executive Board by
Jim Fiedler, President

cc: D. Dean Bibles, State Director

THE ARIZONA DESERT BIGHORN SHEEP SOCIETY, INC.

Response - Letter 253

253-1 See Table 2-1, South Vekol No. 3080 of the draft EIS. Part of the proposed funding would be for boundary fence construction between the South Vekol allotment and the Luke-Williams Air Force Range.

253-2 Concern 1. Use of vehicles will be identified and addressed in the wilderness management plan. All vehicle use must be approved by the State Director. Use of vehicles to develop new projects and maintain existing ones will be evaluated on the rule of practical necessity and reasonableness.

Concern 2. Power hand-portable tools, such as chain saws or rock drills, may be approved by the State Director when they are the minimum necessary for administrative purposes where work cannot be accomplished with nonpowered tools. Use of such tools will be addressed in the wilderness management plan.

Concern 3 and 4. The wilderness management plan will specify the instances and places in which use of aircraft is the minimum necessary to administer the wilderness resource or is necessary as part of a nonconforming but accepted use. State Director approval is required.

Concern 5. Travel within a BLM-administered wilderness will normally be by nonmotorized, nonmechanical means consistent with the preservation of wilderness character. Hunters will not be allowed motorized access.

255

Phy + LBRA

KAREN MAGNAN
1517 West Impala Avenue
Mesa, Arizona 85202

April 22, 1985

BUREAU OF LAND MANAGEMENT
Phoenix District
2015 West Deer Valley Road
Phoenix, AZ 85027

As an Arizona resident for 28 years, and a taxpayer, I would like to express my support for the following:

White Canyon - This is a beautiful canyon with numerous tributaries, and I recommend wilderness protection for this area.

Mt. Wilson - This area has outstanding scenic values, challenging terrain, and excellent opportunities for solitude, and also provides crucial habitat for bighorn sheep. I support wilderness protection for this area.

Coyote Mountains - This is a spectacular area of exfoliating granite domes reminiscent of Yosemite, a highly scenic, natural desert landscape characterized by rugged desert peaks, cliffs, rockfaces, and dense Palo-Verde-Saguaro and interior chaparral plant cover. Such undisturbed terrain would provide outstanding opportunitis for both solitude and primitive recreation. The area has seven special status wildlife species and eight protected plant species. I recommend wilderness designation for this area which would also protect 250 culturally sensitive acres containing a classic period Hohokam Indian compound.

Baboquivari Peak - This dramatic 7,000 foot mountain is a popular hiking and climbing area and is a sacred peak to the Papago Indians. I understand the BLM is recommending the entire WSA as wilderness, but I want to add my support for reinforcement to proceed with the land acquisition.

LGS

Little Horn Mountains/Little Horn Mountains West - These two areas contain a remarkable collection of volcanic features. I recommend wilderness designation for these areas.

Signal Mountain - This area offers rugged, colorful terrain with sweeping views of surrounding mountain ranges and is separated by a single dirt road from the adjoining Woolsey Peak WSA, which was recommended for wilderness designation--please include Signal Mountain too.

North Maricopa Mountains/Butterfield Stage Memorial - These areas contain an abundance of cultural sites, including prehistoric rock shelters. These two areas should rightly be recognized as one. As these areas are threatened by off-road vehicle intrusions, I recommend wilderness designation for these areas as well.

Sincerely,

Karen Magnan

Karen Magnan

klm

256

4/30/85

Dear Sirs:

Regarding our remarks on the draftRMP/EIS for the Lower Gila South Planning Area.

We request that you add the enclosed article by R H Ring which was in the Tucson Star, April of this year. It seems to prove one of our points.

Thank you

Landis Aden
Legislative Liaison
Honeywell Sportsman's Club
Phoenix Az

Remarks of the Honeywell Sportsman's Club concerning the draft RMP/EIS for the Lower Gila South Planning Area.
March 12, 1985

Gentlemen;

I am Landis Aden, representing the Honeywell Sportsman's Club of Phoenix Arizona.

We are generally in favor of wilderness areas. However we do have some serious concerns and reservations about these latest proposals.

Many of these areas seem to be of less than wilderness quality. (or are the standards declining?)

There has been about a million acres taken as wilderness in Arizona in the last year. We have encountered numerous difficulties with access to some of these areas, new and existing. These of us who are not Congressmen or Government officials and have no access to helicopters, have problems with finding a place to park at trailheads, or sometimes even finding the access road, if any. These problems are compounded of week-ends for these of us who have only week-ends off from our employment.

Several of our members are members of the Arizona Desert Bighorn Sheep Society. We have supported their efforts in the past and continue to do so. But, the proposed wilderness around the Kofa Game refuge, they are the Little Horn and New Water Mountians, could make access even more difficult.

We believe the wilderness quality areas in Arizona have already be studied, covered and withdrawn sufficeintly. We believe that these of us who have many and varied interests in the outdoors should be left a place to pursue these activities.

Thank you.

The following remarks were left out of the oral presentation.

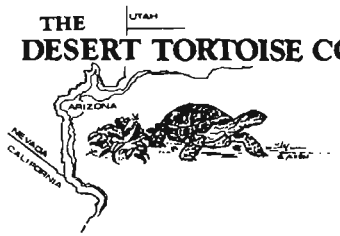
We support multiple use of the land, over the many restrictions that yet more wilderness areas would bring. We believe that the land can be effectivly managed by the BLM without any more new laws or regulations.

Finally, some of these areas appear to be overgrazed, and we feel there is a need for a reduction in the numbers of livestock in these areas. Cowchips on every square yard and under every tree and bush do little to enhance the "Wilderness Experience".

Landis Aden
Legislative Liaison
Honeywell Sportsman's Club
P.O. Box 8000 B61
Phoenix, Az 85066

257

THE DESERT TORTOISE COUNCIL



5319 Cerritos Ave.
Long Beach, CA 90805

April 26, 1985

Marlyn V. Jones
District Manager
Bureau of Land Management
Phoenix District Office
2015 W. Deer Valley Road
Phoenix, AZ 85027

Dear Mr. Jones:

The Desert Tortoise Council regards the large Phoenix District as a holder of very valuable natural resources, including fish and wildlife. We support the concept of a resource management plan as a tool to balance competing resource demands while protecting and sustaining wildlife and other natural values. Unfortunately, none of the likely alternatives presented in the Draft Resource Management Plan/Environmental Impact Statement fulfills that concept, especially the Proposed Action.

Specific comments follow:

Page 2. Rangeland Management Issue. The Proposed Action does not attempt to resolve the subissues listed here.

257-1 Wilderness Issue. The Estrella Mountain WSA should be included in this document and be proposed for management as wilderness or a protective alternative. FLPMA also directed BLM to designate and manage ACEC's. There are none mentioned in this plan, nor are there any specially managed areas such as primitive, scenic, or natural areas proposed.

257-2 Page 4. Land Tenure. Special attention will not be given to wildlife habitat values, according to this statement. Resolution of which lands should be retained is not considered.

257-3 Utility Corridors. Why are communication sites avoided in this document? Surely BLM does not plan to allow every mountain top to become a radio tower forest. Careful analysis and planning of designated sites should have been done in this plan so that significant cumulative impacts could be evaluated, and possibly avoided. This is not done in the plan. "Studying" such things on a case-by-case basis is an open invitation to avoidance of long-term planning and

Response - Letter 257

257-1 The Sierra Estrella WSA was deleted from WSA status by a Secretary of the Interior decision (involving split-estate) implemented on August 9, 1983. On April 18, 1985 a District Court in California ruled that split-estate areas are to be considered for wilderness. This WSA will be studied for wilderness in an EIS scheduled to begin in 1986.

Scenic and natural area designation are land use classifications which BLM can apply administratively. They were not issues addressed in this RMP/EIS. However, we have clarified our intention in the final RMP (Chapter 2, Management Guidance Common to All Alternatives) to evaluate areas containing special and/or significant resource values for special management designations.

257-2 The text has been changed to include special attention to all resource values. The text has been changed to include retention under Land Tenure in Management Guidance Comments to All Alternatives.

257-3 We feel this issue was appropriately discussed in the document. It was stated that a complete and thorough site plan would be developed prior to any new sites allowed. We feel it is not appropriate to consider "cumulative" impacts created by communications sites. Because of changing technologies, it is not possible to predict future needs and plan for those needs. Our approach to communication sites will provide for public participation when a communication site plan is being developed.

(2)

257-3 proliferation of cumulative impacts that become significant but are avoided through lack of presentation to the public. The public does not get to see these case-by-case projects you allow on public lands. We have never seen one of your Environmental Analyses, even though we are on your mailing list.

257-4 Greenbelt Issue. The type of management on the Fred J. Weiler Grenbelt may have significant impacts on the environment. We see no reason to avoid planning for the greenbelt and hiding this land management from the public. The only logical place to discuss and analyze different types of management of the Greenbelt is in this RMP. It must be done in the RMP, since it is an issue. We question BLM's committment to perform any positive management on the Greenbelt at all in light of the general lack of riparian management occurring now.

257-5 Page 5. This is a terrible map that the reader can not make sense of or compare with WSA boundaries which were mentioned as a problem. It seems a corridor could easily be placed to avoid a WSA, thus alleviating the problem.

257-6 Page 9. BLM proposes to do no changes in management where conflicts with wildlife resources occur. Conflicts with Sonoran Pronghorns (endangered) occur. Conflicts with mule deer occur (forage and water source abvailability). Mule deer forage conflicts occur mostly where use on browse is high. Conflicts with desert bighorns occur (disease, forage in foothills, water usurpation). Conflicts occur with the desert tortoise (trampling, usurpation of forage). None of these problems are addressed. These are significant conflicts and are causing significant impacts on wildlife. How does BLM Plan to manage ephemeral ranges under the ephemeral rule? Are there "safety valves" for the desert tortoise built in? Are there any multiple use considerations at all? What will they be? These should be fully discussed and analyzed in this plan. Where would supplemental permits not be issued and give examples.

257-7 Page 11. The water storage tank shown on page 11 is unsafe for wildlife. Is this BLM's standard practice for the area?

257-8 Page 10. There are no improve allotments. Why? Many allotments meet criteria mentioned in the Appendix for the Improve category. Where there is a conflict with wildlife there must be improvement, e.g. Sonoran Pronghorns and desert tortoises. All allotments with conflicts and/or a majority of the land in fair or poor condition need a change in management through some means, whether no grazing, cuts in numbers, seasonal grazing, or other improved management. Such allotments certainly are not "satisfactory."

257-9 Page 11. Which allotments would be monitored? In what priority (where there are conflicts?). What is "more intensive" monitoring and which allotment sould be covered? What are the wildlife habitat objectives that need to be monitored? The place to tell the public is in the RMP/EIS.

257-10 Page 12. Changes in livestock numbers should require environmental analysis and public involvement. It should not be BLM policy to do this without public and other agency (Arizona Game and Fish) input.

257-4 We agree with you that the management of the Fred J. Weiler Greenbelt is a very significant issue. Planning for this area will be a useful tool and important in future management of the Greenbelt. That is why on page 4 of the RMP we have directed development of a comprehensive management plan for the Greenbelt. Furthermore, specific issues that will be looked at are identified in the RMP.

Currently, there are studies being conducted and ongoing coordination between the USFWS, Arizona Game and Fish Department and BLM. As a result of this coordination and these studies, we will have a better understanding of what should take place in the Greenbelt. We feel that by waiting for the information we can do a better job of activity planning for and management of the Greenbelt. By identifying the issue and committing to the preparation of a comprehensive management plan, we are meeting our planning commitments and will be able to develop an appropriate plan for the Greenbelt.

257-5 Due to terrain features and other resource values in areas, it is not possible to "easily place" corridors to avoid WSA boundaries. Sometimes to do so would result in increased resource damage.

257-6 See Chapter 2 under the Grazing Administration.

257-7 BLM Phoenix District water development policy requires that all storage tanks on new well developments be covered or be equipped with a floating platform to reduce wildlife drowning. Many older well storage tanks are not covered, however, BLM personnel make every effort to install escape ramps and covers as funding becomes available.

257-8 The management categorization (MIC) establishes priorities for distribution of range improvement funds and the use of range personnel. Although a few allotments could be placed in the "I" category through strict application of the criteria (Appendix 12), Bureau Resource Specialist determined that the potential for increased production was not sufficient for a positive economic return in rangeland investments. This does not preclude changing existing management practices in order to mitigate resource conflicts. Allotments in the "M" category would be managed to prevent serious conflicts with wildlife resources and prevent resource deterioration. "C" allotments are generally ephemeral and perennial-ephemeral allotments that are in an overall acceptable condition with no serious resource conflicts and or are Section 15 allotments with a small percentage of public land within their ranch boundaries.

257-9 BLM will monitor allotments where livestock competes with the needs of desert tortoise, Sonoran pronghorn and other threatened or endangered wildlife species. Use adjustments may be necessary to reduce or eliminate forage conflicts.

257-10 Once monitoring studies have been evaluated and it is determined that adjustments may be necessary to meet objectives, adjustments would go through the environmental assessment process before final decisions are issued.

③

Since the WSA's met wilderness criteria, they must, somehow, be "suitable." BLM has provided no rationale for areas being proposed or not proposed for designation. BLM has not stated how each area was evaluated for designation. We question the criteria BLM used to come up with designatable areas. Many areas with critical natural renewable resource values and fine wilderness characteristics are not proposed, with no good rationale. For all the reader knows, the proposed areas were picked out of a hat and reduced boundaries were done arbitrarily without thought to resource protection.

257-11 We question how 73,123 acres can be "isolated" or difficult or uneconomical to manage. This area is relatively close to Phoenix (much more economical than other areas to get to). What are the criteria for difficult or uneconomical? Getting rid of an area because it is difficult to manage seems a major cop-out and a poor indication of BLM's management abilities. In fact, many other BLM districts would like to have lands as blocked-up as those you are proposing to get rid of because they are not blocked up enough! Looking at one of the few maps, we can not find 73,000 acres of isolated parcels. Not even close. Where are they really? Lands in Appendix 3 are large blocked areas by and large with thousands and thousands of acres per township. What does isolated mean to BLM? How many lands have been dropped from disposal or exchange because of significant resource values? We question what BLM believes significant resource values are? You do not ask the public when these land cases come up. From whom do you receive input?

257-12 Page 13. BLM should tell the public how it arrived at suitable and nonsuitable areas. It seems the criteria (unstated in this plan) are arbitrary (as are the reduced boundaries) and without much sense since they change so much between alternatives. We believe that desert tortoise habitat in the Maricopa Mountains, for example should be protected through wilderness. Why not, since BLM does not give reasons one way or another? Wilderness is the Plan's only special management for important ecological areas. The plan avoids ACEC's or other special managment areas.

257-13 Page 14. Table 2-3. How can disposal be the same in all the alternatives? Disposing of a net 26,000 acres of land can not be in the interest of Environmental Protection, for instance. BLM needs to explain this much more clearly. We can not tell where all these actions are to take place. The document does not allow us to analyze BLM's plan. A net loss of 26,000 acres is a signifificant impat requiring mitigation.

257-14 No Action. We see no significant difference between proposed and no action for livestock grazing issue. This is not providing a wide range of alternatives, required by CEQ guidelines.

257-15 Page 15. Resource Production. If the eight allotments mentioned here for AMP's do not fit BLM's improve category, then why would BLM improve them in this alternative? Perhaps categorization should change. As in the Proposed Action, new rangeland developments would increase livestock production in the short term. However rangeland productivity would decline. Rangeland developments would eventually increase the amount of lands in fair and poor condition since these are the practices that caused the exisiting fair and poor conditions--where

257-11 The draft RMP did not state that 73,123 acres were isolated or difficult to manage. Many of the identified lands do meet this criteria. Other lands meet the other criteria discussed in the document such as agricultural lands, public expansion areas, and areas where the State Land Department could better manage the lands under the goals and objectives of the State School Trust. Exchange and other disposal actions are fully publicized in the Federal Register and local newspapers and comments and input received on each case.

257-12 Acres of crucial tortoise habitat in the Maricopa Mountains WSA are identified for the Proposed Action Table 4-3, Resource Protection Table 4-14, and Environmental Protection Table 4-16. Under the Resource Production and the No Action no habitat would be protected. Impacts are identified on page 71 of the draft RMP. The human impacts on tortoise are also briefly discussed on page 62 of the draft. Presence of desert tortoise is considered a supplemental wilderness value in analysis of wilderness suitability.

forage was depleted.

257-16 This is the only alternative that would attempt to improve the Cameron Allotment, where endangered Sonoran pronghorns occur, through an AMP. We can not see why BLM would propose to fail to improve Sonoran Pronghorn range in the Proposed Action through some reasonable means. BLM is obligated to improve Sonoran pronghorn habitat under the Endangered Species Act. Other means than an AMP could be used also, such as change to ephemeral grazing, changes in season of use, reductions in livestock numbers, or cessation of livestock grazing. None of these means are considered or analyzed.

Page 16. Resource Protection. This alternative seems the only one that tries to fulfill BLM's mandate for multiple use and sustained yield of resources (the latter phrase seems forgotten from BLM's vocabulary). One thing lacking in this EIS is an alternative putting allotments in seasonal or ephemeral categories. Virtually all allotments in Lower Gila South produce only significant forage from annuals. They should be managed as such by BLM. Most allotments in that part of Arizona are run on a seasonal or ephemeral basis by the ranchers, but are given credit by BLM for having yearlong operations. This perpetuates a myth that the land sustains yearlong production, a myth that many of these are significant cow-calf producers, and a myth to lending institutions that many of these "ranchers" are running viable economic operations. BLM's economic analyses in this document show that most ranches are not viable economic operations. BLM's mission is for multiple use and sustained yield of resources, not perpetuating myths and allowing the desert ecosystems to continue to slowly deteriorate, causing wildlife extinctions in the long term.

Page 18 and others. No alternate protection or designation for WSA's is in the RMP. These areas are special and should be managed by BLM to protect their values. There is not presented a wide range of alternatives for managing these special areas. It is either wilderness or nothing.

257-17 Land Tenure Section. A resolution was unanimously passed by the Dessrt Tortoise Council in 1984 against the disposal of desert tortoise habitat. BLM said it would fully consider such values before exchange or sales would take place. Will BLM not get rid of desert tortoise or other valuable special species habitat? Explain this program in this EIS without glossing over the plans. One paragraph vague statements in each alternative does not explain to the public BLM's real specific intention. How are we readers to know?

257-18 Page 19 and others. Utility Corridors. There is no wide range of alternatives for utility corridors. They are all the same. What types of activities in the corridors are proposed and what types of stipulations would there be?

257-19 Communications Sites. There is no mention in the RMP. If no sites will be allowed this should be stated. Communications sites is an issue. A coordinated plan is needed for placement of such sites with full environmental participation and careful avoidance of significant areas, rather than unplanned, indiscriminant sloppy developments all over every peak, impacting desert bighorn, desert tortoise, and other habitats.

Allotment Categorization. BLM should do this with public and other

257-13 The areas where disposal actions may take place are the same because there are no significant resource values known to exist. This is a constant that does not change by alternative. What does change by alternative is the number of acres and location of land to be acquired for wildlife, wilderness, and other resource values. The whole Land Tenure Adjustment issue needs to be considered, not just the disposal aspect of this issue. That 73,123 acres have been identified for disposal does not mean that all 73,123 acres will be disposed of. This quantity of land is necessary to have as an exchange base in order for us to be able to acquire those nonpublic lands that do contain significant resource values. There has to be a broad enough area offered in order to provide lands that would interest the state and private land owners and allow us to exchange for riparian lands, inholdings within WSAs, etc. Therefore, overall there will not be a loss of 26,000 acres of public lands.

257-14 CEQ requires a range of alternatives from no grazing to full production. The LGS RMP/EIS meets these requirements set by CEQ.

257-15 The fact that allotments are placed in M and C categories does not preclude them from AMPs in any of the alternatives. Also, allotments may be reclassified as additional data becomes available through the monitoring process.

257-16 The impact from reduction of livestock numbers on Sonoran pronghorn is mentioned on page 80 of the draft. Impacts to pronghorn would be positive since it would alleviate forage competition between cattle and antelope.

The impact from cessation of livestock grazing on Sonoran pronghorn is addressed on page 84 of the draft.

257-17 For every disposal action, whether exchange, sale, R&PP etc., a Site-specific Environmental Assessment will be done. During this process and public comments solicited from the Federal Register and newspapers, special habitats will be assessed. This information will be used in the decision making process. The BLM will fully consider the values of Desert Tortoise habitat in this process.

257-18 The utility corridors that are proposed were formed around existing facilities and in locations that will provide necessary routes for utilities. This way much of the existing roads can be used and surface disturbance reduced. This idea does not change even when looking at different alternatives. The width of the corridors (1 mile) is what we feel is a minimum to properly place additional facilities. This width is far below the widths (3 - 5 miles) requested by industry, and this minimum width doesn't change by alternative. Uses within these corridors will include utility systems such as pipelines and powerlines. Stipulations will be developed for each project within the corridor.

(5)

agency (Arizona Game and Fish) input. This was certainly not done. The present categorization fails to look at multiple-use issues like soils, watershed, and wildlife. Criteria listed in Appendix 12 do not fit the way the allotments are categorized. There are conflicts with Sonoran Pronghorn, desert tortoise, bighorn, riparian habitats, and fragile desert pavement soils. These conflicts should put allotments into the improve category.

257-20

Monitoring. "Selected" perennial-ephemeral allotments would be monitored. How is the "selecting" to take place? No special emphasis is stated on allotments with wildlife conflicts, including the 16 with heavy browse use.

Page 21. ORV use. BLM has given no rationale for not proposing ORV designations. Riparian areas, fragile soils mentioned in this plan, and crucial wildlife habitats should have designations. Without designations BLM is licensing indiscriminant abuse of our public lands through a long term (20 to 25 years) that would see ORV use at least double during that time. Areas such as the Eagletail Mountains are overrun now with ORV tracks wherever a vehicle can get. The scars are on the desert pavement for all to see. There is no evidence presented in the RMP that BLM has looked for ORV problems to rectify or if BLM intends to ever. Surely ORV use in Sonoran Pronghorn habitat or desert tortoise habitat is not neutral to these resources. Here the RMP is avoiding planning for resource uses on public lands.

257-21

Page 20. Land Tenure. The place to plan communications sites use and future use is in an RMP/EIS. Impacts of BLM's land use plan/policy are supposed to be analyzed here.

Page 22-23. Wildlife Program. Item Number 3. BLM should be consulting with the U.S. Fish and Wildlife Service because of the plan's impacts on the Sonoran Pronghorn.
Item Number 8. Confusing statement. Should state Blading will not be done for fence building.
We suggest two more items. * Grazing restrictions will be placed on high browse use/crucial wildlife habitat allotments. * Domestic sheep will be kept out of allotments inhabited by Bighorn Sheep to avoid transmittal of disease.

257-22

Page 24. The only wildlife summary is impacts due to wilderness, not other issues. Even this summary is biased since it does not show acres not protected (dropped) for important wildlife.

Page 36. Affected Environment-Wildlife. Items discussed in chapter 3 should be carried through to Environmental Consequences, and vice versa. This is not done completely. Where is the Yuma Clapper Rail habitat (map)? Sonoran Pronghorn habitat, how much is there and where is it? Is habitat of the Threatened or Endangered or State species being affected by any of the issues or other impacting agents? Here is the place to say so. What is the habitat condition of the Sonoran Pronghorn and Yuma Clapper Rail.

257-23

Page 38. Table 3-5. Where and over how much habitat do these species occur? This is necessary so we, your public, can evaluate BLM's assessment of impacts and the plan. Add piecemealing of habitat, mineral development to desert tortoise threats. How many acres of habitat are there and where? Add urbanization to Mojave Desert

257-19 Communication sites are covered on page 20 of the RMP. Site plans will be developed on existing sites and will also be developed on proposed sites. Any new site would also go through the Environmental Assessment process to determine feasibility and required mitigation.

257-20 The management categorization establishes priorities for distribution of range improvement funds and the use of range personnel. Allotments in the "M" category would be managed to prevent serious conflicts with wildlife resources and prevent resource deterioration. "C" allotments are generally ephemeral or perennial-ephemeral allotments that are in an overall acceptable condition with no serious conflicts or are Section 15 allotments with small percentages of public land within their ranch boundaries. Also see response 257-8.

257-21 See Chapter 2, Management Guidance Common to All Alternatives Section on Recreation Off-road Vehicle Use.

257-22 Change made in final RMP.

257-23 Impacts to all wildlife species mentioned in the Affected Environment Section are addressed in Chapter 4 if they are significantly affected by actions in any of the alternatives. The analysis focuses on the impacts of management actions on the habitat of threatened and endangered species; whether these actions will improve, degrade or have no impact on the habitat. Detailed maps of Sonoran pronghorn and Yuma clapper rail were not done to avoid publicizing and attracting additional human disturbance to these species.

Destruction of habitat by mining is an impact to tortoise addressed in Chapter 4, Environmental Consequences.

257-24 Fringe-toed lizard threats. Channelization of the Gila River is not discussed in Environmental Consequences or the Alternatives. Is this the Greenbelt issue? What does BLM have to do with channelization? The Gila monster probably does not significantly occur in all habitats. Add low prey density due to channelization, tamarix invasion, and overgrazing for the Accipiters.

257-25 Page 37. The greenbelt is discussed here, but not in the Environmental Consequences chapter. Should be consistent. Because it is an issue, there should be alternatives and environmental consequences sections on the greenbelt. How many acres of desert bighorn habitat are there and where? Where are the conflicts with other uses? Special management areas or ACEC's should be designated for crucial desert bighorn habitats. No discussion of conflicts with fences. Where do threats occur, so they can be analyzed later in the document.
Mule deer. What are the conflicts between deer and other uses, like livestock. There is no discussion of any problems here. No mention is made of any conflicts in aquatic habitats, either.

Page 40. Table Top Mountains, Sierra Estrella Mountains, and Vekol Valley grassland should be special areas or ACEC's or natural areas. Any conflicts with these areas? This is the last place the Estrella Mountains are discussed in the document. Makes no sense. Will BLM retain ownership of these lands? Is the watershed-grass cover of Vekol valley in good condition? Is any special management needed? Where are these areas so we can see how they fit into areas covered by the issues?

257-26 Page 42-43. Desert Pavement. This section states impacts and conflicts. There will be more in the future. Why is there no planning in this document to handle this? No special management or mitigating measures are discussed. No restrictions on surface-disturbing activities? 150,000 acres are "...not suitable for livestock grazing..." why is BLM not proposing to take care of this? Sites of critical erosion are mentioned, also due, in part to heavy livestock use. No measures in the RMP to manage this.

257-27 Page 53. General Assumption Number 4. Throughout this document BLM fails to look at the long term socio-economic conditions affecting the public land. For instance, the population of the Phoenix-Tucson areas will at least double in the long term. This will at least double the pressures of recreation, ORV, mining, urban sprawl, etc. This knowledge is not used in the RMP/EIS.

257-28 Page 54. Wildlife. These should not be assumptions. They should be fact and should really be in the section on page 22 under management guidance, especially where Threatened or Endangered species are concerned. BLM does intend to take these three steps, correct?

257-29 Page 59. Mule deer conflict was not discussed in Chapter 3. All discussion of impacts to mule deer point toward adverse impacts, except for monitoring studies. Effects of monitoring studies are actually unknown and are, at best, speculation. This narrative conflicts with Table 4-2 (page 61) which indicates overall beneficial impact. Which is true? Evidence points to the narrative as being more likely. When

257-24 Mohave-fringed toed lizard is threatened by potential urbanization around Parker and Quartzite. Proposed land disposal was screened to insure that Mohave-fringed toed lizards did not occur on any parcels.

257-25 The Green Belt Issue is not analyzed in this document but will be addressed in a separate activity management plan. Channelization of the Gila River from 91st Avenue to Gillespie Dam was addressed in a 1980 environment assessment report authored by Benham-Blair Affiliates, Inc. Clearing along that stretch has been completed. BLM will be involved along with AGFD and U.S. Fish and Wildlife Service in addressing any future proposals.

257-26 The 150,000 acres of desert pavement soils produce very little ephemeral forage. These areas are not fenced and livestock make very little use of them. Livestock are in these areas for short periods of time and any damage to the desert pavement soils would be minimal. The fragile desert pavement soils are presently being monitored. Any proposed soil disturbances will contain stipulations to protect these soils.

257-27 Increased demands on resources from population growth was anticipated in the decision to prepare the RMP. Chapter 2 indicates that specific resource management problems will be resolved through the use of environmental assessments. This type of action will be used to resolve problems caused by population growth.

257-28 These assumptions are made to simplify the analysis. It is BLM policy not to initiate land exchanges which would have a significant negative impact on state-listed threatened species such as bighorn sheep and desert tortoise.

257 (7)

little data are present to definitively assess an impact, worst-case analysis is indicated under the CEQ guidelines. This has not been done here nor has it been done in the other alternatives.

257-30 If domestic sheep grazing is permitted by BLM in allotments occupied by bighorn sheep, additional disease factors are present, but unaccounted for in this document. The narrative points out an overall adverse impact of the Proposed action, but not necessarily in Table 4-2. This table should be redone to fit the narrative.

257-31 Page 60. Sonoran Pronghorn would decline under the Proposed Action. BLM can not allow this under the Endangered Species Act. How can BLM have the gall to propose this? The narrative again disagrees with Table 4-2. The level of grazing management is not discussed in these sections, but is on the table 4-2. What does it mean? It does not appear accurate. Desert Tortoise. Again, the narrative shows adverse impact and points out specific impact areas, but does not agree with Table 4-2. This is another section requiring a worst-case scenario. Supposition on downward adjustments due to monitoring is a bad practice. Trampling impacts are not addressed. Wells and reservoirs would be precluded as stated on page 22. Again, BLM is proposing to let the desert tortoise decline further? Bear in mind the desert tortoise has been petitioned for federal listing for some of these reasons.

257-32 Page 61. The Grazing conclusion is negated by the narratives and the need for worst-case analysis. Wilderness issue. Adverse impacts of areas released from wilderness protection are not covered. How many acres of important habitats would be dropped and what would the areas be subjected to? There is no alternative stated for these areas other than wilderness. Why?

257-33 Page 62. Land Tenure. Most discussion of disposal points to adverse impacts, and does a good job, but the last paragraph under disposal says habitat loss would be minimal. From page 14, 73,000 acres-(11,000 to 37,000 acres)=36,000 to 62,000 acres of habitat lost. This is a great deal of habitat and it is significant. BLM fails to flesh-out fully the impacts of this issue.
Acquisition. Although thousands of acres would be disposed of, no desert tortoise habitat would be acquired. Why? BLM's land tenure tact here is for a net large loss of public lands habitat. This is very poor sustained yield management.

257-34 Page 63. Utility Corridors. What will be the cumulative impact of having these full corridors fragmenting habitats and isolating populations throughout the EIS/RMP area? What standard stipulations and measures would BLM employ to ensure that as little habitat as possible is disturbed and that wildlife will be able to have access across these mile-wide areas? The corridor issue is incompletely and superficially analyzed in this plan, along with communications sites.
Soils. Despite statements on pages 42+43, BLM proposes again to do nothing, and then says here that soils will not be significantly impacted. Which section is correct?

Page 71. Wildlife Conclusion-No Action. Rangeland Issue. Impacts would be the "...same as the Proposed Action..." because BLM plans no substantive action to correct any resource problems in the Proposed

257-29 Table 4-2 was developed based on the assumption that long term monitoring studies would point to the need for use adjustments on allotments exhibiting cattle/wildlife conflicts and that these reductions would be put into effect. A change in this assumption would also change the impact ratings for rangeland monitoring and level of management under all alternatives except No Action.

257-30 See Chapter 2 Management Guidance Common to Alternatives Wildlife Program - Specification 10.

257-31 BLM is proposing to monitor Sonoran pronghorn habitat and desert tortoise habitat and adjust livestock grazing based on long-term monitoring studies. This proposal is consistent with the Endangered Species Act and the Federal Land Policy and Management Act.

The conclusion is based on the assumption that monitoring studies will identify areas of conflict between livestock and wildlife and that adjustments in use will be undertaken.

257-32 Adverse impacts on bighorn sheep and desert tortoise habitat in areas released from wilderness protection are discussed fully in the Wilderness Supplement section of the draft RMP/EIS. It is our intention to reevaluate areas found to be unsuitable for wilderness designation to determine the need for establishing Special Management Areas (refer to Chapter 4, General Assumptions for Analysis in the Final RMP).

Action.

Page 73. Impacts on vegetation. What substantive evidence does BLM have that downward trend would solely "...be reversed or stabilized with the construction of new...developments..." unless these developments were exclosures. We feel this is an inaccurate assessment of the vegetation.

257-35 Impacts on Wildlife. Rangeland Issue. Which allotments have desert tortoise and bighorn sheep habitat? How many acres could improve compared to the total acres of habitat in the RMP area? Is this a significant impact? We can not see how an assessment could be made without going through these steps.
Wilderness Issue. Again, no alternatives to wilderness. No mitigating measures. Just all or none. This is not good planning or good, balanced resource management.

Page 78. Caption. There are plenty of ways to protect the desert tortoise that are not chosen in the alternaatives. Monitoring does not seem very likely to protect the desert tortoise, contrary to the caption. Though we are not told in chapter 3 how much crucial desert tortoise habitat there is, of the at least 46,000 acres (Environmental Protection Alternative-Wilderness), the proposed action would protect less than one fourth of that habitat. That is not much conservation, protection, or sustained yield.

257-36 We strongly suggest in crucial desert tortoise habitats:
1. Limit Off Road Vehicle use to designated roads and ways.
2. Grazing use should be very carefully controlled to ensure sufficient forage foremost for the desert tortoise and minimize possibilities of trampling.
3. Withdraw crucial desert tortoise habitats from mineral entry and restrict leasables with no surface occupancy stipulations.
4. Minimize intensive recreation use of the habitat.
5. Allow no range improvements in desert tortoise habitat that would attract livestock.
6. Allow no surface-disturbing activities in desert tortoise habitat.
7. Dispose of no crucial desert tortoise habitat. Acquire additional habitat.

Page 80. Resource Protection. This is the only alternative that takes a balanced effort at managing resources and their uses on a sustained yield basis. Compared to the unliklihood of the Environmental Protection Alternative, this is the best one overall.
Rangeland Issue. This is the only alternative that attempts to resolve grazing conflicts in a balanced manner.
Wilderness Issue. There is still need for special management to protect resources in the non-designated WSA's.

Why are there no mitigating measures proposed in this document? There certainly is great need for mitigation of BLM's planning.

257-37 Page 272. Percentages of acreages in the four condition classes do not add up to 100.

In summary, the draft RMP/EIS fails to recognize, through management proposals, the special wildlife values within Lower Gila South and to balance multiple use and sustained yield with the protection of important desert ecosystems. It fails to look at the worst-case scenario when the situation is warranted, and fails to provide a wide range of alternatives to deal with the issues. The RMP/EIS also fails to deal with all the issues extant in the area.

Thank you for the opportunity to comment on this document.

Sincerely,

Daniel C. Pearson

Daniel C. Pearson
Senior Co-Chairperson

257-33 The acreage proposed for disposal consists largely of creosote-bursage habitat which is of low value for bighorn sheep, desert tortoise and mule deer. Some palo-verde mixed cacti habitat adjacent to now-developed land would be disposed of under the proposed action but these parcels were judged to be not crucial for these species.

The 2,200 acres of desert bighorn habitat proposed for acquisition also contains low density populations of desert tortoise, less than 25 individuals per square mile. Most crucial tortoise habitat in LGS is public land.

257-34 Cumulative impacts of a "full" corridor should not be any greater than the impacts caused by the current existing facilities.

257-35 All allotments contain some desert tortoise or desert bighorn sheep. It can not be ascertained how many acres would improve or what the degree of improvement would be. This depends on the results of long-term monitoring studies followed by adjustments in livestock use to reduce conflicts.

257-36 These recommendations will be analyzed as part of the LGS habitat management plan.

257-37 Thank you - the table has been corrected in the final.

258

ARIZONA DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
206 South Seventeenth Avenue Phoenix, Arizona 85007

BRUCE BABBITT
Governor
CHARLES L. MILLER
Director

W.O. FORO
State Engineer

April 26, 1985

Mr. Marlyn V. Jones, District Manager
Bureau of Land Management
Phoenix District Office
2015 W. Deer Valley Road
Phoenix, Arizona 85027

Re: Draft Lower Gila South Resource Management Plan/Environmental Impact Statement

Dear Mr. Jones:

Thank you for the opportunity to review and comment on the Draft Lower Gila South RMP/EIS. The following comments have been coordinated through our District Engineer, Right-of-Way Section, Materials Section, and Transportation Planning Division.

The state highway system does not appear to be impacted by the proposed action. Projects on the Arizona 5-Year Construction Program within the counties of Maricopa, Pima, La Paz and Yuma will not be affected by the proposed action. Standard highway maintenance and drainage work would not be affected.

The Land Tenure Adjustment proposals may affect ADOT in terms of future right-of-way acquisitions. As ownership transfers to the State or private concerns the cost to ADOT for acquisition is likely to increase. The designation of utility corridors along state highways should not impact the highways. The one-mile width of the corridors should be sufficient to limit encroachment on the highways.

The wilderness proposals for the New Water Mountains, Eagletail Mountains, Woolsey Peak, and Table Top Mountains will not affect state highways. The boundaries of the New Water Mountains WSA and Table Top Mountains WSA south of Interstate 10 and Interstate 8 respectively are sufficiently drawn back to eliminate any conflicts with highway maintenance or drainage work.

258-1 Additionally ADOT supports non-designation of the South Maricopa Mountains WSA as its boundaries currently exist. The 13.5 mile southern boundary which abuts I-8 right-of-way combined with the utility corridor proposed along I-8 could affect our ability to maintain the roadway. The numerous drainage crossings in the area often require upstream maintenance, and the placement of a new utility line could encroach upon the interstate.

If ADOT Environmental Planning Services can be of any assistance please contact Mike Dawson at 255-8638.

Very truly yours,

PHILIP A. SHUCET, Manager
Environmental Planning Services

PAS:MRD:kj

cc: Don Smith, District III Engineer
Bob Darr, Transportation Planning
Jerry Hogin, Right of Way

Response - Letter 258

258-1 BLM is not recommending the South Maricopa Mountains WSA for wilderness under the Proposed Action. Congress could still designate all or a portion of the area as wilderness. Congress traditionally has used a 300-foot setback standard (from centerline) for wilderness boundaries along existing high standard paved roads. This setback may not be sufficient in this case to satisfy ADOT maintenance requirements.

In order to inform Congress of conflicts between wilderness and upstream drainage maintenance, BLM will address and analyze such impacts in the final Lower Gila South Wilderness EIS. Congress will have this information before enactment of any wilderness legislation involving the South Maricopa Mountains WSA. Congress has full discretion on wilderness boundary placement. Congress could choose to: 1) not designate the area as wilderness; 2) designate the area with its present boundary configuration; and 3) modify the boundary to avoid impacts to highway upstream drainage maintenance.

259

1277 So. Prospectors Rd.
Apache Jct, Az 85220
April 30, 1985

District Manager
Bureau of Land Management
Phoenix District Office
2015 W. Deer Valley Rd.
Phoenix, Az 85027

Mr. Jones.

Recently we noticed a letter in the Editorial Section of the Arizona Republic that indicated areas designated Wilderness are roadless. We knew that wasn't true because we have seen areas used by four wheelers, hunters, and Nature lovers of all sorts, closed to our use even though the area had miles of roads. Now we find in this draft the term Roadless is by your definition.

We, as four wheel drive users, object also to your definition of off road use. The term "off road" meant off the paved or maintained roads, to use forest service roads, old mining roads etc, not your definition - over land -. We are trying to eliminate the term "off road" because of the new definition, to use the term four wheel drive which more adequately describes our use.

We are not interesting in driving across a meadow, or making a "new road" up a mountain. What we enjoy is finding an old mining road or forest service road that requires four wheel drive, following that road and enjoying the serenity and peace found in Nature.

We realize there are those that abuse the rights we all should have - free use of our National forests. Those kind of people - the abusers - are found in every group. Please don't let those few ruin every one elses rights.

William A. Mikaiba

Amy Mikaiba

Bill & Amy Mikaiba
1277 S. Prospectors Rd.
Apache Jct., Az 85220

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260

EAGLETAIL RANCH

BILL O'BRIEN
PHONE: (602) 840-6072
RANCH: (602) 372-4619

April 22, 1985

District Manager
Bureau of Land Management
Phoenix District
2015 W. Deer Valley Rd.
Phoenix, AZ 85027

Gentlemen:

We recently have seen the draft resources management plan for the lower Gila South planning area. I would like to comment that your map No. 3-3 "Eagletail Mountains" fails to pinpoint or indicate the location of our mining claims. The area covered by our claims includes a 40 ft. cistern, two graves, three grottos, a deep lateral shaft and several work areas. Please include these claims in your future studies. They are all located approximately in S17xINR10W GSRBM. The area is not surveyed. These mines are named as follows and were filed December 30, 1983.

Frenchman No. 1
Frenchman No. 2
Frenchman No. 3
Frenchman No. 4
Frenchman No. 5
Frenchman No. 6

Sincerely,

E. L. Hayes

E. L. Hayes

OFFICE: 4350 EAST CAMELBACK, PHOENIX, ARIZONA 85018
A 700 SECTION DEVELOPED DESERT RANCH IN MARICOPA, YUMA, AND LA PAZ COUNTIES

263

DAVID M. BAND M.D.
po Box 368
Kayenta, AZ. 86033
30 April 1985

Phoenix District BLM
2015 W. Deer Valley Rd
Phoenix, AZ. 85027

Please support wilderness recommendations for White Canyon, Mt. Wilson, Coyote Mountains Badlands and Oak (& include 3,2 Sections of contiguous state land acquired by trade), Kelly Canyon, Picacho Mountains, Cliff Horn Mountains, Cliff Horn Hills, Signal Mt. North Maricopa Mts, Castle Dome Mts, Table Top Mts, Woolsey Peak, New Water Mts, Eagletail Mts, East Clanton Hills, Palen Mts. & South Maricopa Mts.

These areas in the Phoenix EIS & Lower Gila South are one of the most beautiful spectacular scenic desert areas.

Please support their total preservation - wilderness designation.

Thank you. David M. Band M.D.

262

ARIZONA WILDLIFE FEDERATION
4330 N. 62nd St. #102 • Scottsdale, AZ 85251 • (602) 946-6160

ACE PETERSON
President

May 1, 1985

District Manager, Bureau of Land Management
Phoenix District Office
2015 W. Deer Valley Rd.
Phoenix, AZ 85027

Subject: Lower Gila South Draft Resource Management Plan/Draft Environmental Impact Statement

Gentlemen:

Thank you for furnishing a thorough, intelligible document with a cogent analysis of the issues.

We urge you to adopt a Resource Management Plan based on the Resource Protection Alternative. This alternative offers the best balance between maintaining and enhancing wildlife habitat, and the other potential uses of the area.

Rather than to belabor all of the generally positive ramifications for wildlife of the Resource Protection Alternative, which are shown clearly in the E.I.S., let us point out areas of our special concern:

The inclusion in the Resource Protection Alternative of an additional 94,080 acres, beyond that recommended in the Proposed Action, of "crucial" Desert Bighorn Sheep habitat under the protective umbrella of Wilderness designation is particularly important to the continuing welfare of this species. The values of viable populations of Desert Bighorn Sheep are inestimable, whereas the value of the forage resource as it may be used for cattle growing is negligible, and the value of metallic minerals and fossil fuels that may exist within the affected WSA acreage is dubious.

The "significant beneficial impact" on Desert Tortoise populations arising from Wilderness designation of 7,050 more acres of "crucial" Desert Tortoise habitat in the Resource Protection Alternative versus the Proposed Action should be given due consideration.

The 47% reduction in grazing levels proposed by the Resource Protection Alternative will have "a significant long-term benefit for mule deer", and will "significantly benefit" Sonoran pronghorn on the Cameron allotment, as well as producing ancillary benefits for many other wildlife species by reducing competition with cattle.

We specifically object to the rangeland developments as proposed in the Proposed Action. The further dispersal of cattle over the range will have largely negative

LGS/RMP/EIS cont'd.

impacts on a variety of wildlife, particularly Desert Bighorn Sheep (via increased stress and disease transmission from cattle to sheep), as well as mule deer, Desert Tortoise, and Sonoran pronghorn (via increased competition for forage). We urge you to mitigate the impacts of livestock grazing as they affect wildlife habitat by both reducing alloted AUM's in sensitive areas, and by restricting livestock to no greater areas than those presently in use.

Thank you for inviting and considering our comments.

For the Arizona Wildlife Federation

John K. Calkins
Greenlee County Director

JKC/sv

cc: Bud Bristow, Director, Arizona Game & Fish Department
Chris Jennings, Director, Arizona Game & Fish Commission
Dean Bibles, State Director, Bureau of Land Management
Arizona Wildlife Federation File

Established 1923 - Formerly The Arizona Game Protective Association • State Affiliate of The National Wildlife Federation, Washington, D.C.

264

Apr. 28, 1985

M. McIlvenie
2007 E. Rancho Dr.
Phoenix, AZ 85016

To whom it may concern:

We are writing to support the all wilderness alternative in the Lower Gila South Draft Environmental Impact Statement. After visiting several of the areas ourselves and talking with people who had knowledge of the other areas and viewing numerous slides of the areas [redacted] all of the areas seem to be essentially natural and offer outstanding opportunities for solitude and primitive and unconfined recreation.

The Little Horn Mountains and Little Horn Mountains West WSA's offer a wide variety of volcanic features throughout their range providing needed habitat for numerous species of plants and animals including desert tortoise and desert bighorn sheep. Both of these areas have exceptional wilderness values.

Signal Mountain WSA [redacted] has beautiful, rugged terrain with many scenic vistas and meets all other wilderness criteria easily.

East Clanton Hills WSA deserves protection. The area has excellent wilderness characteristics. The EIS states that manageability would be a problem because of poorly defined boundaries, mineral potential and less desirable wilderness qualities. The sparseness of vegetation in Hyder Valley [redacted] provides a different, albeit harsh wilderness experience but not neccessarily a less desirable one. The boundaries along the western and southern end seem somewhat arbitrarily drawn and something should be done to alleviate the problem other than dropping the area. The wilderness characteristics of the area outweigh any potential mineral deposits that might be in the area.

Face Mountain WSA provides all of the characteristics for both solitude and primitive unconfined recreation. It is isolated, has a beautiful desert landscape, and provides habitat for many species.

The BLM should be commended for recognizing the wilderness characteristics of the Table Top Mountains, Woolsey Peak, New Water Mountains, and Eagletail Mountains WSA's but should include all of the acreage in the [redacted] WSA's in their proposal. This will enhance the areas already outstanding characteristics.

The North Maricopas Mountains, Butterfield Stage, and South Maricopa Mountains WSA's all offer

③

superb wilderness values and should be designated wilderness. We have examined much of the three [redacted] units on foot and by car and found the opportunities for solitude and primitive, unconfined recreation to be exceptional.

There are numerous large washes which wind through the units and provide natural routes for a wide variety of activities including hiking, backpacking, photography, hunting, geologic study, historical study and nature study to name a few. The impacts of the wildlife catchments, ranching improvements, and vehicle intrusion are minimal. We found evidence of bighorn sheep throughout the mountainous areas of the units. These units will provide neccessary protection, for the bighorn and other sensitive species, from encroachments of the Phoenix metropolitan area which will increase greatly in the years to come.

These areas will also protect an abundance of cultural remains, from prehistoric rock shelters to a portion of the [redacted] Butterfield Stage route one of the most prominent, important routes used in the history of the United States.

The Bureau should look into trading out

④

the present [redacted] mineral inholdings in the areas for other mineral rights elsewhere in the BLM's inventory. We visited all but a few of the [redacted] cherrystem "roads" in the areas and found that only two, the road into [redacted] Margies Cove as far as Hazen Well [redacted] in the ~~the road~~ s North Maricopas and the road separating the North Maricopa WSA from the Butterfield [redacted] Stage WSA only as far as Happy Camp, [redacted] could be called roads because none of the other "roads" had the appearance of having been maintained. [redacted] The road to Hazen well and Happy Camp had, [redacted] it appeared, been bladed recently. The rest of the "roads" we traveled on were passable only to a high clearance vehicle and much of the time were just two ruts in the earth to follow.

We feel that the [redacted] cherrystem roads, [redacted] other than the two mentioned above and possibly ones which we did not travel, are actually vehicle ways and should be closed to vehicle entry if and when the areas become wilderness, with possible exceptions granted

for continued maintenance of the water catchments and range improvements in the areas.

We also feel that the road into Happy Camp on the Butterfield Stage route should be cherry-stemmed and the North Maricopa Mountains WSA and Butterfield Stage WSA should be joined to form one unit.

All of the units mentioned in this letter deserve wilderness protection. We need to protect what little remains of our natural environment in an undisturbed setting.

Sincerely,

KEN BUNCH
2707 E. TURNEY AVE
PHOENIX, AZ 85016

Matt McWenie
2007 E. Rancho Dr.
Phoenix, AZ 85016

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266

Mr. John F. Pomponio
334 W. Highland
Phoenix, AZ 85013

Mr. District Manager:

As a mabor of the Sierra Club, Audobon Soc. and numerous other environmental organizations, I would like to take a minute to give my opinion on the Lower Gila South Resource Management Plan + DEIS.

After reviewing the Proposed Action and the 4 Alternatives, I find that I must support the Environmental Protection Alternative.

I feel the Proposed Action is finely good at Addressing the issues except for the Wilderness designation of only 189,750 acres. While 607,557 acres may be a little more than is actually necessary the amount proposed by the PA is not nearly enough.

The adverse effects on the ranchers in the area will be great under the Environmental Prot. Alt., but I think the benefits to the wildlife and vegetation will make it worth it in the long run.

So I will support the Environmental Protection Alt. as the best way of dealing with the issues for the lower Gila South area. Thank you,

Sincerely,
John Pomponio

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April 29, 1985

Give us something to look at in the future!

It's a sad think that a Govt. Agency must protect our own land from the greed of ourselves but our American record has pretty well shown that our insensitivity towards the resources of the Planet Earth is a one-way road-end mentality. I am in support of the wilderness recommendations for all the western States but particularly to those under the consideration of your office.

Need more Grand Canyon, and Aubrey Mountains, and Mt. Wilson, and Little John Mts., and the Maricopa Mountains and Woolsey Peak and the Trigger Mountains and Signal Mountain and. New water mountain. Please don't sell us down the river.

Ramona Scott
8226 N. East St
Pl AZ 85253

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GOLD FIELDS MINING CORPORATION
A Consolidated Gold Fields Group Company

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May 1, 1985

Ms. Marlyn V. Jones, District Manager
Bureau of Land Management
Phoenix District Office
2015 West Deer Valley Road
Phoenix, AZ 85027

re: **Comments on the Lower Gila South Draft Resource Management Plan and Environmental Impact Statement**

Dear Ms. Jones:

In reading and evaluating the various alternatives for the 12 Wilderness Study Areas (WSA's) in the Lower Gila South Planning Area, I find that fair and careful consideration has been given to the issues discussed in the Draft RMP/EIS. I am pleased that the BLM Proposed Alternative recommends portions of four WSA's (189,750 acres) as suitable for wilderness rather than all of the 12 WSA's (607,557 acres). This certainly indicates that the multiple use concept of the WSA's was given proper consideration. The issues are difficult and require a great deal of thought and intelligent planning.

Before commenting specifically on the alternatives, I would like to point out that Gold Fields Mining Corporation and several other major and junior mining companies are conducting extensive precious metal exploration programs in the Lower Gila South Planning Area. Gold Fields and, to the best of my knowledge, our competitors are conducting their reconnaissance and drilling programs with a minimal impact on the environment. This is done for two very practical reasons: 1) we all are required to do so by law; 2) each company does not want to leave tracks for their competitors.

Mineral entry and exploration, including drilling, can be accomplished with very little impact on wilderness values, historical and archaeological sites, and wildlife habitat. A relevant example of minimal adverse impact is given by a recent helicopter supported drilling program conducted by Gold Fields within the Indian Pass WSA, located about 20 miles northwest of Yuma, Arizona, in the California Desert Conservation Area. The two reverse circulation drill rigs which operated for about two

weeks were very closely monitored by the BLM, El Centro, California, office. The BLM was satisfied to the extent that Gold Fields' Indian Pass WSA drilling program will be used as the standard for any future drilling operations within a WSA in the CDCA.

The No Action or Resource Production Alternatives are preferable from a mineral entry and exploration standpoint in that multiple use would continue under current regulations. The Proposed Action would essentially prohibit mineral entry in four of the twelve WSA's, the New Water Mountains, Eagletail Mountains, Table Top Mountains, and Woolsey Peak. All four of the WSA's contain large areas in which significant locatable mineral and geothermal potential exist. For example, modest mineral production occurred in the northern New Water Mountains in the 1930's and 1940's. Numerous pits, shafts, and adits near Twin Peaks and Gunsight Notch indicate significant base and precious metal resources may be present. Table S-4 on page 129 of the Draft RMP/EIS rates the mineral potential of the Eagletail and Table Top Mountains as high while the New Water Mountains and Woolsey Peak WSA have been rated as having medium mineral potential. Other areas in the Basin and Range Province which are rated as having a medium or low mineral potential contain significant economic mineral deposits. The initial lower rating of many areas is based on limited information. The geologic setting in the New Water Mountains and in the Woolsey Peak WSA indicates that the mineral potential of both areas is as high as in the Eagletail and Table Top Mountains.

I reiterate that mineral entry and exploration can be and is accomplished with minimal adverse impact on the environment. Current regulations are more than adequate to protect water quality, scenic values, and wildlife habitat.

Thank you for your consideration of these comments. I am confident that the concerns of the minerals and energy industries will be given proper consideration in your planning.

Sincerely,

Rick H. Russell
Exploration Manager
Southwest/Rocky Mountain Region

RHR:csg

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ARIZONA
MINING ASSOCIATION

C. J. HANSEN
President

May 5, 1985

Mr. Marlyn V. Jones
District Manager
Bureau of Land Management
2015 W. Deer Valley Road
Phoenix, Arizona 85027

Dear Mr. Jones:

Enclosed are the comments of the Arizona Mining Association regarding the Bureau's Lower Gila South Draft RMP/EIS.

The Arizona Mining Association represents 15 of the major mining companies that produce most of the copper, molybdenum, gold and silver in Arizona. These comments resulted from a compilation of data determined by previous field examination of properties in or near the areas proposed for restricted access. Hopefully this information will aid you in arriving at a final Resource Management Plan that will continue the multiple use of public lands in the area.

Sincerely,

R. J. Pursley
Executive Secretary

RJP/jc
enclosure

2702 N. Third Street · Suite 2015 · Phoenix, Arizona 85004 · (602) 266-4416

THE COMMENTS OF
THE ARIZONA MINING ASSOCIATION
ON THE
BUREAU OF LAND MANAGEMENT
LOWER GILA SOUTH
DRAFT RESOURCE MANAGEMENT PLAN/
ENVIRONMENTAL IMPACT STATEMENT
PHOENIX DISTRICT, ARIZONA

Introduction

The Arizona Mining Association has developed these comments to generally show the concern for mineral potential within the Bureau of Land Management's Lower Gila South, Phoenix District that is being studied for wilderness designation. The Arizona Mining Association consists of 15 major mining companies in Arizona that produce most of the copper, gold, silver and molybdenum in the State. The Association, as well as the aware public and the mining industry, are concerned about the continuing actions of the federal government to remove and restrict public lands from productive use prior to a thorough evaluation of the mineral potential of the areas being withdrawn.

Cumulative Effect of Withdrawals in Arizona

The Arizona Mining Association is extremely concerned about the continuing actions of the federal government to remove and restrict public lands from productive use. Approximately two-thirds of all public lands in the United States are now effectively withdrawn from mineral development. In Arizona, existing wilderness areas total two million acres and it has been determined that approximately 30 million additional acres (two-thirds of the Federal lands in Arizona) are unavailable or highly restricted to mineral resource development by other withdrawals including BLM Wilderness Study Areas, Forest Service Wilderness Study Areas, Primitive Areas, Scenic Areas, Game Preserves and Refuges, Parks and Monuments, Defense Department withdrawals, Indian Reservations and numerous other withdrawals. Each of these categories has been formed by individual withdrawal actions with little or no consideration to the cumulative effect of all withdrawals in Arizona. The Association feels this cumulative effect must be addressed and considered in this EIS.

Lower Gila South RMP

The draft Lower Gila South Resource Management Plan and Environmental Impact Statement has been reviewed by the Arizona Mining Association primarily to identify those proposed land management actions that would withdraw lands from mineral entry or otherwise restrict mineral development. Listed below are the major management decisions which would have an impact on mineral development.

The draft Lower Gila South RMP recommends under its proposed action as suitable for wilderness a total of four WSAs comprising 189,750 acres in the New Water Mountains, Eagletail Mountains, Woolsey Peak and Tabletop Mountains WSAs. It is commendable that the RMP recommends that those WSAs not designated as suitable for wilderness should be released from wilderness review and managed under the multiple resources concept. However, the Arizona Mining Association contends that the RMP did not give adequate consideration to potential mineral development in the decision to recommend the four WSAs as suitable for wilderness. Table S-4 on page 129 of the RMP lists the mineral potential and mineral development potential for each WSA. Only three WSAs were rated as having high mineral potential, yet two of these areas, the Eagletail Mountains WSA and the Tabletop Mountains WSA, were recommended as suitable for wilderness. Only one of the WSAs was recommended as having high mineral potential development and this area, the New Water Mountains WSA, also was recommended as suitable for wilderness. It is the Association's position that these areas should be seriously considered for deletion from wilderness recommendation as a result of their mineral potential.

Additionally, each of the four areas recommended as suitable for wilderness are comprised primarily of creosote-bursage habitat and palo verde-mixed cacti habitat, with some ironwood. According to Table 3-3 at page 35 of the RMP, there already exists five statutory wilderness areas comprised of creosote-bursage vegetation type totaling 344,217 acres, three other creosote-bursage vegetation areas comprising 430,150 acres have been administratively endorsed for wilderness, and there are 48 creosote-bursage vegetation type WSAs totaling 1,401,259 acres. Also, there are four existing statutory wilderness area of palo verde-cactus shrub vegetation type totaling 265,450 acres, three other palo verde-cactus shrub vegetation areas totaling 847,600 acres have been administratively endorsed for wilderness, and there are 41 palo verde-cactus shrub vegetation type WSAs totaling 1,396,142 acres. Because the vegetation types in the proposed wilderness areas within the Lower Gila South Planning Area are already well represented in the wilderness system, it does not seem appropriate to designate more of these areas as wilderness.

Arizona: Mineral Storehouse

Arizona is a mineral storehouse and plays a significant role of meeting the nation's mineral needs. For many years, Arizona has been the premier metal producing state in the nation, and Arizona's mining industry produces two-thirds of the nation's newly mined copper, one-quarter of the nation's

molybdenum, one-fifth of the nation's silver and over one-tenth of the nation's gold.

Not only is Arizona the mainstay of the nation's mineral storehouse now, it also will be relied upon heavily in the future to provide a large portion of the United States' copper, molybdenum, silver and gold. The U.S. Bureau of Mines has reported that Arizona contains 85% of the United States' copper reserves and 20% of its molybdenum reserves, as forecast well into the 21st century. As a result, the State will play a significant role of meeting the nation's mineral and energy independence goals in the future and it is expected that mining will continue to be a prominent force in the future growth of the State's economy. However, discovery and development of many of these resources is dependent upon access to federally-controlled lands (70% of the State) where these minerals often occur. And unfortunately, minerals in Arizona have seldom received serious or timely consideration in land use planning.

A large number of small past producing mines and mineral prospects have occurred in or near the wilderness study areas considered in the Lower Gila South Draft RMP/EIS. A common exploration technique for copper, gold and silver has been in use for the past three decades: evaluation of areas of high concentrations of small mines and prospects. Up to this time, all major copper ore bodies in Arizona, except for ASARCO's Sacaton Mine near Casa Grande, reflect the results of thorough and sometimes deep exploration of areas where mineralization in numerous small mines were already known to exist. In some instances, old mining districts hold a high probability of having a deep buried "heart" of copper ore somewhere within or near them. The same criteria has and is being utilized in exploring for major gold and silver deposits.

Recent technological breakthroughs in the processing of low-grade gold and silver ore through particle agglomeration and heap leaching have made these methods attractive alternatives for many small gold and silver deposits and prospects. Some low-grade gold and silver ores, old mine dumps and tailings previously regarded as uneconomic can be profitably developed using agglomeration pre-treatment and heap leaching. This is the process whereby clay and silt-size particles are made to adhere to larger particles or made to accumulate into larger particles by the addition of moisture and usually a cementing agent through the application of some form of mechanical action. Cost comparisons with conventional processes show agglomeration and heap leaching to have a lower capital cost, a lower operating cost and a significantly higher discounted cash flow rate of return (DCF-ROR) than most other previously considered extraction processes for small mines and mineral prospects.

Beyond distinct economic advantages, gold and/or silver agglomeration and heap leaching require less lead time for production, offer greater design flexibility and have major environmental advantages. These and other attributes of the processes have been confirmed by rapid acceptance and utilization of agglomeration and heap leaching throughout the United States' precious metal mining industry.

Most of the high-grade deposits of gold and silver in the western United States were mined out by the 1930s. Thus, when the price of gold dramatically increased in the mid-1970s, the industry sought methods of economically developing lower grade deposits and reprocessing tailings from mills which treated higher grade ores. Heap leaching of these materials using cyanide and a lixiviant gained wide acceptance in the industry and proved, at least in some cases, to be a viable alternative to conventional milling and agitation leaching.

Most of the testwork which led the mining industry to use heap leaching was done by the U.S. Bureau of Mines at its Metallurgical Research Center in Reno, Nevada. The first major full-scale use of heap leaching of gold ore began in 1977 at the Smokey Valley Mine in Round Mountain, Nevada. Following Smokey Valley's example, a number of smaller gold-silver heap leach operations were initiated in the late 1970s mostly in Nevada and Arizona. More than half of these projects proved to be economic failures, due to poor metal recovery resulting from permeability problems in the ore heaps. As a result, the U.S. Bureau of Mines began research in 1978 to improve and sustain heap leach ore permeability. These efforts resulted in the development of the new particle agglomeration pre-treatment technology.

Precious metal producers in the United States quickly recognized the merits of agglomeration pre-treatment for heap leaching. In addition to a number of smaller operations, the process has been successfully applied by Tombstone Exploration, Inc. at their silver mine in Tombstone, Arizona. This was a past producer (State of the Maine Mine) that is similar in size to many of those gold and silver mines within and immediately surrounding the Lower Gila South area. As a result of the above developing technology, the Arizona Mining Association believes that many of the past producing small mines and mineral prospects in the Lower Gila South area may be economically viable mining projects that can be undertaken by both large companies and small groups of entrepreneurs in the near future.

Mineral Occurrences within the Lower Gila South Area

Base and Precicus Metals

Arizona ranks second in the nation in the annual production of silver and fourth in the annual production of gold. The major economic development and cultural growth which occurred in Arizona since the Gadsden Purchase of 1853 and since it became a territory in 1863 can be directly attributed largely to the natural wealth of mineral resources, especially gold and silver, that abound in the State. It was the discovery of placer gold deposits, beginning in 1857, along the Lower Colorado River that attracted prospectors to the Arizona region in large numbers. It started with the Gila City placers about 20 miles east of Yuma and a series of gold rich placers that were located north of Yuma between 1861 and 1864. About the same time, gold placers were discovered near Lynx Creek and at Weaver Gulch and Rich Hill in Yavapai County. Mining operations also began in 1863 at the rich gold deposit of the Vulture Mine which started the town of Wickenburg.

Due to the meteoric rise in the price of gold and silver since 1978 a number of gold and silver mines have reopened in Arizona. Most notable gold deposit is the Congress Mine operated by Congress Consolidated Gold Mines in Yavapai County. Additional small past-producing gold mines are expected to reopen as a more favorable economic climate develops. Additionally, the mineral community is excited by the recent information that a large low-grade gold deposit has been identified 15 miles northwest of Phoenix. As a result, exploration activity is expected to increase in this area for this type of gold deposit. The Association realizes that the dropping price of gold and silver substantially impact on this exploration and development potential. However, this is a short lived phenomena and when prices recover exploration activity will increase.

A number of silver mines also have reopened in Arizona since 1978 and many other mines with significant past production are being re-evaluated. Recent reopened mines include Gunslinger, McCracken, Silver Cross, Contention, Blue Top, State of Maine and Ash Peak.

With a number of recent gold and silver discoveries and mine developments occurring near the California-Arizona border such as the Picacho, Potholes, Fortuna, Mesquite and Cargo gold deposits and the silver deposits of Sheep Tanks and the Silver District near the Imperial National Wildlife Refuge, the Association believes we can ill afford to withdraw or restrict the lands within the Lower Gila South area prior to a thorough mineral evaluation. As Joe Wilkins, Jr. of St. Joe American Corporation states in his treatise on The Distribution of Gold- and Silver-bearing Deposits in the Basin and Range Province, Western United States, "the overall spatial and temporal distribution of (gold and silver) deposits within the Mohave Block (in which the Lower Gila South area occurs) may not represent an absence of mineralization or an inadequacy of other geologic contents, but may be artificially induced by the vast tracts of lands withdrawn from mineral entry." (See Figures 1 and 2, and Table 1.)

New Water Mountains 2-125 (See Figures 3, 4, 5, 6, 7, 8)

This WSA is near Quartzsite and contains 40,375 acres of public land, of which 24,120 acres are designated in the RMP as suitable for wilderness. The WSA is rated as having medium mineral potential and high mineral development potential. p. 129. Although the area proposed for wilderness deletes some of the areas likely to contain mineralization, many of these areas, along with an area likely to contain geothermal resources, remain within the area designated as suitable for wilderness. The RMP states that the Laramide rhyolitic volcanism in the WSA produced many areas of gold and silver mineralization. Lead, copper, zinc, manganese and molybdenum also are present in many of the mineralized zones (Figure 6). The RMP also identifies the existence of deposits of sheelite, the potential for perlite, and outcrops for marble have been identified but not mined. A total of 38,375 acres within this WSA are subject to a USFWS withdrawal application which, if approved, would expand the adjacent Kofa National Wildlife Refuge.

Within the WSA at the old Salome Copper Queen, Moore claim groups, assay results from six samples show a trace of gold, from 0.26 ounces per ton (opt) silver to 1.80 opt silver and from 0.26% copper to 1.97% copper. Mineralized structures from which these samples were taken, trend S50°W, dip 52°SE, S80° and 58°W, dip 58°SE and N62°W, dip 64°NE. The structural trends bear right across the WSA to the southwest and southeast.

Figure 3 shows the occurrence of manganese deposits and copper with gold and lead vein-type deposits in the northeastern and western portions of the WSA. The GEM Report (Geology, Energy and Mineral Resources Assessment of the Kofa Area, Arizona) as well as the EIS indicates high mineral potential on the east-northeast one-third of the unit and on the Western one-third of the WSA. Figures 4 and 6 show the extent of the zones of mineral potential in the New Water Mountains WSA. Additionally, Figures 7 and 8 show the areas of favorable uranium and geothermal potential, respectively. These two zones currently occur outside the WSA boundary as depicted in the EIS.

From the information presented herein, it is the Arizona Mining Association's position that the New Water Mountains WSA has substantial mineral potential for gold, silver, lead, copper, zinc, manganese and molybdenum. The existence of deposits of sheelite, the potential for perlite, and outcrops of marble also have been identified in the WSA. The Association therefore, recommends that this area be deleted from further consideration for wilderness.

Little Horn Mountains West 2-126A and the Little Horn Mountains 2-127 (Refer to Figures 3, 9, 10, 11 and 12)

The area represents a large province, characterized by thin Tertiary volcanics and basement metamorphic rocks cut by extensional faults, which is known to host high grade gold mineralization in the Kofa and Little Horn Mountains. The North Star and King of Arizona Mines in the Kofa Game Range are exemplary of the prospective style of gold mineralization where structures cutting volcanics and basement produced an estimated 50,000 tons of ore grading 2 opt Au from North Star. The Rea Petro property in the Little Horn Mountains occurs in a similar geologic environment and is estimated to contain 120,000 tons of ore in zones 10 feet thick grading approximately 0.15 opt Au and 3 opt Ag.

Figure 3 shows the potential for gold mineralization in the southern portion of the Little Horn Mountains West. Figures 10 and 11 support this position as well as the substantial interest shown by mining claim locations in the unit. Additionally, there is a potential, as shown on Figure 11 for mineralization in the eastern portion of the Little Horn Mountain West unit as well as the southern third of the larger unit. Again this is substantiated by mining claim activity in the larger unit. There also is a possibility for uranium mineralization in the northern most portion of the Little Horn Mountains unit (Figure 12). Also the potential for gold and manganese mineralization extending into the eastern portion of the larger unit is shown in Figures 10 and 11.

The Little Horn Mountains West contain several mineral prospect adits and three vehicle ways (roads) as well as a fence line more than a mile in length. The unit exhibits low quality wilderness values and lacks outstanding primitive recreation opportunities. It also has no special features or resource values unique to the surrounding area. The lack of these wilderness attributes, as well as the nonfederal inholdings and manageability problems due to the areas mineral resources and the substantial number of mining claims within a large portion of the lower two-thirds of the unit, make the Little Horn Mountains West WSA undesirable for further wilderness considerations. With numerous gold and manganese mines, prospects and deposits identified on the southwestern boundary of the unit and the potential for this mineralization to extend into the WSA, the Arizona Mining Association recommends deletion of this unit from further wilderness consideration.

The Little Horn Mountains WSA likewise contains 38 miles of roads, more than five miles of fenceline, and numerous known mining sites. Additionally, a number of mining claims and a high mineral potential area occurs on the Western flank of the WSA and extends into the center of the unit. The east boundary of the WSA contains a number of past producing gold and manganese deposits. There is a potential that this mineralization extends into the WSA and this possibility is recognized in the GEM report (Figure 11). As a result, the Arizona Mining Association agrees with the conclusion in the EIS that wilderness values in this unit are not considered exceptional. The WSA lacks other enhancing wilderness characteristics and would not contribute to the diversity of the National Wilderness Preservation System. The overall quality of the Little Horn Mountains WSA wilderness values and opportunities does not justify the units recommendation for wilderness designation.

Eagletail Mountains 2-128 (Refer to Figures 3, 13, 14, 15 and 16)

This WSA is approximately 65 miles west of Phoenix and contains 117,065 acres, 70,230 acres of which have been recommended as suitable for wilderness designation. The WSA is rated as having high mineral potential and medium mineral development potential. p. 129. Many areas within the WSA likely to contain minerals are not recommended as suitable for wilderness designation but a significant area of the Eagletail Mountains likely to contain minerals is recommended for wilderness designation. Within the WSA, known metallic deposits of gold, silver, copper and molybdenum have been identified. Additionally, manganese, barium and lead carrying veins also have been identified. The RMP also lists actinolite and tremolite non-metallics as being identified with the WSA.

There are 560 acres of privately owned mineral estate in this WSA that would have to be acquired before this area could be designated as wilderness. Because of the split estate problem, this area is an unlikely candidate for wilderness area and should not have been recommended for wilderness designation. For example, the Yuma District RMP, at p. 61, did not recommend for wilderness designation its Gibraltar Mountains WSA solely because of split estate problems.

On the northeastern side of the Eagletail Mountains WSA, in sections 21 and 22, T2N, R11W a sample was cut which assayed trace of gold, trace of silver and 0.70% copper. In the same

area a shaft was sunk on structures bearing N58°W, dipping 84°NE and N71°W dipping 66°NE. These structures trend across the WSA. The sample was taken from a quartz vein more than two feet wide which showed chrysocolla, malachite, chalcopyrite and pyrite. There are numerous other narrow veins with primary sulfides in the WSA.

On the southeast fringe of the WSA within less than one mile of the WSA there are old prospects, shafts, and adits which explored northwest and southwest mineralized structures. Assay certificates noting values of minerals in the vein material show significant values in copper, silver and gold.

Figures 3, 14 and 15 indicate the existence of a zone of mineralization in the southwest portion of the WSA. The dominant deposits in this area are of copper and manganese and also include gold and silver deposits like the Davis Mine in section 19. Figures 14 and 15 also show copper mines and a zone of potential mineralization in the Double Eagle Mountains in the southeastern portion of the WSA. Additionally, Figures 14 and 15 show a mineral zone in the north-northeastern portion of the unit which exhibits past production of copper, lead and zinc. Numerous copper prospects exist within this zone and reconnaissance has been conducted on a number of them by member companies of the Arizona Mining Association.

With the significant potential for mineral potential in the southwest, southeast, and north-northeast portions of the WSA and the occurrence of the outlandish cherrystem which leads to a parcel containing 2,720 acres of nonfederal lands located near the middle of the WSA (which could cause management nightmares), the Arizona Mining Association recommends deletion of the Eagletail Mountains WSA from further consideration for wilderness designation.

East Clanton Hills 2-129 (Refer to Figures 3, 13, 14, 16, 17, 18 and 19)

The East Clanton Hills WSA exhibits high mineral potential. Mineral deposits identified within the unit include gold, silver, copper, lead, molybdenum, manganese, uranium as well as fluorspar and substantial potential for geothermal resources. Figures 3, 14, 16 and 17 show the high mineral potential and mineral deposits in the central and northern portions of the unit dominated by gold mineralization but also containing copper, lead, molybdenum and fluorspar.

Figure 18 shows the zone of uranium potential in the East Clanton Hills WSA. Figure 19 shows the geothermal resource potential for the southern half of this unit. Both types of mineralization are significant within the WSA.

As a result of the significant mineral potential of this WSA, the Arizona Mining Association recommends that the unit be deleted from further consideration for wilderness designation and be returned to multiple use management.

Face Mountain 2-136 (Refer to Figures 20, 21 and 22)

Figure 20 indicates the zone of potential mineralization for copper, silver, gold and lead in the northern portion of the Face Mountain WSA. Just to the south of this zone as well as overlying a portion of it, is a horizon of favorable uranium potential (Figure 22). In addition, the northeastern portion of the WSA fringes on an excellent geothermal resource area (Figure 20). There also are 32 mining claims in the WSA.

The Arizona Mining Association is in agreement with the conclusion reached on page 108 of the Lower Gila South Draft EIS that states, "Solitude is frequently disrupted, however, by the passing sounds of train traffic along the WSA's southern border. In addition, the WSA lacks outstanding primitive recreation opportunities, and there are no recognized special features or unique resource benefits, the opportunity for solitude alone does not justify recommending the Face Mountain WSA for wilderness. The WSA would be returned to multiple use management."

As a result of the above, the Arizona Mining Association recommends the that Face Mountain area not receive further consideration for wilderness designation.

Signal Mountain 2-138 (Refer to Figures 3, 23, 24 and 25)

This WSA is rated as having high mineral potential. The Arizona Mining Association agrees with that high mineral rating which can further be supported by almost 250 mining claims located within the unit. In the northern most part of the Signal Mountain WSA a number of copper mines and deposits have been mined in the past. These deposits contain significant gold and silver mineralization. Figures 24 and 25 show the zone of high mineralization.

Samples from claims in Sections 13, 14 and 15 T2S, R7W where the old Butte Mine workings exist showed assay values from 0.03% copper to 0.21% copper, while assay certificates of the owner in 1961 showed values as high as 2.6 ounces per ton gold, 2.00 opt silver and 24.45% copper from selected high-grade material on one of the old dumps near a mine shaft.

A sample from a dump of another shaft taken one year ago assayed 1.04% copper, 0.41 ounces per ton gold and 0.05 opt silver. This sample was taken from a shaft dump in section 14, T2S, R7W. There also are vein and fault structures in section 14 which trend S27-29°W, and dip 75-78°NW. The projection

of this trend traverses the Signal Mountain WSA. Additionally, there are adequate mineralization exposures within the northern part of the Signal Mountain WSA to disqualify large portions of these WSAs as potential wilderness.

The Draft EIS states that the Signal Mountain WSA does not contain exceptional or unique wilderness characteristics. Additionally, "solitude is frequently disrupted by noise of numerous trains along the WSA's northwestern border." As a result of the foregoing discussion, the Arizona Mining Association recommends that the Signal Mountain WSA be deleted from further wilderness consideration.

Woolsey Peak 2-142/144 (Refer to Figures 23, 24, 25 and 26)

This WSA is comprised of 73,930 acres of public land, 61,000 acres of which are designated in the RMP as suitable for wilderness. The WSA is listed as having medium mineral potential and medium mineral development potential. Almost all of the areas likely to contain locatable minerals and geothermal resources within this WSA are included within the lands designated as suitable for wilderness. According to the RMP this WSA has extensive copper deposits and has produced significant tonnage of medium grade copper ore. Lead, gold and silver also have been mined with good results. In addition, this WSA has produced barite, perlite and some welded tuff building stone and there exists the possibility of low grade uranium at depth. There is a high potential for geothermal resources along the eastern boundary of the WSA and the majority of these lands are included in the area designated as suitable for wilderness.

The eastern portion of the WSA has substantial potential for copper, gold and silver deposit (Figures 24 and 25). This zone extends into the WSA even under the proposed action alternative. The Arizona Mining Association recommends that the WSA eastern boundary as shown in the proposed action be moved an additional two miles to the west to generally coincide with the boundary between Range 5 West and Range 6 West (T1S). Not to do so would have a negative impact on mineral development in this area and would severely restrict all forms of mineral development on the existing mining claims and future mineral prospects. The same holds true for the significant uranium potential as delineated in Figures 24, 25 and 26 in the southeastern portion of the WSA. The WSA boundary in this area also should be pulled back to the township line.

Another area of favorable mineral potential occurs around Woolsey Peak in the north central portion of the unit. A number of past producing copper mines are located just north of the unit and the potential to locate other deposits within the WSA is high. The Association recommends that sections 2, 3, 4, 8, 9, 10 16 and 17 T3S R6W be deleted from further wilderness consideration (as shown on Figure 24). This deletion would include Woolsey Peak.

Lastly, substantial potential for both locatable minerals and geothermal resources occur in a zone shown on Figure 24 in the southeastern portion of the Woolsey Peak WSA. The current boundary is located along a 69KV power line and the Association recommends that the boundary be adjusted to delete this high mineral potential and geothermal resource area (Sections 1, 11, 12, 13, 15, 16, 17, 23 and 24, T4S R6W).

North Maricopa Mountains 2-157 & Butterfield Stage Memorial 2-164 (Refer to Figures 27, 18, 29 and 30)

The Geology, Energy and Mineral Resources Assessment of the Maricopa Area, Arizona (GEM Report) indicates mineral potential for both WSA units (Figures 29 and 30) for copper and uranium. These WSA units are situated along the trend of mineralizing activity which extends throughout central Arizona from the Morenci and Safford areas westward through Globe-Miami, Christmas, Ray, Copper Creek, San Manuel and Superior areas. Both the North Maricopa Mountains and the Butterfield Stage Memorial WSAs border on the Francisco Grande and Casa Grande mining districts. As such, these lands present prime targets for exploration activities with potential for the development of new mines. Mineral possibilities are not limited to copper only, but also exist for silver, gold, lead, zinc and uranium.

The areas also contain favorable potential for nonmetallic mineral occurrence (Mica) and for building stone (granite) throughout the units. Additionally, over 500 mining claims occur within the units attesting to the potential of the areas.

As a result of the copper potential of the region due to its proximity to known porphyry copper deposits in the Francisco Grande and Casa Grande mining districts, the Arizona Mining Association recommends that the North Maricopa Mountains and Butterfield Stage Memorial WSAs be deleted from further wilderness consideration.

South Maricopa Mountains 2-163 (Refer to Figures 27, 29, 30, 31 and 32)

The GEM report for the South Maricopa Mountains WSA indicates mineral potential for copper resources and for uranium (Figures 29 and 30). Figure 31 also shows this favorable copper mineral potential in the central and eastern portions of the unit and in the western portion of the WSA for uranium potential. Over 400 mining claims have been located within the unit which attests to the WSA's mineral potential.

The South Maricopa Mountains WSA is situated along the trend of mineralizing activity which extends throughout central Arizona from the Morenci and Safford areas westward through Globe-Miami, Christmas, Ray, Copper Creek, San Manuel and Superior areas, to the Florence - Sacaton - Vekol Hills and Casa Grande areas. The unit borders on the Francisco Grande and Casa Grande mining districts. As such, these lands present prime targets for exploration activities with potential for the development of new exploration activities with potential for the development of new mines. Mineral possibilities are not limited to copper only, but also exist for silver, gold, lead, zinc and uranium.

A significant potential for geothermal resources exist on the western one-sixth of the WSA (Figure 32) and favorable potential for nonmetallic mica deposits exist in the unit. Additionally, a potential exists for granite building stone throughout the WSA.

As stated in the Draft EIS, the South Maricopa Mountains WSA lacks superior wilderness characteristics. The area is not particularly scenic and has no interesting or unique geologic or plant features. Much of the WSA is relatively flat bajada offering little to the primitive recreationist. These comments plus the potential for significantly favorable geologic horizons for minerals lead the Arizona Mining Association to recommend that the South Maricopa Mountains WSA be removed from further wilderness consideration.

Tabletop Mountains 2-172 (Refer to Figures 33, 34, 35, 36 and 37)

This WSA is comprised of 37,968 acres of public land, 34,400 acres of which have been designated as suitable for wilderness. Almost all of the areas within the WSA likely to contain locatable minerals and a major portion of the areas likely to contain geothermal resources are included within the area designated as suitable for wilderness. The RMP designates this WSA as having high mineral potential and medium mineral development potential. The Association feels that it is almost incredible that this area is recommended for wilderness because the RMP states that:

> The mineralization [in Tabletop Mountains WSA] is more diverse and more concentrated than in any of the other WSAs studied in this supplement. Copper, gold, lead, silver, zinc, manganese and iron have been mined. An unusually low silica, high alumina basalt has been located in the area. Tantalum associated with iron has been located by exploration geologists. The presence of hydrothermal mineralization has been found in several localities of the WSA. Concentrations of mineralization have been identified along the strike of nine known mapped faults within the WSA. A series of six intersecting faults are particularly high in mineral concentration. Mid-tertiary intrusives are numerous. Most of the area was subject to recent basaltic volcanism that enhanced mineralization. . . . Fluorspar, perlite, and building stone have been located in the area. ....Known geothermal areas abound around the WSA. (p. 155).

Affirming this statement is the fact that there are at least 14 different claim groups containing over 150 mining claims located within the WSA.

In the area of sections 32, 33 and 34, T7S, R2E and sections 4 and 5, T8S, R2E, claims were examined and sampled in the 1950s and again in the 1970s by a number of mining companies' exploration teams. Some assay results of samples taken show values from 0.10 to 0.60% copper. One high grade sample assayed 0.25 opt gold, and 1.55% copper. Minerals of azurite, malachite, chrysocolla, cuprite and tenorite exist on those claims.

The Table Mountains Area borders on the Francisco Grande and Casa Grande mining districts. As such, this area presents a prime target for copper exploration activities with the potential for the development of new mines. Mineral possibilities are not limited to copper only, but also exist for silver, gold, lead, zinc and uranium.

As shown on Figures 33 and 35 the WSA exhibits high mineral potential, especially for copper resources. This potential encompasses most (over 65 percent) of the WSA. Additionally, there is a potential for uranium mineralization in the northeast portion of the unit near and around Indian Butte (Figure 36) and in the western portion of the WSA, west of Black Mountain (Figure 36). Geothermal resource potential also is present in the northwestern portion of the unit (Figure 37).

From the foregoing, it is readily apparent that due to the large number of mining claims and significant mineral potential within the WSA, the Tabletop Mountains unit should be deleted from further wilderness consideration.

We appreciate the opportunity to submit our written comments on the Lower Gila South Draft Resource Management Plan and Wilderness Environmental Impact Statement.

270

EMS TRANSMISSION

May 2, 1985

To: District Manager, Phoenix District Office, Bureau of Land Management, Phoenix, AZ

From: Field Supervisor, Fish and Wildlife Service, Ecological Services, Phoenix, AZ

Subject: Review of Draft Lower Gila South Resource Management Plan/ Environmental Impact Statement and Wilderness Supplement

We have reviewed the subject document and have the following comments.

Our review is guided by the Federal Land Policy and Management Act of 1976 which requires BLM to manage the resources on public land for multiple use and sustained yield. This legislation also dictates that public land be managed in a manner that will protect the quality of the scientific, scenic, historical, ecological, environmental, air and atmospheric, water resources, and archeological values, and that will provide food and habitat for fish and wildlife.

The alternatives that we believe provide no consideration for these values are the No Action Alternative, the Proposed Action, and the Resource Production Alternative. These alternatives do little to protect the above mentioned values from urbanization, agricultural development, increased recreation pressure, inadequate livestock management practices, floodplain development, and mineral and energy development. These activities currently exist in the area and their development and intensity will probably increase given growth and development projections for the greater Phoenix area, which includes part of the Lower Gila South for the next 25 years. The Resource Protection and Environmental Protection Alternatives provide some consideration for these values.

270-1 For the five alternatives presented, there are two major omissions from the document:
1) specific information on resources present and their status (this would include tables, appendices, and references), and 2) a description of the monitoring program. For example, little wildlife information is provided concerning species locations and population status within the Lower Gila South management area. We consider this a major flaw in the development of a resource management plan which will be used as the basis for managing this area for the next 25 years or longer. Information that is lacking should be obtained as soon as possible and incorporated into the draft RMP-EIS. If these data are not adequate to determine wildlife resource status or any other resource's status, then we believe BLM should comply with the Council on Environmental Quality's regulations which require that a worst case environmental analysis must be assumed and presented in the environmental consequence chapter.

270-1 Currently, this chapter is rather vague about the benefits or adverse impacts to resources, specifically wildlife resources, from implementation of each of the five alternatives.

Response - Letter 270

270-1 The Resource Management Plan (RMP) is designed to guide and control future management actions and the development of subsequently more detailed and limited scope activity plans for resources and uses. The activity plans that will be developed for Lower Gila South Planning Area will be site-specific and will involve input from other Federal, State and Local agencies and the interested public. These plans may be prepared for livestock allotments (AMP's) Wildlife areas (HMP's), designated wilderness areas (WMP's) and for other resources, such as, cultural resources and threatened and endangered species.

Many comments received on the Lower Gila South RMP/EIS requested more detailed and site-specific data. This plan was not designed to address site-specific actions nor the impacts of those actions. The site-specific actions and impacts will be analyzed in the activity plans and associated environmental assessments. The RMP will guide the development of the activity plans and the implementation of those and other actions in the planning area.

No monitoring program is described in the document. The purpose of a monitoring program is to detail how BLM will determine whether effective resolution of the planning issues and achievement of the desired results has occurred. A monitoring plan is generally considered part of the mitigation which is usually included in the description of each of the alternatives. The intervals and standards of the monitoring plan should have been included in this document for public review and comment. They should not have been referenced, as was the case with rangeland monitoring, as being available in the Phoenix District Office. This information is not easily accessable to the general public. If the monitoring plan is not included in the draft RMP-EIS this precludes the public from commenting on the adequacy of the monitoring plan. We suggest that an addendum to the draft RMP-EIS which contains the monitoring plan be released for public review prior to release of the final RMP-EIS.

We are interested in the criteria used to determine which wilderness or portions of WSAs were designated and which were not. There is a brief general discussion, but the specific reasons should be addressed for each WSA. We are especially interested in the Little Horn Mountains West WSA. This area has crucial bighorn sheep habitat and would abut the Kofa National Wildlife Refuge's proposed wilderness. In the Resource Protection Alternative, this area is not included whereas the Little Horn Mountains WSA is. The inclusion of both of these WSAs into the Proposed Action would create a large contiguous wilderness area that would provide excellent wilderness quality and benefit bighorn sheep. If the inclusion of these WSAs is not possible, we recommend that these areas be designated as primitive areas and be subject to mineral withdrawals and similar constraints on surface disturbances (road construction, ORV activity, communication sites and utility development).

270-2 Concerning endangered species, we wish to point out that under present regulations and the law itself, all Federal actions that may affect a listed species are subject to formal Section 7 consultation. Since there would be effects from the proposed action and alternatives, some adverse and some beneficial, it is the responsibility of BLM to initiate formal Section 7 consultation on all actions which affect a listed species. Therefore, all actions that would be contemplated under this management plan must be evaluated for impacts including management of the Cameron allotment.

Specific Comments

270-3 Page 1, Introduction - What is the life of this resource management plan? How frequently does BLM intend to review and update the information provided in the plan? We suggest that a revision of the plan occur once every five years. Prior to management adjustments being made, the public should have the opportunity to review and comment on these changes.

270-2 BLM will initiate formal Section 7 consultation with USFWS concerning any change in management which may affect endangered species such as Sonoran pronghorn. The alternatives proposes no immediate change from the current level of livestock management. Monitoring of Sonoran pronghorn habitat on Cameron Allotment has been instituted by BLM. This will monitor long-term range trend compared to trend on the adjoining Cabeza Prieta National Wildlife Refuge. Refer to Chapter 2, Management Guidance Common to All Alternatives, Wildlife Programs, No. 3 in this document.

270-3 The RMP will guide management of the area for the next 10 or more years, as stated in the draft document, page 1, column 1, 5th paragraph.

Pages 2-6, Issues Analyzed - Only five issues are presented in this section, and of these, only four are discussed in the draft RMP-EIS. In a statement published by the League of Women Voters in March 1981 which outlined the issues identified by the public during scoping meetings, the following issues were identified: at the Ajo and Gila Bend meetings the public identified availability of water to wildlife; at the Buckeye meeting they identified floodplain management; at the Phoenix meeting they identified wildlife and vegetation, wildlife preserves, and bighorn sheep habitat; and at the Quartzsite meeting they identified cactus protection. The Fish and Wildlife Service was also concerned about bighorn sheep habitat and associated resource conflicts of off-road vehicle use, mineral and energy activities, grazing, and road management. Of these, only grazing is identified by BLM as a major issue. We believe that wildlife, recreation, mining activities, special management areas, special status species protection, and floodplain management which were identified by the public and the Fish and Wildlife Service should be included and evaluated as major issues in this draft RMP-EIS. Resource management plans are mandated by FLPMA to allocate resources and select appropriate uses for public lands. RMPs are undertaken where conflicts are seen as requiring a plan to solve the problems. The problem of degradation of wildlife resources through poor grazing practices, mineral and energy activities, off-road vehicle use, and other activities which impact wildlife habitat have been reiterated to BLM by numerous resource agencies, private organizations, and individuals. Because wildlife and the aforementioned issues are already, or in the near future, will be in conflict with other land use practices under the multiple use land management concept, these issues should be addressed in this draft RMP-EIS and the problems reduced or solved. Under Issue 2: Wilderness,

270-4

apparently no split estate WSAs were considered in this draft RMP-EIS. We believe this is an oversite by BLM, and that these areas should have been included in this document for public review. Specifically, we would like to recommend that the Sierra Estrella WSA be added to this document and that it be recommended for wilderness designation.

Page 4, Issue 4: Utility Corridors - No new communication sites are proposed for designation. Instead, BLM would study potential sites on a case by case basis and require a communication site plan. Because this document is a long-term resource management plan, we believe BLM should designate potential communication sites for future development just as they have designated utility corridors for future use. These sites should be reviewed by the public, and based on this input, communication sites should be designated and enforced.

Page 4, Issue 5: Fred J. Weiler Greenbelt - This issue is not discussed nor is a recommendation made by BLM concerning this issue. Instead BLM states that an environmental assessment will be made available to the public. No estimated date is given as to when this issue would be analyzed and the document available to the public. Because this is an issue that was identified by the public, we do not understand why BLM has decided to postpone addressing this

270-5

issue in the draft RMP-EIS. By not addressing this issue or the other issues identified by the public and agencies, BLM appears to be taking a selective and piecemeal approach to long-term management planning and analyses of associated impacts. We believe this is an unwise approach and also contradicts CEQ's regulations which require that cumulative impacts must be addressed. In addition, we believe that the future management of the Weiler Greenbelt could have a significant impacton the human environment, therefore, and environmental assessment probably would not be adequate. In addition, compliance with Executive Orders 11988 and 11990 should be included in the draft RMP-EIS; an appropriate place to discuss them would be under Issue 5.

Page 5, Map 1-2 - This map is very difficult to read. The legend says that the dashed lines designate county lines, however, we counted at least nine such lines. Please note that future utility construction is not considered compatible with the tenets of establishing and operating a wildlife refuge. Consequently, such construction will not be permitted within the Kofa National Wildlife Refuge. We suggest that Utility Corridors 1 and 2 be relocated on the map to run adjacent to Interstate 10.

Page 9, Proposed Action - Please explain how this alternative will provide for a

270-6

balanced level of production while protecting important resource values. The impacts to mule deer, bighorn sheep, Sonoran pronghorn, and desert tortoise under the Proposed Action (pages 59 - 60) do not support the statement on page 9.

270-4 At the time this draft document was prepared, the Interior Board of Land Appeals (IBLA) had issued a decision that split-estate lands could not be included in the wilderness review process. On April 18, 1985, District Court Judge Karlton ruled that split-estate lands are to be considered in the wilderness review process. The Bureau of Land Management in Arizona will prepare a Wilderness EIS on those WSAs that were dropped from review by IBLA in 1986 and 1987; Sierra Estrella will be included in that EIS.

270-5 See response 257-4.

270-6 BLM will monitor allotments where livestock conflict with the needs of desert tortoise, desert bighorn, Sonoran pronghorn, and other threatened or endangered wildlife species. Use adjustments may be necessary to reduce or eliminate these conflicts.

270-7 Page 9, Rangeland Management Issue - The Proposed Action's grazing management objectives are to maintain ecological rangeland condition currently in good to excellent condition and to improve those areas in poor to fair condition. Unfortunately, we fail to see how the proposed action would accomplish this objective. Authorized grazing use would not change from current grazing use in the short-term and would increase over No Action in the long-term (Appendix 11, page 268). According to information provided on page 272, nine of 22 Perennial-Ephemeral allotments have 50% or more of their area that cannot be placed into the good or excellent condition category and only three of these show any indication of upward trend. The methodology BLM employs to determine range condition is also questionable. Those allotments categorized in good or excellent condition may have lost one or more important perennial species and still be listed in good or excellent condition. In addition, supplemental permits for ephemeral grazing could be issued which would provide added competition between wildlife and cattle for forage. BLM's apparent solution to the problem is to build additional rangeland improvements and move the cattle to previously little-use areas in good to excellent condition to utilize this forage. Unfortunately, these are the areas where wildlife species such as desert mule deer have used to locate adequate forage (page 59). The data presented by BLM in this document clearly show that much of the rangeland within the Lower Gila South is overgrazed. This overgrazing impacts not only wildlife, but also vegetation, water shed, and the soil.

270-8

270-9

We fail to see how BLM can continue to endorse this course of action given their stated responsibility under FLPMA. Consequently, we cannot support any alternative that proposes to maintain or increase current grazing levels.

Page 11, Rangeland Monitoring - This section is unclear and confusing. Please rewrite this section for clarity of method and what the data would accomplish.

270-10 Please explain why none of the allotments in the Lower Gila South are designated in the Improve category. No mention is made as to how the supplemental permits to utilize ephemeral forage would be managed and monitored. How does BLM determine proper stocking rate on ephemeral forage, monitor ephemeral utilization, and determine when livestock will be removed? If such permits are issued, monitoring of ephemeral forage should be conducted on perennial-ephemeral allotments as well as ephemeral allotments. Ephemeral forage is high in protein content, generally more palatable that perennial shrubs, and a necessary component in the diets of many wildlife species such as bighorn sheep, mule

270-11 deer, Sonoran pronghorn, and desert tortoise for successful reproduction and survival. We believe BLM should not permit seasonal ephemeral forage utilization by livestock. Many desert adapted wildlife species barely survive dry years when ephemeral forage is scarce; they depend on the ephemeral forage available during wet years to get them through the dry years. By permitting additional AUMs when ephemeral forage is present, BLM is converting the traditional wet year to a dry year. Resulting adverse impacts to wildlife may include reduced fertility and recruitment which means reduced population viability.

Page 12, First Paragraph - We support BLM's preparation and implementation of a burro capture plan in the Painted Rock Reservoir area.

Pages 12-14, Land Tenure Issue - The legal descriptions of the lands proposed for disposal or acquisition may be provided in Appendix 3 but these are difficult and cumbersome to attempt to locate on the maps provided. We suggest that BLM indicate where the larger parcels are on a map and include this information in the final RMP-EIS.

Page 14, Utility Corridor Issue - The concept of designating utility corridors for future planning is an excellent idea. However, for this planning to be effective, it is also necessary that BLM enforce the development of transmission and pipelines only within the designated corridors.

Page 14 - From the information provided we assume that a major effort will be made to trade land recommended for disposal for lands recommended for acquisition in order to minimize the effects to areas outside the Lower Gila South area.

270-7 See page 55 of the draft RMP - Impacts to Vegetation

270-8 BLM coordinated extensively with the Soil Conservation Service, University of Arizona, and the Arizona State Land Department in developing the local procedures for the inventory. The data were then applied consistently throughout the planning area.

270-9 During favorable wet years when ephemeral forage is known to exist and the authorized officer determines that enough forage is available for wildlife, livestock grazing may be authorized.

270-10 These initial categorizations are subject to change as new information becomes available through monitoring. During BLM's initial categorization, BLM range specialists and management determined that the allotments in the Lower Gila South planning area did not have a high production potential for a positive economic return on investment. This does not preclude BLM from implementing AMPs on M or C allotments. The general rule of thumb in authorizing livestock use on ephemeral range is to take half and leave half. In general, the Bureau should not authorize ephemeral grazing when: 1) ephemeral growth is less than one inch in height, 2) soil moisture in the top 18" is not sufficient to assure continued growth.

270-11 Stocking rates on ephemeral range are based on professional judgement of reasonable potential for ephemeral forage and are monitored through field examinations.

270-12 Why are existing rangeland developments not to be maintained under the No Action Alternative?

270-13 Page 16 - Please explain why this is the only alternative that allows for rangeland improvements to benefit wildlife. If this concept is implicit in the other alternatives, then please say so. If it is not, it should be.

Page 17, Implementation - We do not understand why BLM would not develop AMPs under this alternative but may develop HMPs. Allotment management plans should be developed for each allotment and habitat management plans should be developed to cover all areas within the Lower Gila South. The commitment to develop and implement these AMPs and HMPs should be a part of all the alternatives presented. When any AMPs and HMPs are developed, we request that the Fish and Wildlife Service be given the opportunity to participate in this process.

Page 19 - We suggest that the Management Guidance Common to All Alternatives section be placed before the discussion of the issues in the alternatives.

Under Allotment categorization, it appears as though there has been no public input used in the determination of the grazing allotment categories. We believe we should be given the opportunity to participate in this process.

Under the Rangeland Monitoring Program, please specify which allotments will be monitored. The Cameron Allotment should be included.

270-14 Page 22, Wildlife Program - Endangered and threatened wildlife and plants together with the requirements under the Endangered Species Act should be addressed here.

BLM states that the wildlife program was not identified as a major issue in the Lower Gila South RMP-EIS area. We disagree with this statement. The public did identify wildlife as a major issue during the scoping process. Please refer to our comments for pages 2-6.

Please reword number 8 to read that blading will not be used for fence construction or access for fence construction.

Page 23, Woodcutting Permits - Please note that state permits are required to collect dead or detached firewood from mesquite, palo verde, ironwood, and crucifixion thorn trees. A permit is also required for the destruction or removal of any state-protected plant.

Page 29, Protected Plants - From the information provided, Mammillaria thornberi, a species proposed for listing, occurs within the boundary of the Lower Gila South. occur or may occur.

Page 31, Individual WSA Descriptions - Please note that the Fish and Wildlife Service has a withdrawal application for all of WSA 02-125 and part of WSA 02-126A.

Page 36, Land Uses - It would be helpful to provide the complete reference plus a paragraph or two on the alternative selected in the Record of Decision and Final Environmental Impact Statement for Arizona Hazardous Waste Facility, Maricopa and Yuma Counties, Arizona.

270-15 Page 37, Riparian Habitat - Please qualify the statement that salt cedar provides excellent nesting grounds for white-winged and mourning doves to reflect that habitat for dove reproduction is provided only by trees at least 12 to 15 feet high.

270-12 Permittees and lessees in all alternatives except the environmental protection alternative will maintain structural improvements constructed to benefit livestock grazing, which in turn will benefit wildlife. The maintenance of improvements not designed for the primary benefit of livestock grazing may be assumed by the BLM, or nonlivestock cooperators. Also, refer to the draft RMP, page 19, Rangeland Developments, and page 22, Wildlife Programs which discusses management guidance common to all alternatives on livestock waters.

270-13 See page 22, column 2, Wildlife Program

270-14 See response 270-2.

270-15 Statement will be changed to read salt cedar provides nesting habitat for white-winged and mourning dove, with the highest nesting production occurring in trees stands at least 12 feet high.

270-16 Page 37, Big Game - Is the Palomas Plain contained within a grazing allotment? Since it has not been grazed we recommend that this area be protected from future surface disturbance including grazing, mining activity, road construction, and off-road vehicle activity.

Page 40, Nongame Animals - Because the Gila River area, Table Top Mountains, Sierra Estrella, and South Vekol Valley provide unique or remnant habitats for a number of special status species, we believe these areas should be designated as special management areas or Areas of Critical Environmental Concern with protection of these unique qualities from surface disturbance such as mining activities, road construction and off-road vehicle use, and grazing. Wilderness designation would not provide protection from grazing impacts or some mining activities. Designation of additional special management areas should also be implemented by BLM for state-listed and state-protected species, rare plants, and cultural reaources. Such areas should include those lands administered by BLM that have been designated or are recommended for designation under the Arizona State Parks Natural Areas program. Within the Lower Gila South these areas include Table Top Mesa, White Bur Sage, Agua Caliente Mountains, Sentinal Plain, Eagletail Mountains, and part of the Sierra Estrella. Please inform us as to why Arizona does have any ACECs designated on BLM land.

270-17 Pages 40-41, Minerals and Energy - What type of mining activity is ongoing and what minerals are mined?

270-16 Two allotments overlap the Palomas Plain in the western edge of the planning area. They include the Eagle Tail (P-E) and Palomas (E) allotments. Very light to no grazing use has been made on the Palomas Plain and no changes are foreseen in the future. The Palomas allotment would continue to be managed in accordance with the Special Ephemeral Rule (see Appendix 24 in PFEIS.

270-17 Mining activities in Lower Gila South are mainly either lode (hard rock) or placer (sand) activities. These activities vary with the individual miner, host material, available equipment, environment, and terrain. There are some 230 different kinds of mining activity. Basically, mining activity follows a sequence of operations: (1) securing a claim; (2) surveying the claim; (3) exploration, this may be in the form of geophysical, geochemical, assaying, mapping, and geochronological and stratigraphic analysis; (4) pilot plant operations consist of small-scale activity involving removal of ore, crushing, screening, and sorting of ore concentration or benefication of concentrate; (5) then either processing or shipping to smelter. If financial feasibility is indicated, then full scale mining and milling operations take place. Delineation of the ore body and estimation of the life span of the mine is made during exploration activities and revised during subsequent operations.

Operators are not required to declare what mineral they are after. The following minerals are known to occur in the Lower Gila South area: gold, silver, copper, lead, zinc, barium, tantalum,

Page 43, Soil Erosion and Productivity - This section does not address soil productivity.

Page 47, Medium Ranch - If a representative medium ranch in the Lower Gila South operates at a net annual loss, please explain why such money-losing operations would continue on the Lower Gila South.

Page 53, General Assumptions for Analysis - Since assumption 1 is probably unrealistic given recent and foreseeable budget cuts, we recommend that BLM prioritize all implementable components of the RMP so the public will know what will be implemented first, and if additional funding and manpower are available, what will be implemented later.

270-18 Page 53, Rangeland Management - Please explain how these assumptions deal with wildlife-livestock competition, potential disease problems, and changes in range condition and trend. What would constitute "other affected groups" in Assumption 1?

Page 53, Wilderness - The first assumption should be deleted and the analysis conducted according to CEQ regulations. In addition, we do not believe the impact conclusions as presented are based on reasonable probabilities. Within the next 25 years the population of the Phoenix metropolitan is projected to almost double and the demand for and importance of nearby wilderness areas will greatly increase. This increased demand should be reflected in the analysis.

Page 54, Wildlife - These three assumptions should be included under the Wildlife Program on pages 22 and 23.

270-19 Page 54, Impacts on Rangeland Management - Will the new rangeland developments be put in immediately on or after a monitoring period? It might be helpful to state which allotments on the WSAs are custodial and which are maintain.

Page 55, Impacts on Vegetation - There is no mention of impacts on riparian vegetation. Because this habitat is crucial to the survival of most wildlife species during part or all of their life, and it provides needed soil stabilization, we believe BLM should address the impacts of all alternatives in the draft RMP-EIS.

270-20 Page 59, Mule Deer - Under Mule Deer the conclusion is reached that long-term beneficial impacts impacts may result if monitoring studies call for an adjustment in livestock use. If, after five years of monitoring range condition, trend, and utilization, a decision is made to reduce livestock numbers, how long would it take BLM to implement the recommended reduction?

270-21 Because deer utilize areas of low livestock use, the preferred alternative would distribute livestock to these previously low use areas. The result would be a continuation of the ongoing forage conflict between livestock and cattle except that now the conflict would be greater. It would be harder for deer to find areas of low livestock use; therefore, implementation of the proposed action would result in greater adverse impacts to mule deer than currently exist. This would also be true for Sonoran pronghorn and for those species with small home ranges such as the desert tortoise.

cobalt, molybdenum, manganese, iron, beryllium, arsenic, uranium, fluoride, tungsten, niobium, thorium, and titanium. Nonmetallic: Talc, gypsum, sodium chloride, marble, quartzite, zeolite, perlite, bentonite and other clays.

270-18 All resources would be evaluated before any adjustments in livestock numbers are made or construction of new range improvements are allowed through the environmental assessment process. Any adjustment would be coordinated with livestock operations and other affected parties such as the State Land Department and the Arizona Game and Fish Department.

270-19 The implementation plan will state the order in which range developments will be built. Table 2-6, page 19 of the draft EIS lists the allotments by category and in Chapter 3 of the Wilderness Supplement under each WSA, the affected allotments and the percentage of the allotments within the WSA are stated.

270-20 Monitoring and adjustments of rangeland use are described on Page 11 of the draft. Adjustments in livestock numbers will be placed in over a five year period or by a decision.

270-21 Deer also utilize areas of high cattle use because forage preferences are not the same for all species. The preferred alternative would reduce completion in the high use areas by distributing cattle more evenly and reducing the competition in high use areas. BLM studies indicate that improved livestock distribution through rangeland developments improved mule deer habitat and population numbers.

Pages 59-61 - Please quantify how many "new" acres of grazing land would be accessible to livestock from implementation of the proposed action and other alternatives and how many mule deer, bighorn sheep, Sonoran pronghorn, desert tortoise, and other special status species added would be impacted by implementation of the alternatives.

If disease transmission became a significant problem, would BLM require that cattle numbers be reduced or relocated?

270-22 Page 60, Desert Bighorn Sheep - If disease transmission became a significant problem, would BLM require that cattle numbers be reduced or cattle relocated?

270-23 Please indicate on a map where the proposed fencing would be located. Also, please estimate the number of bighorn sheep that would encounter these fences during their yearly movements.

270-24 Page 60, Sonoran Pronghorn - Please explain why authorized AUM's on the Cameron allotment are not reduced. If there are impacts to the Sonoran pronghorn's habitat and habitat quality is declining, this needs to be addressed under the Endangered Species Act.

270-25 Page 60, Desert Tortoise - Please include a discussion on how the ephemeral grazing permits would impact the desert tortoise and the number of tortoises that may be affected by forage conflicts with livestock. Although BLM states that the proposed action will have significant long-term adverse impacts on the desert tortoise, there is no indication that BLM proposes to attempt to reduce or eliminate these impacts through mitigation. BLM should address mitigation in this section and propose specific measures to implement.

270-26 Page 60, Riparian Habitat - Please add to this section that livestock readily consume young willow, cottonwood, and mesquite trees. Although livestock may not inhibit the establishment of these trees, they do adversely impact their chances for survival. Reduction in stocking rates would due little to improve survival of native riparian trees.

There is no mention of impacts to aquatic resources from implementation of any of the alternatives. This should be added to the draft RMP-EIS and should include seeps and springs as well as rivers and streams.

Page 61, Conclusion - We disagree that that Proposed Action would result in either slightly beneficial impacts to Sonoran pronghorn, mule deer, and riparian habitat. BLM is assuming that rangeland monitoring will result in reductions of permitted livestock use and this is uncertain. Rather, implementation of the proposed action is more likely to have an adverse or significant adverse impact on the Sonoran pronghorn, mule deer, desert bighorn sheep, desert tortoise, and riparian habitat as well as most of the wildlife species in the Lower Gila South. Please see our comments for pages 59 - 61. Because of these adverse effects, we believe BLM should propose and implement mitigation measures to reduce or eliminate the severity of these impacts. This mitigation should be included in the draft RMP-EIS for public review and comment.

Page 62, Disposal - Because the impact of land disposal cannot be fully assessed at this time, BLM should have included a worst case scenario of the impacts. Such an analysis should include the number of acres of each habitat type that may be disposed of and the special status species in each habitat type that would be affected by such an action.

Page 62, Acquisition - Would lands acquired for part of the Weiler greenbelt be withdrawn from mineral and energy development, livestock grazing, or other types of surface disturbance?

Page 62, Split Mineral Estate - Please indicate what stipulations BLM would or may place on mineral and energy activities. We recommend that BLM require that a bond be posted as an incentive for the developer to use mining or exploration techniques that will result in the least amount of damage to the environment. BLM should also insure that all mining operations comply with the new Army Corps of Engineers regulations for implementing Section 404 of the Clean Water Act.

Page 63, Utility Corridor Issue - This conclusion is valid only if BLM enforces construction of utilities within the designated corridors.

270-22 To date there is no disease reported/documented transmissions from cattle to big horn sheep. Disease transmission is more likely to occur when domestic sheep are allowed to graze in areas adjacent to bighorn sheep habitat. No domestic sheep grazing is currently permitted in the planning area. Livestock grazing would be reduced or eliminated in the event of significant disease transmission to bighorn sheep.

270-23 Exact location of some of the fences has not been determined. Fences in bighorn sheep habitat would not be allowed in the event of any significant impacts to bighorn sheep migrations that could not be mitigated.

270-24 Rangeland monitoring and wildlife habitat studies would be used in determining any needed adjustments to reduce conflicts between Sonoran Pronghorns and livestock.

270-25 We do not have any situations of over utilization on ephemeral areas. Ephemeral use by livestock has little or no impact on desert tortoise.

270-26 Many adverse factors act to suppress cottonwood and willow reproduction along the Gila River as stated in the section in question. Livestock grazing is only one factor which limits cottonwood and willow reproduction. Flow regimes which are regulated by upstream reservoirs are very drastic and favor salt cedar at the expense of cottonwood and willow.

Three small seeps are known to occur in LGS. These are important big-game water sources but are too limited to support significant riparian growth or aquatic fauna.

270-27 Page 63, Impacts on Minerals and Energy - The third sentence contradicts page 57, paragraph 3.

Page 65, Impacts on Recreation - There is no mention of impacts to off-road vehicle use.

Page 68, First Paragraph - Please change the second sentence to read that ranchers would be required to build and maintain range improvements in a fashion that would not impair wilderness values.

Pages 69-70, 73, 77-78, and 83, Impacts on Vegetation - Please refer to our comments on page 55.

Pages 70-71, and 73-74, Impacts on Wildlife - Please refer to our comments on pages 59 through 61.

Page 71, Impacts on Wildlife - Discussions of monitoring competition between wildlife and cattle should be addressed in other sections of this document.

Pages 233-267, Appendices 3 through 10 - Please include a map of the proposed locations of land for disposal and for acquisition.

270-28 Page 268, Appendix 11 - Can these stocking rates be increased or decreased depending on range condition, utilization, and trend? If they can be altered, what is the maximum percentage of alteration and over what minimum period of time can this allocation be implemented?

270-29 Please indicate those allotments with rest rotation, deferred grazing or similar grazing management operations.

Page 269, Appendix 12 - After reviewing the criteria for the maintain, improve, and custodial grazing allotment categories, we believe that some of the allotments within the Lower Gila South do qualify for the Improve category. We would be happy to work with you on revising the categorization of allotments within Lower Gila South.

270-30 Page 271, Appendix 14 - Please inform us as to what the asterisk indicates.

270-31 Page 272, Appendix 15 - The percentages under the Condition column do not add to 100%.

Thank you for the opportunity to review this document. We request that you coordinate with this office in any future actions that may include public involvement and we look forward to working with you over the long term to assist you in complying with the Federal Land Policy and Management Act and Endangered Species Act.

cc: Regional Director, FWS, Albuquerque, New Mexico (AHR)
State Director, Bureau of Land Management, Phoenix, Arizona
FWS/EC, Washington, D.C.

270-27 Page 63, third sentence. Will change the sentence to read, No new prospecting.....

270-28 Adjustments in stocking rates would be made if needed based on utilization, trend in rangeland condition, and precipitation. After consultation, coordination, and cooperation adjustments to grazing preference shall be implemented through a documented agreement or by decision. If data to authorized officer are available, an initial adjustment shall be taken on the effective date of the agreement or decision and the balance taken in the third and fifth years following the effective date. Also see response 257-31.

270-29 Presently no P-E allotments are managed under specific grazing systems. Many allotments (ephemeral) are grazed on a seasonal basis when conditions for a favorable ephemeral forage crop exists.

270-30 Asterisk indicates source: SCS Range Handbook.

270-31 Corrections have been made in the final RMP.

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SIERRA CLUB

Grand Canyon Chapter · Arizona

5/01/85

Bill Carter
Phoenix District Office, B.L.M.
2015 West Deer Valley Road
Phoenix, Az. 85027

Re: Lower Gila South RMP/EIS analysis and comment.

Dear Mr. Carter,

Following are the official Grand Canyon Chapter Sierra Club comments on the RMP/EIS. These comments are supplemental to those presented by Joni Bosh on behalf of the Chapter at the public hearings in Phoenix. Please enter these comments into the official record.

Four separate authors participated in this analysis: myself, Paul Hirt- Rangeland Management; David Goldstein- Wildlife and Wilderness; Candy King -Soils and Cultural Resources; and Jim Notestine -Recreation.The comments from these authors follow in that order.

We sincerely appreciate the opportunity to participate in public lands management and planning. We look forward to your considered responses to our concerns and hope to be able to work with you in the future toward sound management of our public land resources.

Sincerely,

Paul W. Hirt

Paul W. Hirt, Conservation Chair
Grand Canyon Chapter, Sierra Club
1038 N. Perry
Tucson, Az. 85705

RANGELAND MANAGEMENT

The entire range management program of the Proposed Action is unacceptable. Decisions are based on incomplete or non-existent data, they ignore the basic requirements of resource conservation, promote the continuation of significant adverse environmental impacts, make no effort to even acknowledge the need for widespread improvement of allotment management, and are wholly biased toward sustaining the marginally productive and largely destructive domestic livestock industry on lands much better suited for other multiple uses.

Following are specific comments on the most obvious problems in the RMP/EIS relating to rangeland management.

Pg. 2- Right from the start you admit that rangeland management actions need to be reviewed to, "aid in stabalizing the livestock industry through management actions." This is not a legislative mandate. You are only required to consider the effects of your actions on local economies, not manage to sustain local special user interests.

It is obvious throughout the RMP/EIS taht the driving element of the proposed action is to sustain dependent livestock operations. From just about any rational perspective, there is little to justify this management direction. There are only a total of 17 permitees running an average of 40,000 Animal Unit Months per year, providing less than 1% of the livestock products generated in just the local 3 county area alone (pgs. 46 & 48). ½ of these permittees aren't even running a profitable business (p. 47).

Livestock operations in this RMP/EIS area have had a significant adverse impact on the environment (see comments re: pg. 29 following), their contribution to local and state beef supplies is virtually insignificant, their economic contribution to regional economies is is almost as insignificant, and the benefits to costs of the range programs supporting them are very low.

Sustaining the few permittees dependent on this hand-out of public forage will have absolutely no effect on"stabalizing the livestock industry". All the proposed action does is continue a wellfare like subsidy program for a few businessmen engaged in outdated and

marginal or submarginal operations. The public deserves more from its lands than that.

271-1 Pg. 9- You state that the B.L.M. "would not initially adjust livestock numbers..." Is this because you don't think reductions are necessary? Or is it because you don't think you have the data yet to "prove" your decision to reduce numbers in an administrative appeal process? (I believe the supporting documentation to justify reductions is presently sufficient.)

271-2 Pg. 11- Rangeland Monitoring. You refer to a "Lower Gila Monitoring Plan" that would provide guidance for monitoring allotments. I would like to receive a copy of this plan for review and comment. Please send it to me as soon as possible or otherwise contact me regarding this request.

From indications in the RMP/EIS (pgs. 11 & 19) this monitoring plan appears inadequate. It overly focusses on livestock utilization of forage, rather than general habitat and ecosystem integrity, soil stability or overall watershed quality. Eg: "...monitoring studies would include actual yearly livestock use, forage utilization, trend in rangeland condition, and precipitation data." (pg. 11). "Rangeland condition" is currently determined solely by studies relating to forage utilization by livestock. "Precipitation" is the only objective consideration in your analysis.

The purpose of monitoring is to determine trend in range condition and the need for adjustments in livestock permitted use. The RMP/EIS goes on to explain that, "Actual livestock use figures supplied by the operators would be the foundation for grazing management adjustments." (pg. 11). Considering that permittees wholly depend on the permitted use levels for loan collateral and ranch resale value (pgs. 47 & 48), it seems imprudent at best to base livestock adjustment decisions on "figures supplied by the operators."

271-3 Also under monitoring on page 11 you state, "B.L.M. would also design studies to ensure that wildlife habitat management objectives were being met." The wording here indicates that such studies have not yet been designed. When will this occur? What methods and standards will be used?

Pg. 15- It is interesting to note that your description of the "Resource Production Alternative" includes the following: "The issues would be resolved in a manner that would place highest priority on livestock forage utilization..." In defense of my earlier assertion that the driving element of the proposed action is to sustain dependent livestock operations, I offer this and the following quote also from page 15, "Grazing management objectives for this alternative (Resource Production) would be the same as the proposed action." (Emphasis added).

Response - Letter 271

271-1 Rangeland monitoring studies would provide information critical to managing and refining the rangeland and wildlife programs and provide the basis for making needed adjustments. These adjustments will be based on monitoring data and severity of any resource use conflicts.

271-2 The Lower Gila Monitoring Plan is available in the Lower Gila Resource Area of the Phoenix District Office for review.

271-3 Monitoring for wildlife habitat condition and trend will utilize accepted techniques, many of which can be found in U.S. Fish and Wildlife Service Publication "Estimating Wildlife Habitat Variables" 81-47 (Sept. 1981). BLM personnel have found frequency quadrat techniques are particularly useful in measuring range trend in the Lower Sonoran Desert Habitats. Monitoring will begin when the RMP is finalized, although BLM is already engaged in monitoring critical habitat of the Sonoran pronghorn.

Pg. 19- Rangeland Management. This whole section on rangeland management is so shallow and contradictory that I can only guess the B.L.M. planners didn't think anyone would read this document carefully.

You state that, "All grazing allotments in the Lower Gila South RMP/EIS area have been assigned to two of three management categories..." The two categories are: "Maintain" and "Custodial". I challenge the accuracy of these assignments. Appendix 12 pg. 269 describes these categories thusly:

The "Maintain" category encompasses those allotments which meet the following conditions:

- "*Present range condition is satisfactiory.
- "*Present management appears satisfactory.
- "*Allotments have moderate or high resource production potential and are producing near their potential (or trend is moving in that direction.)"

The "Custodial" category criteria include the following:

- "*Present range condition is not a factor.
- "*Present management appears satisfactory or is the only logical practice under existing resource conditions.
- "*Allotments have a low resource production potential and are producing near their potential."

271-4 First of all, what do you mean exactly by "range condition is not a factor"? How can range condition not be a factor in judging allotments? Also, what is meant by "the only logical practice under existing resource conditions."? Since when is cattle grazing a logical practice under the existing resource conditions in your arid, sparsely vegetated and fragile desert lands?

Secondly, and most importantly, there is no mention of any allotments in need of improvement! You seem to think everything is hunky-dory. Condition, management and trend are all "satisfactory" or are the "only logical practice" under existing conditions. This is absolutely ridiculous.

91% of all allotments are producing at less than 3/4 of their natural "climax" potential. 40% are producing forage at less than 1/2 their natural potential. (Pg. 29 and Appendix 14, pg. 271). 90% of the allotments are classified as either "static" or "declining" in condition trend (pg. 29). You consider this satisfactory?! This is one of the most blatant violations of the resource conservation intent of the Federal Land Policy and Management Act (FLPMA) that I have ever come across.

From what I can gather from the information on page 272, Appendix 15, there isn't a single allotment that shouldn't be placed in the 3rd category called "Improve". This unused category includes the following criteria:

271-4 See response 257-8.

271-5

* *Present range condition is unsatisfactory.
* *Present management appears unsatisfactory.
* *Allotments have moderate to high resource production potential and are producing at low to moderate levels."

The "Improve" category is a perfectly accurate description of the allotments in the Lower Gila South R.A. What realistic justification could you possibly have to completely ignore the "improve" category and classify all your allotments as satisfactory?

If 40% of your allotments are producing forage at less than ½ that of the natural climax conditions, then a "static" trend in rangeland conditions (85% of allotments) indicates either: 1) the resource has been so abused that it is incapable of rejuvenation (certainly the case in many instances and already in violation of the law); or, 2) cattle use is still too heavy to allow natural revegetation and therefore the range is continuously being degraded at a consistent level (arguably in violation of the law).

The B.L.M. is ignoring its responsibility to conserve vegetative, soil and watershed resources and to prevent "unnecessary or undue degragation" of those resources.

There is no excuse for maintaining these deteriorated conditions. Recent rangeland studies show how maintenance of "excellent" range conditions is entirely compatible with properly managed grazing operations. Indeed, it has been well documented that carefully controlled livestock use can actually increase total forage production by stimulating plant growth at the appropriate times.

Proper management protects or enhances the natural resources, and seeks to rapidly reclaim healthy productive conditions on any deteriorated areas. Livestock operations that cannot meet these basic requirements have no business on the public lands.

Pg. 20- Under your discussion of temporary permits for ephemeral grazing, you stipulate that such permits will be issued "...only if the overall rangeland condition were fair or better." This is unacceptable. "Fair condition" means that forage production is between 26-50% of the natural potential. These are significantly degraded sites which ought to be off limits to livestock for recovery purposes.

Ephemeral permits ought to be issued only for ranges producing within 75-100% of climax conditions.

271-6

Pg. 28- You refer to a 1968 document entitled "Special Ephemeral Rule." I would like to receive a copy of this B.L.M. publication. Under these rules you state that, "livestock grazing is permitted on ephemeral allotments only when sufficient precipitation and temperatures provide the probability of an ephemeral forage crop to exist." (Emphasis added).

271-5 Many of the allotments in Lower Gila South do not have moderate to high potential for vegetation production nor do opportunities for positive economic returns exist. Also see responses 257-8 and 270-10.

271-6 See Appendix 2B of this document.

271-7 I am most curious about the wording here. Are you suggesting that a mere "probability" is sufficient to justify the issuance of an ephemeral permit? Is an on-site pre-decision inspection not required? How do you monitor the accuracy of your decisions regarding "probability"? And how do you monitor compliance with the stipulations of the ephemeral permit?

Pg. 27- Perhaps the most significant shortcoming of the B.L.M.'s entire rangeland management program is revealed in its admission on p.27, bottom, "Currently, no allotment management plans (AMP's) have been developed for any of the allotments in the RMP/EIS area." This simple statement sums up the pitiful condition of the B.L.M.'s grazing program. Range management is in evident infancy in this Resource Area.

Not only are there no AMP's, but there is almost a complete lack of reliable data on the interactions between domestic livestock and native wildlife, vegetation and ecosystem health and stability on these allotments.

More problems of this sort are revealed on p. 29 in the statement, "Since trend studies have not been completely established within the area, apparent rangeland trend was determined during the rangeland inventory conducted in 1980 and 1981." (Emphasis added.) And in the next paragraph, "the apparent rangeland trend information represents only a single year's observations and thus may not reflect the actual long-term trend of an area."

Given the admitted bias on page 2, where the B.L.M. asserts that its aim is to stabilize the livestock industry; and given the fact that the Proposed Action seeks to place the highest priority on livestock forage utilization (see comments on p. 15 above); one might reasonably assume that the hasty and incomplete studies on range condition and trend would err in favor of livestock operations, if they err at all.

Coupled with the reputation the B.L.M. has of being "cooperative" toward ranchers,my conservative judgement leads me to believe that you probably have an even greater problem in condition and trend that your simple studies indicate.

(In fairness to the B.L.M., I must admit that a big part of the problem has been the historic lack of funding for studies. It would be much cheaper, however, and more cost efficient to deemphasize livestock and turn the attentions of "range managers" back to the range resources. All that is being focused on now is cattle, which is not a "range resource." Soil, water, vegetation, wildlife, ecological interactions, etc. are the range resources.)

271-8 Pg. 42- Desert Pavement Soils. There is some discussion here of how fragile and susceptible to erosion Desert Pavement is. The RMP/EIS then mentions that three grazing allotments "contain large areas of these soils." You further mention that "the areas are not suitable for livestock grazing." Are the cattle fenced out? or allowed to roam at will? If they are not fenced, how do you plan to protect these soils from damage?

271-7 Authorization may be issued to operators on allotments designated as ephemeral on the basis that climatic conditions indicate probability or potential of an ephemeral forage crop. Probability may be determined to be high when favorable precipitation occurs during fall and winter months of the previous year. Field exams are conducted when there is a question concerning forage availability, trespass, or resource damage. However, range specialists monitor ephemeral forage during field inspections during the ephemeral season to assure that forage exists. See response 289-2.

271-8 See response 257-26.

271-9 No mention is made of what steps you will take to restore the 1500 acres of Desert Pavement currently classified in a condition of "severe erosion". (pg. 43)

Pg. 43- Five (presumably riparian) washes are mentioned as being in "severe-critical erosion condition" due to "heavy livestock use" and periodic excessive water flows. No mention is made of your plans to correct this condition. Riparian areas are rare and critical habitat, especially in this area. To allow instability and degradation of riparian resources to occur and to neglect to outline in the EIS specific plans to rectify the situation is another grave shortcoming in your management and planning.

Pg. 53- The EIS states that adjustments in livestock numbers will be planned "in cooperation and consultation with the livestock operator and other affected groups." As an "affected group", the Sierra Club is interested in being involved in rangeland management decisions. We would particularly like to participate in the development of allotment management plans.

271-10 Pg. 55- In a paragraph discussing range management in wilderness areas you state, "Construction of new rangeland developments is permissible when it is determined to be necessary for the purpose of effective management of the rangeland." This is incorrect. Within a wilderness, new developments must be justified according to whether they primarily benefit or improve the wilderness resource. They must also be constructed in such a way as to minimize impacts to the wilderness. Development merely for the sake of "effective management of the rangeland" is not allowable. (If the B.L.M. does allow this, it is inconsistent with the Wilderness Act.)

271-11 Finally, on page 68, under Recreation Economics, you make a wholly indefensible statement about the value of added recreation visitors to the local economy from wilderness designations. Your figures of 4650 R.V.D.'s and $17,763 expenditures added for recreation, comes to less than $4.00/R.V.D. Nearly all major studies in the past decade have placed R.V.D. values at 2 to 10 times your value, depending on the recreational activity. Wilderness recreation always ranks particularly high in value.

Your proposed range management program, wildlife management program and wilderness recommendations in the RMP are negligent and completely unacceptable. The "Environmental Protection Alternative" is the overall preferable alternative. Under no circumstances should the Proposed Action be implemented.

We look forward to significant changes in the Final EIS. If the District Office is interested in discussing these issues further in some sort of negotiation/resolution process, the Sierra Club will gladly participate.

We appreciate the opportunity to participate in public land management planning (such as it is).

271-9 The 1,500 acres of desert pavement soils which are in severe erosion condition class are scattered in the planning area (5 to 2 acres in size). Stabilization will take place on a case by case basis as funding is available.

271-10 As stated in BLM's Wilderness Management Policy 46 FR 47180, Sept. 21, 1981, and Forest Service Regulations (36 CFR 2937), and 43 CFR Part 8560. ".... wilderness designation should not prevent the maintenance of existing fences or other livestock improvements, nor the construction and maintenance of new fences or improvements which are consistent with AMPs and/or which are necessary for the protection of the range.

271-11 See response 1-2.

Wildlife

1) Wildlife as a planning priority

According to the draft RMP/EIS, "BLM's wildlife program in the lower Gila South RMP/EIS area was not identified as a major issue" (p. 22). This position is unacceptable. Wildlife is one of the multiple uses which the BLM is mandated to serve in its management. Because of the large tracts of unspoiled land within this management area, the Lower Gila South RMP area is ideally suited for serving the needs of Arizona's desert wildlife. Yet little evidence exists in the RMP/EIS that a wildlife program exists at all. The management plan is excessively directed towards the interests of mining and grazing.

In accepting wildlife as a priority, the BLM must consider not only the requirements of threatened and game species, but also the needs of the natural communities of flora and fauna which exist within the RMP area. Game and threatened species must be seen as integral parts of their associated communities. By focusing on the ecosystems, the individual members will also be protected. In fact, attention to natural communities provides a reliable index to the health and productivity of the lands. BLM management should be based on a standard of healthy natural communities.

2) Habitat diversity

271-12 The extent of all habitat types within the management area should be quantified. This has been done only for the wilderness study areas, in which just two habitat types are identified. The EIS states that the RMP area is composed primarily of two habitat types - creosote bush/bursage and palo verde/ mixed cacti. However, smaller areas of several other habitat types are also recognized (e.g. riparian associations, tobosa grass-scrub, saltbush, mesquite thickets). These associations may comprise small percentages of the planning area. However, their very scarceness makes it imperative that they be identified and quantified. Small and isolated associations of flora and fauna often are critical to their residents and users.

271-12 In addition to delineating more precisely the current habitat types, the RMP/EIS should specify the impact of any proposed habitat manipulations, such as those associated with mining, grazing, or utility corridors, on the various habitats affected. Would these manipulations result in any conversion of ecosystem types, or loss of acreage from any particular habitat type? Such specification is particularly critical with respect to the less widespread ecosystems referred to above. For example, what is the extent of the tobosa grass-scrub association in the South Vekol Valley? Would any of this be protected in wilderness? What would be the impact on this ecosystem of the proposed levels of grazing and mining?

271-12 Management of Riparian Habitat along the Gila River, which is comprised of saltbush and Sonoran deciduous swamp and riparian scrub, will also be addressed in LGS/HMP. These habitats are found in the Fred Weiler Green Belt, which is an issue in the RMP but could not be adequately addressed at this time. Management of the Green Belt will be addressed in LGS/HMP or in a future document specific plans for the Green Belt.

Acres of Habitat types have been quantified in the management situation analysis for LGS. Refer to Chapter 3, Wildlife in this document for a table outlining habitat types.

Habitat management of the unique Tobosa Grassland will be addressed in the upcoming LGS Habitat Management Plan. Public involvement will be solicited in development of the HMP including suggestions for the management of this area.

3) Wilderness as protection for wildlife

By preserving large tracts of unspoiled lands, and thereby protecting intact ecosystems, wilderness designation is often the most effective means of protecting and managing wildlife. This is particularly true for non-game, non-threatened species, which otherwise are given little individual attention.

4) Impact of grazing of wildlife

Overgrazing adversely impacts the health and diversity of all natural ecosystems. Overgrazing must be eliminated (grazing use must be aligned with capacity). All grazing allotments should be managed to achieve good or excellent condition. This will benefit grazing as well as wildlife.

5) Riparian areas

The RMP/EIS states that no perennial streams exist besides the Gila River, but that some springs do exist. Because of the scarcity of perennial water sources, these springs must be critical for native wildlife. We support the BLM policy of excluding cattle from developed spring storage and adjacent riparian habitat (p. 23). However, we would extend this to exclude cattle from all perennial water sources, including the riparian habitat along the Gila River. Despite their depositing scarified mesquite seeds, the impact of cattle on riparian areas is detrimental. Riparian habitat is very much a limited resource in the Lower Gila South; it should be preserved for wildlife and recreation.

6) Monitoring wildlife

The RMP/EIS includes no plan for monitoring wildlife. Monitoring is critical for evaluation of the health of the different habitat types within the RMP area, and provides an important index to the achievement of management objectives. We recommend that the BLM adopt a program of monitoring indicator species. This would entail the development of a list of species which are representative of and dependent on the various habitat types represented in the management area. The population levels of these species should be monitored on a regular basis (every 1-2 years). Because many animal populations naturally vary widely in number from year to year, we also recommend a complementary system of monitoring vegetation structure. Vegetation could be monitored at less frequent intervals (every 5 years). Because of the sensitivity of vegetation structure to grazing and mining, this program would constitute an effective guide to the health of the ecosystems within the RMP/EIS area.

271-13

271-13 See Response 271-3

Wilderness

We question the priorities of the BLM in recommending only portions of 4 out of 12 WSA's for wilderness. The BLM is mandated to manage its lands for multiple uses. Wilderness designation preserves intact ecosystems, provides for long-term maintenance of scenic qualities so important for quality recreation, protects watersheds, and preserves historically important cultural sites. Release from wilderness, on the other hand, caters to the interests of only a small portion of the population, the miners. We argue that designation of lands as wilderness serves the interests of a greater proportion of the population, and does so in more diverse, more lasting, and more fundamental ways.

The RMP/EIS provides little justification for its recommendation to release the 8-plus WSA's from wilderness. All of the WSA's are described as providing outstanding opportunities for solitude and unconfined recreation, and must have significant cultural features or habitat for threatened wildlife. None is described as having mineral development potential greater than moderate, and several are described as having low mineral potential. For example, the South Maricopa Mountains are described as "essentially natural... Outstanding solitude and primitive and unconfined recreation opportunities... supplemental wildlife... and cultural resources" (p. 34). The WSA has 42,800 acres of crucial desert tortoise habitat. The area has low potential for mineral development. Yet, none of the 71,320 acres of this WSA is recommended for wilderness, and a large portion of it is even recommended for management of VRM class IV. The Butterfield State Memorial WSA is similarly described, and similarly recommended. No justification is provided for such recommendations. Wilderness quality is a resource which is irrecoverable once lost; the BLM must provide compelling justification for recommendation against wilderness; such justification should be included in the EIS for each WSA.

We are particularly concerned at the recommendations for the five WSA's abutting and extending from the Kofa Wildlife Refuge. This set of WSA's (New Water Mountains, Little Horn Mountains West, Little Horn Mountains, Eagletail Mountains, East Clanton Hills) represents the opportunity to significantly extend a large tract of unspoiled land. Of these five WSA's, only portions of two are recommended for wilderness, and one of these (Eagletail Mountains) without the inter-connecting lands. The moderate mineral potential in the WSA's connot justify their removal from wilderness.

In determining the value of wilderness for wildlife, the RMP/EIS essentially considers the impacts only on desert bighorn sheep and desert tortoise, and occasionally on a sensitive plant species. Even these considerations appear to have little impact on the BLM recommendations. Yet, one great value of wilderness is that it preserves entire ecosystems intact. Given our rudimentary understanding of the dynamics and potential resources of desert ecosystems, this preservation of intact ecosystems should be a great incentive towards wilderness designation. This significance should be discussed in the EIS, and given adequate weight in the recommendation process.

271-14 The RMP/EIS recognizes that wilderness designation would increase the number of visitor days per year for each of the sites. How were the estimates of changes in visitation rate generated? Why is there a greater projected increase in use under the Resource Protection Alternative than under the Environmental Protection Alternative? The EIS must consider that the five major SMSA's closest to the WSA's are all growing rapidly; visitation rates are likely to increase annually. The RMP/EIS values each increased visitor-day at less than $4.00. How was this figure determined? It is an unjustifiably low valuation, insupportable by any valid study on R.V.D. values, particularly those related to wilderness recreation.

271-14 There is a greater projected increase under the Resource Protection alternative because that alternative, to a great extent, accommodates both existing motorized and increased nonmotorized recreation uses within WSAs recommended for wilderness. Under the Environmental Protection alternative, all motorized based recreation use is prohibited in 12 wilderness areas. Therefore, visitor days in WSAs associated with such use are lost.

Wilderness designation is the only management guideline which ensures long-term stability of ecosystems. Long-term perpetuation of healthy ecosystems in turn ensures continued productivity. This long-term productivity can be considered analgous to a resource output, and should be considered accordingly in balancing priorities for wilderness designation.

Finally, we reiterate our support for designating all WSA's as wilderness. However, in the event that any of the WSA's are not designated as wilderness, these lands should be managed for VRM class II or I whenever possible. None of these lands should be classified as VRM classIV. The areas are currently all pristine enough for VRM I designation; this natural character cannot be reclaimed once lost, and must be preserved.

RECREATION

The recreation values in the Lower Gila South RMP have been downplayed as in almost all BLM planning. BLM's primary emphasis is obviously grazing and mining, and values such as recreation (particularly primitive recreation) and wildlife are secondary. Recreation economic increases from primitive recreation is continually referred to as an insignificant amount viewed on a regional level, but you went into minute detail on ranch economics. You should note that even in your conservative recreation value estimates in the RMP, the economic increases projected from increased primitive recreation exceed total ranch profits.

Recreational use of BLM lands in the Lower Gila South area is not higher because the BLM has done little to encourage or develop it. The Lower Gila South offers exceptional primitive recreation opportunities - large WSA's with unique flora, fauna, geologic values, and cultural resources - stunning scenery. Interpretive centers and trails, as well as maps and publications should be developed and made available to the public. This area is within less than a days drive of five major expanding metropolitan areas which are over-using recreation areas adjacent to them. Areas such as Lower Gila South should be used to disperse recreation.

271-15 The Environmental Protection Alternative would best meet the recreation requirements for the Lower Gila South area. It would designate 30% of the BLM area Wilderness for primitive recreation and leave 70% open to motorized and other non-primitive uses. Table 4-8, pg. 66 gives an erroneous report on this balance. It gives percentages on the assumption that the WSA's are the only lands available for non-primitive use which is a false assumption.

ORV use is the only recreational value inhibited by the Wilderness designations in the Environmental Protection Alternative and it would be very destructive in the WSA areas. It unfortunately would still be permitted on the remaining 70% of the fragile land in the Lower Gila South area. The wilderness protection afforded 607,557 acres in the Environmental Protection Alternative would protect wildlife and scenic values for hunters, hikers, photographers, birders and other wildlife observers, geology buffs, and other enjoyers of scenic and primitive places.

On page 181, Table S-14 you conservatively estimate that recreation would be maximized with the Resource and Environmental Protection Alternatives (up 52-59 % over present use.) I believe this is conservative with the growing demand for primitive recreation and with five major expanding metropolitan centers within easy reach.

In summary, the Environmental Protection Alternative is the preferred alternative for balanced recreational values. Also, interpretive and educational services should be developed for the area.

271-15 Please refer to Chapter 3 - Affected Environment, Recreation.

CULTURAL RESOURCES

Management of the Lower Gila South Planning Area under the proposed resource management plan would have disastrous effects on the cultural resources present. Cultural resources will be adversely affected by multiple use management in areas that have not been adequately inventoried. The proposed action has a definite bias toward mineral development, ORV use, utility corridors, and grazing. This bias will have permanent detrimental effects on the myriad cultural resources present in the area. Cultural needs were not given the consideration they deserved. The proposed action places more importance on "possible" mineral finds than on existing culturally important sites.

Mineral and energy "possibilities" are the basis for the management plan of each WSA. The BLM admits its lack of information on mineral and energy resources in the RMP/EIS. No oil or gas production, leaseable mineral production, or geothermal production have taken place in the RMP/EIS area. The area has a poor potential for saleable minerals. Placer claims have not been productive.

271-16

Only 1.26% of the RMP/EIS acreage has been formally inventoried for cultural resources. 390 sites have been found and additional traditional cultural/ religious sites have been identified by Native American groups. As many as 20,350 sites could occur in the RMP/EIS area. No testing has been done to identify subsurface sites. Lack of summary reports of cultural resource areas make it inadvisable to release land to multiple use management without further study. The proposed action makes it clear that the BLM is willing to release unstudied land with a high probability of cultural resources to the uses that would be most detrimental to any existing known or unknown site. Surface disturbances can totally destroy the context and artifacts of cultural sites. Surface disturbances are likely to occur under multiple use management. The degree of impacts to sites has not been adequately monitored or measured.

The statistics given for cultural resources saved and conclusions about user impact are misleading. The culturally sensitive acres protected by the proposed action are 55% of the recommended acreage for wilderness. This is only 47.5% of the cultural resources present in the RMP/EIS area. The resource protection alternative would protect 66.6% of the culturally sensitive acreage in the RMP/EIS area. The environmental protection alternative would protect 100% of the identified sensitive areas.

271-16

As stated in the draft RMP/EIS Chapter 2, page 21, before proposals involving areas of ground disturbance or transfer of title are approved, site specific cultural resource evaluations will be completed. These include a Class I literature review, as well as a Class II or Class III field inventory in areas which have not been previously surveyed for archaeological remains.

Subsurface testing on sites or areas to identify possible subsurface remains is performed when: 1) a site or portion of a site will be adversely affected by a proposed action and mitigation or data recovery is required and, 2) an area with a high probability to yield subsurface remains is selected for a proposed action. As stated on Page 44 of the draft RMP, Simonis (1982) of the BLM performed an archaeological testing program along the Gila River. Some testing has been performed to identify possible subsurface remains.

All significant archaeological sites on lands under multiple-use management are protected from destruction as stated in the draft RMP/EIS Chapter 2, page 21. The second paragraph states that before any action involving surface disturbance . . . an infield survey for inventorying any cultural resources will be conducted. Any sites located will be evaluated for their eligibility to the National Register. In most cases, projects are redesigned to avoid significant cultural resources. When this is not possible, the BLM in consultation with the SHPO determines appropriate mitigating measures. In this manner, surface disturbances to cultural

User impact has been estimated with a bias favorable to mineral development, ORV use, utility corridors, and grazing. Not one of the WSAs is free from some impact from one of the above uses. These impacts have occurred while the areas in question were in a relatively protected study condition. What will happen when the wilderness study constraints are lifted? A large proportion of the cultural sites exist on desert pavement. These sites are extremely vulnerable to surface disturbances from ORV use, mining activities, road construction, and cattle trampling. Multiple use management would allow new roads, increased mining and ORV use, and utility corridor construction. The cultural resources of the area could be gone forever. The New Water Mtn. WSA and the Eagletail Mtn. WSA currently exhibit signs of vandalism. The East Clanton Hills WSA, Face Mtn. WSA, and Tabletop Mtn. WSA all show signs of site disturbance from mining and ORV use. A habitation site has been excessively disturbed by road building in the Signal Mtn. WSA. All cultural areas of the Woolsey Peak WSA show some signs of disturbance from mining and erosion. The Little Horn Mtn., Little Horn Mtn. West, North Maricopa Mtn., South Maricopa Mtn., and Butterfield Stage Memorial WSAs all have high potentials for cultural site disturbances from the aforementioned groups. The proposed action does not provide enough protection to the important cultural resources present in the RMP/EIS area. How are these sites to be protected from destruction?

271-17

Important traditional cultural/religious sites were virtually overlooked in the proposed wilderness recommendations. Wilderness would preserve these areas of high religious subsistence significance in their natural state. The important areas are the Gila Bend, Eagletail, and Maricopa Mountains. The Gila Bend Mountains are part of the East Clanton Hills WSA, the Signal Mtn. WSA, and the Woolsey Peak WSA. These mountains are important to the Yavapai, Maricopa, Pima, and Papago. The Eagletail Mountains and WSA are important to the Yavapai and Maricopa. The Maricopa Mountains are part of the North Maricopa and South Maricopa Mtns. WSAs and the Butterfield Stage Memorial WSA. These mountains are important to the Pima, Sand Papago, and Maricopa. Only the Woolsey Peak and Eagletail Mtn. designation would provide additional protection. Why were cultural needs ignored? Land management plans must consider historic and cultural preservation if the BLM's stewardship of our heritage is to be effective.

Specific cultural sites are glaringly left unprotected in the proposed action. A large petroglyph site eligible for the National Register is to be left out of the Eagletail wilderness recommendation. Vandalism from increased ORV use could cause its permanent loss. The Face Mtn. WSA contains an extensive archaeological district which has been nominated to the National Register of Historic Places. This area has not been recommended for wilderness. Face Mtn. WSA should be included in the wilderness system. Wilderness would provide protection from casual destruction. The remnants of the Butterfield Stage Route should be preserved in the North Maricopa Mtn. WSA and Butterfield Stage Memorial WSA.

sites are avoided, reduced, or mitigated. Previous impacts to sites are measured when evaluations of sites in a particular project area involving ground disturbances are completed. In addition, known sites which are eligible for inclusion in the National Register are monitored periodically to determine if any vandalism or impacts have occurred. Present and past impacts to all sites recorded during the Class II sample survey of WSAs were adequately recorded and reported on.

271-17 Sites currently in the WSAs will be managed under the multiple-use management concept if certain WSAs are not designated for wilderness. Under multiple-use management concept policies and guidelines, as discussed in No. 1 and No. 2 in response 271-16 and in the draft RMP/EIS Chapter 2, page 21, will be carried out.

There are very few differences in the management policies of WSAs and land under multiple-use management in regards to cultural site preservation. Mining, road construction, and cattle disturbance from range developments constitute ground disturbing actions, each of which would warrant a Class III field inspection for significant cultural resources, as well as a Class I literature search. Appropriate measures, as stated in the draft RMP/EIS Chapter 2, page 21 and detailed in BLM Manual 8111, provide for the protection of cultural resources on BLM lands managed under the multiple-use classification.

The proposed action addresses four major issues, all of which will have the same management constraints for protecting

This is a historic route of regional importance.

The fragile nature of cultural resources should be a major concern in land management planning. Irreversible and irretrievable damages will be done to our local, regional, and national heritage unless major emphasis is placed on stopping current destructive uses and abuses of our cultural resources. Additional disruptive uses in the future should not be allowed.

SOILS

Fragile desert pavement soils would not be adequately protected under the proposed action. Soils with slow natural recovery rates would be opened to multiple use management and the high probability of surface disturbances. The proposed action would favor land uses that foster irreversible and irretrievable impacts to the area's soils. Mining, ORV use, utility corridors, and, to some extent, grazing are directly harmful to the soil types present in the RMP/EIS area.

Approximately 150,000 acres of desert pavement exist in the RMP/EIS area. This soil is intolerant to surface disturbance and experiences severe wind and water erosion when damage takes place. Large areas of desert pavement exist in the New Water Mtn. WSA, Little Horn Mtn. West WSA, Little Horn Mtn. WSA, and South Maricopa Mtn. WSA. The East Clanton Hills WSA also has areas of desert pavement. The proposed action would protect only the New Water Mtn.'s desert pavement. All other areas would be opened to multiple uses.

The Little Horn Mtn. West WSA and Little Horn Mtn. WSA are relatively untouched by ORV tracks. Surrounding areas not under study are overrun by ORV tracks. These areas are criss-crossed with mining claims. Release of these lands would subject the desert pavement to the projected increases in ORV use and mining activities. The expected surface damage could not be repaired by the poor soil and low rainfall prevalent in these areas.

The East Clanton Hills WSA exhibits signs of ORV damage although the desert pavement is relatively pristine. Mineral and geothermal activities would damage desert pavement in this area if this area was released for multiple use. ORV use would continue to grow.

The South Maricopa Mtn. WSA is particularly vulnerable to soil disruption. Mineral interest is high in this area although mineral potential and potential for development are low. The shallow, rocky soils and desert plains are easily damaged. Most of the mining claims are on the desert plain where strip mining is a possibility. ORV use is expected to increase under multiple use management.

cultural resources. As stated previously, Chapter 2 - Management Guidance Common to All Alternatives - explains how any significant sites are protected from destruction (see answers No. 1-3 above).

Cultural sites are not unprotected if they are not placed under wilderness management. Any site eligible for inclusion in the National Register, regardless if it has been nominated or not, is afforded protection by various federal laws and regulations. Some of these were listed in Chapter 2 - National Historic Preservation Act of 1966 and the National Environmental Policy Act of 1969. Also the BLM Manual 8141 (Arizona Supplement) provides for agency-specific guidelines for both long-term and interim physical and administrative protection of cultural resources. If vandalism or ORV use is identified as a factor for continued degradation of a significant site, a variety of protective measures (e.g., fencing, ORV closure, locked gates) may be taken to restrict public use of an area. Also 36 CFR 800 provides for the the treatment of National Register eligible properties to eliminate adverse impacts by developing mitigating measures.

The proposed action would not protect the previously mentioned areas of desert pavement(except New Water Mtn. WSA). It would not protect areas of sensitive soils in the Face Mtn. WSA, Signal Mtn. WSA, Woolsey PeakWSA, North Maricopa Mtn. WSA, and Butterfield Stage Memorial WSA. The latter two are extremely vulnerable because they contain areas of high ORV use. Surface disturbances in the North Maricopa Mtn. WSA are considered "nearly permanent" because of the soil type and steep slopes prevalent in the critical area.

The resource protection alternative would give added protection to sensitive soils in the Eagletail Mtn. WSA. It would protect soils in the Little Horn Mtn. WSA, Face Mtn. WSA, and sensitive North Maricopa Mtn. WSA.

The environmental protection alternative is the only alternative that offers protection to the desert pavement areas present in the Little Horn Mtn. West WSA, East Clanton Hills WSA, and the South Maricopa Mtn. WSA.

Some provision must be included in future management plans to protect the fragile and unique character of desert soils. Disruptive activities must not be allowed to trigger cycles of erosion. Irreversible and irretrievable impacts can be stopped before they happen.

272

TALIESIN ASSOCIATED ARCHITECTS
ARCHITECTURE · PLANNING · INTERIOR LANDSCAPE GRAPHIC DESIGN
TALIESIN WEST · SCOTTSDALE, ARIZONA 85261-4430 602 948-6400

Phoenix District B.L.M.
2015 Deer Valley Road
Phoenix,Az. 85027

1 May 1985

Dear Sir:

I am writing to urge that several areas in your jurisdiction be recommended designation as wilderness areas and given that protection. Specifically White Canyon, Mt.Wilson, Coyote Mountains, Baboquivari Peak, Hell's Canyon and Picacho Mountains deserve this protection for various important reasons. I am also concerned that the Little Horn Mountains & Mountains West be included for their bighorn sheep and tortoise population-protection.This consideration should also apply to Signal Mountain and North Maricopa Mountains which of course also contain important early rock shelters.

I would hope that the Baboquivari Peak wilderness would also include the 3,000± acres of contiguous state land that should be acquired by trade.

I also support wilderness recommendations for Little Horn Mountains & L.H.Mountains West, Signal Mountain, North Maricopa Mountains, Butterfield Stage Memorial, Tabletop Mountains, Woolsey Peak, New Water Mountains, Eagletail Mountains, East Clanton Hills, Face Mountain, and South Maricopa Mountains.

Our Sonoran desert areas are unique and though Congress did designate 1.2 million acres as wilderness in Arizona last year I feel strongly that much more action must be taken soon to assure protection for all the above areas.

Yours sincerely,
Mary C Nemtin
Mary C.Nemtin

cc: Senator Barry Goldwater
Senator Dennis DeConcini
Representative John McCain
Representative Eldon Rudd
Representative Bob Stump
Representative Morris K.Udall

273

LITTLE RAINBOW VALLEY FLOOD CONTROL DISTRICT
County of Maricopa, State of Arizona

April 24, 1985

Mr. Bill Carter
Phoenix District
Bureau of Land Management
2015 West Deer Valley Road
Phoenix, Arizona 85027

Re: Draft RMP/EIS
Lower Gila South Area
Phoenix District, Arizona

Dear Mr. Carter:

On behalf of the Little Rainbow Valley Flood Control District, we present these comments on the Draft Resource Management Plan/Environmental Impact Statement ("RMP/EIS") for the Lower Gila South RMP/EIS Area.

The Little Rainbow Valley Flood Control District (the "District") was formed under Article 1.1, Chapter 10 of Title 45 of the Arizona Revised Statutes on February 4, 1985. The purpose of the District is to protect farmlands from stormwaters and overflowing flood waters in the watershed area bordered by the Buckeye Hills to the north and the Maricopa Mountains to the east. Those waters collect in large part on public lands under the control of the Bureau of Land Management ("BLM") and eventually flow to the Gila River to the west.

The focus of our comments will be directed to two wilderness study areas ("WSAs") which impact on the flood and drainage control efforts of the District: the North Maricopa Mountains (Unit No. AZ-020-157) and the South Maricopa Mountains (Unit No. AZ-020-163).

In the section on "soil erosion and productivity," the RMP/EIS states on page 43 that:

> "Soil erosion from water in the EIS area is generally low due to low precipitation and the gravelly-cobbly soil surface that protects the soil from raindrop splash and channel runoff. The amount and intensity of rainfall greatly vary, making soil erosion and sedimentation levels difficult to calculate or predict. Sheet and streambank erosion during high-intensity storms cause most soil movement."

273-1

Based upon personal observations and experiences of private landowners in the area, occasional storms above the WSAs and other BLM lands cause major accumulations and discharges of stormwaters, along with sediment, to flow from those areas across private lands to the Gila River. The massive area of the WSAs and other BLM lands provide for an enormous collection of stormwaters which cause frequent damage to private property and results in sedimentation of drainageways which requires frequent maintenance at the expense of private landowners.

273-2

Response - Letter 273

273-1 The Proposed Action will serve to improve watershed conditions and to reduce flooding and sedimentation. If grazing reductions are determined necessary through monitoring, the subsequent improvement of range vegetation would help stabilize the watershed, reduce runoff, and decrease sedimentation. Similar benefits would occur from enhanced livestock distribution through range improvement projects.

273-2 Floodplain management and wetlands protection will continue as indicated on Page 54 of the draft RMP/EIS. Rangeland projects directed toward watershed improvement and flood control may be authorized given adequate funding, proper environmental assessment, and consistency with applicable Wilderness Management Policy guidelines.

Lack of a comprehensive and coordinated floodplain and watershed management programs covering both BLM and private lands have resulted in severe soil erosion, deterioration of drainageways, and unnecessary damage to the environment and to private property. For those reasons, the District strongly encourages BLM to undertake mitigating measures which are appropriate under these circumstances.

The conditions described above present a definite hazard to life and property, in addition to causing a depreciation of environmental quality both on the WSAs and other BLM lands as well as on private lands. The District solicits the cooperation and assistance of BLM in formulating and preparing a comprehensive flood and drainage control study and in constructing and maintaining necessary water-regulating structures on BLM lands.

In respect to the North Maricopa Mountains and South Maricopa Mountains WSAs, the District supports the recommendation of BLM in not designating those areas as wilderness under the Proposed Action. The District further endorses the recommendation that those areas be subject to multiple use management, including the installation of and access to necessary control/release structures and diversion channels as may be required for environmentally sound floodplain and watershed management.

Thank you for this opportunity to express these concerns on behalf of the District and we hope they will be given careful consideration during the formulation of the Final Management Plan and Statement.

Sincerely,

Doug C. Nelson

Douglas C. Nelson, P.C.
Legal Counsel
Little Rainbow Valley Flood Control District

DCN/pg

Mr. Bill Carter
April 24, 1985
Page 3

c: Mr. William T. Childress
Area Manager
Lower Gila Resource Area

Board of Directors
Little Rainbow Valley Flood Control District

276

[redacted]

6034 N. Kachina Ln
Scottsdale Az 85253
May 1, 1985

Gentlemen,

I am deeply concerned about encroachments on our public land. Desert areas in Arizona represent unique settings and should be preserved for future generations. Those of us familiar with areas such as White Canyon, Hell's Canyon, Mt. Wilson and The Coyote Mountains are anxious To see them preserved. The Picacho Mountains Too should be spared from development.

I support wilderness recommendations for all the above. Yours truly

Helen Voltz-Hunter

278

GEORGE E. JOHNSTON
KING RANCH BOX 1702 A
APACHE JUNCTION, ARIZ. 85220

May 1, 1985

Phoenix District BLM
2015 W. Deer Valley Rd.
Phoenix, AZ 85027

Gentlemen:

I am writing this letter to urge that you give further consideration to recommending for Wilderness designation, the following areas:

White Canyon	Mt. Wilson
Coyote Mountains	Baboquivari Peak
Hell's Canyon	Picacho Mountains
Little Horn Mts.	Signal Mountain
No. Maricopa Mts.	Tabletop Mts.
Woolsey Peak	New Water Mts.
Eagletail Mts.	East Clanton Hills
Face Mountain	So. Maricopa Mts.

In several cases, the reasons given for not recommending some of these areas has been "off-road intrusions." If these are no longer allowed, these areas will "heal" themselves...even if it does take 100 or more years to do so. Once these lands are cut adrift, there is no hope of their salvation.

As for the copper mining potential...they can't give the stuff away! I live in what was once one of the beauty spots of the world...and all that's left is that part of it which has been designated "wilderness." I'm speaking of Superstition Mountain, which now has its western and southern flanks despoiled with the worst kind of development!

Please...let's save what we can of our national heritage. Even if, as wilderness areas, they will be readily accessible only to the young and healthy (I'm 65 years old). The rest of us can get "close" and enjoy these areas not only in our own lifetimes but can get satisfaction that they will be there for generations to come.

Thanks for listening.

Sincerely,

George E. Johnston

279

3326 E. Elida St.
Tucson. Az. 85716
May 2nd 85

Yuma District BLM.
Yuma az.

Sirs:

Please dont destroy our grandchildrens natural, national heritage.

Please leave our wilderness lands intact.

Please listen to the Naturalists like the Audubon Society.

The list of canyons and areas is too big to list but leave them alone, in their natural form.

a tax Payer.

Sincerely
Peggy Slater

RECEIVED

281

May 2, 1985

District Manager,
BUREAU OF LAND MANAGEMENT
Phoenix District Office
2015 W. Deer Valley Rd.
Phoenix, Arizona 85027

Re: LOWER GILA SOUTH - Resource Management Plan
Environmental Impact Statement

Dear District Manager:

Please include these comments as part of your public input record. Thank you.

The subject area in the Arizona desert has an average rainfall varying from 3-10 inches. Therefore, I find it hard to understand that cattle grazing will get increased from 60,524 AUMs to 61,900 per the "Proposed Action" alternative. Eliminating livestock grazing, according to "Environmental Protection" alternative would be beneficial to the vegetation resources and wildlife. Even now the livestock operators are not contributing any significant part to Arizona's total personal income. The historic Arizona economy included cattle in 1929 but today, agriculture (farming and ranching) contributes less than 2% of Arizona's personal income. The question must be asked: Is it worth it? The answer here seems to be NO. Attached to my comments is a 7-page report by the Bureau of Business and Economic Research in Arizona State University's College of Business Administration showing 1929 to 1983 data.

The low price of grazing fees on BLM land is also a big subsidy I do not support. This subsidy has been going on for almost a hundred years. It is time to stop the abuses on the public's funds and abuses on the public lands. I strongly urge the 47% reduction to 31,914 AUMs as proposed in the "Resource Protection" alternative.

Using the same attached 7-page report, it will be seen that the Arizona mining industry has been declining in significance ever since its high of 16% of Arizona's personal income, in 1929. Today, Arizona's mining industry contributes less than 2% to Arizona's personal income. It should be seen then that mining in the Lower Gila South area is not worth the damage it causes. I heartily urge that the "Environmental Protection" alternative be applied to mining.

Off-road vehicles in Arizona, unlike the declining industries, are increasing. I find them noisy, dirty, and their operators generally showing a low regard for Arizona's natural beauty. Sometimes I have come across groups of ORV enthusiasts, including families with children of all ages and individuals, tearing up a desert area, resembling a battle scene. Even if ORVs were prohibited in the entire 12 WSAs (607,557 acres) that would still allow ORVs on the remaining area and that is too much. There are plenty of places for ORVs near Arizona's two largest cities, Phoenix and Tucson (in the usually dry Salt and Santa Cruz rivers), where most of the ORVs are in Arizona. ORV areas in the Lower Gila South should be restricted to dry washes or areas BLM feels can take these destructive vehicles.

I am not sympathetic to wild horses and burros and am concerned about their impacting forage and water supplies for native wildlife.

I endorse the "Environmental Protection" alternative recommending all 12 WSAs as wilderness areas. Arizona continues to be one of the nation's fastest growing states and yet the most highly urbanized with increasing pressure on our natural recreational areas. More wilderness areas are needed for the public, not less. Also, wilderness areas are important to tourism, Arizona's second largest industry.

According to Arizona's tourism director, tourism attracts 16.2 million visitors who spend $5 billion a year, producing $230 million in tax revenue and providing 71,700 jobs directly related to tourism and 114,600 in indirect fields. It would be short-sighted from an economic standpoint alone to not designate the maximum 607,557 acres as wilderness.

Aside from the significant economic considerations, I love the desert and I am excited that I could enjoy beneficial impacts on wilderness and associated resource values (botanical, cultural, wildlife) enhanced by a wilderness protection designation, and that knowing my children's children would be able to enjoy these areas also.

Cultural Resources: We should always be aware that research and study is not complete on Arizona's prehistoric people and we are not aware of what places are still used today by our native people culturally and religiously.

Thank you for this opportunity to comment on your draft Lower Gila South Resource Management Plan/Environmental Impact Statement.

Sincerely,

Carolina Butler

Mrs. Carolina Butler
11837 N. Paradise Drive
Scottsdale, Ariz. 85254
(602) 948-6824

Attach.

The Decline of Arizona's "Four Cs"

The historic Arizona economy has been described as the "four Cs": copper, cattle, cotton and citrus. While it is widely acknowledged that other industries have gained significance recently, especially high technology manufacturing and tourism-oriented services, many still consider the old mainstays of the Arizona economy to be important.

To answer the question of whether these characterizations of the Arizona economy are accurate, a consistent set of data available over a long time period is needed. Of the best measures of the Arizona economy - Gross State Product (GSP), employment, personal income (PI) - only the latter is available by industry for a number of years (since 1929, from the U.S. Department of Commerce).

The Arizona Economy in 1929

The four Cs characterization of the Arizona economy was relatively accurate in 1929, according to the PI data: The agriculture and mining industries together contributed nearly one-third of the state's personal income. Even then, however, the PI derived from the services and trade industries was nearly as much as from agriculture and mining.

In comparison to the national economy in 1929, mining and agriculture were much more important to the Arizona economy; manufacturing was the most important industry nationally. In contrast, the services and trade industries were no more important to the Arizona economy than to the national economy. Thus, the four Cs did fairly describe the Arizona economy in 1929, particularly in comparison to the national economy.

The Decline of Mining and Agriculture

The Arizona mining industry has been declining in significance ever since 1929 (see Figure I). Its share of PI fell to less than 7 percent in 1932 from more than 16 percent just three years earlier. Except preceding and during World War II, mining's share of PI remained at approximately 6 percent until it began a slow decline around 1960. Even during the copper boom of 1981, mining contributed less than 4 percent of Arizona's personal income; its contribution now is just 2 percent.

The mining industry had remained somewhat more important to the Arizona economy than to the national economy until 1983. Now, Arizona mining's share of Arizona PI is no greater than national mining's share of national PI.

The Arizona agriculture industry did not begin to decline until much later than the mining industry. Its peak year was in 1951, when it accounted for 23 percent of Arizona's personal income. Its portion has been falling ever since, however, to less than 8 percent by 1958, to 2 percent by 1983. The Arizona agricultural industry has not been more important to the Arizona economy than the national agriculture industry has been to the national economy since the early 1960s.

The actual output of these industries has not necessarily declined: Except for cyclical down swings, the inflation-adjusted GSP of both agriculture and mining has been increasing. This growth, however, has been much slower than that of Arizona's other industries. The explosive growth of the state's urbanized areas has overwhelmed these rural industries.

In some parts of rural Arizona, mining and/or agriculture remain the dominant forces of the local economy. In these areas, such as portions of Gila, Graham, Greenlee, Pinal and Yuma counties, a slump in mining or agriculture can be devastating to the local area. But because the population of these areas is so small, these problems barely affect the state as a whole.

The Growth Industries

The combined share of Arizona personal income of the agriculture and mining industries has declined from 32 percent in 1929 to 4 percent in 1983. Three industries in particular have grown, replacing most of this lost share.

Government was the first industry to gain in importance, with its share of PI rising from less than 10 percent in 1929 to more than 20 percent in 1932: a result of the depression. During World War II, when military operations expanded in Arizona, government's share of PI briefly exceeded 33 percent. Since the early 1960s government's portion of PI has remained near 20 percent; it contributed the largest part of Arizona's personal income each year from 1961 through 1982. (Government's share of GSP, however, was only 14 percent, ranking it as the fifth largest industry). Compared to the contribution of government to the national PI, the Arizona government share of Arizona personal income has been slightly higher.

During the 1950s, Arizona's manufacturing industry began to expand. It usually had contributed less than 7 percent of Arizona personal income until 1951, while the national manufacturing industry was contributing more than 25 percent of U.S. PI. By 1960, the PI derived from manufacturing was nearly 14 percent of the state's total; manufacturing had achieved an 18 percent share of PI by 1980, still not as large as that nationally.

The Arizona services industry has also grown, but to a lesser extent. Excluding cyclical fluctuations, the services industry accounted for approximately 18 percent of Arizona PI from 1929 through 1960, approximately the same share as nationally. Both in Arizona and nationally, services' share of PI has increased since 1960, especially during the last few years.

The Arizona Economy Today

Arizona now has a diversified economy, one much different than in 1929 (see Figure II). While manufacturing, especially that related to high technology, and services are the most rapidly growing industries, the government and trade sectors still contribute comparable shares of Arizona personal income. If GSP is used as the measurement base, the finance, insurance and real estate industry must be added to this group. The Arizona industrial structure is much like the national structure, except that manufacturing is a little less important in Arizona while construction and government are slightly more significant.

Conclusion

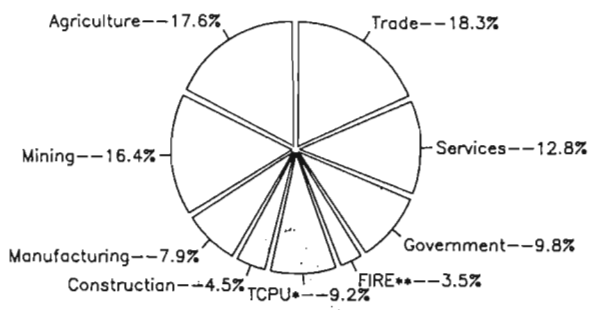
It is simple, but accurate, to say that the four Cs (agriculture and mining) used to be important to Arizona. Mining declined first, replaced by government. Agriculture declined more recently, replaced by manufacturing and, later, also by services. Agriculture and mining seem doomed to continue their relative decline, though neither can fall much farther since each contributes only 2 percent of Arizona personal income.

These changes in the Arizona economy did not occur recently. By the middle 1960s, the economy's structure already closely resembled that of today. Recognition of these changes has been slow, however. The importance of the manufacturing and services industries has only recently been realized while the problems of the mining and agriculture industries still garner considerable attention.

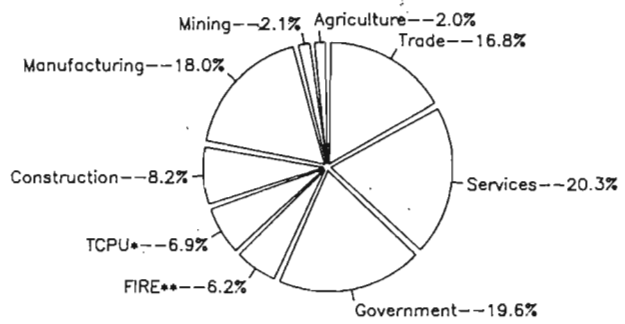
Tom R. Rex

Research Manager

THE SHIFT IN ARIZONA'S INDUSTRIAL STRUCTURE
Sectoral Share of Arizona Personal Income



1929



1983

* TCPU = Transportotion, Communications, and Public Utilities

** FIRE = Finance, Insurance, and Real Estate

Source: Bureau of Business and Economic Research
College of Business
Arizona State University

282

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
215 Fremont Street
San Francisco, Ca. 94105

MAY 0 2 1985

Marlyn V. Jones, District Manager
Bureau of Land Management
Phoenix District Office
2015 West Deer Valley Road
Phoenix, Arizona 85027

Dear Mr. Jones:

The Environmental Protection Agency (EPA) has reviewed the Draft Environmental Impact Statement (DEIS) titled LOWER GILA SOUTH RESOURCE MANAGEMENT PLAN; MARICOPA, LA PAZ, YUMA, PIMA AND PINAL COUNTIES, ARIZONA. We have the enclosed comments regarding this DEIS.

282-1 We have classified this DEIS as Category EC-2, Environmental Concerns - Insufficient Information (see attached "Summary of Rating Definitions and Follow-Up Action"). This DEIS is rated EC-2 because 1) water quality and air quality issues need to be addressed, 2) pesticide use should be discussed, 3) possible conflict between grazing and wildlife habitat should be resolved and 4) environmental benefits of additional wilderness areas should be considered. The classification and date of EPA's comments will be published in the Federal Register in accordance with our public disclosure responsibilities under Section 309 of the Clean Air Act.

We appreciate the opportunity to review this DEIS. Please send five copies of the Final Environmental Impact Statement (FEIS) to this office at the same time it is officially filed with our Washington, D.C. office. If you have any questions, please contact Juli Jessen, Federal Activities Branch, at (415) 974-0257 or FTS 454-0257.

Sincerely yours,

Charles W. Murray, Jr.
Assistant Regional Administrator
for Policy and Management

Enclosure (3 pages)

Response - Letter 282

282-1 Water Quality and Air Quality - these two issues were not addressed in the draft RMP/EIS because none of the actions proposed would have a significant impact, beneficial or adverse, on either the air or water quality of the area.

Water Quality Comments

1. The FEIS should provide baseline information and a detailed map of water resources within the area. The FEIS should discuss the following resources, indicating management measures to protect water quality:
   a. Springs and wells
   b. Ponds and reservoirs
   c. Perennial streams and hydrographic basins
   d. Riparian communities.

2. Under the sections Affected Environment (Chapter 3), Environmental Consequences (Chapter 4) and Wilderness Supplements (Chapters 3 and 4), discussions of wildlife resources should specifically include wetland habitats. Although impacts to riparian vegetation are discussed under several of the alternatives, this vegetation type represents only one kind of wetland habitat potentially found in the Resource Management Area. Other wetland types that should be identified include, but should not be limited to, marshes, tule beds bordering stock ponds and reservoirs, seeps and springs, wet meadows, playa lakes, etc. Potential impacts to these wetland habitats under each alternative should be discussed in detail. If there are no potential impacts to wetlands under the alternatives, this should be substantiated.

3. Numerous species of waterfowl and shorebirds are stated as using riparian habitat on the Gila River and, to a lesser extent, stock reservoirs in the Vekol Valley (p. 39). Heavy cattle grazing is identified as currently limiting the importance of Vekol Valley reservoirs as waterfowl habitat. However, Table 4-2 identifies no long term adverse impacts to riparian habitat, waterfowl or Vekol Valley grassland under any alternative. The FEIS should explain why adverse impacts to these habitat types and species will not continue.

4. The environmental protection alternative proposes improvement of the Vekol Valley grassland, including the dike system which contains important waterfowl habitat. The proposed action of the FEIS should also consider this improvement.

5. Mitigation to protect water quality and maintain beneficial uses for each water resource discussed, especially riparian communities, should be included in the FEIS.

Air Quality Comments

1. The FEIS should provide baseline information for existing air quality in the resource areas.

2. The DEIS states that none of the alternatives will significantly impact air quality (p. 53). However, alternatives vary widely in activities permitted and therefore will impact air quality differently. The FEIS should discuss the kinds of air quality impacts which could be possible under the different alternatives and how these impacts would be mitigated.

Pesticide and Herbicide Comments

1. Any pesticide use should be discussed with respect to its effect on fish and wildlife, particularly endangered species. Appropriate precautions should be included in the discussion.

2. If pesticide or herbicide use is proposed, the FEIS should indicate that the compound is:
   a. Registered with EPA
   b. Registered for the specifically proposed use
   c. Marked with a current label
   d. Applied by a certified applicator or by personnel under the direct supervision of a certified applicator
   e. Used in accordance with all state and federal laws
   f. Applied in such a way that precautions are taken to protect workers during the operation.

3. The FEIS should discuss the use of pesticides or herbicides in relation to the following topics:
   a. Cattle-dip treatment
   b. Fire prevention programs
   c. Predator control programs
   d. Deer repellent programs
   e. Wood preservative treatment for fences
   f. Vegetation control near roads and right-of-way corridors
   g. Control of disease vectors such as fleas.

4. The FEIS should address the following considerations for the safe use of pesticides or herbicides in the project area:
   a. Provisions for mixing, storing, loading and disposal of pesticides or herbicides
   b. Spill prevention contingency plans (SPCP)
   c. Adverse effects on nontarget species
   d. Applicator safety and prespraying notification procedures
   e. Impacts on aquatic resources
   f. Current status of the pesticide or herbicide to be used
   g. Alternative means of achieving desired management goals.

General Comments

1. Although 10% of the rangeland is in poor condition (p. 29) and erosion is a problem (p. 63), no management practices are outlined for improvement of these areas. Allotment categories are limited to "custodial" or "maintain." The FEIS should include a category for rangeland needing improvement and describe Best Management Practices for this land.

2. The DEIS traces soil erosion (p. 63) and adverse impacts on big game (p. 59) to cattle population. Yet, the proposed action alternative allows grazing to continue at its present level or to increase (p. 9). Even the resource production alternative recommends initial herd reduction (p. 15). This may indicate that the proposed action fails to balance multiple uses and instead favors grazing activities. The FEIS should propose a more balanced approach.

3. Establishment of wilderness areas can benefit other resource and environmental values such as water quality, air quality and soil condition. By adding 134,600 acres of suitable wilderness to the 189,750 acres designated by the proposed action, the resource protection alternative prevents several adverse impacts on environmental and wilderness values. In evaluating the resource protection alternative the DEIS states on page 79 that "all seven areas recommended suitable [by this alternative] are considered manageable as wilderness over the long term." Due to the lesser impacts and manageability of the wilderness areas, EPA recommends that BLM reconsider the acreage proposed as suitable for wilderness designation.

SUMMARY OF RATING DEFINITIONS AND FOLLOW-UP ACTION*

Environmental Impact of the Action

LO—Lack of Objections
The EPA review has not identified any potential environmental impacts requiring substantive changes to the proposal. The review may have disclosed opportunities for application of mitigation measures that could be accomplished with no more than minor changes to the proposal.

EC—Environmental Concerns
The EPA review has identified environmental impacts that should be avoided in order to fully protect the environment. Corrective measures may require changes to the preferred alternative or application of mitigation measures that can reduce the environmental impact. EPA would like to work with the lead agency to reduce these impacts.

EO—Environmental Objections
The EPA review has identified significant environmental impacts that must be avoided in order to provide adequate protection for the environment. Corrective measures may require substantial changes to the preferred alternative or consideration of some other project alternative (including the no action alternative or a new alternative). EPA intends to work with the lead agency to reduce these impacts.

EU—Environmentally Unsatisfactory
The EPA review has identified adverse environmental impacts that are of sufficient magnitude that they are unsatisfactory from the standpoint of public health or welfare or environmental quality. EPA intends to work with the lead agency to reduce these impacts. If the potential unsatisfactory impacts are not corrected at the final EIS stage, this proposal will be recommended for referral to the CEQ.

Adequacy of the Impact Statement

Category 1—Adequate
EPA believes the draft EIS adequately sets forth the environmental impact(s) of the preferred alternative and those of the alternatives reasonably available to the project or action. No further analysis or data collection is necessary, but the reviewer may suggest the addition of clarifying language or information.

Category 2—Insufficient Information
The draft EIS does not contain sufficient information for EPA to fully assess environmental impacts that should be avoided in order to fully protect the environment, or the EPA reviewer has identified new reasonably available alternatives that are within the spectrum of alternatives analyzed in the draft EIS, which could reduce the environmental impacts of the action. The identified additional information, data, analyses, or discussion should be included in the final EIS.

Category 3—Inadequate
EPA does not believe that the draft EIS adequately assesses potentially significant environmental impacts of the action, or the EPA reviewer has identified new, reasonably available alternatives that are outside of the spectrum of alternatives analyzed in the draft EIS, which should be analyzed in order to reduce the potentially significant environmental impacts. EPA believes that the identified additional information, data, analyses, or discussions are of such a magnitude that they should have full public review at a draft stage. EPA does not believe that the draft EIS is adequate for the purposes of the NEPA and/or Section 309 review, and thus should be formally revised and made available for public comment in a supplemental or revised draft EIS. On the basis of the potential significant impacts involved, this proposal could be a candidate for referral to the CEQ.

*From: EPA Manual 1640 Policy and Procedures for the Review of Federal Actions Impacting the Environment

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Public Lands Institute

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May 3rd, 1985

Mr. Marlyn V. Jones, District Mgr.
Phoenix District Office,
2015 West Deer Valley Road
Phoenix, ARIZ. 85027

RE: Lower Gila South RMP/EIS

Dear Mr. Jones:

Pursuant to your letter of January 2, 1985, the Public Lands Institute, a division of the Natural Resources Defense Council, has reviewed the above-mentioned document.

In brief, we support the limited, proposed wilderness designation for portions of four of the WSAs under consideration. These are identified as portions of the New Water Mountains, Eagletail Mountains, Woolsey Peak, and Table Top Mountains. We are disappointed to find that the "suitable" wilderness acreage recommended by your staff totals only 189,750 out of a possible 607,557 acres identified for the 12 potential WSAs.

284-1 After review of the document, it is obvious that in each and every case, the Phoenix District has either ignored or deliberately downplayed the essential resource values that clearly merit wilderness designation. These include, but are not limited to, the presence of significant, sensitive cultural resources, identification of important riparian habitat for fish and wildlife, habitats for threatened state-listed species, the outstanding potential for primitive recreational experiences, and the real opportunities all twelve areas have for solitary outdoor experiences.

284-2 It appears that the Phoenix District bowed to the ever-present pressures of the mining and ranching interests in releasing roughly 69 percent of the lands under consideration and study. This percentage is even higher than the national average of BLM areas released as "unsuitable" as analyzed in a recent PLI Newsletter. A copy is attached for your information

Further, your team of specialists failed to even consider an important provision under your 1976 Organic Act, the Federal

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284-1 BLM fully recognizes the value of wilderness for the protection and enhancement of wilderness, for the protection of wildlife, plant, cultural, and scenic resources. The supplemental wilderness values protected or benefited by wilderness designation are fully described in the document.

These resources will be protected by other means if the areas are not designated wilderness. All environmental constraints required by law would be applied. Possible constraints include specific laws and regulations which require BLM to protect threatened and endangered plant and animal species and cultural and visual resources. BLM is also required to manage the public lands to prevent unnecessary and undue resource degradation.

284-2 The Lower Gila South RMP/EIS is just one of five DEIS documents containing wilderness recommendations for public lands in Arizona. These five draft documents have preliminarily recommended almost 558,000 acres in 23 areas as suitable for wilderness, approximately 33% of all lands initially identified as wilderness study lands in Arizona. Additional wilderness studies will begin in Arizona in 1986 involving about 600,000 acres in 23 units.

Land Policy and Management Act. It requires the agency to designate and protect special areas with unique resources in a special way and, at the same time, would allow for certain compatible commercial uses. Such areas have been identified in other states as "areas of critical environmental concern" and all twelve of the WSAs identified in your planning effort would more than qualify or have portions that would qualify. I enclose a copy of a study recently published by the Public Lands Institute that clarifies the intent of Congress in this regard.

It is truly regrettable and even incomprehensible that in all of Arizona, BLM has yet to find a single area for designation as an ACEC. Equally incomprehensible, in reviewing the document we find not a hint that this special provision in the law was even considered in all of your extensive planning efforts.

The Public Lands Institute is dedicated to turning this situation around, and we are committed to working within the intent of Congress and the framework of the law to secure BLM compliance.

In closing, we recommend that you complete your cultural resource inventories before any final release of any of these special areas for such uses as mining, oil exploration, off-road vehicle use, and other exploitive purposes.

Sincerely yours,

Charles H. Callison

Charles H. Callison
Director

All Audubon and Sierra Club
Chapters in Arizona

RECEIVED
MAY 8 1985
BLM ARIZONA STATE OFFICE
PHOENIX, ARIZONA

285

4/29/85
Box 1264

William K. Baxter, Dist. Mgr. Jonestyville, Az.
Phoenix District BLM
Phoenix, Az.

Dear Sir:

I feel that the areas in Arizona proposed as wilderness areas be left as they presently are. Multiple Use Areas.

There are already vast areas now in game refuges, reservations, military installations, gunnery and bombing ranges that are restricted or forbidden to the general public. Making more areas into wilderness areas further reduces what area is left to those people who do not have the time, energy or ability to hike in or could not afford the services of guides and outfitters.

I feel it would also unduly prohibit and restrict the development of any natural resources that may be in or discovered in these areas.

Thank you

Jonathan L. Sams

Mary L. Sams

Box 1264

Jonestyville, Az. 85346

RECEIVED
BLM PHOENIX DIST. OFC.
PHOENIX, ARIZONA
8 MAY 1985
BLM

289

YUMA AUDUBON SOCIETY
P.O. Box 6395
YUMA, ARIZONA 85364

May 5, 1985

Marlyn Jones, District Manager
Phoenix District Office
U.S. Bureau of Land Management
2015 W. Deer Valley Road
Phoenix, AZ 85027

Dear Mr. Jones:

The following are Yuma Audubon's comments on the Draft Resource Management Plan/Environmental Impact Statement for the Lower Gila South RMP/EIS Area.

RANGELAND MANAGEMENT

We feel that the critical issues in rangeland management for this plan are ephemeral grazing, wildlife-cattle conflicts, classificaton of allotments, and when to initiate changes in the number of livestock using the public lands.

Ephemeral Grazing

We request that ephemeral livestock grazing be eliminated from the area covered by this proposed plan. BLM advises us (EIS, pp. 59-60) that 9 of these ephemeral allotments either have high potential for transmission of disease to Bighorn Sheep or forage conflicts between cattle and Desert Tortoises. They are: Artex, Dendora Valley, Gila River Community, Hazen Sheppard, Jagow Kreager, Layton, Mumme, Palomas, and Powers Butte. These allotments represent only those with the highest potential for conflicts.

We feel that ephemeral vegetation should be allowed to play its natural role in an ecosystem to which its constituent animals have adapted. It is our understanding, for example, that Desert Tortoises are highly reliant on annuals and breed only in years of relatively abundant vegetation--the same years that BLM proposes to let cattle remove this vital vegetation.

289-1 The EIS states that ephemeral grazing will be allowed only when "such use does not conflict with other resources or damage the perennial vegetation base" (p. 27). But how does BLM define "conflict" and "damage"? What "other resources" are taken into consideration? How are the conflicts resolved and the damage repaired? Furthermore, ephemeral grazing is permitted based on PROBABILITY of abundant vegetation, not actual occurrence (EIS, p. 27). We feel that there already is abundant evidence that

289-1 conflicts of ephemeral grazing exist with other resources. And what is the rangeland condition and trend in the ephemeral allotments? This information is not furnished in the EIS.

289-2 BLM should also look at the effect of ephemeral grazing on species besides those mentioned in the EIS. For example, research by Danita Hardy of the University of Arizona indicates that green vegetation, but not water, is a limiting factor in reproduction of Round-tailed Ground Squirrels (Journal of the Arizona-Nevada Academy of Science, Proceedings Supplement, p. 25, 1985).

289-3 The EIS should also indicate how frequently these ephemeral allotments have been used.

We feel that all of the above justifies our request for elimination of ephemeral grazing in the Lower Gila South planning area.

Perennial/Ephemeral Grazing

289-4 BLM's rangeland management goals (EIS, p. 9) are vague. Areas in poor to fair condition are to be improved, but to what level? How long will this take? There should be a specific overall date by which time improvement must take place. This could vary for individual allotments, since some could recover more rapidly than others. We feel that BLM's goal should be to return all allotments to excellent condition as soon as possible and eliminate all conflicts with wildlife, especially rare, threatened, and endangered species (Federal or State lists).

BLM already has abundant evidence of cattle-wildlife conflicts and adjustments should be made now, not some time in the future. For example, 5 sensitive plant species have already been adversely affected by cattle trampling and grazing (EIS, p. 29). BLM already knows that cattle using washes compete with deer, eating the same plants (EIS, p. 59). BLM already knows that cattle compete for vegetation with Bighorn Sheep and transmit devastating diseases to the wild sheep (EIS, p. 59). BLM already knows that cattle compete with Sonoran Pronghorn for food (EIS, p. 60). BLM already knows that cattle compete with Desert Tortoises for food and can depress tortoise reproduction (EIS, p. 60). BLM already knows that cattle eat cottonwoods (EIS, p. 60). And BLM states that reduction in number of cattle would accelerate habitat improvement and wildlife recovery (EIS, p. 17). All these factors call for reduction in cattle numbers now, not after 5 or more years of monitoring.

289-5 We also fail to understand why BLM permits grazing in desert pavement areas of the Crowder-Weisser, Eagle Tail, Palomas, Bighorn, and Artex allotments (EIS, pp. 42-43). In the same section BLM states that desert pavement soils "are not suited for livestock grazing" (EIS, p. 43).

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289-1 BLM determines the extent of conflict and damage of any surface disturbing activities through the environmental assessment process. Resources such as wildlife, botanical, cultural and watershed values are evaluated and any detrimental impacts from the activity would be mitigated or not allowed.

289-2 Ephemeral allotments produce little perennial vegetation and annual vegetation varies from year to year. BLM's rangeland inventory was conducted to determine base line data for estimating vegetation production potentials. BLM through its ephemeral designations has determined that ephemeral allotments do not have potential for perennial vegetation production and do not have yearlong herd numbers attached to them.

289-3 Livestock use of ephemeral allotments varies from year to year depending on precipitation, ephemeral forage conditions and the economic conditions of the livestock operator. On the average, livestock utilize ephemeral ranges three years out of ten.

289-4 Rangeland within the Lower Gila South planning area varies greatly in potential and response to management actions. High producing range sites are intermingled with low producing which make it difficult to manage along with unpredictable weather patterns. For analysis purposes, excluding areas within 1/4 mile of perennial water sources, rangeland in poor and fair condition

289-6 We are skeptical of BLM's classification of allotments and proposals for improvements. Twelve perennial-ephemeral allotments are proposed for "Maintain" status, which implies that present range condition is satisfactory and there are no serious resource use conflicts or controversy (EIS, p. 269). Yet 11 of these allotments have conflicts with one or more wildlife species (Sentinel is the exception) (EIS, pp. 59-60). Even Sentinel is 47% poor or fair condition, two of the "Maintain" allotments have 50% or over in poor to fair condition (Crowder-Weisser and Hazen) and two other allotments (Cameron and Childs) have over 40% poor to fair condition. Condition trend on these allotments is overwhelmingly static (EIS,
289-7 Appendix 15, p. 272). Thus we fail to understand how BLM finds no conflicts on these allotments and satisfactory range condition.

The allotments with the worst condition and/or greatest conflicts with wildlife are Cameron, Crowder-Weisser, Gable-Ming, Hazen, and Kirian.

Cameron is 41% poor to fair condition, 97% static and 3% downward trend, and has conflicts with Mule Deer, BighornSheep, and Sonoran Pronghorn. We find all these factors calling out for immediate improvement in conditions, not waiting for five years of monitoring. The Pronghorn, an endangered species, could be gone by then.

Crowder-Weisser is 50% poor to fair condition, 8% downward trend, 89% stable trend, and has conflicts with Bighorn Sheep and Desert Tortoise. Again, improvement is needed now, not five years or more from now.

289-8 Gable-Ming is 73% poor to fair condition and 100% static trend. This is dismal. There are also conflicts with Bighorn Sheep and Desert Tortoise. Again, immediate improvement is needed.

Hazen is 55% poor to fair condition and 100% static with conflicts with Bighorn Sheep and Desert Tortoise, and Kirian is 44% fair condition, 86% static, and has conflicts with Bighorn Sheep and Desert Tortoise. All these allotments have either conflicts with two or more species of wildlife and/or 40% or more poor to fair condition class with predominantly static or even some downward trend. It would be foolish for BLM to wait five years or more to take action to improve the quality of the habitat in these areas.

289-9 We also question the value of the proposed improvements. BLM's analysis shows only "slight improvement" of rangeland condition and trend resulting from the Proposed Action (EIS, p. 24). For the amount of money being spent ($371,345), we would expect more than just slight improvement. Moreover, the Proposed Action would benefit primarily medium and large ranches. This means the small rancher would be no better off as a result of the Proposed Action. (EIS, p. 67). BLM should do a benefit/cost analysis on

would be expected to improve to fair and good in the long term (5 - 25 years) depending on climate, effectiveness of management and funding.

For analysis purposes rangeland in poor and fair condition would be expected to improve to fair and good condition in the long term (5 - 25 years), depending on climate, effectiveness of management and funding.

289-6 See response 257-8.

289-7 The vegetation data has been used to identify and analyze impacts and mitigation of the proposed action and alternatives. We recognize the shortcomings of a one year rangeland inventory. While this data is adequate for purposes of planning and analysis, they must be supported by the results of monitoring studies before making forage allocation decisions.

289-8 No entire allotment is designated crucial bighorn sheep or desert tortoise habitat, and cattle do not occupy only bighorn or desert tortoise habitat. While potential conflicts have been identified with wildlife on some allotments, rangeland conditions in the fair range would not indicate a shortage of wildlife feed but rather that less than 50% of the natural plant community species exists. Through monitoring specific conflicts will be identified between wildlife and livestock. Once studies are evaluated, conflicts would be mitigated.

289-9 BLM will conduct benefit/cost analysis for all proposed rangeland developments.

the proposed improvements.

289-10 We recommend against the proposed improvements. Their sole purpose seems to be to disperse cattle into areas where they have not grazed, thus destroying more habitat. We especially request that cattle be kept out of the Ranegras Plain (the Eagle Tail and Palomas allotments) because the vegetation there is lush (EIS, p. 37). We also request that no development of waters for cattle and no fencing be allowed in Bighorn Sheep habitat because of detrimental effects to the sheep.

Table 4-2 (EIS, p. 61) appears to us to overstate as beneficial the long-term impacts to wildlife under the Proposed Alternaitve, specifically the effects of grazing management level on Bighorn Sheep, Desert Tortoise, Sonoran Pronghorn, and Riparian Habitat. We certainly don't think a person would come to these conclusions from reading the text.

If and when rangeland condition improves, we feel the increased vegetation should be for the benefit of wildlife that has suffered because of poor or fair range conditions. This has been going on for many years.

289-11 Although we disagree with the Proposed Action for grazing, we would like to know which "other resources" are considered in determing whether an increased level of grazing could be authorized under the monitoring plan. How are these "other resources" to be considered? What weight will "other resources" be given? This is unclear.

We also feel that BLM should carry out studies to ensure that wildlife requirements are being met in ALL areas, although we could support more intensive studies of riparian areas and areas with listed or sensitive species, such as the Sonoran Pronghorn.

Finally, we feel that the Conclusion paragraph of the Impacts on Vegetation section on p. 55 of the EIS is inadequate and vague. It leaves out a lot.

WILDERNESS

While the EIS recommends some excellent areas for wilderness, we feel that BLM should recognize an opportunity to recommend virtually contiguous areas which would create one of the finest wilderness experiences in the United States.

By recommending the Little Horn and Little Horn West, Eagletail, and East Clanton Hills WSAs, BLM could help create a large wilderness area which would provide tremendous solitude and outstanding opportunities for primitive recreation. Moreover, Bighorn Sheep, which need realtively large areas for their existence, including migration routes, would be protected by designating these areas wilderness.

The Face Mountain, Signal Mountain, and Woolsey Peak WSAs create a similar opportunity, as does wilderness designation of the North Maricopa Mountains, South Maricopa Mountains, and Butterfield Stage Memorial WSAs.

Most of the WSAs have only low to medium mineral potential or development potential (EIS, p. 129). The areas that do have high potential have in 2 out of 3 cases been recommended for wilderness by BLM (Eagletail Mountains and Table Top Mountains). We think this is excellent in that BLM has recognized the wilderness values of these two WSAs.

Surely the other WSAs with lower mineral potential and great wilderness value could be recommended.

In many cases, BLM's descriptions of the WSAs provide more than enough reason to designate non-recommended WSAs as wilderness--the description of the Little Horn Mountains West WSA on p. 31 of the EIS is one example ("essentially natural," "jumbled arrangement of hills and low mountains separated by small canyons provide outstanding opportunities for solitude," "Good but not outstanding opportunities for primitive and unconfined recreation"--but are these opportunities not outstanding especially when the Little Horn West and Little Horn WSAs are considered at the same time? Only a road separates the two areas from being one.

289-10 Rangeland developments are used to control livestock distribution, thus helping to improve or maintain the vigor and density of major forage plants and to harvest these plants efficiently. Impacts to critical wildlife habitat will require assessment and mitigation prior to development of an improvement.

289-11 When monitoring data reveal permanent increase in forage available for livestock grazing, the additional forage will be allocated in a manner consistent with multiple-use management objectives.

We also feel it is important to include bajadas and plains below the mountains to give integrity to the wilderness areas as natural and recreational units. Part of the enjoyment of wilderness hiking and backpacking is gradually approaching the mountains in the distance until they loom before one and present details that could not be observed from the distance--details of rock formations, plants, the shining sand grains of the washes. Moreover, including the flatter areas also protects Bighorn Sheep range, and the sheep are very sensitive to human disturbance. This is why we recommend BLM include all of the New Water Mountains WSA, not just the mountainous part. Wilderness can be not only up and down but planar as well, enhancing the experience by providing a variety of topography.

While we feel all WSAs are worthy of designation, we would especially like to mention one of our favorites, the North Maricopa Mountains, South Maricopa Mountain, and Butterfield Stage WSAs. We have always been impressed with the high quality of the environment in these WSAs, with their lush vegetation. If these areas were closer to Tucson they would be part of Saguaro National Monument. BLM should designate them wilderness.

We are somewhat confused about BLM's rationale for recommending wilderness areas. In the Proposed Alternative (pp. 58-59) the EIS states that although wilderness opportunities would be lost by not designating all WSAs under consideration in the EIS, BLM feels that those recommended for designation would offset

289-12 adverse impacts to wilderness in Arizona. However, on p. 79 of the EIS, under the Resource Protection Alternative, BLM states the same thing, but more WSAs are recommended for wilderness. If the areas recommended under the Resource Protection Alternative merely offset adverse impacts to non-recommended WSAs, how can the smaller amount of wilderness recommended under the Proposed Action offset adverse impacts to wilderness? We fail to understand BLM's reasoning here, and also how BLM measured

289-13 adverse impacts to wilderness resulting from non-designation against beneficial impacts resulting from designation. What criteria were used and how specifically did BLM arrive at these ocnclusions? We note that the EIS states (p. 59) that non-designated areas have moderate to high potential for degradation of natural values. This is all the more reason to recommend all the WSAs for wilderness.

We feel that any WSA not designated wilderness by Congress should be made an Area of Critical Environmental Concern (ACEC) to recognize its outstanding natural values and very often high values for certain species of animals and plants.

LAND TENURE ADJUSTMENT

While we are glad to see BLM prefers land exchanges to land sales (EIS, p. 12), nevertheless we feel that there should be no erosion of the public land base. BLM should dispose of no more land than is acquired. None of the alternatives in this EIS

289-14 propose to acquire as much surface estate as would be disposed of. We thus recommend that BLM cut back on the amount of land designated for disposal and acquire all lands listed under the Environmental Protection Alternative. In general we are opposed to BLM land sales as this decreases the public land base and the money goes for general government purposes rather than benefiting the public lands.

The EIS provides no real alternatives for land disposal, other than the No Action Alternative, since the amount of land is always the same (73,123 acres). Yet the amount of land to be acquired varies by alternative. We think BLM should provide land disposal alternatives with varying amounts of land in order to create real alternatives.

We also request that BLM determine resource values of land BEFORE designating it for disposal (see EIS, p. 12). Determination of resource values is an important step in evaluating the suitability of public land for disposal.

We request that BLM NOT dispose of the following lands proposed for disposal:

289-12 The impacts addressed, involve the ability of designated areas to offset adverse impacts to diversity in the National Wilderness Preservation System (NWPS). Overall impacts to the diversity of the NWPS are not considered significant under the proposed action or resource protection alternatives. No other types of impact are addressed here. The section will be rewritten to clarify the issues addressed.

289-13 Impacts from nondesignation were developed by analyzing existing and potential land uses in each WSA, including patterns of ORV use, mining claim distribution and mineral potential, and the potential for other types of land use to occur both beneficial, neutral or detrimental to wilderness values. Wilderness, cultural, scenic, wildlife and plant resources were determined to benefit from wilderness because of the general prohibition of surface disturbance and generally less human interference with natural ecological processes.

289-14 The listing of 73,123 acres of land was done in order to establish an exchange base that is varied enough to interest the state and private land owners. This will be necessary in order for us to implement the exchanges necessary to acquire the valuable resource lands listed. This does not mean that 73,123 acres will be disposed of.

--> Any land in the Gila River and its historically defined floodplain. The following are among parcels which may be located in this area: T. 4 S., R. 4 W., Secs. 8 and 21; T. 5 S., R. 4 W., Sec. 7; T. 1 S., R. 5 W., Sec. 35; T. 5 S., R. 11 W., Sec. 33; T. 6 S., R. 12 W., Sec. 26; T. 6 S., R. 13 W., Secs. 27 and 28; T. 7 S., R. 13 W., Sec. 7. If BLM is going to exchange land along the Gila River, we feel that BLM should acquire the river bed, historic floodplain, and riparian vegetation and only dispose of isolated parcels outside of the Gila River historic floodplain.

--> Lands that include Waterman Wash or its major tributary from the southeast, namely, T. 4 S., R. 1 E., Sec. 9; T. 3 S., R. 1 W., Secs. 21, 22, 23, 25, 28 and 36, because of the high resource values of large washes;

--> Lands that include Vekol Wash or its major tributary from the southwest, namely, T. 6 S., R. 1 E., Secs. 2, 10, 11, 15, 21, 27, 28, 32, and 33; T. 7 S., R. 1 E., Secs. 3 and 5, because of the high resource values of this major wash to southern Arizona;

--> Any lands in T. 1 S., R. 2 W., because they include the foothills and bajada of the Sierra Estrella, and to protect the western edge of the Sierra Estrella from encroachment. The Sierra Estrella should be retained as a natural area for the appreciation of residents of the Phoenix area and to recognize the unique qualities of this range, including its vegetation, some of which reaches range limits in the Sierra Estrella.

--> T. 6 N., R. 16 W., Sec. 7, which includes Cunningham Wash, a major wash and significant habitat area;

--> T. 6 N., R. 16 W., Sec. 29, which includes Bouse Wash, a major wash and significant habitat area.

We also request that BLM NOT dispose of any lands which contain moderate to high potential or occurrence of cultural resources. These lands need protection from destruction of cultural resources sites through development.

The criteria for designating parcels for disposal are unclear, except in a general sense. Do the enclosed maps accurately reflect land tenure in the Lower Gila South area? We found parcels proposed for disposal not shown in yellow on the large map (e.g., T. 6 S., R. 12 W., Sec. 26, NE 1/4 and N 1/2 NW 1/4). Should T. 4 N., R. 15 W., Sec. 36 be Sec. 35? It would have been helpful if BLM had prepared a map showing areas designated for disposal and acquisition, but we appreciate inclusion of legal descriptions of the parcels being proposed.

289-16 It is unclear why some parcels are proposed for disposal and not others in the same section. An example is T. 7 S., R. 12 W. Why does BLM propose to retain the N 1/2 NW 1/4 of Sec. 34 when the rest of the section is proposed for disposal? There are a number of other such examples.

We commend BLM for proposing acquisition of subsurface estate in areas where the United States owns the surface estate. Even though split estate WSAs are again under consideration for wilderness, we recommend that BLM set as a priority acquisition of subsurface estate in WSAs.

BLM should acquire the full estate to all riparian areas along the Gila River for wildlife purposes and also to prevent development in flood-prone areas.

Unfortunately, a major weakness of this EIS is that no Areas of Critical Environmental Concern are proposed. In fact, the Federal Land Policy and Management Act (FLPMA) requires that the identification and designation of ACECs is to be given PRIORITY in the development of land use plans (Public Law 94-579, Sec. 202(c)(3); 90 Stat. 2748). If the ACEC issue is not included in the Lower Gila South RMP, the plan would fail to meet the requirements of FLPMA, thus nullifying the whole RMP. BLM thus needs to indentify potential ACECs and make recommendations as to their suitability for such status.

289-15 The particular example pointed out lies in an area where we are trying to dispose of an isolated parcel in a section but also within that section are some public lands with significant resource values that need to be retained. In this case it is riparian habitat along the Gila River that is being retained.

ACECs are needed in the Lower Gila South planning area for the protection of wildlife values, ecosystems, and cultural resources. We do not feel that ACECs should be used as a substitute for wilderness designation in areas of wilderness quality.

One example of an area that needs ACEC status is the Vekol Valley Grassland outside of the Table Top WSA (including the variety of amphibian species present). Other examples are areas of protected plants listed in Table 3-1 (EIS, p. 30). Another area suitable for ACEC status is the Gila River channel and its riparian vegetation. Certainly the Sonoran Pronghorn and Organ Pipe Cactus habitat near Ajo are worthy of ACEC designation. The Sierra Estrella should be protected as an ACEC, recognizing the unusual plants that occur there, often at boundaries of their distribution Arizona Rosewood, Vauquelinia californica Desert Olive, Forestiera shrevei Standleyi Mohave Sage, Salvia mohavensis Greene). We would also like to see BLM use the expertise of its biologists and archaeologists to come up with recommendations for ACECs in the Lower Gila South planning area, based on their intimate knowledge of this area.

The Lower Gila South planning area needs an off-road vehicle (ORV) route plan. The EIS proposal to leave all areas open to cross-country travel (except wilderness) is an invitation to destruction of the resources of the area. BLM should restrict travel to designated routes. At the least, the Lower Gila South area should be consistent with the proposals for ORV travel of the Yuma BLM District and the Tonto National Forest. It is even more curious that BLM's proposal for unlimited ORV access comes in the absence of any demonstrated demand for such access. We also feel that ORV races are inconsistent with BLM's mission to protect resources and manage land for multiple uses. Thus we request that BLM not authorize any ORV races in the Lower Gila South area.

The conclusion paragraphs on land uses (EIS, p. 59) are too general, ignoring the value of some land parcels proposed for disposal. We also are unclear of the goal of the BLM-State land tenure adjustments. These need to be explained in more detail.

UTILITY CORRIDORS

We are strongly opposed to designation of the Palo Verde-Devers 500 kV line route as a utility corridor. This corridor would run through the Kofa National Wildlife Refuge and we feel a mile-wide corridor is inconsistent with refuge purposes. It would also impact administratively endorsed wilderness study areas in the Kofa Refuge, an impact which was ignored in this EIS.

After the recent examination of utility routes resulting from the All American/Celeron crude oil pipeline EIS, we are surprised that BLM would recommend the route through the Kofa refuge as a utility corridor. The documentation from the All American/Celeron EIS clearly demonstrates the unacceptable adverse impacts of running more utility lines through the Kofa Refuge. The fact that All American was willing to take the slightly longer and more expensive I-10 route also demonstrates this.

Moreover, we understand the Kofa Refuge is opposed to more utility lines through the refuge. It would be unproductive to set up a utility corridor that would be a constant source of dispute between two federal agencies (BLM and FWS), state agencies, environmental groups, and applicants for utility routes. The idea of utility corridors is to achieve agreement that routings for utility proposals will be processed with a minimum of delay and controversy. The Palo Verde-Devers route would not achieve this goal.

We also request that BLM propose designated communications sites, as this will help all concerned in planning for future actions.

WILDLIFE

Some of our concerns and comments about wildlife appear above. We emphasize that BLM should improve habitat for Bighorn Sheep, Mule Deer, Desert Tortoise, Sonoran Pronghorn, and riparian habitat to excellent condition by removing livestock-wildlife conflicts.

We commend BLM for some excellent proposals concerning wildlife. Specifically, we are glad to see BLM's consideration for State-listed species, such as in Wildlife Program Management Guidance #2 (EIS, p. 21) and the proposal not to dispose of land with habitat for State-listed species (EIS, p. 54).

We would like to see BLM give more consideration to protected plant species in the RMP. For example, BLM should not dispose of any land with protected plant species (Federal or State), not just animal species.

BLM should also develop a plan for revegetation of the Gila River with native vegetation. We think that releases from Painted Rock Dam should also be regulated in order to promote establishment and maintenance of native riparian vegetation. This would also benefit the Gila River below the Lower Gila South planning area.

Since BLM states (EIS, p. 53) that ". . . impacts to protected and sensitive plant species are difficult to define because of lack of site-specific information" we believe that this EIS requires a worst case analysis of impacts to such vegetation, until and unless BLM obtains site-specific information and can realistically estimate impacts to the vegetation as a result of the RMP.

We appreciate BLM's proposal to provide cattle exclosures for wildlife waters developed in conjunction with cattle watering sources, but we would rather see cattle-wildlife conflicts reduced following our proposals in the section on Rangeland Management above.

We also feel that the degree of effect on wildlife from fences should set the priority of modification, not whether BLM feels the fence condition requires replacement or maintenance. It is conceivable that the worse the condition of the fence, the better it could be for large mammals.

We are especially concerned that Clapper Rail habitat be established and protected along the Gila River since they will breed in this area. We also are concerned that egret and heron habitat be protected along the Gila River.

We also feel that BLM should mitigate for Gila Monster and Kit Fix loss of habitat by setting up ACECs to manage for their habitat types.

MINERALS AND MINING

The table on p. 24 of the EIS should also show how much area outside wilderness or WSAs remains open to mining. The number of claims in the planning area outside wilderness or WSAs should also be shown in order to give better perspective to the minerals issue.

Similarly, the EIS would give a better perspective in the section on the affected environment (p. 41) by presenting information on mineral potential and known mineral resources outside the areas proposed for wilderness under the various alternatives.

CULTURAL RESOURCES

Areas with high probability of stratified sites should be protected from disturbance by ACEC designation. The farther west one goes in Arizona the rarer stratified sites become and the Lower Gila South planning area also represents the zone of contact between Hohokam and Patayan. Stratified sites in this area are of tremendous archaeological significance.

289-16 Any sites eligible for the National Register should be protected as ACECs. How many sites in the Lower Gila South planning area have been evaluated for eligibility? Similarly, the petroglyph site mentioned on p. 44 of the EIS should be designated an ACEC. We know of an outstanding petroglyph site along the Gila River (not Painted Rocks) that should be designated an ACEC. Since this may be the same site referred to on p. 44 and it appears BLM feels it better not to publicize its location, we would be glad to talk to an archaeologist with BLM about the site we would like to see protected as an ACEC.

289-17 Have the trail and shrine sites in the Bouse area been evaluated for the National Register? We think they should also receive ACEC protection.

Is Table Top Mountain of religious significance to the Pima, Papago, or any other American Indian group? On pp. 296 and 331 of THE PIMA INDIANS by Frank Russell (U.S. Bureau of American Ethnology Annual Report 26, 1904-1905) there is a reference to a "Table mountain" (Matcipand unavangu/Matcipant). These groups should be contacted in order to determine if it is sacred. This would reinforce BLM's recommendation for wilderness status of the Table Top Mountains WSA as it would reduce human impacts on the area.

289-18 We would like to know how BLM proposes to avoid or mitigate direct impacts from grazing on cultural resources (EIS, p. 63). It appears to us that BLM's conclusion paragraph on p. 65 for the land tenure issue is too general. Disposal of land which would presumably be developed or used more intensively than under BLM control would undoubtedly have an impact on cultural resources and loss of cultural resources IS not only possible but probable.

SOCIAL IMPACTS

The social impacts section of the EIS needs to be greatly augmented. The only social group mentioned in regard to impacts is ranchers (EIS, pp. 69, 72, 77, 82). The EIS should assess, for example, the social impacts of not designating wilderness or ACECs.

289-19 We question the validity of "informal interviews with residents in the CCDs" (EIS, p. 48). How are these residents chosen? The sample of persons chosen should be statistically defensible. Moreover, the questions asked should be the same for each person. BLM presents no evidence that the "informal interviews" sample has any statistical validity.

OTHER ALTERNATIVES

The Resource Production Alternative states that it would "contribute to the economy of the region" (EIS, p. x). So would the other alternatives. This general statement needs to be augmented. The consequences of the Resource Production Alternative on wilderness could be degradation of wilderness values in BLM's view. We feel that "could" should be changed to "would."

The Resource Production Alternative (EIS, p. 74) projects benefits from minerals and energy development. But how much would these benefits impact the economy of the study area?

Small ranchers sustain the greatest reductions (proportionally) under the Resource Production Alternative, and probably would be more greatly impacted. Why is this so?

289-16 Sites eligible to the National Register are protected from adverse impacts by ARPA, 36 CFR 800, NHPA of 1966 and NEPA of 1969 as described in Chapter 2. Designation of ACEC areas for significant cultural sites would have to be publicized, thereby bringing further attraction to the site and possibly increasing vandalism. However, we will look at designation of significant sites for special management areas in a case by case basis.

The petroglyph site (mentioned on page 44 of draft EIS) is currently being studied under a Cultural Resource Management Plan (CRMP) which will determine how the site will be managed and protected in the future. Within a CRMP, the BLM identifies protection, recordation, and other needs for long-term site management without publicizing precise site areas.

289-17 The trail and shrine sites in the Bouse are have not been evaluated for eligibility to the National Register yet, since they are being recorded by amateur archaeologists. Again, other types of protection, besides ACECs, are available as discussed in No. 1.

Table Top Mountain does not appear to be of religious significance to the Pima, Papago, or other Indian groups. Chapter 5 discusses various letters of notification, publication in the Federal Register, and public scoping meetings which invited comments and discussion from the public. In particular, 21 Indian tribes and councils were sent copies of the draft EIS for reviewing (page 92 of draft EIS). No responses were returned from any Indian group.

289-20 Are the springs mentioned on p. 41 designated Public Water Reserves? If they are not and can be so designated, they should be. Also, what is the trend in the groundwater table (EIS, p. 41)? The EIS should also explain that the toxic pollutants found in the Gila River include pesticides no longer authorized for use in the United States.

BLM's assumption #1 ("General Assumptions for Analysis," p. 53), that there will be sufficient funding and work force to achieve the goals of the selected alternative, is probably unwarranted. BLM must also consider indirect impacts resulting from implementation of the planning alternatives.

There should be an explicit monitoring element of the plan not only for grazing but for other resources as well, including wildlife and cultural resources. The plan should establish thresholds at which action will be taken to correct resource degradation. The best approach would be to monitor ecosystems, not certain species, yet taking into account BLM's responsibilities for threatened, endangered, and otherwise sensitive species.

We also believe that wildlife, including plants, IS irretrievably and irreversibly committed to be lost if the Proposed Action is implemented because of impacts from grazing, mining, and ORVs (EIS, p. 87).

The paragraph on short-term uses vs. long-term productivity needs to be augmented.

We appreciate the opportunity to comment on this EIS and proposed plan. BLM has done much hard work in producing it and we hope our suggestions resulting from detailed consideration and analysis of the Draft EIS will be incorporated into the Final EIS and RMP.

Sincerely,

Cary W. Meister

Cary W. Meister
President

During April 9 -12, public hearings in Phoenix and Gila Bend and public meetings in Ajo, and Quartzsite were held for discussion on the draft RMP. Again, no cultural concerns were voiced from representatives from American Indian tribes or councils. A review of Persistence and Power (Cultural Systems Research, Inc. 1978), a document discussing areas of concern for various Indian groups, did not reveal any information on Table Top Mountain.

289-18 As stated in Chapter 2, page 21 of draft EIS, proposals involving areas of ground disturbance are approved (including range improvements such as fence or well construction, cattle holding grounds, etc.) site specific cultural resource field evaluations will be completed. These include Class I literature review, as well as Class III field inventory in areas which have not been previously surveyed for archaeological remains. Impacts to significant cultural resources identified during these inventory stages would be avoided by redesigning the project in another location or by developing mitigating measures to reduce adverse impacts. The latter are discussed in 36 CFR 800.

The conclusion paragraph on page 65 for the land tenure issue should have included reference to Chapter 2, which makes it clear that prior to disposal of public lands, significant cultural sites are identified and mitigated, if necessary, to reduce adverse impacts. As stated in the draft RMP/EIS on page 21, a Class III inventory, which is an intensive on the ground search for cultural remains, and a Class I

literature search will be conducted prior to transfer of title of lands. In some cases, a Class II sample inventory is appropriate for land disposal. Impacts to cultural resources by land disposals are avoided or mitigated in the same manner as those by ground disturbances. However, BLM in consultation with the State Historic Preservation Office has developed a MOA which permits an adequate Class II cultural inventory on BLM lands proposed for exchange with the State instead of an intensive Class III inventory (MOA Regarding Cultural Resource Protection Responsibilities among BLM, Arizona State Land Department, Arizona State Historic Preservation Officer, and Arizona State Museum 1984).

289-19 The information on public attitudes and expectations is descriptive and general. It is illustrative and is not based on a scientifically valid sample.

289-20 Not all naturally occurring springs and water holes in the Lower Gila Resource Area are designated Public Water Reserves. However, like other ground water users, the Bureau can protect its interest in specific sources by filing for water rights with the Arizona Department of Water Resources.

In general, water levels are in decline in the major ground water basins within the RMP/EIS area. However, because local conditions vary, the Arizona DWR should be contacted for site specific data.

The Arizona Department of Health Services has detected the presence of DDT in the Gila River and Painted Rock Reservoir. This pesticide, which is no longer authorized for use in the United States, is not used on public lands in the RMP/EIS area.

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THE SACRED MOUNTAIN TRADING POST
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HC-33 Box 436A
Flagstaff, AZ 86001

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23 Miles North of Flagstaff, Arizona 86001

May 5, 1985

Phoenix District BLM
2015 West Deer Valley Rd.
Phoenix, Az 85027

Re: Wilderness Study Areas
within the State of Arizona

Dear Sirs:

Several areas that I've been interested in in regards to Wilderness status I have learned are not being proposed for such status by the Bureau of Land Management. I have several times written to your agency requesting information about these locattions as well as writing you several long letters as to the reason why I felt certain areas deserved attention.

Needless to say I have not recieved any replies nor information about rublic Hearings. Frankly, I'm not happy at the attitude on the part of the BLM in regards to such matters. Those who are a small loud mouth minority seem to capture your attention more. I refer to such groups as to off-road people who scatter beer cans all overour State. I'm also disgusted with the fact that BLM does not give adequate consideration to archeaological areas, nor to the fact that many of the areas under their domain have religious significance to the various Tribes who once owned those areas and still consider them as import ant. Both these issues are covered by Federal Acts which seem to have very little bearing on BLM's consideration.

Specifically I'm referring to Baboquivari Peak, Pichacho, and Table Mountain as well as several others that I had written to you about a couple of years ago. I also wish to point out that the North Maricopa Mountains have very important cultural areas as well as desert wild life that needs protecting. But again you seem to be afraid of the "Survivalist Mentality" if it could be called a mentality.

Coyote Mountain should be protected regardless of the size of the parcel. Such reasoning about it being too small is totally indefensible. But we find that those who make such statements are impossible to find since they hide inside some office. I feel that the entire process has been one where the BLM has already made up their minds and are now just going through the motions of making it appear that they have really done all they can. But exactly for whom?

I find all the comments about copper possibilities interesting in light of the fact that this State has seen a record number of mine shut downs in the last four or five years, with the copper companies saying that they aren't sure when they'll ever open again because of the world price and glut of the copper market. Its very hard to make a case for any shortage of copper.

With the huge growth in the population of Arizona and the large number of people from California who come over to Arizona due to their crowded conditions, plus the fact that each year we see more and more winter visitors not only from the east but from Canada it appears that we really need to have as much open space as we can get- undisturbed by screeming vehicle engines of any kind.

The Arizona deserts are not all that vast when one looks at what is happening to the State. Also when one looks at the tremendous over-crowding that is happening to our National Parks and Monuments. This is going to get worse not better and it is time that the BLM, Forest Service as well as the National Park Service take a large over all view of what is happening.

So with this I hope I have made it clear that I feel that there has been too little concern for saving Arizona from the few who want to destroy our deserts and take the long time view and realize that once its destroyed that is it. So in the over-all it would be best to err on the part of being over-protective than to later say "it should have been done differently". As for the present exploitative point of view all I can say is that "this too will pass"!

Sincerely yours
William Beaver
William Beaver

Copies to Washington D.C.

292

WILLIAM A. DAVIS
1155 WEST GIACONDA WAY
TUCSON, ARIZONA 85704

May 6,1985

Phoenix District Bureau of Land Management
2015 West Deer Valley Road
Phoenix, AZ 85027

Re:Wilderness Areas

Dear Sirs--

I understand that you have recently released recommendations for areas to be designated wilderness.

I hope you will include all the areas as wilderness. We have so little of it left;we should save as much as possible of our American heritage.

I am particularly interested in Baboquivari Peak,an area I know well. I hope you will include both the present B L M land and contiguous state land in wilderness.

Very truly

William A Davis

William A.Davis

CC: Senator Dennis DeConcini
Comgressman Jim Kolbe

293

[redacted]

Tucson, Arizona
May 5, 1985

BUREAU OF LAND MANAGEMENT
Phoenix District
2015 W.. Deer Valley Rd.
Phoenix, AZ 85027

Dear Sirs:

I amdistressed to learn that recommendations for wilderness protection in Arizona made by the Bureau of Land Management completely eliminate many of the areas I consider crucial. Since your agency has requested public comment, I will state my views.

The Little Horn Mountains (two sections) provide important habitat for bighorn sheep and the desert tortoise. Unless designed as wilderness, these areas may be threatened by mining, oil and gas exploration, and other types of intrusion. Since they are adjacent to the Eagletail Mountains which are being proposed for wilderness, it seems important to provide the same protection for the approximately 100,000 acres of the Little Horns.

Why are the Coyote Mountains not being recommended for wilderness status? Though small in area, they nevertheless contain "special status" wildlife and plant species, as well as important former Hohokam Indian dwelling sites.

The Baboquivari Peak area, nearer Tucson, certainly deserves the utmost in protection and I sincerely hope that the BLM will proceed with its plans to acquire 3,000 additional acres of state land in order to enlarge the size of the area being given wilderness designation.

Other areas which I feel deserve wilderness protection include the Signal Mountains (desert tortoise and bighorn sheep), North Maricopa Mountains (also tortoise and bighorn sheep habitat), White Canyon, Mt. Wilson (more bighorn sheep), - to list several of those which have been undergoing study.

Please re-study these and other areas.. I feel it is urgent that more of Arizona's "wilderness" areas be so designated so that they can be preserved, too. Thank you.

Sincerely,

Linnea Holland

Linnea Holland (Mrs. S.T.)
7460 N. San Anna Dr.
Tucson, AZ 85704

cc: Senator Goldwater
Senator DeConcini
Congressman Udall

295

MAY 8, 198

DEAR SIRS:

I THOUGHT THE RESPONSIBILITY OF THE B.L.M. WAS TO EFFICIENTLY MANAGE THE PUBLIC DOMAIN. BECAUSE THIS NATION CURRENTLY IMPORTS THE VAST MAJORITY OF ITS BASE AND STRATEGIC METALS FROM OVERSEAS SOURCES DOESN'T MEAN THAT THESE SOURCES WILL ALWAYS BE HANDY AND ECONOMICALLY EXPEDIENT. HOW DO ADMINISTRATORS WITH NO EXPERTISE IN MATTERS CONCERNING MINERAL TECHNOLOGY PRESUME TO KNOW WHAT NEW INDUSTRIAL APPLICATIONS UTILIZING ANONYMOUS, UNDISCOVERED MINERALS MIGHT BE IMMINENT. BY THE INDISCRIMINATE CLOSING OF ENTIRE MOUNTAIN RANGES TO MINERAL EXPLORATION, YOU COULD BE POSING SERIOUS THREATS TO THIS COUNTRY'S INDEPENDENCE AND NATIONAL SECURITY.

TODAYS GOVERNMENTAL POLICY REGARDING FEDERALLY ADMINISTERED PUBLIC LANDS SEEMS TO BE DETERMINED BY THE ONE-DIMENSIONAL IDEALS OF THE ENVIRONMENTAL LOBBYISTS. FURTHERMORE, THE ECONOMIC PLIGHT WITHIN THE MINING INDUSTRY HAS ONLY BEEN INTENSIFIED BY RECENT EXTENSIVE FEDERAL LAND RECLASSIFICATIONS. CONTINUED CLOSURE OF LANDS TO MINERAL DEVELOPMENT CAN ONLY POUND NAILS IN THE COFFIN OF AMERICAN MINES. FOLLOW THE PIPE DREAM OF ENVIRONMENTAL IDEALISTS; ELIMINATE POTENTIALLY VALUABEE LAND TO PROSPECTING; FORGET ABOUT THE LEGACY AND ACCOMPLISHMENTS OF THE AMERICAN MINING MAN; IT'S HIGHLY LIKELY THAT OUR CHILDREN WILL FORGET ABOUT FREEDOM AND INDIVIDUALITY.

OPPOSED TO W.S.A.

GENE R. RALPH

G.R. Ralph
914 S 3rd Ave.
Yuma, Az 85364

RECEIVED

298

Mark Sterkel
Navajo National Monument
HC63, Box3
Tonalea AZ 86044-9704

May 7, 1985

Staff: Bureau of Land Management
Phoenix area District
2015 W. Deer Valley Rd.
Phoenix, AZ 85027

Dear BLM Staff;

I have had the oppurtunity to review the Agency recommendations for wilderness designation, and have a few comments and suggestions for consideration and the record. I myself deal with public resources, though in a different manner than your agency. Seeing the US and the rest of the industrialized world devour wild pristine lands at senseless rates, I feel that wilderness is a most definite need for our society. I ask you, what is the harm in designating largs biologically complete units of wild land as wilderness? Spoiled wilderness can never really be returned to its pristine state, but conversely, wild pristine lands designated wilderness stay wild and pristine, and can always have the potential of being developed, though I wuoud hope it would never happen.

There are too many "no wilderness" recommendations in your plan. WHY?? Considering the potential to later use the resources, and the large BLM holdings, I feel as much acreage as possible should be recommended as wilderness, and that your agency should give whole-hearted support to the recommendation process.

The following WSA's should be designated and recommended in their entirety, with the addition of as much additional acreage as possible.

- White Canyon
- Mt. Wilson
- Coyote Mountains
- Baboquivari Peak **
- Hell's Canyon
- Picacho Mountains

** Baboquivari Peak area is quite unique, and a treasure to all Americans, since all AMericans own BLM land, not just the subsidized ranchers. This wilderness should include the roughly 3000 acres of nearby state land that you can trade for. (are cattle really that dam important that we will overgraze and waste the last vestiges of untrampled sonoran wildlands??)

Every single area in the Gila South EIS should be recommeded for wilderness, but with the inclusion of additional acreage to make the WSA's "complete biological units", even if it means closing some minor dirt tracks or limiting some permittie's damaging hords.

Please consider the above facts, and try to recommend as muchwilderness as you can. What do we have to loose??

Sincerely, Mark Sterkel

Mark Sterkel

299

JAMES M MYERS SP26
1295 W MIRACLE MILE
TUCSON, ARIZ.
85705

TUCSON AZ
5-8-85

PHOENIX DIST BLM

I WOULD LIKE TO VOICE MY OPPOSITION TO WILDERNESS RECOMMENDATIONS FOR ALL DISTRICTS IN YOUR AREA. THERE IS NOT ANY THING TO BE GAINED BY SUCH FOOLISH AS THIS.

THANK YOU

J. M. MYERS SP. 26
1295 W. MIRACLE MILE
TUCSON ARIZONA 85705

J. M. Myers

300

639 Fremont Circle
Green Valley, Az. 85614
May 8, 1985

Phoenix District BLM
2015 W. Deer Valley Rd.
Phoenix, Az. 85027

Gentlemen:

As members of the National Audubon Society and other nature groups, we would like to add our voice in support of recommendations of wilderness designations in Arizona. In fact, perhaps they do not go far enough.

As our most immediate concern (geographically) we particularly are interested in the Baboquivari Peak wilderness, and agree that it should also include 3,245 acres of contiguous state land that should be acquired by trade.

Yours truly,

Mr. and Mrs. W. T. Mason

RECEIVED
MAY 10 1985
BLM PHOENIX DISTRICT OFFICE
PHOENIX, ARIZONA

RMP COMMENTS FOR LOWER GILA SOUTH

No Wilderness Comments:

There were 135 comments received that voiced similar concerns about the proposed plans described and analyzed in the draft Lower Gila South RMP/EIS. These comments were requesting the Bureau of Land Management not to designate any of the wilderness study areas wilderness for several reasons. These reasons were:

1. Closure to vehicular use.

2. Closure would not allow the older citizens to utilize the areas for scenic rides, rock and gem hunting, wildlife viewing and other related activities.

3. Many of the winter visitors to the area aren't able to hike or enter the areas without motorized transportation because of handicaps or other health reasons.

4. Wilderness is just another "bureaucratic land grab".

5. Designating the area's wilderness would close them to future mineral exploration and development.

6. Closing the areas to motorized vehicular use would have an adverse economic impact on the surrounding communities.

7. The areas do not meet the wilderness criteria.

The following persons submitted comments voicing all or some of the above listed reasons for not designating the areas wilderness:

10. Mr. and Mrs. Robert Allison
11. David P. Trenholm
12. A.S. Harman
13. Mr. and Mrs. Robert Kloster
14. Mr. and Mrs. Don McMurry
15. David Taylor
16. Lila and Martin Jorde
18. Mr. and Mrs. H.F. Waggoner
19. Mr. and Mrs. Richard C. Bias
20. Rodney and Audrey Isaacson
22. Mr. and Mrs. W.H. Douglas
64. John and Bernice Soltis (50 others signed)
70. Deloris Millard
71. Morris L. Millard
94. Claud Johnson
95. Ellis Merritt
96. Alyce L. Clogle
97. G.D. Eaton
99. Norma Campbell
110. Paul Fisher
111. Koss Kirkpatrick
113. Homer R. Owens
114. Ora J. and Eugene J. Shumaker
117. John R. Wilson
118. Ellis Merritt
119. Helen Merritt
120. W.C. Saladiv
121. T.E. Porowski
122. Lloyd T. Pruitt
123. Mr. & Mrs. Lawrence L. Burton, Sr.
125. Arthur J. Heilkisar
126. Walter and Alice Pappin
127. R.D. (Bob) Cooper
128. W.M. Davis
129. Ruth M. Thompson
130. J.P. Herz
146. Clarence Gracely
147. Margaret Gracely
148. C.O. Hartman
149. Bill Christman
150. Donald E. McKay
151. James F. George
152. David Taylor
153. Joe Sizlnor
154. Kenneth R. King
155. John Heflin
156. G. Simard
157. Dan Todd
158. Samuel Heflin
159. Chester F. Hunt
160. J.O. Buffaler
161. Dorothy Christie
162. John and Marilyn McFate
163. Earl K. Johnson
164. Raive Munts
165. Karl Luthin
166. Hazel Vincent
167. Nathan F. Johnson
168. Bob Todd
169. Dave Johnson
170. Kendriek Holder
171. Clinton F. Huntoon
172. Gene Mrotek
173. Orrill May Stedman
174. Elizabeth Palmer
175. R.R. Palmer
176. Dale Johnson
177. Fred Williams
178. Gene A. Verely
179. No Signature
180. Louis C. McHenry
181. Maggie Mince, John Whitson Amelia Whitson
182. P.L. Baumann
183. Douglas Hunt
184. Pete Peterson
185. Emile Claud

186. William Burney
187. Cary Cousin
188. James L. Smith
189. Marlene Wilson
190. Ted Schroedoer
191. Paul E. Neff
192. C.R. Hafford
193. Robert D. Hamilton
194. Ralph F. Griffin, Jr.
195. James Herring
196. Gary Howard
197. K.O. Sherwood
198. L.C. Miller
199. Randi Shumway
200. Susan Thompson
201. John Merly
202. Michael Thompson
203. Robert R. Aken
204. James Collins
205. Edward Collins
206. D. Tivitchell
207. William E. Bohme
208. P.W. Thompson
209. Eula Belle Bohme
210. Delores K. Aker
211. Delores Harrington
212. Charles Schwab
213. Joyce Wright
214. Ernie Fetzer
215. John Blankenship
216. Daryl V. Link
217. P. Strough, Jr.
218. Opal Illingworth
219. William Illingworth
220. Arthur J. Gross
221. Vijare Winkers
222. Leslie E. Kumles
223. Wayne Winters
224. Arley Escopule
225. Bailey Escopule
226. Jessie Purtee
227. Laura Ann Woodard
228. Steve Henderson
229. Owen Ladhery
230. Paul Cohn
231. Wanda Houghtelin
232. Les Bunde
233. Dean Houghtelin
234. George Corlery
235. Maynard Capewell
236. Harry Williamson
237. M.G. Bush
238. Thomas J. Forqueron
239. Ruth White
240. Dottie M. Williamson
241. Glenna C. Auld
242. Hondo Dunn
243. James Rice
244. James A. Goble

ALL WILDERNESS

There were 65 comments received that requested that the Bureau recommend all 12 WSAs studied in the draft EIS for wilderness designation. Many of the comments stated that the increased population of the southwest, (principally the Tucson and Phoenix areas) as the need to have these areas designated wilderness to protect the areas from development and mining disturbance. Also, there is a need to have large open areas free of roads and evidence of man for the people to go to for peace of mind and away from the rush and noise of the large metropolitan areas.

The following persons submitted comments voicing all or some of the above reasons for recommending wilderness designation for all 12 WSAs:

23. Leroy Zimmerman
25. M.K. Daly
26. Rosemary Spaulding
27. Mr. and Mrs. J.E. Lilly
34. Scott Hudson
36. Nancy L. Russell
42. Majorie Woodruff
44. J. Salty Honeharik
46. Nancy Tukey
48. John S. Jachus
49. Peggy Ann Doty
52. Greg Barr
53. John Pamperin
55. Donovan H. Lyngholm
60. Mary Sojourner
62. Dara Newman-Samuels
63. D. Scott Samuels
65. Maureen Mageau-DeCindis
66. Victoria M. Scheffer
67. Neil S. Klemek
68. Sue Baughlman
69. Mrs. George Veassis
72. Rebecca P. Allison
73. Marcia and George Colliat
75. Sandie and Fred Nelson
76. Ann S. Johnson
77. Lilliam A. Santomaria
78. Kevin J. Fernlund
79. Henry and Joy Schultz and
80. Rhoela V. Varn
81. Nancy Stevenson
82. J. Lorenzini
83. Elizabeth Pomich
86. Larry Langstaff
89. John Barcellos
90. Holly Carman
100. John E. Earl
101. Coco Savage
103. Molly Coffin and Tris Coffin
104. Marie A. Burling
107. Robert A. Kerry
109. Linda Schnabel Stitzer
112. Wallace J. Gibbs
141. Wolf and Dorothy Pelech
144. Valerie Payson
249. Geoffry Platts
254. Edward H. Murphy
261. Joan Ridder
265. P.A. Nisbet
272. Mary C. Newtin
274. Donald A. Brown
275. Mrs. Sherry Gillingham
277. Mrs. Thomas Spencer
280. Richard A. Coxhead
283. L.E. Spesard
286. Robert W. Grange
287. Helene Unland-Rinjel
288. Jule Drown
290. Maurice M. Fetters
294. Mr. and Mrs. S. Alberto Castanedo
296. Edward P. Klohe
297. Janet K. Morrison
301. Mr. and Mrs. James Fitzsimmons

APPENDICES

APPENDIX 1
RESOURCE MANAGEMENT PLAN ACTION STEPS
Bureau of Land Management, Phoenix District, Arizona

The planning process described in BLM planning regulations 43 CFR part 1600, consists of nine action steps: (1) Inventory Data and Information Collection; (2) Identification of Issues; (3) Development of Planning Criteria; (4) Analysis of the Management Situation; (5) Formulation of Alternatives; (6) Estimation of Effects of Alternatives; (7) Selection of the Preferred Alternative; (8) Selection of the Resource Management Plan; (9) Monitoring and Evaluation. The action steps are summarized below. The first seven action steps have been completed.

Step 1: Inventory Data and Information Collection

This step involves the collection of various kinds of issue-related resource, environmental, social, economic, or institutional data needed for completion of the process.

Step 2: Identification of Issues

This step is intended to identify resource management problems or conflicts that can be resolved through the planning process.

Step 3: Development of Planning Criteria

During this step preliminary decisions are made regarding the kinds of information needed to clarify the issues, the kinds of alternatives to be developed, and the factors to be considered in evaluating alternatives and selecting a preferred resource management plan.

Step 4: Analysis of the Management Situation

This step calls for a deliberate assessment of the current situation. It includes a description of current BLM management guidance, a discussion of existing problems and opportunities for solving them, and a consolidation of existing data that is needed to analyze and resolve the identified issues.

Step 5: Formulation of Alternatives

During this step several complete, reasonable resource management alternatives are prepared; including one for no action and several that strive to resolve the issues while placing emphasis either on environmental protection or resource production.

Step 6: Estimation of Effects of Alternatives

The physical, biological, economic, and social effects of implementing each alternative are estimated in order to allow for a comparative evaluation of impacts.

Step 7: Selection of the Preferred Alternative

Based on the information generated during Step 6, the District Manager identifies a preferred alternative. The draft RMP/EIS document is then prepared and distributed for public review.

Step 8: Selection of the Resource Management Plan

Based on the results of public review and comment, the District Manager will select a proposed resource management plan and publish it along with a final EIS. A final decision is made after a thirty-day appeal period on the final EIS.

Step 9: Monitoring and Evaluation

This step involves the collection and analysis of long-term resource condition and trend data to determine the effectiveness of the plan in resolving the identified issues, and to assure that implementation of the plan is achieving the desired results. Monitoring continues from the time the RMP is adopted until changing conditions require a revision of the whole plan or any portion of it.

SOURCE: 43 CFR part 1600

APPENDIX 2
EPHEMERAL ALLOTMENTS AND SECTION 15 LEASES
Bureau of Land Management, Phoenix District, Arizona

Ephemeral Allotments

Allotment Number	Allotment Name	Federal Acres
3002	A Lazy T	4,927
3003	Amavisca	26,110
3004	Arnold	22,865
3005	Artex	80,658
3024	Dendora Valley	31,450
3033	Gable Peterson	316
3036	Gila River Community	56,334
3037	Gillespie	15,171
3043	Hazen Sheppard	23,129
3044	Jagow Kreager	13,174
3049	Layton	5,780
3054	Mariani	8,092
3057	Mumme	5,283
3062	Painted Rock	297
3064	Palomas	109,808
3068	Powers Butte	7,577
3077	Sevey	2,261
3082	Stout	3,722
	TOTAL	416,954

Section 15 Grazing Leases

5001	Amavisca	2,040
5000	Bagwell	3,719
5002	Bagwell	3,278
5003	Arizona Title & Trust	1,440
5024	C. Hill & J. Palmer	80
5036	Jojoba Plantation & Prod. Inc.	4,576
5044	K.K. Skousen (Caliente Farms)	2,728
5006	Whitewing Ranch Co.	523
	TOTAL	18,384

SOURCE: Lower Gila Resource Area grazing files

APPENDIX 2A

Special Ephemeral Rule

Published in the Federal Register, Vol. 33. No. 238, Saturday, December 7, 1968 (Livestock Grazing Ephemeral Range: Arizona, California and Nevada).

In accordance with 43 CFR 4115.2-1 regarding special rules for grazing districts and pursuant to the receipt of recommendations of the State Directors for Arizona, California and Nevada and a factual showing of its necessity, a special rule for range designated as ephemeral is hereby approved.

Ephemeral (annual) ranges lie within the general southwest desert region extending primarily into southern Arizona, southern California and southern Nevada and include portions of Mohave, Sonoran and Chihuahuan Deserts. The region is characterized by desert type vegetation ,some of which may be classed as ephemeral only. Ephemeral range does not consistently produce forage, but periodically provides annual vegetation suitable for livestock grazing. In years of abundant moisture and other favorable climatic conditions a large amount of forage may be produced. Favorable years are highly unpredictable and the season is usually short lived. Ephemeral areas fall generally below the 3,200 foot contour and below the 8-inch precipitation isoline. A minor percentage of the total plant composition is made up of desirable perennial forage plants and potential to improve range condition and produce a dependable supply of forage by applying intensive management practices is lacking.

Because of the unique characteristics of ephemeral range the following special rule shall apply as follows:

Applicable allotments or uses shall be formally designated by the District Manager as ephemeral range.

An annual application by qualified licensees or permittees is not required unless grazing use is desired. On a year-to-year basis, whenever forage exists or climatic conditions indicate the probability of an ephemeral forage crop, livestock grazing may be authorized upon application pursuant to any management requirements for the allotment.

Use of base property (water base) during nonforage years is not feasible or economical and no use of base properties is required except during these periods when ephemeral forage is available and livestock grazing occurs.

Therefore:

An annual application per 43 CFR 4115.2(c)(9) is not required unless grazing use is described.

Grazing capacity per 43 CFR 4115.2-1(c)(3) may be based on a reasonable potential for forage.

Substantial use of grazing privileges per 43 CFR 4115(c)(10) is not required.

A year round operation per 43 CFR 4115.2(c)(1) is not required.

Substantial use of base property per 43 CFR 4115.2-1(c)(7) is not required.

This special rule shall immediately apply to the Phoenix, Safford and Arizona Strip Districts in Arizona, the Bakersfield District in California and the Las Vegas District in Nevada upon recommendation for adoption in that District by the respective District Advisory Board and concurrence by the State Director.rd and Arizona Strip Districts in Arizona, the Bakersfield District in California and the Las Vegas District in Nevada upon recommendation for adoption in that District by the respective District Advisory Board and concurrence by the State Director.

APPENDIX 3
LANDS IDENTIFIED FOR DISPOSAL IN THE LOWER GILA SOUTH RMP/EIS AREA*
Bureau of Land Management, Phoenix District, Arizona

Township and Range	Section	Subdivision	Acres
T. 5 S., R. 2 E.,	5:	Lots 1, 2, 3, 4, S½N½, S½;	669.00
	6:	Lots 1, 2, 3, 4, 5, 6, 7, S½NE¼, SE¼NW¼, E½SW¼, SW¼;	664.01
	7:	Lots 1, 2, 3, 4, E½W½, E½;	629.76
	8:	E½;	320.00
	9:	All.	640.00
		TOTAL:	2,922.77
T. 4 S., R. 1 E.,	1:	Lots 1, 2, 3, 4, 5, 6, 7 SE¼NE¼, S½NW¼, SW¼, W½SE¼;	665.46
	3:	Lots 1, 2, 3, 4, S½N½, S½;	639.32
	9:	All;	640.00
	10:	W½;	320.00
	11:	All;	640.00
	12:	Lots 1, 2, 3, 4, W½E½, W½;	665.56
	13:	NW¼NE¼;	40.00
	19:	W½;	320.00
	31:	E½;	320.00
	34:	E½;	320.00
	35:	W½.	320.00
		TOTAL:	4,890.34
T. 5 S., R. 1 E.,	2:	Lots 1, 2, 3, 4, S½N½, S½;	640.16
	3:	Lots 1, 2, 3, 4, S½N½, S½;	639.92
	7:	E½;	320.00
	8:	W½;	320.00
	9:	W½;	320.00
	10:	All;	640.00
	11:	W½;	640.00
	13:	S½SW¼, SW¼SE¼, E½SE¼;	200.00
	15:	N½NE¼, SW¼NE¼, W½, SW¼SE¼;	480.00
	16:	All;	640.00
	17:	W½.	320.00
		TOTAL:	5,160.08
T. 6 S., R. 1 E.,	2:	Lots 1, 2, 3, 4, S½N½, S½;	638.40
	3:	Lot 4, SW¼NW¼, S½;	399.60
	4:	Lots 1, 2, 3, 4, S½N½, S½;	638.60
	7:	Lots 1, 2, NE¼, E½NW¼;	312.43
	9:	SW¼NW¼, S½;	360.00
	10:	All;	640.00
	11:	All;	640.00
	14:	N½;	320.00
	15:	W½;	320.00
	18:	Lots 3, 4, E½SW¼;	152.88
	19:	Lots 1, 2, E½NW¼;	153.02
	21:	N½;	320.00
	26:	N½;	320.00

APPENDIX 3 (Continued)
LANDS IDENTIFIED FOR DISPOSAL IN THE LOWER GILA SOUTH RMP/EIS AREA*

Township and Range	Section	Subdivision	Acres
T. 6 S., R. 1 E., (Continued)	27:	S½;	320.00
	28:	W½NW¼, E½SE¼;	160.00
	29:	W½;	320.00
	31:	Lots 1, 2, 3, 4, E½, E½W½;	626.84
	32:	All;	640.00
	33:	NW¼;	160.00
	35:	E½SW¼, SE¼.	240.00
		TOTAL:	7,681.77
T. 7 S., R. 1 E.,	2:	Lots 1, 2, 3, 4, S½N½, S½;	640.56
	3:	Lots 1, 2, 3, S½NE¼, SE¼NW¼, SE¼;	320.14
	5:	Lots 1, 2, 3, 4, S½N½;	319.16
	6:	Lots 1, 2, 3, 4, 5, S½NE¼, SE¼NW¼.	313.04
		TOTAL:	1,592.90
T. 2 S., R. 1 W.,	25:	N½, SW¼;	480.00
	26:	N½, SE¼;	480.00
	27:	E½;	320.00
	34:	NE¼;	160.00
	35:	All.	640.00
		TOTAL:	2,080.00
T. 3 S., R. 1 W.,	1:	SE¼;	160.00
	3:	SE¼;	160.00
	4:	SE¼;	160.00
	11:	W½, SE¼;	480.00
	12:	All;	640.00
	13:	All;	640.00
	14:	NE¼;	160.00
	21:	W½W½;	160.00
	22:	E½;	320.00
	23:	S½;	320.00
	24:	All;	640.00
	25:	All;	640.00
	26:	All;	640.00
	27:	W½;	320.00
	28:	W½W½;	160.00
	33:	NW¼, SE¼;	320.00
	34:	SW¼;	160.00
	35:	All;	640.00
	36:	All.	640.00
		TOTAL:	7,360.00

APPENDIX 3 (Continued)
LANDS IDENTIFIED FOR DISPOSAL IN THE LOWER GILA SOUTH RMP/EIS AREA*

Township and Range	Section	Subdivision	Acres
T. 1 S., R. 2 W.,	1:	Lots 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20;	610.74
	2:	Lot 3, S½NW¼;	120.01
	3:	SE¼NE¼;	40.00
	10:	All;	640.00
	11:	All;	640.00
	12:	Lots 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16;	602.17
	13:	Lots 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16;	603.09
	14:	All;	640.00
	15:	All;	640.00
	22:	E½, E½NW¼, SW¼;	560.00
	23:	All;	640.00
	24:	All;	640.00
	25:	NW¼, S½;	480.00
	26:	Lots 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16;	639.36
	27:	All;	640.00
	28:	S½;	320.00
	30:	Lot 1;	39.87
	31:	Lots 1, 3, 4, N½NE¼, NE¼NW¼, W½SW¼;	319.78
	32:	S½N½, SW¼SW¼, SE¼;	360.00
	33:	NE¼;	160.00
	34:	NW¼, N½SW¼, SE¼SE¼, SE¼;	440.00
	35:	All;	640.00
	36:	All.	640.00
		TOTAL:	11,055.02
T. 2 S., R. 2 W.,	5:	Lots 1, 2, SE¼NE¼;	117.29
	6:	N½SE¼;	80.00
	18:	Lots 1, 2, E½NW¼;	153.47
	28:	NW¼NE¼NE¼, N½SW¼NE¼NE¼, S½NE¼SW¼NE¼, N½SE¼SW¼NE¼, S½SW¼SW¼NE¼, N½NE¼NE¼NW¼, NW¼NE¼NW¼, SE¼SE¼NW¼, W½W½SW¼, SW¼NE¼SW¼, NW¼SE¼SW¼, S½SE¼SW¼, N½NE¼SE¼, SW¼NE¼SE¼, S½NE¼NW¼SE¼ S½SE¼NW¼SE¼, S½NE¼SW¼SE¼, SE¼SW¼SE¼, S½SW¼SW¼SE¼;	195.00
	33:	NW¼NE¼NE¼, W½NE¼, W½SE¼NE¼, S½NE¼SE¼NE¼, SE¼SE¼NE¼, N½NE¼NW¼, SE¼NE¼NW¼, SW¼NW¼NW¼, E½SE¼NW¼, NE¼SW¼, E½NW¼SW¼, SW¼NW¼SW¼, S½SW¼.	325.00
		TOTAL:	870.76

APPENDIX 3 (Continued)
LANDS IDENTIFIED FOR DISPOSAL IN THE LOWER GILA SOUTH RMP/EIS AREA*

Township and Range	Section	Subdivision	Acres
T. 1 S., R. 3 W.,	24:	SE¼NW¼, SW¼SW¼, E½SW¼;	160.00
	25:	NE¼NE¼, W½NE¼, W½, W½SE¼.	520.00
		TOTAL:	680.00
T. 1 S., R. 4 W.,	35:	Lots 1, 3, 4, 5, 6, 7, 8, 9, 10, SW¼NE¼NE¼.	145.46
		TOTAL:	145.46
T. 3 S., R. 4 W.,	27:	NE¼.	160.00
		TOTAL:	160.00
T. 4 S., R. 4 W.,	3:	SE¼;	160.00
	6	Lots 4,5;	75.82
	7:	Lots 1,2,3,4, E½W½;	314.20
	8:	SE¼;	160.00
	18:	Lots 13, 14, 15, 16, 17, 18, 19, 20, 21, 22;	418.11
	21:	NW¼NW¼;	40.00
	22:	E½W½;	160.00
	27:	E½W½.	160.00
		TOTAL:	1,488.13
T. 5 S., R. 4 W.,	6:	Lots 3, 4, 5, 6, 7, 8, 9, 10, W½SE¼;	401.92
	7:	Lots 3, 4, 5, 6.	166.90
		TOTAL:	568.82
T. 6 S., R. 4 W.,	19:	Lots 3,4, E½, E½SW¼;	473.39
	31:	Lots 1,2, NE¼, E½NW.	313.81
		TOTAL:	787.20
T. 1 S., R. 5 W.,	35:	N½;	320.00
	36:	N½.	320.00
		TOTAL	640.00
T. 2 S., R. 5 W.,	3:	SE¼SE¼;	40.00
	28:	W½SW¼;	80.00
	33:	W½W½.	160.00
		TOTAL:	280.00
T. 1 S., R. 6 W.,	31:	W½.	320.00
		TOTAL:	320.00

APPENDIX 3 (Continued)
LANDS IDENTIFIED FOR DISPOSAL IN THE LOWER GILA SOUTH RMP/EIS AREA*

Township and Range	Section	Subdivision	Acres
T. 1 S., R. 7 W.,	19:	E½SW¼, SE¼;	240.00
	20:	S½S½;	160.00
	21:	SW¼SW¼;	40.00
	26:	S½;	320.00
	27:	All;	640.00
	28:	NW¼, N½SW¼, SW¼SW¼, E½SE¼;	360.00
	29:	All;	640.00
	30:	NE¼, E½NW¼, N½SE¼, SE¼SE¼;	360.00
	31:	Lots 3, 4;	72.58
	33:	NE¼NE¼, S½NE¼, N½S½.	280.00
		TOTAL:	3,112.58
T. 6 S., R. 7 W.,	15:	SW¼;	160.00
	23:	NW¼SW¼, S½SW¼;	120.00
	33:	E½SW¼, SE¼SW¼, SE¼.	280.00
		TOTAL:	560.00
T. 12 S., R. 5 W.,	7:	E½E½;	160.00
	18:	E½E½;	160.00
	19:	NE¼NE¼, S½NE¼, E½SW¼, SE¼.	360.00
		TOTAL:	680.00
T. 13 S., R. 5 W.*	25:	N½NE¼.	80.00
		TOTAL:	80.00
T. 12 S., R. 6 W.*	11:	N½, SW¼, E½SE¼;	560.00
	12:	NW¼.	160.00
		TOTAL:	720.00
T. 1 S., R. 8 W.,	20:	NE¼NE¼, SE¼SE¼;	80.00
	21:	SW¼, S½SE¼;	240.00
	22:	E½, E½NW¼;	400.00
	23:	SE¼.	160.00
		TOTAL:	880.00
T. 1 S., R. 9 W.,	7:	Lots 1, 2, 3, 4, E½W½;	302.96
	14:	NE¼, S½NW¼;	240.00
	16:	E½SE¼.	80.00
		TOTAL:	622.96
T. 1 N., R. 10 W.,	13:	SW¼, N½SE¼.	240.00
		TOTAL:	240.00
T. 5 S., R. 10 W.,	1:	Lots 1, 2, S½NE¼;	80.04
	11:	N½NW¼;	80.00
	18:	Lot 1, W½NW¼, SE¼NW¼, N½SE¼, SE¼SE¼.	239.00
		TOTAL:	399.04

APPENDIX 3 (Continued)
LANDS IDENTIFIED FOR DISPOSAL IN THE LOWER GILA SOUTH RMP/EIS AREA*

Township and Range	Section	Subdivision	Acres
T. 5 S., R. 11 W.,	33:	N½SE¼.	80.00
		TOTAL:	80.00

*The following areas have public lands that cannot be described by aliquot parts and need cadastral survey work prior to disposal:
T. 13 S., R. 5 W., Sec. 25.
T. 12 S., R. 6 W., Secs. 10, 22, 27.

T. 6 S., R. 11 W.,	1:	S½SE¼;	80.00
	10:	N½NW¼;	80.00
	23:	W½SE¼, NE¼NE¼SE¼, E½SE¼SE¼;	110.00
	24:	S½NW¼;	80.00
	27:	E½NE¼, SE¼;	240.00
	29:	W½NE¼NW¼, W½NW¼, SE¼NW¼.	140.00
		TOTAL:	730.00
T. 7 S., R. 11 W.,	6:	Lots 1, 2, 3, 4, 5, 6, 7, S½NE¼, SE¼NW¼, E½SW¼;	462.59
	7:	Lots 1, 2, 3, NE¼, E½NW¼, NE¼SW¼, NW¼SE¼, W½NE¼SE¼;	448.94
	8:	NW¼;	160.00
	10:	S½SW¼;	80.00
	15:	SE¼;	160.00
	30:	E½SW¼;	80.00
	31:	Lots 3,4, E½SW¼, E½SE¼.	197.11
		TOTAL:	1,588.64
T. 3 N., R. 12 W.,	27:	W½.	320.00
		TOTAL:	320.00
T. 6 S., R. 12 W.,	4:	Lots 3, 4, S½NW¼;	163.21
	5:	Lots 1, 2, S½NE¼;	163.85
	9:	NW¼;	160.00
	10:	N½;	320.00
	26:	NE¼, N½NW¼, NW¼SE¼.	280.00
		TOTAL:	1,087.06
T. 7 S., R. 12 W.,	4:	NW¼SW¼SE¼;	10.00
	5:	Lot 4, N½SW¼NW¼, N½NW¼SW¼, E½SE¼NW¼SW¼, NE¼SW¼, N½SE¼SW¼, SW¼SE¼SW¼, NE¼SE¼, E½NW¼SE¼, E½W½NW¼SE¼, NE¼SW¼SE¼, NW¼SE¼SE¼;	245.29
	6	SE¼NW¼, NE¼SW¼;	80.00
	25:	W½SE¼;	80.00
	33:	SE¼NE¼SE¼, E½SE¼SE¼, E½W½SE¼SE¼;	40.00
	34:	W½NE¼NE¼, NW¼NE¼, S½N½, S½.	540.00
		TOTAL:	995.29

APPENDIX 3 (Continued)
LANDS IDENTIFIED FOR DISPOSAL IN THE LOWER GILA SOUTH RMP/EIS AREA*

Township and Range	Section	Subdivision	Acres
T. 6 S., R. 13 W.,	17:	NE¼SW¼, S½SW¼;	120.00
	18:	SE¼SE¼;	40.00
	19:	S½SE¼;	80.00
	27:	N½NW¼;	80.00
	28:	N½N½.	160.00
		TOTAL:	480.00
T. 7 S., R. 13 W.,	1	Lot 2, W½NE¼SW¼, SE¼NE¼SW¼, W½SW¼, SE¼SW¼, S½N½SE¼;	229.93
	3:	Lot 1, S½NE¼, SE¼NW¼, S½;	479.74
	4:	SE¼SW¼, NE¼SE¼, S½SE¼;	160.00
	7:	Lot 4, SE¼SW¼, NE¼SE¼, S½SE¼;	196.60
	8:	S½NE¼, S½S½;	400.00
	9:	N½N½NE¼NE¼, W½NE¼, NW¼, W½SW¼, W½E½SW¼.	370.00
			1,836.27
T. 6 S., R. 14 W.,	34	S½;	320.00
	35:	N½, SW¼, NW¼SE¼.	520.00
		TOTAL:	840.00
T. 7 S., R. 14 W.,	3:	Lots 1,2,3,4, SW¼NE¼, S½NW¼, NW¼SW¼;	318.68
	4:	Lots 1,2,3,4, S½N½, S½;	640.08
	5:	Lots 1,2,3,4, S½N½, N½S½;	480.02
	13:	All;	640.00
	14:	SE¼NE¼, S½;	360.00
	15:	SE¼;	160.00
	20:	SE¼;	160.00
	24:	N½NW¼.	80.00
		TOTAL:	2,838.78
T. 4 N., R. 15 W.,	30:	Lots 3, 4, E½SW¼;	154.56
	31:	Lots 1, 2, 3, 4, E½, E½W½;	629.20
	32:	All;	640.00
	36:	W½.	320.00
		TOTAL:	1,743.76
T. 3 N., R. 15 W.,	2:	Lots 1, 2, 3, 4, S½N½, N½SW¼, SW¼SW¼.	439.20
		TOTAL	439.20
T. 6 N., R. 16 W.,	6:	Everything south of highway: Needs cadastral survey Approx. 480.00 acres;	480.00±
	7:	Lots 1, 2, 3, NE¼, E½NW¼, NE¼SW¼, E½SE¼;	486.34

APPENDIX 3 (Continued)
LANDS IDENTIFIED FOR DISPOSAL IN THE LOWER GILA SOUTH RMP/EIS AREA*

Township and Range	Section	Subdivision		Acres
T. 6 N., R. 16 W., (Continued)	8:	Everything south of highway: needs cadastral survey Approx. 320.00 acres;		320.00±
	29:	W½;		320.00
	32:	W½.		320.00
			TOTAL:	1,926.34±
T. 5 N., R. 16 W.,	4:	Lots 1, 2, S½NE¼, S½;		478.67
	5:	Lots 3, 4, S½NW¼, S½;		480.92
	9:	NE¼;		160.00
	10:	NW¼.		160.00
			TOTAL:	1,279.59
T. 4 N., R. 16 W.,	14:	E½;		320.00
	24:	E½.		320.00
			TOTAL:	640.00
T. 7 N., R. 17 W.,	36:	Everything southwest of highway: needs cadastral survey: Approx. 320.00 acres.		320.00±
			TOTAL:	320.00±
	GRAND TOTALS			73,122.76

* Lands proposed for disposal will be the same for all alternatives except the No Action alternative. Under the No Action alternative no lands are recommended for disposal.

SOURCE: Phoenix District maps and files

APPENDIX 4
LANDS SUITABLE FOR ACQUISITION FOR MULTIPLE USE MANAGEMENT*
Bureau of Land Management, Phoenix District, Arizona

Township and Range	Section	Subdivision	Acres
T. 4 S., R. 1 W.,	34:	SE¼;	160.00
	35:	NW¼.	160.00
T. 3 S., R. 2 W.,	4:	E½, SW¼;	480.00
	5:	SW¼.	160.00
T. 13 S., R. 6 W.,	36:	All.	640.00
T. 5 S., R. 8 W.,	36:	Lots 1,2,3,4, NW¼NW¼, S½NW¼, N½S½.	448.48
T. 4 S., R. 9 W.,	2:	All;	640.00
	4:	S½;	320.00
	9:	All;	640.00
	10:	NW¼NE¼, S½NE¼, W½, SE¼;	600.00
	32:	Lots 1,2,3,4, N½, N½S½;	655.84
	36:	NE¼NE¼.	40.00
T. 5 S., R. 9 W.,	32:	All.	640.00
T. 6 S., R. 9 W.,	4:	SW¼NW¼, NW¼SW¼;	80.00
	5:	Lots 1,2,3,4, S½N½, N½S½, SE¼SW¼.	491.28
T. 1 S., R. 10 W.,	16:	NE¼, E½NW¼, NE¼SW¼, N½SE¼;	80,00
	19:	Lots 3,4, E½SW¼, SE¼;	312.70
	30:	Lots 1,2,3, NE¼, E½NW¼, NE¼SW¼, N½SE¼.	469.16
T. 2 N., R. 11 W.	32:	N½, SW¼, NW¼SE¼;	520.00
	36:	N½, SW¼, W½SE¼.	540.00
T. 1 S., R. 11 W.,	1:	SW¼;	160.00
	2:	SE¼;	160.00
	3:	Lots 1,2,3,4, S½N½, S½;	601.60
	4:	Lots 1,2,3,4, S|N½, S½;	601.36
	5:	Lots 1,2,3,4, S½N½, S½;	601.12
	24:	SE¼;	160.00
	25:	N½, N½S½;	480.00
	26:	S½N½, N½S½.	320.00
T. 2 S., R. 12 W.,	16:	NW¼, S½;	480.00
	17:	All;	640.00
	20:	NE¼;	160.00
	21:	NW¼NW¼, S½NW¼, SW¼.	280.00

APPENDIX 4 (Continued)
LANDS SUITABLE FOR ACQUISITION FOR MULTIPLE USE MANAGEMENT*

Township and Range	Section	Subdivision	Acres
T. 4 S., R. 12 W.,	23:	E½, E½W½;	480.00
	26:	E½;	320.00
	35:	Lots 2,3,4, NE¼, E½NW¼, NE¼SW¼, N½SE¼.	484.98
T. 3 N., R. 13 W.,	36:	E½SE¼.	80.00
T. 1 N., R. 13 W.,	2:	Lot 1;	39.90
	16:	N½, SW¼;	480.00
	36:	N½.	320.00
T. 4 S., R. 13 W.,	14:	All;	640.00
	21:	S½;	320.00
	23:	All;	640.00
	24:	All;	640.00
	26:	All;	640.00
	27:	All;	640.00
	28:	All.	640.00
T. 6 S., R. 11 W.,	3:	N½SW¼, SW¼SW¼, SE¼SW¼, NW¼SE¼;	200.00
	9:	SW¼NE¼, E½NE¼SW¼, E½SW¼SW¼;	80.00
	10:	NE¼, S½NW¼, S½;	560.00
	16:	N½;	320.00
	15:	N½;	320.00
	11:	E½SW¼.	80.00
		TOTAL	20,642.42

* Lands proposed for acquisition will be the same for all alternatives except the No Action alternative. Under the No Action alternative no lands are recommended for acquisition.
SOURCE: Phoenix District maps and files

APPENDIX 5
LANDS IDENTIFIED BY ALTERNATIVE FOR ACQUISITION TO BENEFIT WILDLIFE
Bureau of Land Management, Phoenix District, Arizona

Township and Range	Section	Subdivision	Acres	Status*	Habitat**
		Proposed Action			
T. 7 S., R. 14 W.,	16	S½;	320.0	S	Tamarisk
	32	SW¼.	160.0	S	Mesquite
T. 6 S., R. 12 W.,	32	S½.	320.0	S	Mesquite
T. 6 S., R. 11 W.,	17	NE¼;	160.0	P	Prime Mesquite
	16	NW¼NW¼;	40.0	S	Prime Mesquite
	9	SW¼SW¼;	40.0	P	Prime Mesquite
	9	N½SW¼;	80.0	P	Prime Mesquite
	9	S½NW¼;	80.0	P	Prime Mesquite
	9	SW¼NE¼;	40.0	P	Prime Mesquite
	3	SW¼;	160.0	P	Prime Mesquite
	3	N½SE¼;	80.0	P	Prime Mesquite
	2	All.	640.0	P	Prime Mesquite
T. 5 S., R. 11 W.,	36	All;	640.0	S	Tamarisk
	35	All.	640.0	P,S	Tamarisk
T. 5 S., R. 10 W.,	27	NE¼;	160.0	S	Tamarisk
	26	N½N½;	160.0	S	Mesquite
	25	NW¼NW¼;	40.0	S	Mesquite
	24	All.	640.0	S,P	Mesquite
T. 4 S., R. 8 W.,	32	All.	640.0	S	Tamarisk/Mesquite
T. 5 S., R. 8 W.,	5	NE¼SE¼;	40.0	S	Mesquite
	4	N½SW¼;	80.0	S	Mesquite
	4	NW¼SE¼.	40.0	S	Mesquite
T. 1 S., R. 5 W.,	27	NE¼SW¼;	40.0	S	Tamarisk
	27	NW¼SE¼;	40.0	S	Tamarisk
	26	S½N½;	160.0	S	Tamarisk
	25	S½N½;	160.0	S	Tamarisk
	25	NE¼NE¼.	40.0	S	Tamarisk
T. 1 S., R. 4 W.,	14	NE¼SE¼;	40.0	S	Tamarisk
	13	W½W½SW¼.	40.0	S	Tamarisk
T. 1 S., R. 3 W.,	18	N½N½;	160.0	S	Tamarisk
	16	All.	640.0	S	Tamarisk
T. 1 N., R. 2 W.,	36	All.	640.0	S	Tamarisk
T. 1 N., R. 1 W.,	31	N½N½;	160.0	S	Tamarisk
	36	S½.	320.0	S	Tamarisk

APPENDIX 5 (Continued)
LANDS IDENTIFIED FOR ACQUISITION TO BENEFIT WILDLIFE*

Township and Range	Section	Subdivision	Acres	Status*	Habitat**
		Proposed Action (Continued)			
T. 2 S., R. 5 W.,	2	All.	640.0	S	Saguaro Paloverde
T. 5 N., R. 17 W.,	16	S½;	320.0	S	Bighorn/Tortoise
	32	SW¼SW¼.	40.0	S	Bighorn/Tortoise
T. 5 N., R. 18 W.,	36	SE¼SE¼.	40.0	S	Bighorn/Tortoise
T. 4 N., R. 18 W.,	36	N½;	320.0	S	Bighorn/Tortoise
	36	SE¼SE¼.	40.0	S	Bighorn/Tortoise
T. 3 N., R. 18 W.,	2	N½NW¼;	80.0	S	Bighorn/Tortoise
	2	NE¼;	160.0	S	Bighorn/Tortoise
	2	SW¼SW¼.	40.0	S	Bighorn/Tortoise
T. 2 N., R. 11 W.,	32	NW¼;	160.0	S	Bighorn/Tortoise
	32	NE¼;	160.0	S	Bighorn/Tortoise
	32	SW¼;	160.0	S	Bighorn/Tortoise
	32	NW¼SE¼.	40.0	S	Bighorn/Tortoise
T. 3 S., R. 1 E.,	2	All.	640.0	S	Bighorn/Tortoise
T. 9 S., R. 1 E.,	2	All.	640.0	S	Vekol grassland
		No Action			
No land is proposed for acquisition under this alternative.					
		Resource Production			
T. 5 N., R. 17 W.,	16	S½;	320.0	S	Bighorn/Tortoise
	32	SW¼SW¼.	40.0	S	Bighorn/Tortoise
T. 5 N., R. 18 W.,	36	SE¼SE¼.	40.0	S	Bighorn/Tortoise
T. 4 N., R. 18 W.,	36	N½;	320.0	S	Bighorn/Tortoise
	36	SE¼SE¼.	40.0	S	Bighorn/Tortoise
T. 3 N., R. 18 W.,	2	N½NW¼;	80.0	S	Bighorn/Tortoise
	2	NE¼;	160.0	S	Bighorn/Tortoise
	2	SW¼SW¼.	40.0	S	Bighorn/Tortoise
T. 2 N., R. 11 W.,	32	NW¼;	160.0	S	Bighorn/Tortoise
	32	NE¼;	160.0	S	Bighorn/Tortoise
	32	SW¼;	160.0	S	Bighorn/Tortoise
	32	NW¼SE¼.	40.0	S	Bighorn/Tortoise
T. 3 S., R. 1 E.,	2	All.	640.0	S	Bighorn/Tortoise

APPENDIX 5 (Continued)
LANDS IDENTIFIED FOR ACQUISITION TO BENEFIT WILDLIFE*

Township and Range	Section	Subdivision	Acres	Status*	Habitat**
		Resource Protection			
T. 7 S., R. 14 W.,	16	S½;	320.0	S	Tamarisk
	32	SW¼.	160.0	S	Mesquite
T. 6 S., R. 13 W.,	15	E½;	320.0	P	Tamarisk
	22	S½SE¼;	80.0	P	Mesquite
	23	S½;	320.0	P	Mesquite
	27	N½NE¼;	80.0	P	Mesquite
	29	S½;	320.0	P	Mesquite
	30	S½SE¼;	80.0	P	Mesquite
	31	N½;	320.0	P	Mesquite
	31	N½SW¼.	80.0	P	Tamarisk
T. 6 S., R. 12 W.,	32	S½;	320.0	S	Mesquite
	33	S½;	320.0	P	Mesquite
	33	S½N½;	160.0	P	Mesquite
	26	NE¼;	160.0	P	Mesquite
	26	NE¼SW¼;	40.0	P	Mesquite
	25	N½.	320.0	P	Mesquite
T. 6 S., R. 11 W.,	19	N½;	320.0	P	Mesquite
	19	NE¼SW¼.	40.0	P	Mesquite
T. 6 S., R. 11 W.,	17	NE¼;	160.0	P	Prime Mesquite
	16	NW¼NW¼;	40.0	S	Prime Mesquite
	9	SW¼SW¼;	40.0	P	Prime Mesquite
	9	N½SW¼;	80.0	P	Prime Mesquite
	9	S½NW¼;	80.0	P	Prime Mesquite
	9	SW¼NE¼;	40.0	P	Prime Mesquite
	3	SW¼;	160.0	P	Prime Mesquite
	3	N½SE¼;	80.0	P	Prime Mesquite
	2	All.	640.0	P	Prime Mesquite
T. 5 S., R. 11 W.,	36	All;	640.0	S	Tamarisk
	35	All;	640.0	P,S	Tamarisk
	25	N½;	320.0	P	Mesquite
	25	N½S½;	160.0	P	Mesquite
	25	SW¼SW¼.	40.0	P	Mesquite
T. 5 S., R. 10 W.,	30	N½;	320.0	P	Mesquite
	30	N½SW¼.	80.0	P	Mesquite
T. 6 S., R. 11 W.,	1	N½;	320.0	P	Mesquite
	1	N½S½.	160.0	P	Mesquite
T. 6 S., R. 10 W.,	6	NW¼.	160.0	P	Mesquite

APPENDIX 5 (Continued)
LANDS IDENTIFIED FOR ACQUISITION TO BENEFIT WILDLIFE*

Township and Range	Section	Subdivision	Acres	Status*	Habitat**
Resource Protection (Continued)					
T. 5 S., R. 10 W.,	28	E½SW¼;	80.0	P	Mesquite
	28	SW¼SW¼;	40.0	P	Mesquite
	27	NE¼;	160.0	S	Tamarisk
	23	E½;	320.0	S,P	Tamarisk/Mesquite
	26	N½N½;	160.0	S	Mesquite
	25	NW¼NW¼;	40.0	S	Mesquite
	24	All.	640.0	S,P	Mesquite
T. 4 S., R. 8 W.,	32	All.	640.0	S	Tamarisk/Mesquite
T. 5 S., R. 8 W.,	5	NE¼SE¼;	40.0	S	Mesquite
	4	N½SW¼;	80.0	S	Mesquite
	4	NW¼SE¼.	40.0	S	Mesquite
T. 1 S., R. 5 W.,	27	NE¼SW¼;	40.0	S	Tamarisk
	27	NW¼SE¼;	40.0	S	Tamarisk
	26	S½N½;	160.0	S	Tamarisk
	25	S½N½;	160.0	S	Tamarisk
	25	NE¼NE¼.	40.0	S	Tamarisk
T. 1 S., R. 4 W.,	14	NE¼SE¼;	40.0	S	Tamarisk
	13	W½W½SW¼.	40.0	S	Tamarisk
T. 1 S., R. 3 W.,	18	N½N½;	160.0	S	Tamarisk
	16	All.	640.0	S	Tamarisk
T. 1 N., R. 2 W.,	36	All.	640.0	S	Tamarisk
T. 1 N., R. 1 W.,	31	N½N½;	160.0	S	Tamarisk
	36	S½.	320.0	S	Tamarisk
T. 2 S., R. 5 W.,	2	All.	640.0	S	Saguaro Paloverde
T. 5 N., R. 17 W.,	16	S½;	320.0	S	Bighorn/Tortoise
	32	SW¼SW¼.	40.0	S	Bighorn/Tortoise
T. 5 N., R. 18 W.,	36	SE¼SE¼.	40.0	S	Bighorn/Tortoise
T. 4 N., R. 18 W.,	36	N½;	320.0	S	Bighorn/Tortoise
	36	SE¼SE¼.	40.0	S	Bighorn/Tortoise
T. 3 N., R. 18 W.,	2	N½NW¼;	80.0	S	Bighorn/Tortoise
	2	NE¼;	160.0	S	Bighorn/Tortoise
	2	SW¼SW¼.	40.0	S	Bighorn/Tortoise

APPENDIX 5 (Continued)
LANDS IDENTIFIED FOR ACQUISITION TO BENEFIT WILDLIFE*

Township and Range	Section	Subdivision	Acres	Status*	Habitat**
		Resource Protection (Continued)			
T. 2 N., R. 11 W.,	32	NW¼;	160.0	S	Bighorn/Tortoise
	32	NE¼;	160.0	S	Bighorn/Tortoise
	32	SW¼;	160.0	S	Bighorn/Tortoise
	32	NW¼SE¼.	40.0	S	Bighorn/Tortoise
T. 3 S., R. 1 E.,	2	All.	640.0	S	Bighorn/Tortoise
T. 9 S., R. 1 E.,	2	All.	640.0	S	Vekol grassland
		Environmental Protection			
T. 7 S., R. 14 W.,	16	S½;	320.0	S	Tamarisk
	32	SW¼.	160.0	S	Mesquite
T. 6 S., R. 13 W.,	15	E½;	320.0	P	Tamarisk
	22	S½SE¼;	80.0	P	Mesquite
	23	S½;	320.0	P	Mesquite
	27	N½NE¼;	80.0	P	Mesquite
	29	S½;	320.0	P	Mesquite
	30	S½SE¼;	80.0	P	Mesquite
	31	N½;	320.0	P	Mesquite
	31	N½SW¼.	80.0	P	Tamarisk
T. 6 S., R. 12 W.,	15	E½SW¼;	80.0	P	Tamarisk
	32	S½;	320.0	S	Mesquite
	33	S½;	320.0	P	Mesquite
	33	S½N½;	160.0	P	Mesquite
	26	NE¼;	160.0	P	Mesquite
	26	NE¼SW¼;	40.0	P	Mesquite
	25	N½.	320.0	P	Mesquite
T. 6 S., R. 11 W.,	19	N½;	320.0	P	Mesquite
	19	NE¼SW¼;	40.0	P	Mesquite
	8	E½SE¼;	80.0	P	Tamarisk
	17	NE¼;	160.0	P	Prime Mesquite
	16	NW¼NW¼;	40.0	S	Prime Mesquite
	9	SW¼SW¼;	40.0	P	Prime Mesquite
	9	N½SW¼;	80.0	P	Prime Mesquite
	9	S½NW¼;	80.0	P	Prime Mesquite
	9	SW¼NE¼;	40.0	P	Prime Mesquite
	3	SW¼;	160.0	P	Prime Mesquite
	3	N½SE¼;	80.0	P	Prime Mesquite
	2	All.	640.0	P	Prime Mesquite

APPENDIX 5 (Continued)
LANDS IDENTIFIED FOR ACQUISITION TO BENEFIT WILDLIFE*

Township and Range	Section	Subdivision	Acres	Status*	Habitat**
		Environmental Protection (Continued)			
T. 5 S., R. 11 W.,	36	All;	640.0	S	Tamarisk
	35	All;	640.0	P,S	Tamarisk
	25	N½;	320.0	P	Mesquite
	25	N½S½;	160.0	P	Mesquite
	25	SW¼SW¼.	40.0	P	Mesquite
T. 5 S., R. 10 W.,	30	N½;	320.0	P	Mesquite
	30	N½SW¼.	80.0	P	Mesquite
T. 6 S., R. 11 W.,	1	N½;	320.0	P	Mesquite
	1	N½S½.	160.0	P	Mesquite
T. 6 S., R. 10 W.,	6	NW¼.	160.0	P	Mesquite
T. 5 S., R. 10 W.,	28	E½SW¼;	80.0	P	Mesquite
	28	SW¼SW¼;	40.0	P	Mesquite
	27	W½;	320.0	P	Tamarisk/Mesquite
	27	NE¼;	160.0	S	Tamarisk
	23	E½;	320.0	S,P	Tamarisk/Mesquite
	23	SW¼;	160.0	S	Tamarisk/Mesquite
	23	E½NW¼;	80.0	S	Tamarisk
	23	SW¼NW¼;	40.0	S	Tamarisk
	26	N½N½;	160.0	S	Mesquite
	25	NW¼NW¼;	40.0	S	Mesquite
	24	All.	640.0	S,P	Mesquite
T. 4 S., R. 8 W.,	32	All.	640.0	S	Tamarisk/Mesquite
T. 5 S., R. 8 W.,	5	NE¼SE¼;	40.0	S	Mesquite
	4	N½SW¼;	80.0	S	Mesquite
	4	NW¼SE¼.	40.0	S	Mesquite
T. 1 S., R. 5 W.,	27	NE¼SW¼;	40.0	S	Tamarisk
	27	NW¼SE¼;	40.0	S	Tamarisk
	26	S½N½;	160.0	S	Tamarisk
	25	S½N½;	160.0	S	Tamarisk
	25	NE¼NE¼.	40.0	S	Tamarisk
T. 1 S., R. 4 W.,	19	S½SW¼;	80.0	P	Tamarisk
	22	NW¼NW¼;	40.0	P	Tamarisk
	14	S½S½;	160.0	P	Tamarisk
	14	N½SW¼;	80.0	P	Tamarisk
	14	NW¼SE¼;	40.0	P	Tamarisk
	14	NE¼SE¼;	40.0	S	Tamarisk
	13	W½W½SW¼;	40.0	S	Tamarisk
	24	N½.	320.0	P	Tamarisk
T. 1 S., R. 3 W.,	18	S½NW¼;	80.0	P	Tamarisk
	18	N½N½;	160.0	S	Tamarisk
	17	NE¼SW¼;	40.0	P	Tamarisk

APPENDIX 5 (Continued)
LANDS IDENTIFIED FOR ACQUISITION TO BENEFIT WILDLIFE*

Township and Range	Section	Subdivision	Acres	Status*	Habitat**
Environmental Protection (Continued)					
T. 1 S., R. 3 W.,	17	S½NW¼;	80.0	P	Tamarisk
(Continued)	16	All;	640.0	S	Tamarisk
	15	N½NW¼;	80.0	P	Tamarisk
	15	SW¼SW¼.	40.0	P	Tamarisk
T. 1 S., R. 2 W.,	7	N½S½;	160.0	P	Tamarisk
	5	NE¼SE¼;	40.0	P	Tamarisk
	35	S½SE¼;	80.0	P	Tamarisk
	35	SE¼SW¼;	40.0	P	Tamarisk
	36	All.	640.0	S	Tamarisk
T. 1 N., R. 1 W.,	31	N½N½;	160.0	S	Tamarisk
	34	N½SW¼;	80.0	P	Tamarisk
	36	S½.	320.0	S	Tamarisk
T. 2 S., R. 5 W.,	2	All.	640.0	S	Saguaro Paloverde
T. 5 N., R. 17 W.,	16	S½;	320.0	S	Bighorn/Tortoise
	32	SW¼SW¼.	40.0	S	Bighorn/Tortoise
T. 5 N., R. 18 W.,	36	SE¼SE¼.	40.0	S	Bighorn/Tortoise
T. 4 N., R. 18 W.,	36	N½;	320.0	S	Bighorn/Tortoise
	36	SE¼SE¼.	40.0	S	Bighorn/Tortoise
T. 3 N., R. 18 W.,	2	N½NW¼;	80.0	S	Bighorn/Tortoise
	2	NE¼;	160.0	S	Bighorn/Tortoise
	2	SW¼SW¼.	40.0	S	Bighorn/Tortoise
T. 2 N., R. 11 W.,	32	NW¼;	160.0	S	Bighorn/Tortoise
	32	NE¼;	160.0	S	Bighorn/Tortoise
	32	SW¼;	160.0	S	Bighorn/Tortoise
	32	NW¼SE¼.	40.0	S	Bighorn/Tortoise
T. 3 S., R. 1 E.,	2	All.	640.0	S	Bighorn/Tortoise
T. 9 S., R. 1 E.,	2	All.	640.0	S	Vekol grassland

* S = State Land; P = Private Land

** Prime Mesquite - Mature mesquite trees arranged in a tight canopy; excellent dove, quail, and rabbit habitat.
Mesquite - Mesquite trees arranged in an open canopy; good dove, quail, and rabbit habitat.
Tamarisk - Tight canopy of saltcedar; good whitewing habitat.
Saguaro-Paloverde - Desert habitat containing saguaro cactus and paloverde as dominant plant species..
Bighorn Sheep/Desert Tortoise - Saguaro-paloverde habitat crucial for bighorn or desert tortoise.
Vekol Grassland - A unique grassland habitat in south Vekol Valley.

SOURCE: Phoenix District Files

APPENDIX 6
LANDS SUITABLE FOR SPLIT-ESTATE ACQUISITION TO BENEFIT WILDERNESS
Bureau of Land Management, Phoenix District, Arizona

Township and Range	Section	Subdivision	Acres
		Proposed Action	
WSA 2-128			
T. 2 N., R. 11 W.,	32:	S½SE¼, NE¼SE¼;	120.00
T. 1 S., R. 11 W.,	2:	All but SE¼.	441.00
		TOTAL:	561.00
		No Action	
No split-estate lands proposed for acquisition.			
		Resource Protection	
WSA 2-127			
T. 1 N., R. 14 W.	36:	N½, SW¼, NE¼SE¼.	520.00
WSA 2-128			
T. 2 N., R. 11 W.,	32:	E½SE¼, SW¼SE¼;	120.00
T. 1 N., R. 10 W.,	36:	W½, W½SE¼;	400.00
T. 1 S., R. 11 W.	2:	All but SE¼;	441.00
T. 1 S., R. 10 W.,	2:	All.	640.00
WSA 2-157			
T. 3 S., R. 3 S.,	32:	All;	640.00
T. 3 S., R. 4 W.,	36:	All.	640.00
		TOTAL:	3,401.00

APPENDIX 6 (Continued)
LANDS SUITABLE FOR SPLIT-ESTATE ACQUISITION
TO BENEFIT WILDERNESS

Township and Range	Section	Subdivision	Acres
		Environmental Protection	
WSA 2-125			
T. 3 N., R. 18 W.,	36:	N½;	320.00
T. 3 N., R. 15 W.,	32:	SW¼, SW¼NW¼.	200.00
WSA 2-126			
T. 1 N., R. 14 W.,	16:	All;	640.00
	32:	All but NW¼NW¼.	600.00
WSA 2-127			
T. 1 N., R. 14 W.,	2:	All;	640.00
	36:	N½, SW¼ and NE¼SE¼.	520.00
T. 2 N., R. 14 W.,	36:	SE¼, N½SW¼.	240.00
WSA 2-128			
T. 2 N., R. 11 W.,	16:	SW¼, SW¼NW¼, S½SE¼, NW¼SE¼;	320.00
	32:	E½SE¼ and SW¼SE¼;	120.00
	36:	E½SE¼.	80.00
T. 2 N., R. 10 W.	32:	All but N½NE¼.	560.00
T. 1 N., R. 10 W.	36:	W½, W½SE¼.	400.00
T. 1 S., R. 11 W.	2:	All but SE¼.	441.00
T. 1 S., R. 10 W.	2:	All.	640.00
WSA 2-129			
T. 2 S., R. 11 W.	32:	SE¼SE¼.	40.00
WSA 2-138			
T. 2 S., R. 7 W.	32:	All;	640.00
	36:	All.	640.00

APPENDIX 6 (Continued)
LANDS SUITABLE FOR SPLIT-ESTATE ACQUISITION
TO BENEFIT WILDERNESS

Township and Range	Section	Subdivision	Acres
		Environmental Protection (Continued)	
WSA 2-157			
T. 2 S., R. 3 W.	36:	S½, S½N½.	480.00
T. 3 S., R. 3 W.	2:	All;	640.00
	32:	All;	640.00
	36:	All.	640.00
T. 3 S., R. 4 W.	36:	All.	640.00
T. 3 S., R. 2 W.	16:	All;	640.00
	32:	All.	640.00
T. 4 S., R. 4 W.	36:	All.	640.00
WSA 2-163			
T. 5 S., R. 3 W.	36:	All.	640.00
T. 6 S., R. 3 W.	2:	E½E½.	160.00
WSA 2-172			
T. 7 S., R. 1 E.	36:	All.	640.00
T. 8 S., R. 1 E.	2:	All.	640.00
		TOTAL:	14,081.00

SOURCE: Phoenix District files

APPENDIX 7
LANDS SUITABLE FOR SURFACE AND MINERAL ACQUISITIONS TO BENEFIT WILDERNESS
Bureau of Land Management, Phoenix District, Arizona

Township and Range	Section	Subdivision	Acres
Proposed Action			
WSA 2-128			
T. 2 N., R. 11 W.,	32:	N½, SW¼, NW¼SE¼.	520.00
T. 1 S., R. 11 W.,	1:	SW¼;	160.00
	2:	SE¼;	160.00
	3:	All;	601.00
	4:	All;	601.00
	5:	All.	601.00
		TOTAL:	2,643.00
No Action and Resource Production			
No surface or mineral acquisitions.			
Resource Protection			
WSA 2-127			
T. 1 N., R. 14 W.,	36:	S½SE¼, NW¼SE¼;	120.00
T. 1 N., R. 13 W.,	36:	N½.	320.00
WSA 1-128			
T. 2 N., R. 11 W.,	32	N½, SW¼, NW¼SE¼.	520.00
T. 1 S., R. 11 W.,	1	SW¼;	160.00
	2	SE¼;	160.00
	3	All;	601.00
	4	All;	601.00
	5	All.	601.00
		TOTAL:	3,083.00

APPENDIX 7 (Continued)
LANDS SUITABLE FOR SURFACE AND
MINERAL ACQUISITIONS TO BENEFIT WILDERNESS

Township and Range	Section	Subdivision	Acres
		Environmental Protection	
WSA 2-126A			
T. 1 N., R. 14 W.,	32:	NW¼NW¼.	40.00
WSA 1-127			
T. 2 N., R. 14 W.,	36:	N½, S½SW¼.	400.00
T. 1 N., R. 13 W.,	2	NE¼NE¼;	40.00
	16:	N½SW¼;	480.00
	36:	N½.	320.00
T. 1 N., R. 14 W.,	36:	NW¼SE¼, S½SE¼.	120.00
WSA 2-128			
T. 2 N., R. 10 W.,	30	SW¼, S½SE¼;	200.00
	33:	SW¼.	160.00
T. 2 N., R. 11 W.,	32:	N½, SW¼, NW¼SE¼;	520.00
	36:	All but E½SE¼.	560.00
T. 2 N., R. 12 W.,	2:	SW¼SW¼.	40.00
T. 1 S., R. 11 W.	1:	SW¼;	160.00
	2:	SE¼;	160.00
	3:	All;	640.00
	4:	All;	640.00
	5:	All.	640.00
T. 1 S., R. 10 W.,	19:	S½;	320.00
	30:	NW¼NW¼.	40.00
T. 1 S., R. 11 W.	24:	SE¼;	160.00
	25:	N½, W½SW¼;	400.00
	26:	S½N½, N½S½.	320.00
WSA 2-157			
T. 3 S., R. 2 W.,	5	SW¼.	160.00
		TOTAL:	6,396.00

SOURCE: Phoenix District files

APPENDIX 8
LANDS SUITABLE FOR ACQUISITION FOR BOTANICAL PROTECTION
Bureau of Land Management, Phoenix District, Arizona

Township and Range	Section	Subdivision	Acres
T. 13 S., R. 5 W.,	36:	All.	640.00
T. 13 S., R. 6 W.,	36:	All.	640.00
T. 3 S., R. 1 E.,	2:	All.	640.00
T. 2 N., R. 11 W.,	32:	NE¼, NW¼, SW¼, NW¼SE¼.	520.00
		TOTAL	2,440.00

Proposed Action	No Action	Resource Production	Resource Protection	Environmental Protection
2,440	0	0	2,440	2,440

SOURCE: Phoenix District files

APPENDIX 9
FEDERAL SURFACE (NON-FEDERAL MINERALS)
(Mineral Estate Acres Proposed for Acquisition)
Bureau of Land Management, Phoenix District, Arizona

Township and Range	Section	Subdivision		Acres
T. 1 S., R. 3 W.,	32:	All;		640.00
	36:	All.		640.00
			TOTAL	1,280.00
T. 2 S., R. 3 W.,	2	All;		640.00
	16:	All;		640.00
	32:	All;		640.00
	36:	All.		640.00
			TOTAL	2,560.00
T. 3 S., R. 3 W.,	2:	All;		640.00
	16:	All;		640.00
	32:	All;		640.00
	36:	All.		640.00
			TOTAL:	2,560.00
T. 5 S., R. 3 W., Sec.	16:	SW¼, N½SE¼, SE¼SE¼;		280.00
	32:	All;		640.00
	36:	All.		640.00
			TOTAL:	1,560.00
T. 6 S., R. 3 W., Sec.	2:	E½NE¼;		80.00
	36:	All.		640.00
			TOTAL:	720.00
T. 7 S., R. 3 W., Sec.	2:	E½NE¼;		80.00
	16:	SE¼;		160.00
	32:	SE¼, SE¼SW¼.		200.00
			TOTAL:	440.00
T. 1 S., R. 4 W.,	32:	All;		640.00
	36:	All.		640.00
			TOTAL	1,280.00
T. 4 S., R. 4 W., Sec.	2:	All;		640.00
	36:	All.		640.00
			TOTAL	1,280.00
T. 5 S., R. 4 W., Sec.	16:	All;		640.00
	36:	All.		640.00
			TOTAL	1,280.00
T. 6 S., R. 4 W., Sec.	2:	All;		640.00
	16:	All;		640.00
	28:	NW¼SE¼;		320.00
	32:	All;		640.00
	34:	N½;		320.00
	36:	All.		640.00
			TOTAL	3,200.00

APPENDIX 9 (Continued)
FEDERAL SURFACE (NON-FEDERAL MINERALS)
(Mineral Estate Acres Proposed for Acquisition)

Township and Range	Section	Subdivision		Acres
T. 7 S., R. 4 W.,	Sec. 2:	NW¼SE¼;		320.00
	16:	N½, N½S½.		480.00
			TOTAL	800.00
T. 12 S., R. 4 W.,	Sec. 16:	All.		640.00
			TOTAL	640.00
T. 3 S., R. 4 W.,	Sec. 2:	SW¼, S½NW¼;		240.00
	32:	W½;		320.00
	36:	All.		640.00
			TOTAL	1,200.00
T. 1 S., R. 5 W.,	Sec. 3:	S½N½;		160.00
	36:	W½NE¼.		480.00
			TOTAL	640.00
T. 6 S., R. 5 W.,	Sec. 16:	All.		640.00
			TOTAL	640.00
T. 11 S., R. 5 W.,	Sec. 2:	All;		640.00
	16:	All;		640.00
	32:	All;		640.00
	36:	All.		640.00
			TOTAL	2,560.00
T. 12 S., R. 5 W.,	Sec. 2:	All;		640.00
	16:	All;		640.00
	32:	All;		640.00
	36:	All.		640.00
			TOTAL	2,560.00
T. 14 S., R. 5 W.,	Sec. 2:	S½, NW¼, E½NE¼;		560.00
	16:	All.		640.00
			TOTAL	1,200.00
T. 6 S., R. 6 W.,	Sec. 36:	E½SE¼.		80.00
			TOTAL	80.00
T. 7 S., R. 6 W.,	Sec. 2:	All;		640.00
	16:	All;		640.00
	32:	All;		640.00
	36:	All.		640.00
			TOTAL	2,560.00

APPENDIX 9 (Continued)
FEDERAL SURFACE (NON-FEDERAL MINERALS)
(Mineral Estate Acres Proposed for Acquisition)

Township and Range	Section	Subdivision		Acres
T. 11 S., R. 6 W.,	Sec. 2:	All;		640.00
	16:	All;		640.00
	32:	All;		640.00
	36:	All.		640.00
			TOTAL	2,560.00
T. 12 S., R. 6 W.,	Sec. 2:	All;		640.00
	16:	All;		630.00
	36:	S½, S½NE¼, NE¼NE¼.		440.00
			TOTAL	1,710.00
T. 13 S., R. 6 W.,	Sec. 2:	All;		640.00
	16:	All;		640.00
	32:	All.		640.00
			TOTAL	1,920.00
T. 14 S., R. 6 W.,	Sec. 32:	All;		640.00
	36:	All.		640.00
			TOTAL	1,280.00
T. 1 N., R. 7 W.,	Sec. 2:	W½, W½NE¼, W½NE¼SE¼;		420.00
	16:	All;		640.00
	32:	All;		640.00
	36:	N½, SE¼.		480.00
			TOTAL	2,180.00
T. 2 S., R. 7 W.,	Sec. 2:	All;		640.00
	16:	All;		640.00
	32:	All;		640.00
	36:	All.		640.00
			TOTAL	2,560.00
T. 4 S., R. 7 W.,	Sec. 32:	SE¼.		160.00
			TOTAL	160.00
T. 6 S., R. 7 W.,	Sec. 32:	S½SW¼, NW¼SW¼.		120.00
			TOTAL	120.00
T. 7 S., R. 7 W.,	Sec. 32:	All;		640.00
	36:	All.		640.00
			TOTAL	1,280.00
T. 1 N., R. 8 W.,	Sec. 16:	S½, NE¼, E½NW¼.		560.00
			TOTAL	560.00
T. 1 S., R. 8 W.,	Sec. 36:	All.		640.00
			TOTAL	640.00

APPENDIX 9 (Continued)
FEDERAL SURFACE (NON-FEDERAL MINERALS)
(Mineral Estate Acres Proposed for Acquisition)

Township and Range	Section	Subdivision		Acres
T. 6 S., R. 8 W.,	Sec. 16:	All;		640.00
	32:	All;		640.00
	36:	All.		640.00
			TOTAL	1,920.00
T. 7 S., R. 8 W.,	Sec. 2:	All;		640.00
	16:	All;		640.00
	32:	All;		640.00
	36:	All.		640.00
			TOTAL	2,560.00
T. 1 S., R. 9 W.,	Sec. 16:	E½SE¼;		80.00
	32	All;		640.00
	36:	All.		640.00
			TOTAL	1,360.00
T. 5 S., R. 9 W.,	Sec. 2:	All;		640.00
	10:	N½SW¼;		80.00
	16:	All;		640.00
	36:	All.		640.00
			TOTAL	2,000.00
T. 6 S., R. 9 W.,	Sec. 2:	All;		640.00
	9:	S½SE¼;		80.00
	16:	All;		640.00
	22:	SW¼, NE¼.		40.00
			TOTAL	1,400.00
T. 7 S., R. 9 W.,	Sec. 2:	All;		640.00
	16:	All;		640.00
	32:	All;		640.00
	36:	All.		640.00
			TOTAL	2,560.00
T. 2 N., R. 10 W.,	Sec. 2:	All;		640.00
	32:	All.		640.00
			TOTAL	1,280.00
T. 1 N., R. 10 W.,	Sec. 36	All.		640.00
			TOTAL	640.00
T. 1 S., R. 10 W.,	Sec. 2:	All;		640.00
	16:	W½, NE¼, E½SE¼;		560.00
	32:	All;		640.00
	36:	All.		640.00
			TOTAL	2,480.00
T. 4 S., R. 10 W.,	Sec. 13:	All;		640.00
	12:	SE¼, E½SW¼.		240.00
			TOTAL	880.00

APPENDIX 9 (Continued)
FEDERAL SURFACE (NON-FEDERAL MINERALS)
(Mineral Estate Acres Proposed for Acquisition)

Township and Range	Section	Subdivision		Acres
T. 6 S., R. 10 W., Sec.	2:	All;		640.00
	16:	All;		640.00
	32:	N½;		320.00
	36:	N½SE¼.		80.00
			TOTAL	1,680.00
T. 3 N., R. 11 W., Sec.	2:	All.		640.00
			TOTAL	640.00
T. 2 N., R. 11 W., Sec.	16:	All;		640.00
	32:	S½SE¼, NE¼SE¼;		120.00
	36:	E½SE¼.		80.00
			TOTAL	840.00
T. 1 S., R. 11 W., Sec.	2:	N½, SW¼.		480.00
			TOTAL	480.00
T. 4 S., R. 11 W., Sec.	29:	NE¼.		160.00
			TOTAL	160.00
T. 7 S., R. 11 W., Sec.	15:	SE¼.		160.00
			TOTAL	160.00
T. 3 N., R. 12 W., Sec.	2:	All;		640.00
	12:	N½;		320.00
	16:	All;		640.00
	27:	SW¼;		160.00
	32:	All;		640.00
	36:	All.		640.00
			TOTAL	3,040.00
T. 2 S., R. 12 W., Sec.	36	S½NW¼, NW¼NW¼.		120.00
			TOTAL	120.00
T. 4 S., R. 12 W., Sec.	2:	All;		640.00
	16:	All;		640.00
	32:	All;		640.00
	36:	All.		640.00
			TOTAL	2,560.00
T. 5 S., R. 12 W., Sec.	2:	N½, SW¼, W½SE¼, NE¼SE¼.		600.00
			TOTAL	600.00
T. 6 S., R. 12 W., Sec.	15:	W½SW¼.		80.00
			TOTAL	80.00

APPENDIX 9 (Continued)
FEDERAL SURFACE (NON-FEDERAL MINERALS)
(Mineral Estate Acres Proposed for Acquisition)

Township and Range	Section	Subdivision		Acres
T. 4 S., R. 13 W., Sec.	2:	All;		640.00
	16:	All;		640.00
	32:	All;		640.00
	36:	All.		640.00
			TOTAL	2,560.00
T. 3 N., R. 14 W., Sec.	2:	All;		640.00
	32:	S½.		320.00
			TOTAL	960.00
T. 2 N., R. 14 W., Sec.	2:	All;		640.00
	16:	All;		640.00
	32:	All;		640.00
	36:	N½S½, S½SE¼.		240.00
			TOTAL	2,160.00
T. 1 N., R. 14 W., Sec.	2:	All;		640.00
	16:	All;		640.00
	32:	S½, NE¼, NE¼NW¼;		520.00
	36:	N½, SW¼, NE¼SE¼.		520.00
			TOTAL	2,320.00
T. 8 S., R. 14 W., Sec.	35:	E½SE¼SE¼;		20.00
	36:	N½NE¼.		80.00
			TOTAL	100.00
T. 4 N., R. 15 W., Sec.	32:	All;		640.00
	36:	W½.		320.00
			TOTAL	960.00
T. 3 N., R. 15 W., Sec.	2:	W½, NE¼, SW¼NE¼SW¼;		490.00
	16:	All;		640.00
	32:	All.		640.00
			TOTAL	1,770.00
T. 6 N., R. 16 W., Sec.	2:	All;		640.00
	32:	W½.		320.00
			TOTAL	960.00
T. 5 N., R. 16 W., Sec.	2:	NE¼NE¼;		40.00
	16:	All;		640.00
	32:	All.		640.00
			TOTAL	1,320.00
T. 4 N., R. 16 W., Sec.	2:	All;		640.00
	16:	All;		640.00
	32:	All.		640.00
			TOTAL	1,920.00

APPENDIX 9 (Continued)
FEDERAL SURFACE (NON-FEDERAL MINERALS)
(Mineral Estate Acres Proposed for Acquisition)

Township and Range	Section	Subdivision		Acres
T. 7 N., R. 17 W.,	Sec. 2:	All;		640.00
	32:	All;		640.00
	36:	All.		640.00
			TOTAL	1,920.00
T. 6 N., R. 17 W.,	Sec. 2:	All;		640.00
	16:	All;		640.00
	32:	S½;		320.00
	36:	All.		640.00
			TOTAL	2,240.00
T. 4 N., R. 18 W.,	Sec. 2:	All;		640.00
	16:	All;		640.00
	32:	All;		640.00
	36:	N½SE¼, SW¼SE¼.		120.00
			TOTAL	2,040.00
T. 3 N., R. 18 W.,	Sec. 16:	All;		640.00
	32:	All;		640.00
	36:	N½.		320.00
			TOTAL	1,600.00
T. 2 S., R. 1 W.,	Sec. 2:	All.		640.00
			TOTAL	640.00
T. 3 S., R. 1 W.,	Sec. 27:	W½;		320.00
	32:	All;		640.00
	36:	All.		640.00
			TOTAL	1,600.00
T. 4 S., R. 1 W.,	Sec. 2:	All;		640.00
	16:	All;		640.00
	32:	All;		640.00
	36:	All.		640.00
			TOTAL	2,560.00
T. 1 S., R. 2 W.,	Sec. 4:	SW¼NW¼;		40.00
	32:	N½, SE¼;		480.00
	36:	All.		640.00
			TOTAL	1,160.00
T. 3 S., R. 2 W.,	Sec. 2:	All;		640.00
	16:	All;		640.00
	32:	All;		640.00
	36:	All.		640.00
			TOTAL	2,560.00

SOURCE: Phoenix District maps and files

APPENDIX 10
FEDERAL MINERALS (NON-FEDERAL SURFACE)
(Mineral Estate Acres Proposed for Disposal)
Bureau of Land Management, Phoenix District, Arizona

Township and Range	Section	Subdivision	Acres
T. 1 S., R. 2 W.,	Sec. 21:	W½NE¼, SE¼, N½SW¼, S½NW¼, SE¼SW¼;	440.00
	30:	N½NW¼NW¼, NW¼NE¼, NW¼.	220.00
		TOTAL	660.00
T. 1 S., R. 3 W.,	8	W½SE¼, NE¼SE¼;	120.00
	9:	NE¼, SW¼NE¼, SE¼NW¼, N½SW¼, NW¼SE¼.	360.00
		TOTAL	480.00
T. 1 S., R. 4 W.,	34:	All;	640.00
	35:	All.	640.00
		TOTAL	1,280.00
T. 4 S., R. 4 W.,	Sec. 18:	W½W½.	160.00
		TOTAL	160.00
T. 5 S., R. 4 W.,	Sec. 26:	W½;	320.00
	28:	S½, NE¼;	480.00
	33:	N½NW¼.	80.00
		TOTAL	880.00
T. 6 S., R. 4 W.,	Sec. 4:	SW¼, E½SE¼.	240.00
		TOTAL	240.00
T. 3 S., R. 4 W.,	Sec. 18:	SW¼;	160.00
	19:	SW¼NW¼;	40.00
	30:	W½NE¼;	80.00
	11:	SW¼NW¼NW¼SW¼, NW¼NE¼NW¼SW¼, NW¼SE¼NW¼SW¼, SW¼SE¼NW¼SW¼, NW¼NW¼SW¼NW¼, Lots 88, 87, 51, 80, 16, 48, 65, 20, 21, 28, 18, 23, 19, 22, 73, 43, 44, 72, 79, 89, 90, 91, 17, 24, 29, 71.	77.50
		TOTAL	357.50
T. 3 S., R. 5 W.,	Sec. 2:	All;	640.00
	11:	SE¼SE¼;	40.00
	13:	N½N½, SE¼NE¼.	200.00
		TOTAL	880.00
T. 11 S., R. 5 W.,	Sec. 19:	SW¼, S½NW¼;	240.00
	30:	W½.	320.00
		TOTAL	560.00
T. 12 S., R. 5 W.,	Sec. 18:	W½E½;	160.00
	19:	SW¼, NW¼NE¼.	200.00
		TOTAL	360.00

APPENDIX 10 (Continued)
FEDERAL MINERALS (NON-FEDERAL SURFACE)
(Mineral Estate Acres Proposed for Disposal)

Township and Range	Section	Subdivision	Acres
T. 14 S., R. 5 W.,	Sec. 1:	E½.	320.00
		TOTAL	320.00
T. 13 S., R. 5 W.,	Sec. 25:	N½NW¼SW¼SW¼, NW¼SE¼NE¼SW¼, SW¼NE¼NE¼SW¼, S½S½NW¼NE¼SW¼, NW¼SE¼SE¼NW¼, N½SW¼SE¼SW¼, N½SE¼SE¼SW¼, S½SW¼SE¼SW¼, S½SE¼SE¼SW¼, N½NE¼SE¼NW¼, N½NE¼SE¼SW¼, S½NE¼SE¼NW¼, NW¼SE¼NW¼SW¼, NE¼SE¼NW¼SW¼, N½SW¼SW¼SW¼, S½NE¼SE¼SW¼, SW¼SE¼SE¼NW¼, SE¼NE¼NE¼SW¼, N½NW¼SE¼NW¼, N½NE¼SW¼NW¼, S½SE¼NW¼NW¼, N½SE¼SW¼NW¼, S½NW¼NW¼NW¼, N½SW¼NW¼NW¼, SW¼NE¼NW¼SW¼, E½SW¼NE¼NW¼, S½NW¼NW¼SW¼, N½SW¼NW¼SW¼, S½SW¼NW¼SW¼, N½SE¼NW¼NW¼, SW¼SE¼NE¼SW¼, S½NE¼SW¼SW¼, N½NE¼SW¼SW¼, S½NW¼SE¼NW¼, S½SE¼SW¼NW¼, SW¼SE¼NW¼SW¼, W½SW¼NE¼NW¼, NE¼SW¼NE¼SW¼, SE¼SW¼NE¼SW¼, N½NW¼NW¼NW¼, S½SW¼SW¼SW¼, N½NW¼NW¼SW¼ W½NE¼NW¼NW¼, S½NW¼SE¼SW¼, NW¼SW¼NE¼SW¼, S½SW¼SW¼NW¼ N½SE¼NE¼NW¼, N½NW¼SW¼NW¼, NE¼SE¼SE¼NW¼, NE¼NE¼NW¼SW¼, NW¼NE¼NW¼SW¼, S½SE¼SW¼SW¼, N½NE¼NE¼NW¼, S½NW¼NE¼NW¼, S½SE¼NE¼NW¼, S½SW¼NW¼NW¼, S½NE¼SW¼NW¼, N½SW¼SW¼NW¼, N½SE¼SW¼SW¼, NE¼NE¼NE¼SW¼, S½NW¼SW¼NW¼, N½NW¼NE¼NW¼, S½NE¼NE¼NW¼, S½NW¼SW¼SW¼, NW¼SE¼NW¼SW¼, NE¼SE¼NW¼SW¼, NE¼SW¼NE¼SW¼, SE¼SW¼NE¼SW¼.	285.00
		TOTAL	285.00
T. 1 S., R. 6 W.,	Sec. 5:	SW¼;	160.00
	6:	SE¼;	160.00
	7:	NE¼, E½NW¼, N½SE¼.	320.00
		TOTAL	640.00
T. 11 S., R. 6 W.,	Sec. 3:	SW¼, W½SE¼;	240.00
	10:	NW¼, W½NE¼;	240.00
	24:	E½SE¼;	80.00
	23:	E½;	320.00
	26:	N½;	320.00

APPENDIX 10 (Continued)
FEDERAL MINERALS (NON-FEDERAL SURFACE)
(Mineral Estate Acres Proposed for Disposal)

Township and Range	Section	Subdivision	Acres
T. 11 S., R. 6 W.,	Sec. 27:	NE¼;	160.00
(Continued)	34:	Lots 18, 4, 31, 27, 19, 30, 28, 11, 16, 17, 24, 9, 32, 25, 29, 20, 26, 1, 6, 7, 2, 10, 15, 12, 3, 5, 8, 13, 21, 23, 14.	155.00
		TOTAL	1,515.00
T. 12 S., R. 6 W.,	Sec. 3:	Lots 11, 22, 56, 7, 55, 32, 42, 48, 59, 62, 36, 39, 43, 20, 14, 35, 30, 61, 69, 64, 65, 46, 67, 63, 40, 15, 68, 19, 12, 18, 27, 28, 26, 53, 60, 58, 38, 24, 37, 44, 47, 49, 6, 51, 5, 45, 23, 52, 16, 17, 10, 29, 21, 41, 9, 33, 31, 54, 57, 8, 13, 25, 34, 50, 66.	320.31
T. 12 S., R. 6 W.,	Sec. 10:	Lots 46, 9, 30, 14, 34, 2, 37, 11, 40, 45, 28, 24, 15, 25, 38, 17, 36, 42, 35, 29, 31, 32, 8, 23, 18, 20, 39, 10, 41, 27, 44, 3, 16, 1, 19, 21, 22, 6, 13, 26, 7, 43, 4, 5, 12, 33, S½SE¼SW¼NE¼, SE¼SE¼NE¼SW¼, W½SW¼SW¼NW¼SE¼, W½SW¼NW¼SW¼, SE¼SW¼NW¼SE¼, E½SW¼SW¼NW¼SE¼, W½SW¼SW¼NW¼, E½NW¼SW¼SW¼NE¼, NE¼SW¼SW¼NE¼, E½NE¼NW¼NW¼, E½NW¼NW¼SW¼, W½SE¼NW¼SW¼, N½SE¼SE¼NE¼, S½NW¼NE¼NE¼, SE¼SE¼SE¼NW¼, W½SW¼SW¼SW¼NE¼, NE¼NE¼NE¼SW¼, W½NW¼NW¼NW¼SE¼, SE¼SW¼SW¼NE¼, E½SW¼SW¼SW¼NE¼, N½NE¼SW¼NE¼, S½NE¼SW¼NE¼, SE¼NW¼SW¼NE¼, E½SW¼NW¼SW¼NE¼, N½NW¼NE¼NE¼, N½SW¼NE¼NE¼, NE¼NE¼SE¼NW¼, W½NW¼NW¼SW¼NE¼, SE¼NE¼SE¼NW¼, W½SW¼NW¼SW¼NE¼, W½NW¼NW¼SW¼, N½SE¼SW¼NE¼, SE¼NW¼NW¼SE¼, E½SW¼NW¼NW¼SE¼, E½SE¼NW¼SW¼, E½SW¼NW¼SW¼, W½NE¼SW¼NW¼, E½SW¼SW¼NW¼, W½NW¼SW¼NW¼, E½NW¼SW¼NW¼, S½SW¼NE¼NE¼, N½SE¼NW¼SE¼, S½NE¼NW¼SE¼, NE¼SW¼NW¼SE¼, E½NW¼SW¼NW¼SE¼, S½SE¼NW¼SE¼, SE¼NE¼NE¼SW¼, W½SW¼NW¼NW¼SE¼, W½SE¼SW¼NW¼, E½SE¼SW¼NW¼, NE¼SE¼NE¼SW¼, W½NW¼SW¼NW¼SE¼, E½NW¼NW¼SW¼, W½SE¼NW¼SW¼, E½NE¼NW¼NW¼, N½SE¼SE¼NE¼, W½NE¼NW¼NW¼, W½SW¼SW¼NW¼.	273.21
		TOTAL	593.52

APPENDIX 10 (Continued)
FEDERAL MINERALS (NON-FEDERAL SURFACE)
(Mineral Estate Acres Proposed for Disposal)

Township and Range	Section	Subdivision	Acres
T. 12 S., R. 6 W.,	Sec. 14:	W½SW¼NW¼;	20.00
	15:	W½NW¼;	80.00
	16:	SE¼NW¼SW¼NE¼, NE¼SW¼SW¼NE¼, SW¼NE¼SW¼NE¼, NW¼SE¼SW¼NE¼;	10.00
	17:	W½NW¼NE¼SE¼.	5.00
		TOTAL	115.00
T. 14 S., R. 6 W.,	Sec. 24:	E½.	320.00
		TOTAL	320.00
T. 4 S., R. 8 W.,	Sec. 17:	E½SE¼.	80.00
		TOTAL	80.00
T. 5 S., R. 8 W.,	Sec. 2:	NE¼.	160.00
		TOTAL	160.00
T. 1 N., R. 9 W.,	Sec. 4:	SE¼SE¼.	40.00
		TOTAL	40.00
T. 4 S., R. 10 W.,	Sec. 18:	NE¼.	160.00
		TOTAL	160.00
T. 3 N., R. 11 N.,	Sec. 19:	N½.	320.00
		TOTAL	320.00
T. 6 S., R. 11 W.,	Sec. 25:	S½.	320.00
		TOTAL	320.00
T. 7 S., R. 11 W.,	Sec. 27:	All;	640.00
	28:	SE¼, N½N½.	320.00
		TOTAL	960.00
T. 4 N., R. 15 W.,	Sec. 18:	All;	640.00
	7:	W½;	320.00
	21:	W½;	320.00
	22:	N½;	320.00
	23:	NW¼;	160.00
	15:	E½, NE¼;	480.00
	14:	W½, NE¼;	480.00
	26:	N½;	320.00
	27:	N½.	320.00
		TOTAL	3,360.00
T. 6 N., R. 16 W.,	Sec. 8:	SW¼SW¼;	40.00
	9:	N½, SE¼, NE¼NW¼;	520.00
	10:	All;	640.00
	11:	All;	640.00
	16:	All;	640.00
	17:	W½;	320.00

APPENDIX 10 (Continued)
FEDERAL MINERALS (NON-FEDERAL SURFACE)
(Mineral Estate Acres Proposed for Disposal)

Township and Range	Section	Subdivision		Acres
T. 6 N., R. 16 W., Sec.	18:	SE¼SE¼;		40.00
	29:	E½;		320.00
	32:	E½;		320.00
	33:	N½;		320.00
	34:	S½.		320.00
			TOTAL	4,120.00
T. 5 N., R. 16 W., Sec.	1:	N½;		320.00
	3:	SE¼, SE¼SW¼, W½NW¼, NE¼NW¼;		320.00
	11:	N½;		320.00
	22:	E½;		320.00
	23:	S½, S½N½;		480.00
	25:	E½;		320.00
	27:	All;		640.00
	35:	All.		640.00
			TOTAL	3,360.00
T. 7 N., R. 17 W., Sec.	22:	N½, NE¼SE¼NW¼.		330.00
			TOTAL	330.00

SOURCE: Phoenix District maps and files

APPENDIX 11
STOCKING RATES (AUMS) BY ALTERNATIVE
Bureau of Land Management, Phoenix District, Arizona

Allotment*		Proposed Action		No Action		Resource Production		Resource Protection		Environmental Protection	
Number	Name	S.T.	L.T.**	S.T.	L.T.	S.T.	L.T.	S.T.	L.T.	S.T.	L.T.
3007	Beloat	3,492	3,842	3,492	3,492	3,296	4,038	2,084	2,084	0	0
3009	Bighorn	6,240	6,490	6,240	6,240	5,915	6,815	3,355	3,355	0	0
3013	Cameron	2,526	2,626	2,526	2,526	2,283	2,869	981	981	0	0
3016	Childs	3,802	3,802	3,802	3,802	3,398	4,800	1,729	1,729	0	0
3017	Clem	3,216	3,216	3,216	3,216	2,785	3,216	879	879	0	0
3018	Conley	4,158	4,158	4,158	4,158	3,958	4,358	1,786	1,786	0	0
3020	Coyote Flat	456	456	456	456	388	456	388	388	0	0
3022	Crowder-Weisser	15,758	15,758	15,758	15,758	13,520	15,758	8,768	8,768	0	0
3028	Eagle Tail	2,100	2,310	2,100	2,100	1,894	2,516	521	521	0	0
3032	Gable-Ming	4,200	4,200	4,200	4,200	3,519	4,200	1,360	1,360	0	0
3035	Gila Bend Indians	583	583	583	583	509	583	509	509	0	0
3039	Hansen	921	921	921	921	746	921	620	620	0	0
3042	Hazen	1,440	1,526	1,440	1,440	1,238	1,728	542	542	0	0
3046	Kirian	387	387	387	387	352	387	306	306	0	0
3047	Ranegras Plain	1,862	1,937	1,862	1,862	1,713	1,937	1,713	1,713	0	0
3053	Lower Vekol	1,165	1,165	1,165	1,165	1,095	1,165	813	813	0	0
3076	Sentinel	361	378	361	361	303	437	214	214	0	0
3080	South Vekol	1,863	2,049	1,863	1,863	1,738	2,174	1,182	1,182	0	0
3083	Table Top	1,710	1,778	1,710	1,710	1,659	1,829	1,038	1,038	0	0
3085	Vekol	840	874	840	840	798	916	452	452	0	0
3086	Ward	1,476	1,476	1,476	1,476	1,299	1,476	878	878	0	0
3091	Why	456	456	456	456	397	456	284	284	0	0
	TOTALS	59,012	60,388	59,012	59,012	52,803	63,035	30,402	30,402	0	0
Allotment Statistics											
22	Perennial-Ephemeral Allotments	59,012	60,388	59,012	59,012	52,803	63,035	30,402	30,402	0	0
18	Ephemeral Allotments (Custodial)	0	0	0	0	0	0	0	0	0	0
8	Perennial-Ephemeral Leases	1,512	1,512	1,512	1,512	1,512	1,512	1,512	1,512	0	0
48	Total Allotments	60,524	61,900	60,524	60,524	54,315	64,547	31,914	31,914	0	0
	% Reduction	0	+2%	0	0	-10%	+6%	-47%	-47%	-100%	-100%

* Perennial-Ephemeral allotments only.
** S.T. = Short Term; L.T. = Long Term.
SOURCE: Lower Gila Resource Area grazing files

APPENDIX 12
GRAZING ALLOTMENT CATEGORIES
Bureau of Land Management, Phoenix District, Arizona

Maintain Category Criteria

- Present range condition is satisfactory.
- Allotments have moderate or high resource production potential and are producing near their potential (or trend is moving in that direction).
- No serious resource-use conflicts/controversy exist.
- Opportunities may exist for positive economic return from public investments.
- Present management appears satisfactory.
- Other criteria appropriate to EIS area.

Improve Category Criteria

- Present range condition is unsatisfactory.
- Allotments have moderate to high resource production potential and are producing at low to moderate levels.
- Serious resource-use conflicts/controversy exists.
- Opportunities exist for positive economic return from public investments.
- Present management appears unsatisfactory.
- Other criteria appropriate to EIS area.

Custodial Category Criteria

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

SOURCE: Grazing Policy (IM-82-292)

APPENDIX 13
RANGE DEVELOPMENT TYPES
Bureau of Land Management, Phoenix District, Arizona

Following is a discussion of typical design features and construction practices for range improvements and treatments proposed in this plan. There are many special design features that are not specifically discussed in this appendix. These design features will be developed, if needed, for individual projects at the time an environmental assessment is written.

Structural Improvements

Fences. All fences would be built to BLM manual specifications. Normally fences would be constructed to provide exterior allotment boundaries, divide allotments into pastures, protect streams, and control livestock. Most fences would be three-wire or four-wire with steel posts spaced 16-1/2 feet apart with intermediate wire stays. Existing fences that create wildlife movement problems would be modified. Proposed fence lines would usually not be bladed or scraped. Gates or cattleguards would be installed where fences cross existing roads.

Reservoirs. Reservoir sites would be selected based on available watershed and hydrologic information. All applicable state laws and regulations would be followed.

Wells. Well sites would be selected based on geologic reports that predict the depth to reliable aquifers. The typical well site would consist of a windmill or jack-pump with motor, a large storage tank, and a water trough. All applicable state laws and regulations that apply to ground water would be observed.

SOURCE: Yuma RMP/EIS, 1985

APPENDIX 14
VEGETATION METHODOLOGY
Bureau of Land Management, Phoenix District, Arizona

Inventory Criteria

The Phoenix District completed a rangeland survey of the Lower Gila South RMP/EIS area from 1980-1981, using BLM's rangeland inventory method for mapping and the Soil Conservation Service (SCS) method for determining condition and trend.

BLM resource specialists used recent natural-color aerial photographs, topographic maps, soil survey information, and a helicopter to map preliminary range sites or complexes of range sites. SCS provided technical range site guides for the planning area, and the Arizona State Land Department inventoried state lands concurrently, using the range site concept.

Determination of Rangeland Condition and Apparent Trend*

Rangeland Condition. The rangeland condition of areas within a range site was determined by comparing the present plant community to the climax plant community, as shown by the technical guide for the site. For the existing plant community, specialists counted no more than the maximum weight (or percentage of total production) shown on the guide for any species in the climax plant community.

The amount of all climax species not exceeding that shown on the guide was totaled to show the relative ecological rating or numerical evaluation of the stand. The rating will range from 0 to 100, depending on how closely the plant community resembles the climax plant community for the range site.

the following four classes were used to express the degree to which the present plant community composition reflects climax composition.

Range Condition Class	Percentage of Present Plant Community that is Climax for the Range Site
Excellent	76-100
Good	51-75
Fair	26-50
Poor	0-25

Guides based on the weight of species in the climax plant community truly express ecological condition. A condition rating based on the percentage of composition alone may be adjusted if the total production is less than that characteristic for the condition class. For example, a rating determined by counting the percentage of each climax species may show that the existing plant community is in near-climax condition but that the production of these species is less than expected for near-climax condition. The condition rating can then be lowered, considering current growing condition.

Apparent Trend. The present ecological rangeland condition rating alone does not tell whether the plant community is improving or deteriorating in relation to its potential. Trend is a separate means needed for assessing what is happening to the plant community. Existing rangeland condition results from a sustained trend over time. Trend should be known when planning the use, management, and treatment for maintaining or improving rangeland. The following vegetation and soil characteristics, showing apparent trend in rangeland condition, were evaluated in the field during the rangeland survey: plant composition; seedling and young plant abundance; plant residues; plant vigor; and solid surface factors such as bare ground, soil crusting, stone cover, compaction, plant hummocking, and soil movement.

SOURCE: SCS Rangeland Handbook

APPENDIX 15
RANGELAND CONDITION AND APPARENT TREND
(Perennial-Ephemeral Allotments Only)
Bureau of Land Management, Phoenix District, Arizona

Allotment Number	Allotment Name	Federal Acres	Preference	Condition (%) Poor	Fair	Good	Excellent	Apparent Trend (%) Up	Static	Down
3007	Beloat	125,936	3,492	2	24	63	11	37	61	2
3009	Bighorn	146,336	6,240	1	24	59	16	0	100	0
3013	Cameron	55,926	2,526	7	34	59	0	0	97	3
3016	Childs	99,326	3,802	10	33	46	11	0	100	0
3017	Clem	82,252	3,216	17	33	50	0	0	100	0
3018	Conley	91,586	4,158	2	20	66	12	19	73	8
3020	Coyote Flat	10,789	456	10	54	36	0	0	100	0
3022	Crowder-Weisser	234,645	15,758	21	29	43	7	3	89	8
3028	Eagle Tail	188,230	2,100	18	13	60	9	17	83	0
3032	Gable-Ming	121,421	4,200	8	65	13	14	0	100	0
3035	Gila Bend Indians	18,460	583	6	51	33	10	10	80	10
3039	Hansen	18,968	921	27	41	32	0	0	81	19
3042	Hazen	42,484	1,440	15	40	45	0	0	100	0
3046	Kirian	17,094	387	0	44	33	23	14	86	0
3047	Ranegras Plain	128,466	1,862	6	27	66	1	6	94	0
3053	Lower Vekol	21,892	1,165	4	24	59	13	17	83	0
3076	Sentinel	18,564	361	4	70	26	0	2	97	1
3080	South Vekol	49,349	1,863	3	31	34	32	1	96	3
3083	Table Top	35,940	1,710	1	11	85	3	6	90	4
3085	Vekol	20,848	840	0	23	28	49	6	94	0
3086	Ward	34,893	1,476	5	48	42	5	0	86	14
3091	Why	10,489	456	12	41	47	0	0	100	0
	TOTAL	1,573,894								

SOURCE: Lower Gila Resource Area grazing files

APPENDIX 16
DIVERSITY IN THE NATIONAL WILDERNESS PRESERVATION SYSTEM
Bureau of Land Management, Phoenix District, Arizona

AREAS WITH SOLITUDE OR PRIMITIVE RECREATION OPPORTUNITIES*

SMSA	Status	No.	Acres	States	Administering** Agency
Phoenix, Arizona	Designated	37	2,064,835	AZ, CA, NM	FS, NPS, BLM
	Endorsed	4	1,318,710	AZ	BLM, FS, FWS
	Study	72	3,143,139	AZ, CA, NM	BLM, FS, NPS
Tucson, Arizona	Designated	33	2,038,095	AZ, NM	FS, NPS, BLM
	Endorsed	3	1,316,200	AZ	BLM, FS, FWS
	Study	61	1,525,640	AZ, NM	BLM, FS
Las Vegas, Nevada	Existing	15	1,309,288	AZ, CA	FS, NPS, CAL, BLM
	Endorsed	25	4,679,481	AZ, CA, NV, UT	FS, NPS, FWS
	Study	253	10,607,984	AZ, CA, NV, UT	BLM, FS, NPS, CAL
Riverside, California	Designated	30	1,958,821	CA	FS, NPS, BLM, CAL
	Endorsed	28	5,033,801	AZ, CA, NV	FS, NPS, FWS
	Study	280	9,832,014	AZ, CA, NV	FS, NPS, FWS, BLM, CAL
San Diego, California	Existing	8	795,960	CA	FS, NPS, CAL
	Endorsed	18	1,520,660	AZ, CA,	FS, NPS, FWS
	Study	200	7,463,251	AZ, CA, NV,	BLM, FS, NPS, CAL

* Within a day's drive of Phoenix, Tucson, Las Vegas, Riverside, and San Diego SMSAs.
** BLM = Bureau of Land Management; FS = Forest Service; FWS = Fish and Wildlife Service; NPS = National Park Service; CAL = State of California
SOURCE: BLM, Profile 2, Wilderness Diversity Computer Reports, Phoenix District files

APPENDIX 16 (Continued)
DIVERSITY IN THE NATIONAL WILDERNESS PRESERVATION SYSTEM

DESIGNATED WILDERNESS IN ARIZONA

Wilderness Areas	Acreage	Managing Agency
Apache Creek	5,420	U.S. Forest Service
Cedar Bench	14,950	U.S. Forest Service
Chiricahua	87,700	U.S. Forest Service
Bear Wallow	11,080	U.S. Forest Service
Castle Creek	26,030	U.S. Forest Service
Escudilla	5,200	U.S. Forest Service
Fossil Springs	11,550	U.S. Forest Service
Four Peaks	53,500	U.S. Forest Service
Galiuro	76,317	U.S. Forest Service
Granite Mountain	9,800	U.S. Forest Service
Hellsgate	36,780	U.S. Forest Service
Juniper Mesa	7,600	U.S. Forest Service
Kachina Peaks	18,200	U.S. Forest Service
Kendrick Mountain	6,510	U.S. Forest Service
Mazatzal	251,707	U.S. Forest Service
Miller Peak	20,190	U.S. Forest Service
Mt. Wrightson	25,260	U.S. Forest Service
Mount Baldy	6,975	U.S. Forest Service
Munds Mountain	18,150	U.S. Forest Service
Pajarita	7,420	U.S. Forest Service
Pine Mountain	20,478	U.S. Forest Service
Pusch Ridge	56,510	U.S. Forest Service
Red Rock-Secret Mountain	43,950	U.S. Forest Service
Rincon Mountain	38,590	U.S. Forest Service
Saddle Mountain	40,600	U.S. Forest Service
Salome	18,950	U.S. Forest Service
Salt River Canyon	32,800	U.S. Forest Service
Santa Teresa	26,780	U.S. Forest Service
Sierra Ancha	20,850	U.S. Forest Service
Strawberry Crater	10,140	U.S. Forest Service
Superstition	159,756	U.S. Forest Service
Sycamore Canyon	55,942	U.S. Forest Service
West Clear Creek	13,600	U.S. Forest Service
Wet Beaver	6,700	U.S. Forest Service
Woodchute Wilderness	5,600	U.S. Forest Service
Kanab Creek	77,100	U.S. Forest Service/ Bureau of Land Management
Aravaipa Canyon	6,670	Bureau of Land Management
Beaver Dam Mountains	19,600	Bureau of Land Management
Cottonwood Point	6,500	Bureau of Land Management
Grand Wash Cliffs	36,300	Bureau of Land Management
Mt. Logan	14,600	Bureau of Land Management
Mt. Trumbull	7,900	Bureau of Land Management
Paiute	84,700	Bureau of Land Management
Paria Canyon-Vermillion Cliffs	110,000	Bureau of Land Management
Chiricahua National Monument	10,290	National Park Service
Organ Pipe National Monument	299,600	National Park Service
Petrified Forest	50,260	National Park Service
Sahuaro National Monument	71,400	National Park Service
TOTAL	2,046,505	

ADMINISTRATIVELY ENDORSED WILDERNESS STUDY AREAS IN ARIZONA

Wilderness Areas	Acreage	Managing Agency
Imperial National Wildlife Refuge	1,600	U.S. Fish and Wildlife Service
Cabeza Prieta National Wildlife Refuge	744,000	U.S. Fish and Wildlife Service
Havasu National Wildlife Refuge	2,510	U.S. Fish and Wildlife Service
Kofa	570,600	U.S. Fish and Wildlife Service
TOTAL	1,318,710	

SOURCE: BLM, Profile 2, Wilderness Diversity Computer Reports, Phoenix District files

APPENDIX 17
CULTURAL RESOURCE SITES IN THE LOWER GILA SOUTH AREA
Bureau of Land Management, Phoenix District, Arizona

Prehistoric Archaeological Sites

Hohokam/Patayan	Usually a permanent habitation area for several families over an extended period of time
Temporary Camps	Temporary habitation area
Trail Camps	Very temporary camps used for a night or two while migrating to other areas
Hunting and Gathering Camp	Temporary camp used for a few weeks as a base camp for hunting and gathering activities
Rock Shelters	Same as above except found within rock shelters
Cleared Circles	Cleared and/or smoothed depression areas on desert pavement terraces; usually used for sleeping
Rock Circles	Usually a cleared area with rocks around the edge. Rocks thought to have served as anchors for temporary brush huts
Litchic Source/ Quarry	A source area for raw lithic materials used for tool manufacture, or for minerals used for paints
Roasting Pit	A concentration of thermally affected rocks usually with ash in the soil (occasionally these will be a cremation site)
Rock Cairn	A trail marker, monument or "shrine" resulting from stones placed in a cluster or pile
Milling Station	A food preparation area where one or more grinding stones (metates, mortars, or pestles) are present
Knapping Station	Locus where cores or raw lithic materials were reduced to blanks, preforms, or tools, evidenced by a concentration of large chunks or large flakes of the same material

APPENDIX 17 (Continued)
CULTURAL RESOURCE SITES IN THE LOWER GILA SOUTH AREA

	Prehistoric Archaeological Sites (cont)
Lithic Scatter	A location used to manufacture a lithic tool, as evidenced by a scatter of lithic flakes or cores
Ceramic Scatter	A location with scattered broken pottery sherds, may be the result of the breakage of a single vessel
Hunting Blind	A semi-walled locality, usually on hilly or mountain slopes, used to hunt primarily bighorn sheep and deer
Burial/Cremation	Evidence of human burial or cremation. The latter usually contain ash and pieces of human bone
Trails	Aboriginal footpaths used to travel from area to area primarily identified by association with artifacts/features
Aboriginal Art	Geometric, zoomorphic or anthropomorphic design created by aboriginal peoples
Petroglyphs	Designs pecked, rubbed or scratched on a rock
Pictographs	Designs painted on rock
Intaglios	Large designs created on desert pavement by removal of surface gravel
Rock Alignments	Large designs created by the alignment of rocks and gravel
Isolated Artifacts	Artifacts (pottery sherds, lithic tools, etc.) found without association to an identifiable site
	Historic Archaeological Sites
Mine	Evidence of ore removal for mineral extraction, i.e., plts, holes, shafts, adits, tailings, etc.
Mill	Structures (or remains of) associated with processing minerals
Town	Aggregation of structures and other physical remains of a multifamily occupation in historic periods
Home or Cabin	Single structure and associated physical remains of a single person or family occupancy

APPENDIX 17 (Continued)
CULTURAL RESOURCE SITES IN THE LOWER GILA SOUTH AREA

	Historic Archaeological Sites
Historic Campsite	Evidence of temporary occupation by one or more families. Usually associated with temporary mining or river-related activities
Road or Trail	Evidence of historic use as a wagon or pack train route
Military	Site of a military camp or other activity, primarily remnants of General Patton's World War II manuevers
Trash Dump	Historic refuse area associated with any of the above
Grave	One or more historic burials
	Traditional Cultural/Religious Sites
Ceremonial Sites	Prehistoric or historic area of sacred character. Physical evidences of activities usually present, i.e., dance patterns, vision quest circles, intaglios, rock cairns, etc.
Sacred Areas	Prehistoric or historic area of sacred character. Evidences of physical activities not always present, i.e. sacred mountain top, power place or vision quest places, etc.
Traditional Use Areas	Areas of traditional hunting, gathering, fishing or travel
Burial or Cremation Site	Area of historic cremation or burial of their dead

SOURCE: Phoenix District files

APPENDIX 18
LOWER GILA SOUTH--RANCH CLASSES*
Bureau of Land Management, Phoenix District, Arizona

LOWER GILA SOUTH--SMALL SIZE RANCH CLASS--42 COWS TYPICAL*

Production	Quantity	Weight	Price (CWT)	Value	Value/Cow
Steer Calves	16	420	$65.67	$ 4,413	$105.07
Heifer Calves	8	365	56.00	1,635	38.93
Cull Cows	5	875	37.71	1,650	39.29
TOTAL GROSS REVENUE				$ 7,698	$183.29

Cash Costs	Units	Number of Units	Price	Value	Value/ Cow
BLM Grazing	AUMs	465	$1.86	$865	$20.59
Private Grazing	AUMs	50	0.0	0	0.0
Public Grazing - State	AUMs	67	1.02	68	1.62
Salt & Mineral	CWT	15	4.88	73	1.74
Veterinary Medicine	$	234	1.00	234	5.58
Trucking	$	74	1.00	74	1.77
Marketing	$	220	1.00	220	5.25
Hired Labor	HRS	249	4.82	1,200	28.57
Machinery (Fuel & Lube)				609	14.49
Machinery Repair				234	5.56
Equipment Repair				146	3.47
Interest on Operating Capital				232	5.53
Total Cash Costs				$3,955	$94.17
Net Revenue				$3,743	$89.11
Family Labor				2,164	51.52
Net Income				$1,579	$37.60

LOWER GILA SOUTH--MEDIUM SIZE RANCH CLASS--140 COWS TYPICAL*

Production	Quantity	Weight	Price (CWT)	Value	Value/Cow
Steer Calves	50	420	$65.67	$13,791	$98.50
Heifer Calves	29	365	56.00	5,928	42.34
Cull Cows	15	875	37.71	4,949	35.35
TOTAL GROSS REVENUE				$24,668	$176.19

Cash Costs	Units	Number of Units	Price	Value	Value/ Cow
BLM Grazing	AUMs	1,855	$1.86	$3,450	$24.64
Private Grazing	AUMs	30	0.0	0	0.0
State Grazing	AUMs	47	1.02	48	0.34
Salt & Mineral	CWT	49	4.88	239	1.70
Veterinary Medicine	$	440	1.00	440	3.14
Trucking	$	60	1.00	60	0.43
Marketing	$	461	1.00	461	3.29
Hired Labor	HRS	1,100	4.82	5,302	37.87
Machinery (Fuel & Lube)				1,036	7.40
Machinery Repair				412	2.94
Equipment (Fuel & Lube)				80	0.57
Equipment Repair				638	4.56
Interest on Operating Capital				914	6.53
Total Cash Costs				$13,080	$93.41
Net Revenue				$11,588	$82.78
Family Labor				12,000	85.71
Net Income				(- 412)	(- 2.93)

APPENDIX 18 (Continued)
LOWER GILA SOUTH--RANCH CLASSES*
Bureau of Land Management, Phoenix District, Arizona

LOWER GILA SOUTH--LARGE SIZE RANCH CLASS--518 COWS TYPICAL*

Production	Quantity	Weight	Price (CWT)	Value	Value/Cow
Steer Calves	170	380	$67.00	$43,282	$ 83.56
Heifer Calves	92	360	56.00	18,547	35.80
Cull Cows	57	850	37.71	18,270	35.27
TOTAL GROSS REVENUE				$80,099	$154.63

Cash Costs	Units	Number of Units	Price	Value	Value/ Cow
BLM Grazing	AUMs	6,077	$1.86	$11,303	$21.82
Private Grazing	AUMs	357	0.0	0	0.0
State Grazing	AUMs	718	1.02	732	1.41
Salt & Mineral	CWT	181	4.88	886	1.71
Veterinary Medicine	$	2,004	1.00	2,004	3.87
Trucking	$	1,321	1.00	1,321	2.55
Marketing	$	1,352	1.00	1,352	2.61
Hired Labor	HRS	4,048	4.82	19,511	37.66
Machinery (Fuel & Lube)				1,756	3.39
Machinery Repair				642	1.24
Equipment (Fuel & Lube)				83	0.16
Equipment Repair				1,471	2.84
Interest on Operating Capital			0.15	4,175	8.06
Total Cash Costs				$45,236	$87.32
Net Revenue				$34,863	$67.31
Family Labor				12,000	23.16
Net Income				$22,863	$44.15

* Herd size (Small)--42 cows: 79 percent calf crop, 5 percent calf loss birth to weaning, 5 percent annual cow loss, 17 percent replacement rate, 14 cows per bull.
Herd size (Medium)--140 cows: 76 percent calf crop, 5 percent calf loss birth to weaning, 5 percent annual cow loss, 16 percent replacement rate, 14 cows per bull.
Herd size (Large)--518 cows: 70 percent calf crop, 6 percent calf loss birth to weaning, 4 percent annual cow loss, 15 percent replacement rate, 15 cows per bull.
SOURCE: Economic Research Services

APPENDIX 19
REPRESENTATIVE RANCH BUDGETS
Bureau of Land Management, Phoenix District, Arizona

Item	Small-Size Ranch Short Term	Small-Size Ranch Long Term	Medium-Size Ranch Short Term	Medium-Size Ranch Long Term	Large-Size Ranch Short Term	Large-Size Ranch Long Term
Proposed Action						
Revenue	$7,698	$7,698	$24,668	$26,155	$80,099	$82,619
Cash Costs	3,955	3,955	13,080	13,731	45,236	46,367
Net Revenue	3,743	3,743	11,588	12,424	34,863	36,251
Less Family Labor	(2,164)	(2,164)	(12,000)	(12,000)	(12,000)	(12,000)
Net Income	$1,579	$1,579	($ -412)	$ 424	$22,863	$24,250
No Action						
Revenue	$7,698	$7,698	$24,668	$24,688	$80,099	$80,099
Cash Costs	3,955	3,955	13,080	13,080	45,236	45,236
Net Revenue	3,743	3,743	11,588	11,588	34,863	34,863
Less Family Labor	(2,164)	(2,164)	(12,000)	(12,000)	(12,000)	(12,000)
Net Income	$1,579	$1,579	($ -412)	($ 412)	$22,863	$22,863
Resource Production						
Revenue	$6,336	$6,336	$22,416	$27,871	$72,034	$83,667
Cash Costs	3,296	3,296	11,956	14,759	41,602	47,240
Net Revenue	3,040	3,040	10,460	13,112	30,432	36,427
Less Family Labor	(2,050)	(2,050)	(12,000)	(12,000)	(12,000)	(12,000)
Net Income	$ 990	$ 990	($1,540)	$ 1,112	$18,432	$24,427
Resource Protection						
Revenue	$5,525	$5,525	$12,949	$12,949	$40,584	$40,584
Cash Costs	3,013	3,013	6,912	6,912	27,165	27,165
Net Revenue	2,512	2,512	6,037	6,037	13,419	13,419
Less Family Labor	(1,972)	(1,972)	(6,890)	(6,890)	(12,000)	(12,000)
Net Income	$ 540	$ 540	($ 852)	($ 852)	$ 1,419	$ 1,419

SOURCE: Lower Gila South Ranch Budgets, Phoenix District files

APPENDIX 20
TOTAL ANNUAL RANCH RECEIPTS, EXPENDITURES, AND REVENUES
Bureau of Land Management, Phoenix District, Arizona

Item	Ranch Size			RMP/EIS Total
	Small	Medium	Large	
Number of Ranches	4	6	7	17
Gross Revenue				
Per Ranch	7,698	24,668	80,099	
RMP/EIS Total	30,792	148,008	560,693	739,493
Expenditures				
Per Ranch	3,955	13,080	45,236	
RMP/EIS Total	15,820	78,480	316,652	410,952
Net Revenue				
Per Ranch	3,743	11,588	34,863	
RMP/EIS Total	14,972	69,528	244,041	328,541

SOURCE: Lower Gila South Ranch Budgets, Phoenix District files

APPENDIX 21
NUMBER OF RANCH EMPLOYEES AND THEIR EARNINGS
Bureau of Land Management, Phoenix District, Arizona

Item	Ranch Size			RMP/EIS Total
	Small	Medium	Large	
Number of Ranches	4	6	7	17
Labor Requirements (Hours per Year)				
Per Ranch	249	1,100	4,048	
RMP/EIS Total	996	6,600	28,336	35,932
Employement (1 Workyear = 2,600 Hours)				
Per Ranch	0.09	0.4	1.6	
RMP/EIS Total	0.36	2.5	10.9	13.8
Earnings ($12,500 per workyear)				
Per Ranch	1,200	5,302	19,511	
RMP/EIS Total	4,800	31,812	136,577	173,189

SOURCE: Lower Gila South Ranch Budgets, Phoenix District files

GLOSSARY, REFERENCES, AND INDEX

GLOSSARY

The following abbreviations are used in this EIS. Those representing terms are defined in the glossary.

ACEC	area of critical environmental concern
AG&FD	Arizona Game and Fish Department
AMP	allotment management plan
APS	Arizona Public Service
AUM	animal unit month
BLM	Bureau of Land Management
BR	Bureau of Reclamation
CFR	Code of Federal Regulations
CMU	Classification for Multiple Use
EIS	environmental impact statement
ESA	economic study area
FLPMA	Federal Land Policy and Management Act
FWS	Fish and Wildlife Service
HMAP	herd management area plan
HMP	habitat management plan
MFP	management framework plan
MSA	management situation analysis
NRDC	National Resource Defense Council
NWPS	National Wilderness Preservation System
ORV	off-road vehicle
RMP	resource management plan
SHPO	State Historic Preservation Officer
SMSAs	Standard Metropolitan Statistical Areas
USGS	U.S. Geological Survey
VRM	visual resource management
WSA	wilderness study area

Terms

ACTIVITY PLANNING. Site-specific planning which precedes actual development. This is the most detailed level of BLM planning.

ADJUDICATION. The legal processing of applications, entries, and claims to assure compliance with the public land laws and regulations.

ADMINISTRATIVELY ENDORSED WILDERNESS AREA. An area that the President ofthe United States has recommended to Congress as suitable for wilderness designation.

AGGLOMERATE. A rock composed largely or entirely of angular volcanic fragments held together in a matrix.

AIR QUALITY CLASSES. Classes established by the Environmental Protection Agency to define the amount of air pollution considered significant within an area. Class I applies to areas where almost any change in air quality would be considered significant and therefore not allowed; Class II applies to areas where the deterioration normally accompanying moderate well-controlled growth would be considered allowable; and Class III applies to areas where deterioration up to the national standards would be allowed.

ALLOTMENT. A land area where one or more operators' livestock graze. It generally consists of public land but may include parcels of private and state-owned lands. The number of livestock and the season of use are stipulated for each allotment.

ALLOTMENT MANAGEMENT PLAN (AMP). A BLM livestock grazing management plan for a specific allotment, based on multiple use resource management objectives. The AMP considers livestock grazing in relation to other uses of the range and in relation to renewable resources—watershed, vegetation, and wildlife. An AMP establishes the seasons of use, the number of livestock to be permitted on the range, and the rangeland developments needed.

ALLUVIAL. Pertaining to sediments transported and deposited by water.

ALLUVIAL FAN. A sloping, fan-shaped mass of sediment deposited by a stream where it emerges from an upland onto a plain. See Bajada.

ALLUVIUM. Unconsolidated rock or soil material deposited by running water, including gravel, sand, silt, clay, and various mixtures of these.

ANDESITE. A light-colored volcanic rock.

ANIMAL UNIT MONTH (AUM). The amount of forage needed to sustain one cow or its equivalent for one month.

ANNUAL (EPHEMERAL) PLANT. A plant that completes its life cycle and dies in one year or less (Range Term Glossary Committee, 1974).

AREA OF CRITICAL ENVIRONMENTAL CONCERN (ACEC). An ACEC is an area of national or international significance that is threatened by adverse change—a reduction or loss of values—unless special management attention is applied. With ACEC status, public land is managed to prevent irreparable damage to important historic, cultural, or scenic values, fish and wildlife resources, or other natural systems or processes.

ARIZONA NATURAL HERITAGE PROGRAM. A cooperative effort of the Nature Conservancy and the Arizona Game and Fish Department to maintain Arizona's biological diversity by collecting, analyzing, and disseminating information on the populations and distributions of plants and animals of special interest in the state. Being studied are Arizona species that are poorly understood and species with low populations or limited distribution within Arizona.

ARROYO. A small steep-sided and usually dry water course with a flat floor.

ASPECT (VEGETATION). The appearance that a dominant or most common species of vegetation gives to the viewer.

AUTHORIZED GRAZING PREFERENCE (QUALIFICATIONS). The total number of AUMs that livestock are allowed to graze annually on public lands. Preference is apportioned and attached to base waters or property owned or controlled by a permittee or lessee.

BAILEY-KUCHLER SYSTEM. A classification system that divides the United States into ecosystems based on climate, vegetation, soils, and landform.

BAJADA. A broad, gently inclined slope at the foot of a mountain, formed by the coalescing of alluvial fans.

BASALT. A dark rock, usually of volcanic origin.

BURRO HERD. One or more jacks (male burros) and their jennies (females).

BURRO HERD AREA. The area used by free-roaming burros during their yearly movements to obtain biological requirements; the area occupied by wild free-roaming burros at the passage of the Free-Roaming Wild Horse and Burro Act of December 15, 1971 and limited to that area by the Act, not to be expanded by the relocating of animals.

BURRO USE AREA. An area currently being used by burros. See Burro Herd Area.

CARRYING CAPACITY (GRAZING CAPACITY). The greatest stocking rate possible without damaging vegetation or related resources. It may vary from year to year in the same area because of fluctuating forage production (Range Term Glossary Committee, 1974).

CHAPARRAL. A vegetation type of dense brush and shrubs, which in the EIS area occurs between 4,000 and 7,000 feet in elevation and consists of the following plants: mountain mahogany, shrub live oak, desert ceanothus, cliffrose, manzanita, skunkbush, shrubby buckwheat, and desert

needlegrass. Chaparral provides significant forage and cover for wildlife and livestock.

CHERRYSTEM ROAD. A dead-end road extending into and surrounded by a wilderness study area (WSA) but not within its boundaries. Such roads may lead to range developments, mines, or inholdings. Cherrystemming is the delimiting of WSAs to exclude a cherrystem road, developments, or other uses not compatible with wilderness.

CLASSIFICATION FOR MULTIPLE USE. Land classification to determine whether public lands shall be disposed of or retained, authorized by the Classification and Multiple Use Act of 1964 (78 Stat. 986, 43 U.S.C. 1411-18)

CRITICAL MINERALS. Minerals essential to the national defense of the United States, which, though difficult to procure, are easier to procure than strategic minerals because they can be domestically produced, obtained in more adequate quantities, or are less essential than strategic minerals. Nevertheless, critical minerals need some degree of conservation and distribution control. See Strategic Minerals.

CRITICAL WILDLIFE HABITAT. That part of the habitat of a federally threatened or endangered wildlife species that is essential for its survival and perpetuation.

CRUCIAL WILDLIFE HABITAT. That part of the habitat of a wildlife species that is essential to its survival and perpetuation as a population.

CULTURAL RESOURCE INVENTORY CLASSES.

Class I —A prepared study of existing cultural resource data from published and unpublished documents, various institutional site inventory records, state and national registers, and other sources leading to a compilation and analysis of all available data and synthesis of the data.

ClassII —A professionally conducted, statistically based sample survey designed to characterize the probable density, diversity, and distribution of cultural properties within a project area. Sample units are inventoried with the methods described under Class III. Several phases with differing sample designs and intensities may be conducted.

CLASS III —A professionally conducted systematic intensive survey of an entire target area, aimed at locating and recording all cultural properties. Crew members commonly walk parallel, closely-spaced transects until the area has been thoroughly examined.

CULTURAL RESOURCES. Those fragile and nonrenewable remains of human activity, occupation, or endeavor (reflected in districts, sites, structures, buildings, objects, artifacts, ruins, works of art, architecture, and natural features) which were of importance in 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 actual resource.

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.

CULTURAL RESOURCE USE CATEGORIES.

Public Use - means that a cultural property is eligible 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.

Socio-cultural Use- means that a cultural resource is perceived by a specified social and/or cultural group as having attributes which contribute to maintaining the heritage or existence of that group, and is to be managed in a way that takes those attributes into account.

Management Use- means that a cultural property is eligible for controlled experimental study which would result in its physical alteration—the study to be conducted for purposes of obtaining specific information leading to a better understanding of kinds and rates of natural or human-caused deterioration, and determining effectiveness of protection measures, as well as similar lines of inquiry which would ultimately aid in the management of cultural properties.

Potential Scientific Use - means that a cultural property is presently eligible 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 the property need not be conserved in the face of an appropriate research or mitigation proposal.

Conservation for Future Use- means that because of (1) scarcity of similar cultural properties, (2) a research potential that surpasses the current state of the art, (3) singular historic importance or architectural interest, or (4) comparable reasons, a cultural property is (a) not presently eligible for consideration as the subject of scientific or historical study which would result in its physical alteration, (b) that it is worthy of segregation from other land or resource uses which would threaten the maintenance of its present condition, and that (c) it will remain in this use category until specific provisions are met in the future.

Current Scientific Use - means that a cultural property is the subject of an ongoing scientific or historical study or project at the time of evaluation.

Discharged Use - means that a cultural property previously qualified for assignment to any of the categories defined above (1) no longer possesses the qualifying characteristics for that use or for assignment to an alternative use, or (2) that its records are its only important characteristic; therefore its location no longer presents a management constraint for competing land uses.

CUSTODIAL GRAZING MANAGEMENT. A limited form of rangeland management employed when the percentage of public land is small, when public land is scheduled to be transferred from public ownership, or when other conditions are not conducive to intensive management. Under custodial management, an allottee is not required to follow a specified grazing system. BLM licenses custodial allotments only for the capacity of the public land but does not control overall livestock numbers.

ECONOMIC MINERAL DEPOSIT. Any mineral deposit of sufficient quality and quantity to produce a profit when mined. (See Subeconomic Resource.)

ECONOMIC STUDY AREA (ESA) In this EIS, the three-county area (Maricopa, Pima, and Yuma Counties, Arizona) in which the RMP/EIS area is located and whose economy would be affected by wilderness designation.

ECOTONE. A transition line or strip of vegetation between two communities, having characteristics of both kinds of neighboring vegetation as well as characteristics of its own (Soil Conservation Society of America, 1970).

ENDANGERED ANIMAL SPECIES. Any animal species in danger of extinction throughout all or a significant portion of its range. This definition excludes species of insects that the Secretary of the Interior determines to be pests and whose protection under the Endangered Species Act of 1973 would present an overwhelming and overriding risk to man.

ENDANGERED PLANT SPECIES. Species of plants in danger of extinction throughout all or a significant portion of their ranges. Existence may be endangered because of the destruction, drastic change, or severe curtailment of habitat, or because of overexploitation, disease, predation, or unknown reasons. Plant taxa from very limited areas, e.g., the type localities only, or from restricted fragile habitats are usually considered endangered. See Threatened and Sensitive Plant Species.

ENVIRONMENT. The surrounding conditions, influences, or forces that affect or modify an organism or an ecological community and ultimately determine its form and survival.

ENVIRONMENTAL ASSESSMENT (EA). The procedure for analyzing the impacts of some proposed action on a given environment and the documentation of that analysis. An EA is similar to an environmental impact statement (EIS) but is generally smaller in scope. An EA may be preliminary to an EIS.

ENVIRONMENTAL IMPACT STATEMENT (EIS). An analytical document developed for use by decisonmakers 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 ALLOTMENT. An allotment on which livestock grazing is permitted when sufficient precipitation and temperatures provide the potential for the growth of abundant annual (ephemeral) vegetation. See Perennial-Ephemeral Allotment.

EPHEMERAL RANGELAND. Rangeland that does not consistently produce forage but periodically provides annual vegetation suitable for livestock grazing.

EPHEMERAL VEGETATION. (See Annual Plant).

FEDERAL LAND POLICY AND MANAGEMENT ACT OF 1976 (FLPMA). Public law 94-579, which gives BLM the legal authority to establish public land policy; to establish guidelines for administering such policy; and to provide for the management, protection, development, and enhancement of the public lands.

FORAGE. All browse and herbaceous foods, available to grazing animals, which may be grazed or harvested for feeding (Range Term Glossary Committee, 1974).

GRANDFATHERED USES. A mineral, grazing, or right-of-way use that occurred on the land on the date of approval of the Federal Land Policy and Management Act (FLPMA) (October 21, 1976). Under BLM Interim Management Policy and Guidelines for Lands Under Wilderness Review, grandfathered uses may continue on lands under wilderness review in the same manner and degree as on the date of FLPMA's approval, even if such uses impair wilderness suitability. These uses, however, must be regulated to ensure that they do not unnecessarily degrade these lands.

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 (HMP). A written and officially approved plan (for aspecific geographical area of public land) that identifies wildlife habitat and related objectives, establishes the sequence of actions for achieving objectives, and outlines procedures for evaluating accomplishments.

HARDROCK MINING. The extraction of locatable minerals except for placer deposits.

HERD MANAGEMENT AREA PLAN (HMAP). Plan for the management of a geographic area used by wild horses or burros. A HMAP outlines details of a burro or horse capture plan, adoption program, and long-term management of populations.

HOHOKAM. A desert farming culture centered in the middle Gila and Salt River drainage basins of Arizona. The Hohokam produced a characteristic type of red-on-buff pottery. The culture flourished from about 300 B.C. to 1450 A.D.

INHOLDING. A parcel of state or private land surrounded by a wilderness study area.

INTRUSION (VISUAL RESOURCES). A feature (land, vegetation, or structure) that is generally considered out of context with the characteristic landscape.

LITHIC SITE. A site containing debris left from the manufacture, use, or maintenance of flaked stone tools.

LOCATABLE MINERAL. Any mineral that can have a mining claim filed on it under the Mining Law of 1872 as amended.

LOCATION. The act of fixing the boundaries of a mining claim according to law or the claim itself.

MANAGEMENT FRAMEWORK PLAN (MFP). A land use plan for public lands (for aspecific planning area) that provides a set of goals, objectives, and constraints to guide the development of detailed plans for the management of each resource.

MINERALIZED AREA. An area that has exposures of near-surface deposits of potentially valuable minerals.

MANAGEMENT SITUATION ANALYSIS (MSA). A BLM reference document describing the affected environment of the planning area, including current management practices and programs. The MSA is a basic descriptive and analytic reference for resource condition, trend, demands, and capabilities in the planning area, providing the basis for formulating and analyzing plan alternatives.

MULTIPLE USE MANAGEMENT (PRINCIPLES). "...the management of the publiclands and their various resource values so that they are utilized in the combination that will best meet the present and future needs of the American people, making the most judicious use of the land for some or all of these resources or related services over areas large enough to provide sufficient latitude for periodic adjustments in use to conform to changing needs and conditions, the use of some land for less than all of the resources; a combination of balanced and diverse resource uses that takes into account the long-term needs of future generations for renewable and nonrenewable resources, including, but not limited to, recreation, range, timber, minerals, watershed, wildlife and fish, and natural scenic, scientific and historical values; and harmonious and coordinated management of the various resources without permanent impairment of the productivity of the land and the quality of the environment with consideration being given to the relative values of the resources and not necessarily to the combination of uses that will give the greatest economic return or the greatest unit output." (Section 103, Federal Land Policy Management Act of 1976.)

NATURAL AREA. Lands managed for retention of their typical or unusual plant or animal types, associations, or other biotic phenomena; or for their outstanding scenic, geologic, pedologic (pertaining to soils), or aquatic features or processes.

OFF-ROAD VEHICLE (ORV). Any motorized vehicle designed for or capable of cross-country travel on or immediately over land, water, sand, snow, ice, marsh, swampland, or other natural terrain, excluding (a) any registered motorboat, (b) any fire, military, emergency, or law enforcement vehicle when used for emergencies and any combat or combat support vehicle when used for national defense, and (c) any vehicle whose use is expressly authorized by the respective agency head under a permit, lease, license, or contract.

OFF-ROAD VEHICLE (ORV) DESIGNATION. This option designates public lands open,closed, or limited to ORV use. In recognizing ORV use of the public lands, it establishes controls on the use and operation of ORVs. The objective is to provide for ORV use, protect the public lands, promote user safety, and reduce user group conflicts.

ORE. A mineral deposit of sufficient quality and quantity to be mined at a profit.

OVERTHRUST BELT (ZONE). An extensive zone in western North America (believed to extend from Canada to Mexico) where an overthrust fault has forced older rocks on top of younger rocks. The discovery of oil and gas in the younger rock layers has aroused much interest in exploration throughout the belt, including Arizona.

PERENNIAL-EPHEMERAL ALLOTMENT. An allotment on which livestock are permitted to graze perennial vegetation but on which additional livestock grazing may be authorized should sufficient annual (ephemeral) forage be present. See Ephemeral Allotment.

PERENNIAL PLANT. A plant that has a life cycle of three or more years (Range Term Glossary Committee, 1974).

PERENNIAL STREAM. A stream that flows throughout the year.

PETROGLYPH. An art figure or symbol cut, carved, or pecked into a stone surface.

PICTOGRAPH. An art figure or symbol drawn or painted on a stone surface.

PLACER DEPOSIT. An alluvial or glacial deposit, as of sand or gravel, containing particles of gold or other valuable minerals.

PLACER MINING. The extraction of heavy minerals from a placer deposit by concentration in running water. Placer mining includes ground sluicing, panning, shoveling gravel into a sluice, scraping by power scraper, and excavation by drag line.

PRIMITIVE AND UNCONFINED RECREATION. Nonmotorized and nondeveloped types of outdoor recreation (hiking, backpacking, camping, and hunting).

PRIMITIVE AREAS. Areas established to preserve, protect, and enhance lands of scenic splendor, natural wonder, scientific interest, primitive environment, and other natural values for the enjoyment and use of present and future generations. BLM primitive areas are managed to maintain the same quality.

PROSPECT. An attempt to determine mineral values or the site of this attempt.

PRUDENT MAN RULE. The Prudent Man Rule is the test of discovery used by the Department of the Interior. The test determines

> "...where minerals have been found and the evidence is of such a character that a person of ordinary prudence would be justified in the further expenditure of his labor and means, with a reasonable prospect of success, in developing a valuable mine, the requirements of the statutes have been met."

This test has been approved by the Supreme Court of the United States in many cases (e.g., *Chrisman v. Miller, 197 US 313 (1905); Best v. Humboldt Placer Mining Company, 371 US 334 (1963); U.S. v. Coleman, 390 US 599 (1968).*

PUBLIC LAND. Federal lands administered by the Bureau of Land Management.

RANGELAND (RANGE). Land dominated by vegetation that can be grazed or browsed and whose husbandry is provided routinely through grazing management instead of renovation or cultural treatment.

RANGELAND DEVELOPMENT. A structure, development, or action used together with good management practices and land use planning recommendations (1) to rehabilitate, protect, and improve public land and its resources; (2) to arrest rangeland deterioration; and (3) to improve forage condition, fish and wildlife habitat, watershed protection, and livestock production.

RAPTOR. A bird of prey with sharp talons and strongly curved beak.

RESOURCE MANAGEMENT PLAN (RMP). A BLM planning document that presents systematic guidelines for making resource management decisions for a resource area. An RMP is based on an analysis of an area's resources, their existing management, and their capability for alternative uses. RMPs are issue-oriented and developed by an interdisciplinary team with public participation.

RHYOLITE. A silica-rich fine-grained rock of volcanic origin.

RIPARIAN. Situated on or pertaining to the bank of a river, stream, or other body of water. Riparian is normally used to refer to the plants of all types that grow near bodies of water.

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.

SCHIST. Any of various medium- to coarse-grained metamorphic rocks composed of laminated, often flaky, parallel layers of chiefly micaceous minerals.

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.

SEGREGATION. Any action such as a withdrawal or allowed application (exchange) that suspends the operation of the general public land laws. To separate, set apart, or to remove lands from the jurisdiction of part or all the public land mineral laws.

SENSITIVE PLANT SPECIES. Plants 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. Sensitive plants also include species rare in one locality (such as in Arizona) but abundant elsewhere. See Endangered and Threatened Plant Species.

SITE (ARCHAEOLOGICAL). A physical location where human activities or events occurred.

SOCIOCULTURAL RESOURCES. Places, objects, structures, and things of importance to a subgroup or population at large. Included are values that reflect the concepts, religion, social heritage, habits, skills, arts, and lifestyles of a given people.

SPECIAL EPHEMERAL RULE. Allows livestock grazing on certain public land inthose years that moisture and/or other conditions produce sufficient forage. (See Federal Register, Vol. 33, No. 238, December 7, 1968.)

SPECIAL-STATUS SPECIES. Those wildlife species either federally listed as endangered or threatened, state-listed, or listed by BLM as sensitive.

STANDARD METROPOLITAN STATISTICAL AREA (SMSA). A county that contains at least one city of 50,000 residents or more and as many adjacent counties as are metropolitan in character and are socially integrated with that central city or cities.

STATE HISTORIC PRESERVATION OFFICER (SHPO). The official within each state, authorized by the state at the request of the Secretary of the Interior, to act as a liaison for implementing the National Historic Preservation Act of 1966.

STRATEGIC MINERALS. Minerals essential to the national defense, for the supply of which the United States is wholly or in part dependent upon sources outside its continental limits and for which strict measures are needed to control conservation and distribution.

SUPPLEMENTAL WILDERNESS VALUES. Resources not required for an area to be designated a wilderness but that are considered in assessing the wilderness potential of an area. Such values include ecological, geologic, and other features of scientific, educational, scenic, or historic value.

THREATENED ANIMAL SPECIES. Any animal species likely to become endangered within the foreseeable future throughout all or a significant part of its range. See Endangered Animal Species.

THREATENED PLANT SPECIES. Species of plants that are likely to become endangered within the foreseeable future throughout all or a significant portion of their ranges, including species categorized as rare, very rare, or depleted. See Endangered Plant Species and Sensitive Plant Species.

TUFF. A rock formed of compacted volcanic fragments that are generally smaller than four millimeters in diameter.

UTILIZATILON (FORAGE). The proportion of the current year's forage consumed or destroyed by grazing animals. Utilization is usually expressed as a percentage.

VALID EXISTING RIGHT. "Valid existing right" means a valid discovery had been made and continues to be valid at the present time.

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.

VISITOR DAY. Twelve visitor hours which may be aggregated continuously, intermittently, or simultaneously by one or more people.

VISUAL RESOURCE MANAGEMENT (VRM) CLASSES. Classification containing specific objectives for maintaining or enhancing visual resources, including the kinds of structures and modifications acceptable to meet established visual goals.

WILDERNESS. An uncultivated, uninhabited, and usually roadless area set aside for preservation of natural conditions. According to 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 and use in an unimpaired condition; and (4) may also contain ecological, geological, or other features of scientific, educational, scenic, or historical value.

WILDERNESS STUDY AREA (WSA). A roadless area or island that has been inventoried and found to have wilderness characteristics as described in section 603 of the Federal Land Policy and Management Act and section 2(c) of the Wilderness Act of 1964 (78 Stat. 891).

WITHDRAWAL. An action that restricts the disposal of public lands and holds them for specific public purposes; also, public lands that have been dedicated to public purposes.

REFERENCES

Anderson, B.W., Engel-Wilson, R. W., Wells, D., and Ohmart, R.D. 1977. Ecological Study of Southwestern Riparian Habitat: Techniques and Data Adaptability. In *Importance, Preservation, and Management of Riparian Habitat: A Symposium*, p. 146–155. USDA Forest Service General Technical Report RM-43. Fort Collins, Colorado: Rocky Mountain Forest and Range Experiment Station.

Arizona Crop and Livestock Reporting Service. 1980. *Arizona Agricultural Statistics Historical Summary of County Data 1965-1980.* Bulletin S-16. Phoenix.

Arizona Game and Fish Department. 1981. The Sonoran Pronghorn. Special Report No. 10. Phoenix, Arizona.

Arizona Game and Fish Department. 1982. Threatened Native Wildlife in Arizona. Phoenix, Arizona.

Arizona Geological Society Digest. 1981. "Relation of Tectonic to Ore Deposits in the Southern Cordillera." Vol. XIV.

Arizona Geological Society Digest. 1981. Vol. XIII, ed. Claudia Stone and Judith P. Jenney.

Arizona Geological Society Digest. 1984. "Gold and Silver Deposits of the Basin and Range Province Western U.S.A." ed. Joe Wilkins Jr., Vol. XV, Tucson, Arizona.

Arizona, State of, Commission of Agriculture and Horticulture. 1981. *Arizona Native Plant Law.* Arizona Revised Statutes, Chapter 7, Article 1, Protection.

Bailey, R.G., and A.W. Kuchler. 1966. *Potential Natural Vegetation of the United States.* (First published by USDI Geological Survey, 1966; later reprinted in map form by USDA Forest Service for Rare II (Map B) titled: Ecosystems of the United States, 1978.)

Berry, K.H. 1978. Livestock Grazing and the Desert Tortoise. In *Transactions of the 43rd North American Wildlife and Natural Resources Conference.* Washington, D.C.: Wildlife Management Institute.

Bostwick, Todd. 1982. The Class III Archaeological Survey in Vekol Valley, Arizona. Ak-Chin Water Supply Project. Phase I Final Report. Northland Research, Inc.

Brown, D.E. 1982. See Turner, Raymond M., and Brown, David E.

Bureau of Geology and Mineral Technology. 1967. "Arizona Lode Gold Mines and Gold Mining." Bulletin 137, Tucson, Arizona.

Bureau of Geology and Mineral Technology. 1978. "Index of Mining Properties in Yuma County, Arizona." Bulletin 192, Tucson, Arizona.

Bureau of Geology and Mineral Technology. 1983. "Metallic Mineral Districts and Production in Arizona." Bulletin 194, Tucson, Arizona.

Bureau of Land Management (see U.S. Department of the Interior).

Caughley, Graeme. 1975. *Analysis of Vertebrate Populations,* John Wiley & Sons Ltd., New York.

Cottam, C. and Trefethen, J.B. (eds.) 1968. *Whitewings: The Life History, Status, and Management of the White-Winged Dove.* Princeton, New Jersey: D. Van Nostrand Co.

Cultural Systems Research, Inc., 1978. *Persistence and Power, A Study of Native American Peoples in the Sonoran Desert and the Devers-Palo Verde High Voltage Transmission Line.* Report prepared for Southern California Edison Company. Menlo Park, California.

DeVoss, James. 1984. Arizona Game and Fish Department, Phoenix. Personal Communication.

Duff, D.A. 1978. Riparian Habitat Recovery on Big Creek, Rich County, Utah. In *Proceedings of the Forum—Grazing and Riparian/Stream Ecosystems,* ed. O.B. Cope, p. 91-92. Denver, Colorado: Trout Unlimited.

Effland, Richard, and Green, Margarie. 1982. "Cultural Resource Investigations for the Yuma 500 kV Transmission Line, Arizona Public Service Company." Phoenix, Arizona: BLM District files.

Fredlake, M., and Lucas, R. 1982. Big Game Report for Lower Gila South Planning Area. Unpublished Report. Phoenix: BLM District files.

Gallizioli, Steve. 1960. *About Quail and Quail Hunting.* Phoenix: Arizona Game and Fish Department.

Geoexplorers International, Inc. 1982. "Geology, Energy and Mineral Resources Assessments in the Maricopa Area and in the Kofa Area, Arizona. Denver, Colorado. Contracted Reports. Phoenix, Arizona: BLM District files.

Green, Dee F. 1975. The Wilderness and Cultural Values: A Symposium. USDA Forest Service, Southewestern Region, Alburquerque, New Mexico. Phoenix, Arizona: BLM District files.

Haase, E.F. 1972. Survey of Floodplain Vegetation Along the Lower Gila River in Southwestern Arizona. *Journal of the Arizona Academy of Science,* Vol. 7(2):75-81.

Haxel, Gordon, et al. 1984. Latest Cretaceous and Early Tertiary Orogenises in South-Central Arizona. *Geological Society of America Bulletin,* Vol. 95(6):631-653.

Helvie, J.B. 1971. Bighorns and Fences. *Desert Bighorn Sheep Transactions* 15:53-62.

Jones, Bruce. 1983. Anurans of Vekol Valley, Central Arizona. *Southwestern Naturalist* 28:469-470.

Jones, Bruce. 1984. Wildlife Biologist, BLM Training Center, Phoenix. Personal Communication.

Keith, Stanley, et al. 1984. Regional Gold Exploration Models for the Mojave Region, Arizona. Geological Society of America, Abstracts with Programs, Vol. 16(6).

Kuchler, A.W., and Bailey, R.W. 1978. Ecosystems of the United States. Rare II Map B. Washington, D.C.: USDA, Forest Service. (Also see Bailey and Kuchler.)

McQuire, Randall, and Schiffer, Michael. 1982. Hohokam and Patayan: Prehistory of Southwestern Arizona. Academic Press.

Norris, John C. 1984. Range Conservationist, BLM District Office, Phoenix, Arizona. Personal Communication.

Platts, W.S. 1979. Livestock Grazing and Riparian/Stream Ecosystems—an Overview. In *Proceedings of the Forum—Grazing and Riparian/Stream Ecosystems,* ed. O.B. Cope, p. 39-45. Denver, Colorado: Trout Unlimited, Inc.

Post, George. 1976. Diagnostics and Disease of Wild Sheep. In *Transactions 2nd North American Wild Sheep Conference.* Fort Collins, Colorado. Colorado State University.

Rickard, W.H. & Cushing, C.E. 1982. Recovery of Streamside Woody Vegetation After Exclusion of Livestock Grazing. *Journal of Range Management,* 35(3) 360-361.

Rodgers, Malcolm. n.d. Archaeological Surveys in Arizona During 1920-1940. Unpublished Manuscript. Phoenix: Phoenix District files.

Roney, John. 1977. Livestock and Lithics: The Effects of Trampling. Unpublished Manuscript. Phoenix: BLM District files.

Scarborough, R.B. 1984. Implications of Arizona Neotectonics for Regional Space-Time Patterns of Basin-Range Tectonism. Geological Society of America, Abstracts with Programs, Vol. 16(6).

Sellers, W.D., and Hill, R.H. 1974. *Arizona Climate* 1931-1972. Tucson: University of Arizona Press.

Shreve, F. 1942. The Desert Vegetation of North America. *Botanical Review* 8:195-246.

Simonis, Don. 1982. Archaeological Trenching Along the Gila River. Unpublished Manuscript. Phoenix: BLM District files.

Smith, E.L. 1976. *Proposed Natural Areas in Arizona: a Summary.* Arizona Department of Economic Planning and Development. Phoenix, Arizona.

Turner, Raymond M., and Brown, David E. 1982. Sonoran Desertscrub. In *Biotic Communities of the American Southwest—United States and Mexico. Desert Plants,* ed. D.E. Brown, 4(1-4):181-219.

U.S. Department of the Interior, Bureau of Land Management. 1979. "Arizona BLM Facts." Phoenix, Arizona: BLM State Office.

U.S. Department of the Interior, Bureau of Land Management. 1980. "Paleontological Inventory of the Phoenix District Area." Phoenix, Arizona: BLM District Office.

U.S. Department of the Interior, Bureau of Land Management. 1982. Lower Gila North Draft Grazing Environmental Impact Statement. Phoenix, Arizona: BLM District Office.

U.S. Department of the Interior, Bureau of Land Management. 1982a. Upper Sonoran Draft Wilderness Environmental Impact Statement. Phoenix, Arizona: BLM District Office.

U.S. Department of the Interior, Bureau of Land Management. 1983. Lower Gila South Management Situation Analysis (MSA). Phoenix, Arizona: BLM District Office.

U.S. Department of the Interior, Bureau of Land Management. 1983a. Arizona Wilderness Public Opinion Survey. Phoenix, Arizona: BLM Arizona State Office.

U.S. Department of the Interior, Bureau of Land Management. 1985. Yuma Draft Resource Management Plan/Environmental Impact Statement. Yuma, Arizona: BLM District Office.

Valley National Bank of Arizona. 1983. *Arizona Statistical Review.* 39th ed. Arizona.

Walsh, Richard G., Gillman, Richard A., and Loomis, John B. 1981. "Wilderness Resource Economics: Recreation Use and Preservation Values." Colorado State University: Fort Collins, Colorado.

Westec Services, Inc. 1980. Draft Report. Cultural Resource Inventory of the Devers to Palo Verde Transmission Line Corridor. Unpublished Document. Phoenix: BLM District files.

Westec Services, Inc. 1982. Cultural Resource Inventory and National Register Assessment of the Southern California Edison Palo Verde to Devers Transmission Line Corridor (Arizona Portion). Unpublished Document. Phoenix: BLM District files.

Wilt, Jan, and Keith, Stan. 1984. Metallogeny of Arizona Lode Gold Production. Geological Society of America, Abstracts with Programs, Vol. 16(6).

Woods, Clyde. 1982. APS, SDG&E Interconnection Project Native American Cultural Resources. Unpublished Document. Phoenix: BLM District files.

Woodward, Lee. 1984. Basement Control of Tertiary Intrusions and Associated Mineral Deposits. *Geology,* Vol. 12(9):531-533.

MAPS

Bureau of Geology and Mineral Technology. 1965 (Reprinted 1979). Known Nonmetallic Mineral Occurrences in Arizona. Tucson, Arizona.

Bureau of Geology and Mineral Technology. 1969 (Reprinted 1978). Known Nonferrous Base and Precious Metal Mineral Occurrences in Arizona. Tucson, Arizona.

Bureau of Geology and Mineral Technology. 1978. Geothermal Resources of Arizona. Tucson, Arizona.

Bureau of Geology and Mineral Technology. 1983. Metallic Mineral Districts of Arizona. Tucson, Arizona.

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