

Introduction

Four alternative land use plans, including the *Preferred Alternative*, are described in this chapter. Each alternative contains land use objectives that could guide management of the public lands for the next 15 years and the actions BLM could implement to carry out those objectives. A section is also included that identifies general management guidance common to all alternatives. General management guidance is based on the laws, regulations and policies that guide BLM's management of the public lands regardless of the alternative chosen for implementation through this Resource Management Plan.

Decisions concerning management of livestock on public lands and management of the San Pedro Riparian National Conservation Area have been developed through the *Upper Gila-San Simon Grazing environmental Impact Statement* (BLM 1978), *Eastern Arizona Grazing Environmental Impact Statement* (BLM 1986) and *San Pedro River Riparian Management Plan and Environmental Impact Statement* (BLM 1989). Through the above authorizing documents, BLM will continue to issue grazing permits and licenses, implement, monitor and modify allotment management plans and increase or decrease grazing authorizations as determined through the allotment evaluation processes. As necessary, National Environmental Policy Act compliance documents will be prepared prior to any action being implemented. The grazing decisions are incorporated into this Resource Management Plan/Environmental Impact Statement by reference and are common to all alternatives.

To provide the public and decisionmaker with a tool for comparing impacts and reaching conclusions, Chapter 2 ends with a summary of the environmental consequences of implementing each alternative.

Alternative Formulation

Both the *National Environmental Policy Act* and BLM planning regulations require the formulation of a range of alternatives. Each alternative represents a complete and reasonable plan for management of the public lands and resources in the Safford District for the next 15 years. One alternative must represent no action, meaning current management. Other alternatives must provide a reasonable range of choices for management of the public lands. The range usually varies from resource protection to resource production. The following criteria, using governing regulations, applicable state, local and other Federal regulations were used in the development of the alternatives.

1. Each alternative will provide for protection of proposed and listed Threatened and Endangered species and their habitat and efforts to recover those species, as required by the *Endangered Species Act*, Memorandums of Understanding and BLM Manual.
2. Each alternative will provide for protection of significant cultural resources as required by the *National Historic Preservation Act* and the *Archaeological Resources Protection Act*.
3. Each alternative will comply with all existing state, federal and local regulations.
4. Each alternative will assume a continuation of existing interagency cooperative agreements.
5. Each alternative will be reasonable and attainable.
6. At least one alternative will comply with the No Action requirement of the Council on Environmental Quality regulations (40 CFR 1502.14(d)).

The goal of any alternative is to propose guidance that responds to the issues and management concerns identified for resolution in the Resource Management Plan.

The four alternatives analyzed in this Environmental Impact Statement were developed around the following general themes: no action (Alt. D); resource protection (Alt. B); resource production (Alt. C); and a balance of multiple uses between production and protection of lands and resources (The *Preferred Alternative* Alt. A.)



Outcrops of white diatomaceous earth are visible in portions of the 111 Ranch.

Alternatives Considered But Not Analyzed

No other specific alternatives were considered for analysis in this Environmental Impact Statement. Variations of the four basic themes were considered, but none were carried forward. The Bureau believes the four themes present a full and reasonable range of alternatives for management of the public lands and comply with the requirements of National Environmental Policy Act and BLM regulations and policies.

Alternative Evaluation Criteria

The following criteria are considered in the evaluation of each alternative.

1. Significant social and economic effects.
2. Consistency with federal, state and local plans.
3. Compatibility with adjacent land uses.
4. Implementation requirements.
5. Significant impacts to resource values such as wildlife habitat condition, watershed and water quality/quantity, recreation opportunities, historic and prehistoric archaeological sites and threatened and endangered species.

Management Guidance Common to All Alternatives

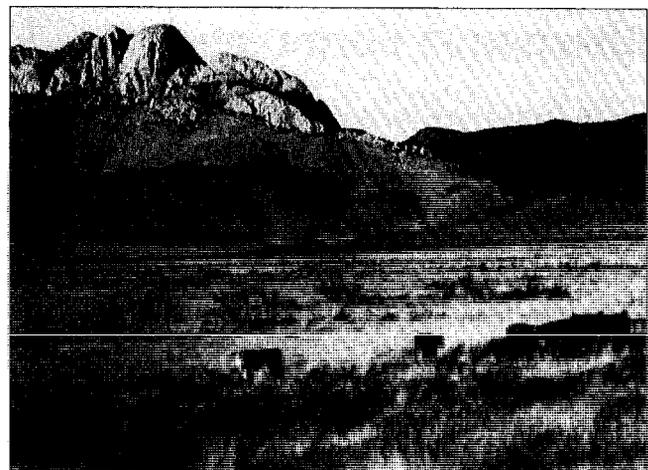
It is not feasible to discuss every law, regulation, policy or decision that affects management of the public lands and resources in this document. This section does, however, summarize significant guidance and identify legally protected categories that affect BLM's management of the public lands. Further information about the development of the alternatives can be found in the *Gila Resource Area Management Situation Analysis* (BLM 1989) and *San Simon Resource Area Management Situation Analysis* (BLM 1989). The Management Situation Analyses, prepared in the early stages of the planning process, included an analysis of the issues and management concerns and led to the development of the Resource Management Plan alternatives. They are incorporated into this Environmental Impact Statement by reference but can be reviewed in the Safford District Office.

Future strategic plans and changes in policy will be incorporated into Bureau actions where compatible with the approved Resource Management Plan or the Resource Management Plan will be revised to bring it into compliance with other Bureau actions.

BLM will evaluate any action proposed on the public lands to determine the impacts it will have on the environment. An environmental assessment (to the appropriate level of detail) will be conducted for every considered proposal on the public lands. In addition, all actions proposed in specific activity plans (allotment management plans, habitat management plans, wilderness management plans, etc.) will be coordinated with other programs.

Fire management policy within the Safford District will be in accordance with Departmental Manual 910 and Bureau Manuals 9200 and 8560. Essentially, the policy states that every wildland fire is either a wildfire or a prescribed burn and that all wildfires will be suppressed unless a pre-approved prescribed burn plan exists and the fire meets all the prescription criteria.

Any wildfire escaping initial attack suppression efforts will be dealt with through the Escaped Fire Situation Analysis process to determine further suppression actions. Wildfires occurring within designated wilderness areas will be handled in accordance with Bureau Wilderness Management Policy (BLM Manual 8560). Suppression actions in the wilderness must be executed to minimize surface disturbance, alterations to the natural landscape and fire suppression costs while being consistent with management objectives and constraints. Fire management methods and equipment which least alter the landscape or disturb the land are considered to be the best.



Over 11,000 cattle graze public rangelands in the Safford District.

Issue 1- Access

BLM Manual 9110 provides for transportation planning. A transportation plan portrays the transportation system (roads and trails), the access needs identified in the Resource Management Plan and subsequent activity and project plans. Through the Resource Management Plan, decisions will be made where legal access for vehicle, horse and foot travel is needed across state, other federal and private lands; where construction of roads or trails is needed to provide access to public lands; and where existing access needs to be closed to protect resource values. Upon completion of the Resource Management Plan, these decisions will be incorporated into the District Transportation Plan. The plan will also address road and trail maintenance needs.

BLM's policy provides private property owners reasonable means of access across public lands to their property. This may vary from foot or horse travel to construction of a road, depending on the need for access.

Issue 2 - Areas of Critical Environmental Concern and Other Types of Special Management

Individual management plans will be written for each Area of Critical Environmental Concern designated through the approved Resource Management Plan. These management plans will identify the actions BLM will take to implement the specific management prescriptions. The complexity of the issues surrounding a particular Area of Critical Environmental Concern will determine the detail of the management plan.

The three Research Natural Areas Areas of Critical Environmental Concerns recommended in the *San Pedro River Riparian Management Plan and Environmental Impact Statement* (BLM 1989) will be designated in this plan under all alternatives. Management plans will be prepared for each area following designation.

As required by *The Federal Land Policy and Management Act of 1976* and the subsequent *Guidelines for Fulfilling Requirements of the Wild and Scenic Rivers Act*, BLM must study those rivers which qualify as potential additions to the National Wild and Scenic Rivers System. Two rivers in this area (the Gila and San Francisco) were identified by the National Park Service as needing further study and are addressed in this document as well (see Appendix /3).



The Wild and Scenic River study process involves making an eligibility, classification and suitability determination. This Resource Management Plan/ Environmental Impact Statement addresses only eligibility and classification as required by the Guidelines and will defer the suitability determination until a later date due to the need for further public involvement. Only through the detailed suitability assessment and further public involvement will BLM make a recommendation through the Secretary of Interior to Congress on suitable Wild and Scenic Rivers designations. Only Congress has the authority to designate a Wild and Scenic River through this process.

Appendix 3 includes a discussion of the eligibility and classification criteria used to evaluate rivers in the Safford District. Those waterways which demonstrated individual outstandingly remarkable hydrologic values include the Gila and San Francisco Rivers within the Gila Box, the Gila River below Coolidge Dam, Aravaipa Creek, Turkey Creek, Swamp Springs, Hot Springs Canyon, Bonita Creek and the San Pedro River. All other areas have been determined ineligible under the criteria.

The above rivers which have been determined eligible for consideration under the requirements of the Wild and Scenic Rivers Act will be afforded adequate interim protection until a final decision is reached on

suitability for designation. Management activities and authorized uses will not be allowed to adversely affect the rivers' eligibility or future suitability. Subject to valid existing rights, outstandingly remarkable values of the river must be protected and enhanced if possible.

Issue 3 - Off-highway Vehicles

BLM Manual 8340 defines acceptable off -highway vehicle use as an acceptable use of the public lands wherever it is compatible with established resource management objectives. *The Federal Land Policy and Management Act* of 1976, Executive Orders 11644 and 11989 and BLM Manual 8342 also state that all public lands will be designated as open, closed or limited to off-highway vehicle use to meet public demands, protect resources and public safety and minimize conflicts.

Issue 4 - Riparian Areas

Bureau policy sets the following direction for management of riparian areas.

1. Achieve riparian area improvement and maintenance objectives through the management of existing uses, wherever feasible.
2. Ensure that new resource management plans and activity plans, and revisions of existing plans recognize the importance of riparian values and propose management to maintain, restore or improve them.
3. Prescribe management of riparian values based on site-specific characteristics and settings.
4. Give special attention to monitoring and evaluating management activities in riparian areas and revise management practices where site-specific objectives are not being met.
5. Cooperate with and encourage the involvement of interested federal, State and local governments, organizations and private parties to share information, implement management, coordinate activities, and provide education on the value, productivity and management of riparian areas.
6. Retain riparian areas in public ownership unless disposal would be in the public interest, as determined by land use planning.
7. Identify, encourage and support research and studies needed to ensure that riparian area management objectives can be properly defined and met.

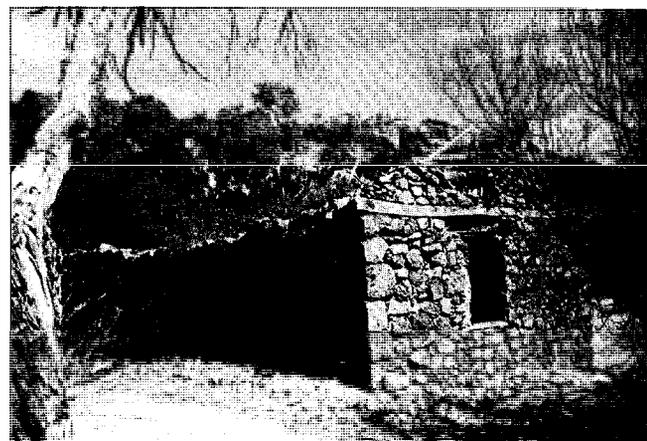
8. Provide environmental education materials to schools and other publics relating to riparian management.

Arizona BLM has developed a strategic plan that outlines the overall riparian wetland management. The "*Arizona Riparian- Wetland Area Management Strategy*" (BLM 1990) uses the Bureauwide policy presented above to develop more site-specific goals, objectives and actions to maintain or improve these valuable areas. One of the primary goals is to improve water quality and riparian areas to good or better ecological conditions by 1997 for 75 percent of the BLM-administered streams by implementing grazing systems and strategically planned enhancement projects.

From 1986 to 1988, BLM acquired 47,668 acres along the upper San Pedro River between the Mexican border and St. David. In 1987, BLM began preparing the *San Pedro River Riparian Management Plan* (BLM 1989) to protect and enhance the significant natural and cultural resources of the property. The plan was completed in 1989. In 1988, during preparation of the plan, Congress designated 54,189 acres of public land as the San Pedro Riparian National Conservation Area. The additional 6,521 acres were acquired from the State of Arizona by exchange and are subject to existing livestock grazing leases.

Since this designation came in the middle of the planning process, BLM decided to complete its plan for management of the 47,668 acres and address the remaining 6,521 acres of the National Conservation Area in this Resource Management Plan.

The *San Pedro River Riparian Management Plan* provides management direction for the riparian corridor and the adjacent uplands in the National Conservation



Remains of historic homesteads can be seen along lower Bonita Creek.

Area. Generally, the plan provides a framework for protection of the National Conservation Area, allowing those uses that are compatible with preservation of the National Conservation Area. Energy and mineral uses are not permitted, nor are sand and gravel operations.

According to the San Pedro Plan, livestock grazing has been prohibited for the life of the plan on the original acreage. Dispersed and developed recreation is being carefully planned to avoid impacts to the abundant natural, cultural and paleontological (fossil) resources. Vehicles will be restricted to designated roads. Discharge of firearms is being restricted to ensure visitor safety. Many actions will be implemented to maintain and enhance the quality and quantity of the water, riparian vegetation, wildlife, cultural resources and paleontological resources. Administrative and visitor contact facilities are also planned.

The decisions of the *San Pedro River Riparian Management Plan* will apply to the 6,521 acres of the National Conservation Area not covered in the plan, with the following exceptions.

- 1 Livestock grazing will continue on the added 6,521-acre area in accordance with the State exchange agreements. This area includes state lands acquired through exchange; state grazing leases will be recognized for the term of these leases.
- 2 Allotment categorization will be changed from "Maintain" to "Improve" to intensively manage livestock on all allotments in the 6,521 -acre area.
- 3 Allotment management plans will be prepared for all allotments in the 6,521 -acre area to provide for continued livestock grazing and protection of the riparian values of the National Conservation Area.

Management Concern 1 - Wildlife Habitat

Wildlife and their habitat are managed cooperatively by BLM and Arizona Game and Fish Department under a *Memorandum of Understanding* (1987). Federally listed or proposed threatened and endangered wildlife are protected under provisions of the *Endangered Species Act* (1973, as amended). BLM Manual 6840 outlines the conservation of Threatened and Endangered species and the ecosystems they depend upon; ensures that all actions authorized, funded or carried out by BLM are in compliance with the Endangered Species Act; cooperates with the Fish and Wildlife Service and the National Marine Fisheries Service in planning and providing for the recovery of Threatened

and Endangered species; and retains in public ownership all habitat essential to the survival or recovery of any Threatened and Endangered species, including habitat used historically by these species. It is also BLM policy to manage candidate species and their habitat to prevent the need to list them as threatened or endangered.

Management Concern 2 - Lands and Realty

Land Ownership Adjustment Lands identified for disposal by sale must comply with Section 203 of The *Federal Land Policy and Management Act of 1976*. Section 203 states that lands offered for sale must meet one of the following criteria: they are difficult and uneconomical to manage and not suitable for management by another agency; they are no longer needed for the original purpose for which they were acquired; or they will serve an important public purpose. If lands, because of their location or other characteristics, meet one of the above criteria, they may be offered for sale (see Appendix 5).

All public lands will be disposed of at fair market value, except for lands disposed of under the *Recreation and Public Purposes Act* or state indemnity selection. Disposals are subject to valid existing rights.

It is Bureau policy not to dispose of public lands encumbered with properly recorded unpatented mining claims. These lands, however, may be disposed of if the mining claims are found to be void; a mining claimant relinquishes the mining claims to the United States; a mining claim is contested and found to be invalid; or policy is changed.

State Indemnity Selection is another method of disposal of public lands. Upon statehood the government granted Arizona four sections of land per township. Much of this land had already been appropriated and, therefore, was unavailable to the state. Other state lands may have been appropriated by federal projects and require compensation to the state. Thus, a "bank" of public lands has accrued to the state from which it may select desired, unappropriated public lands. All public lands identified for disposal will also be available for state selection.

Lands identified for disposal will be reviewed for the presence of significant natural and cultural resources, threatened and endangered plants and animals, flood hazards and other critical factors. The actual transfer of the land cannot be finalized until these reviews are complete.

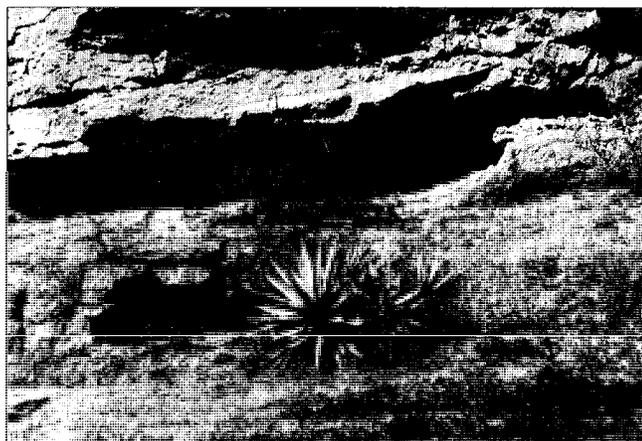
BLM may acquire lands and interests in lands needed to manage, protect, develop, maintain and use resources on public lands. Land may also be acquired to provide access for public use and enjoyment.

Public lands are often repositioned under the exchange authority of Section 206 of the Federal Land Policy and Management Act of 1976. Exchanges are negotiated with the state, as well as with private landowners. Exchange is the preferred method of land disposal, as it provides an opportunity to acquire desired tracts of nonpublic land. Land purchase is the second preferred method of acquisition due in part to the loss of private lands to a federal agency and thereby a portion of the tax base. Condemnation of lands by the government for acquisition under the authority of Public Law 91646 Uniform Relocation and Real Property Acquisition Policy Act of 1970 is the least preferred method. Refer to Map 27 for potential land disposal and acquisition areas.

Land Use *Authorizations* Rights-of-way, leases and permits will be considered on a case-by-case basis, in accordance with the decisions of this Resource Management Plan. Major rights-of-way, however, will be directed to designated corridors where possible.

Communication Sites Communication site right-of-way grants will be issued for newly designated communication sites. Where designated sites do not meet public needs, additional new sites will be considered on a case-by-case basis.

Communications site user groups will be encouraged and supported at the designated sites. Right-of-way applications will be approved when consistent with site plans and found to be technically compatible with the existing uses.



Agaves cling to cliffs along Turkey Creek, a popular picnicking spot just outside Aravaipa Canyon Wilderness.

Recreation and Public Purpose Leases/Patents Recreation and Public Purposes applications for public parks, building sites and other public purposes will continue to be evaluated on a case-by-case basis. Leases and patents will be issued in accordance with the decisions of the approved Resource Management Plan and Record of Decision and evaluated following the requirements of National Environmental Policy Act. New landfills may be authorized under the Recreation and Public Purposes Amendment Act of 1988 upon promulgation of its regulations by the Secretary of the Interior. Land exchanges will not be executed for later conveyance of land under the Recreation and Public Purposes Act.

Public Land Withdrawals and Classifications BLM will continue its withdrawal review process to determine the need for existing withdrawals and classifications. Future needs for withdrawals will be evaluated on a case-by-case basis, in accordance with the decisions of the final approved plan.

Hazardous Materials The laws that provide guidance for management of hazardous materials include the *Resource Conservation and Recovery Act of 1976, Comprehensive Environmental Response, Compensation, and Liability Act* and *Superfund Amendment Reauthorization Act* (Executive Order 12580, 1986). BLM responsibilities under these acts include conformance with state enforcement regulations pertaining to the storage, handling and disposal of hazardous materials and the reporting of unpermitted hazardous materials discharges under the provisions of the *Comprehensive Environmental Response, Compensation and Liability Act*. The District's hazardous materials emergency contingency plan provides procedures for responding to hazardous materials incidents on public lands. Inventories of the public lands will be used to identify areas possibly contaminated with hazardous materials. Identified sites will be further evaluated by preliminary assessments, site investigations and expanded site investigations, as appropriate.

Management Concern 3 - Outdoor Recreation and Visual Resource Management

The Bureau's primary recreation management goal is to provide continued outdoor recreation opportunities that the public seeks and that are not readily obtainable from other public and private entities. BLM's primary recreation role is to provide dispersed and resource-dependent types of outdoor recreation, and to deal with the few situations where special or more intensive types of recreation management are required.

Section 102 of the Federal Land Policy and Management Act of 1976 states that "... the public lands be managed in a manner that will protect the quality of the ... scenic ... values ...". BLM Manual 8400 states that BLM "...has a basic stewardship responsibility to identify and protect visual values on public lands." Every action BLM authorizes, funds or carries out will be evaluated for its effects on the scenic qualities of the public lands. Adverse impacts will be mitigated.

Management Concern 4 - Energy and Minerals

The Bureau's policy is to foster and encourage the development of energy and mineral resources. Overall guidance on management of energy and mineral resources comes from the *Mining and Minerals Policy Act*, Section 102 of the Federal Land Policy and Management Act of 1976, *National Materials and Minerals Policy*, *Research and Development Act* and BLM's Mineral Resources Policy.

Locatable Minerals Development of locatable minerals (copper, gold, silver, etc.) is regulated by BLM's Code of Federal Regulations (43 CFR 3802 and 43 CFR 3809). The 3809 regulations provide for mineral entry,



Many unusual rock formations can be seen at Black Rock RNA ACEC.

exploration, location and operations, pursuant to the mining laws, that will prevent unnecessary and undue degradation of other resources. The 3802 regulations were implemented to provide for mining in lands under wilderness review in a manner that protects claimants' rights and the values of wilderness study areas. Mining activities will be evaluated on a case-by-case basis during the life of this plan.

Salable Minerals Mineral materials are administered by BLM and will be disposed of on a case-by-case basis. Mineral materials are usually sold at fair market value, but BLM may provide free-use permits to federal, State and local governments, as well as non-profit organizations.

Leasable Minerals BLM regulations 43 CFR 3100 3500 provide the authority to issue mineral (oil, gas, geothermal, etc.) leases. Stipulations are attached to leases to protect the natural and cultural resources in a lease area.

Management Concern 5 - Cultural Resources

The Federal Land Policy and Management Act of 1976 is the primary basis for BLM's management of cultural resources. Many other laws and regulations, however, provide specific protection of these resources, the most important being the *National Historic Preservation Act* and the *Archaeological Resources Protection Act*. Under National Historic Preservation Act, activities that may affect existing sites or eligible National Register sites are evaluated and potential impacts are analyzed and evaluated in consultation with the State Historic Preservation Officer and the Advisory Council on Historic Preservation. National Historic Preservation Act also gives BLM the responsibility to inventory the cultural resources on public land and to preserve significant resources. The *Archaeological Resources Protection Act* prohibits looting and vandalism of archaeological resources. Severe penalties may be assessed for actions in violation of the conditions of the Act. Several laws provide for the consideration and protection of traditional lifeway values including those of Native Americans.

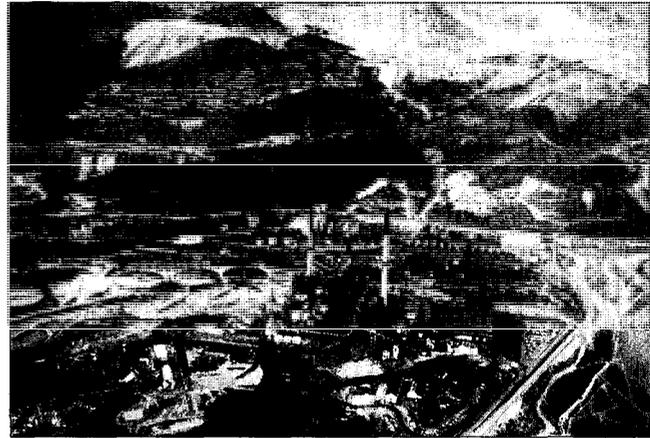
Regardless of the alternative selected, cultural resources will be managed under three broad objectives: manage for information potential; manage for public values; and manage for conservation. See Appendix 11 for the definition of each objective. The degree to which BLM manages each category varies among the alternatives, according to whether the emphasis is on protecting values (*Alternative B*), utilizing values (*Alternative C*) or balanced management (*Preferred Alternative*).

BLM's cultural resource management program is designed as a comprehensive system for identifying, planning the appropriately using and managing cultural resources on public lands and in areas of BLM responsibility other than public lands. The following are the cultural resource management program objectives.

1. Respond legally and professionally to: (a) the various statutory authorities concerning historic preservation and cultural resource protection, and (b) the principles of multiple use.
2. Recognize the potential public and scientific uses of, and the values attributed to, cultural resources on the public lands, and manage the cultural resources so that these uses and values are not diminished but rather are maintained and enhanced.
3. Contribute to land use planning and the multiple use management of the public lands in ways that make optimum use of the thousands of years of land use history inherent in cultural resource information, and that safeguard opportunities for attaining appropriate uses of cultural resources.
4. Protect and preserve, in-place, representative examples of the full array of cultural resources on public lands for the benefit of scientific and public use by present and future generations.
5. Ensure that proposed land uses, initiated or authorized by BLM, avoid inadvertent damage to federal and non-federal cultural resources.

Management Concern 6 - Soil Erosion

The *Federal Land Policy and Management Act* defines BLM's multiple use management mission to include protection of watersheds. In all alternatives in the Resource Management Plan, the overall goal is to minimize soil erosion and rehabilitate eroded areas to maintain and enhance watershed condition and reduce non-point source pollution that could result from rangeland management and use activities. Corrective measures include construction of erosion control structures, allocation of proper levels of vegetation use by livestock and wildlife, land treatment measures and control or mitigation of activities that may contribute to soil erosion and degradation of watershed condition. Activities proposed in areas prone to erosion are evaluated through the National Environmental Policy Act process to determine anticipated impacts and mitigating measures needed to approve the project.



Copper mines and smelters, such as Phelps-Dodge in Morenci, provide jobs for many people in Graham and Greenlee Counties.

Management Concern 7- Vegetation

BLM's authority for management of upland vegetation (vegetation outside riparian zones) comes from the *Endangered Species Act* (1973), *Taylor Grazing Act* (1934), *Public Rangelands Improvement Act* (1978) and *The Federal Land Policy and Management Act* (1976). These laws require BLM to manage vegetation for its use while maintaining sufficient ground cover to maintain and enhance watershed condition and reduce non-point source pollution from rangeland management and use activities. Best management practices would be selected from available grazing management systems, livestock management practices and BLM standards for range improvements to ensure ground cover and reduce non-point pollution (to Arizona's waters sediment production and fecal contamination) resulting from grazing activities.

Under the *Endangered Species Act*, BLM will not jeopardize the continued existence of any species listed or proposed for listing as threatened or endangered and to actively promote species conservation and recovery. BLM will also manage candidate species to prevent listing as threatened or endangered.

The 9th Circuit Court of Appeals has issued an injunction that prohibits use of chemicals for vegetation manipulation on public lands. BLM is preparing an environmental impact statement assessing the use of chemicals. Several actions in this Resource Management Plan involve the use of herbicides. Herbicides will be used only if permit-led upon completion of the *Environmental Impact Statement, Vegetation Treatment on BLM Lands in 13 Western States* (BLM 1989, in preparation) and relief from the 9th Circuit Court. If chemicals are approved for use, site-specific

environmental analyses will be prepared for each project proposing the use of chemicals.

The *Upper Gila-San Simon Grazing Environmental Impact Statement* (BLM 1978) and *Eastern Arizona Grazing Environmental Impact Statement* (BLM 1986) provide direction for management of livestock on public lands. These Environmental Impact Statements set the direction for livestock numbers, grazing systems, class of livestock, etc. The decisions of these Environmental Impact Statements are still valid and will be incorporated by reference in all alternatives evaluated in this Environmental Impact Statement.

The *Safford District Fire Management Activity Plan* (BLM 1989, in preparation) sets direction for management of wild and prescribed fire. Wildfires will be put out. Prescribed fire (either a natural start or a planned ignition) will be used to accomplish resource management objectives. Prescribed fire will be used only with a "pre-approved" burning plan.

Management Concern 8 - Water Resources

The *Water Quality Act* (1987) and *Arizona Environmental Quality Act* (1986) provide direction on man-

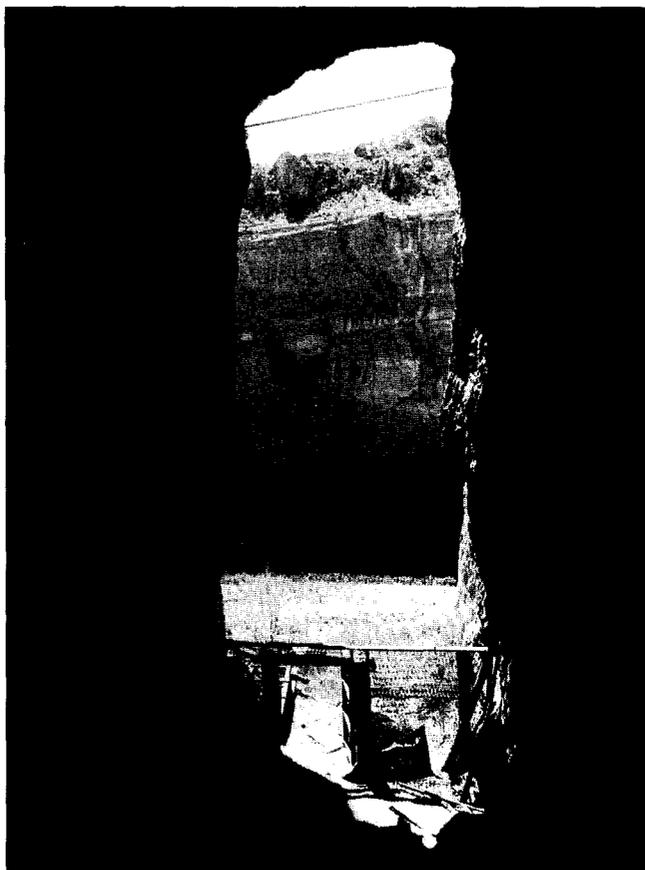
agement and maintenance of water quality. Water is allocated in Arizona under the *Surface Water Code*, the *Groundwater Code* (1980) and applicable federal laws. Executive Order 11988 gives BLM guidance on management of floodplains. Specifically, the Executive Order prohibits use of federal funds for construction in floodplains. Acquisition of water rights for the quantities of water needed to accomplish BLM's programs will be obtained through the State of Arizona's appropriation procedure and adjudication process.

Water quality necessary to accomplish BLM's programs will be secured through quality monitoring programs, National Environmental Policy Act evaluations of activities proposed on public lands, and designation and management under the State of Arizona's Unique Waters Program. BLM resource activities will employ the best selected management practices to reduce non-point source pollution from rangeland management and use activities on the public lands.

Management Concern 9 - Air Quality

Under the *Clean Air Act* (1977, as amended), public lands within the Safford District were given Class II air quality classification. This classification allows for





The large entrance to Eagle Creek bat cave, a maternity care for Mexican free-tailed bats, was gated when the cave was used as a source of commercial guano.

moderate deterioration of air quality associated with moderate, well-controlled population and industrial growth. Public lands will be managed as Class II areas unless excepted as non-attainment areas or their classification is changed as a result of state procedures prescribed under the *Clean Air Act*. Air quality reclassification is the responsibility of the state, not BLM. impacts to air quality resulting from activities on public lands will be prevented or reduced to acceptable levels through mitigation prescribed in National Environmental Policy Act evaluations.



Management Concern 10 - Paleontological Resources

The Bureau's authority for management and protection of fossils comes from a variety of laws, regulations and policies, most recently the Federal Land Policy and Management Act of 1976. Section 102 requires that scientific values be protected while Section 103 requires scientific values be addressed in the management of public lands and resources. Potential impacts of activities on public lands will be evaluated through the National Environmental Policy Act review process. Paleontological collection permits from the Safford District will be required for scientific studies on public lands within the District.

Description of the Alternatives

This section provides details on each alternative considered in this Resource Management Plan/ Environmental Impact Statement. Most of the actions identified in the Resource Management Plan can be implemented when the State Director signs the Record of Decision. Other actions identified in the Resource Management Plan require further approval before they can be implemented. Some decisions like withdrawals must be made by the Secretary of the Interior, with BLM only making recommendations through this Resource Management Plan. BLM intends to pursue all recommendations made in the approved Resource Management Plan.

Alternative A (Preferred Alternative)

This alternative is BLM's preferred Resource Management Plan. It is designed to respond to the issues and management concerns in a manner that provides a balanced approach to multiple use management. It provides protection to important resources that cannot tolerate disturbance from other activities. It also provides for the consumptive use and development of other resources.

Issue 1 - Access

With Alternative A, the following actions would be implemented to resolve the Access Issue.

1. Prepare a District Transportation Plan that includes identification of access needs and closures, a road and trail numbering system, sign needs,

- maintenance needs and coordination with other agencies and landowners.
2. Where needed, reserve access across public lands conveyed out of federal administration.
 3. Obtain public and administrative access to the public lands.
 4. Close roads, as needed, to manage visitors, protect resources and to meet objectives.
 5. Obtain legal access, for public and/or administrative use, across private lands in 39 locations Districtwide (see Appendix 1) and across other state and private lands as determined in the future.
 6. Reconstruct the following roads at the locations noted below to provide or improve vehicle access for the administration and use of the public lands.
 - a. Left Fork of Markham Creek Road, about three miles T. 3 S., R. 24 E., Sec. 36; T. 4 S., R. 24 E., Secs. 1, 12; and T. 4 S., R. 25 E., Secs. 6, 7, 18.
 - b. Military Trail, about three miles T. 3 S., R. 16 E., Secs. 13, 14, 23.
 - c. Virgus Canyon Road, about a half mile T. 6 S., R. 18 E., Secs. 27,34,35.
 - d. Jackson Cabin Road, about five and a half miles T. 11 S., R. 20 E., Secs. 22, 26, 27, 35, 36; T. 12 S., R. 20 E., Secs. 1, 2, 11, 24; and T. 12 S., R. 21 E., Secs. 30,31.
 - e. Buckeye Canyon Road, about one mile T. 13 S., R. 27 E., Secs. 26,27,34 and T. 14 S., R. 27 E., Sec. 9.
 - f. Other roads as determined in the future and included in the District Transportation Plan.
 7. Obtain legal administrative and public access across private, state and Indian lands on existing foot and horse trails.
 - a. Safford-Morenci Trail where it crosses the San Carlos Indian Reservation T. 4 S., R. 28 E., Sec. 31.
 - b. Safford-Morenci Trail where it crosses Bonita Creek T. 5 S., R. 27 E., Secs. 10,11.
 - c. Hell Hole Canyon Trail and trailhead at Dry Camp T. 6 S., R. 19 E., Sec. 7.
 - d. Aravaipa Canyon Wilderness Trail from the west trailhead (at the administrative site) to the west boundary of the wilderness T.6 S., R. 17 E., Secs. 13, 24.
 - e. Babocomari River Trail T. 20 S., R. 20 E., Sec. 13 and T. 20 S., R. 21 E., Sec. 18.

Issue 2 - Area of Critical Environmental Concerns and Other Types of Special Management Areas

Under Alternative A, the following actions will be implemented to resolve the Area of Critical Environmental Concern and Other Types of Special Management Areas Issue.

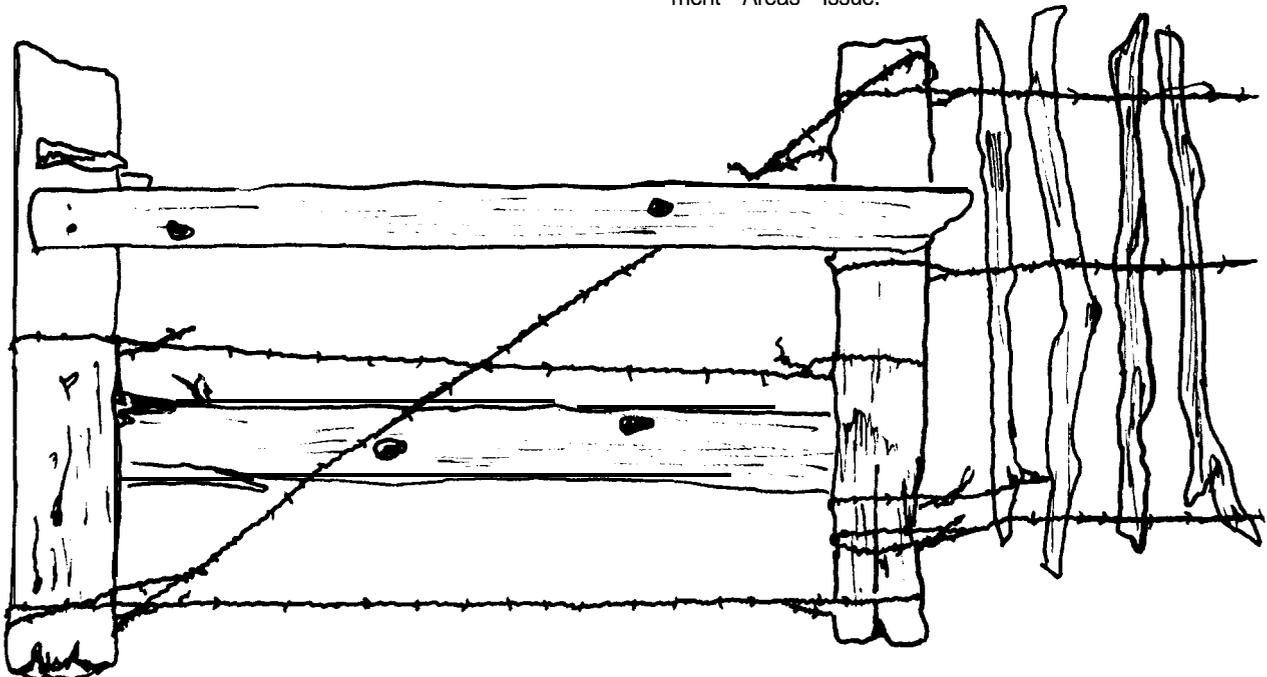


Table 2-1. Areas Designated as Area of Critical Environmental Concerns-Alternative A

Proposed Name	Federal, State & Private	Acres	Values or Hazards	Management Prescription
Gila Box ONA ACEC	F	2,411	Desert rivers, riparian habi- tat, T&E spe- ties, bighorn sheep, scenery, recreation use, cultural resources.	Mineral with- drawal, NSO for mineral leasing, no sand/gravel sales, limit OHVs, no new RWs, no woodcutting, acquire private lands if available, VRM Class II.
	S	0		
	P	210		
		2,621		
Turkey Creek Riparian ACEC	F	2,326	Two riparian woodlands.	Limit OHV use, close Oak Grove Canyon to OHVs, close upper part of Turkey Cr. to OHVs, require a mining plan, manage livestock, no woodcutting, monitor water quality, rehabili- tate riparian area, develop cooperative agreements.
	S	0		
	P	0		
		2,326		
Table Mtn. RNA ACEC	F	1,220	Plant community.	Limit OHV use, no woodcutting, min- eral withdrawal, no vegetative sales, prescribed fire plan.
	S	0		
	P	0		
		1,220		
Desert Grass- lands RNA ACEC	F	530	Relict desert grasslands.	Mineral withdrawal (part of ACEC), closed to OHVs, acquire state/ private lands if available, no livestock, prescribed fire plan.
	S	240		
	P	70		
		840		
Swamp Springs- Hot Springs Watershed ACEC*	F	10,838	Riparian areas, T&E species, bighorn sheep, native fish, cultural resources.	Limit OHV use, close Hot Springs Canyon to OHV use, require mining plans, no woodcut- ting, rehabilitate upland and riparian vegetation, no live- stock, acquire legal access, acquire state/ private lands if available.
	S	967		
	P	4,958		
		16,763		

Table 2-1. Areas Designated as Area of Critical Environmental Concerns-Alternative A (continued)

Proposed Name	Federal, State & Private Acres	Values or Hazards	Management Prescription
Bear Springs Badlands ACEC	F 2,927	Paleontological (fossil) resources, scenery.	Scientific studies, VRM Class II, no road construction, inventory, limit OHV use, mitigate livestock and soil erosion impacts, mineral withdrawal, NSO for mineral leasing, no sand/ gravel sales.
	S 320		
	P 0		
	3,247		
Guadalupe Cyn. ONA ACEC	F 2159	Riparian habitat, T&E species, scenery, recreation values.	Limit OHV use, prescribed fire plan, no woodcutting, VRM Class II.
	S 0		
	P 778		
	2,937		
Bowie Mtn. Scenic ACEC	F 4,190	Scenic backdrop to Ft. Bowie National Historic Site.	Mineral withdrawal, and NSO for mineral leasing in Ft. Bowie viewshed, limit OHV use, suppress wildfire, no woodcutting, VRM Class I, no RWs, acquire private lands if available.
	S 0		
	P 100		
	4,290		
Coronado Mtn. RNA ACEC	F 120	Unique plant association.	Mineral withdrawal, no woodcutting, VRM Class II, prescribed fire plan, no R/ ws.
	S 0		
	P 0		
	120		
Dos Cabezas Peaks ACEC	F 25	Scenic, historic landmark.	Require mining plan, limit OHV use, no woodcutting, prescribed fire plan, no RWs, VRM Class II.
	S 0		
	P 0		
	25		
Eagle Creek Bat Cave ACEC	F 40	Mexican free-tailed bat maternity cave.	Mineral withdrawal, NSO for mineral leasing, no sand/gravel sales, no guano extraction, monitor the cave, acquire private lands if available, VRM Class II.
	S 0		
	P 10		
	50		

Table 2-1. Areas Designated as Area of Critical Environmental Concerns-Alternative A (continued)

Proposed Name	Federal, State & Private Acres	Values or Hazards	Management Prescription
Willcox Playa NNL	F	2,475	Close to OHV use, acquire state/private lands if available, no woodcutting, no RWs, VRM Class II.
	S	803	
	P	400	
		3,678	
111 Ranch RNA ACEC	F	2,688	Limit OHV use, no wood-cutting, VRM Class II, inventory.
	S	0	
	P	0	
		2,688	

* Includes Muleshoe Riparian Area of Critical Environmental Concern from Alternative C.
Source: Safford District Files

1. Designate 13 Area of Critical Environmental Concerns totalling 40,805 acres (31,949 acres of public land) to protect important natural and cultural resources. Table 2-1 describes the specific areas, acreages, values and management prescriptions. Maps 1 through 22 and Map 24 show the location of each proposed Area of Critical Environmental Concern.

Appendix 2 includes a detailed discussion of each Area of Critical Environmental Concern nomination, including a determination of relevance and importance, rationale for designation, management prescriptions and alternatives considered.

2. Develop Coordinated Resource Management Plans to direct the management of BLM's multiple use programs on public lands in the Aravaipa Creek Watershed, Muleshoe Ranch and Bear Springs Flat. The purpose of the plans is to establish management objectives that directs the development of future program activities toward maintenance and enhancement of watershed condition (see Maps 24 and 26). A Cooperative Management Agreement for the Muleshoe Ranch area has been prepared between the BLM and The Nature Conservancy (19--) to facilitate accomplishment of the joint management objectives for public lands in the Muleshoe area. A Cooperative Management Agreement between BLM and The Nature Conservancy will also be prepared for the Aravaipa area.

These Cooperative Management Agreements will be incorporated into the Coordinated Resource Management Plans for the Aravaipa and Muleshoe areas scheduled to be prepared after the Resource Management Plan is approved.

Management goals for the Aravaipa Creek Watershed and Muleshoe Ranch are designed to maintain or restore the natural ecological processes, biological communities and cultural resource values as practicable while allocating and actively managing the full spectrum of compatible multiple uses. These goals will be achieved through the following management actions.

a. Aravaipa Creek Watershed -

- (1) In order to increase management flexibility and to provide for acceleration of uplands and riparian areas, initiate an immediate 50 percent suspension (2890 Animal Unit Months) of total preference on South Rim Allotment 4529.
- (2) Determine livestock carrying capacity and complete a Range Suitability Study for South Rim Allotment prior to development of a Coordinated Resource Management Plan for the area.
- (3) Implement monitoring studies and evaluate success of current South Rim Allotment Management Plan (dated 1989).

- (4) As part of the Coordinated Resource Management Plan process, reevaluate existing Allotment Management Plan, and implement a monitoring plan in order to measure progress toward resource management goals and objectives for the area.
 - (5) Since active use currently constitutes 50 percent of the new preference, changes in current active use will be justified by monitoring studies and consistency with management goals and objectives for the area. Changes in active use in excess of 10 percent will be implemented over a five year period, unless otherwise negotiated with the allottee.
 - (6) Suspension of preference as well as deferrals will be evaluated at a minimum of five year intervals to determine progress toward and achieving management goals and objectives. Changes in preference, in either direction, may be made as a part of this process.
 - (7) Improve watershed conditions on the upland areas by vegetative manipulation through a fire management plan and by stabilization of active erosion areas.
- b. Muleshoe Ranch Livestock grazing on this allotment was previously suspended for a five-year period (by the Eastern Arizona Grazing Environmental Impact Statement, which was implemented upon signing of a Cooperative Management Agreement between BLM, The Nature Conservancy and the Forest Service) beginning December 12, 1988. The purpose of this suspension was to improve riparian conditions and wildlife habitat on the Muleshoe Ranch. In order to continue progress toward the management goals for the Muleshoe, BLM will:
- (1) Implement a suspension of grazing use on the Swamp Springs-Hot Springs Watershed Area of Critical Environmental Concern to provide for accelerated rehabilitation of uplands and riparian areas. Suspension will be evaluated at a minimum of five year intervals to make progress toward meeting the management objectives.
 - (2) Allow livestock use on the Soza Mesa area. Livestock forage use will not be permitted to exceed an average of 40 percent over a full grazing cycle (averaging three to five years duration). Specific livestock management actions will be developed during the Coordinated Resource Management Plan stage of planning.
- (3) Improve watershed conditions on the upland areas by vegetation manipulation through a Fire Management Plan and by studies to evaluate progress in meeting the desired goals and objectives. A monitoring plan will be developed and implemented in concert with the Coordinated Resource Management Plan.
- Management goals for the Bear Springs Flat are designed to protect sensitive Class I fossils and protection of scenic values with impressive erosional features in the area. These goals will be achieved through the following management actions.
- a. Allow livestock use in the Bear Springs Flat area, consistent with a livestock management plan to mitigate the adverse impacts on fossils of the area. Livestock forage use will not be permitted to exceed an average of 40 percent over a full grazing cycle (averaging 3 to 5 years duration). Specific livestock management actions will be developed at the activity plan level.
 - b. Evaluate progress in meeting the desired goals and objectives through appropriate monitoring studies
5. Revise the San Simon River Coordinated Resource Management Plan. The purpose of this plan is to direct development of program activities to maintain and enhance watershed condition.
 6. Following completion of the approved Resource Management Plan cooperative livestock and watershed management studies will be conducted to restore native grasslands and improve the condition of the Aravaipa Watershed. These studies will investigate the best management techniques.



Killdeer are a common site around stock ponds throughout the Safford District.

Issue 3 - Off-highway Vehicles

Under the Preferred Alternative the following actions will be implemented to resolve the off-highway vehicles Issue.

1. Initiate procedures to designate 1,708 acres at Hot Well Dunes as open to off-highway vehicle use. An open area is an area where all types of vehicle use is permitted, at all times and anywhere in the area.
 2. Designate the following areas closed to off-highway vehicle use.
 - a. Turkey Creek, above Oak Grove Canyon corral and Oak Grove Canyon 102 acres.
 - b. Desert Grasslands Research Natural Area Area of Critical Environmental Concern 530 acres.
 - c. Willcox Playa NNL Area of Critical Environmental Concern 2,475 acres.
 - d. The riparian area of Hot Springs Canyon 140 acres.
 - e. Any areas designated wilderness (84,632 acres currently designated).
- A closed area is an area where off -highway vehicle use is prohibited, even if roads or trails exist within the closed area.
3. Off-highway vehicle use within the San Pedro Riparian National Conservation Area (54,189 acres) is limited to designated roads. Vehicle use within the Gila Box Riparian National Conservation Area (20,900 acres) will be determined during preparation of the management plan for the area.
 4. Designate the remainder of the public lands within the District (1,310,713 acres) limited to off-highway vehicle use. Off-highway vehicle use will be limited to existing roads and trails occurring at the time of designation and any new roads approved for construction during the life of this Resource Management Plan. Existing roads and trails have been identified and can be reviewed in the Safford District Office. Table 2-2 identifies the acres designated in each category.
 5. Off-highway vehicle designations and management will apply to motorized transportation only.

Table 2-2. Acres Designated for Off-highway Vehicle Use-Alternative A

Off-highway Vehicle Designation	Approximate Acres
Open	1,708
Limited	1,310,713
Closed	87,879

Source: Safford District Files

Issue 4 - Riparian Areas

If this alternative is approved, the following objective and actions will be implemented to resolve the Riparian Areas Issue.

The objective for management of riparian areas is to maintain or improve 75 percent of the acreage of riparian vegetation on public lands within the District in good or excellent condition by 1997 (see Map 26).

To accomplish this objective, the following actions will be implemented.

1. Incorporate riparian area objectives into existing and future activity plans.
2. In cooperation with Arizona Game and Fish Department, develop and implement a system to prioritize needed riparian area management. The priorities will be based on management objectives, resource condition, resource conflict and the potential or capability of a riparian area to respond to treatment.
3. Develop a riparian inventory system. Coordinate development and implementation of the system with other land managing agencies.
4. In cooperation with Arizona Game and Fish Department, complete the inventory of all riparian areas on public lands in the District to establish baseline condition.
5. Establish a monitoring plan for selected riparian areas based upon the management priority system. Implement the plan and evaluate monitor-

- ing data. Continue to carry out needed changes in riparian area management through activity plans.
6. Continue to file for in-stream flow water rights on perennial streams or rivers and water rights on springs and ponds to protect and maintain riparian vegetation.
 7. Continue to develop grazing systems and modify existing allotment management plans, as necessary, to best manage livestock use for the improvement of riparian areas and reduce non-point source water pollution.
 8. Do not permit firewood cutting in riparian areas.
 9. Permit the removal of non-native vegetation for improvement of riparian vegetation.
 10. Maintain and monitor representative relict riparian areas to provide a baseline for future management decisions.
 11. Build Timber Draw Dam on the San Simon River to reestablish stream channel and floodplain conditions to promote the redevelopment of the riparian ecosystem.
 12. Continue to manage the San Pedro Riparian National Conservation Area according to the guidance in the existing management plan, and develop a management plan for the Gila Box Riparian National Conservation Area.
 13. Develop an environmental education program for schools and the public for riparian management.
4. Manage state-listed species to meet state objectives. Other special status species will be managed in accordance with inter and intra-agency management plans.
 5. Manage priority wildlife species habitat (vegetation communities) or special features of that habitat (water, riparian vegetation, cliffs etc.) to maintain or enhance population levels.
 6. Focus management efforts on enhancing biological diversity.
- The following actions will be implemented to accomplish these objectives.
1. Establish the following as priority species and habitats. Priority species and habitats in the District include federally listed, proposed and candidate Threatened and Endangered species and their habitat; State-listed Threatened and Endangered species and their habitat; important game species and their habitat; and other sensitive species and their habitat.
 - a. Riparian/aquatic habitat and species dependent on riparian/aquatic habitat Gila topminnow, desert pupfish, southern bald eagle, loach minnow, spikedace, Gila chub, Colorado roundtail chub, razorback sucker, western yellow-billed cuckoo, gray hawk, Mississippi kite, common black-hawk, ferruginous pygmy-owl, willow flycatcher, leopard frog, black bear, turkey and waterfowl.
 - b. Species identified for reintroduction in Fish and Wildlife Service plans are the aplomado falcon and woundfin.
 - c. Desert tortoise.
 - d. Desert and Rocky Mountain bighorn sheep.
 - e. Mule deer.
 - f. Pronghorn antelope.
 - g. Oak woodlands and species dependent on oak woodland habitat white-tailed deer, turkey, black bear and Montezuma quail.
 - h. Neotropical migratory birds.
 - i. Other species and habitats of interest peregrine falcon, red bat, Sanborn's long-nosed bat,

Management Concern 1 - Wildlife Habitat

If this alternative is approved, the following objectives and actions will be implemented to resolve the Wildlife Habitat Management Concern.

1. Maintain and enhance priority species and their habitats.
2. Focus management actions on a single species, only when required by the *Endangered Species Act*. Actively promote Threatened and Endangered species recovery to achieve eventual delisting.
3. Conserve candidate species to ensure that BLM-authorized actions do not contribute to the need to list any species as threatened or endangered.

Mexican long-tongued bat, ferruginous and Swainson's hawks, javelina, mountain lion, dove, quail and bat roosts.

General management objectives for each of the priority species and habitats are identified in Appendix 4.

2. Inventory public lands within the District to determine the presence and abundance of priority species and their habitat.
3. Manage habitat for optimum wildlife populations, based on ecological conditions, taking into consideration local, yearly climatic variations. BLM will follow Arizona Game and Fish Department's five-year strategic plans for the various species and will assist the Department in accomplishing its goals for the various species.
4. Transplant and augment populations of priority wildlife species within historic ranges, if necessary, to reach management objectives.
5. Monitor priority habitat to determine condition and changes in condition. Conduct inventories to determine the impacts of other activities on wildlife populations and habitat prior to preparation of Habitat Management Plans. Identify opportunities in Habitat Management Plans to mitigate adverse impacts and implement the actions needed to correct the problems.
6. Continue to maintain and improve wildlife habitat, emphasizing priority habitat.
7. Protect springs and associated indigenous riparian vegetation for wildlife water, cover and forage.
8. Develop prescribed burning plans in fire-dependent vegetation communities to improve habitat conditions for priority wildlife species.
9. Suppress wildfire in sensitive vegetation communities (like palo Verde/saguaro) to reduce the detrimental effects on priority wildlife dependent on those communities.
10. Existing Habitat Management Plans address all public lands in the District except scattered parcels in Cochise County. Two Habitat Management Plans were completed prior to substantial land exchanges, and were not based on realistic ecological boundaries. To improve site-specific habitat management direction, redefine all Habitat Management Plan area boundaries. Develop

Sikes Act Habitat Management Plans with Arizona Game and Fish Department for the following areas: Geronimo, Gila Box, Aravaipa Muleshoe, Peloncillo, Dos Cabezas, San Simon, Cochise and San Pedro. Priorities for revisions will be determined in coordination with Arizona Game and Fish Department.

11. Provide input into livestock Allotment Management Plans to ensure sufficient vegetation in bighorn sheep lambing areas for food and cover.
12. Provide input into Allotment Management Plans in oak-woodland habitat to ensure perennial grasses are available to provide adequate cover for priority species.
13. Close the following areas to animal damage control activities such as trapping, shooting, aerial gunning or use of M-44.
 - a. Threatened and Endangered species habitat for those techniques that pose a threat to the species.
 - b. Zones around residences and communities and in areas of concentrated recreation use for those techniques that pose a threat to the visitor or to dogs in areas where they are trained, exercised or used for hunting.
 - c. Wilderness areas and Research Natural Areas except as individually authorized by the Arizona BLM State Director or the District/Area Manager.

Authorize areas that are open for animal damage control in coordination with the Animal and Plant Health Inspection Service on a yearly basis.



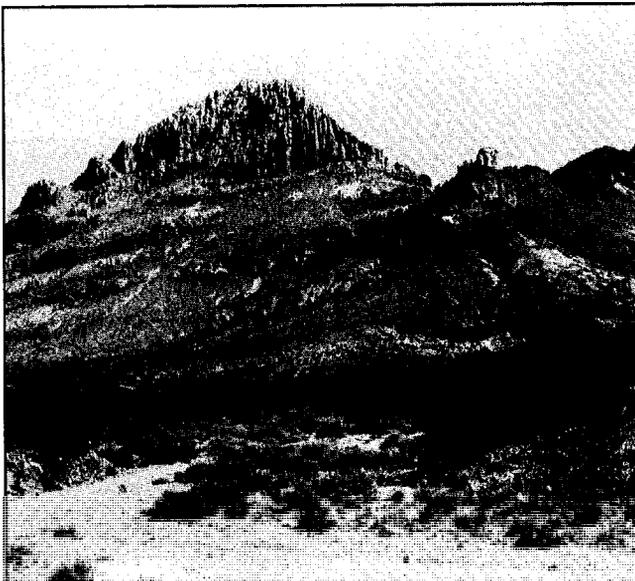
The tree-lined canyon along Aravaipa Creek provides cool shade for hikers and pleasant areas for primitive camping.

14. Inventory and categorize desert tortoise habitat by 1992. In the interim, place about 26,000 acres of public land in the San Pedro River basin from Cascabel to Winkelman and parts of the Dripping Spring and Pinal Mountains in Category 3. Place about 3,000 acres east of San Manuel in Category 2 (see Appendix 10 for goals and criteria for categorization of habitat).
15. Designate the following Area of Critical Environmental Concerns for the protection of priority wildlife species and their habitat: Gila Box Outstanding Natural Area, Swamp Springs-Hot Springs Watershed, Guadalupe Canyon Outstanding Natural Area and Eagle Creek Bat Cave .

Management Concern 2 - Lands and Realty

If this alternative is approved the following objectives and actions will be implemented to resolve the Lands and Realty Management Concern.

1. The following are objectives for disposal of public lands.
 - The order of preference for disposal will be by exchange, *Recreation and Public Purposes Act* or sale.
 - Isolated tracts of public land may be disposed of to improve resource management efficiency and service to the public.
 - When lands next to urban areas are disposed of, the resulting boundaries will be manageable, fenceable and identifiable.



The rugged volcanic cliffs of Doubtful Canyon in the Peloncillos are home to desert bighorn sheep.

- Prior to disposal, lands will be evaluated for significant cultural and natural resource values.

Dispose of 105,523 acres of public lands in the following areas to accomplish these objectives.

- a. Texas Canyon area.
- b. Gila Valley area.
- c. El Capitan and southern Pinal Mountain area.
- d. Dripping Spring Wash area.
- e. Swisshelm Mountain area.
- f. Bisbee area, excluding the Juniper Flats block.
- g. Tombstone area.
- h. Douglas area.
- i. Greenlee County Area.
- j. San Simon area.
- k. Portal area.
- l. Recreation and Public Purposes sanitary landfill leases.

The public land areas have been identified for disposal by sale or exchange and are within the disposal area identified on Map 27. However, all public lands within these areas do not have to be disposed of. Unforeseen future land management concerns or public demand may also necessitate the need for other public lands to be sold or exchanged which are not in the identified disposal area. The parcels considered at that time would be subject to BLM's planning process and the *National Environmental Policy Act*.

Appendix 5 shows the lands that meet the the Federal Land Policy and Management Act of 1976 criteria for sale. Although these lands qualify for sale, BLM's preferred method of disposal is by exchange or through the *Recreation and Public Purposes Act*. Map 27 shows where disposals of land may take place.

2. The following are objectives for land acquisition:
 - Acquire lands with high public values that complement existing management programs.
 - Consolidate ownership pattern to improve management efficiency.
 - Improve service to the public.

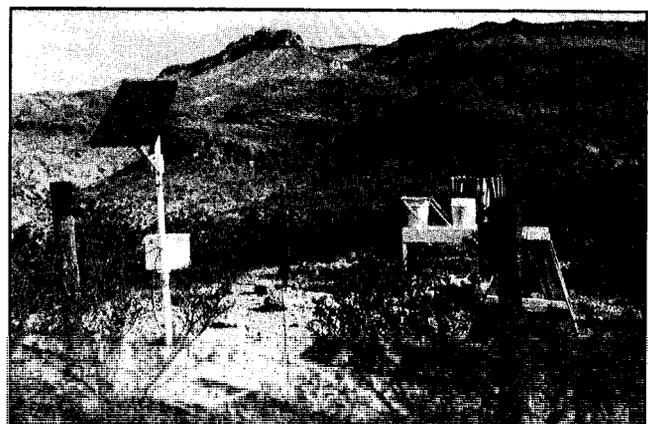
To accomplish these objectives, acquire State of Arizona and private land in the areas shown on Map 27 if they become available. These lands would have one or more of the following characteristics, generally within or adjacent to public lands shown on the map.

- a. riparian habitat.
 - b. watersheds of important riparian areas.
 - c. high value wildlife habitat, such as Threatened and Endangered species areas and major migration corridors.
 - d. administrative sites.
 - e. land for developed recreation sites.
 - f. land providing access to public lands.
 - g. significant cultural and paleontological properties.
 - h. other lands with high public resource values such as inholdings in Area of Critical Environmental Concerns and other types of special management areas.
 - i. other private lands that will accomplish BLM's acquisition objectives.
3. According to *The Federal Land Policy and Management Act of 1976*, all lands not identified for disposal must be retained under Federal administration to be managed under the principles of multiple use and sustained yield. Unforeseen future land management concerns or public demand may necessitate the disposal of other public lands. Such proposals will require this plan to be amended with the appropriate National Environmental Policy Act compliance documents as part of the amendment.
4. Designate the following existing utility lines as corridors for future utility needs across the District.
- a. Arizona Electric Power Company line 1-mile wide.
 - b. Tucson Electric Power Company line 1-mile wide.
 - c. All American pipeline (San Simon Resource Area only) 1-mile wide.
 - d. San Pedro 1-mile wide (660 ft. wide where it crosses San Pedro Riparian National Conservation Area).

- e. Hayden/Christmas 1 -mile wide.

Any future major cross-District utility rights-of-way proposals will be encouraged to use these corridors (see Map 27).

- 5. Establish the Muleshoe Ranch and the Bowie Mountain Scenic Area of Critical Environmental Concern as right-of-way avoidance. Every attempt will be made to avoid these areas with major cross-District rights-of-way to minimize or eliminate conflicts with sensitive resource values.
- 6. Attach needed site-specific environmental protection stipulations to all rights-of-way.
- 7. Establish the following areas as right-of-way exclusion areas.
 - a. Gila Box Outstanding Natural Area Area of Critical Environmental Concern.
 - b. Coronado Mountain Research Natural Area Area of Critical Environmental Concern.
 - c. Dos Cabezas Peaks Area of Critical Environmental Concern.
 - d. Bear Springs Badlands Area of Critical Environmental Concern.
 - e. Willcox Playa National Natural Landmark Area of Critical Environmental Concern.
 - f. wilderness study area.
 - g. designated wilderness areas.



The Oliver Knoll atmospheric deposition monitoring station is part of a nationwide network that measures the acidity and particulate content of precipitation.

h. Oliver Knoll Atmospheric Deposition Monitoring Station

8. Designate Guthrie Peak, Juniper Flat in the Mule Mountains and the west end of Dos Cabezas Mountains as communication sites (see Map 27). Site plans will be prepared for all communication sites, and designation of new sites will be analyzed on a case-by-case basis.
9. Complete the withdrawal review process. Revoke all withdrawals determined to no longer serve their original or intended purpose.
10. Withdraw 12 acres for the proposed Safford District Office administrative site (T. 7 S., R. 25 E., Sec. 24, that part of the W1/2NW1/4NE1/4 lying north of Golf Course Road) from the public land laws and the mining and mineral leasing laws,
11. Withdraw 10 acres for the Oliver Knoll atmospheric deposition monitoring station (T. 4 S., R. 24 E., Sec. 22, SW1/4SE1/4SE1/4NE1/4, SE1/4SW1/4 SE1/4NE1/4, NW1/4NE1/4NE1/4SE1/4, NE1/4NW1/4NE1/4SE1/4) from the public land laws and the mining laws. Mineral leasing will be permitted with a "No Surface Occupancy" stipulation. Area will be established as an administrative site.
12. Withdraw 9,829 acres, including administrative sites and campgrounds, from mineral entry to preserve important resource values. Table 2-3 identifies the areas and acreages to be withdrawn, Appendix 7 lists the legal descriptions of the areas to be withdrawn.

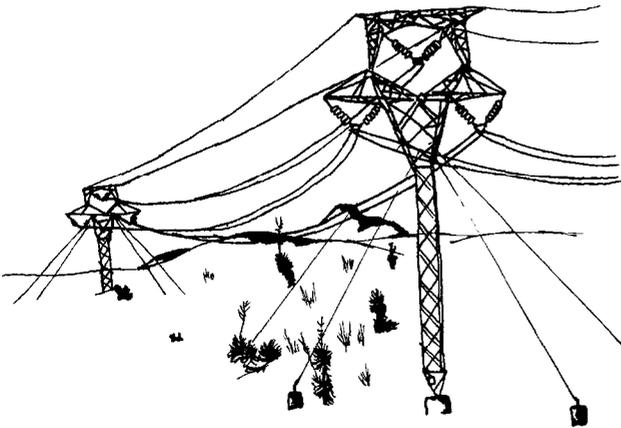


Table 2-3. Areas/Acres To Be Withdrawn From Mineral Entry-Alternative A

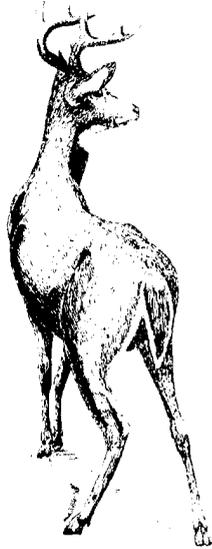
Area Withdrawn	Acres Withdrawn
Gila Box ONA ACEC	2,411
Table Mountain RNA ACEC	1,220
Desert Grassland RNA ACEC	380
Bear Springs Badlands ACEC	2,927
Bowie Mountain Scenic ACEC	2,230
Coronado Mountain RNA ACEC	120
Eagle Creek Bat Cave ACEC	40
Fourmile Canyon Campground	159
Oliver Knoll Atmospheric Deposition Monitoring Station	10
District Office Site proposed	12
Yuma Wash Archaeological Site	120
Tres Alamos Archaeological Site	160
Midway Cave Archaeological Site	40
Total	9,829

Source: Safford District Files

Management Concern 3- Outdoor Recreation and Visual Resource Management

If this alternative is approved the following actions will be implemented to resolve the Outdoor Recreation and Visual Resource Management Concern.

1. Designate the following areas as Special Recreation Management Areas to manage current recreation use.
 - a. Aravaipa Canyon/Turkey Creek
 - b. Gila Box/Bonita Creek.
 - c. Christmas (Gila River below Coolidge Dam).
 - d. Red Knolls/Bear Springs Badlands/Watson Wash.
 - e. Hot Well Dunes.



f. additional lands in the San Pedro Riparian National Conservation Area not previously included in the *San Pedro River Riparian Management Plan* (BLM 1989).

Prepare Recreation Area Management Plans for designated Special Recreation Management Areas, as needed. Manage the remainder of the public lands within the District as an Extensive Recreation Management Area for dispersed recreation use.

2. In the Recreation Area Management Plans, determine which public lands will be managed for interpretation and education, and which sites will have signs added for public interpretation, safety and education.
3. Continue to manage Aravaipa Canyon Wilderness following the guidance of the *Aravaipa Canyon Wilderness Management Plan* (BLM 1988).
4. Prepare project plans for the following areas that need some recreation planning and development.
 - a. Gila Mountain Crest Trail, in cooperation with the San Carlos Apache Tribe.
 - b. Galiuro/Aravaipa Santa Teresa Trail, in cooperation with the Forest Service.
 - c. Watson Wash Hot Well.
 - d. Safford-Morenci Trail.
 - e. Red Knolls.
 - f. Guadalupe Canyon.

- g. Black Hills Rockhound Area.
 - h. Round Mountain Rockhound Area.
 - i. Fort Bowie/Helen's Dome Trail, in cooperation with the National Park Service.
5. Evaluate new road construction for possibilities to enhance recreation experiences. Evaluate possible closure of some existing roads for the same possibilities. (See Access issue for additional information.)
 6. Continue to exclude livestock from 159 acres of public land around Fourmile Canyon Campground.
 7. Unless otherwise established, the maximum length of stay for recreation purposes in any one location is 14 days.
 8. Develop a District sign plan to determine which roads, sites and facilities will be signed for interpretation, education, information and public safety.
 9. Designate the following as Visual Resource Management Class I areas to preserve the scenic quality. (See Appendix 6 for classification definitions.)
 - a. designated wilderness areas.
 - b. Bowie Mountain Scenic Area of Critical Environmental Concern.



A BLM archaeologist examines fossilized bones at the Bear Springs Badlands ACEC.

10. Designate the following as Visual Resource Management Class II areas to preserve their scenic quality and to allow for some modification of the landscape.
 - a. Gila Box Riparian National Conservation Area and adjacent lands.
 - b. Turkey Creek Riparian Area of Critical Environmental Concern.
 - c. Aravaipa Canyon tablelands.
 - d. Bear Springs Badlands Area of Critical Environmental Concern.
 - e. Guadalupe Canyon Outstanding Natural Area Area of Critical Environmental Concern.
 - f. Dos Cabezas Peaks Area of Critical Environmental Concern.
 - g. Eagle Creek Canyon.
 - h. Coronado Mountain



Prickly pear cactus are a favorite food of javelina and other wildlife species.

- i. Willcox Playa National Natural Landmark Area of Critical Environmental Concern.
 - j. 111 Ranch Research Natural Area Area of Critical Environmental Concern.
 - k. Muleshoe Ranch.
 - l. Babocomari River.
 - m. Gila River Canyon (below Coolidge Dam).
 - n. Baker Canyon wilderness study area.
 - o. Brandenburg Mountain
11. Designate the following as Visual Resource Management Class III areas to preserve their scenic quality while providing for management activities that are evident but do not dominate the landscape.
 - a. all major highway corridors.
 - b. public lands north of Morenci.
 - c. San Francisco River above and below the Town of Clifton.
 - d. Government Peak and Happy Camp Canyon area of the Dos Cabezas Mountains.
 - e. east of Bowie Mountain around the marble quarry.
 - f. lands adjacent to the San Pedro Riparian National Conservation Area.
 - g. Whitlock Mountains.
 - h. Orange Butte.
 - i. Gila River at Bonita Creek.
 - j. Gila Mountains.
 - k. Mescal Mountains.
 - l. Jackson Mountain.
12. Designate the remainder of the District as a Visual Resource Management Class IV area. Appendix 6 explains the Visual Resource Management management class objectives. The following table identifies the number of acres designated by Visual Resource Management class.

Table 2-4. Acres by Visual Resource Management Class-Alternative A

VRM Class	Acres Designated
I	90,582
II	47,156
III	386,849
IV	874,413

Source: Safford District Files

Management Concern 4 - Energy and Minerals

The following actions will be implemented to resolve the Energy and Minerals Management Concern.

1. Review mining notices and plans of operation received under the surface management regulations (43 CFR 3809) for impacts to other resources. Mitigation and reclamation measures will be provided to prevent unnecessary or undue degradation of the environment. Reclamation bonds will be required consistent with current BLM policy.
2. Withdraw 9,829 acres from mineral entry to preserve important resource values. Table 2-3 identifies the areas and acreages to be withdrawn. Appendix 7 lists the legal descriptions of the areas to be withdrawn.
3. Withdraw administrative sites and campgrounds (Table 2-3) from entry under the mining laws (see Appendix 7 for legal descriptions).
4. Prohibit the sale of mineral materials (sand, gravel, etc.) on 12,371 acres to protect sensitive resource values. Table 2-5 identifies the areas and acreages where mineral materials will not be sold.
5. Sale of mineral materials (sand, gravel, etc.) will not be permitted in areas with riparian vegetation (see Map 26).
6. The standard list of environmental protection stipulations will be attached to all mineral material

Table 2-5. Areas/Acres Where Mineral Materials Will Not Be Sold-Alternative A

Area	Acres
Gila Box ONA ACEC	2,411
Bear Springs Badlands ACEC	2,927
Bowie Mountain Scenic ACEC	2,230
Dos Cabezas Peaks ACEC	25
Eagle Creek Bat Cave ACEC	40
Riparian areas other than those located in ACECs above	4,458
Tres Alamos Archaeological Site	160
Yuma Wash Archaeological Site	120
Total	12,371

Source: Safford District Files

sale authorizations. Any needed site-specific stipulations will also be added.

7. Energy and other leasable minerals will be leased subject to the following conditions.
 - a. Standard environmental protection stipulations will be applied to all leases in open areas.
 - b. Surface occupancy will not be permitted in riparian areas (see Map 26).
 - c. Surface occupancy will not be permitted in campgrounds or administrative sites.
 - d. Surface occupancy will not be permitted in established bighorn sheep lambing areas from February 1 to April 30 of each year.
 - e. Surface occupancy will not be permitted at Tres Alamos, Yuma Wash or Midway Cave archaeological sites.
8. Issue mineral and energy leases with a "No Surface Occupancy" stipulation on 14,052 acres to protect sensitive resource values. Table 2-6 identifies the areas and acreages to which this stipulation will apply.

Table 2-6. Areas/Acres to be Leased With a “No Surface Occupancy” Stipulation-Alternative A

NSO Area	NSO Acres
Gila Box ONA ACEC	2,411
Bear Springs Badlands ACEC	2,927
Bowie Mountain Scenic ACEC	3,600
Dos Cabezas Peaks ACEC	25
Eagle Creek Bat Cave ACEC	40
Riparian Areas other than those located in ACECs above	4,458
Desert Bighorn Sheep Lambing Areas	90
Fourmile Canyon Campground	159
District Office Site proposed	12
Oliver Knoll Atmospheric Deposition Monitoring Station	10
Yuma Wash Archaeological Site	120
Tres Alamos Archaeological Site	160
Midway Cave Archaeological Site	40
Total	14,052

Source: Safford District Files

Management Concern 5 - Cultural Resources

If this alternative is approved, the following objectives and actions will be implemented to resolve the Cultural Resources Management Concern.

- . Manage for Information Potential.
- . Manage for Public Values.
- . Manage for Conservation.

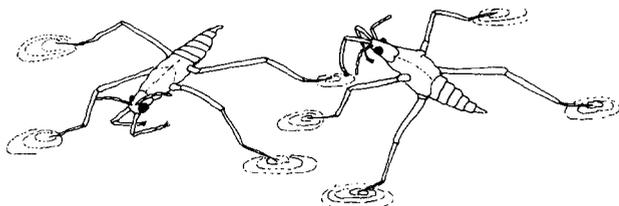


Table 2-7 identifies the actions that will be implemented to achieve each objective. Appendix 12 defines each objective.

The following actions will be implemented to accomplish the cultural resource management objectives. Critical protection will be considered more important than planning or field studies of threatened resources involving non-critical protection. This does not mean, however, that all critical protection work will be done before any planning or other actions.

1. Prioritize implementation of planned cultural resource actions according to the degree of need as defined below.
 - a. First priority will be given to planned actions protecting threatened and significant cultural resources that would otherwise be lost. This includes obtaining important data from individuals (ethnographic information) that may not be available in the future.
 - b. Second priority will be given to the preparation of management plans directing how the District manages its cultural resources.
 - c. Third priority will be given in cases where there is good reason to believe that cultural resources are being adversely affected even though they are not located in any area of proposed activity. Planned actions in these instances will seek to determine the nature and extent of the impacts and to identify corrective management actions. Third priority will also be given to planned actions protecting significant threatened cultural resources where the degree of damage or threat of damage is low (non-critical).



Bobcats can be found in rocky, brushy habitat along desert washes throughout the Safford District.

- cf. Fourth priority will be given to collecting cultural resource field data for planning purposes and for resource utilization not part of any protection or mitigation measure (for example, to allow a cultural property to be excavated solely for scientific research purposes or to allow a property to be interpreted to the public).
 - e. Fifth priority will be given to non-field studies designed to collect data for management or scientific purposes and for nominating cultural properties to the National Register of Historic Places. These studies and nominations will not be designed primarily to meet immediate management needs. Instead, they will be done to provide supplemental management information or to highlight cultural properties by nominating them to the National Register of Historic Places as requested by the general public or other interested parties.
2. Use the following administrative and physical measures to protect cultural properties:
- a. *Signing* place antiquity or interpretive signs on cultural properties being looted or vandalized.
 - b. *Withdrawal* withdraw areas from locations under the mining laws to protect significant cultural properties. Retain significant cultural properties in public ownership to conserve them for the future.
 - c. *Access* install fences or other barriers to restrict or eliminate public access to cultural properties that are being looted or vandalized. Prohibit firewood cutting for public use in areas with high cultural resource values.
 - d. *Patrol* patrol threatened cultural properties with personnel from the Arizona Site Steward Program, BLM's Cultural Resource Assistants and Law Enforcement Rangers and community volunteers.
 - e. *Fire Control* provide input to the development of a fire management plan to protect cultural resources. Assign a Cultural Resource Advisor to all extended attack fires whenever heavy equipment is used.
 - f. *Stabilization* stabilize deteriorating standing architectural structures on significant cultural properties.
 - g. *Detailed Recording* record all known prehistoric cliff dwellings and related structures in the District and the Yuma Wash and Midway Cave sites.
 - h. *Public Education* develop and implement annual Public Affairs Action Plans for cultural resources.



- | | |
|--|---|
| <p>3. Complete a Class III cultural resource inventory and intensive testing in and adjacent to the Timber Draw project area.</p> <p>4. Eliminate livestock grazing on the Tres Alamos site.</p> <p>5. Conduct ethnographic studies of Bonita Creek, Muleshoe Ranch, Pima Mormon Canal System,</p> | <p>Civilian Conservation Corps camps and project areas and Aravaipa Canyon Wilderness and adjacent lands.</p> <p>6. Revise the Safford District Rock Art Cultural Resource Management Plan.</p> <p>7. Conduct a records search inventory and personal</p> |
|--|---|

Table 2-7. Management Objectives Achieved by Planned Actions-Alternative A

Actions	Manage for Information Potential	Manage for Values	Manage for Conservation
1. Use protection measures	X	X	X
2. Inventory and test at Timber Draw	X		
3. Eliminate grazing - Tres Alamos	X		
4. Conduct ethnographic studies - Bonita Creek	X	0	0
Muleshoe Ranch	X	0	0
Mormon Canals	X		0
CCC camps and projects	X	0	0
Aravaipa area	X	0	0
5. Revise Rock Art CRMP	X	0	0
6. Study vandalism	X		
7. Conduct Class II inventories - Aravaipa area	X	0	0
Muleshoe Ranch	X	0	0
Mormon Canals	X	0	0
CCC camps and projects	X	0	0
8. Conduct Class III inventory - Bonita Creek	X	0	0
Timber Draw			
9. Inventor and manage the Dos Ca6ezas mining area	X	0	0
10. Research trails, roads, etc.	X	0	
11. Develop regional research design	X		
12. Promote scientific use	X		
13. Promote development of predictive model	X		
14. Interpret Aravaipa area		X	
15. Interpret - Safford Airport CCC Camp		X	
Bonita Creek properties		X	
16. Study San Simon erosion		X	

X Primary Objective 0 Secondary Objective N/A Not Applicable
Source: Safford District files.

interviews to determine the extent of looting and vandalism to cultural resources.

8. Conduct Class II archaeological inventories in Aravaipa Canyon Wilderness and adjacent lands, Muleshoe Ranch, Pima Mormon Canal System and Civilian Conservation Corps camps and project areas to enhance knowledge of cultural resources for future management decisions.
9. Conduct a Class III archaeological inventory in Bonita Creek Canyon to enhance knowledge of cultural resources for future management decisions.
10. Conduct a judgemental cultural resource field inventory and archival research to increase knowledge of the Dos Cabezas historical mining area on public lands. Develop cooperative management agreements for the inventory of the mining area on adjacent non-federal lands.
11. Conduct archival research to identify historic trails, roads, telegraph lines and other forms of historic transportation and communication.
12. Develop a regional research design to help identify the specific scientific and public values of individual cultural properties.
13. Actively promote scientific investigations on District cultural resources through the development of information packets, brochures and other measures.
14. Promote the development of a rigorous predictive model for the occurrence of cultural resources.
15. Develop a comprehensive interpretive and educational program depicting the geological, cultural and wildlife values of Aravaipa Canyon.
16. Develop and implement a management plan for interpretive use of the Civilian Conservation Corps Base Camp near the Safford Airport and selected cultural properties along Bonita Creek.
17. Conduct a cooperative study with the Soils Program to determine the effects of soil erosion on cultural properties in the San Simon drainage.

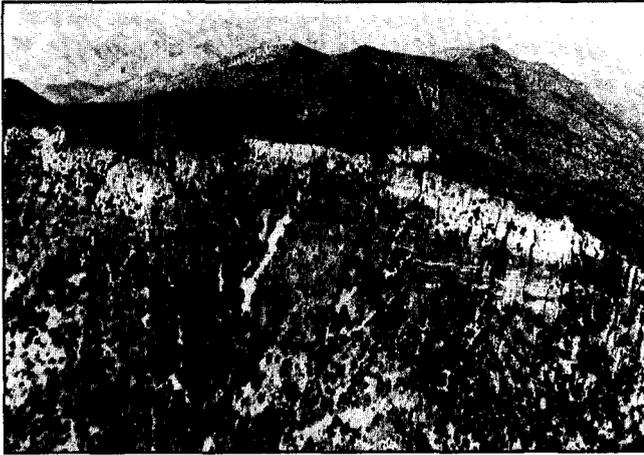
Management Concern 6 - Soil Erosion

If this alternative is approved, the following objectives and actions will be implemented to resolve the Soil Erosion Management Concern.

- Reduce accelerated erosion.
- Restore eroded floodplains of the San Simon River and in the Bear Springs Flat area (see Map 26).
 - Reduce silt and salts entering the Gila River from the San Simon River.
- Reduce non-point source pollution that could result from rangeland management and use activities.

The following actions will be implemented to accomplish the soil erosion and salinity management objectives.

1. Develop activity plans, where needed, to initiate rehabilitation of eroded areas.
2. Construct Timber Draw Dam to continue efforts to rehabilitate eroded areas of the San Simon River (see Map 26).
3. Continue reseeding grasses and riparian vegetation on restored areas behind erosion control structures. Manage livestock with fencing or other methods to protect these areas.
4. Protect the eroded floodplain of the San Simon River through appropriate livestock management.
5. Establish soil erosion studies at Hot Well Dunes to determine the effects of off-highway vehicle use. Limit off-highway vehicle use if erosion becomes unacceptable.
6. Repair Oso Largo Detention Dam (see Map 26) in the Bear Springs Flat area to continue rehabilitation of eroded lands. Assess the land upstream of Oso Largo Dam to determine the need for maintenance of existing structures or the need for additional structures. Make all structures functional without adverse impacts to the Area of Critical Environmental Concern located in the upper end of the eroded area.
7. Investigate methods to increase vegetation cover in the Bear Springs Flat area, without adversely affecting the Area of Critical Environmental Concern.
8. Continue seasonal livestock use in the Bear Springs Flat area.
9. Cap or contain the flowing wells in the San Simon Watershed if salinity exceeds 3,000 ppm.



A unique plant community of Arizona cypress, Mexican pinyon, pointleaf and pringle's manzanita and netleaf oak atop Coronado Mountain is managed by BLM and USFS.

Management Concern 7- Vegetation

If this alternative is approved, the following objectives and actions will be implemented to resolve the Vegetation Management Concern.

1. The objective for management of upland vegetation is to restore and maintain plant communities for wildlife, watershed condition and livestock. The desired plant communities will be determined in the preparation of activity plans (allotment management plans, habitat management plans, etc.). An ecological site inventory will be completed as new allotment management plans are prepared or existing plans revised.
2. The objective for management of threatened, endangered and special status plant species is to manage the public lands to preserve and enhance occurrences of special status species and to achieve the eventual delisting of threatened and endangered species. BLM will assist the Fish and Wildlife Service in the development of Threatened and Endangered species recovery plans. Implementation of recovery plans will be accomplished through activity plans.

To accomplish the Threatened and Endangered plant species management objectives, inventory and develop Habitat Management Plans or include Threatened and Endangered plants in other Habitat Management Plans in the following priority order.

- a. Listed threatened *Coryphantha robbinsorum*.
- b. Candidate category I species *Aster lemonii* and *Rumex orthoneurus*.

- c. Reinventory and monitor other candidate species known to occur on public lands.
 - d. Reinventory and monitor listed endangered species. *Echinocereus triglochiciatus*
3. Land treatments (vegetation manipulation) will be used to decrease invading woody plants and increase grasses and forbs for wildlife, watershed condition and livestock. Public lands, where vegetation condition is less than desired to meet management objectives, will be identified for treatment through activity plans. Treatments may include various artificial (mechanical, chemical or prescribed fire) methods. Management objectives for riparian vegetation can be found under Issue 4 Riparian Vegetation.

The following actions will be implemented to accomplish the land treatment objective.

- a. Implement those best management practices and methods that will increase vegetation cover and decrease soil erosion and non-point source pollution to streams from sedimentation.
 - b. Study the methods and effects of reducing rodent and rabbit populations on selected upland areas to improve vegetation cover.
4. Make the following firewood cutting areas available to the public (see Map 26).
 - a. San Simon Fan Structure area for tamarisk and mesquite.
 - b. West of the San Simon River, on Sonoita soils for mesquite.
 - c. Mesquite Well area, on Sonoita soils for whitethorn and mesquite.
 - d. Horse Mountain area for manzanita, juniper and mesquite.

Permit up to 500 cords per year on public lands Districtwide, but do not allow cutting in major desert washes, wilderness areas or some special management areas.

5. Determine other areas appropriate for firewood cutting and the quantities available.
6. Issue permits for vegetation products, other than firewood, as determined by public demand and on-site evaluation.

7. Initiate a study of the effects of climatic changes on vegetation communities as well as on other resources.

Management Concern 8 - Water Resources

If this alternative is approved, the following objectives and actions will be implemented to resolve the Water Resources Management Concern. These objectives are designed to support on-going programs (range, riparian, recreation, wildlife, etc.) while providing data to be used for future management decisions.

1. The objective for management of groundwater is to conserve water for prudent resource management purposes.

The following actions will be implemented to accomplish the groundwater management objective.

- a. Cap unusable or unsuitable wells to prevent contamination of aquifers and to contain highly saline water.
- b. Restrict artesian flow to meet specific program needs.
- c. Inspect and maintain water systems to prevent unnecessary loss of water.

Further, initiate a groundwater study for the San Simon Watershed to determine the depth of the various aquifers, changes in the quantities of individual aquifers, the water quality of each aquifer and availability of groundwater for BLM's resource management programs. Prepare a management plan for the use and conservation of water (quality and quantity).

2. The objective for management of water quality is to maintain or enhance water quality at or above established standards for designated uses to meet management goals for each water source. BLM will adhere to federal and state water quality laws and standards.

The following actions will be implemented to accomplish the water quality management objective.

- a. Support other resource programs in the implementation of this plan and monitor the effectiveness of planning decisions.
- b. Continue the existing water quality testing program in the District (see Appendix 9).

c. Initiate data collection where there is a suspected or known pollution threat or hazard to water quality.

d. Develop an activity plan and initiate management actions needed to mitigate water quality degradation detected through monitoring.

e. Develop a District Water Quality Monitoring Plan, including recommendations for Unique Waters nominations.

f. Share data with other water quality managing agencies.

3. Evaluate Aravaipa Creek, Mescal Creek, Redfield Canyon, Swamp Springs Canyon, Hot Springs Canyon and Bass Canyon to determine their suitability for Unique Waters designation. Nominate those that meet the required standards.

4. Evaluate Turkey Creek, Deer Creek and the Left Fork of Markham Creek (intermittent streams) for Unique Waters designation, if their flow becomes perennial. Nominate those that meet the required standards.

5. Manage stream segments through public lands designated as Unique Waters to maintain or enhance water quality standards, protect the associated resources, and use best management practices selected to reduce non-point source pollution that could result from rangeland management uses.

6. Evaluate the long-term Districtwide resource management needs for ground and surface water.

7. Evaluate Gila River, San Francisco River, Redfield Canyon, Hot Springs Canyon, Swamp Springs



The winding canyonlands of Aravaipa, as view from atop the Pilaes, are habitat for desert bighorn sheep.

Canyon, Bass Canyon, Bonita Creek and Mescal Creek to determine the quantities of in-stream flow (water rights) needed to meet resource management objectives. File with the state on the quantities needed to meet resource management objectives.

8. Evaluate Turkey Creek, Deer Creek, Left Fork of Markham Creek and Guadalupe Canyon (intermittent streams), if their flow becomes perennial, to determine the quantities of instream flow (water right) needed to meet resource management objectives. File with the state on the quantities needed to meet resource management objectives.
9. Purchase water rights, when necessary, to protect threatened resource values.

Management Concern 9 - Air Quality

If this alternative is approved, the following objectives and actions will be implemented to resolve the Air Quality Management Concern.

1. Continue to manage the airshed in accordance with State of Arizona Class II standards, unless redesignated. Class II standards allow for moderate deterioration of air quality associated with moderate, well-controlled industrial and population growth.
2. Comply with all federal and State statutes pertaining to air quality and cooperate with the State of Arizona in carrying out the State Implementation Plan.

The following actions will be implemented to accomplish these objectives.

- a. When implementing BLM or BLM-approved activities, minimize surface disturbances to prevent the addition of large quantities of dust to the air. When surface disturbances occur, enforce stipulations to mitigate the impacts to air quality.
- b. Continue the rehabilitation of erosion in the San Simon Watershed and the Bear Springs Flat area (see Map 26) to reduce airborne dust.
- c. Conduct prescribed fire with prior approval of the Arizona Department of Environmental Quality, Office of Air Quality.
- d. Continue operation of the Oliver Knoll atmospheric deposition monitoring station as part of a nationwide network.

Management Concern 10 - Paleontological Resources

If this alternative is approved, the following objectives and actions will be implemented to resolve the Paleontological Resources Management Concern.

1. Preserve a representative sample of Class I (see Appendix 12) paleontological localities.
2. Ensure that BLM actions avoid inadvertent damage to paleontological resources.
3. Manage paleontological resources to preserve their scientific and interpretive values.
4. Emphasize management of Class I sites.
5. Provide opportunities for education and interpretation.
6. Provide opportunities for scientific research.

Implement the following actions to accomplish the objectives for management of paleontological resources:

- a. Continue inventories in areas of proposed activities to identify the presence of paleontological resources and determine measures needed to mitigate anticipated impacts.
- b. Conduct field studies at Bear Springs Badlands, 111 Ranch and Hot Well Dunes.
 - (1) Provide data on the nature, extent and scientific significance of fossils.
 - (2) Determine the condition of exposures and factors that may be affecting them.
 - (3) Determine the suitability of these areas for inclusion in the National Natural Landmarks program. Nominate qualifying areas.
3. Prepare a Paleontological Resources Management Plan for the District.
4. Write a detailed overview of the biological and geological history of the District emphasizing paleontological resources important to scientific research.
5. Study, evaluate and monitor off-highway vehicle use at the Hot Well Dunes to determine the effect on paleontological resources.

Alternative B

This alternative emphasizes management and protection of natural and cultural resources while still providing for use and development of the public lands. More restrictions are applied, compared to the other alternatives, to protect natural and cultural resources. This alternative designates larger areas in some Areas of Critical Environmental Concern with more protective management prescriptions. Priority wildlife species include Threatened and Endangered species and their habitat but no game species. Actions are proposed to protect water quality by using best management practices to reduce non-point pollution from rangeland management activities and uses. Additional management emphasis is given to protection and enhancement of riparian areas. The protection of cultural resource values (scientific, public and conservation) will be emphasized before the use of these values.

Issue 1- Access

The following actions will be implemented to resolve the Access Issue.

1. Prepare a District Transportation Plan that includes identification of access needs and closures, a road and trail numbering system, sign needs, maintenance needs and coordination with other agencies and landowners.
2. Minimize the impact from existing and proposed access routes on natural and cultural resources.
3. Reserve, as needed, access across public lands that are disposed of by sale, exchange or other means.
4. Obtain public and administrative access to the public lands.
5. Roads may be closed, as needed, for visitor use management, resource protection and to accomplish resource management objectives.
6. Obtain legal access, for public and administrative use, across private lands in 29 locations Districtwide (see Appendix 1) and across other state and private lands as determined in the future.
7. Reconstruct the following roads to provide vehicle access for the administration and use of the public lands.
 - a. Virgus Canyon Road, about one half mile T. 6 S., R. 18 E., Secs. 27,34,35.

- b. Military Trail, about three miles T. 3 S., R. 16 E., Secs. 13, 14, 23.
 - c. Buckeye Canyon Road, about one mile T. 13 S., R. 27 E., Secs. 26, 27,34 and T. 14 S., R. 27 E., Sec. 9.
 - d. Jackson Cabin Road, about five and a half miles T. 11 S., R. 20 E., Secs. 22, 26, 27, 35, 36; T. 12 S., R. 20 E., Secs. 1, 2,11, 24; and T. 12 S., R. 21 E., Secs. 30,31.
 - e. other roads as determined in the future.
8. Obtain legal access, for public and administrative use, on existing foot and horse trails across private lands in the following locations.
- a. Aravaipa Canyon Wilderness Trail from the west trailhead (at the administrative site) to the west boundary of the wilderness T. 6 S., R. 17 E., Secs. 13, 24.
 - b. Babocomari River Trail T. 20 S., R. 20 E., Sec. 13 and T. 20 S., R. 21 E., Sec. 18.
 - c. Safford-Morenci Trail where it crosses Bonita Creek T. 5 S., R. 27 E., Secs. 10, 11.
 - d. Safford-Morenci Trail where it crosses the San Carlos Indian Reservation T. 4 S., R. 28 E., Sec. 31.
 - e. Hell Hole Canyon Trail and trailhead at Dry Camp T. 6 S., R. 19 E., Sec. 7.



Desert bailey, a common desert flower, is poisonous to livestock.

Issue 2 - Area of Critical Environmental Concerns and Other Types of Special Management

If this alternative is approved, the following actions will be implemented to resolve the Area of Critical Environmental Concerns and Other Types of Special Management Issues.

1. Designate 13 Area of Critical Environmental Concerns totalling 122,102 acres (97,057 acres of public land) to protect important natural and cultural resources. Table 2-8 describes the specific areas, acreages, values and management prescriptions. Maps 1 through 22 and Map 24 show the location of each proposed Area of Critical Environmental Concern.

Appendix 2 includes a detailed discussion of each Area of Critical Environmental Concern nomination, including a determination of relevance and importance, rationale for designation, management prescription and alternatives considered.

2. Develop a Coordinated Resource Management Plan for the Bear Springs Flat area to direct the management of BLM's multiple use programs. The purpose of the plan will be to establish management objectives that direct development of future programs activities toward maintenance and enhancement of watershed condition (see Map 26). When developing the plan, livestock forage use will not be permitted to exceed an average of 40 percent over a full grazing cycle (averaging three to five years in duration).
3. Revise the San Simon River Coordinated Resource Management Plan. The purpose of the plan is to direct development of program activities to maintain and enhance watershed condition.
4. Cooperative livestock and watershed management studies will be conducted with the Forest Service, The Nature Conservancy and state universities to restore native grasslands and improve the condition of the Aravaipa Watershed. District studies will explore various "best management" techniques.

Issue 3 - Off-highway Vehicles

If this alternative is approved, the following actions will be implemented to resolve the Off-highway Vehicles Issue.

1. Initiate procedures to designate 1,708 acres at Hot Well Dunes closed to off-highway vehicle use.
2. Designate the following areas closed to off-highway vehicle use.
 - a. That part of Turkey Creek and Oak Grove Canyon in the Aravaipa Watershed Area of Critical Environmental Concern above the Oak Grove Canyon corrals 102 acres.
 - b. Desert Grasslands Research Natural Area Area of Critical Environmental Concern 530 acres.
 - c. Willcox Playa National Natural Landmark Area of Critical Environmental Concern 2,475 acres.
 - d. The riparian area of Hot Springs Canyon 140 acres.
3. Designate wilderness areas closed to off-road vehicle use. (84,632 acres currently designated).
4. Off-highway vehicle use within the San Pedro Riparian National Conservation Area (54,189 acres) is limited to designated roads. Vehicle use within the Gila Box Riparian National Conservation Area (20,900 acres) will be determined during the preparation of the management plan for the area.
5. Designate the remainder of the District (1,309,646 acres) Limited to off-highway vehicle use. Off highway vehicle use will be limited to existing roads and trails occurring at the time of designation and any new roads approved for construction during the life of the Resource Management Plan. Existing roads and trails have been identified and are available for review in the District Office. Table 2-9 identifies the acres designated in each category.
6. Off highway vehicle designations and management will apply to motorized transportation only.

Issue 4 - Riparian Areas

If Alternative B is approved, the following objectives and actions will be implemented to resolve the Riparian Areas Issue.

The objective for management of riparian areas is to maintain or improve 75 percent of the acres of riparian vegetation on public lands within the District in good or excellent condition by 1997 (see Map 26).

The following actions will be implemented to accomplish this objective.

Table 2-8. Areas Designated as Area of Critical Environmental Concerns-Alternative B

Proposed Values or Name	Federal, State Management & Private Acres	Values or Hazards	Prescription
Gila Box ONA ACEC	F 2,994 S 0 P 360 3,354	Desert rivers, riparian habitat, T&E species, bighorn sheep, scenery, recreation use, cultural resources.	Mineral withdrawal, NSO for mineral leasing, no sand/gravel sales, limit OHVs, no OHVs in canyon bottoms, suppress wildfire in riparian zones, acquire private lands if available, no RWs outside the designated corridor, no woodcutting, VRM Class II.
Aravaipa Watershed ACEC*	F 50,290 S 0 P 8,028 58,318	Valuable watershed, including a wilderness, riparian zones, T&E wildlife, bighorn sheep, native fish, streams, recreation opportunities	Limit OHV use, close Oak Grove Cyn. and upper part of Turkey Cr. to OHV use, NSO for mineral leasing or no mineral material perennial waters, sales in riparian zones. Require a mining plan, no livestock after expiration of current lease, monitor water quality, rehabilitate riparian and upland vegetation, develop cooperative agreement.
Table Mtn. RNA ACEC	F 1,220 S 0 P 0 1,220	Plant community.	Limit OHV use, no woodcutting, mineral withdrawal, no vegetative sales, prescribed fire plan, NSO for mineral leasing, no sand/gravel sales, exclude livestock.
Desert Grasslands RNA ACEC	F 530 S 240 P 70 840	Relict desert grasslands.	Mineral withdrawal, no sand/gravel sales, closed to OHV use, acquire State/private lands if available, prescribed fire plan.

Table 2-8. Areas Designated as Area of Critical Environmental Concerns-Alternative B (continued)

Proposed Values or Name	Federal, State Management & Private Acres	Values or Hazards	Prescription
Muleshoe ACEC**	F 19,400 S 967 P 6,320 26,687	Riparian areas, T&E species, big-horn sheep, native fish, cultural resources, valuable watershed.	Limit OHV use, close Hot Springs Canyon to OHVs, require mining plans, rehabilitate riparian and upland vegetation, exclude livestock except on Soza Mesa and peripheral areas, acquire legal access, acquire State/private land if available.
Bear Springs Badlands ACEC	F 4,127 S 320 P 0 4,447	Paleontological (fossil) resources, scenery.	Scientific studies, VRM Class II, no road construction, limit OHV use, mitigate livestock and soil erosion impacts, mineral withdrawal, NSO for mineral leasing, no sand/gravel sales, extensive inventory.
Guadalupe Canyon ONA ACEC	F 5,838 S 0 P 1,146 6,984	Riparian habitat, T&E species, scenery, recreation values.	Limit OHV use, prescribed fire plan, no woodcutting, VRM Class II, no R/Ws.
Bowie Mtn. Scenic ACEC	F 4,190 S 0 P 100 4,290	Scenic backdrop to Ft. Bowie National Historic Site.	Require mining plan, limit OHV use, suppress wild-fire, no woodcutting, VRM Class I, no R/Ws, acquire private lands if available.
Coronado Mtn. RNA ACEC	F 120 S 0 P 0 120	Unique plant association.	Mineral withdrawal no woodcutting, VRM Class I, prescribed fire plan, no R/Ws.

Table 2-8. Areas Designated as Area of Critical Environmental Concerns-Alternative B (continued)

Proposed Values or Name	Federal, State Management & Private Acres	Values or Hazards	Prescription
Dos Cabezas Peaks ACEC	F 25 S 0 P 0 25	Scenic, historic landmark.	Require mining plan, limit OHV use, no woodcutting, prescribed fire plan, no RWs, VRM Class II.
Eagle Creek Canyon ONA ACEC***	F 3,160 S 1,341 P 4,950 9,451	Mexican free-tailed bat maternity cave, scenery, T&E wildlife, raptors.	Mineral withdrawal, NSO for mineral leasing, acquire State/private lands if available, VRM Class II, prohibit guano extraction, monitor bat cave.
Willcox Playa NNL ACEC	F 2,475 S 803 P 400 3,678	Pleistocene Epoch lakebed.	Close to OHV use, acquire State/private lands if available, no woodcutting, no RWs, VRM Class II.
111 Ranch RNA ACEC	F 2,688 S 0 P 0 2,688	Paleontological (fossil) resources.	No wood-cutting, no RWs, VRM Class II, paleontological clearances.

*Includes Turkey Creek Riparian Area of Critical Environmental Concern from Alternative A and South Rim Area of Critical Environmental Concern from Alternative C.

**Includes Swamp Springs-Hot Springs Watershed Area of Critical Environmental Concern from Alternative A and Muleshoe Riparian Area of Critical Environmental Concern from Alternative C.

***Includes Eagle Creek Bat Cave Area of Critical Environmental Concern from Alternatives A and C.

Source: Safford District Files

- Incorporate riparian area objective into existing and future activity plans.
- Develop and implement a system to prioritize needed riparian area management. The priorities will be based on management objectives, resource condition, resource conflicts and the potential or capability of a riparian area to respond to treatment.
- Develop a riparian inventory system. Coordinate development and implementation of the system with other federal and state land managing agencies.
- Complete the inventory of all riparian areas on public lands in the District to establish baseline conditions.
- Establish a monitoring plan for selected riparian areas based on the management priority system. Implement the plan and evaluate monitoring data. Continue to carry out needed changes in riparian area management through activity plans.
- Continue to file for in-stream flow rights on perennial streams or rivers and water rights on springs and ponds to protect and maintain riparian vegetation.

Table 2-9. Acres Designated for Off-highway Vehicle Use-Alternative B

Off-highway Vehicle Designation	Approximate Acres
Open	0
Limited	1,309,646
Closed	89,587

Source: Safford District Files

- Continue to develop grazing systems and modify existing allotment management plans, as necessary, to manage livestock use for the improvement of riparian areas.
- Except for tamarisk, do not permit firewood cutting in riparian areas.



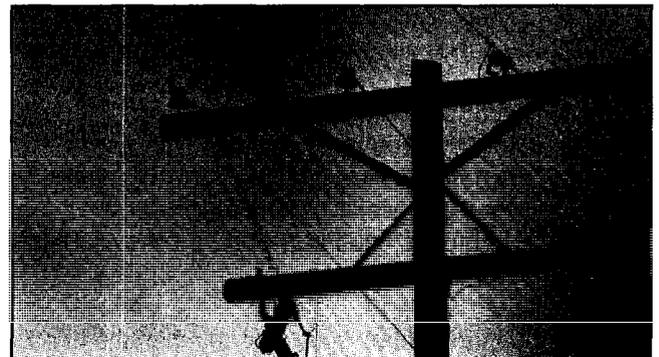
Mining claims for locatable mineals can be filled on most public lands in the Safford District under the proposed RMP.

- Permit the removal of non-native vegetation for improvement of riparian vegetation.
- Maintain and monitor representative relict riparian areas to provide a baseline for future management decisions.
- Build Timber Draw Dam on the San Simon River to re-establish stream channel and floodplain conditions to promote the redevelopment of the riparian ecosystem.
- Continue to manage the San Pedro Riparian National Conservation Area following the guidance in the existing management plan and develop a management plan for the Gila Box Riparian National Conservation Area.
- Develop an environmental education program for riparian management.

Management Concern 1- Wildlife Habitat

If Alternative B is approved, the following objectives and actions will be implemented to resolve the Wildlife Habitat Management Concern.

- Maintain and enhance priority species and their habitats.
- Focus management actions on a single species, only when required by the *Endangered Species Act*. Actively promote Threatened and Endangered species recovery to achieve eventual delisting of the species.
- Conserve candidate species to ensure BLM authorized actions do not contribute to the need to list any species as threatened or endangered.



Power and telephone poles provide perching and nesting sites for many birds.

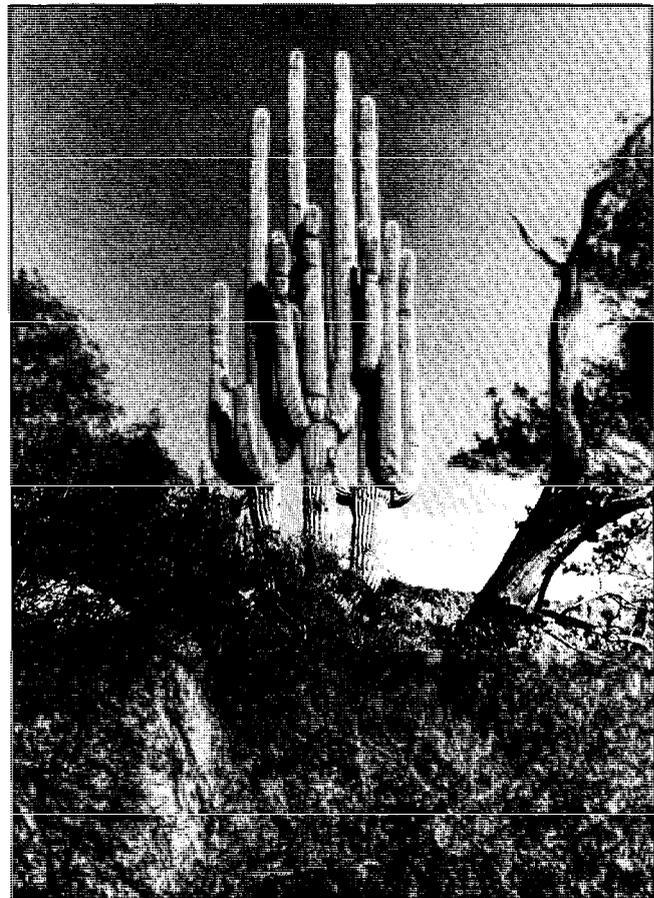
4. Manage State listed species to meet State objectives. Other special status species will be managed in accordance with inter and intra-agency management plans.
5. Manage priority wildlife species habitat (vegetation communities) or special features of that habitat (water, riparian vegetation, cliffs, etc.) to maintain or enhance population levels.
6. Focus management efforts on enhancing biological diversity.

The following actions will be implemented to accomplish these objectives.

- a. Establish the following as priority species and habitats. Priority species and habitats in the District include federally listed, proposed and candidate Threatened and Endangered species and their habitat, state-listed Threatened and Endangered species and their habitat, and other sensitive species and their habitat.
 - (1) Riparian/aquatic habitat and species dependent on riparian/ aquatic habitat Gila topminnow, desert pupfish, southern bald eagle, loach minnow, spinedace, Gila chub, Colorado roundtail chub, razorback sucker, western yellow-billed cuckoo, gray hawk, Mississippi kite, common black-hawk, ferruginous pygmy-owl, willow flycatcher and leopard frog.
 - (2) Species extirpated from the Safford District aplomado falcon, woundfin, grizzly bear, wolf, ocelot, jaguar, Colorado River squawfish, black-tailed prairie dog and river otter.
 - (3) Saguaro/palo verde owls, desert tortoise, songbirds and Harris hawk.
 - (4) Desert and Rocky Mountain bighorn sheep.
 - (5) Desert grasslands songbirds, reptiles, small game and pronghorn antelope.
 - (6) Oak woodlands and species dependent on oak woodland habitat white-tailed deer, turkey, black bear and Montezuma quail.
 - (7) Wetlands waterfowl, shore birds and leopard frog.
 - (8) Neotropical migratory birds
 - (9) Other species and habitats of interest peregrine falcon, red bat, Sat-born's long-nosed bat, Mexican long-tongued bat, ferruginous and Swainson's hawks and bat roosts.

General management objectives for each of the priority species and habitats are identified in Appendix 4.

- b. Inventory the District to determine the presence and abundance of priority species and their habitat.
- c. Manage habitat for optimum wildlife populations, based on ecological conditions, taking into consideration climatic changes and the goals and objectives of Arizona Game and Fish Department and the Fish and Wildlife Service (for Threatened and Endangered species).
- d. Transplant and augment populations of priority wildlife species, if necessary, to reach management objectives.
- e. Monitor priority habitat to determine condition and changes in condition. Inventory the impacts of other activities on wildlife populations and habitat prior to preparation of Habitat Management Plans. Identify opportunities in Habitat Management Plans to mitigate adverse impacts and implement the actions needed to correct the problem.
- f. Continue to maintain and improve wildlife habitat, emphasizing priority habitat.



Saguaros are common in the Lower Sonoran Desert. Large individuals are over 200 years old.

- g. Protect springs and associated riparian vegetation for wildlife water, cover and forage.
- h. Develop prescribed burning plans in fire-dependent vegetation communities to improve habitat conditions for priority wildlife species.
- i. Suppress wildfire in sensitive vegetation communities (like palo Verde/saguaro) to reduce any detrimental effects on priority wildlife dependent on those communities.
- j. Existing Habitat Management Plans address all public lands in the District except scattered parcels in Cochise County. Two Habitat Management Plans were completed prior to substantial land exchanges and were not based on realistic ecological boundaries. Redefine all Habitat Management Plan area boundaries to improve site-specific habitat management direction. Develop Sikes Act Habitat Management Plans, with Arizona Game and Fish Department for the following areas: Geronimo, Gila Box, Aravaipa-Muleshoe, Peloncillo, Dos Cabezas, San Simon, Cochise and San Pedro. Revision priorities will be determined in coordination with Arizona Game and Fish Department.
- k. Provide input into livestock Allotment Management Plans to ensure sufficient vegetation for cover and food in bighorn sheep lambing areas.
- l. Provide input into Allotment Management Plans in oak-woodland habitat to ensure perennial grasses are available to provide adequate cover for priority species.
- m. Close the following areas to animal damage control activities.
 - (1) Threatened and Endangered species habitat for those techniques that pose a threat to the species.
 - (2) Zones around residences and communities and in areas of concentrated recreation use for those techniques that pose a threat to the visitor or to dogs in areas where they are trained, exercised or used for hunting.
 - (3) Wilderness areas and Research Natural Areas except as individually authorized by the Arizona BLM State Director or the District/Area Manager.
- n. Authorize areas that are open for animal damage control in coordination with the Animal and Plant Health Inspection Service on a yearly basis.
- o. Inventory and categorize desert tortoise habitat by 1992. In the interim, place about 26,000 acres of public land in the San Pedro River basin from Cascabel to Winkelman and parts of the Dripping Spring and Pinal Moun tains in Category 3. Place about 3,000 acres east of San Manuel in Category 2 (see Appendix 10 for goals and criteria for categorization of habitat).
- p. Designate Gila Box Outstanding Natural Area, Muleshoe, Guadalupe Canyon Outstanding Natural Area, Eagle Creek Canyon and Aravaipa Watershed Outstanding Natural Area Areas of Critical Environmentat Concern for the protection of priority wildlife species and their habitat.

Management Concern 2 - Lands and Realty

-If this alternative is approved, the following objectives and actions will be implemented to resolve the Lands and Realty Management Concern.

1. The following are objectives for disposal of public lands.
 - a. The order of preference for disposal will be by exchange, *Recreation and Public Purposes Act* or sale.
 - b. Isolated tracts of public land may be disposed of to improve resource management efficiency and service to the public.
 - c. When lands next to urban areas are disposed of, the resulting boundaries will be manageable, fenceable and identifiable.



Facilities for handling livestock are scattered throughout the Safford District.

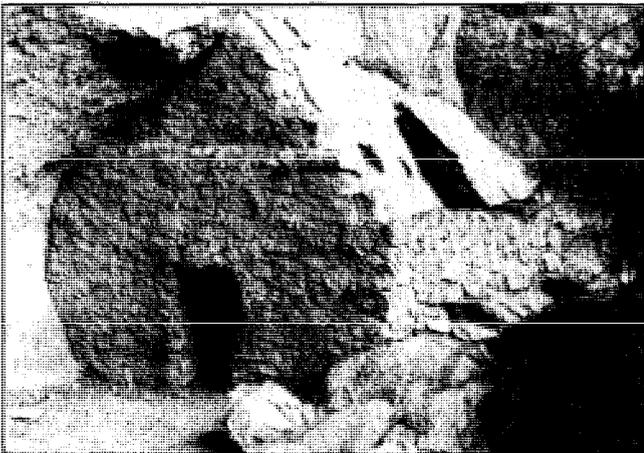
- ct. Prior to disposal, lands will be evaluated for significant cultural and natural resource values.

To accomplish these objectives, dispose of 73,569 acres of public lands in the following areas.

- (1) Gila Valley area.
- (2) southern Pinal Mountain area.
- (3) Dripping Spring Wash area.
- (4) Bisbee area, excluding the Juniper Flats block.
- (5) Tombstone area.
- (6) Douglas area.
- (7) Greenlee County Area.
- (8) San Simon area.
- (9) Three-Way Recreation and Public Purposes.
- (10) Recreation and Public Purposes sanitary landfill leases.

These areas have been identified for disposal and are within the disposal area identified on Map 27. However, all public lands within these areas do not have to be sold or exchanged. BLM may retain certain lands within the disposal areas. Upon evaluation of future land disposals, BLM may identify resource values worthy of retention in public ownership. Unforeseen future land management concerns or public demand may also necessitate disposal of other public lands not currently identified. The parcels considered at that time would be subject to BLM's planning process and the *National Environmental Policy Act*.

Appendix 5 shows the lands that meet The *federal Land Policy and Management Act* of 1976 criteria for sale. Although these lands qualify for sale, BLM's preferred method of disposal is exchange or through the *Recreation and Public Purposes Act*. Map 27 shows the areas where disposals of land may take place.



The Turkey Creek cliff dwelling is one of the most intact prehistoric structures of its kind in southeastern Arizona.

2. The following are objectives for land acquisition.

- . Acquire lands with high public values that complement existing management programs.
- . Consolidate ownership pattern to improve management efficiency.
- . Improve service to the public.

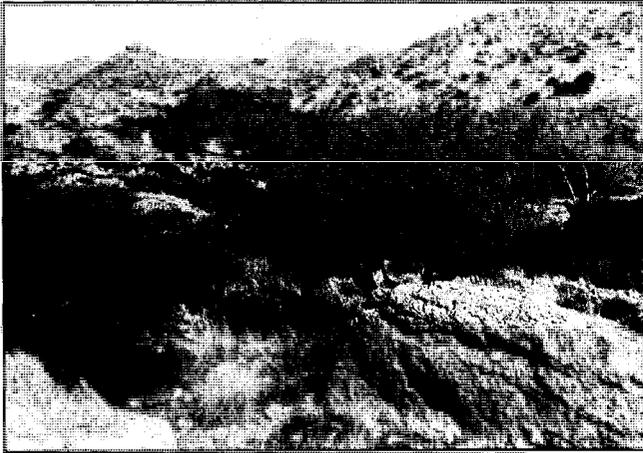
To accomplish these objectives, acquire, if they become available, state and private lands in the same areas as depicted in Alternative A and displayed on Map 27. These lands are of the following types and are located within or adjacent to public lands.

- a. riparian habitat.
- b. watersheds of important riparian areas.
- c. high-value wildlife habitat, such as Threatened and Endangered species areas and major migration corridors.
- d. administrative sites.
- e. land providing access to public lands.
- f. significant cultural and paleontological properties.
- g. other lands with high public resource values such as inholdings in Area of Critical Environmental Concerns and other types of special management areas.
- h. other private lands that will accomplish BLM's acquisition objectives.

3. According to the Federal Land Policy and Management Act of 1976 all lands not identified for disposal must be retained in federal ownership to be managed under the principles of multiple use and sustained yield.

Unforeseen future land management concerns or public demand may necessitate the disposal of other public lands. Such proposals will require this plan to be amended.

4. Designate the following existing utility lines as corridors for future utility needs on public lands across the District.
 - a. Arizona Electric Power Company line one mile wide.
 - b. Tucson Electric Power Company line one mile wide.



Guadalupe Canyon has a unique overlap of Chihuahuan, Rocky Mountain and Sierra Madrean vegetation communities.

- c. All American pipeline (San Simon Resource Area only) one mile wide.
 - cf. San Pedro one mile wide (660 ft. wide where it crosses the San Pedro Riparian National Conservation Area.
 - e. Hayden/Christmas one mile wide.
- Any future major cross-District utility rights-of-way proposals will be encouraged to use these corridors (see Map 27).
5. Establish the Muleshoe Area of Critical Environmental Concern, the Aravaipa Watershed Area of Critical Environmental Concern, the Bear Springs Badlands Area of Critical Environmental Concern and the Bowie Mountain Scenic Area of Critical Environmental Concern as right-of-way avoidance areas. Every attempt will be made to avoid these areas with major cross-District rights-of-way to minimize or eliminate conflicts with sensitive resource values.
 6. Attach needed site-specific environmental protection stipulations to all rights-of-way.
 7. Establish the following areas as right-of-way exclusion areas.
 - a. Gila Box Outstanding Natural Area Area of Critical Environmental Concern.
 - b. Guadalupe Canyon Outstanding Natural Area Area of Critical Environmental Concern.
- c. Coronado Mountain Research Natural Area Area of Critical Environmental Concern.
 - d. Dos Cabezas Peaks Area of Critical Environmental Concern.
 - e. Willcox Playa National Natural Landmark Area of Critical Environmental Concern.
 - f. Bear Springs Badlands Area of Critical Environmental Concern
 - g. 111 Ranch Research Natural Area Area of Critical Environmental Concern.
 - h. wilderness study areas.
 - i. designated wilderness areas.
 - j. Oliver Knoll Atmospheric Deposition Monitoring Station
8. Designate Guthrie Peak, Juniper Flat in the Mule Mountains and the west end of Dos Cabezas Mountains as communication sites (see Map 27). Site plans will be prepared for all communication sites, and designation of new sites will be analyzed on a case-by-case basis.
 9. Complete the withdrawal review process. Revoke all withdrawals determined to no longer serve their original or intended purpose.
 10. Withdraw 12 acres for the proposed Safford District Office administrative site (T. 7 S., R. 25 E., Sec. 24, that part of the W1/2NW1/4NE1/4 lying north of Golf Course Road) from the public land laws and the mining and mineral leasing laws.
 11. Withdraw 10 acres for the Oliver Knoll atmospheric deposition monitoring station (T. 4 S., R. 24 E., Sec. 22, SW1/4SE1/4SE1/4NE1/4, SE1/4SW1/4SE1/4NE1/4, NW1/4NE1/4NE1/4SE1/4, NE1/4NW1/4NE1/4SE1/4) from the public land laws and the mining laws, Mineral leasing will be permitted with a "No Surface Occupancy" stipulation. Area will be established as an administrative site.
 12. Withdraw 17,220 acres, including administrative sites and campgrounds, from mineral entry to preserve important resource values. Table 2-10 identifies the areas and acreages to be withdrawn. Appendix 7 lists the legal descriptions of the areas to be withdrawn.

Table 2-10. Areas/Acres to be Withdrawn From Mineral Entry-Alternative B

Area Withdrawn	Acres Withdrawn
Gila Box ONA ACEC	2,994
Table Mountain RNA ACEC	1,220
Desert Grassland RNA ACEC	530
Bear Springs Badlands ACEC	4,127
Coronado Mtn. RNA ACEC	120
Eagle Creek Canyon ONA ACEC	3,160
Fourmile Canyon Campground	159
Oliver Knoll Atmospheric Deposition Monitoring Station	10
District Office Site proposed	12
Yuma Wash Archaeological Site	120
Tres Alamos Archaeological Site	160
Midway Cave Archaeological Site	40
Total	12,652

Source: S&ford District Files

Management Concern 3 - Outdoor Recreation and Visual Resource Management

If Alternative B is approved, the following actions will be implemented to resolve the Outdoor Recreation and Visual Resource Management Concern.

1. Designate the following areas as Special Recreation Management Areas to manage current recreation use.
 - a. Aravaipa Canyon/Turkey Creek.
 - b. Gila BotiBonita Creek.
 - c. Christmas (Gila River below Coolidge Dam).
 - d. Red Knolls/Bear Springs Badlands/Watson Wash.

- e. additional lands in the San Pedro Riparian National Conservation Area not previously included in the *San Pedro River Riparian Management Plan* (BLM 1989).

Prepare Recreation Area Management Plans for designated Special Recreation Management Areas, as needed. Manage the remainder of the public lands within the District as an Extensive Recreation Management Area for dispersed recreation use.

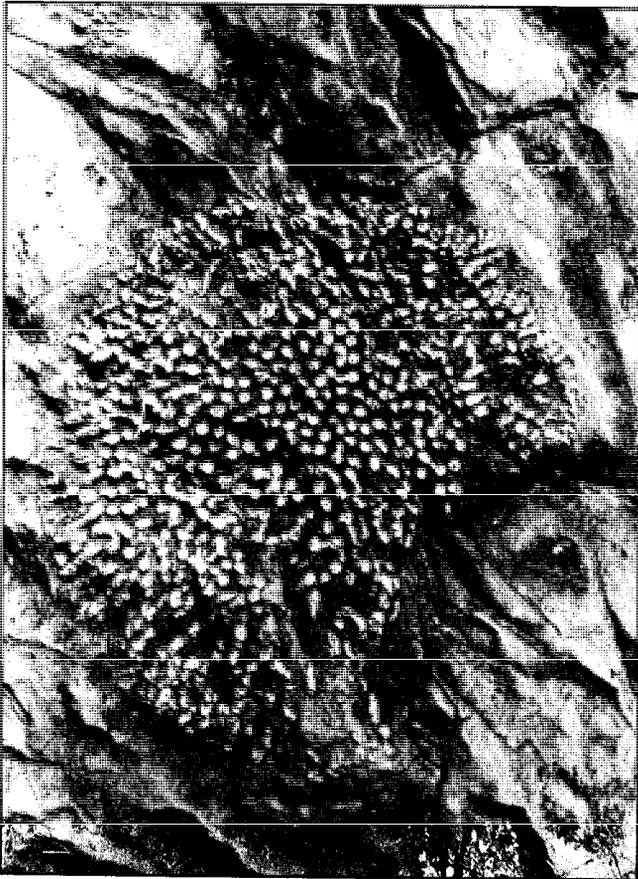
2. In the Recreation Area Management Plans, determine which public lands will be managed for interpretation and education, and which sites will be signed for interpretation, safety and education.
3. Continue to manage Aravaipa Canyon Wilderness following the guidance of the *Aravaipa Canyon Wilderness Management Plan* (BLM 1988).
4. Prepare project plans for the following areas that need some recreation planning and development.
 - a. Gila Mountain Crest Trail in cooperation with the San Carlos Apache Tribe.
 - b. Galiuro/Aravaipa/Santa Teresa Trail, in cooperation with the Forest Service.
 - c. Watson Wash Hot Well.
 - d. Safford-Morenci Trail.
 - e. Red Knolls.
 - f. Guadalupe Canyon.
 - g. Black Hills Rockhound Area.
 - h. Round Mountain Rockhound Area.
 - i. Fort Bowie/Helen's Dome Trail, in cooperation with the National Park Service.
5. Continue to exclude livestock from 159 acres of public land around Fourmile Canyon Campground.
6. Unless otherwise established, the maximum length of stay for recreation purposes in any one location is 14 days.
7. Develop a District sign plan to determine which roads, sites and facilities will be signed for interpretation, education, information and public safety.
8. Designate the following as Visual Resource Management Class I areas to preserve scenic quality.

- a. designated wilderness areas.
 - b. rivers designated as "Wild" under the Wild & Scenic Rivers Act.
 - c. Bowie Mountain Scenic Area of Critical Environmental Concern.
 - d. Coronado Mountain Research Natural Area Area of Critical Environmental Concern.
9. Designate the following as Visual Resource Management Class II areas to preserve scenic quality and to allow some limited modification of the landscape.
- a. Bonita Creek Canyon in the Bonita Creek Watershed.
 - b. Gila Box.
 - c. Bear Springs Badlands Area of Critical Environmental Concern.
 - d. Guadalupe Canyon Outstanding Natural Area Area of Critical Environmental Concern.
 - e. Dos Cabezas Peaks Area of Critical Environmental Concern.
 - f. Eagle Creek Canyon.
 - g. Willcox Playa National Natural Landmark Area of Critical Environmental Concern.
 - h. 111 Ranch Research Natural Area Area of Critical Environmental Concern.
 - i. Muleshoe Area of Critical Environmental Concern.
 - j. Babocomari River.
 - k. Gila River Canyon (below Coolidge Dam).
 - l. Baker Canyon wilderness study area.
 - m. Brandenburg Mountain
10. Designate the following as Visual Resource Management Class III areas to preserve scenic quality while providing for management activities that are evident but do not dominate the landscape .
- a. all major highway corridors.
 - b. public lands north of Morenci.
 - c. San Francisco River above the Town of Clifton.
 - d. Government Peak and Happy Camp Canyon area of the Dos Cabezas Mountains.
 - e. east of Bowie Mountain around the marble quarry.
 - f. lands adjacent to the San Pedro Riparian National Conservation Area.
 - g. Whitlock Mountains.
 - h. Orange Butte.
 - i. Gila Mountains.
 - j. uplands surrounding Bonita Creek Canyon in the Bonita Creek Watershed Area of Critical Environmental Concern.
 - k. Mescal Mountains.
 - l. uplands surrounding Aravaipa Canyon Wilderness in the Aravaipa Watershed Area of Critical Environmental Concern.
11. Designate the remainder of the District as a Visual Resource Management Class IV area. Appendix 6 explains the Visual Resource Management management class objectives. The following table identifies the acres designated by Visual Resource Management class.

Table 2-11. Acres by Visual Resource Management Class-Alternative B

VRM Class	Acres Designated
I	90,991
II	82,043
III	409,145
IV	817,811

Source: Safford District Files



Many fossils, such as this 350-million-year-old coral, can be found in the Mescal Mountains.

Management Concern 4 - Energy and Minerals

1. Mining notices and plans of operation received under the surface management regulations (43 CFR 3809) will be reviewed for impacts to other resources. Mitigation and reclamation measures will be provided to prevent unnecessary or undue degradation of the environment. Reclamation bonds will be required consistent with current BLM policy.
2. Withdraw 12,652 acres from mineral entry to preserve important resource values. Table 2-10 identifies the areas and acreages to be withdrawn. Appendix 7 lists the legal description of the area to be withdrawn.
3. Withdraw administrative sites and campgrounds (Table 2-10) from entry under the mining laws (see Appendix 7 for legal descriptions).
4. Lease energy and other leasable minerals subject to the following conditions.
 - a. Standard environmental protection stipulations will be applied to all leases in open areas.
 - b. Surface occupancy will not be permitted in riparian areas (see Map 26).
 - c. Surface occupancy will not be permitted in campgrounds or administrative sites.
 - d. Surface occupancy will not be permitted in established bighorn sheep lambing areas from February 1 to April 30 of each year.
 - e. Surface occupancy will not be permitted at Tres Alamos, Yuma Wash or Midway Cave archaeological sites.

Table 2-12. Areas/Acres to be Leased With a "No Surface Occupancy" Stipulation Alternative B

NSO Area	NSO Acres
Gila Box ONA ACEC	3,340
Aravaipa Watershed ACEC	537
Table Mountain RNA ACEC	1,220
Desert Grasslands RNA ACEC	790
Bear Springs Badlands ACEC	4,127
Bowie Mountain Scenic ACEC	3,600
Dos Cabezas Peaks ACEC	25
Eagle Creek Canyon ONA ACEC	3,642
Riparian Areas other than those located in ACECs or wilderness	3,797
Desert Bighorn Sheep Lambing Areas	90
Fourmile Canyon Campground	159
District Office Site proposed	12
Oliver Knoll Atmospheric Deposition Monitoring Station	10
Yuma Wash Archaeological Site	120
Tres Alamos Archaeological Site	160
Midway Cave Archaeological Site	40
Total	21,669

Source: Safford District Files

5. issue mineral and energy leases with a "No Surface Occupancy" stipulation on 21,669 acres to protect sensitive resource values. Table 2-12 identifies the areas and acreages to which the NSO stipulation will apply.
6. Prohibit the sale of mineral materials (sand, gravel, etc.) on 21,948 acres to protect sensitive resource values. Table 2-13 identifies the areas and acreages where mineral materials will not be sold.
7. Sale of mineral materials (sand, gravel, etc.) will not be permitted in areas with riparian vegetation (see Map 26).
8. The standard list of environmental protection stipulations will be attached to all mineral material sale authorizations. Any needed site specific stipulations will also be added.

Management Concern 5- Cultural Resources

If Alternative B is approved, the following objectives and actions will be implemented to resolve the Cultural Resources Management Concern.

- . Manage for Information Potential.
- . Manage for Public Values.
- ı Manage for Conservation.

Table 2-14 identifies the actions that will be implemented to achieve each objective. Appendix 12 defines each objective.

To accomplish the cultural resource management objectives, the following actions will be implemented. Critical protection will be given a higher priority for action than either planning or field studies of properties that are not critically threatened. This does not mean, however, that all critical protection work will be done before any planning or other actions.

- 1 Prioritize implementation of planned cultural resource actions according to the degree of need as defined below:
 - a. First priority will be given to planned actions protecting threatened and significant cultural resources that would otherwise be lost. This includes obtaining important data from individuals (ethnographic information) that may not be available in the future.
 - b. Second priority will be given to the preparation of management plans directing how the District manages its cultural resources.
 - c. Third priority will be given in cases where there is good reason to believe that cultural resources are being adversely affected even though they are not located in any area of proposed activity. Studies of plan actions in these instances will seek to determine the nature and extent of the impacts and identify corrective management actions. Third priority will also be given to planned actions protecting significant threatened cultural resources where the degree of damage or threat of damage is low (non-critical).
 - d. Fourth priority will be given to non-field studies designed to collect data for management or scientific purposes, This priority will also be given to nominating cultural properties to the National Register of Historic Places.

Table 2-13. Areas/Acres Where Mineral Materials Will Not Be Sold Alternative B

Area	Acres
Gila Box ONA ACEC	3,340
Aravaipa Watershed ACEC	537
Table Mountain RNA ACEC	1,220
Desert Grasslands RNA ACEC	790
Bear Springs Badlands ACEC	4,127
Bowie Mountain Scenic ACEC	4,190
Dos Cabezas Peaks ACEC	25
Eagle Creek Canyon ONA ACEC	3,642
Riparian Areas other than those located in ACECs or wilderness	3,797
Tres Alamos Archaeological Site	160
Yuma Wash Archaeological Site	120
Total	21,948

Source: Safford District Files

- e. Fifth priority will be given to collecting cultural resource field data for planning purposes and for resource utilization not part of any protection or mitigation measure (for example, to allow a cultural property to be excavated solely for scientific research, or to allow a property to be interpreted to the public).
2. Use the following administrative and physical measures to protect cultural properties:
 - a. Signing place antiquity or interpretive signs on cultural properties being looted or vandalized.
 - b. Withdrawal withdraw areas from location under the mining laws to protect significant cultural properties. Retain significant cultural properties in public ownership to conserve them for the future.
 - c. Access install fences or other barriers to restrict or eliminate public access to cultural properties that are being looted or vandalized. Disallow firewood cutting for public use in areas with high cultural resource values.
 - d. *Patrol* patrol threatened cultural properties with personnel from the Arizona Site Steward Program, BLM's Cultural Resource Assistants and Law Enforcement Rangers and community volunteers.
 - e. *fire Control* provide input into the development of a fire management plan to protect cultural resources. Assign a Cultural Resource Advisor to all extended attack fires whenever heavy equipment is used.
 - f. *Stabilization* stabilize deteriorating standing architectural structures on significant cultural properties.
 - g. *Detailed Recording* record all known prehistoric cliff dwellings and related structures in the District and the Yuma Wash and Midway Caves sites.
 - h. *Public Education* develop and implement annual Public Affairs Action Plans for cultural resources.
 3. Complete a Class III cultural resource inventory and intensive testing in and adjacent to the Timber Draw project area.
 4. Nominate at least six eligible cultural properties in the District to the National Register of Historic Places within the lifespan of the approved Resource Management Plan.
 5. Eliminate livestock grazing on the Tres Alamos site.
 6. Conduct ethnographic studies in Bonita Creek, Muleshoe Ranch, Pima Mormon Canal System, Civilian Conservation Corps camps and project areas and Aravaipa Canyon Wilderness and adjacent lands.
 7. Revise the Safford District Rock Art Cultural Resource Management Plan.
 8. Conduct a records search inventory and personal interviews to determine the extent of looting and vandalism to cultural resources.
 9. Conduct Class II archaeological inventories in Aravaipa Canyon Wilderness and adjacent lands and Muleshoe Ranch to enhance knowledge of cultural resources for future management decisions.
 10. Conduct a Class III archaeological inventory in Bonita Creek Canyon to enhance knowledge of cultural resources for future management decisions.
 11. Conduct a cooperative study with the Bureau Soils Program to determine the effects of soil erosion on cultural resources in the San Simon drainage.



Table 2-14. Management Objectives Achieved by Planned Actions-Alternative B

Actions	Manage for information Potential	Manage for Public Values	Manage for Conservation
1. Use protection measures	X	X	X
2. Inventory and test at Timber Draw	X		
3. Nominate properties to National Register	0	0	X
4. Eliminate grazing - Tres Alamos	X		
5. Conduct ethnographic studies -			
Bonita Creek	X	0	0
Muieshoe Ranch	X	0	0
Mormon Canals	X	0	0
CCC camps & projects	X	0	0
Aravaipa area	X	0	0
6. Revise Rock Art CRMP	0	0	
7. Study vandalism	X		
8. Conduct Class ii inventories -			
Aravaipa area	X	0	0
Muieshoe Ranch	X	0	0
9. Conduct Class iii inventory -			
Bonita Creek	X	0	0
Timber Draw			
10. Study San Simon erosion	X		

X - Primary Objective 0 - Secondary Objective N/A - Not Applicable
Source: Safford District Files



Riparian areas provide nesting habitat for many species of birds.

Management Concern 6 - Soil Erosion

The following objectives and actions will be implemented to resolve the Soil Erosion Management Concern.

- Reduce accelerated erosion.
- Restore eroded floodplains of the San Simon River and in the Bear Springs Flat area (see Map 26).
- Reduce silt and salts entering the Gila River from San Simon River.

The following actions will be implemented to accomplish these objectives.

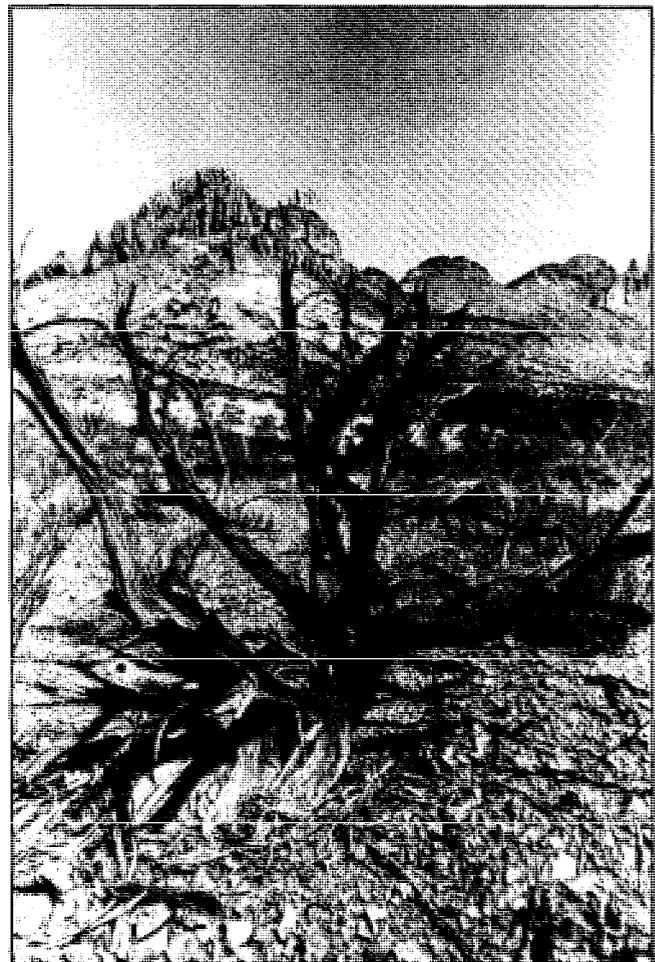
1. Develop activity plans, where needed, to initiate rehabilitation of eroded areas.
2. Construct Timber Draw Dam to continue efforts to rehabilitate eroded areas of the San Simon River (see Map 26).
3. Continue reseeded grasses and riparian vegetation on restored areas behind erosion control structures. Manage livestock with fencing or other methods to protect these areas.
4. Protect the eroded floodplain of the San Simon River through appropriate livestock management.
5. Repair Oso Largo Detention Dam (see Map 26) in the Bear Springs Flat area to continue rehabilitation of eroded lands. Assess the land upstream of Oso Largo Dam to determine the need to maintain existing structures or the need to build additional

structures. Make all structures functional without adverse impacts to the Area of Critical Environmental Concern located in the upper end of the eroded area.

6. Investigate methods to increase vegetation cover in the Bear Springs Flat area without adversely affecting the Area of Critical Environmental Concern located in the upper end of the eroded area.
7. Continue seasonal livestock use in the Bear Springs Flat area.
8. Cap or contain flowing wells in the San Simon Watershed if salinity exceeds 3,000 ppm.

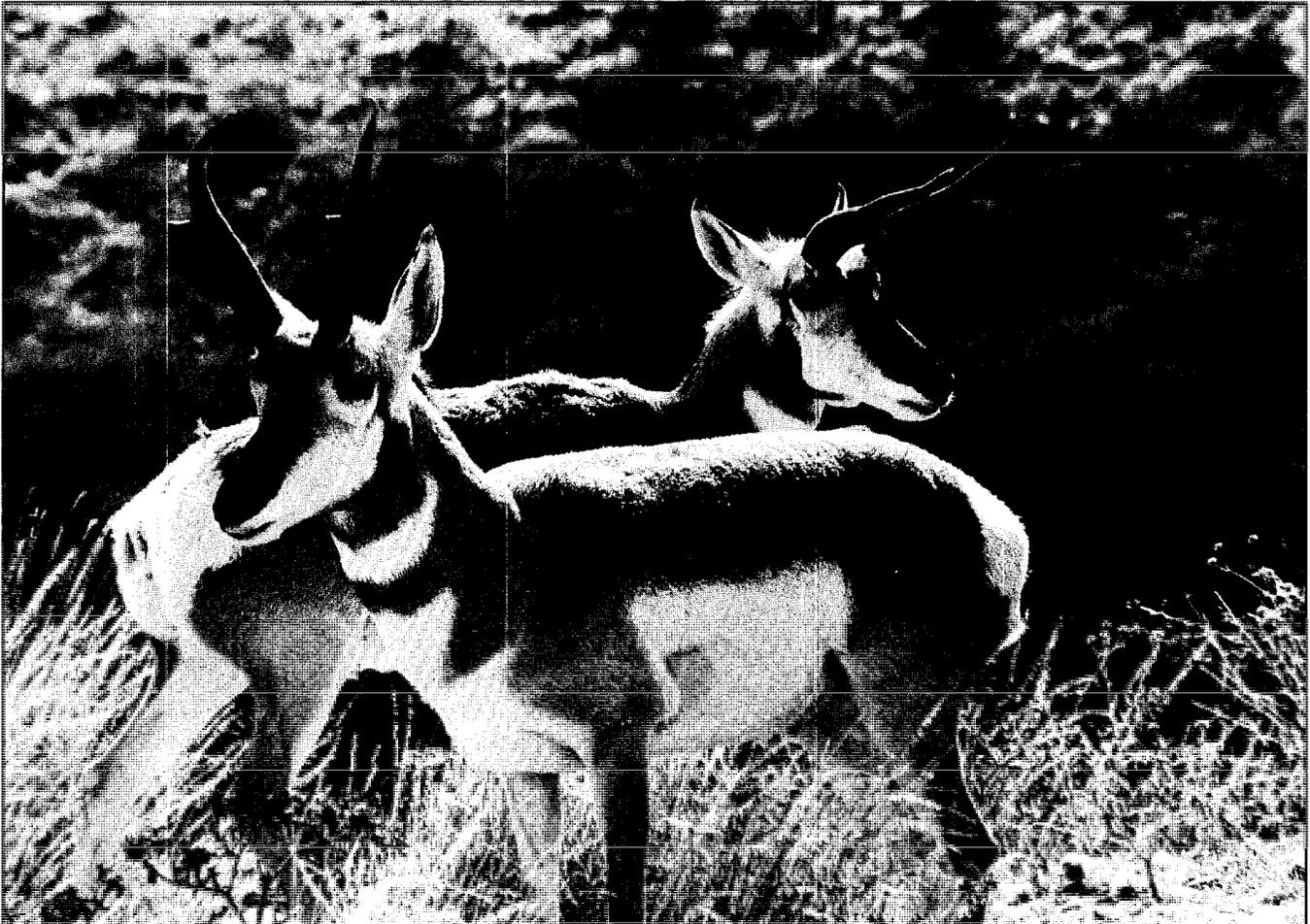
Management Concern 7- Vegetation

If Alternative B is approved, the following objectives and actions will be implemented to resolve the Vegetation Management Concern.



A gnarled juniper is contrasted against the jagged cliffs of the highly scenic Peloncillo Mountains.

1. The objective for management of upland vegetation is to restore and maintain plant communities for wildlife, watershed condition and livestock. The desired plant communities will be determined in the preparation of activity plans (allotment management plans, habitat management plans, etc.). An ecological site inventory will be completed as allotment management plans are prepared or existing plans revised.
2. The objective for management of threatened, endangered and special status plant species is to manage the public lands to preserve and enhance occurrences of special status species and to achieve the eventual delisting of threatened and endangered species. BLM will assist the Fish and Wildlife Service in the development of Threatened and Endangered species recovery plans. Implementation of recovery plans will be accomplished through activity plans.
 - a. Listed threatened *Coryphantha robbinsorum* and *Vauquelinia pauciflora*.
 - b. Candidate category I species *Aster lemonii* and *Rumex orthoneurus*.
 - c. Re-inventory and monitor other candidate species known to occur on public lands.
 - d. Re-inventory and monitor *Echinocereus triglochidiatus*-listed endangered species.
3. Land treatments (vegetation manipulation) will be used to decrease invading woody plants and increase grasses and forbs for wildlife, watershed condition and livestock. Public lands, where vegetation condition is less than desired to meet management objectives, will be identified for treatment through activity plans. Treatments may include various artificial (mechanical, chemical or prescribed fire) methods. Management objectives for riparian vegetation can be found under Issue 4 — Riparian Vegetation. To achieve the objective for vegetation manipulation, implement those desirable treatment methods that increase vegetation cover and decrease soil erosion.



Pronghorn were released on semi-desert grasslands west of the Peloncillo Mountains through efforts of the BLM and Arizona Game and Fish Department.

4. Do not provide firewood or other vegetation products for public use.

Management Concern 8 -Water Resources

If this alternative is approved, the following objectives and actions will be implemented to resolve the Water Resources Management Concern. These objectives are designed to support on-going programs (range, riparian, recreation, wildlife, etc.) while providing data to be used for future management decisions.

1. The objective for management of groundwater is to conserve water for prudent resource management purposes.

The following actions will be implemented to accomplish the groundwater management objectives.

- a. Cap unusable or unsuitable wells to prevent contamination of aquifers and to contain highly saline water.
- b. Restrict artesian flow to meet specific program needs.
- c. Inspect and maintain water systems to prevent unnecessary loss of water.

Further, initiate a groundwater study for the San Simon Watershed to determine the level of the various aquifers, changes in the level of the aquifers, the water quality of the aquifers and availability of groundwater for BLM's resource management program. Prepare a management plan for use and conservation of water (quality and quantity).

2. The objective for managing water quality is to maintain or enhance water quality at or above established standards for designated uses to meet management goals for each water source. BLM will adhere to federal and State water quality laws and standards.

The following actions will be implemented to accomplish the water quality management objective.

- a. Support other resource programs in the implementation of this plan and monitor the effectiveness of planning decisions.
- b. Continue the existing water quality testing program in the District (see Appendix 9).

- c. Initiate data collection where there is a suspected or known pollution threat or hazard to water quality.

- d. Develop an activity plan and initiate management actions needed to mitigate water quality degradation detected through water quality monitoring.

- e. Develop a District Water Quality Monitoring Plan, including recommendations for Unique Waters nominations.

3. Evaluate Aravaipa Creek, Mescal Creek, Redfield Canyon, Swamp Springs Canyon, Hot Springs Canyon, Bass Canyon, Wildcat Canyon and Double R Canyon to determine their suitability for Unique Waters designation. Nominate those that meet the required standards.

4. Evaluate Turkey Creek, Deer Creek, Left Fork of Markham Creek and Grapevine Creek (intermittent streams) for Unique Waters designation, if their flow becomes perennial. Nominate those creeks that meet the required standards.

5. Manage stream segments designated by the state as Unique Waters to maintain or enhance water quality standards and protect the associated resources.

6. Evaluate the long-term Districtwide resource management needs for ground and surface water across public lands.

7. Evaluate the Gila River, San Francisco River, Redfield Canyon, Hot Springs Canyon, Swamp Springs Canyon, Bass Canyon, Wildcat Canyon, Double R Canyon, Bonita Creek and Mescal Creek to determine the quantities of in-stream flow (water rights) needed to meet resource management objectives. File with the state for the quantities of water needed to meet management objectives for those streams where no instream flow filings have been made.

8. Evaluate Turkey Creek, Deer Creek, Left Fork of Markham Creek, Guadalupe Canyon and Johnny Creek (intermittent streams), if their flow becomes perennial, to determine the quantities of instream flow (water right) needed to meet resource management objectives. File with the state for the quantities needed to meet management objectives.

9. Purchase water rights, when necessary, to protect threatened resource values.

Management Concern 9 - Air Quality

The following objectives and actions will be implemented to resolve the Air Quality Management Concern.

- Continue to manage the airshed in accordance with State of Arizona Class II standards, unless redesignated.
- Comply with all federal and state statutes pertaining to air quality and cooperate with the State of Arizona in carrying out the State Implementation Plan.

The following actions will be implemented to accomplish these objectives.

1. When implementing BLM or BLM-approved activities, minimize surface disturbances to prevent the addition of large quantities of dust to the air. When surface disturbances occur, require appropriate stipulations to mitigate the impact to air quality.
2. Continue the rehabilitation of erosion in the San Simon Watershed and the Bear Springs Flat area (see Map 26) to reduce airborne dust.
3. Conduct prescribed fire with prior approval of the Arizona Department of Environmental Quality, Office of Air Quality.
4. Continue operation of the Oliver Knoll atmospheric deposition monitoring station as part of the nationwide network.

Management Concern 10 - Paleontological Resources

If this alternative is approved, the following objectives and actions will be implemented to resolve the Paleontological Resources Management Concern.

1. Preserve a representative sample of Class I paleontological localities.
2. Ensure that BLM actions avoid inadvertent damage to paleontological resources.
3. Manage paleontological resources to preserve their scientific and interpretive values.
4. Emphasize management of Class I and II sites.
5. Provide opportunities for education, interpretation and scientific research.

Implement the following actions to accomplish the objectives for management of paleontological resources.

1. Continue inventories in areas of proposed activities to identify the presence of paleontological resources and determine measures needed to mitigate anticipated impacts.
2. Conduct field studies at Bear Springs Badlands, 111 Ranch and Hot Well Dunes.
 - a. Provide data on the nature, extent and scientific significance of fossils.
 - b. Determine the condition of exposures and factors that may be affecting them.
 - c. Determine the suitability of these areas for inclusion in the National Natural Landmarks Program. Nominate qualifying areas.
3. Prepare a Paleontological Resources Management Plan for the District.
4. Write a detailed overview of the biological and geological history of the District emphasizing the paleontological resources important to scientific research.

Alternative C

This alternative provides more emphasis on use and development of the public lands than Alternatives A or B. Fewer areas are managed to protect natural and cultural resources and specific prescriptions are less restrictive to use and development activities. While Area of Critical Environmental Concerns are still



Harris Hawks nest in large mesquites and saguaros in the Safford District.

designated, they are generally smaller and less restrictive on other uses. Protection and enhancement of riparian areas and Threatened and Endangered wildlife species are emphasized as are scientific use and recreational/interpretive development of cultural resources. Most of the planning area is open to off-highway vehicles.

Issue 1 - Access

If this alternative is approved, the following actions will be implemented to resolve the Access Issue.

1. Prepare a District Transportation Plan that includes identification of access needs and closures, a road and trail numbering system, sign needs, maintenance needs and coordination with other agencies and landowners.
2. Minimize the impact of existing and proposed access routes on natural and cultural resources.
3. Reserve, as needed, access across public lands that are disposed of by sale, exchange or other means.
4. Obtain public and administrative access to the public lands.
5. Roads may be closed as needed for visitor use management, resource protection and to accomplish resource management objectives.
6. Obtain legal access for public and administrative use across private lands in 39 locations Districtwide (see Appendix 1) and across other State and private lands as determined in the future.
7. Reconstruct the following roads to provide vehicle access for the administration and use of the public lands.
 - a. Virgus Canyon Road, about one half mile T. 6 S., R. 18 E., Secs. 27,34,35.
 - b. Military Trail, about three miles T. 3 S., R. 16 E., Secs. 13, 14, 23.
 - c. Buckeye Canyon Road, about one mile T. 13 S., R. 27 E., Secs. 26, 27,34 and T. 14 S., R. 27 E., Sec. 9.
 - d. Left Fork of Markham Creek Road, about three miles T. 3 S., R. 24 E., Sec. 36; T. 4 S., R. 24 E., Secs. 1, 12; and T. 4 S., R. 25 E., Secs. 6, 7, 18.

e. Jackson Cabin Road, about five and one half miles T. 11 S., R. 20 E., Secs. 22,26, 27,35, 36; T. 12 S., R. 20 E., Secs. 1,2,11,24; and T. 12 S., R. 21 E., Secs. 30,31.

f. Other roads as determined in the future.

8. Obtain legal access, for public and administrative use, on existing foot and horse trails across private lands in the following locations.
 - a. Aravaipa Canyon Wilderness Trail from the west trailhead (at the administrative site) to the west boundary of the wilderness T. 6 S., R. 17 E., Secs. 13, 24.
 - b. Babocomari River Trail T. 20 S., R. 20 E., Sec. 13 and T. 20 S., R. 21 E., Sec. 18.
 - c. Safford-Morenci Trail where it crosses Bonita Creek T. 5 S., R. 27 E., Secs. 10, 11.
 - d. Safford-Morenci Trail where it crosses the San Carlos Indian Reservation T. 4 S., R. 28 E., Sec. 31.
 - e. Hell Hole Canyon Trail and trailhead at Dry Camp T. 6 S., R. 19 E., Sec. 7.

Issue 2 - Area of Critical Environmental Concerns and Other Types of Special Management

If Alternative C is approved, the following actions will be implemented to resolve the Area of Critical Environmental Concerns and Other Types of Special Management Issue.

1. Designate 10 Area of Critical Environmental Concerns totalling 42,988 acres (35,362 acres of public land) to protect important natural and cultural resources. Table 2-15 describes the specific areas, acreages, values and management prescriptions. Maps 1 through 22 and Map 24 show the location of each proposed Area of Critical Environmental Concern.

Appendix 2 includes a detailed discussion of each Area of Critical Environmental Concern nomination, including a determination of relevance and importance, rationale for designation, management prescription and alternatives considered.

2. Develop Coordinated Resource Management Plans to direct the management of BLM's various multiple use programs on public lands in the Aravaipa Creek

Table 2-15. Areas Designated as Area of Critical Environmental Concerns-Alternative C

Proposed Name	Federal, State & Private	Acres	Values or Hazards	Management Prescription
South Rim ACEC*	F S P	22,510 0 6,268 28,778	Valuable watershed, including a wilderness, T&E species, native fish, recreation opportunities, big-horn sheep, riparian vegetation	Limit OHV use, close Oak Grove Canyon to OHV use, NSO for mineral leasing in riparian zones, require mining plan, no livestock after expiration of lease, monitor water quality, rehabilitate riparian and upland vegetation, VRM Class II.
Table Mtn. RNA ACEC	F S P	1,220 0 0 1,220	Plant community.	Limit OHV use, no woodcutting, require mining plan, no vegetative sales, prescribed fire plan, manage livestock.
Desert Grasslands RNA ACEC	F S P	530 240 70 840	Relict desert grasslands.	Require a mining plan, no livestock, closed to OHV use, acquire State/private lands if available, prescribed fire plan
Muleshoe Riparian ACEC	F S P	2,556 0 160 2,716	Riparian areas, T&E species, big-horn sheep, native fish, cultural resources.	Require mining plan, rehabilitate riparian vegetation, exclude livestock, acquire legal road access, acquire private land if available, limit OHV use, close Hot Springs Canyon to OHV use, monitor water quality, develop cooperative agreements.
Bear Springs Badlands ACEC	F S P	2,007 0 0 2,007	Paleontological (fossil) resources, scenery.	Inventory fossils, VRM Class II, no road construction, limit OHV use, require a mining plan.

Table 2-15. Areas Designated as Area of Critical Environmental Concerns-Alternative C (continued)

Proposed Name	Federal, State & Private Acres	Values or Hazards	Management Prescription
Guadalupe Canyon ONA ACEC	F 2,159 S 0 P 778 2,937	Riparian habitat, T & E species, scenery, recreation values.	Limit OHV use, no woodcutting, VRM Class II, no R/Ws, acquire private land if available, prescribed fire plan.
Bowie Mtn. Scenic ACEC	F 2,562 S 0 P 100 2,662	Scenic backdrop to Ft. Bowie National Historic Site.	Mineral withdrawal, NSO for mineral leasing, limit OHV use, prescribed fire plan, acquire private land if available, no woodcutting, VRM Class I, no R/Ws.
Coronado Mtn. RNA ACEC	F 50 S 0 P 0 50	Unique plant association.	Require mining plan, no woodcutting, VRM Class II, prescribed fire plan, no R/Ws.
Eagle Creek Bat Cave ACEC	F 40 S 0 P 10 50	Mexican free-tailed bat maternity cave.	Require mining plan, NSO for mineral leasing, no guano extraction, monitor the bat cave, acquire private lands if available, VRM Class II.
111 Ranch RNA ACEC	F 1,728 S 0 P 0 1,728	Paleontological (fossil) resources.	Require mining plan, limit OHV use, no woodcutting, VRM Class II, paleontological clearances.

¹ Includes Turkey Creek Riparian Area of Critical Environmental Concern from Alternative A.
Source: Safford District Files

Watershed, Muleshoe Ranch, Bear Springs Flat and Bonita Creek Watershed.

The purpose of the plans is to establish management objectives that directs the development of future program activities toward maintenance and enhancement of watershed condition (see Map 26). When developing Coordinated Resource Management Plans, livestock forage use will not be permitted to exceed an average of 40 percent over a full grazing cycle (averaging three to five years).

3. Revise the San Simon River Coordinated Resource Management Plan. The purpose of this plan is to direct development of program activities to maintain and enhance watershed condition.
4. Cooperative livestock and watershed management studies will be conducted with the Forest Service, The Nature Conservancy and universities to restore native grasslands and improve the condition of the Aravaipa Watershed. The District will study various best management techniques.

Issue 3 - Off-highway Vehicles

If this alternative is approved, the following actions will be implemented to resolve the Off-highway Vehicles Issue.

1. Designate the following areas closed to off-highway vehicle use. (85,384 acres)
 - a. Oak Grove Canyon above the Oak Grove Canyon corrals in the South Rim Area of Critical Environmental Concern 82 acres.
 - b. Desert Grasslands Research Natural Area Area of Critical Environmental Concern 530 acres.
 - c. The riparian area of Hot Springs Canyon 140 acres.
 - d. Any area designated wilderness. (84,632 acres currently designated.)

A closed area is where off -highway vehicle use is prohibited, even on roads or trails that exist within the closed area.

2. Designate the following areas limited to off-highway vehicle use. (34,742 acres)
 - a. South Rim Area of Critical Environmental Concern 22,510 acres.

- b. Table Mountain Research Natural Area Area of Critical Environmental Concern 1,220 acres.
- c. Muleshoe Riparian Area of Critical Environmental Concern 2,556 acres.
- d. Bear Springs Badlands Area of Critical Environmental Concern 2,007 acres.
- e. Guadalupe Canyon Outstanding Natural Area Area of Critical Environmental Concern 2,159 acres.
- f. Bowie Mountain Scenic Area of Critical Environmental Concern 2,562 acres.
- g. 111 Ranch Research Natural Area Area of Critical Environmental Concern 1,728 acres.

Off-highway vehicle use will be limited to roads and trails existing at the time of designation and any new roads approved for construction during the life of the Resource Management Plan. Existing roads and trails in these areas have been identified and the lists are available for review at the Safford District Office.

3. Off-highway vehicle use within the San Pedro Riparian National Conservation Area (54,189 acres) is limited to designated roads. Vehicle use within the Gila Box Riparian National Conservation Area (20,900 acres) will be determined during preparation of the management plan for the area.
4. Initiate procedures to designate the remainder of the District (1,257,513 acres) open to off-highway vehicle use. An open area is where all types of vehicle use is permitted, at all times and anywhere in the area. Table 2-16 identifies the acres designated in each category.

Table 2-16. Acres Designated for Off-highway Vehicle Use--Alternative C

Off-highway Vehicle Designation	Approximate Acres
Open	1,257,513
Limited	88,931
Closed	85,384

Source: Safford District Files

5. Off-highway vehicle designations and management will apply to motorized transportation only.

Issue 4 - Riparian Areas

The following objective and actions will be implemented to resolve the Riparian Areas Issue.

The objective for management of riparian areas is to maintain or improve 75 percent of the acres of riparian vegetation on public lands within the District in good or excellent condition by 1997 (see Map 26).

The following actions will be implemented to accomplish this objective.

1. Incorporate riparian area objectives into existing and future activity plans.
2. Develop and implement a system to prioritize needed riparian area management. The priorities will be based on management objectives, resource condition, resource conflicts and the potential or capability of a riparian area to respond to treatment.
3. Develop a riparian inventory system. Coordinate development and implementation of the system with other land managing agencies.
4. Complete the inventory of all riparian areas on public lands within the District to establish baseline condition.
5. Establish a monitoring plan for selected riparian areas based upon the management priority system. Implement the plan and evaluate monitoring data. Continue to carry out needed changes in riparian area management through activity plans.
6. Continue to file for in-stream flow rights on perennial streams or rivers and water rights on springs and ponds to protect and maintain riparian vegetation.
7. Continue to develop grazing systems and modify existing allotment management plans, as necessary, to manage livestock use for the improvement of riparian areas.
8. Do not permit firewood cutting in riparian areas.
9. Permit the removal of non-native vegetation for improvement of riparian vegetation.
10. Maintain and monitor representative relict riparian

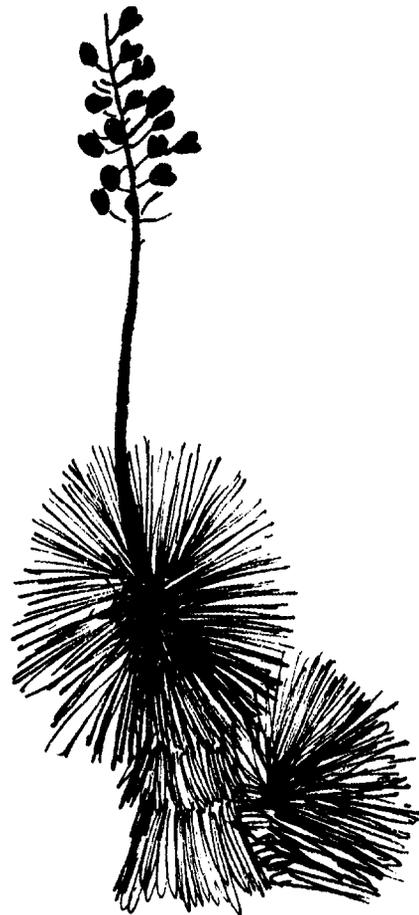
areas to provide a baseline for future management decisions.

11. Build Timber Draw Dam on the San Simon River to re-establish stream channel and floodplain conditions to promote the redevelopment of the riparian ecosystem.
12. Continue to manage the San Pedro Riparian National Conservation Area following the guidance in the existing management plan and develop a management plan for the Gila Box Riparian National Conservation Area.
13. Develop an environmental education program for riparian management.

Management Concern 1 - Wildlife Habitat

If this alternative is approved, the following objectives and actions will be implemented to resolve the Wildlife Habitat Management Concern.

1. Maintain and enhance priority species and their habitats.



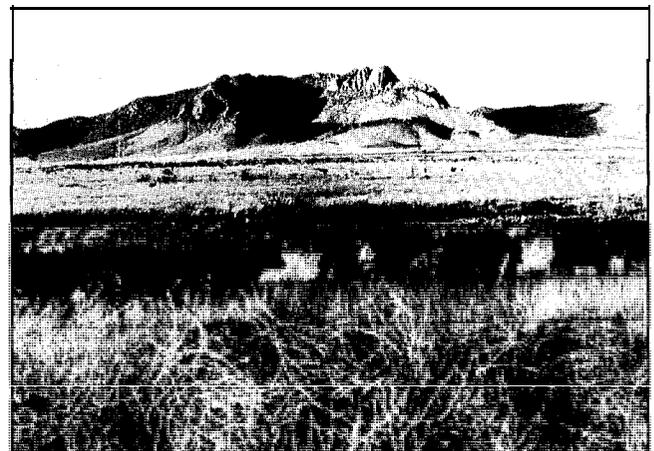
2. Focus management actions on a single special species, only when required by the Endangered Species Act. Actively promote Threatened and Endangered species recovery to eventually delist the species.
3. Conserve candidate species to ensure BLM-authorized actions do not contribute to the need to list any species as threatened or endangered.
4. Manage state-listed species to meet state objectives. Other special status species will be managed in accordance with inter- and intra-agency management plans.
5. Manage priority wildlife species habitat (vegetation communities) or special features of that habitat (water, riparian vegetation, cliffs, etc.) to maintain or enhance population levels.
6. Focus management efforts on enhancing biological diversity.

The following actions will be implemented to accomplish these objectives,

1. Establish the following as priority species and habitats. Priority species and habitats in the District include federally listed, proposed and candidate Threatened and Endangered species and their habitat, state-listed Threatened and Endangered species and their habitat, and other sensitive species and their habitat.
 - a. Riparian/aquatic habitat and species dependent on riparian/ aquatic habitat Gila topminnow, desert pupfish, southern bald eagle, loach minnow, spikedace, Gila chub, Colorado roundtail chub, razorback sucker, western yellow-billed cuckoo, gray hawk, Mississippi kite, common black hawk, ferruginous pygmy-owl, willow flycatcher and leopard frog.
 - b. Species identified for reintroduction in Fish and Wildlife Service plans - aplomado falcon and woundfin.
 - c. Desert tortoise.
 - d. Other species and habitats of interest - peregrine falcon, red bat, Sanborn's long-nosed bat, Mexican long-tongued bat, ferruginous hawk and Swainson's hawk.

General management objectives for each of the priority species and habitats identified in Appendix 4.

2. Inventory public lands across the District to determine the presence and abundance of priority species and their habitat.
3. Manage habitat for optimum wildlife populations, based on ecological conditions, taking into consideration climatic changes and the goals and objectives of Arizona Game and Fish Department and the Fish and Wildlife Service (for Threatened and Endangered species).
4. Transplant and augment populations of priority wildlife species, if necessary, to reach management objectives. Prescribe management through Endangered Species Act recovery plans.
5. Monitor priority habitat to determine condition and changes in condition. Inventory the impacts of other activities on wildlife populations and habitat prior to preparation of habitat management plans. Identify opportunities to mitigate adverse impacts and implement the actions needed to correct the problem.
6. Continue to maintain and improve wildlife habitat, emphasizing priority habitat.
7. Protect springs and associated riparian vegetation for wildlife water, cover and forage.
8. Develop prescribed burning plans in fire-dependent vegetation communities to improve habitat conditions for priority wildlife species.
9. Suppress wildfire in sensitive vegetation communities (like palo Verde/saguaro) to reduce the detrimental effects on priority wildlife dependent on those communities.



Allotment management plans are implemented to manage livestock use on grazing allotments.

10. Close the following areas to animal damage control activities.
 - a. Threatened and Endangered species habitat for those techniques that pose a threat to the species.
 - b. Zones around residences and communities in areas of concentrated recreation use for those techniques that pose a threat to visitors or to dogs in areas where they are trained, exercised or used for hunting.
 - c. Wilderness areas and Research Natural Areas except as individually authorized by the BLM State Director or the Area Manager.

Authorize areas that are open for animal damage control in coordination with the Animal and Plant Health Inspection Service on a yearly basis.

11. Inventory and categorize desert tortoise habitat by 1992. In the interim, place about 26,000 acres of public land in the San Pedro River basin from Cascabel to Winkelman and parts of the Dripping Springs and Pinal Mountains in Category 3. Place about 3,000 acres east of San Manuel in Category 2 (see Appendix 10 for goals and criteria for categorization of habitat).
12. Designate Muleshoe Riparian, Guadalupe Canyon Outstanding Natural Area and Eagle Creek Bat Cave Area of Critical Environmental Concerns for the protection of priority wildlife species and their habitat.

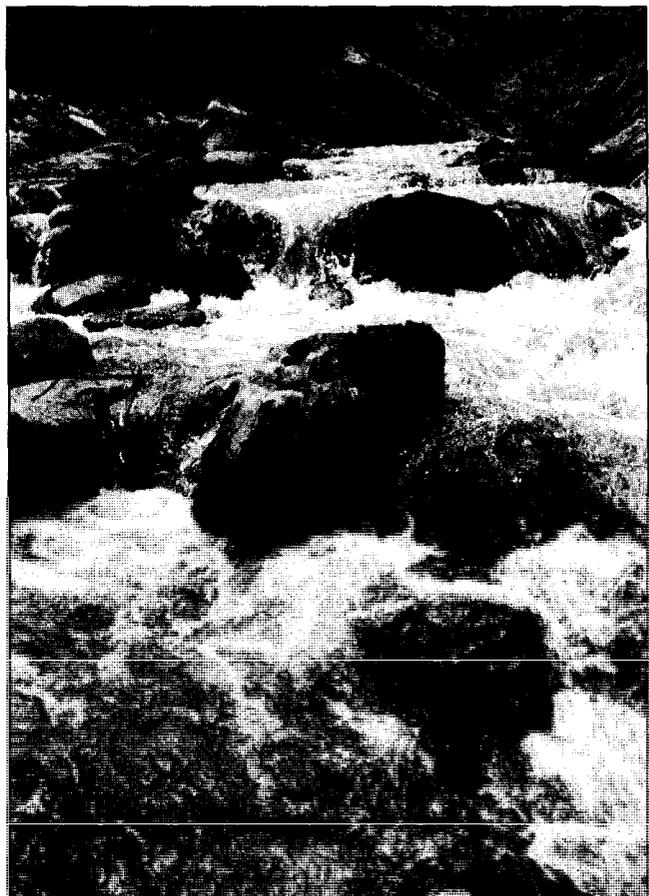
Management Concern 2 - Lands and Realty

If Alternative C is approved, the following objectives and actions will be implemented to resolve the Land and Realty Management Concern.

1. The following are the objectives for disposal of public lands.
 - . The order of preference for disposal will be by exchange, Recreation and Public Purposes Act or sale.
 - . Isolated tracts of public land may be disposed of to improve resource management efficiency and service to the public.
 - . When lands next to urban areas are disposed of, the resulting boundaries will be manageable, fenceable and identifiable.
 - Prior to disposal, lands will be evaluated for significant cultural and natural resource values.

To accomplish these objectives, dispose of 105,523 acres of public lands in the following areas.

- a. Gila Valley area.
- b. El Capitan and southern Pinal Mountain area.
- c. Dripping Spring Wash area.
- d. Texas Canyon area.
- e. Swisshelm Mountain area.
- f. Douglas area.
- g. Bisbee area, excluding the Juniper Flats block.
- h. Greenlee County area.
- i. Tombstone area.
- j. San Simon area.
- k. Recreation and Public Purposes sanitary landfill leases.
- l. Portal area.



The Safford District plans to file for instream flow water rights on Hot Springs Canyon to protect its perennial flow.

These public lands have been identified for disposal and are within the disposal area identified on Map 27. However, all public lands within these areas do not have to be sold or exchanged. BLM may retain certain lands within the disposal areas. Upon evaluation of future land disposals, BLM may identify resource values worthy of retention in public ownership. Unforeseen future land management concerns or public demand may also necessitate the disposal of other public lands for sale or exchange which are not currently identified. The parcels considered at that time would be subject to BLM's planning process and The National Environmental Policy Act of 1976.

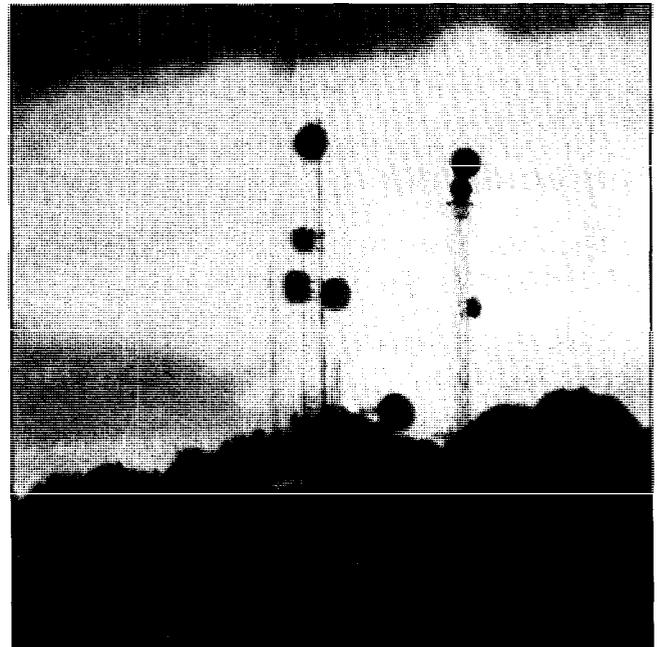
Appendix 5 shows the lands that meet The Federal Land Policy and Management Act of 1976 criteria for sale. Although these lands qualify for sale, BLM's preferred method of disposal is exchange or through the Recreation and Public Purposes Act. Map 27 shows the areas where land disposal may occur.

2. The following are the objectives for land acquisition.

- Acquire lands with high public values that complement existing management programs.
- Consolidate ownership pattern to improve management efficiency.
- Improve service to the public.

To accomplish these objectives, acquire, if they become available, state and private lands in the same areas depicted in Alternative A and shown on Map 27. These lands shall have one or more of the following characteristics and will generally be within or adjacent to public lands.

- a. riparian habitat.
- b. watersheds of important riparian areas.
- c. high value wildlife habitat, such as Threatened and Endangered species areas and major migration corridors.
- d. administrative sites.
- e. land for developed recreation sites.
- f. land providing access to public lands.
- g. significant cultural and paleontological properties.
- h. other lands with high public resource values such as inholdings in Area of Critical Environmental Concerns and other types of special management areas.



Rights-of-way are granted for communication sites on public lands.

- i. other private lands that will accomplish BLM's acquisition objectives.
3. According to the Federal Land Policy and Management Act of 1976, all lands not identified for disposal must be retained in Federal administration to be managed under the principles of multiple use and sustained yield. Unforeseen future land management concerns or public demand may necessitate other lands for disposal. Such proposals will require plan amendments and environmental documentation.
4. Designate the following existing utility lines as corridors for future utility needs across the District.
- a. Arizona Electric Power Company one mile wide.
 - b. Tucson Electric Power Company one mile wide.
 - c. All American Pipeline (San Simon Resource Area only) one mile wide.
 - d. San Pedro one mile wide (660 ft. wide where it cross San Pedro Riparian National Conservation Area).
 - e. Hayden/Christmas one mile wide.

Any future major cross-District utility rights-of-way will be encouraged to use these corridors (see Map 27).

5. Establish the Muleshoe Ranch and Bowie Mountain Scenic Area of Critical Environmental Concern as right-of-way avoidance areas. Every attempt will be made to avoid these areas with major cross-District rights-of-way to minimize or eliminate conflicts with sensitive resource values.
6. Attach needed site-specific environmental protection stipulations to all rights-of-way.
7. Establish the following areas as right-of-way exclusion areas.
 - a. Guadalupe Canyon Outstanding Natural Area Area of Critical Environmental Concern.
 - b. Bear Springs Badlands Area of Critical Environmental Concern.
 - c. Coronado Mountain Research Natural Area Area of Critical Environmental Concern.
 - d. wilderness study areas.
 - e. designated wilderness.
 - f. Oliver Knoll Atmospheric Deposition Monitoring Station.
8. Designate Guthrie Peak, Juniper Flat in the Mule Mountains and the west end of the Dos Cabezas Mountains as communication sites (see Map 27). Site plans will be prepared for all communication sites and designation of new sites will be analyzed on a case-by-case basis.
9. Complete the withdrawal review process. Revoke all withdrawals determined to no longer serve their original or intended purpose.
10. Withdraw 12 acres for the proposed Safford District Office administrative site (T. 7 S., R. 25 E., Sec. 24, that part of the W1/2NW1/4NE1/4 lying north of Golf Course Road) from the public land laws and the mining and mineral leasing laws.
11. Withdraw 10 acres for the Oliver Knoll atmospheric deposition monitoring station (T. 4 S., R. 24 E., Sec. 22, SW1/4SE1/4SE1/4NE1/4, SE1/4SW1/4SE1/4NE1/4, NW1/4NE1/4NE1/4SE1/4, NE1/4NW1/4NE1/4SE1/4) from the public land laws and mining laws. Establish it as an administrative site.
12. Withdraw 2,743 acres, including campgrounds and above administrative sites, from mineral entry to preserve important resource values. Table 2-17

identifies the areas and acreages to be withdrawn. Appendix 7 lists the legal descriptions of the areas to be withdrawn.

Management Concern 3 Outdoor Recreation and Visual Resource Management

If this alternative is approved, the following actions will be implemented to resolve the Outdoor Recreation and Visual Resource Management Concern.

1. Designate the following areas as Special Recreation Management Areas to manage current recreation use.
 - a. Aravaipa Canyon/Turkey Creek.
 - b. Gila Box/Bonita Creek.
 - c. Christmas (Gila River below Coolidge Dam).
 - d. Red Knolls/Bear Springs Badlands/Watson Wash.
 - e. Hot Well Dunes.
 - f. additional lands in the San Pedro Riparian National Conservation Area not previously included in the San Pedro River Riparian Management Plan (BLM 1989).

Table 2-17. Areas/Acres to be Withdrawn From Mineral Entry Alternative C

Area Withdrawn	Acres Withdrawn
Bowie Mountain Scenic ACEC	2,562
Fourmile Canyon Campground	159
Oliver Knoll Atmospheric Deposition Monitoring Station	10
District Office Site - proposed	12
Total	2,743

Source: Safford District Files

Prepare Recreation Area Management Plans for designated Special Recreation Management Areas, as needed. Manage the remainder of the public lands within the District as an Extensive Recreation Management Area for dispersed recreation use.

2. In the Recreation Area Management Plans, determine which public lands will be managed for interpretation and education and which sites will be signed for interpretation safety and education.
3. Continue to manage Aravaipa Canyon Wilderness following the guidance of the Aravaipa Canyon Wilderness Management Plan (BLM 1988).
4. Prepare project plans for the following areas that need some recreation planning and development.
 - a. Gila Mountain Crest Trail in cooperation with the San Carlos Apache Tribe.
 - b. Galiuro/Aravaipa/Santa Teresa Trail, in cooperation with the Forest Service.
 - c. Watson Wash Hot Well.
 - d. Safford-Morenci Trail.
 - e. Red Knolls.
 - f. Guadalupe Canyon.
 - g. Black Hills Rockhound Area.
 - h. Round Mountain Rockhound Area.
 - i. Fort Bowie/Helen's Dome Trail, in cooperation with the National Park Service.
5. Evaluate plans for new road construction for possibilities to enhance recreation experiences.
6. Unless otherwise established, the maximum length of stay for recreation purposes in any one location is 14 days.
7. Develop a District sign plan to determine which roads, sites and facilities will be signed for interpretation, education, information and public safety.
8. Designate the following as Visual Resource Management Class I areas to preserve scenic quality.
 - a. designated wilderness areas.
 - b. Bowie Mountain Scenic Area of Critical Environmental Concern.
9. Designate the following as Visual Resource Management Class II areas to preserve scenic quality and to provide for limited modification of the landscape.
 - a. Gila Box.
 - b. Bear Springs Badlands Area of Critical Environmental Concern.
 - c. Guadalupe Canyon Outstanding Natural Area Area of Critical Environmental Concern.
 - d. Eagle Creek Bat Cave Area of Critical Environmental Concern.
 - e. Coronado Mountain,
 - f. 111 Ranch Research Natural Area Area of Critical Environmental Concern.
 - g. Babocomari River.
 - h. Baker Canyon wilderness study area.
10. Designate the following as Visual Resource Management Class III areas to preserve scenic quality while providing for management activities that are evident but do not dominate the landscape .
 - a. all major highway corridors.
 - b. San Francisco River above and below the Town of Clifton.
 - c. Dos Cabezas Peaks.
 - d. lands adjacent to the San Pedro Riparian National Conservation Area.
 - e. Eagle Creek Canyon.
 - g. Gila Box outside the Area of Critical Environmental Concern.
 - f. Gila Mountains, including Bonita Creek.
 - g. Mescal Mountains,
 - h. Gila River Canyon (below Coolidge Dam).
 - i. Aravaipa tablelands including the South Rim Area of Critical Environmental Concern,
 - j. Muleshoe Ranch.

11. Designate the remainder of the District as a Visual Resource Management Class IV area. Appendix 6 explains the Visual Resource Management management class objectives. The following table identifies the acres designated by Visual Resource Management class.

Management Concern 4 - Energy and Minerals

If Alternative C is approved, the following actions will be implemented to resolve the Energy and Minerals Management Concern.

- 1 Mining notices and plans of operation received under the surface management regulations (43 CFR 3809) will be reviewed for impacts to other resources. Mitigation and reclamation measures will be provided to prevent unnecessary or undue degradation of the environment. Reclamation bonds will be required consistent with current BLM policy.
- 2 Withdraw 2,743 acres from mineral entry to preserve important resource values. Table 2-17 identifies the areas and acreages to be withdrawn. Appendix 7 lists the legal descriptions of the areas to be withdrawn.
3. Administrative sites and campgrounds (Table 2-17) will be withdrawn from entry under the mining laws (see Appendix 7 for legal descriptions).
4. Energy and other leasable minerals will be leased subject to the following conditions.
 - a. Standard environmental protection stipulations will be applied to all leases in open areas.

Table 2-18. Acres by Visual Resource Management Class-Alternative C

VRM Class	Acres Designated
I	80,295
II	11,746
III	369,807
IV	938,152

Source: Safford District Files

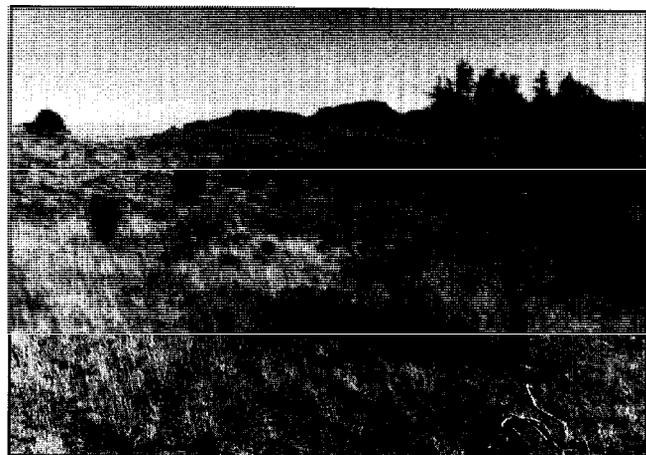
- b. Surface occupancy will not be permitted in riparian areas (see Map 26).
- c. Surface occupancy will not be permitted in campgrounds or administrative sites.
- d. Surface occupancy will not be permitted in established bighorn sheep lambing areas from February 1 to April 30 of each year.
- e. Surface occupancy will not be permitted at Tres Alamos, Yuma Wash or Midway Cave archaeological sites.

5. Issue mineral and energy leases with a "No Surface Occupancy" stipulation on 7,525 acres to protect sensitive resource values. Table 2-19 identifies the areas and acreages to which the No Surface Occupancy stipulation will apply.
6. Sale of mineral materials will not be permitted in 4,316 acres of riparian vegetation (see Map 26) on public lands throughout the District.
7. The standard list of environmental protection stipulations will be attached to all mineral material sale authorizations. Any needed site-specific stipulations will also be added.

Management Concern 5 - Cultural Resources

If this alternative is approved, the following objectives and actions will be implemented to resolve the Cultural Resources Management Concern.

- . Manage for Information Potential.
- Manage for Public Values.
- . Manage for Conservation.



The abundant grass on Sombrero Butte provides an excellent area for studies of native vegetation.

Table 2-19. Areas/Acres to be Leased With a “No Surface Occupancy” Stipulation-Alternative C

NSO Area	NSO Acres
South Rim ACEC	358
Bowie Mountain Scenic ACEC	2,230
Eagle Creek Bat Cave ACEC	40
Riparian Areas - other than those located in ACECs or wilderness	4,316
Desert Bighorn Sheep Lambing Areas	90
Fourmile Canyon Campground	159
District Office Site - proposed	12
Yuma Wash Archaeological Site	120
Tres Alamos Archaeological Site	160
Midway Cave Archaeological Site	40
Total	7,525

Source: Safford District Files

Table 2-20 identifies the actions that will be implemented to achieve each objective. Appendix 11 defines each objective.

To accomplish the cultural resource management objectives, the following actions will be implemented. Critical protection needs will be given a higher priority for action than either planning or field studies of properties that are not critically threatened. This does not mean, however, that all critical protection work will be done before planning or other types of studies.

1. Prioritize implementation of planned cultural resource actions according to the degree of need as defined below:
 - a. First priority will be given to planned actions protecting threatened and significant cultural resources that would otherwise be lost. This includes obtaining important data from individuals (ethnographic information) that may not be available in the future.
 - b. Second priority will be given to collecting cultural resource field data for planning purposes and for resource utilization not part of any protection or mitigation measure (for example, to allow a

cultural property to be excavated solely for scientific research purposes or to allow a property to be interpreted to the public).

- c. Third priority will be given to non-field studies designed to obtain information through archival research on cultural resources not currently having management needs or emphasis. They will, instead, be designed to produce documentation on issues relevant to current scientific questions or potential future management concern.
 - d. Fourth priority will be given to the preparation of management plans directing how the District manages its cultural resources.
 - e. Fifth priority will be given in cases where there is good reason to believe that cultural resources are being adversely effected even though they are not located in any area of proposed activity. Studies of plan actions in these instances will seek to determine the nature and extent of the impacts and to identify corrective management actions. Fifth priority will also be given to planned actions protecting significant threatened cultural resources where the degree of damage or threat of damage is low (non-critical).
2. Use the following administrative and physical measures to protect cultural properties.
 - a. Signing - place antiquity or interpretive signs on cultural properties being looted or vandalized.
 - b. Withdrawal -withdraw areas from location under the mining laws to protect significant cultural properties. Retain significant cultural properties in public ownership to conserve them for the future.
 - c. Access - install fences or other barriers to restrict or eliminate public access to cultural properties that are being looted or vandalized. Disallow firewood cutting for public use in areas with high cultural resource values.
 - d. Patrol - patrol threatened cultural properties with personnel from the Arizona Site Steward Program, BLM's Cultural Resource Assistants and Law Enforcement Rangers and community volunteers.
 - e. fire Control - provide input to the development of a fire management plan to protect cultural resources. Assign a Cultural

Table 2-20. Management Objectives Achieved by Planned Actions-Alternative C

Actions	Manage for Information Potential	Manage for Public Values	Manage for Conservation
1. Use protection measures	X	X	X
2. Expand inventory and testing of Timber Draw	X		
3. Conduct ethnographic studies -			
Bonita Creek	X	0	0
Muleshoe Ranch	X	0	0
Mormon Canals	X	0	0
CCC camps & projects	X	0	0
Aravaipa area	X	0	0
Dos Cabezas area	X	0	0
4. Revise Rock Art CRMP	X	0	0
5. Conduct Class II inventories -			
Aravaipa area	X	0	
Muleshoe Ranch	X	0	0
Mormon Canals	X	0	0
CCC camps and projects	X	0	
Dos Cabezas historic sites	X	0	0
San Simon riparian areas	X	0	0
6. Conduct Class III inventory -			
Bonita Creek	X	0	0
7. Conduct extensive inventory and manage Dos Cabezas Mining Area	X	0	0
8. Research trails, roads, etc.	X	0	
9. Develop regional research design	X		
10. Promote and fund scientific use	X		
11. Develop predictive model	X		
12. Interpret -			
Aravaipa area	X		
Bonita Creek	X		
Muleshoe Ranch	X		
Gila Box	X		
13. Interpret -			
Safford Airport CCC Camp	X		
Bonita Creek properties	X		
Dos Cabezas mining properties	X		

X Primary Objective
Source: Safford District files.

0 . Secondary Objective

NA . Not Applicable

- Resource Advisor to all extended attack fires whenever heavy equipment is used.
- f. Stabilization - stabilize deteriorating standing architectural structures on significant cultural properties.
 - g. Detailed Recording - record all known prehistoric cliff dwellings and related structures in the District and the Yuma Wash and Midway Cave sites.
 - h. Public Education -develop and implement annual Public Affairs Action Plans for cultural resources.
3. Expand and complete a Class III cultural resource inventory and intensive testing in and adjacent to the Timber Draw project area.
 4. Conduct ethnographic studies in Bonita Creek, Muleshoe Ranch, Pima Mormon Canal System, Civilian Conservation Corps camps and project areas, Aravaipa Canyon Wilderness and adjacent lands and Dos Cabezas Mountains area.
 5. Revise the Safford District Rock Art Cultural Resource Management Plan.
 6. Conduct Class II archaeological inventories in Aravaipa Canyon Wilderness and adjacent lands, Muleshoe Ranch, Pima Mormon Canal System, Civilian Conservation Corps camps and project areas, Dos Cabezas Mountains historic sites and culturally sensitive riparian areas bordering the San Simon Valley to enhance knowledge of cultural resources for future management decisions.
 7. Conduct a Class III archaeological inventory in Bonita Creek Canyon to enhance knowledge of cultural resources for future management decisions.
 8. Conduct extensive archival research on public lands to increase knowledge of the Dos Cabezas historical mining area. Develop cooperative management agreements for the inventory of the mining area on adjacent non-federal lands.
 9. Conduct archival research to identify historic trails, roads, telegraph lines and other forms of historic transportation and communication.
 10. Develop a regional research design to help identify the specific scientific and public values of individual cultural properties.
 11. Actively promote and fund scientific investigations on District cultural resources through the development of information packets, brochures and other measures.
 12. Develop a rigorous predictive model for the occurrence of cultural resources.
 13. Develop a comprehensive interpretive and educational program depicting the geological, cultural and wildlife values of Aravaipa Canyon, Bonita Creek, Muleshoe Ranch and Gila Box.
 14. Interpret the Civilian Conservation Corps Base Camp near the Safford Airport, selected cultural properties along Bonita Creek and the Dos Cabezas mining properties for public use.



Desert bighorn ewes inhabit the rocky cliffs of Aravaipa Canyon.

Management Concern 6- Soil

If Alternative C is approved, the following objectives and actions will be implemented to resolve the Soil Erosion Management Concern.

- . Reduce accelerated erosion.
- . Restore eroded floodplains of the San Simon River and in the Bear Springs Flat area (see Map 26).
- . Reduce silt and salts entering the Gila River from the San Simon River.

The following actions will be implemented to accomplish the soil erosion and salinity management objectives.

1. Develop activity plans, where needed, to initiate rehabilitation of eroded areas and to provide more forage for livestock.
2. Construct Timber Draw Dam to continue efforts to rehabilitate eroded areas of the San Simon River (see Map 26).
3. Continue reseeding grasses and riparian vegetation on restored areas behind erosion control structures. Manage livestock with fencing or other methods to protect these areas.
4. Protect the eroded floodplain of the San Simon River through appropriate livestock management.
5. Repair Oso Largo Detention Dam (see Map 26) in the Bear Springs Flat area to continue rehabilitation of eroded lands. Assess the land upstream of Oso Largo Dam to determine the need for maintenance of existing structures or the need for additional structures. Make all structures functional without adversely affecting the Area of Critical Environmental Concern located in the upper end of the eroded area.
6. Investigate methods to increase livestock forage in the Bear Springs Flat area, without adversely affecting the Area of Critical Environmental Concern located in the upper end of the eroded area.
7. Continue seasonal livestock use in the Bear Springs Flat area.
8. Cap or contain the flow of flowing wells in the San Simon Watershed if salinity exceeds 3,000 ppm.

Management Concern 7- Vegetation

If this alternative is approved, the following objectives and actions will be implemented to resolve the Vegetation Management Concern.

1. The objective for management of upland vegetation is to restore and maintain plant communities for wildlife, watershed condition and livestock. The desired plant communities will be determined in the preparation of activity plans (allotment management plans, habitat management plans, etc.). An ecological site inventory will be completed as new allotment management plans are prepared or existing plans revised.
2. The objective for management of threatened, endangered and special status plant species is to manage the public lands to preserve occurrences of

special status species and to eventually delist threatened and endangered species. To accomplish these objectives, continue inventories in areas of proposed activities.

3. Land treatments (vegetation manipulation) will be used to decrease invading woody plants and increase grasses and forbs for wildlife, watershed condition and livestock. Public lands, where vegetation condition is less than desired to meet management objectives, will be identified for treatment through activity plans. Treatments may include various artificial (mechanical, chemical or prescribed fire) methods. Management objectives for riparian vegetation can be found under Issue 4 Riparian Vegetation.
4. Make the following firewood-cutting areas available to the public.
 - a. San Simon Fan Structure area for tamarisk and mesquite.
 - b. West of the San Simon River, on Sonoita soils for mesquite.
 - c. Mesquite Well area, on Sonoita soils for whitethorn and mesquite.
 - d. Horse Mountain area for manzanita, juniper and mesquite.

Permit up to 500 cords per year Districtwide, but do not allow cutting in major desert washes.

5. Determine other areas appropriate for firewood cutting and the quantities available.



Examples of prehistoric Salado adobe structures can be found on public lands in the Safford District.

6. Issue permits for vegetative products, other than firewood, as determined by public demand and on-site evaluation.

Management Concern 8 - Water Resources

If Alternative C is approved, the following objectives and actions will be implemented to resolve the Water Resources Management Concern.

1. The objective for management of groundwater is to efficiently use available water for on-going resource management purposes.

The following actions will be implemented to accomplish the groundwater management objective.

- a. Cap unusable or unsuitable wells to prevent contamination of aquifers and to contain highly saline water.
- b. Inspect and maintain water systems to prevent unnecessary loss of water.

Further, initiate a groundwater study for the San Simon Watershed to determine the level of the various aquifers, changes in the level of the aquifers, the water quality of the aquifers and availability of groundwater for BLM's resource management programs. Prepare a management plan for use of water.

2. The objective for managing water quality is to maintain or enhance water quality at or above established standards for designated uses to meet management goals for each water source. BLM will adhere to federal and state water quality laws and standards.

The following actions will be implemented to accomplish the water quality management objective.

- a. Support other resource programs in the implementation of this plan and monitor the effectiveness of planning decisions.
- b. Continue the existing water quality testing program in the District (see Appendix 9).
- c. Initiate data collection where there is a suspected or known pollution threat or hazard to water quality.
- d. Develop an activity plan and initiate management actions needed to mitigate water quality degradation detected through water quality monitoring.

- e. Develop a District Water Quality Monitoring Plan.
 - f. Share data with other water quality managing agencies.
3. Manage stream segments nominated or state designated as Unique Waters to maintain or enhance water quality standards and protect the associated resources.
 4. Evaluate the long-term Districtwide resource management needs for ground and surface water.
 5. Evaluate the Gila River, Redfield Canyon, Hot Springs Canyon, Bass Canyon and Bonita Creek to determine the quantities of in-stream flow (water right) needed to meet resource management objectives. File on the quantities needed to meet those objectives.
 6. Evaluate Turkey Creek, Deer Creek, Left Fork of Markham Creek and Guadalupe Canyon (intermittent streams), if their flow becomes perennial, to determine the quantities of in-stream flow (water rights) needed to meet resource management objectives. File with the state on the quantities needed to meet resource management objectives.
 7. Consider purchasing water rights when resource values are threatened.

Management Concern 9 - Air Quality

The following objectives and actions will be implemented to resolve the Air Quality Management Concern.

1. Continue to manage the airshed in accordance with State of Arizona Class II standards, unless redesignated.
2. Comply with all federal and State statutes pertaining to air quality and cooperate with the State of Arizona in carrying out the State Implementation Plan.

The following actions will be implemented to accomplish these objectives.

1. When implementing BLM or BLM-approved activities, minimize surface disturbances to prevent the addition of large quantities of dust to the air. When surface disturbances occur, enforce appropriate stipulations to mitigate the impact to air quality.
2. Continue the rehabilitation of erosion in the San Simon Watershed and the Bear Springs Flat area (see Map 26) to reduce airborne dust.

3. Conduct prescribed fire with prior approval of the Arizona Department of Environmental Quality, Office of Air Quality.
4. Continue operation of the Oliver Knoll atmospheric deposition monitoring station as part of the nation-wide network.

Management Concern 10 - Paleontological Resources

If this alternative is approved, the following objectives and actions will be implemented to resolve the Paleontological Resources Management Concern.

1. Preserve a representative sample of Class I paleontological localities.
2. Ensure that BLM actions avoid inadvertent damage to paleontological resources.
3. Manage paleontological resources to preserve their scientific and interpretive values.

The following action will be implemented to accomplish these objectives.

1. Continue inventories in areas of proposed activities to identify the presence of paleontological resources and determine measures needed to mitigate anticipated impacts or whether proposed activity should be allowed.

Alternative D (No Action)

This alternative continues implementation of the current land use plans. The allocation of lands and resources would remain unchanged. The analysis of



Agaves were an important food of Native Americans, who cultivated is using dryland farming techniques near Safford.

the impacts of implementing Alternative D provides a basis for comparing the effects of the other three alternatives.

Issue 1 - Access

If this alternative is approved, the following action will be implemented to resolve the Access Issue.

1. Develop a plan to determine physical and legal access needs in the District. Close roads determined to be unnecessary.

Issue 2 - Area of Critical Environmental Concerns and Other Types of Special Management

If Alternative D is approved, the following actions will be implemented to resolve the Area of Critical Environmental Concerns and Other Types of Special Management Issue.

- 1 Consider the following areas for Area of Critical Environmental Concern designation or other types of special management.
 - a. Coronado Mountain.
 - b. Bear Spring Paleontological Area.
 - c. Little Doubtful Canyon.
 - d. Howell Canyon.
 - e. Gila River, below Coolidge Dam.
 - f. Turkey Creek.
 - g. Dos Cabezas Peaks.
 - h. Mescal Creek.
 - i. riparian areas.
 - j. Government Peak.
 - k. springs.
 - l. Bonita Creek
 - m. Eagle Creek
 - n. Gila Box
 - o. Fishhooks

- p. Johnny Creek
 - q. Markham Creek
2. Manage the following areas to maintain the primitive character, scenic quality, recreation opportunities and research potential.
 - a. Peloncillo Mountains.
 - b. Bowie Mountain.
 - c. Bonita Creek.
 - d. Dos Cabezas Mountains.
 - e. Jackson Mountain.
 - f. Eagle Creek.
 3. Determine the preliminary suitability of the Gila and San Francisco Rivers, through the Gila Box, for inclusion in the National Wild and Scenic River System.



The Narrows, located in Hot Springs Canyon in the Muleshoe Ranch, is subject to flash flooding.

Issue 3 - Off-Highway Vehicles

The following actions will be implemented to resolve the Off-highway Vehicles Issue.

1. Manage off-highway vehicle use on lands designated as wilderness or under wilderness review according to the Interim Management Policy and Guidelines for Lands Under Wilderness Review to preserve the wilderness values of these areas.
2. Designate the remainder of the District limited to existing roads and trails.
3. Inventory and analyze the District to determine possible locations for open off-highway vehicle areas.

Issue 4 - Riparian Areas

If this alternative is approved, the following actions will be implemented or continued to resolve the Riparian Areas Issue.

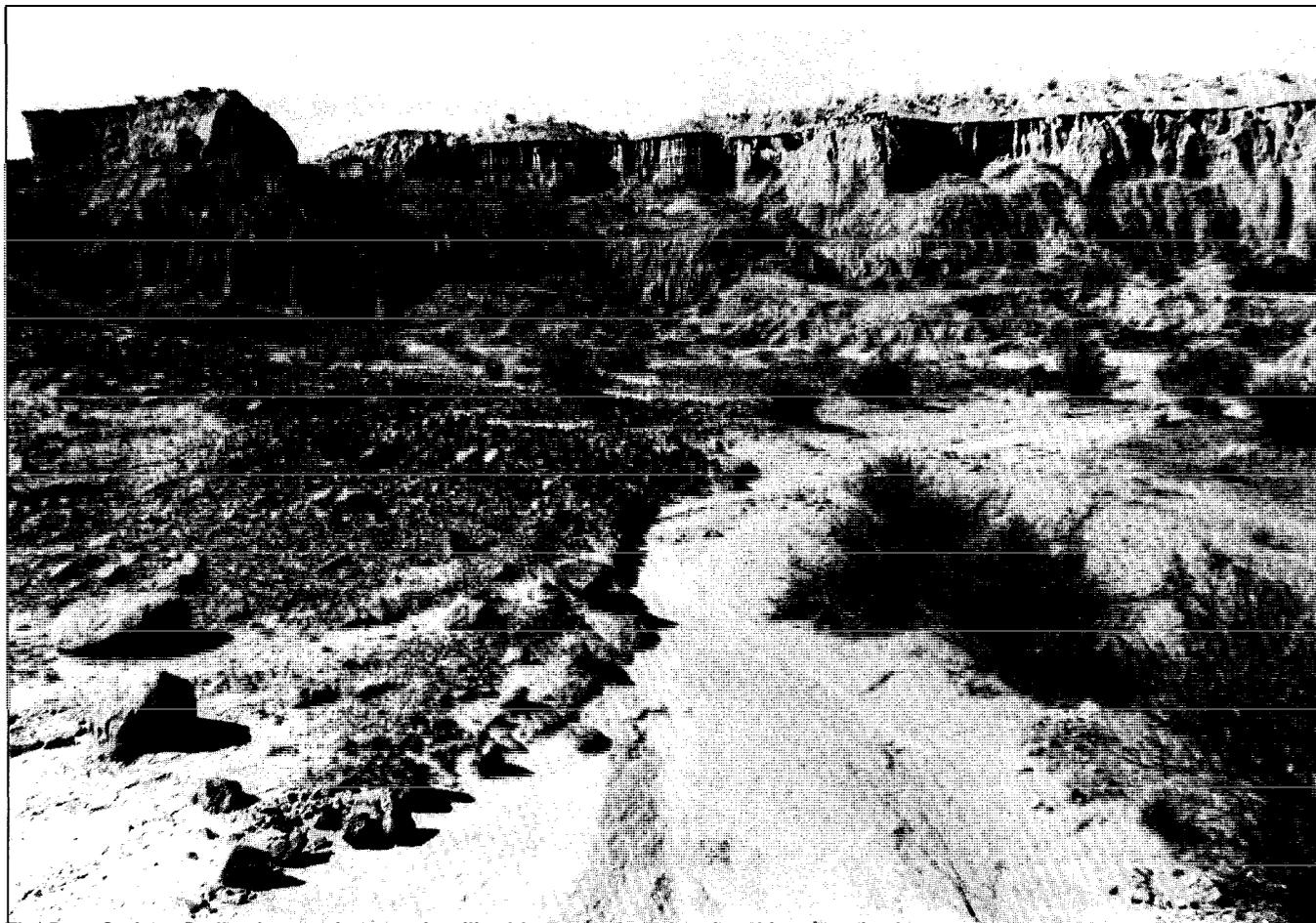
1. Manage desert washes to minimize soil erosion, maintain or increase vegetation ground cover, maintain or improve wildlife habitat and protect cultural values.
2. Suppress wildfires with as little surface disturbance as possible with the following limitations.
 - a. Prohibit use of heavy equipment in riparian and aquatic habitat along the Gila and San Francisco rivers, except as a last resort.
 - b. Keep surface disturbance to an absolute minimum in the remainder of the Gila Box.
3. Manage livestock grazing in riparian and aquatic habitat in the Gila Box. Allow only periodic prescribed use for vegetation control and management.
4. Enhance riparian habitat in the Geronimo Planning Unit by the following prescription.
 - a. Eliminate or manage livestock grazing.
 - b. Intensively inventory fish, raptors and songbirds.
 - c. Eliminate vehicular travel from all or part of the riparian areas or seasonally restrict travel based on information collected in the riparian inventory.
 - d. Prohibit unnatural destruction or removal of vegetation unless it benefits wildlife.

- e. Prohibit construction of any project that disrupts wildlife.
 - f. Prohibit any high-intensity human use.
 - g. Retain all public lands. Acquire new lands with riparian values.
 - h. Classify all or part of the riparian areas as Outstanding Natural Areas.
2. Contract or develop cooperative agreement with range users to provide water for wildlife at wells, springs and pipelines when livestock are not on the range or pasture.
 3. Provide artificial quail and javelina cover, artificial raptor nests, big game water developments and study the feasibility of waterfowl habitat development projects.
 4. Conduct intensive wildlife inventory and analysis in cooperation with the Arizona Game and Fish Department. Give full consideration to nongame species and special attention to threatened and endangered species and those proposed for listing.
 5. Manage livestock to minimize competition with wildlife and to enhance wildlife habitat where feasible.
 6. Vegetation manipulation will be coordinated with the wildlife program to determine and mitigate potential impacts to wildlife and their habitat.

Management Concern 1 - Wildlife Habitat

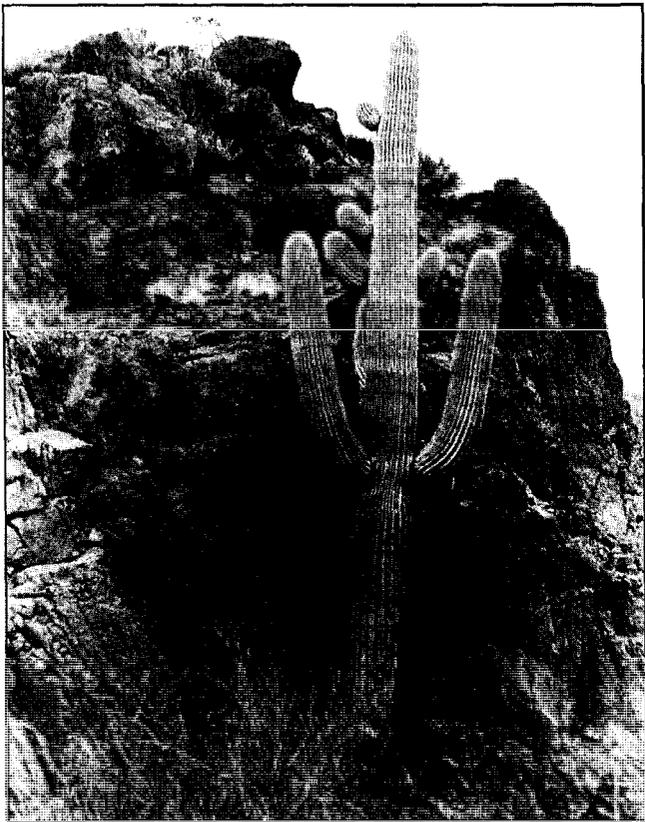
If Alternative D is approved, the following actions will be implemented to resolve the Wildlife Habitat Management Concern.

1. Provide additional permanent and/or seasonal water developments for wildlife and livestock. Make access to water available to wildlife yearlong in accordance with wildlife and livestock activity plans.



The Bear Springs Badlands contain many fossilized bones and tracks of prehistoric animals.

7. Protect, enhance and establish vegetation cover at water sources.
8. Erosion control structures will include specific design features to provide better habitat for wildlife and fish.
9. Use prescribed fire to improve wildlife habitat. Keep bulldozer work to a minimum to reduce impacts to wildlife habitat and minimize additional access to the area.
10. Conduct an inventory, in cooperation with the Arizona Game and Fish Department, to determine the feasibility of reintroducing or supplementing big game populations.
11. Focus management in upper elevations to protect and enhance wildlife habitat.
12. Develop a grazing management program that more closely meets the needs of desert bighorn sheep in cooperation with state and local grazing lessees.
13. Monitor the distribution and numbers of native and non-native fish in the Aravaipa watershed and prevent non-native fish from becoming established.
14. Establish at least one 100-acre range and wildlife study enclosure in each of the major standard habitats.
15. Conduct a comprehensive terrestrial and aquatic inventory, using the Integrated Habitat Inventory Classification System . Evaluate the potential for endangered fish reintroductions and Area of Critical Environmental Concern recommendations.
16. Study ephemeral rangelands to determine the relationship between livestock forage use and wildlife densities and diversities.
17. Manage riparian areas to protect their values.
18. Prevent tamarisk from establishing itself in Mescal Creek and Aravaipa Canyon Wilderness.
19. Coordinate with Fish and Wildlife Service, Arizona Game and Fish Department, The Nature Conservancy and local landowners to acquire protective easements for selected parts of the San Pedro River to protect this diverse and highly productive riparian area.
20. Coordinate with the San Carlos Apache Tribe to prohibit livestock grazing from 18 miles of riparian habitat on the Gila River below Coolidge Dam. If this is not feasible, construct small enclosures on public lands with the highest potential for rehabilitation of riparian vegetation. Rehabilitate the riparian community by removing tamarisk and planting cottonwoods and willows.
21. Acquire baseline terrestrial and aquatic biological data on the condition and trend of all riparian habitat and perennial streams.
22. Prohibit the removal of all native live and dead trees greater than 6 inches diameter at breast height (DBH) in the Winkelman Planning Unit. Potential firewood-cutting areas will be evaluated to determine impact on wildlife.
23. Study white-tailed deer and elk distribution and habitat use.
24. Study the potential for introduction of beaver into Aravaipa Creek and the river otter into the Gila River below Coolidge Dam.
25. Predator control activities, other than sport hunting, should be permitted only in areas where there is documented evidence of extreme depredation of livestock. Aim control measures only at offending animals.
26. Coordinate with the Arizona Game and Fish Department to establish predator concentration areas, habitat preferences and population trends.
27. During nesting season, prohibit activities within one fourth mile radius of active raptor nests in wooded areas and one half mile radius in open country unless consideration has been given to minimizing disturbance to nesting raptors. Manage raptors to enhance nesting success.
28. Assist the Fish and Wildlife Service and Arizona Game and Fish Department by monitoring the Gila River for use by wintering bald eagles to determine the extent and period of use.
29. Determine the distribution, population status and habitat relationships of the desert tortoise and Gila monster.
30. Restrict off-highway vehicles to existing roads, except in designated areas currently receiving regular use where no wildlife conflicts exist. Areas designated for unrestricted use should exclude major washes, riparian zones, forest, chaparral and saguaro-palo verde habitats.



Saguaros are found along canyons in the foothills of the Gila Mountains northwest of Safford.

Management Concern 2 - Lands and Realty

If this alternative is approved, the following actions will be implemented to resolve the Lands and Realty Management Concern.

1. Consider public land disposal proposals in the following use priority: to assure public access; for other public purposes (such as Recreation and Public Purposes); exchanges that benefit BLM programs; and Bureau-motion sales.
2. Lands in urban, suburban, residential, commercial and industrial expansion areas will be disposed of on the merit of the application, as it would benefit BLM programs or be of benefit to the public for public purposes.
3. Provide through Recreation and Public Purposes lease or by exchange, 80 acres of public land in T. 8 S., R. 16 E., Sec. 24, E1/2NE1/4 for the future expansion of the Town of Mammoth.
4. Provide through Recreation and Public Purposes lease or by exchange, 20 acres of public land in

the Dripping Spring Valley in T. 4 S., R. 16 E., for disposal to Gila County for a sanitary landfill.

5. Provide through Recreation and Public Purposes lease or by exchange, 40 acres of public land in T. 8 S., R. 17 E., Sec. 19, NE1/4SW1/4 for disposal to Pinal County for use as a medical health building.
6. Retain isolated tracts of public lands in the Bowie-San Simon area, that have agricultural potential, until adequate information is obtained concerning the effect new wells will have on the groundwater table.
7. Conduct a feasibility study of, and implement accordingly, a land exchange and acquisition program to provide better control of range administration and improve management practices.
8. Acquire State and private lands in the same areas described in Alternative A and shown on Map 27.
9. Acquire 680 acres of private land along Aravaipa Creek, east and west of the wilderness.



A lone tree is silhouetted against the sheer canyon walls of Aravaipa Canyon Wilderness.

10. Retain public lands in the following areas.
 - a. Dos Cabezas Mountains.
 - b. Gila Box.
 - c. Jackson Mountain.
 - d. small tracts of public lands adjacent to the Gila River.
 - e. the National Guard Withdrawal, in T. 7 S., R. 25 E., Sec. 23, S1/2NE1/4, SE1/4, Sec. 26, NE1/4.
 - f. T. 8 S., R. 17 E., Sec. 29 for the future recreation and public purposes in the next 10 years
 - g. all lands in the Winkelman Planning Unit that have perennial water or riparian habitat.
11. Grant rights-of-way to public and private utility interests in established or proposed alternative primary corridors. Secondary or distribution line rights-of-way will be considered on a case-by-case basis.
12. Consider the existing concentration of rights-of-way through the Dripping Spring, Gila and San Pedro valleys right-of-way corridor. Attempt to confine all future rights-of-way to this corridor.
13. Develop site plans for all existing and future communication site developments prior to granting additional rights-of-way.
14. Following completion of the withdrawal review, authorize the following withdrawals along the Gila River below Coolidge Dam, by cooperative agreements with the withdrawing agency.
 - a. San Carlos Indian Irrigation Project.
 - b. Power Site Reserve 150.
 - c. Power Site Reserve 590 and Secretarial Order Water Power Designation 4.
15. Complete the U.S. Geological Survey revocation request for Power Project AR-730, Water Power Designation 5, and Power Site Reserve 602 included in Power Site Restoration A-760, located along the Gila River below Coolidge Dam, and within the Needles Eye Wilderness Area. Close the land included in these revocations to all appropriations when the withdrawals are revoked.

Management Concern 3 - Outdoor Recreation and Visual Resource Management

If Alternative D is approved, the following actions will be implemented to resolve the Outdoor Recreation and Visual Resource Management Concern.

1. Retain, as possible, existing scenic qualities on lands along Interstate 10, U.S. Highways 666 and 70, the Apache Pass Road and around Ft. Bowie National Historic Site. Exclude activities, where possible, that detract from open space values.
2. Review project proposals to determine their impact on scenic values. Prescribe needed mitigation measures.
3. Conduct a thorough inventory and evaluation of geologic features and develop a plan for interpretation and/or management of those determined to be of value for outdoor recreation opportunities.
4. Prepare activity plans to consider type and location of recreation facilities needed for visitors to accommodate and enhance recreation experiences while providing control and minimal impact on other activities.
5. Review new road construction proposals to determine the impacts on primitive values and opportunities for providing wayside stops, scenic overlooks, turnouts, interpretive signs, etc.
6. Conduct a thorough inventory to determine the location of unique ecological communities. Develop activity plans to provide for the management and interpretation of these areas.
7. Develop an activity plan for private lands adjacent to each end of Aravaipa Canyon Wilderness that may be acquired in the future.



The 1000-foot cliffs above the Gila River afford spectacular views of the rugged Gila Box.

8. Develop a comprehensive interpretive and education program depicting the biological, cultural and geological values of the Aravaipa Canyon area.
9. Provide day-use facilities along the Gila River near Winkelman, including a single picnic site about one mile below Coolidge Dam.
10. Inventory all Visual Resource Management Class I areas that fall outside the Wilderness and Wilderness Study Area. Manage those areas identified as Class I to provide primarily for natural ecological changes.
11. Manage Visual Resource Management Class II areas. Changes in any of the basic landscape elements caused by a management activity should not be evident in the landscape. Contrasts may be seen but should not attract attention.
12. Manage Visual Resource Management Class III areas. Management activities that cause changes to the basic landscape elements may create contrasts that are evident and begin to attract attention but the changes should remain subordinate to the existing landscape.
13. Manage Visual Resource Management Class IV areas. Contrasts in the landscape, caused by management activities, may attract attention and be a dominant feature in terms of scale but the contrast should repeat the basic landscape elements.

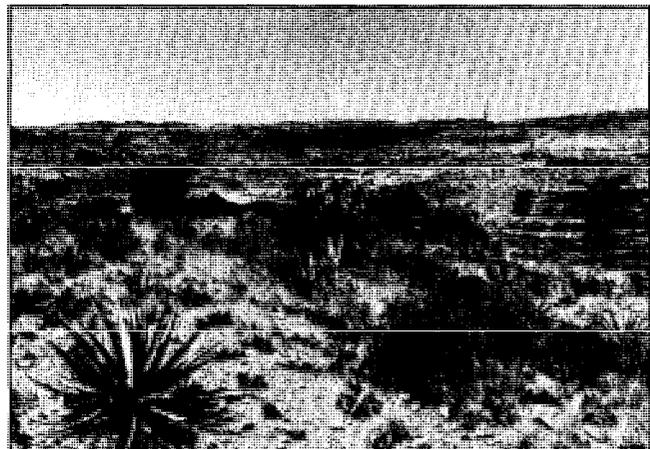
Management Concern 4 - Energy and Minerals

If this alternative is approved, the following actions will be implemented to resolve the Energy and Minerals Management Concern.

1. Continue to make public lands available to mineral entry.
2. Allow common material (sand and gravel) sales in material pits to be established as needed. Refer applicants first to commercial sources.
3. Allow free use of common material sites, as needed, by public agencies. Inventory existing sites to determine management compatibility and suitability for continued use.
4. Withdraw the Gila Box from all forms of appropriation, including mineral entry under the mining laws

and material sales acts. Permit mineral leasing. Issue mineral leases with the following restrictions.

- a. Lease only those minerals that do not require surface excavation for exploration or development (oil, gas or geothermal resources).
 - b. Prohibit leasing in riparian and aquatic habitat and needed buffer areas, pending studies to determine the feasibility and effects of leasing activities.
 - c. Prohibit surface occupancy in riparian and aquatic habitat and the buffer areas except as may be determined allowable by an environmental assessment.
 - d. Prohibit surface occupancy in all wilderness areas.
5. Withdraw the Black Hills Rockhound Area, Round Mountain Rockhound Area and Eagle Creek Canyon from all forms of appropriation, including mineral entry under the mining law, but allow mineral leasing.
 6. Withdraw 40 acres containing the Eagle Creek Bat Cave from all forms of appropriation, including the mining and mineral leasing laws.
 7. Give management emphasis to mineral development in the following areas,
 - a. zeolite deposits in the San Simon Valley.
 - b. Gila Mountains north of Safford and Ft. Thomas.
 - c. Black Rock.



The tops of the Pilares are Inaccessible to livestock, providing an excellent opportunity to study native plants.

- d. the Gila River between Bonita Creek and Spring Canyon.
8. Lease geothermal resources with environmental stipulations to protect other resource values.
9. Keep the lands adjacent to the Gila River in the Safford Valley open to mineral entry.
10. Review all lands closed to mineral entry and determine withdrawals that should be revoked.
11. Provide 640 acres for the future expansion of Christmas Mine.

Management Concern 5 - Cultural Resources

If Alternative D is approved, the following objectives and actions will be implemented to resolve the Cultural Resources Management Concern.

- . Manage for Information Potential.
- . Manage for Public Values.
- . Manage for Conservation.

Table 2-21 identifies the actions that will be implemented to achieve each objective. Appendix 12 defines each objective.

1. Conduct an intensive archaeological site inventory and analysis on the public lands within the District to determine location of sites and management needs.
2. Direct archaeological site inventory emphasis to areas subject to disturbance or which are endangered by a specific action.
3. Thoroughly inventory and evaluate archaeological sites and develop a plan for their interpretation, restoration and protection.
4. Consider protective withdrawals as a viable means to attain protection of highly significant archaeological sites from disturbing actions, when other protective alternatives are inadequate.
5. Provide interim and long-term protection of selected cultural resources threatened by agents of deterioration such as wind, and rain.
6. Implement the Safford District Cultural Resources Patrol Plan and initiate a public information and education campaign.
7. Conduct studies to identify and evaluate socio-cultural values held by the public, and locate and evaluate cultural resource properties and areas possessing socio-cultural values.
8. Allocate a select sample of cultural resources to Management Use. Prepare a cultural resource management plan on these properties. Plan and implement studies to determine the effects of other programs and uses on cultural resources.
9. Evaluate the effectiveness and efficiency of cultural resource protection measures.
10. Allocate select cultural resource sites and areas to scientific use and initiate studies directed at filling the primary cultural resource data gaps.
11. Develop an interpretive program on the San Simon Restoration Project.

Management Concern 6 - Soil Erosion

If this alternative is approved, the following actions will be implemented to resolve the Soil Erosion Management Concern.

1. Provide watershed protection by establishing grazing systems that meet vegetation needs and ensure sufficient ground cover to protect the soil surface from erosion.
2. Provide prompt wildfire control.
3. Construct water control structures to provide additional erosion control.
4. Conduct land treatments to increase vegetation cover and reduce soil erosion.
5. Limit watershed practices, in the upper elevations of the Gila Mountains north of Pima, to check dams and other small water control structures.

Management Concern 7- Vegetation

If Alternative D is approved, the following actions will be implemented to resolve the Vegetation Management Concern.

1. Remove or sell vegetation products as a salvage measure on project areas or other areas where surface disturbance is imminent.

Table 2-21. Management Objectives Achieved by Planned Actions-Alternative D

Actions	Manage for Information Potential	Manage for Public Values	Manage for Conservation
1. Inventory District	X	0	0
2. Inventory proposed projects	X		
3. Manage cultural resources	X	0	0
4. Protect through withdrawal	0	0	X
5. Protect selected cultural resources	X	X	X
6. Patrol sites and educate the public	X	X	X
7. Identify public values	0	X	
8. Conduct impact studies of selected cultural resources	X		
9. Evaluate existing protection measures	X	0	0
10. Conduct studies to fill data gaps	X		

X Primary Objective
Source: Safford District Files

0 Secondary Objective

2. Consider applications for vegetation products (jojoba nuts, cactus fruits) on a case-by-case basis.
3. Authorize firewood cutting in cases of emergency energy shortage or other extreme situations requiring special use considerations.
4. Review and make needed revisions to all existing Allotment Management Plans. Develop Allotment Management Plans and grazing systems, consistent with BLM's allotment categorization and management policy, for the remainder of the allotments.
5. Manage vegetation at watering sites to improve or provide habitat (cover), protect cultural resources, decrease erosion, increase forage and protect Threatened and Endangered species.
6. Use land treatment practices to increase forage production and improve range condition.
7. Use vegetation manipulation treatments to increase forage production and improve range condition in the Bear Springs Flat and Ashurst areas. Apply treatments only on suitable sites likely to respond.

8. Use prescribed fire to increase grass production.
9. Use water control and watershed treatment practices to increase vegetation.
10. Control cockleburrs by maintenance spraying.
11. Manage livestock to increase forage production and improve range condition in the Gila Mountains and at Black Rock.
12. Reactivate plant material studies, concentrating on suitable species for watershed rehabilitation and wildlife and recreation needs.
13. Prohibit harvest of ponderosa pine on public lands.

Management Concern 8 - Water Resources

If Alternative D is approved, the following actions will be implemented to resolve the Water Resources Management Concern.

1. Inventory water resources in the Dos Cabezas Mountains to obtain additional information for management of wildlife, particularly Threatened and Endangered species.
2. Manage the Bonita Creek area primarily for water yield and quality.
3. Intensively manage livestock in Bonita Creek to protect vegetation cover, maintain water quality, reduce run-off and increase water percolation for storage to allow for continued discharge flow during dry periods.



A thick cover of native grasses grows atop Sombrero Butte east of Mammoth.

4. Sample Aravaipa Creek weekly for bacterial analysis during peak recreation use. When pollution exceeds established standards for Primary Contact Water, notify the public of the problem so they can decide whether they want to use the area.
5. Enforce state and federal water quality standards for mining operations, in coordination with the state.
6. Collect water quality data at specific locations in response to management concerns.

Management Concern 9 - Air Quality

No management actions are planned.

Management Concern 10 - Paleontological Resources

If this alternative is approved, the following actions will be implemented to resolve the Paleontological Resources Management Concern.

1. Prohibit any proposal that would disturb any object of antiquity or affect the integrity of lands in the 111 Ranch Paleontological Area. Retain lands in public ownership at least until the significance of the area has been evaluated by specialists.
2. Inventory and evaluate geologic features and develop a plan for the interpretation and management of those features of interest to the public. Give particular attention to paleontological sites in the "Breaks" and eroded slopes of Bear Springs Badlands.
3. Develop a sensitivity map of fossil-bearing geologic formations on public lands in the District.

Summary of Environmental Effects

The following Table 2-22 is a summary of the anticipated environmental effects anticipated through implementation of the various alternatives.

Table 2-22. Summary of Environmental Effects

Action	Alternative A Proposed Action)	Alternative B	Alternative C	Alternative D (No Action)
WATER				
1. ACEC management	Low benefits to water quality and quantity by management of 4 ACECs on 17,734 acres.	Low benefits to water quality and quantity by management of 4 ACECs on 78,522 acres.	Low benefits to water quality and quantity by management of 3 ACECs on 27,225 acres.	No significant effects.
2. Restrictions on mining and mineral material sales	Low benefits due to lower water sedimentation on the 2,411 acres with restrictions.	Moderate benefits to water quality from mining restrictions on 11,316 acres.	No significant effects,	No significant effects.
3. OHV designations	Low benefits to water quality from OHV restrictions on 1,310,713 acres by reducing sediment in water.	Low benefits to water quality from OHV restrictions on 1,400,000 acres by reducing sediment in water.	Low impacts to water quality from increased sedimentation due to OHV use on 1,257,513 acres.	Low benefits to water quality by restricting OHV use to existing roads and trails District-wide.
SOIL				
1. Construction and/or repair of detention dams	Moderate benefit. Save 500 ac. feet of soil per year.	Moderate benefit. Save 500 ac. feet of soil per year.	Moderate benefit. Save 500 ac. feet of soil per year.	Moderate benefit. Save 300 ac. feet of soil per year.
2. OHV designations	Designation of 1,310,713 acres as "limited" and 87,879 acres as "closed" - low benefits. 1,708 acres "open" - low impacts.	Restrictions to OHVs on 1,400,000 acres would give a low benefit to soil by reducing soil disturbance and erosion.	88,931 acres as "limited" and 85,384 acres as "closed" would give low benefits by reducing soil erosion caused by vehicles.	Restrictions on OHVs of 1,400,000 acres would provide a low benefit to soil by reducing disturbance and erosion.
RIPARIAN VEGETATION				
1. ACEC management	High benefits on 1,500 acres and 40 miles of riparian vegetation in 5 ACECs.	High benefits to 8,455 acres of riparian vegetation due to management of 4 ACECs.	Moderate benefits to 460 acres of riparian areas in 3 ACECs.	Moderate benefits on 60 riparian areas covering 1,267 acres.
2. OHV designations	Low benefits from limiting vehicle disturbance.	Restrictions on OHV use would provide low benefits by minimizing vegetation disturbance.	Designation of most of the District as "open" would cause moderate impacts to 35 riparian areas that would be used by OHVs.	Designation of most of the District as "limited" would give low benefits to riparian areas that would be used by OHVs.
3. Disposal and acquisition of lands	Disposal of less than 25 acres - low impact. Acquisition of other riparian areas - moderate benefit.	Acquisition of riparian vegetation - moderate benefit.	Acquisition of riparian vegetation - moderate benefit.	Acquisition of riparian vegetation - low benefit.

Table 2-22. Summary of Environmental Effects (continued)

Action	Alternative A Proposed Action)	Alternative B	Alternative C	Alternative D (No Action)
4. Acquisition of instream flow water rights and water rights	Moderate benefits to 5 riparian areas on 350 acres.	Moderate benefit by assuring continual necessary flow to riparian areas.	Moderate benefit by assuring continual necessary flow to riparian areas.	No action.
5. Restrictions on mineral leasing	Low benefits to 2,411 acres of riparian habitat through NSO stipulations.	Low benefits to 2,397 acres of riparian habitat through NSO stipulations.	Low benefits to 570 acres of riparian habitat through NSO stipulations.	Low benefits to 274 acres of riparian habitat through NSO stipulations and mineral withdrawal.
UPLAND VEGETATION				
1. Prescribed land treatments	Low benefits from seedings, prescribed fire, etc.	Low benefits from seedings, prescribed fire, etc.	Low benefits from seedings, prescribed fire, etc.	Low benefits from seedings, prescribed fire, etc.
2. ACEC management	No significant effect.	Low benefits from management of 3 ACECs (72,684 acres) by increasing vegetation density and diversity.	No significant effect.	No significant effect.
3. OHV designations	"Limited" or "closed" OHV designation on 1,398,592 acres would provide low benefits by protecting vegetation from vehicular disturbance.	"Limited" or "closed" OHV designation on 1,400,000 acres would provide low benefits by protecting vegetation from vehicular disturbance.	Designation of 1,257,513 acres as "open" would create low impacts from vehicular disturbance.	"Limited" or "closed" OHV designation on 1,400,000 acres would provide low benefits by protecting vegetation from vehicular disturbance.
WILDLIFE HABITAT				
1. ACEC management	Management of 26,861 acres in 9 areas would give moderate benefits for wildlife by protecting unique habitats and riparian ecosystems. Management of 4,717 acres in 4 areas would give low benefits by protecting necessary habitat.	Management of 32,447 acres in 9 areas would moderately benefit wildlife habitat by protecting and enhancing habitat.	Management of 42,988 acres in 10 areas would give moderate benefits to wildlife habitat by protecting and improving habitat.	Designation of riparian areas as ACECs would provide moderate benefits to wildlife by protecting riparian habitat. Management of Gila River and Mescal Creek would give moderate benefits to 17 priority species.
2. OHV designations	Closure of bighorn sheep lambing areas would give high benefits to bighorn sheep. "Limited" and "closed" areas would give high benefits to 17 priority wildlife species and their habitat.	Closure of bighorn sheep lambing areas would give high benefits to bighorn sheep by reducing human harassment during critical periods. "Limited" and "closed" areas would give high benefits to 36 priority species and their habitat.	"Open" OHV areas would moderately impact wildlife habitat.	"Limited" and "closed" areas would give high benefits to wildlife habitat.

Table 2-22. Summary of Environmental Effects (continued)

Action	Alternative A Proposed Action)	Alternative B	Alternative C	Alternative D (No Action)
3. Disposal and acquisition of lands	Acquisitions would provide high benefits by acquiring wildlife habitat.	Disposal actions would provide low impacts to wildlife by loss of habitat. Acquisitions would give high benefits by acquiring wildlife habitat.	Disposal of lands in 9 locations provides low impacts due to loss of habitat. Acquisitions would give high benefits by acquiring wildlife habitat.	Acquisitions would give high benefits by acquiring wildlife habitat.
4. Restrictions on mining and mineral material sales	Withdrawal of 9,829 acres from mineral entry, NSO stipulations on 14,052 acres and no mineral materials sales on 12,371 acres would give high benefits to wildlife by protecting their habitat.	Withdrawal of 12,652 acres from mineral entry would highly benefit wildlife habitat. No mineral material sales on 11,316 acres would moderately benefit 17 species. NSO stipulations (21,669 acres) have moderate benefits for 15 species.	Withdrawal of 2,411 acres from mineral entry, NSO stipulations on 7,525 acres and no mineral materials sales on 4,316 acres would give low benefits to 11 priority species by protecting their habitat.	No significant impact.
5. Acquisition of instream flow water rights and water rights	Moderate benefit by providing continued water on 5 streams, giving protection to 15 priority species.	Moderate benefits for 17 species by increased water quality protection.	Acquisition of instream flow water rights on 5 perennial streams and 4 intermittent streams would give low benefits to 3 priority species.	Management of Bonita Creek for Safford's water supply would moderately benefit wildlife by ensuring continued water supply.
CULTURAL/PALEONTOLOGICAL RESOURCES				
1. Restrictions on mining and mineral material sales	Restrictions on Bear Springs Badlands (2,927 acres) would provide high benefits to paleontological resources by protecting them from disturbance.	Restrictions on Bear Springs Badlands (4,127 acres) would provide high benefits to paleontological resources by protecting them from disturbance. Moderate benefits to cultural resources from mining and material sales restrictions on other areas.	NSO stipulations would provide low benefits to three archaeological sites totaling 320 acres.	Withdrawal from mineral entry and NSO stipulations would moderately benefit cultural resources.
2. ACEC management	ACEC management on 6 ACECs for 14,716 acres would provide moderate benefits by protective actions.	ACEC management on 7 ACECs for 35,899 acres would provide moderate benefits by protective actions.	ACEC management on 4 ACECs for 8,853 acres would provide moderate benefits by protective actions.	Designating riparian areas as ACECs would have moderate benefits to cultural resources by protecting the condition of these areas.

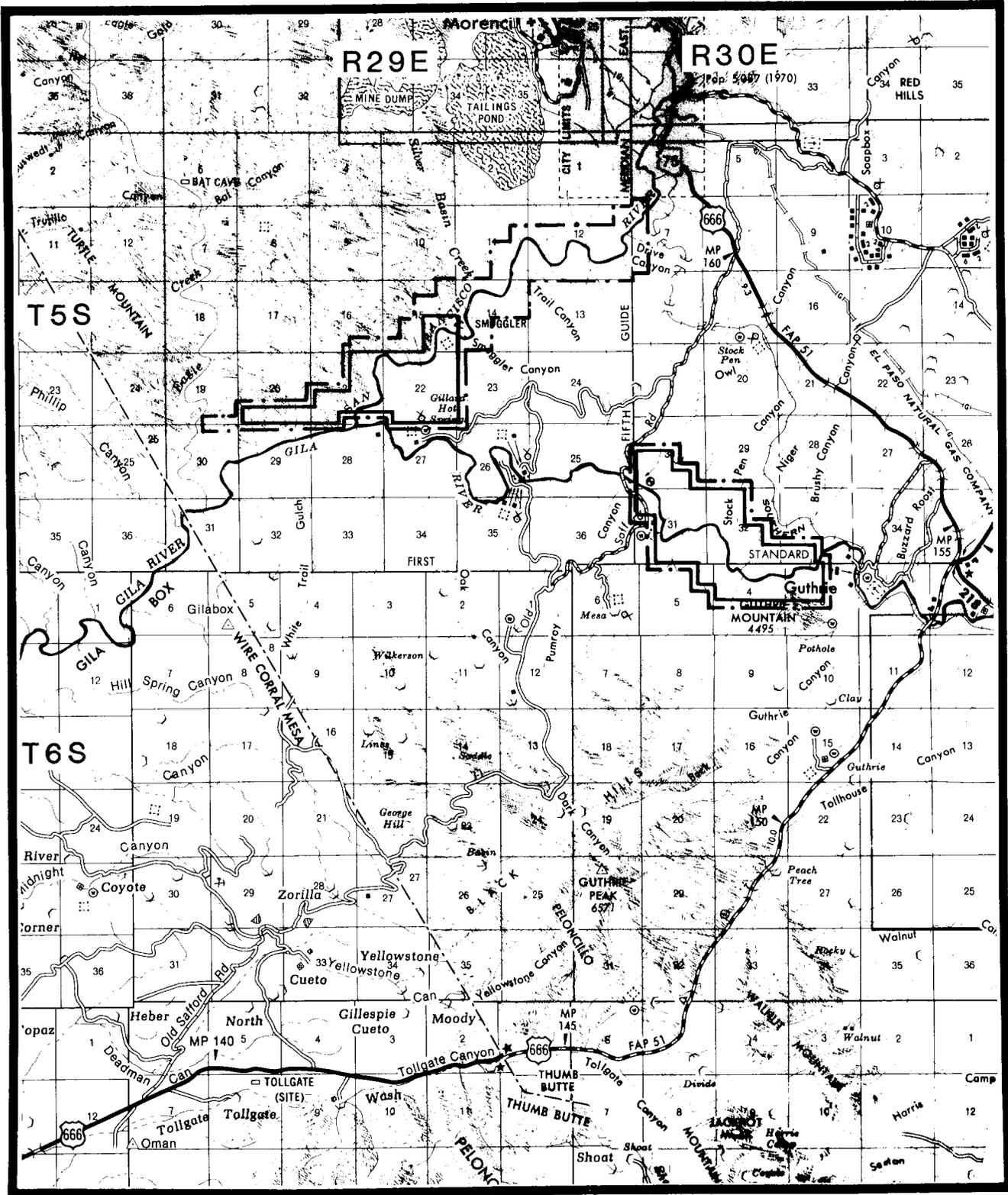
Table 2-22. Summary of Environmental Effects (continued)

Action	Alternative A Proposed Action)	Alternative B	Alternative C	Alternative D (No Action)
3. OHV designations	Closure of 2 ACECs to vehicular use would moderately benefit cultural resources by preventing damage associated with vehicular use.	Closure of 2 ACECs to vehicular use would moderately benefit cultural resources by preventing damage associated with vehicular use.	Designation of 1,257,513 acres as "open" would give moderate impacts to cultural resources by increasing damage by vehicles.	Designation of 1,393,301 acres as "limited" to OHVs would provide moderate benefits by protecting cultural resources from damage by vehicular use.
4. Construction and/or repair of detention dams	High impacts to 37 archaeological sites on 1,300 acres.	High impacts to 37 archaeological sites on 1,300 acres.	High impacts to 37 archaeological sites on 1,300 acres.	High impacts to 37 archaeological sites on 1,300 acres.
SOCIO-ECONOMIC				
1. Restrictions on mining and mineral material sales	Mineral withdrawals on 9,829 acres, NSO stipulations on 14,052 acres and no mineral material sales on 12,371 acres would have a low economic impact by precluding mineral exploration.	Mineral withdrawals on 12,652 acres, NSO stipulations on 21,669 acres, no mineral material sales on 21,316 acres would have a low economic impact on the economy.	Withdrawal of 2,411 acres from mineral entry, NSO stipulations on 7,525 acres and no mineral materials sales on 4,316 acres would have a low impact to the economy.	Withdrawal from mineral entry would have a low impact on the economy.
2. ACEC management	Low benefits to the local economy due to increased primitive recreation use.	Low benefits to the local economy due to increased primitive recreation use.	Low impacts to local economy by decreased primitive recreation use.	Low benefits to the local economy due to increased primitive recreation use.
3. OHV designations	No significant impact.	No significant impact.	Low benefit to the local economy that provides goods and services to OHV enthusiasts.	No significant impact.
4. Disposal of lands	Low impacts to the economy from loss of PILT payments.	Low impacts to the economy from loss of PILT payments.	Low impacts to the economy from loss of PILT payments.	No significant impact.

Source: Safford District Files.

GILA BOX ONA ACEC

MAP 1

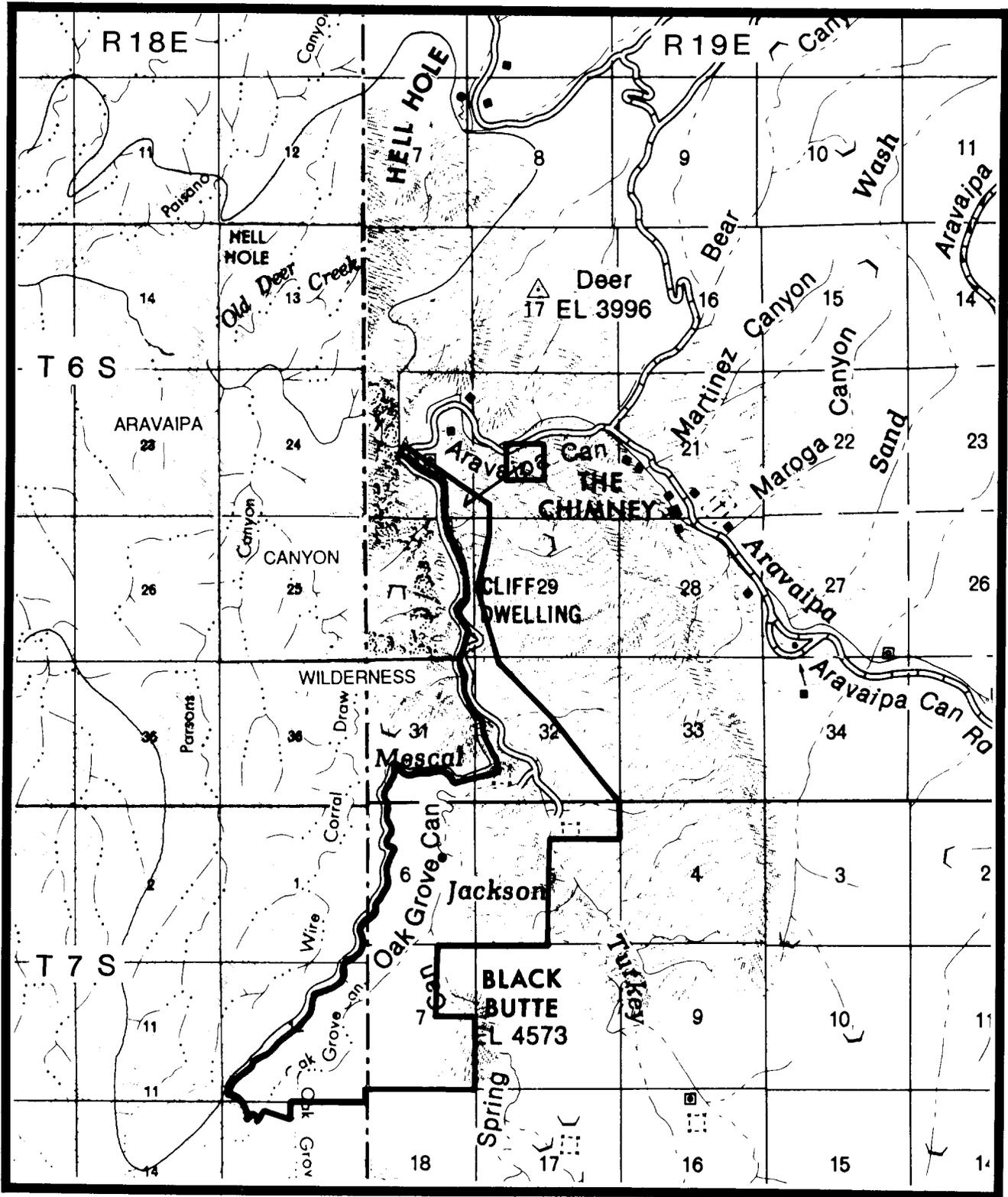


ALTERNATIVE A
 ALTERNATIVE B



TURKEY CREEK RIPARIAN ACEC

MAP 2

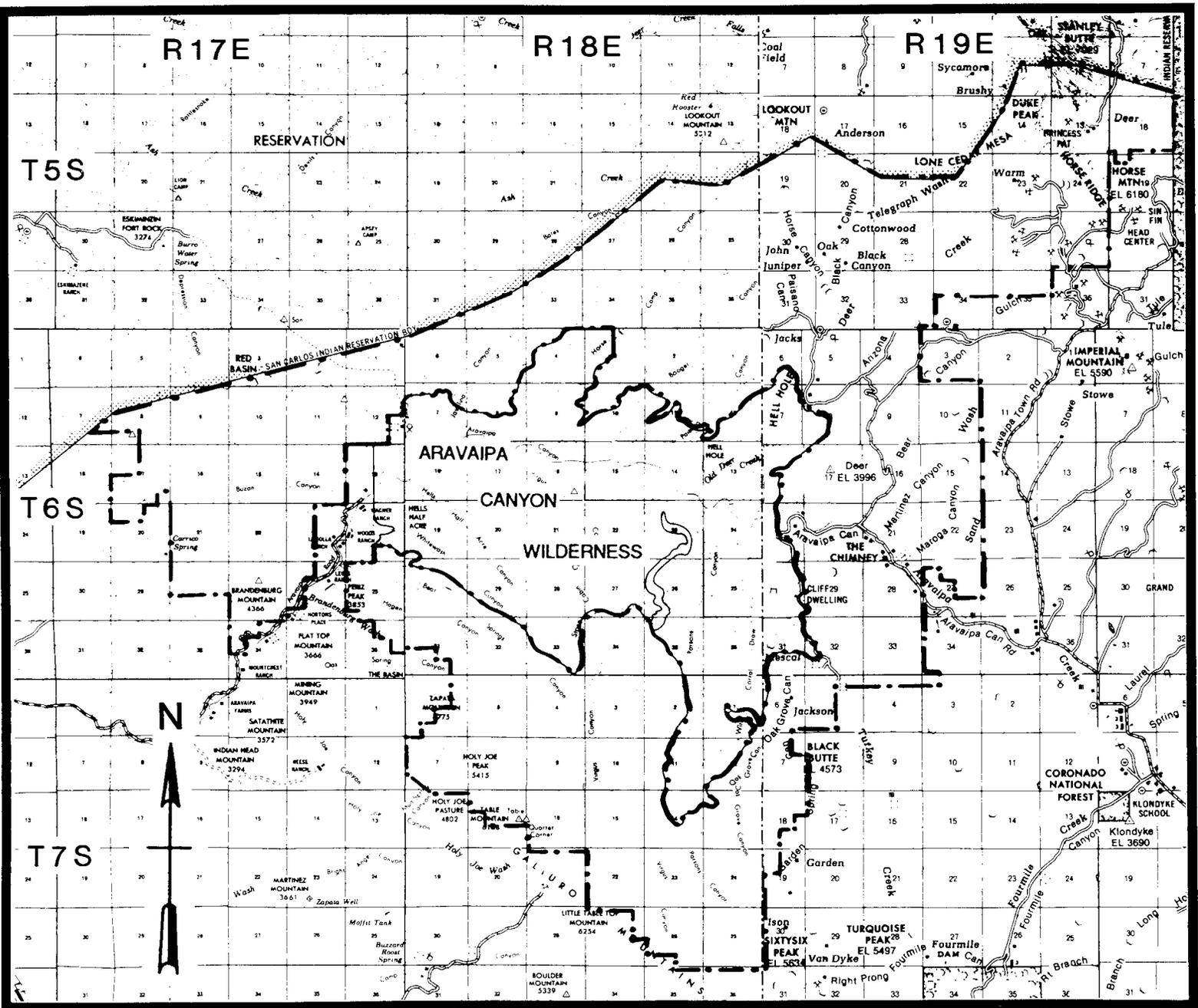


ALTERNATIVE A 
WILDERNESS BOUNDARY 

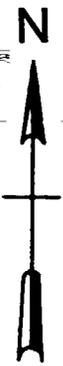
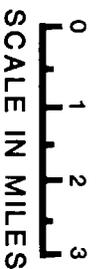


ARAVAIPA WATERSHED ACEC

MAP 3

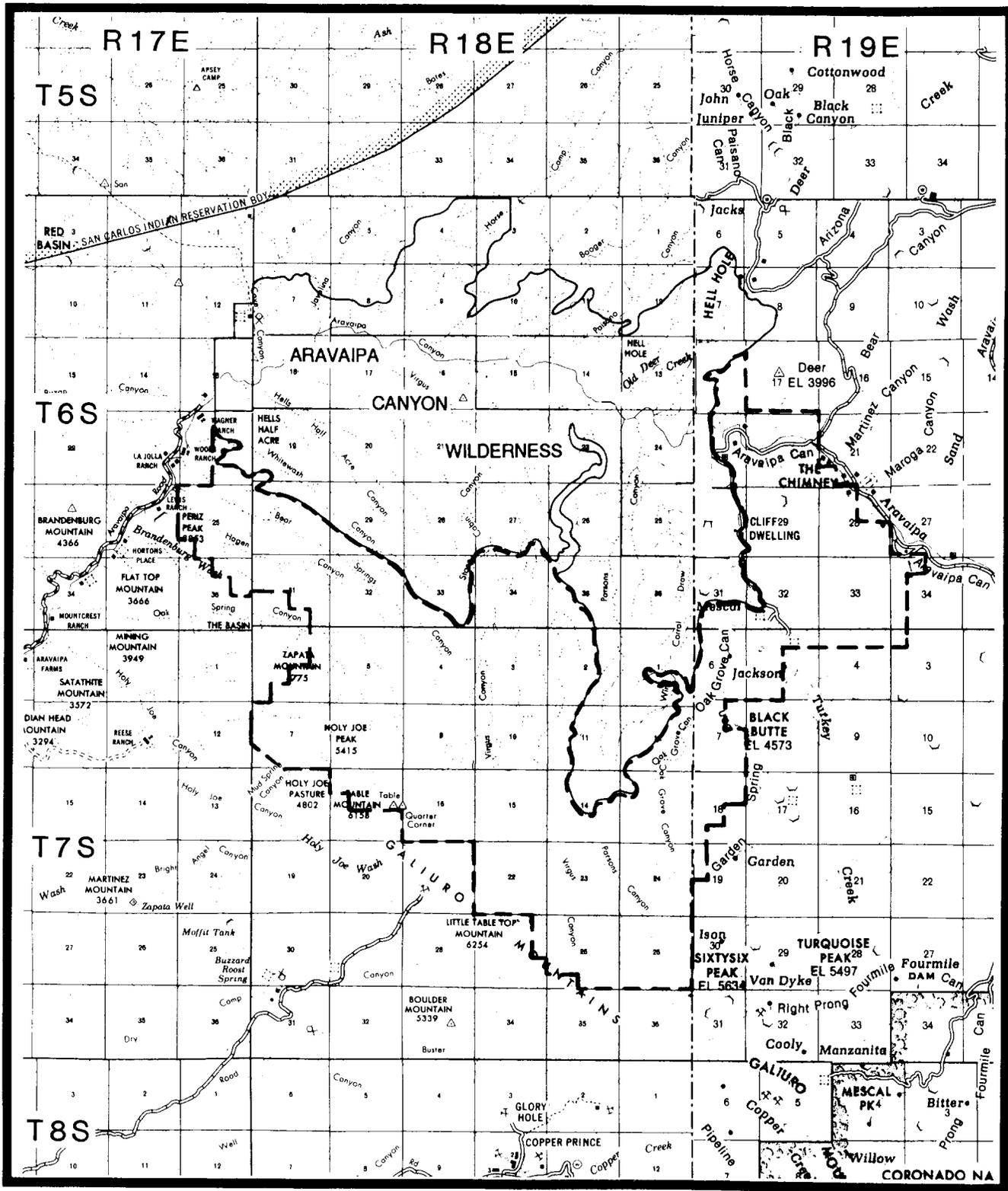


ALTERNATIVE B WILDERNESS BOUNDARY



SOUTH RIM ACEC

MAP 4

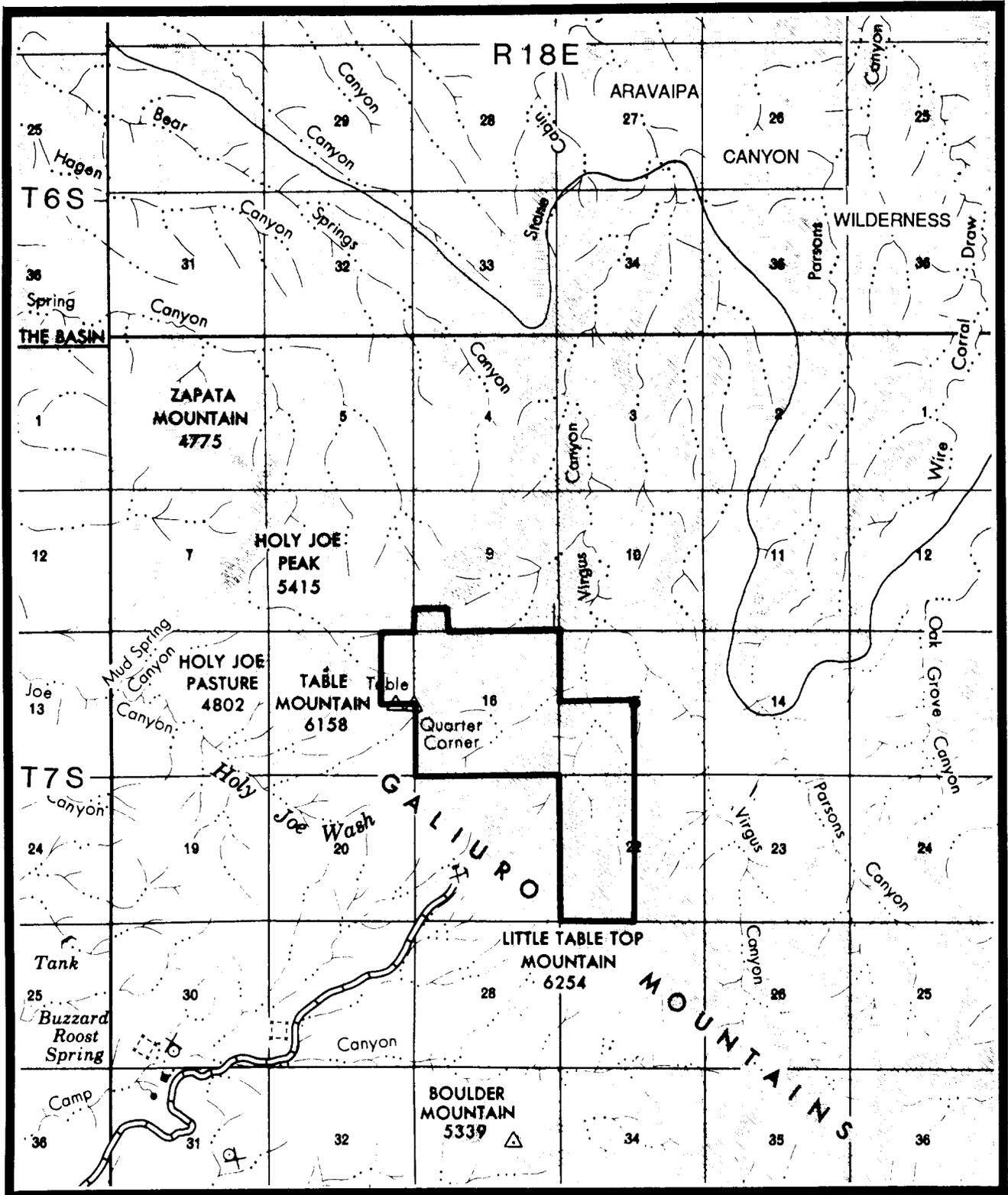


ALTERNATIVE C 
 WILDERNESS BOUNDARY 



TABLE MOUNTAIN RNA ACEC

MAP 5

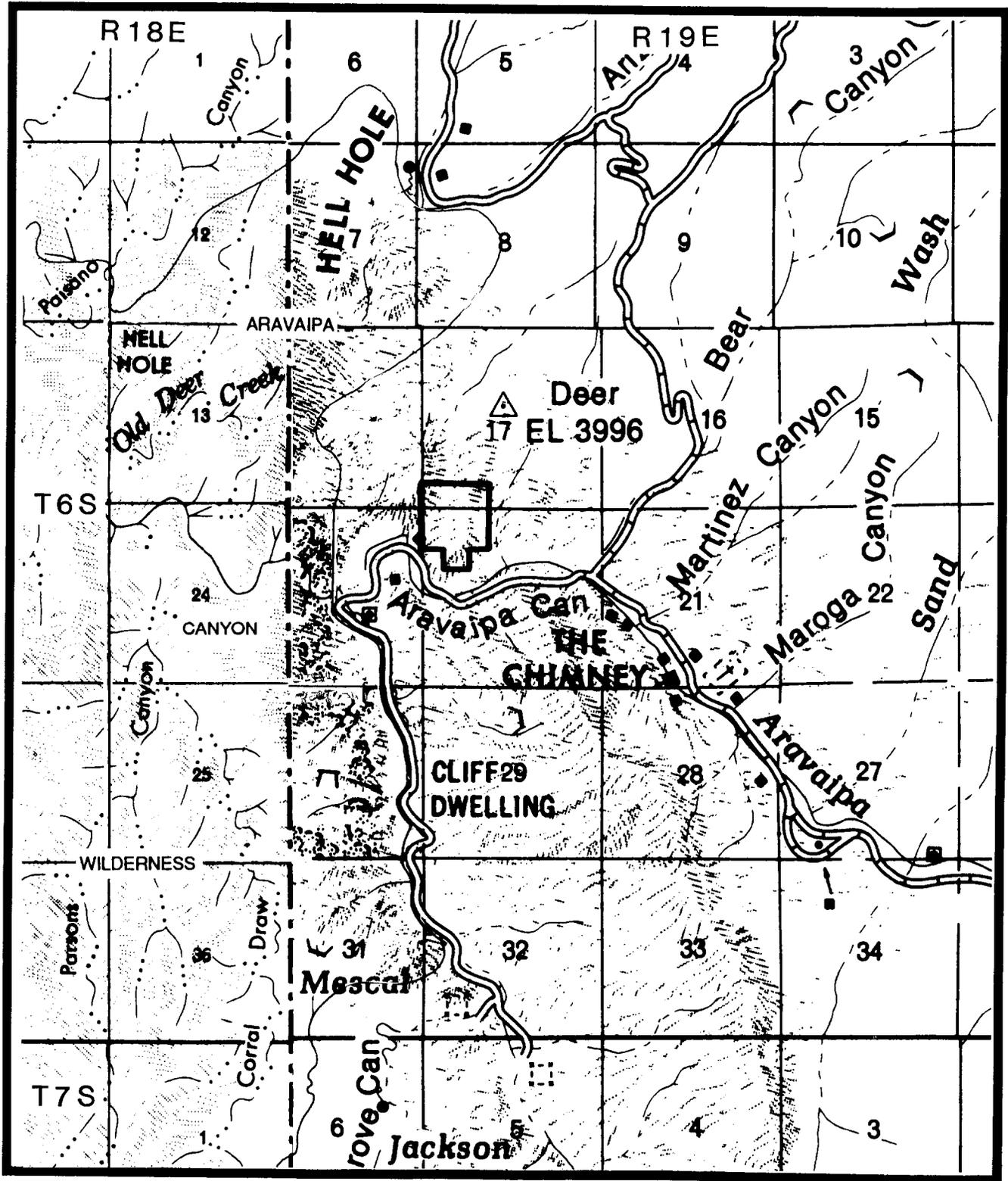


ALTERNATIVES A, B & C 
 WILDERNESS BOUNDARY 



DESERT GRASSLANDS RNA ACEC (PILARES)

MAP 6



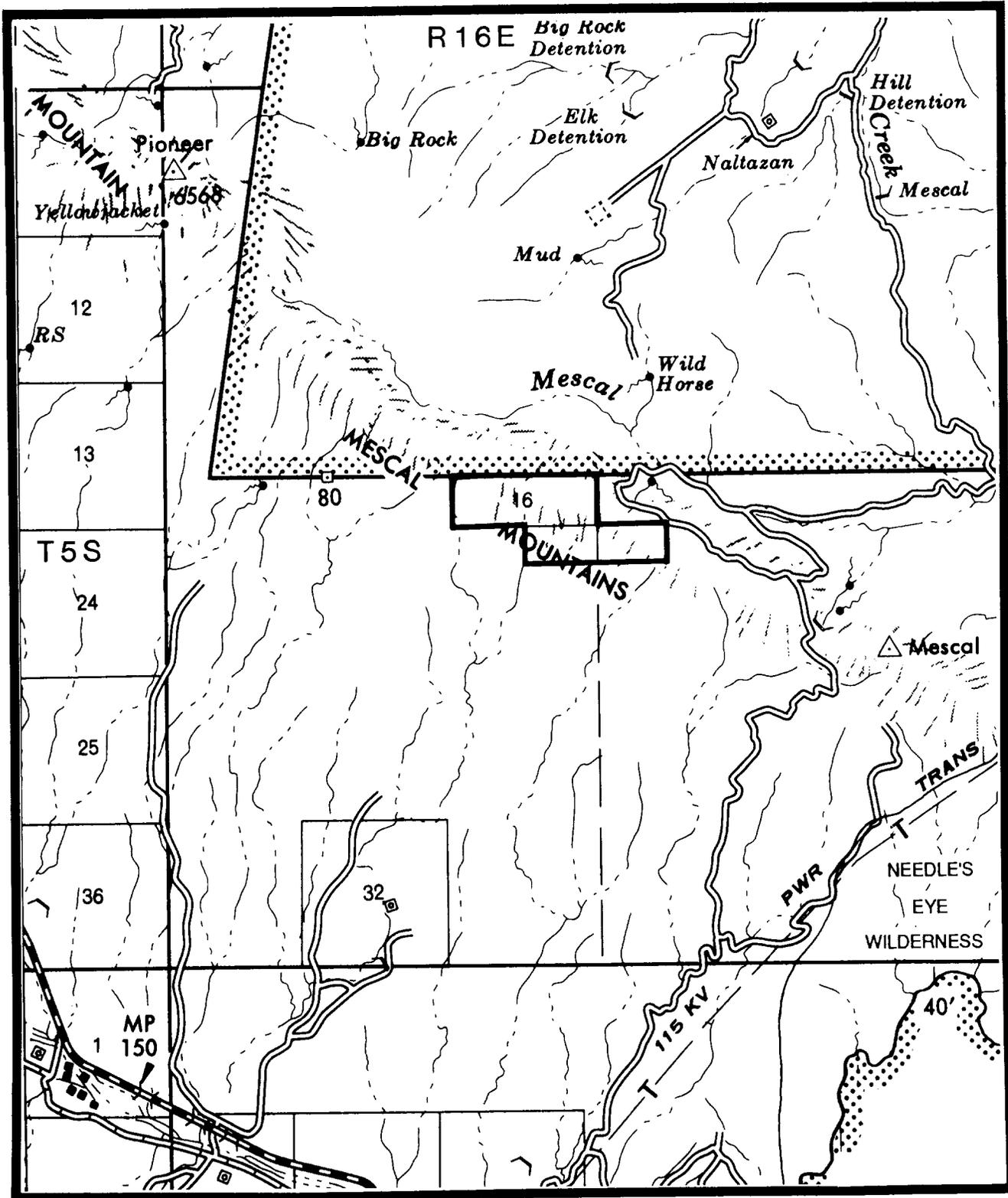
ALTERNATIVES A, B & C
 WILDERNESS BOUNDARY



SCALE IN MILES

DESERT GRASSLANDS RNA ACEC (MESCAL RIDGE)

MAP 7



ALTERNATIVES A, B & C 

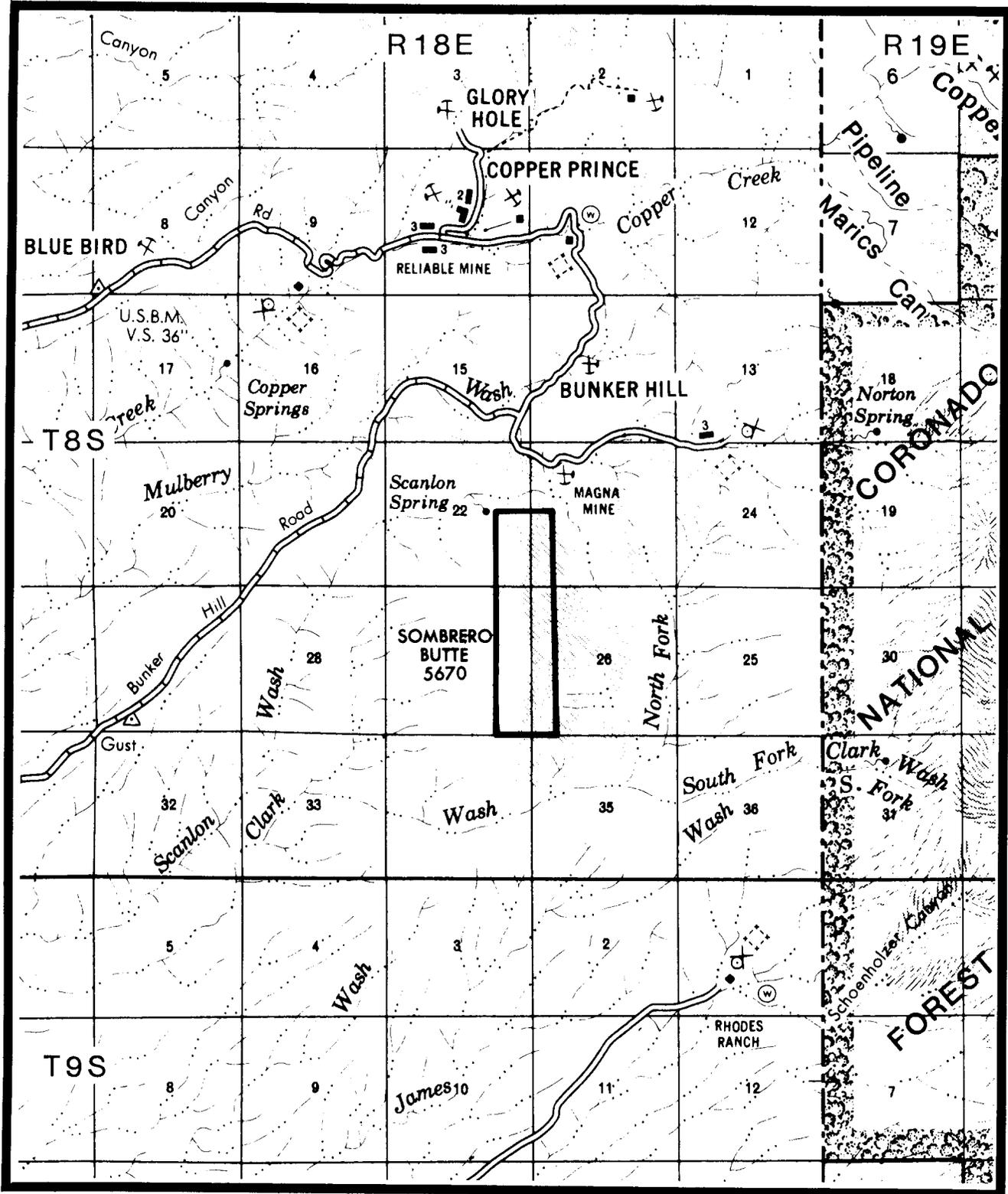
WILDERNESS BOUNDARY 



SCALE IN MILES

DESERT GRASSLANDS RNA ACEC (SOMBRERO BUTTE)

MAP 8

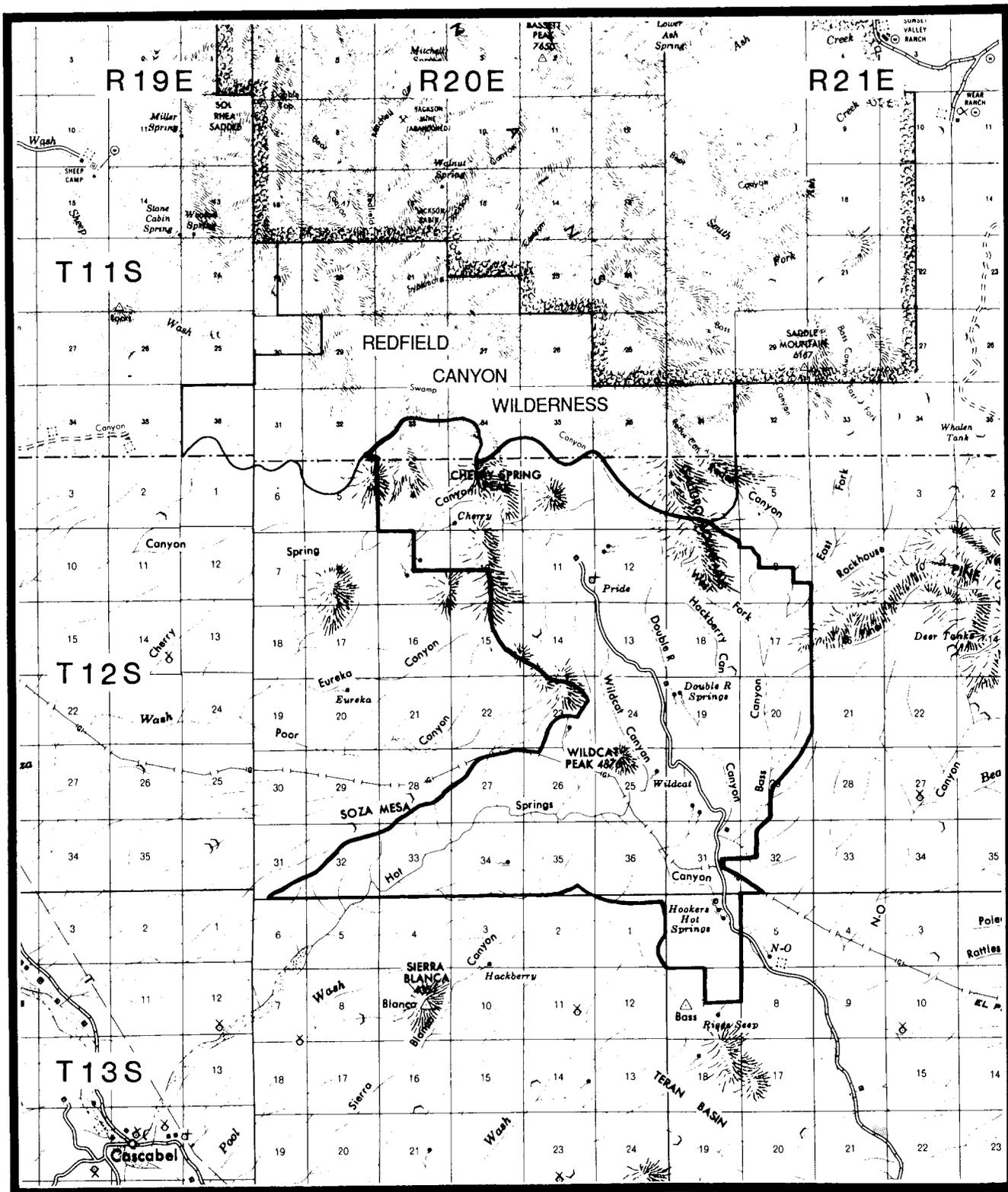


ALTERNATIVES A, B & C



SWAMP SPRINGS-HOT SPRINGS WATERSHED ACEC

MAP 9

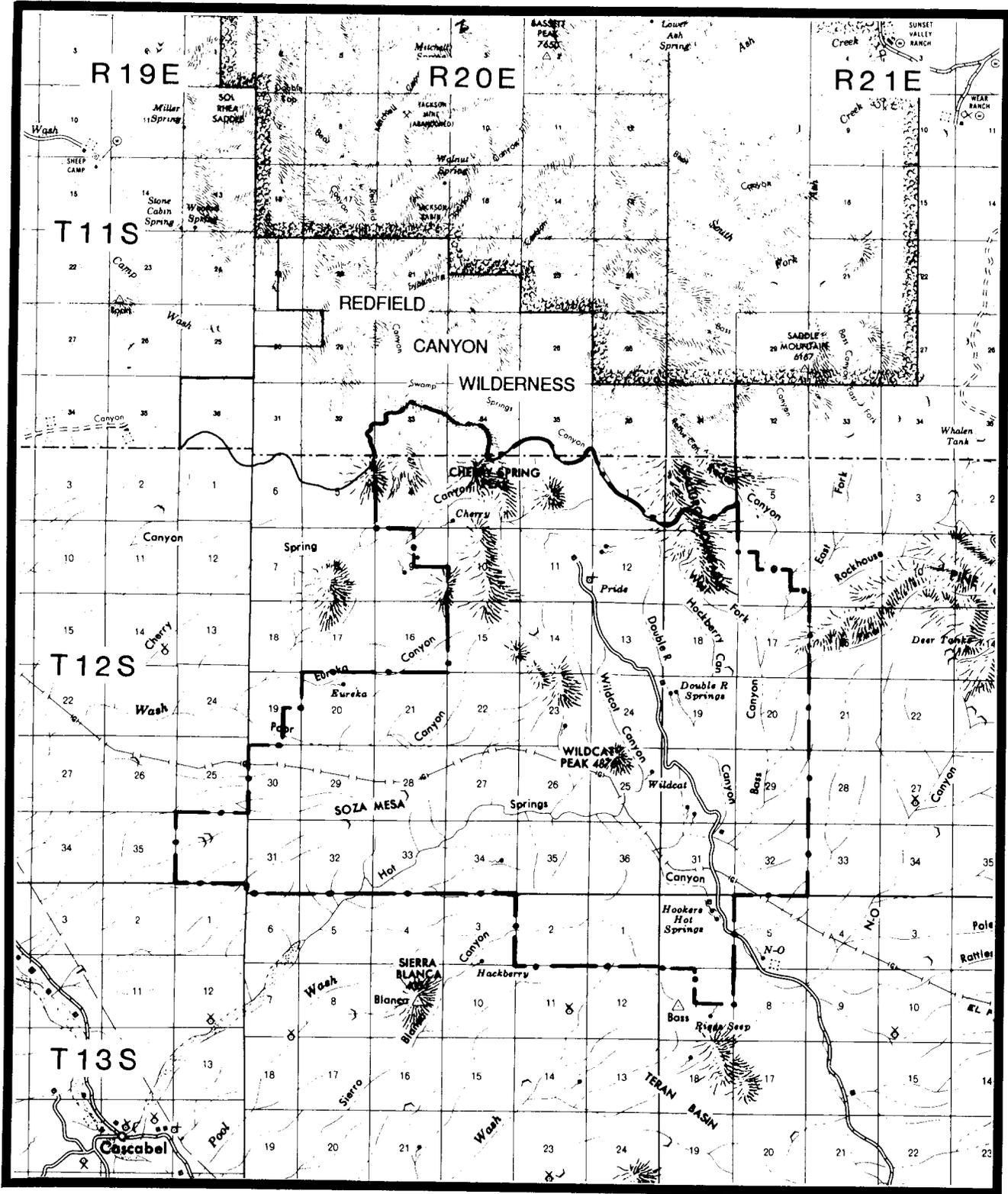


ALTERNATIVE A 
 WILDERNESS BOUNDARY 



MULESHOE RANCH ACEC

MAP 10



ALTERNATIVE B **- - - - -**

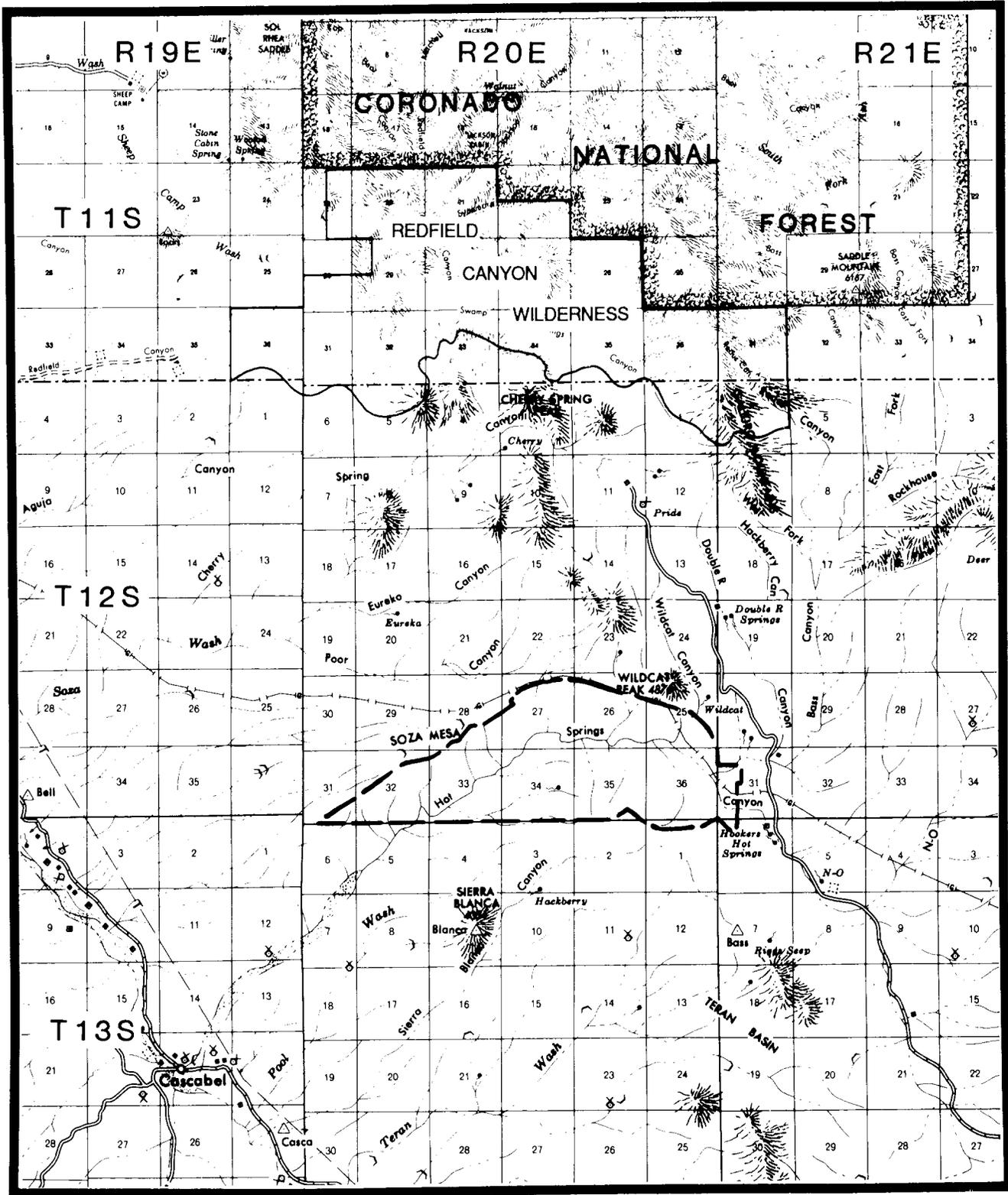
WILDERNESS BOUNDARY **—————**



SCALE IN MILES

MULESHOE RIPARIAN ACEC

MAP 11



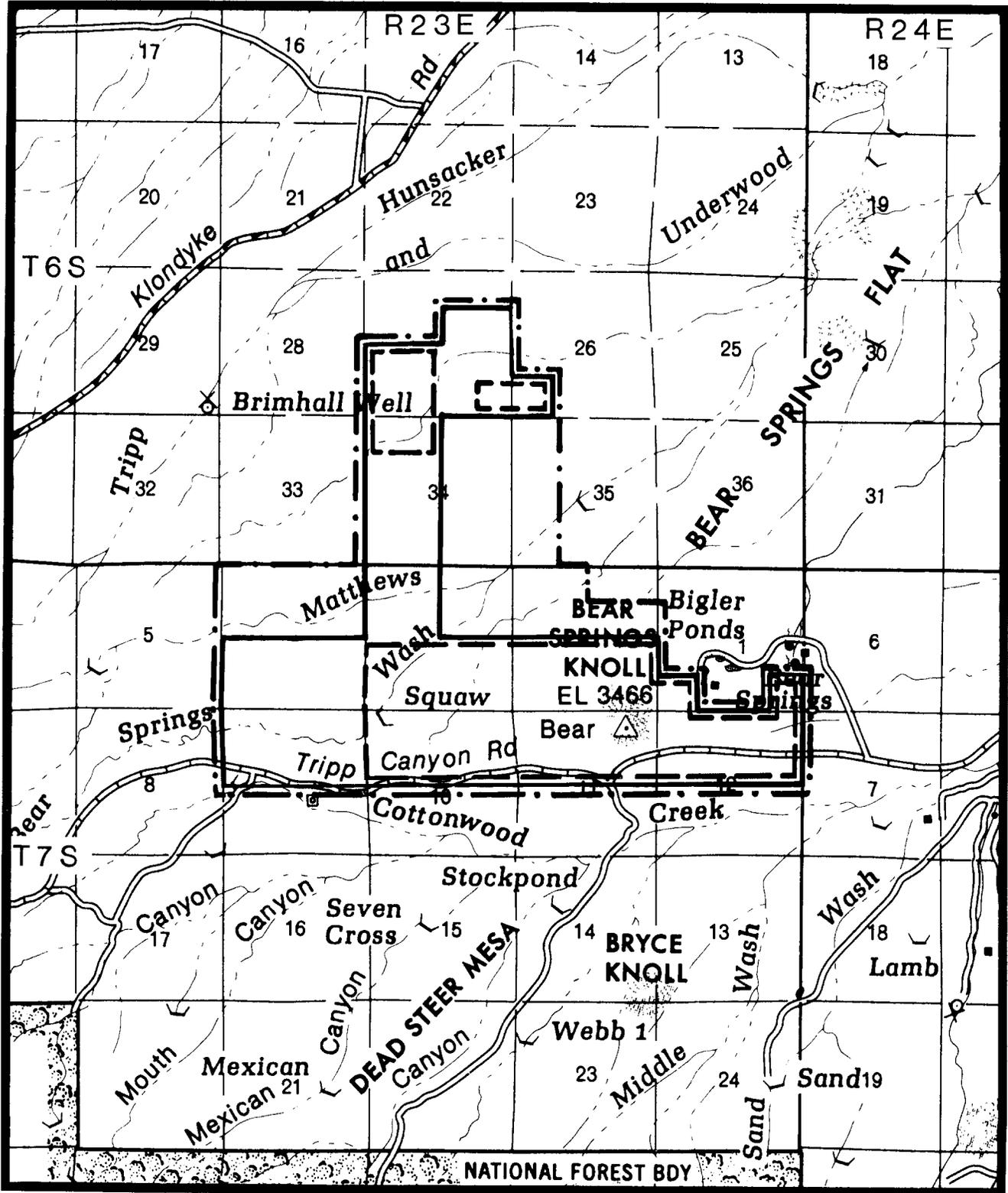
ALTERNATIVE C ————

WILDERNESS BOUNDARY ————



BEAR SPRINGS BADLANDS ACEC

MAP 12

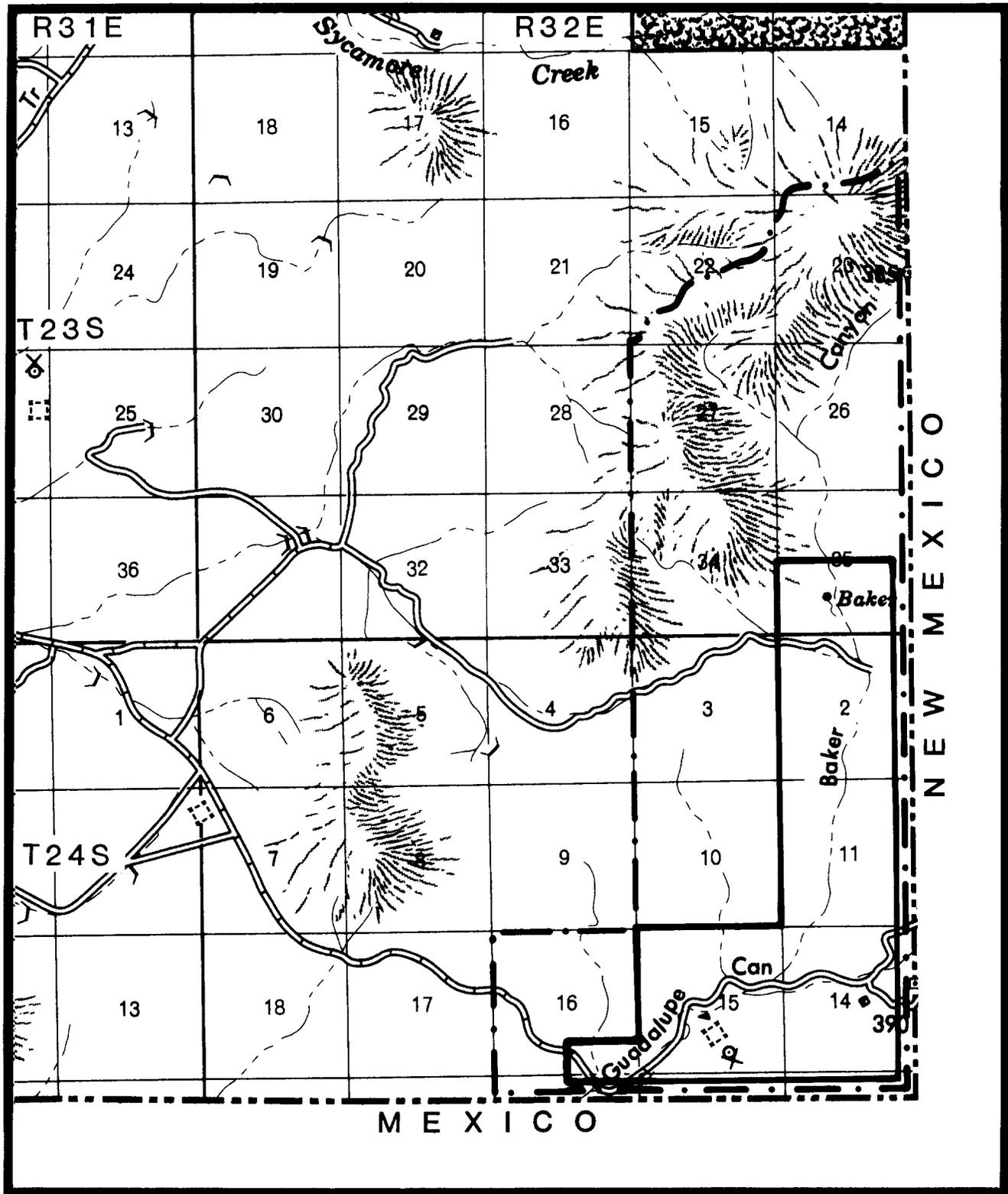


- ALTERNATIVE A
- ALTERNATIVE B
- ALTERNATIVE C



GUADALUPE CANYON ONA ACEC

MAP 13



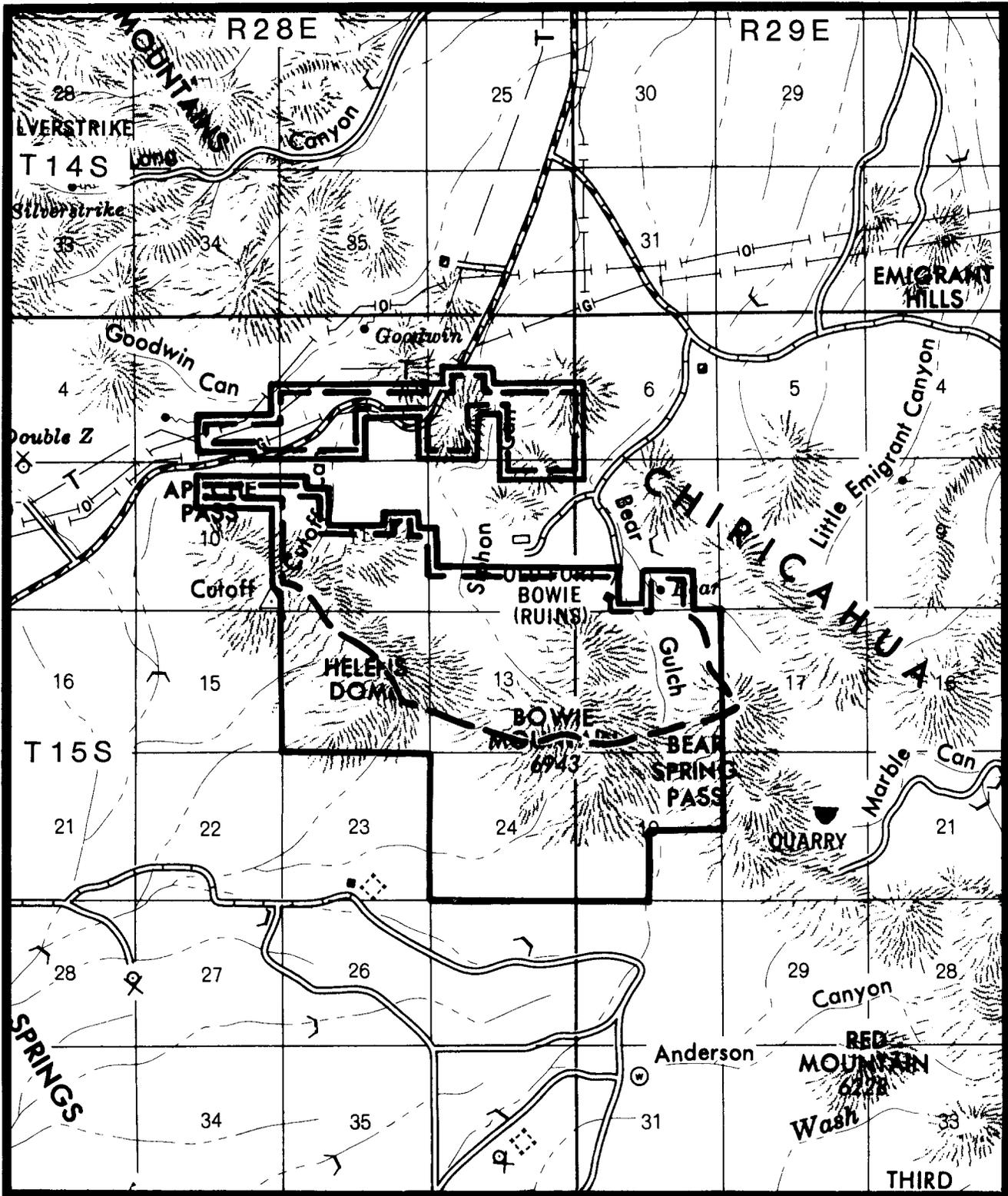
ALTERNATIVES A & C 
ALTERNATIVE B 



SCALE IN MILES

BOWIE MOUNTAIN SCENIC ACEC

MAP 14



ALTERNATIVES A & B 

ALTERNATIVE C 



SCALE IN MILES

CORONADO MOUNTAIN RNA ACEC

MAP 15

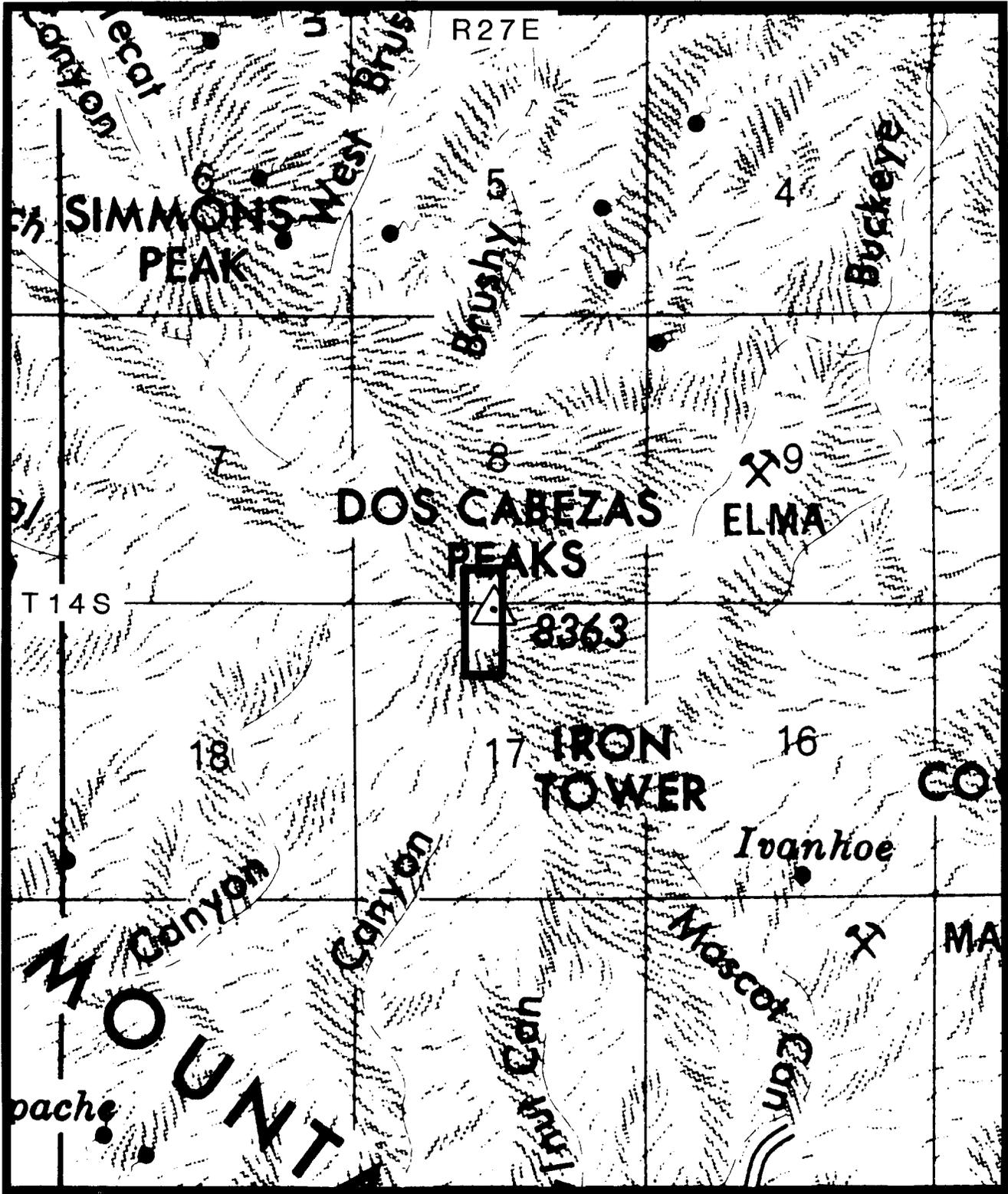


ALTERNATIVES A & B 
ALTERNATIVE C 



DOS CABEZAS PEAKS ACEC

MAP 16



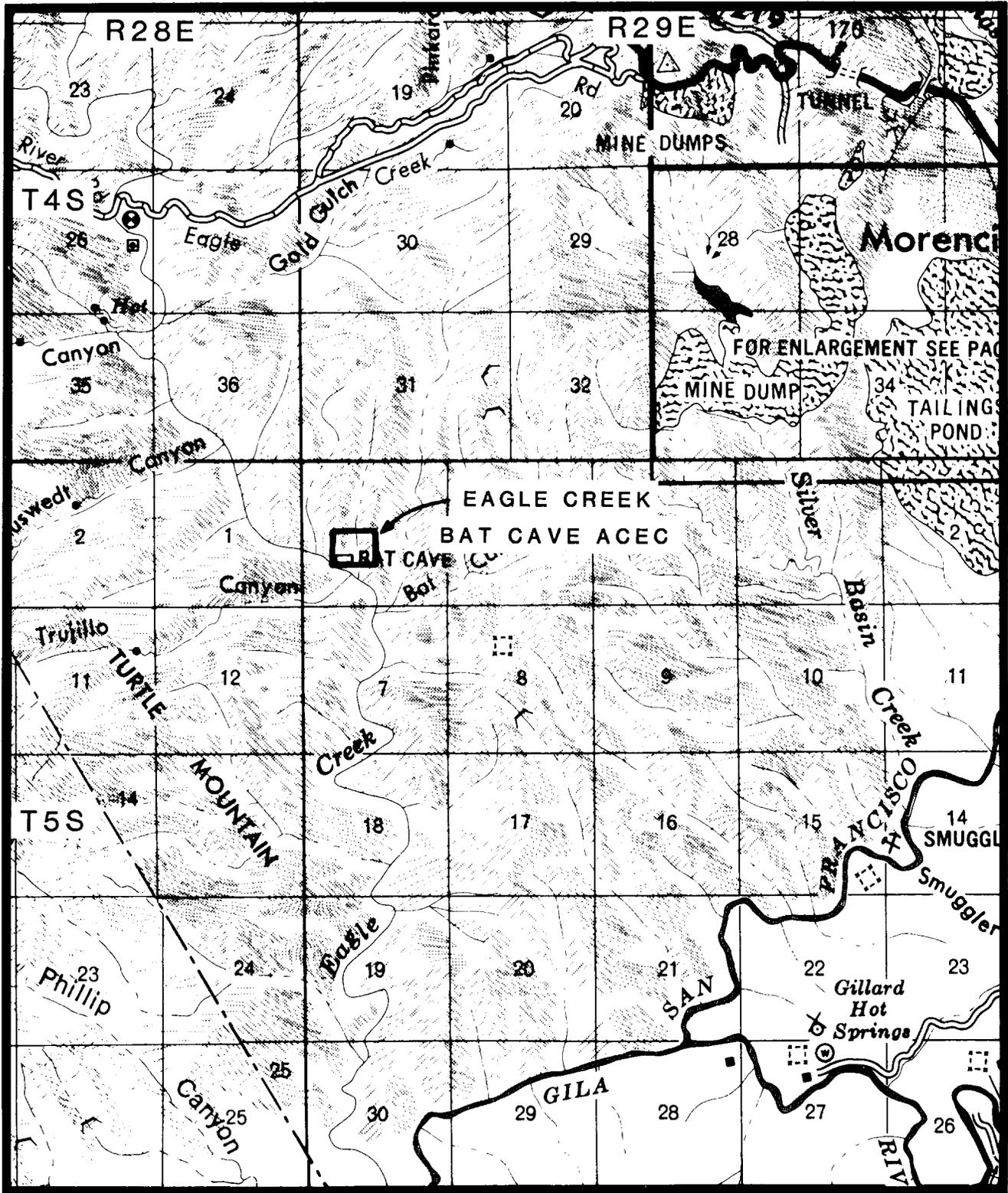
ALTERNATIVES A & B 



SCALE IN MILES

EAGLE CREEK BAT CAVE ACEC

MAP 17



ALTERNATIVES A & C 

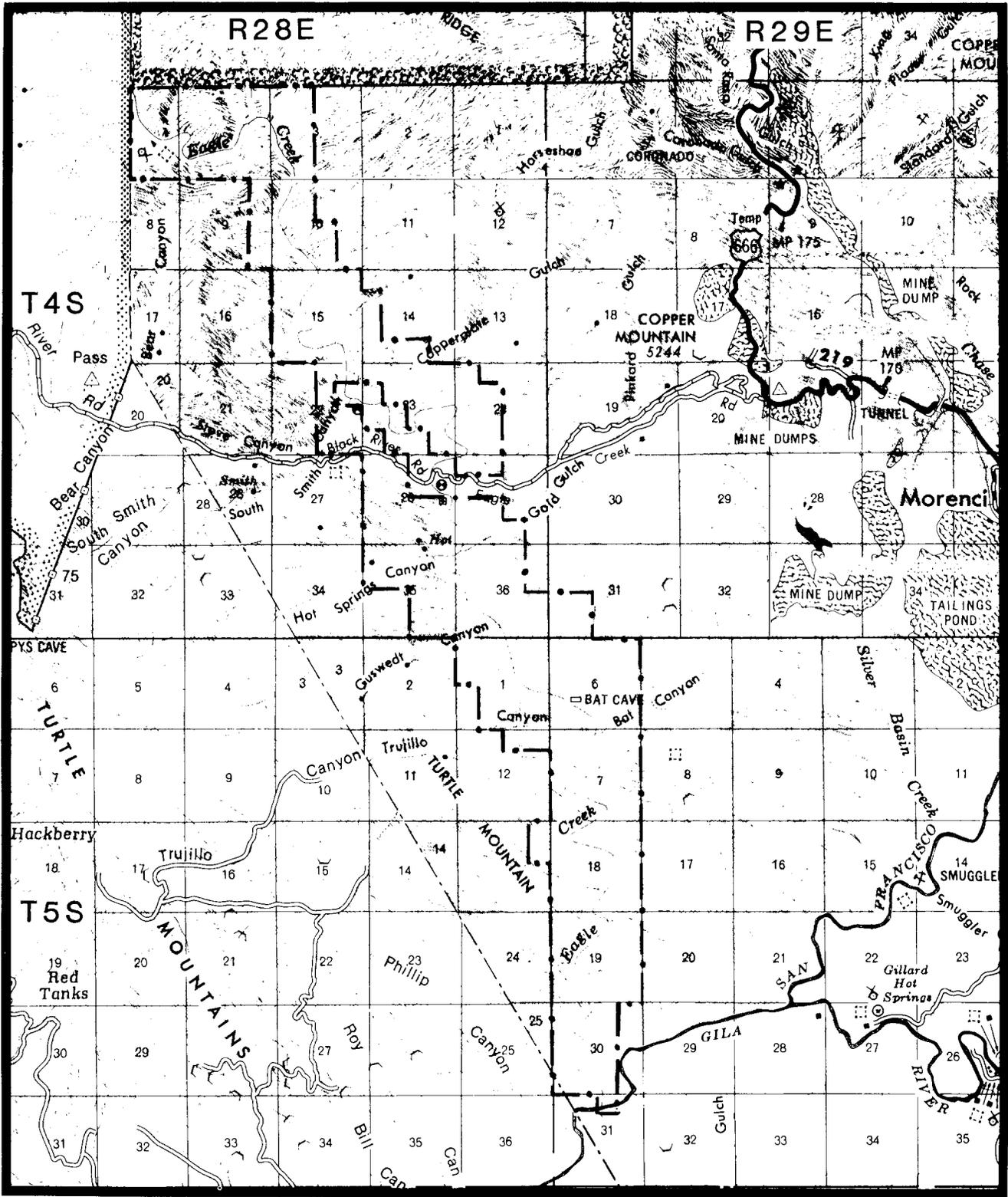


SCALE IN MILES

Basemap © Az. Dept. of Trans.

EAGLE CREEK CANYON ONA ACEC

MAP 18

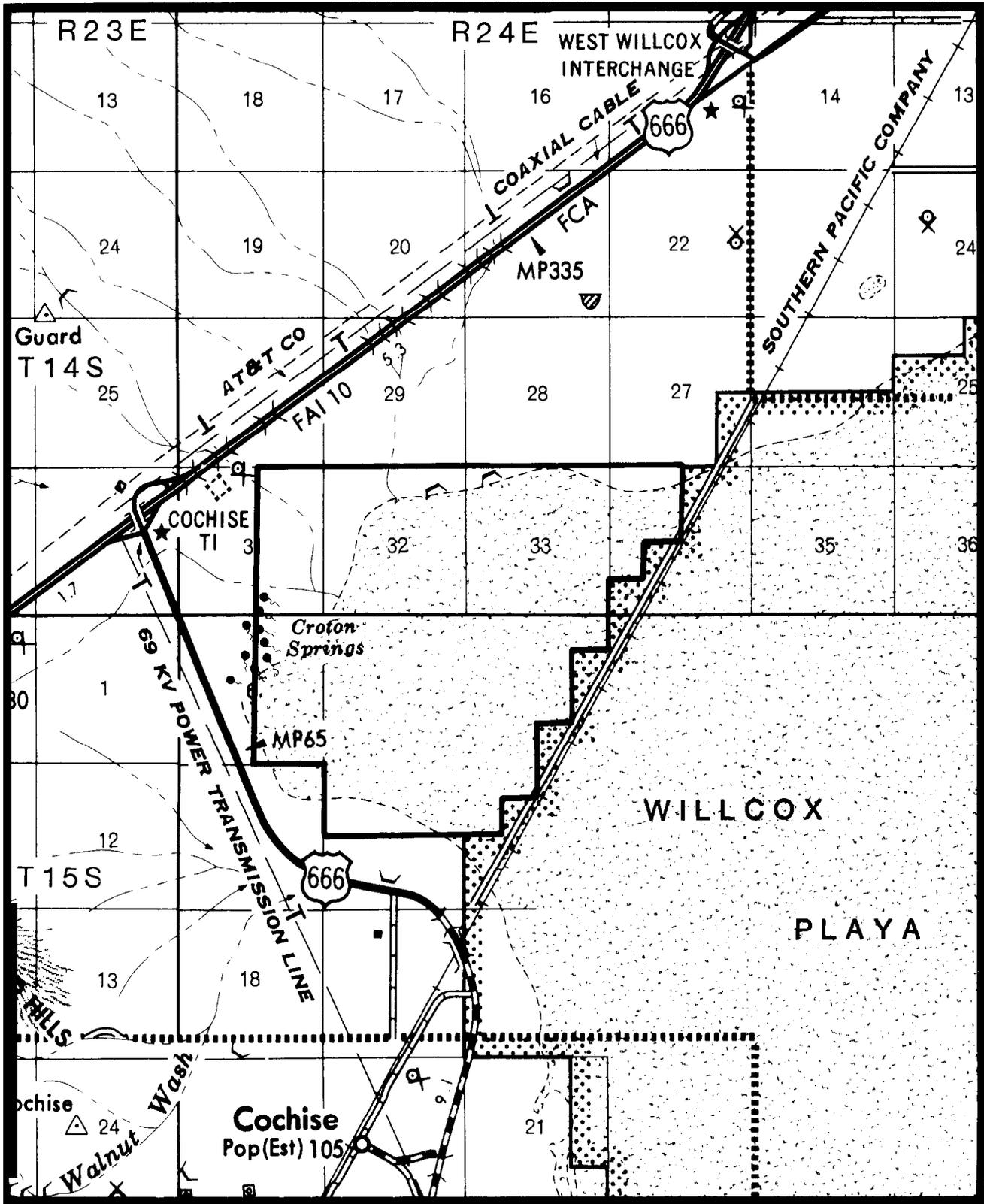


ALTERNATIVE B



WILLCOX PLAYA NNL ACEC

MAP 19

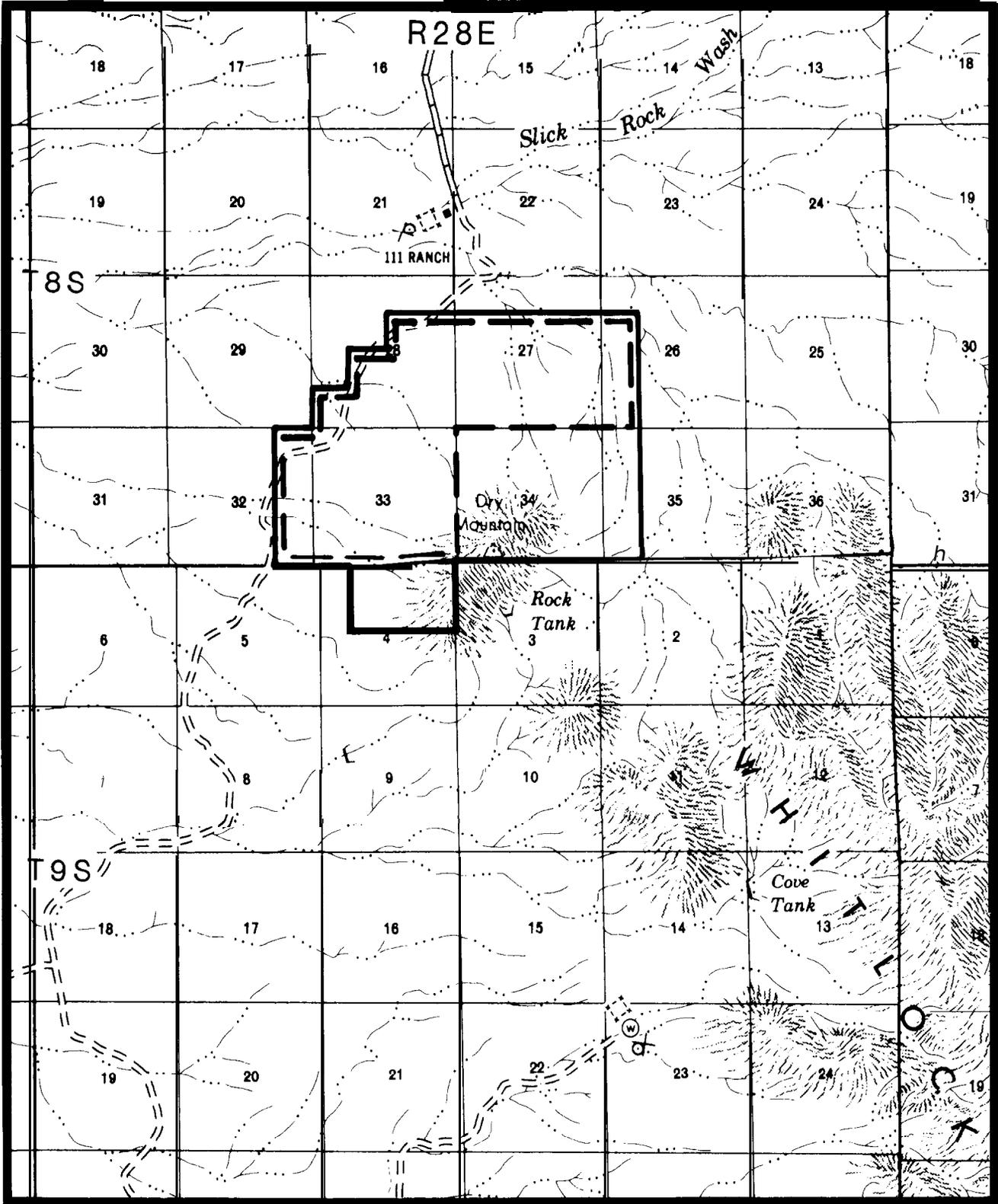


ALTERNATIVES A, B & D



111 RANCH RNA ACEC

MAP 20



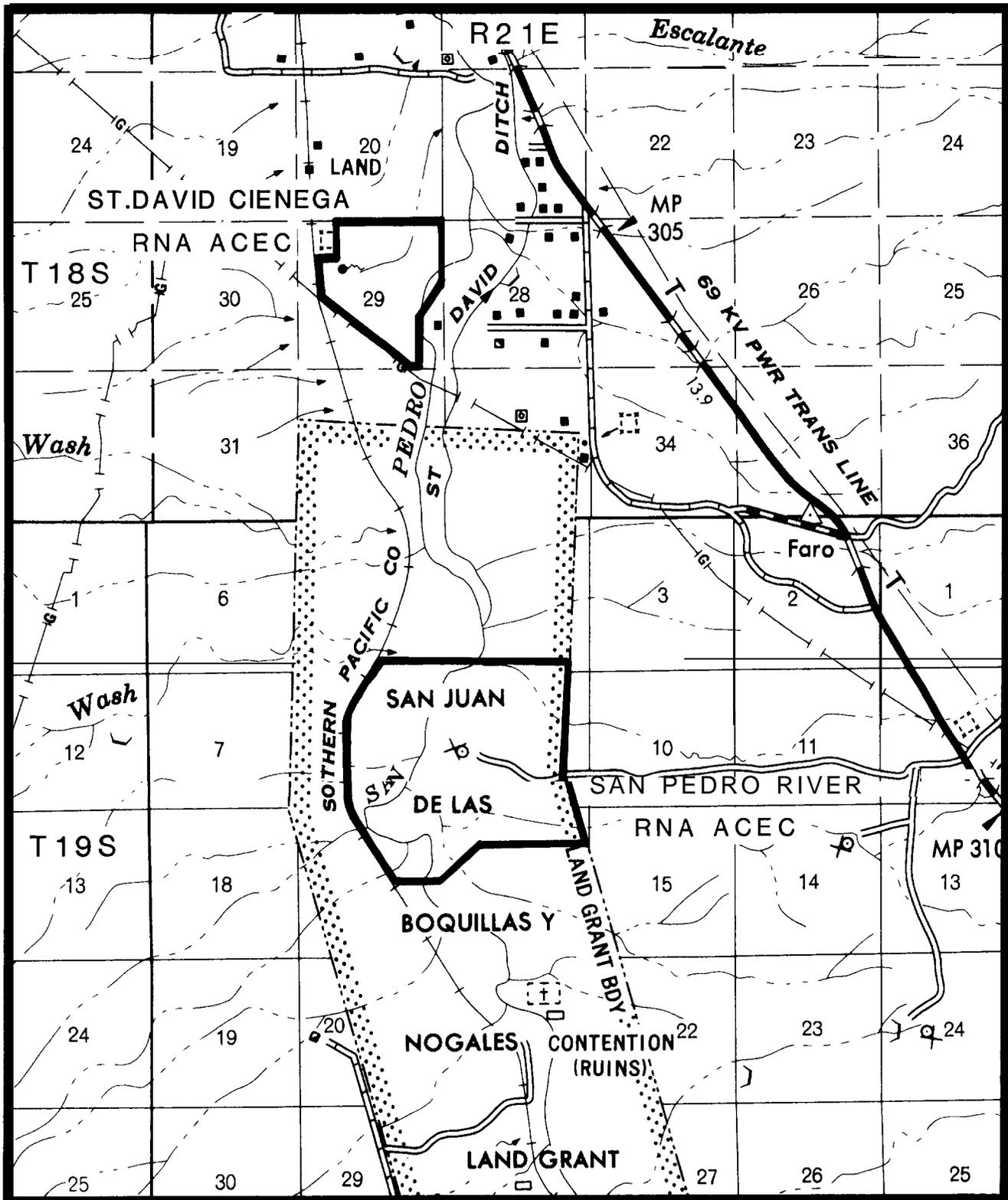
ALTERNATIVES A & B —————
ALTERNATIVE C - - - - -



ST. DAVID CIENEGA RNA ACEC

SAN PEDRO RIVER RNA ACEC

MAP 21



ALTERNATIVES A,B,C & D

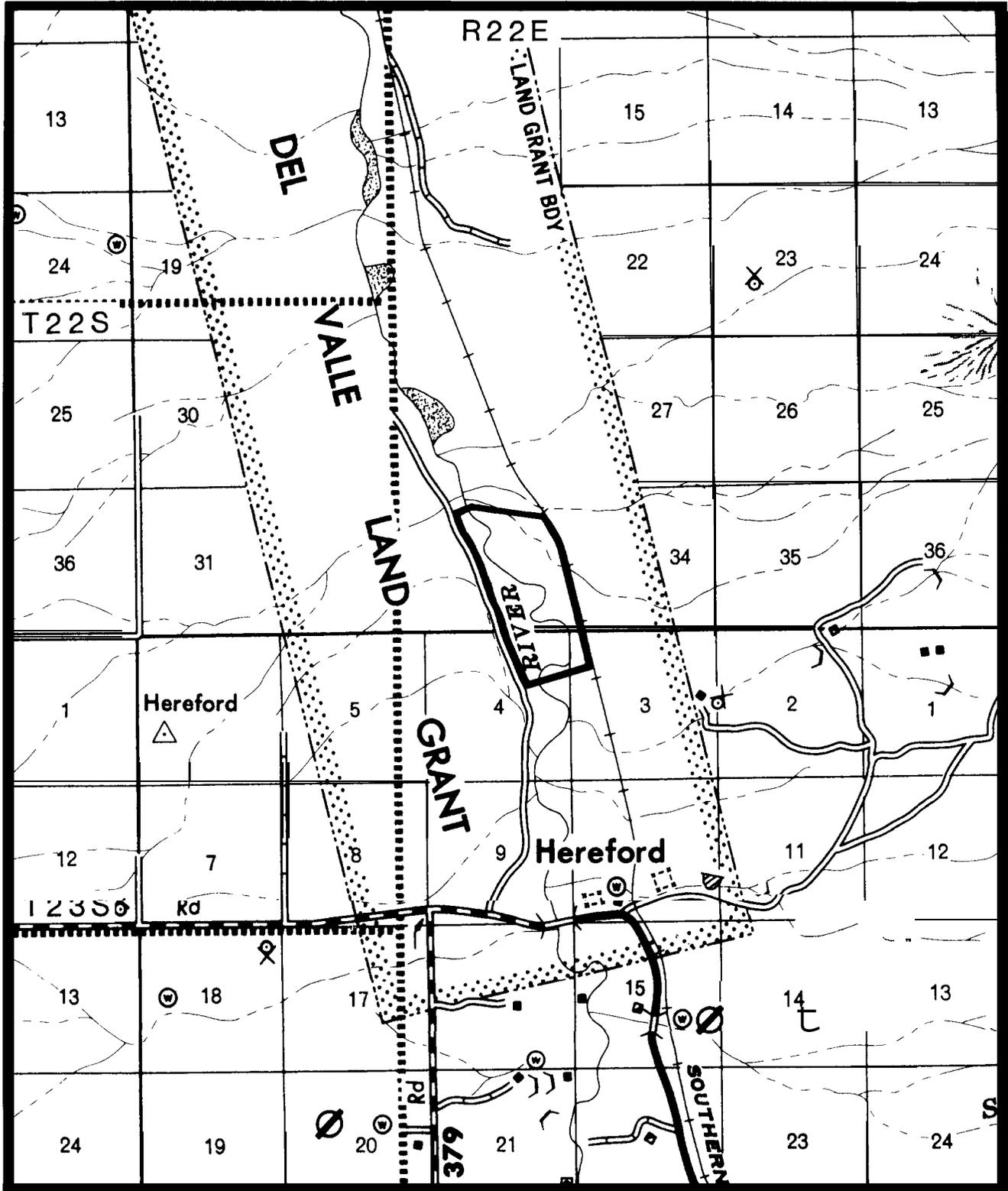


SCALE IN MILES

Basemap © Az. Dept. of Trans.

SAN RAFAEL RNA ACEC

MAP 22

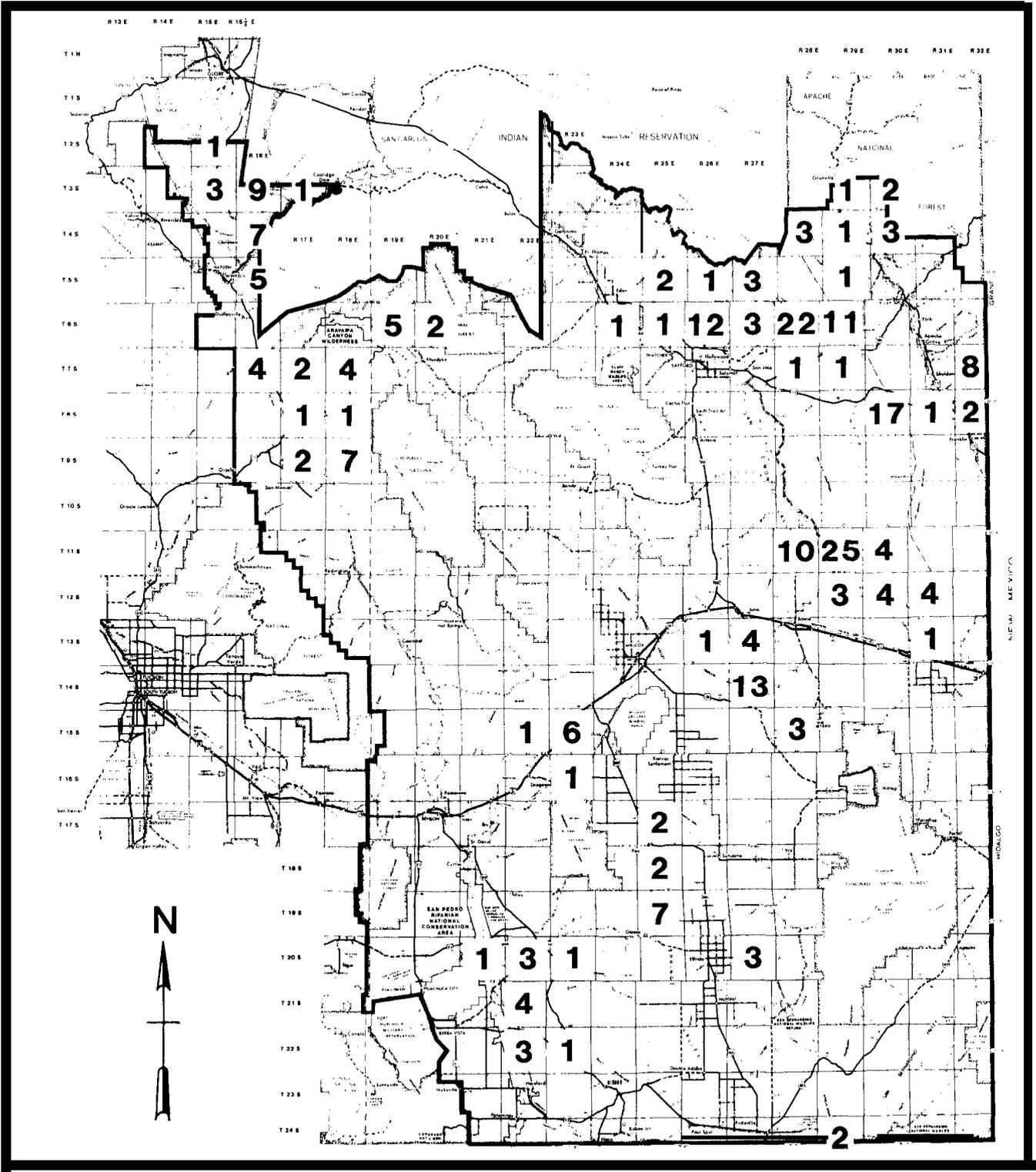


ALTERNATIVES A, B, C & D 



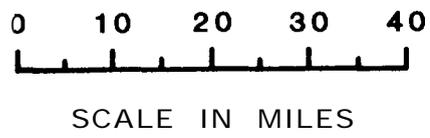
MINING PLANS AND NOTICES BY TOWNSHIP

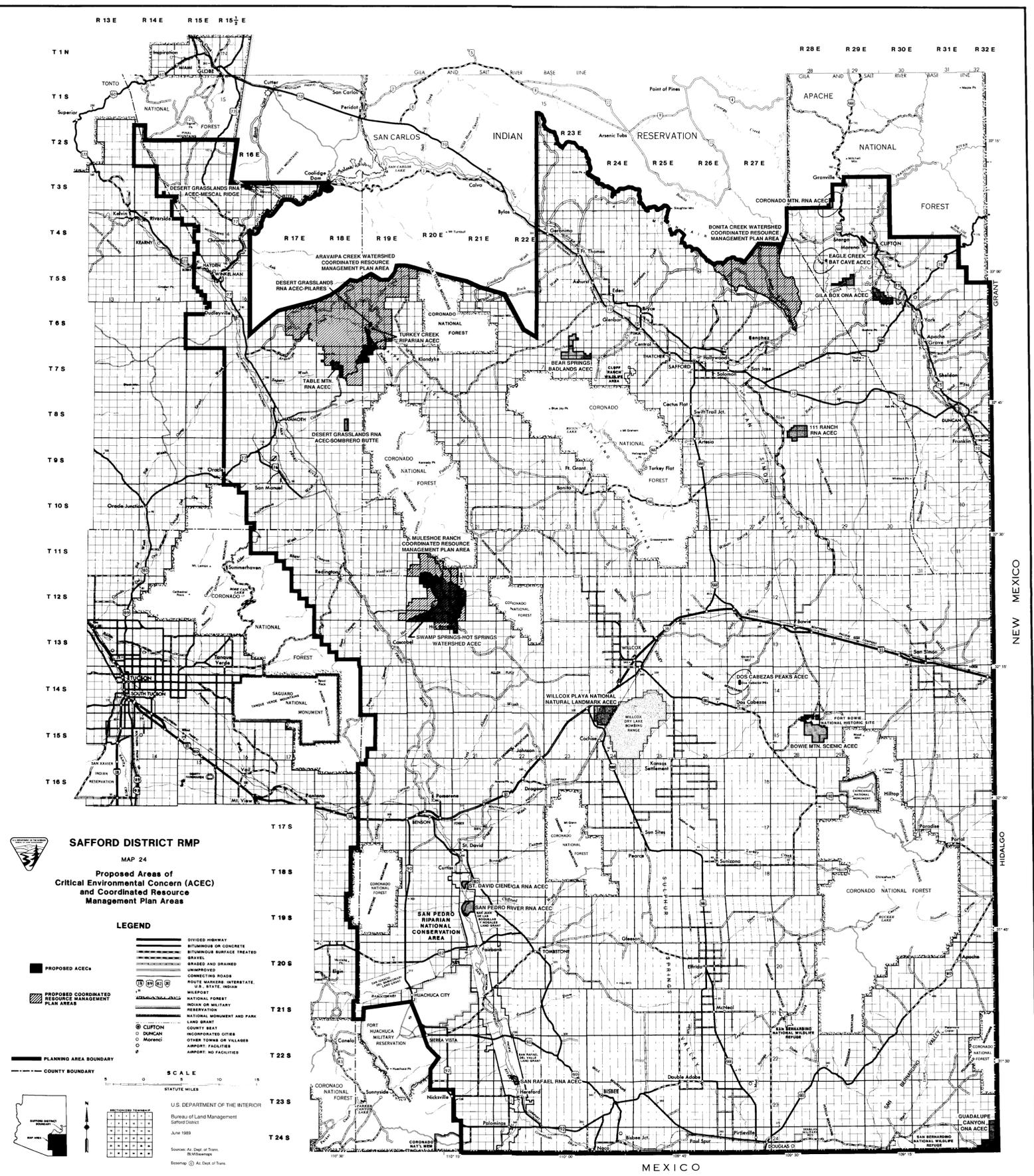
MAP 23



THE NUMBER OF MINING PLANS AND NOTICES RECEIVED FROM JANUARY 1981 ~ JULY 1989, BY TOWNSHIP

7





SAFFORD DISTRICT RMP
 MAP 24
Proposed Areas of Critical Environmental Concern (ACEC) and Coordinated Resource Management Plan Areas

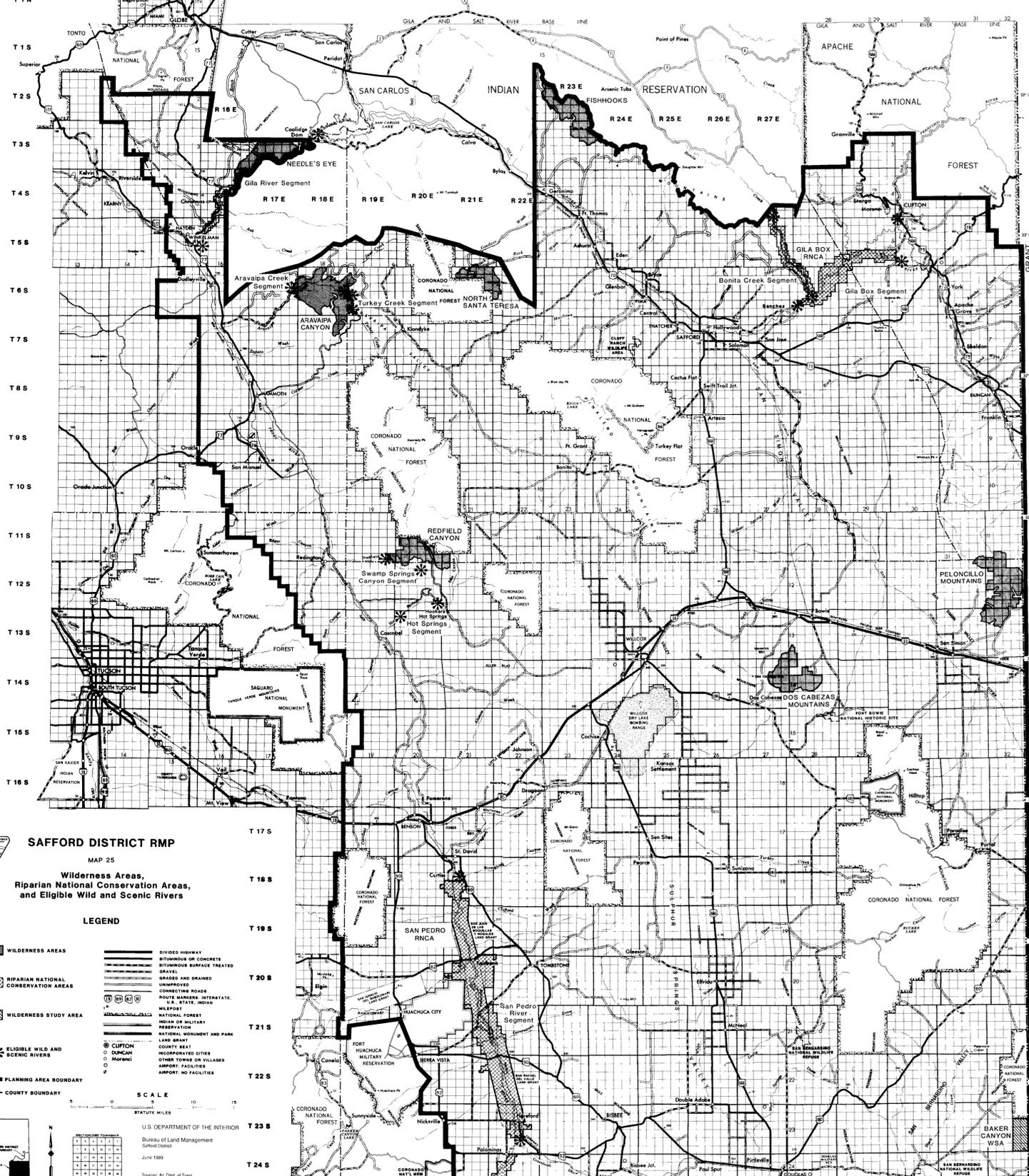
- LEGEND**
- DIVIDED HIGHWAY
 - BITUMINOUS OR CONCRETE
 - BITUMINOUS SURFACE TREATED
 - GRAVEL
 - GRAVEL AND DRAINED
 - UNIMPROVED
 - CONNECTING ROADS
 - ROUTE MARKERS INTERSTATE
 - U.S. STATE HIGHWAY
 - WILSPOT
 - NATIONAL FOREST
 - INDIAN OR MILITARY RESERVATION
 - NATIONAL MONUMENT AND PARK
 - LAND GRANT
 - COUNTY SEAT
 - INCORPORATED CITIES
 - OTHER TOWNS OR VILLAGES
 - AIRPORT FACILITIES
 - AIRPORT NO FACILITIES

SCALE
 0 5 10 15
 STATUTE MILES

U.S. DEPARTMENT OF THE INTERIOR
 Bureau of Land Management
 Safford District
 June 1989
 Sources: Air Dept. of Trans.
 © Management
 Reprint: © Air Dept. of Trans.

NEW MEXICO
 HIDALGO

R 13 E R 14 E R 15 E R 15 1/2 E R 28 E R 29 E R 30 E R 31 E R 32 E



NEW MEXICO
HIDALGO



SAFFORD DISTRICT RMP
MAP 25
**Wilderness Areas,
Riparian National Conservation Areas,
and Eligible Wild and Scenic Rivers**

LEGEND

- WILDERNESS AREAS
- RIPARIAN NATIONAL CONSERVATION AREAS
- WILDERNESS STUDY AREA
- ELIGIBLE WILD AND SCENIC RIVERS
- PLANNING AREA BOUNDARY
- COUNTY BOUNDARY

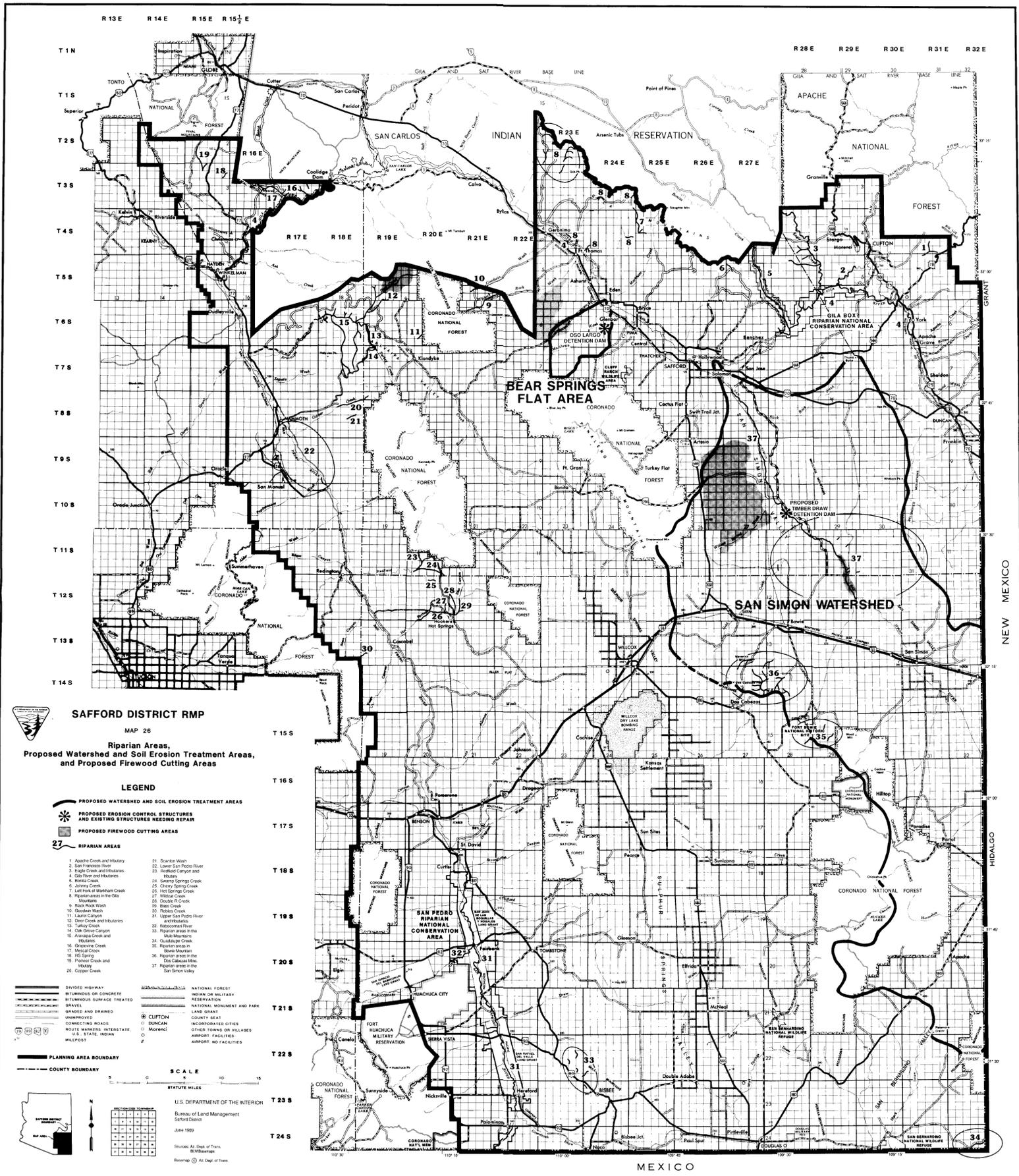
- DIVIDED HIGHWAY
- BITUMINOUS OR CONCRETE BITUMINOUS SURFACE TREATED
- GRAVEL
- UNIMPROVED
- CONNECTING ROADS
- ROUTE MARKER, INTERSTATE
- U.S. STATE, INDIAN
- NATIONAL FOREST
- INDIAN OR MILITARY RESERVATION
- NATIONAL MONUMENT AND PARK
- LAND GRANT
- COUNTY SEAT
- INCORPORATED CITIES
- OTHER TOWNS OR VILLAGES
- AIRWAY FACILITIES
- AIRPORT, NO FACILITIES

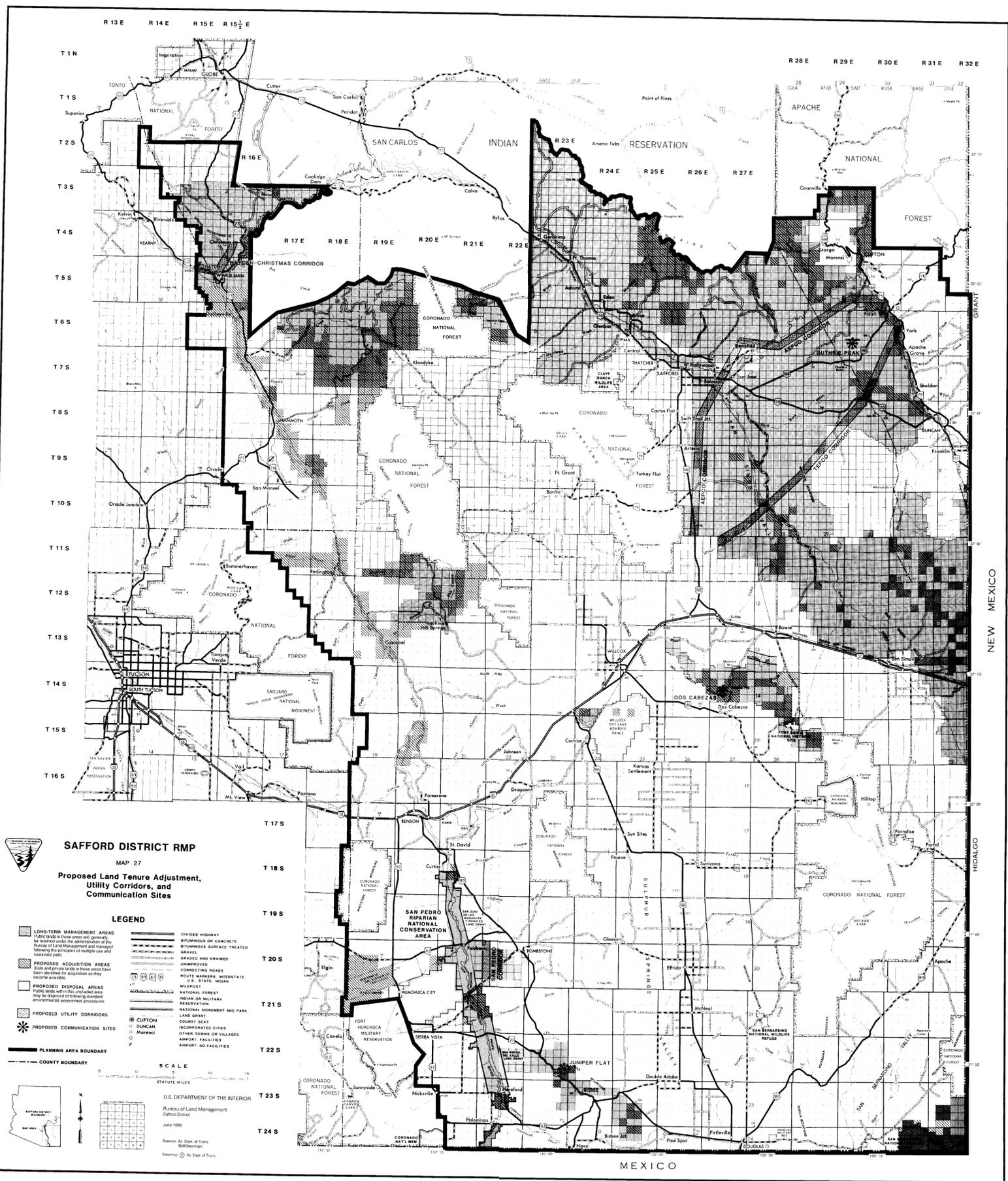
SCALE
STATUTE MILES

U.S. DEPARTMENT OF THE INTERIOR
Bureau of Land Management
Safford District
June 1989
Source: A-1, Dept. of Trans.
Bismarck, © A-1, Dept. of Trans.

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T 23 S
T 24 S

MEXICO





NEW MEXICO

HIDALGO

MEXICO

SAFFORD DISTRICT RMP
 MAP 27
**Proposed Land Tenure Adjustment,
 Utility Corridors, and
 Communication Sites**

- LEGEND**
- LONG-TERM MANAGEMENT AREAS
Public lands in these areas will, generally, be managed under the authority of the Bureau of Land Management and its agencies following the process of multiple use and sustained yield.
 - PROPOSED ACQUISITION AREAS
State and private lands in these areas have been identified for acquisition as they become available.
 - PROPOSED DISPOSAL AREAS
Public lands with 10% or more of the area designated for disposal under the environmental assessment procedures.
 - PROPOSED UTILITY CORRIDORS
 - PROPOSED COMMUNICATION SITES
 - PLANNING AREA BOUNDARY
 - COUNTY BOUNDARY

SCALE
 STATUTE MILES
 0 5 10 15

U.S. DEPARTMENT OF THE INTERIOR
 Bureau of Land Management
 Safford District
 June 1989

Source: Az. Dept. of Trans.
 BLM Drawings
 Reprints: © Az. Dept. of Trans.

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