

**PRE-PLAN ANALYSIS
FOR THE
IRONWOOD FOREST NATIONAL MONUMENT**



Ragged Top Mountain, Ironwood Forest National Monument

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INTRODUCTION & BACKGROUND	7
PURPOSE AND NEED	9
PLANNING AREA DESCRIPTION	12
ISSUES & MANAGEMENT CONCERNS	
ISSUE 1 Preserving the Natural Resources of the Ironwood Forest National Monument	13
Terrestrial Wildlife	13
Threatened and Endangered Species	14
Vegetation Management	15
Fire Management	15
Cultural/Native American Resources	16
Wilderness Study Areas	17
ISSUE 2 Intermixed Land Ownership	18
Land Exchanges, acquisitions	18
Split Estate lands	19
ISSUE 3 Managing Public Activities and Uses	20
Minerals Management	20
Locatable	21
Saleable	21
Leasable	21
Rights-of-ways,	22
Grazing Management	23
ISSUE 4 Integrating Monument Management with Other Agency and Community Plans?	24
Emergency Services (County Sheriffs and NPS)	24
Tourism Management	25
ISSUE 5 Visitor Use and Enjoyment	25

Recreation Management	25
Recreation Use Permits	25
Hunting	26
OHV Management	26
Mechanized Vehicles	27
Special Population Accessibility	27
Camping/Picnicking	27
Target Shooting	28
Transportation System	28
Visitor Information, Signing, and Interpretation	28
ISSUE 6. Urban Interface	30
Controlling unauthorized uses	30
ISSUE 7. Facilities and Infrastructure Required to Provide for Services and Administration of the Monument	32
Monument Staffing, Office Space, and Equipment Needs	32
DATA and GIS REQUIREMENTS	33
FORMAT AND PROCESS FOR THE PLAN	33
Ecosystem Planning and Collaborative Approach	34
Planning Meetings and Relationship Building	34
Formal Planning and Review	35
Internal Review of the Plan	36
Accountability	36
MANAGEMENT GUIDANCE FOR DEVELOPING MANAGEMENT PLAN ..	36
Watershed management	38
Mineral's management	38
Hazardous material's	39
Soils management	39
Water management	40
Air Quality	40
Vegetation Management	41
Rangeland Resources	41
Riparian and Wetland resource's	42
Livestock Grazing	42

Fish and Wildlife management	43
Cultural Resources	43
Native American Consultation	44
Recreation Use Permits	44
PARTICIPANTS IN THE PROCESS	45
Roles and Responsibilities	45
Management Team	45
Community Outreach/Partnership Team	46
Interdisciplinary Team (I.D. Team)	47
COMMUNICATION PLAN	49
BUDGET	51

APPENDIX A:	MAP OF IRONWOOD FOREST NATIONAL MONUMENT	53
APPENDIX B:	PLAN PREPARATION SCHEDULE	54
APPENDIX C:	PUBLIC PARTICIPATION SCHEDULE	57
APPENDIX D:	CONTACT/COMMENT DOCUMENTATION	60
APPENDIX E:	INTERIM TABLE OF ORGANIZATION	61
APPENDIX F:	PROCLAMATION ESTABLISHING IFNM	62
APPENDIX G:	BUDGET TABLES	65
APPENDIX H:	PROJECTED DATA NEEDS FOR THE IFNM PLAN	68
APPENDIX I:	SUMMARY OF REALTY ACTIONS IN THE IFNM	73
APPENDIX J:	SUMMARY OF MINING CLAIMS IN THE IRONWOOD FOREST NM	87

INTRODUCTION & BACKGROUND

The Ironwood Forest National Monument was created to protect the resources of the Sonoran Desert. Pima County in cooperation with the US Fish and Wildlife Service and the unanimous endorsement of the Board of Supervisors spearheaded the planning effort that addressed growth issues in the county. The catalyst for the effort was largely the result of development conflicts and subsequent construction delays because of the identification of Threatened and Endangered Species, primarily the Cactus Ferruginous Pygmy Owl. Among the management prescriptions identified in the plan was the identification of lands critical for T&E throughout Pima County. This included the recommendation for the Ironwood Forest National Monument.

The Ironwood Forest National Monument Proclamation of June 9, 2000, signed by the President by the authority vested in him by section 2 of the Act of June 8, 1906 (34 Stat. 225, 16 U.S.C. 431), designated about 129,000 acres of land managed by the Bureau of Land Management (BLM) as the Ironwood Forest National Monument (IFNM). See Map 1 for the location and boundary of the IFNM.

The Proclamation recognizes that the IFNM provides "A landscape that is swathed with the rich, drought-adapted vegetation of the Sonoran Desert. The IFNM contains objects of scientific interest throughout its desert environment. Stands of ironwood, palo verde, and saguaro blanket the monument floor beneath the rugged mountain ranges, including the Silver Bell Mountains. Ragged Top Mountain is a biological and geological crown jewel amid the depositional plains in the IFNM."

The IFNM presents a quintessential view of the Sonoran Desert with ancient legume and cactus forests. The geologic and topographic variability of the IFNM contributes to the area's high biological diversity. Ironwoods, which can live in excess of 800 years, generate a chain of influences on associated understory plants, affecting their dispersal, germination, establishment, and rates of growth. Ironwood is the dominant nurse plant in this region, and the Silver Bell Mountains support the highest density of ironwood trees recorded in the Sonoran Desert. Ironwood trees provide roosting sites for hawks and owls, forage for desert bighorn sheep, protection for saguaro against freezing, burrows for tortoises, flowers for native bees, a dense canopy for nesting of white-winged doves and other birds, and protection against sunburn for night-blooming cereus.

The ironwood-bursage habitat in the Silver Bell Mountains is associated with more than 674 species, including 64 mammalian and 57 bird species. Within the Sonoran Desert, Ragged Top Mountain contains the greatest richness of species. The IFNM is home to species federally listed as threatened or endangered, including Nichol's Turk's head cactus and the lesser long-nosed bat, and contains historic and potential habitat for the cactus ferruginous pygmy-owl. The desert bighorn sheep in the IFNM may be the last viable population indigenous to the Tucson basin.

In addition to the biological and geological resources, the area holds abundant rock art sites and

other archeological objects of scientific interest. Humans have inhabited the area for more than 5,000 years. More than 200 sites from the prehistoric Hohokam period (600 A.D. to 1450 A.D.) have been recorded in the area. Three areas within the IFNM have been listed on the National Register of Historic Places, the Los Robles Archeological District, Mission Santa Ana del Chiquiburitac and the Cocoraque Butte Archeological District. The archeological artifacts include rhyolite and brown chert chipped stone, plain and decorated ceramics, and worked shell from the Gulf of California. The area also contains the remnants of the Mission Santa Ana, the last mission constructed in Pimeria Alta. The area also contains exceptional multiple use opportunities and offers natural cultural scenic, and recreation resources worthy of additional protection as a national monument, and with respect to the IFNM itself, as a component of the national landscape conservation system.

The BLM Tucson Field Office (formerly the Tucson Resource Area) in Tucson, Arizona is responsible for the management of the IFNM and the preparation of the IFNM plan.

The Arizona State Land Department and BLM will coordinate on many aspects of the management of the IFNM. An ASLD liaison will work with the planning team to ensure that BLM/ASLD management issues are incorporated, and fully addressed, in the IFNM plan. The BLM, however, will be the lead agency responsible for plan preparation and coordination with other agencies, key stakeholders, and the general public.

PURPOSE AND NEED

The plan will establish guidance, objectives, policies, and management actions for the Ironwood Forest National Monument, and adjacent federally managed lands where necessary. The plan will be comprehensive in nature, and will resolve or address issues within the entire IFNM and in areas outside the boundaries which are identified through agency, interagency, and public scoping efforts.

The plan will explain or identify the current management situation, desired future conditions to be maintained or achieved, wilderness management goals and methods, management actions necessary to achieve objectives, and a schedule and a cost estimate for implementing the actions for achieving those goals. Through these actions, the IFNM will be managed according to the intent of the President as expressed in the establishing Proclamation.

The plan will address and integrate, to the degree possible, all BLM and Arizona State Trust Land management plans related to management of the lands in or adjacent to the IFNM, including, but not limited to, fire management plans, livestock grazing allotment management plans, wildlife habitat management plans, and recreation management plans.

In addition to the purposes described above, the Plan will also fulfill the following needs and obligations set forth by the establishing legislation, the National Environmental Policy Proclamation (NEPA), the Federal Land Policy and Management Proclamation (FLPMA), and

BLM Land Use Plan policy.

IFNM Proclamation Directive for Plan Preparation

The Ironwood Forest National Monument Proclamation of 2000 designated the 128,917 acres that are managed by the BLM Tucson Field Office (TFO) in Tucson, Arizona. The Proclamation directs that a transportation plan be completed that addresses the actions, including road closures or travel restrictions, necessary to protect the objects identified in this proclamation.

Conducting Land Use Plan Evaluation for IFNM-Related Decisions for Incorporation into IFNM Plan

The IFNM Proclamation specifically states, "Laws, regulations, and policies followed by the Bureau of Land Management in issuing and administering grazing permits or leases on all lands under its jurisdiction shall continue to apply with regard to the lands in the IFNM," which allows for the incorporation of appropriate decision contained in any management or activity plan for the area and appropriate wildlife habitat management plans or other plans prepared for the land within or adjacent to the IFNM completed prior to the date of the Proclamation.

Before Presidential designation of the IFNM, management of the area was guided by the Phoenix Resource Management Plan (RMP), a document that was completed in June 1987. Wildlife habitat plans, such as the Silverbell Habitat Management Plan, and allotment management plans provided specific management direction and actions for wildlife and range programs on lands now within and immediately adjacent to the IFNM.

BLM Instruction Memo No. 2000-162 (08/01/2000) states that it is BLM's policy to complete land use plan evaluations as soon as possible on all National Monuments and National Conservation Areas to provide the basis for scoping the preparation of management plans for these areas. If evaluations are not completed prior to the issuance of the Notice of Intent, as in the case of the IFNM, the evaluations should be the first steps in the scoping process.

Preparing Phoenix Resource Management Plan (RMP) Amendment and Environmental Impact Statement (EIS)

It is our intention to evaluate the existing RMP as it relates to the IFNM. In compliance with the Plan Evaluation Policy, management decisions contained in the RMP, and other activity-level planning documents which pertain to the IFNM lands will be evaluated as part of the Plan scoping and those decisions determined to be still valid will be carried forward into the Plan. Similarly, management decisions and actions in the wildlife habitat plans and other related activity plans will also be evaluated for their incorporation into the IFNM Plan.

It is anticipated the IFNM Plan will require amendment of some of the RMP decisions related to the IFNM. However, as the IFNM comprises only about 25 percent of the lands managed by the Tucson Field Office, the majority of decisions covered by that document will not be affected by this amendment.

The Plan may also recommend certain lands within the IFNM boundary to be removed to address various management needs and objectives such as conflicts with the development of economic deposits of solid minerals or the removal of Private and State Trust lands from within the boundaries.

In addition to land adjustments, there are a number of new issues, higher levels of concern about existing issues, and new (unforeseen) public land uses and concerns that have arisen over the years which were not included or were inadequately addressed in the 1988 RMP. Such issues, which include, but are not limited to, off-highway vehicle use, access and transportation issues, mountain bike use, new motorized uses, target shooting areas, and management of high-risk, high-adventure sports (i.e., rock climbing, hang-gliding, etc.), and new commercial uses will be addressed in the IFNM Plan.

Because of the combination of changes from the RMP, and the need to address new and potentially very controversial public land uses, issues, and concerns which have arisen over the last 15 years, necessitates the preparation of an Environmental Impact Statement rather than an Environmental Assessment or activity-level plan.

Purpose of this Pre-Plan Analysis

Given the higher level of staff involvement, resource information needs, time and costs associated with an EIS, a Pre-Plan Analysis is necessary to set the direction of the work, define work priorities and planning team responsibilities, project time lines for public involvement and the EIS comment process, and to project cost estimates for the entire Plan from start to finish. This Pre-Plan provides the general blueprint for how the IFNM plan will be developed. It is our intention that the Pre-Plan be dynamic and our IFNM preparation strategy may be modified as unforeseen situations arise.

The purpose of this Pre-Plan is to:

- Document the Planning Area boundaries covered by the IFNM Plan;
- Identify the preliminary objectives and issues to be resolved and the planning criteria that will be used to address them;
- Document the scope, complexity, major responsibilities and requirements for the planning effort;
- Establish the internal and external coordination for the agencies involved.
- Identify a completion schedule and budget; and
- Establish and identify the public participation process.

PLANNING AREA DESCRIPTION

The IFNM lies in the heart of the Sonoran Desert ecosystem in Southeast Arizona, and is a unique, scenic area of rolling desert and Ironwood woodlands around the Silverbell, Waterman, and Roskrige mountains. Located along the Tohono O'Odham Reservation boundary, within an hour of the rapidly growing Tucson metropolitan area, the National Monument offers outstanding dispersed recreation opportunities but is also highly vulnerable to the impacts of growth. In addition to Tucson, the area is readily accessible from the Phoenix Metropolitan area. Access into the area is provided by dirt and paved roads connecting with Interstate Highway 10.

Much of the vegetation in this area is classic Sonoran desert upland habitat dominated by cactus, saguaro, Bigelow's cholla, and staghorn cholla. Common plants include: ironwood, palo verde, creosote, brittlebush, triangle-leaf bursage, ocotillo, and thornbush. The upper slopes of the Silverbell Mountains possess a chaparral community dominated by jojoba. The lower bajadas contain inter-braided stream beds that carry water after heavy rains. These desert wash habitats are characterized by large ironwood, blue paloverde, and saguaro.

The IFNM encompasses most of the mountain ranges that are important to the diverse wildlife and plant communities associated with the saguaro/ironwood forest. In addition, the IFNM contains habitats for several endangered species, a site listed on the National Register of Historic Places, two archaeological districts on the National Register of Historic Places, an ACEC to protect an endangered cactus, a Desert Bighorn Sheep special management area, Desert Tortoise habitat, historic mining camps and scenic open space.

The planning area encompasses approximately 129,068 acres of federal, 6012 acres of private, and 54,697 acres of state lands. It is bordered on the north by farmland on the Santa Cruz flood plain, and on the west and south by the Tohono O'Odham Reservation. The east border of the

planning area follows the IFNM boundary south along the private lands to the Garcia Strip of the Tohono O'Odham Reservation (see map appendix 1).

ISSUES & MANAGEMENT CONCERNS

Preserving the Natural and Cultural Resources of the Ironwood Forest National Monument

The Ironwood Forest National Monument was established in order to protect the natural resources of the area within the boundaries, primarily the cultural resources, wildlife and vegetation unique to the Sonoran desert.

Terrestrial Wildlife

With more than 670 species of plants and animals documented within the boundaries of the IFNM, it is one of the most biologically diverse areas within the Sonoran Desert and in the southwestern United States. Many of these plants and animals are found nowhere else in the United States, and with continued habitat alteration both within the United States and Mexico, viable populations of many of these species are being threatened. Special management attention is needed to restore, maintain, and/or enhance priority species and their habitats. Continued or increased human-use throughout the area including recreational use, grazing, motorized use, etc., has the potential to significantly impact wildlife populations and their habitats if not properly managed. Integrating habitat management with other resource programs requires careful planning to minimize impacts to wildlife species and their habitats, while still providing for other uses on the public lands within the IFNM.

The following issues will require investigation and resolution before they can be included in the IFNM management plan.

- *What are the status and distribution of the wildlife species within the National Monument?*
- *What management actions are needed to protect and preserve the biodiversity, integrity, and population viability of the terrestrial wildlife while still allowing visitors an outstanding opportunity for solitude or a primitive and unconfined type of recreation experience?*
- *How will wildlife populations be impacted when uses such as off-highway vehicles and mountain bike use become more popular?*
- *Are there areas within the National Monument which should be closed to human access to prevent potential disturbance to sensitive plant or animal resources?*
- *What monitoring indicators, or Limits of Acceptable Use, will be established to*

determine when wildlife populations are being impacted to an unacceptable degree?

- *What animal damage control activities will be permitted, in what manner, and where?*
- *What information will be needed to adequately assess wildlife habitats and develop management actions to improve or restore habitat conditions?*

Threatened and Endangered Species, Special Status Species, and Critical Habitat Designations

Within the boundaries of the IFNM, three Federally-listed species are known or are believed to occur: the Nichol's turk's head cactus; the lesser long-nosed bat; and the cactus ferruginous pygmy-owl. Nineteen additional species of BLM special status plants, reptiles, birds, and mammals occur in or adjacent to the IFNM. The cactus ferruginous pygmy-owl critical habitat block two takes in portions of the southeastern edge of the IFNM. A small herd of approximately 100 desert bighorn sheep is present in the Silverbell Resource Conservation Area and is vulnerable to decline due to disease outbreaks, predation, natural variations in climate and forage quantity and quality, human disturbance, and stochastic events. A fairly healthy population of Sonoran desert tortoises exists within the boundaries of the monument. Consultations with Fish and Wildlife Service are current on all activities within the IFNM. Section 7 consultation will need to be done on the preferred alternative to the IFNM plan.

Conservation needs of the desert bighorn sheep: The existing 800 acres of closed area is woefully inadequate for conservation of a wide-ranging species such as desert bighorn sheep, let alone smaller species such as pygmy owl or tortoise. Sheep habitat use may be constrained by increased human activity. Recreational and other uses have increased with publicity incurred by the monument designation, urban growth, copper mine expansion, and demand for landscaping rock and gravel.

There is also a need to designate and, in some cases, create "*movement belts*" to allow for migration by large mammal species. Without the ability to move from the Silver Bell mountains to surrounding ranges, sheep will become isolated (genetically and physically), dwindle in number, and die out due to drought, inbreeding, or random events which larger populations can withstand.

OHV use in desert washes. This use degrades habitat for desert tortoises, pygmy owls as well as a host of other species. These drainages are the locations of much needed shade from desert heat. Forage is more lush in these drainages since they hold more moisture following rain. These drainages are more diverse than the adjacent bajada in terms of plant and animal species. The effects, (soil compaction, erosion, vegetation destruction, disturbance, accidental death, deliberate poaching) are immediate and long-lasting. Vehicle use also creates open ground for establishment of nonnative pest species (such as buffel grass which may be gaining a toehold along vehicle routes in the Waterman mountains).

- *How will Threatened and Endangered animal species be managed within the objectives set for the IFNM and any specially-designated areas within the IFNM such as Areas of Critical Environmental Concern and Research Natural Areas, etc.?*
- *Are there areas within the National Monument which should be closed to human access to prevent potential disturbance to sensitive plant or animal resources?*
- *Will increased human visitation result in increased levels of theft of Nichol's Turk's head cactus or increased disturbance of Pima Indian mallow and/or Tumamoc globeberry and other sensitive plant species?*
- *What sort of management actions should be developed to encourage movement of desert bighorn sheep from the Silverbell RCA into other areas to increase genetic exchange and to improve the health of the herd?*
- *How will populations of desert tortoise and desert bighorn respond to increased recreational disturbance during sensitive times of the year such as hibernation and rutting and/or lambing seasons?*
- *How can the IFNM be managed to decrease chance of habitat degradation for desert tortoises and yet still provide for increased human visitations and historical uses such as grazing, hunting, recreation, etc.?*

Vegetation Management

The national monument is located within the Southeastern Arizona Basin and Range series, and consists of Sonoran Semidesert Grassland and Upper Sonoran Desert scrub Mix. It is one of the most ecologically diverse areas in North America. Plant communities are strongly influenced by the soil's ability to capture the sporadic yet intense summer rainfall. An overstory of ironwood, saguaro, cholla, prickly pear, triangle-leaf bursage, ocotillo and mesquite occurs throughout the area while three-awn grasses dominate the understory. Ironwood trees are the predominant trees along the stream beds and sandy washes. Vegetation provides food and cover for wildlife and domestic animals as well as for scenic enjoyment for people. It is a key ingredient in determining the health of the public lands because it influences the quantity and quality of the limited water produced from the watershed of the IFNM. Vegetation also affects overland surface water flows and soil movement which lead to erosion and eventual loss of habitats. Nonnative plants and noxious weeds displace native species, affect the structure of plant associations and their ecological function, and threaten biodiversity.

- *What are the status and distribution of the vegetative communities within the National Monument? What other sources of information can be used to determine the status and distribution of these vegetative communities?*
- *What are the desired conditions of the vegetation types within the IFNM?*

- *How will biodiversity in vegetation and associated communities be maintained or restored?*
- *What is the status of exotic vegetation such as red brome, buffleggrass, etc. within the IFNM? How will these exotic species affect the natural ecosystem balance within the area?*
- *What is the fire regime on lands within and adjacent to the IFNM? What impacts will a changed fire regime (frequency and intensity) have on regeneration of native plants? How will it affect the spread of exotic vegetation such as red brome, buffleggrass, etc.?*
- *What is the rate of regeneration of saguaro, ironwood, palo verde, and other larger-structured and long-lived trees within the IFNM? Is grazing or fire frequency and intensity altering the natural rate of regeneration for any of these species?*
- *What threats (if any) are posed to soil stability and impaction, erosion and vegetative regeneration by increased visitation to areas which have not currently had high visitation rates?*

Fire Management

The Sonoran Desert Ecosystem is not a fire dependant system. Therefore, prescribed fire is not proposed for use in the Ironwood Forest National Monument. Much of the IFNM has been invaded with annual vegetation that is not native to the area that provides a continuous fuel load in years of good ephemeral bloom.

- *What threats are presented by a Hazardous Fuel situation in the Wildland Urban Interface, which is not addressed in any current planning.*
- *What is the Appropriate Management Response to fires within the IFNM?*
- *What is appropriate Emergency Fire Rehabilitation following a fire event?*

Cultural and Paleontological Resources

The cultural resources located within the Ironwood Forest National Monument represent approximately 8,000 years of human history. They include campsites used by Archaic hunter-gatherers about 6,000 B.C., villages, hamlets, and agricultural fields where Hohokam farmers lived and cultivated corn, beans, and squash between A.D. 300 and A.D. 1450; sites where proto

historic and historic Tohono O`odham Indians, who are believed to be descendants of the Hohokam, camped, farmed and harvested domesticated and wild plant crops; a small mission/vista constructed in the late 1700s by Tohono O`odham laborers for Spanish Franciscan friars; and remnants of historic mining camps and cemeteries dating to the 1880s. Explosive population growth in the Tucson/Phoenix metropolitan areas, coupled with the recent National Monument designation renders these sites vulnerable to increasing impacts associated with casual visitation, vandalism, looting, illegal collection of pottery shards and other surface artifacts, theft of boulders inscribed with prehistoric rock art, and site damages and theft of artifacts by people using metal detectors to search for "treasure troves" they believe to be buried in historic mining camps, ghost towns, and Spanish missions. Increasing sale of artifacts at local flea markets, antique stores, and also on the internet may be contributing to an increase in local "sherd harvesting" at sites located in the IFNM. Consideration of management of the cultural resources located in the IFNM pose the following questions:

- *What level of inventory is needed to provide a basis for understanding the distribution, comparative importance, and potential uses of cultural resources in the IFNM, i.e., relative sensitivity, relative opportunities for interpretive development, relative scientific importance, relative potential for research and education?*
- *Which sites or areas where sites are located are most vulnerable to current and future impacts?*
- *What management actions, such as stabilization, fencing, signing or interpretative development, are needed to protect and preserve the IFNM's cultural resources?*
- *Are there areas where cultural resources are located which should be closed off to the public?*
- *How can the IFNM's cultural resources be protected against artifact collectors, looters, thieves, and vandals?*
- *Are there particular sites or specific areas in the national Monument that are of concern to the Native American community? If so, what are the concerns and how might the BLM address them?*
- *What types of uses will be acceptable/allowable?*
- *Are all classes of cultural properties, both identified and unidentified allocated to use categories?*
- *How can the cultural resources be managed so that the public may gain knowledge and information about the prehistoric and historic legacies represented by the IFNM's cultural resources?*

- *What are the possibilities for engaging scientific and academic interest in these resources and*
- *What are the possibilities for developing educational partnerships to encourage and support scientific and academic research?*
- *What are the options and possibilities for developing educational programs involving local/regional schools?*
- *How can the BLM engage the public in helping to protect and benefit from the cultural resources located in the Ironwood Forest National Monument?*
- *Are there Paleontological resources in the monument that need to be protected? If so, how can scientific, educational, and recreational uses of these fossils be promoted?*

Wilderness Study Areas

The Ragged Top area was determined to be suitable as a Wilderness Study Area under section 603 of the Federal Land Planning and Management Act (FLPMA). The area was evaluated for Wilderness suitability in the Arizona - Mojave EIS, and the lands were found suitable for wilderness. The lands were released from wilderness study in the Arizona Desert Wilderness Act of 1990, which said "the Congress hereby finds and directs that all public lands in Arizona, administered by the Bureau of Land Management pursuant to the Federal Land Policy and Management Act of 1976 not designated as wilderness by this Act, or previous Acts of Congress, have been adequately studied for wilderness designation pursuant to section 603 of such Act and are no longer subject to the requirement of section 603(c) of such Act pertaining to the management of wilderness study areas in a manner that does not impair the suitability of such areas for preservation as wilderness."

- *Are there areas in the Ironwood Forest National Monument that should be reviewed for inclusion in the National Wilderness System?*
- *How can the BLM engage the public in determining potential wilderness areas in the Ironwood Forest National Monument?*

Intermixed Land Ownership

The IFNM is large; 30 miles from the furthest point south to the northern most point in the Sawtooth Mountains, and 31 miles from west to east. A review of Appendix A shows land status throughout the IFNM. Generally there are fairly large blocks of public land throughout most of the IFNM with the exception of the western portion where isolated parcels of public land are surrounded by State and Private lands. Conversely there are fairly large blocks of State land throughout various portions of the IFNM with the exception of the North Central and Southeastern portions of the IFNM where isolated blocks of state land are surrounded by BLM and private Lands. Private lands are scattered throughout the IFNM and are isolated parcels up to a square mile in size. Land ownerships are intermixed with State and private lands as shown below:

Land Ownership	Acres	Percent of Monument
BLM	129,068	68%
State Trust Land	54,697	29%
Private	6,012	3%
Total acres are	189,731	100%

Intermixed land ownership creates conflicts with access to public lands, protection of Threatened and Endangered Species, wildlife management, how BLM authorizes land, recreation, grazing, and mineral actions.

Land Exchanges, Acquisitions, and Conservation Easements

Laws and regulations vary for private, State, and Federal lands resulting in inconsistent and sometimes conflicting management prescriptions. Regulations for mining, ranching, recreation, and other land use authorizations' change from one location to another. Depending upon land status, this creates confusion for the various users and the public in general. To help resolve regulatory differences among local, States, and Federal agencies, land exchanges or acquisitions can be entered into with the State of Arizona. Private lands can also be acquired, or the development and access rights purchased through the use of conservation easements.

- *How will the BLM identify priority state lands for exchange or acquisition?*

- *What information will need to be obtained in order to determine areas where private land can be purchased for public access*
- *Can conservation easements be utilized to prevent excessive development occurring in or adjacent to the IFNM?*
- *How will the BLM obtain funding for acquisitions and easements?*
- *Can the boundary of the IFNM be adjusted to exclude some large blocks of state land or to avoid conflicts with other adjacent land users?*

Split Estate Lands

Land ownership in the IFNM varies with some lands having state surface and Federal Mineral rights. There are numerous existing mining claims on these lands, which fall partially under the jurisdiction of the State of Arizona and the BLM. Further conflicts developed when the law that created the IFNM withdrew the area from mining, subject to valid existing rights. The area is withdrawn from new claims, but existing claims are subject to valid existing rights with surface management responsibilities falling under the jurisdiction of the State of Arizona.

- *Can BLM prevent degradation of natural and cultural resources do to the development of Federal mining claims without regulatory authority for surface management?*
- *Can the BLM acquire surface rights to the State lands?*

How Will People's Activities and Uses Be Managed?

Minerals Management

The Bureau manages minerals on 129,068 acres of BLM land and an unknown amount of mineral estate with non-federal surface estate. Creation of the IFNM withdrew all public lands and interest in lands from entry, location, and leasing under the mineral leasing and mining laws. As of June 9, 2000, mining claims cannot be located within the IFNM and mining leases cannot be issued. Claims and leases that existed prior to the date of creation of the IFNM have valid existing rights. In order to establish valid existing rights for a mining claim, a validity examination must be conducted to determine if the claim supported a discovery of a valuable mineral deposit prior to the date of the Proclamation. Currently, there are 387 active mining claims within the IFNM, held by seven individuals or groups. Sixty-six percent of the claims are held by one company, with three other companies or individuals at 13%, 10%, and 9% respectively. There are no active mineral leases.

Locatable minerals. Mining activities for Locatable minerals are conducted under the 43 CFR 3809 mining regulations. The regulations recognize three classifications of use.

- *Casual Use* is defined as activities resulting in none or negligible disturbance and usually involves the use of hand tools.
- *Notice Level* involves exploration activity that disturbs 5 acres or less.
- *Plan Level* involves mining activities beyond the exploration stage and are more than casual use.

This classification requires the submittal of a mining plan of operations to the BLM and approval by the BLM prior to commencement of activities. Because the Proclamation that created the IFNM closed it to off-road vehicle use, *all* activities beyond casual use, whether exploration or mining, require the submittal of a mining plan of operations pursuant to 43 CFR 3809.11(C)(5). Notice level activities are not allowed in the IFNM. Interim management guidance requires the Bureau to determine the validity of all mining claims and mill sites covered by the mining plan before issuing approval of the plan.

- *Should the Bureau continue to require validity determinations of mining claims prior to approving mining plans on grand-fathered mining claims?*
- *What types of casual use should the Bureau allow on existing mining claims? Should these activities be allowed on lands not covered by a mining claim?*
- *How will the Bureau conduct validity contests on all of the grandfatered mining claims within the IFNM?*

Salable Minerals. Applications for disposal of common variety materials, such as sand and gravel, landscape rock, or clay, will not be accepted. Currently, there is one mineral material disposal site in the IFNM. The permit is expired and the site is being reclaimed.

Leasable Minerals. Applications for leasable minerals such as coal, oil and gas, and geothermal will not be accepted. No leases exist within the IFNM.

Realty Actions (Rights-of-way and Other Uses)

There are more than 35 authorized realty actions within the IFNM. These include rights-of-ways for power lines (18), roads (11), and several pipelines and telephone lines. In addition to these, there are the following authorized uses: a lease held under the Recreation and Public Purposes (R&PP) Act, a communications site lease, reservoir, railroad, a research site, and a right-of-way marker site. There are two actions with pending status, in which right-of-way application documents were filed prior to the IFNM designation.

A variety of customers are involved through these actions. These include public corporations, county, state, and federal agencies, and private individuals. Many of the rights-of-ways through the IFNM serve many more interests besides those of the holder. Through the administration and maintenance of power lines, for example, electric companies are able to provide electric service to private landowners and residents within the IFNM. Several of these rights-of-way serve companies and private individuals beyond the immediate area within and around the IFNM as well. Many of these actions are a smaller portion of a much larger service infrastructure of the pipeline and electric power companies, whose service extends well beyond the IFNM boundaries. In this regard, many of these existing rights-of-way cross several township and range parcels.

There are several actions that were authorized, many years prior to the designation of the IFNM, that have perpetual holding periods. This situation exists for a variety of the actions including the reservoir, railroad, a power line, a pipeline, several roads, and the communications site. The remainder of the actions are subject to varying expiration dates, which includes the years from now until 2025.

- *What will be the procedure followed for renewal requests from corporations, government entities, and private individuals for those actions subject to expiration?*
- *How will future proposed realty actions within the IFNM be handled? Will the Western Regional Corridor Study be followed? That is, shall there be a formal standard procedure followed, for those corporate and governmental entities and private individuals, filing applications documents and fees for rights-of-ways or leases?*
- *What will be the procedure followed for those corporate and governmental entities,*

and private individuals, that file for a temporary use permit?

- *Shall there be a formal notification process followed for those authorized holders of actions within the IFNM?*
- *What guidance can the Bureau of Land Management currently give to those with actions with a pending status?*
- *Will any actions be authorized or renewed based on a case-by-case basis, depending on the applicant's considerations and circumstances?*
- *Will the Tucson Soaring Club Recreation and Public Purposes lease be patented or modified?*

Grazing Management

Management of rangelands in the IFNM area is guided by the Phoenix Resource Management Plan (BLM 1988), the Eastern Arizona Grazing EIS (BLM 1986) and the associated Rangeland Program Summary to the Grazing EIS (BLM 1987b). The Eastern Arizona Grazing EIS provides regulations for managing rangelands and for the livestock grazing program. There are currently 13 grazing leases that are wholly or partly within the IFNM.

- *What levels of livestock grazing are appropriate for the IFNM, ?*
- *What role does livestock grazing in the IFNM play in the tourism industry, does it support dude ranching, commercial off highway tours?*
- *Where within the IFNM is livestock grazing appropriate?*

Integrating Monument Management with Other Agency and Community Plans

The BLM is committed to working with other agencies and communities to manage the IFNM. Coordination with Federal and state agencies, which have jurisdiction over resources within or close to the IFNM, such as the Park Service, Arizona State Land Department, Tohono O'Odham nation and the Arizona Game and Fish Department is essential for the effective management of the IFNM. Existing agreements with these agencies need to be reexamined and modified to ensure that IFNM management objectives are incorporated in them. New agreements with other agencies and local governments will also likely be developed to address specific management issues and implement aspects of the plan.

Proclamation objectives call for a significant portion of visitor services related to the IFNM to be located in the surrounding communities rather than within its boundary. In order to do this, a good working relationship with local tourism and service providers must be developed and

maintained. Agreements with the local counties and communities should to be explored for activities and services such as planning, transportation, emergency services (i.e., search and rescue) law enforcement, infrastructure, and tourism.

Emergency Services (Pima and Pinal County Sheriffs and NPS)

Emergency services in the IFNM are conducted throughout the planning area by the Pima and Pinal County sheriff's departments in coordination with the BLM and NPS law enforcement ranger. The following questions should be answered in the plan to arrive at a single, coordinated and effective approach to handle these activities throughout the IFNM.

- *What criteria will best determine when an emergency situation warrants the possible impacting of IFNM resources in order to properly deal with emergencies such as fires, emergency evacuations, lifesaving injury or medical evacuations, law enforcement activities, deceased persons, or aircraft accidents/investigation?*
- *What is the simplest process for considering and approving or rejecting requests for these activities anywhere in the IFNM, assuming by their nature that the activities require a quick response from someone in authority?*
- *What will be required, if anything, to establish or maintain cooperative relations with Pima and Pinal County sheriff departments and NPS relative to these activities?*

Threatened and Endangered Species Coordination (US Fish and Wildlife Service)

A Memorandum of Agreement (MOA) will be formulated with the US Fish and Wildlife Service (USFWS) to establish an effective and cooperative planning process upon which Endangered Species Act (ESA) Section 7 consultation may be conducted by the Bureau of Land Management. The agreement will serve to define the process, products, actions, time frame and expectations of the USFWS and BLM and will serve as a guiding document throughout the planning and consultation process. The MOA will:

1. Promote conservation of candidate, proposed, and listed species.
2. Allow for consultation/conferring on species and critical habitats during planning.
3. Increase Efficiency and shorten time frames for consultation.

Pima County

Pima County spearheaded the Sonoran Desert Conservation planning effort which led to the designation of the Ironwood Forest National Monument. The County has expressed interest in assisting BLM with planning and management of the IFNM on an as needed basis. A cooperative agreement will be entered into with Pima County to assist BLM with planning and management efforts. This agreement will serve to:

1. Coordinate planning efforts.

2. Coordinate and share scientific data and studies.
3. Facilitate co-funding of positions.

State of Arizona

Planning efforts will be coordinated with Arizona Game and Fish, Arizona State Land Department, and the Department of Environmental Quality. These agencies will be asked to participate in planning meetings to the greatest extent possible for their agency. Agreements will be constructed to take advantage of the strengths of each agency as it relates to the planning efforts, for example Arizona Game and Fish can monitor Tortoise populations.

Visitor Use and Enjoyment

Recreation/Tourism Management: Federal lands in the IFNM are generally open to public recreational use, subject to general regulations at 43CFR8300 and dispersed recreation management policies for BLM lands. No specific recreation management objectives have been identified for most of the monument area. Federal lands in portions of the planning area in the Tortolita Mountains and the Sawtooth Mountain have been identified as Cooperative Recreation Management Areas to provide for intensive recreation uses in cooperation with local government agencies. The cooperative management plans have not yet been developed.

- *Are dispersed recreation management policies adequate for providing for visitor use and enjoyment while protecting resource values in the National Monument and other federal lands in the planning area?*
- *Are supplementary regulations needed to implement the purposes of the National Monument designation?*
- *Should special recreation management objectives be established for federal lands in the area?*
- *How can the BLM best work with the Park Service, tourism industry, local businesses, etc., to ensure that visitors to the IFNM are provided with the right information about the area and the recreational activities it offers?*
- *What tools/sources, such as interpretation, marketing, and advertisement, need to be utilized on local, regional, and national levels for information and education for the area?*
- *What messages about the IFNM need to be conveyed?*
- *How will BLM incorporate visitor and resident preferences into IFNM management?*

Recreation Use Permits and Fees: Federal lands in the planning area are generally open to public

recreational use by individuals without special permit requirements. Special permits are required for commercial recreational use and for organized group activities. There are two commercial operations under Special Recreation Permits that provide visitor services in the monument area. With increasing visitor use, some of the existing recreation opportunities qualities in the planning area will change, particularly opportunities for solitude and primitive recreation. Additionally, demand for organized group events and commercial recreational permits is expected to increase.

- *Should permits and/or user fees be required for recreational use of federal lands in the planning area by individuals?*
- *What services need to be available to visitors to facilitate public use or meet recreation management objectives?*
- *Should limits be established on the type and number of organized group or commercial operation permits?*
- *What type of monitoring would be effective and efficient for BLM to utilize to determine impacts of organized, commercial, and general visitations on the natural and cultural resources of the IFNM?*

Hunting: The monument area is open to hunting subject to current federal and state laws and regulations. The Arizona Game and Fish Department is responsible for wildlife management and regulating hunting. The area is used for small and big game hunting, mainly rabbit, quail, dove, javelina, desert big horn sheep, and deer. With increasing public visitation for other recreational activities during the hunting seasons, the potential exists for increased conflicts among users. Safety zones are prescribed under State law within 1/4 mile from buildings or structures, and hunting grounds are found near or adjacent to existing residences and dispersed public use areas. Cross country travel by motorized vehicle is allowed under Arizona state regulations for retrieving game, but is prohibited on federal lands within the IFNM. With the intermingled state and federal land ownership, conflicts and confusion are likely among hunters in the area regarding vehicle use regulations.

- *Are additional hunting restrictions needed to ensure public safety, especially in areas of increased visitor use, recreation sites, or along roads and trails?*
- *Should special exceptions be made on motor vehicle use to retrieve game in the area?*

OHV Management: Existing OHV designations in the IFNM area include approximately 800 acres closed to all motorized vehicle use to protect desert big horn sheep habitat in the Ragged Top Mountain area, a 'Limited to designated roads and trails' designation on approximately 2000 Acres in the Waterman Mountains Area of Critical Environmental Concern, and a 'Limited to Existing Roads and Trails' over the rest of the area. The designated route system, and the existing route system have not been implemented since the designations were established in the current Resource Management Plan. The Ironwood Forest National Monument proclamation prohibits use of motorized vehicles' cross country, and directs the BLM to establish a transportation system.

The monument area contains an extensive system of existing routes of varying condition which are used by motorized vehicles.

Under current state regulations, motorized vehicles without registration or liability insurance coverage may be used on routes in the area that are not maintained by the state or counties. This poses liability concerns in the case of accidents involving injuries or property damage.

Policies and regulations for OHV use on federal lands differ from those applicable to state lands.

- *Are current OHV use designations adequate to protect the resources in the planning area?*
- *Should all motorized vehicle use be limited to the established transportation system?*
- *What routes need to be included in the transportation system for the planning area?*
- *What maintenance level is appropriate for the various routes?*

Target Shooting: Lands in the area are used for target shooting at a number of locations on both federal and state land. Under current regulations, target shooting is allowed on federal lands provided it does not create a hazard or nuisance, or cause resource damage or littering. Target shooting is prohibited on state lands.

- *Should target shooting be prohibited on federal lands in the National Monument to protect resource values and avoid potential hazards and conflicts?*
- *Should target shooting be allowed at designated areas in managed settings?*

Transportation System: The area contains an extensive system of existing roads and trails which were established for various access purposes, such as mining exploration, rangeland improvements, and recreational use. A BLM transportation plan for the area has not been prepared. The National Monument proclamation requires that a transportation system be established for the IFNM. Under current BLM policies, a transportation plan is developed to provide adequate access for administrative purposes and public use, and to identify road and trail maintenance needs.

- *What are the administrative and public access needs which should be accommodated by the area's transportation system?*
- *What roads and trails should be identified as components of the transportation system?*
- *What are the appropriate road and trail standards, and the type of uses which should be accommodated in the transportation system? (I.e.,: RVs/motorhomes, stock trailers, passenger vehicles, 4WD, equestrian, bicycles, hiking, etc.).*

- *What is the appropriate maintenance level for the various routes on the system?*
- *Are special restrictions needed to address liability issues, prevent use conflicts, resource damage, or other concerns?*
- *Will the Bureau of Land Management be able to sell Arizona State Land Recreation permits in order for visitors to travel within the IFNM?*
- *How will the BLM make the determination of what roads will be closed that enter into the IFNM from private lands and what type of access will be allowed to the private residents?*
- *What measures will be taken to reduce traffic conflicts between visitors and traditional users of the area, i.e., ranchers, miners, right of way users?*

Mountain Bicycles: The IFNM Proclamation prohibits all mechanized vehicle use off road, and the definition of mechanized vehicles includes mountain bicycles. The area is regularly used for mountain biking by individuals and organized groups/clubs, and is becoming increasingly popular for this activity. Mountain biking routes primarily utilize the existing road system, but some single track trails have been established cross country or along wildlife or livestock trails. Many mountain bikers prefer a single track trail system to avoid potential conflicts with motorized vehicle users.

- *Should a dedicated trail system be established for mountain biking as part of the transportation system for the area?*
- *Should mountain bikes be limited to travel routes also used by motor vehicles?*

Special Populations Accessibility: Recreational visitors in the area include a segment with mobility impairments and other disabilities. An accessibility assessment has not been prepared for the recreation opportunities and programs in the planning area, but the Americans with Disabilities Act requires consideration of access needs for special populations in federal land programs and activities.

- *What is the appropriate level of accessibility for the recreation opportunities and programs in the area?*
- *Should special exceptions be made for providing motorized access for persons with mobility impairments?*

Camping/Picnicking: The area is made up of dispersed recreation lands, and is used for camping

and picnicking in semi-primitive settings with no improvements or facilities provided. With increased public awareness of the area brought about by the National Monument designation, public demand and use for these activities are expected to increase.

- *Should dispersed camping and picnicking be regulated to prevent damage to resource values?*
- *Should camping be limited to designated camping areas?*

Visitor Information, Signing and Interpretation:

Visitor information and signs in the area are minimal, and there is no interpretative or educational plan. Information available to visitors influences recreational use and activities in the area, and the impacts visitors have on the area. An integrated visitor information, signing, and interpretive plan can help increase visitor awareness of resource values, encourage appropriate behavior to prevent resource damage and use conflicts, and promote safety and compliance with regulations.

- *What visitor information and signing should be provided to manage visitor use in the planning area?*
- *What are the appropriate interpretive themes and programs which should be provided in the planning area?*

Urban Interface

Primary access to the IFNM for the public is provided primarily by a system of county roads that vary in size and design from maintained gravel to two lane highway. To travel off the county maintained roads the public will have to utilize a system of primitive roads requiring the use of high clearance and/or four wheel drive vehicles. In numerous cases these roads cross private or state lands, which effectively preclude access to the BLM tracts. The state land department will sell recreation permits allowing anyone with a permit to move freely across lands owned by the State. However, private landowners can close the roads on their lands, unless legal access is obtained.

Most of the eastern edge of the IFNM is located adjacent to urban lands and people living in the area are accustomed to accessing the monument from the closest trail available. In many cases this is literally their back yard. The situation has contributed to the conflicts described in the Urban Interface section of this report, but it has also created a land ownership conflict requires a proactive approach. Furthermore interior private land owners are experiencing more access conflicts as the result of increased visitations to the IFNM. In many cases private land owners, such as ASARCO, are worry about the safety concerns of increased traffic on county roads where large trucks transport materials to and from the mine.

Controlling Unauthorized Uses

Disposal of Solid Waste: Increased residential subdivision and associated urbanization in the Arizona City and Marana/Avra Valley areas have led to increased occurrences of illegal dumping. In some areas of the extreme southeast boundary between Silverbell and Avra Valley Road, illegal dumping of residential and landscape vegetation has become common. There have also been routine occurrences of commercial waste product and hazardous materials dumping in this area. A large source of solid waste located in the Pump Station Road area is associated with irresponsible target shooting and "wildcat shooting ranges" where target shooters use residential refuse as targets.

Traffic Control and Parking: Currently there are no designated parking areas located within the IFNM. Open areas, road sides and washes have become default parking on an as needed basis. Traffic control is minimal to nonexistent on most of the IFNM roads and routes.

Large Group Parties: Numerous areas along Pump Station Road, Silverbell Road and the EPNG gas line service road have been the sites of large group "desert parties." Problems associated with these parties has been refuse, wood cutting, off road vehicle use, resource damage, reckless motor vehicle operation and other criminal offenses such as drug use, driving under the influence of drugs or alcohol, physical assaults, auto theft and motor vehicle accidents.

Wood Cutting: Increased wood cutting of Mesquite, Ironwood and Palo Verde trees have increased dramatically in the southeast area of the IFNM east and southeast of the Silverbell Mountains and in the Samaniego Hills. Most illegal wood cutting is used for either commercial or private use after being transported from the area. Much of this use is due to availability and the proximity of residential subdivisions in the area between Silverbell and Avra Valley Roads. Wood cutting has also increased in the Green Reservoir area on the east side of the Sawtooth Mountains. This too can be attributed to the proximity of residential subdivisions located near the IFNM and in the Arizona City area.

What Facilities and Infrastructure Are Needed to Provide Visitor Services and Administration of the IFNM?

The IFNM is characterized as a predominately natural environment with few facilities for the comfort and convenience of visitors. Facilities are needed, however, to provide for visitor safety and information, disabled access, and to address vehicle use, and other resource impacts. Current facilities include boundary signs, and an existing network of primary and secondary roads. There are no campgrounds, although there are many traditionally used camping areas in the Ragged Top area. Some visitors have requested more facilities while other say there are already too many. Currently there are no office facilities for the administration of the IFNM. Temporary use of office space at Pinal Air Park has been negotiated, but because of its location, it is not "visitor friendly" as visitor's must check in and out through a security gate house.

Monument Staffing, Office Space, and Equipment Needs

Appendix E provides the Tucson Field Office's proposed Table of Organization for effective staffing and management of the Ironwood Forest National Monument. A short description and rationale are provided for the new positions requested. Both management of the IFNM and preparation of the Plan will require assistance and involvement by the Tucson Field Office staff.

Additional office space and equipment (office furniture, computers, printers, etc.) will be needed to accommodate new monument positions. The building which currently houses the TFO Field Office is reaching capacity.

In addition to office space, the building layouts need to effectively provide visitor services for the IFNM. Ideally, visitor restroom facilities would be provided in a visitor services area which is visually and functionally separated from the staff offices. This would reduce traffic, increase security, and allow the area to be operated under different time schedules (i.e., open weekends) than the rest of the office.

The Field Office is requesting assistance from the Arizona State Office and National Business Center to evaluate the office space situation to determine alternatives (new construction, leasing of space, etc.) for handling existing and new staff.

- *To what extent, and where, are additional visitor facilities such as trails, restrooms, overlook areas, camping and parking areas needed?*
- *What level of development, choice of standards, consistency, and kind of maintenance would be required for existing or proposed visitor facilities, including signing?*
- *To what extent, and where, are office and visitor facilities needed?*

DATA and GIS NEEDS

The TFO staff has identified data and GIS needs that are required to address resource and use issues and develop and analyze impacts of plan alternatives. Appendix H summarizes these data needs and provides a cost estimate for collecting the data. In many cases, existing resource information available in the BLM Field Office will be used in formulating resource objectives and management actions.

Much of these data, however, will have to be updated, compiled, and put into digital format for use in the planning process and for development of resource maps for the plan. GIS theme maps are the building blocks to quantify resources, create maps, and manipulate information during alternative formulation, especially the preferred alternative.

In addition to existing information, new data are also needed in a number of areas to provide plan baseline inventory and resource condition information. The plan may recommend that certain additional resource data be gathered in implementing an action, or gathering data may be a recommended action. Table 1 provides a list of known data needs grouped by resource (not in

priority order at this time), rationales for why they are needed for plan development, and proposed solutions for gathering the data, and a projected cost and time requirement. The last column "Funding Need Beyond 2001 PTA" shows data collection costs above and beyond our projected 2001 budget.

The costs for collecting data for the plan are reflected in the Proposed Budget for IFNM Plan Preparation in Appendix G.

FORMAT AND PROCESS FOR THE PLAN

Through the planning process for the Ironwood Forest National Monument the BLM will develop short-term and long-term objectives. First, the existing Phoenix RMP will be amended to identify existing public lands for retention which were previously identified for disposal. These lands are located near the Ironwood Forest National Monument and in the Tortolita Mountains and Park Link Road areas. These contain critical habitat for Cactus Ferruginous Pygmy Owl. The land tenure adjustment will be a parallel, but separate, effort from the IFNM Plan with a short-term completion date.

A specific plan for the IFNM will be developed that will establish guidance, objectives, policy, and management actions. The plan will compliment the Sonoran Desert conservation efforts by Pima County and promote land stewardship excellence through relationship building with the community and other agencies.

Ecosystem Planning and Collaborative Approach

The Council on Environmental Quality (CEQ) regulations for implementing the National Environmental Policy Act (NEPA) direct that to the fullest extent possible federal agencies must encourage and facilitate public involvement in decisions that affect the quality of the human environment. Traditionally, BLM and other agencies have involved the public in planning at the initial scoping stage and have then "disappeared" until ready to ask for comments on a draft plan. This process led people to think that their comments were ignored and lack of trust of the agencies and public participation.

In recent years, the BLM has incorporated an ecosystem management approach in its land use planning process. Interested parties are encouraged to help establish goals and determine ways to achieve them.

The Interagency Ecosystem Management Task Force in its 1995-1996 report, *The Ecosystem Approach: Healthy Ecosystems and Sustainable Economies*, recommended eight steps in the ecosystem approach. These steps are complementary to the National Environmental Policy Act (NEPA) and guide agencies in implementing and participating in ecosystem efforts:

1. Define the areas of concern or interest.
2. Involve stakeholders.
3. Develop a shared vision of the ecosystem's desired future conditions.
4. Characterize the historical ecosystem and the present environmental, economic, and social conditions and trends.
5. Establish ecosystem goals.
6. Develop and implement an action for achieving the goals.
7. Monitor conditions and evaluate results.
8. Adapt management according to new information.

Planning Meetings and Relationship Building

Public meetings will be routinely scheduled, primarily on a monthly basis. These meetings will involve a broad spectrum of representation from the public, including OHV groups, environmental organizations, mountain biking clubs, ranchers, local neighbors, and other government agencies. The purpose of the meetings will be to;

- To Identify issues.
- Educate the Public about Natural and Cultural resources.
- Gather information about Public Uses and Needs for Public Lands.
- Determine public perception of appropriate uses.
- Foster open and honest discussion on resource issues in a neutral environment where people can present their perspectives without fear of personal attack.

Through this process of open discussion and debate groups or individuals with differing points of view gradually get to know and respect one another, thereby fostering a relationship which is able to promulgate alternatives which previously may have never been considered.

An on the ground perspective will also be provided through the use of field trips, guided by BLM, other agency representatives, ranchers, OHV representatives, and the public. The field trips will provide everyone with a shared perspective. For example, an environmentalist and a rancher can discuss face to face the impacts of cattle grazing while standing on and looking at the same piece of ground.

Formal Planning and Review

The relationship building process and the planning process are complimentary. The formal planning process requires public participation to as great extent as possible allowing the collaborative process described above to build a public platform from which the BLM can make better quality land management decisions. Furthermore the collaborative process garner public support for implementing planning decisions.

The format and outline for the plan will come from the BLM Land Use Planning Manual 1601 and Handbook H-1601-1 . All legal and policy requirements will be met in the plan and in the process regarding public notices, required elements, distribution of draft and final documents, and specific laws; the National Environmental Policy Act (NEPA) and Council on Environmental Quality guidelines (CEQ) will be met. The draft and final Environmental Impact Statement (EIS) will be published with the draft and final versions of the plan.

Public comments will be analyzed after a 90-day review period for the draft plan and EIS. All comments will be considered by the agencies before the final plan and EIS, and Record of Decision(s) are published. See the plan and EIS preparation schedule for general content of the plan and the process to be used. Detail of maps in the plan will depend on the information being presented.

A range of alternatives, including a No Action alternative, will be developed to respond to the issues identified at the outset of the process. Each alternative will provide different solutions to the issues and concerns explored. The objective in alternative formulation will be to develop realistic, implementable solutions that represent a complete plan in and of themselves. Some sub alternatives may be identified where only portions of an alternative require variations in resource management potential.

Likely alternatives to be formulated for the Plan include: 1) **No Action Alternative**, which will meet the minimum Legislative requirements for the Plan mandated by P.L. 106-76; 2) **Enhanced Protection and Conservation Alternative**, which will maximize the enhancement and protection of the Area's natural, cultural, and scenic resources; 3) **Enhanced Multiple Use Alternative**, which will maximize multiple uses such as recreation, grazing, leases, and other opportunities available while still providing protection for the Natural and Cultural Resources; and the 4) **Preferred**

Alternative, which will protect the natural and cultural resources, determine appropriate uses in the IFNM and potentially set limitations on those uses.

Internal Review of the Plan

Four weeks will be permitted for the internal review of the Draft and Final Plan and EIS by the BLM and other participating government agencies, including time required to transmit comments to the core team, SO, and WO. Forms will be supplied electronically to all reviewers to facilitate receipt of comments and to facilitate the analysis of the comments and needed corrections. For the BLM, review will take place at the BLM Tucson Field Office, Arizona State Office, and Washington, D.C. NLCS headquarters.

Accountability

Individuals working on this plan are accountable for completing their specific tasks on time. Management and supervisors will be kept informed of our progress. All efforts will be made by the Team Leader to keep team members and reviewers aware of the schedule and elapsed time. Being accountable for a job carries a responsibility for each individual involved to meet deadlines and submit the best product possible. Any situations that occur in which a delay seems imminent will be resolved immediately by collaboration between the Team Leader and individuals involved. The objective will be to evaluate the circumstances, ensure all involved are aware of the impacts, and take actions to get the schedule and products on track again.

**MANAGEMENT GUIDANCE FOR DEVELOPING
MANAGEMENT PLAN**

BLM’s management of public lands and resources is governed by a large number and variety of laws, regulations, and policies. Table 1 summarizes the major laws, regulations, and policies that apply to the resources and proposals to be analyzed through this plan development. In addition to these pre-existing guides, the IFNM Proclamation (Appendix F) provides specific directives to be implemented in the IFNM.

Table 1. Laws and Regulations Relating to the Ironwood Forest National Monument Management Plan	
Law/Regulation:	Applies to:
American Indian Religious Freedom Act (AIRFA) 42 USC @ 1996	Native American religious places and access
Archeological Resources Protection Act (ARPA) 16 USC @ 470	Archaeological resources
Clean Air Act (CAA) of 1970, as amended 1990 42 USC @ 7401 et seq.	Air quality

Clean Water Act (CWA), as amended 33 USC @1252 et seq.	Surface water quality
Endangered Species Act (ESA) 16 USC @1531 et seq., as amended	Threatened and endangered species
Federal Land Exchange Facilitation Act of 1988 (FLEFA), 43 USC @1716, @1740	Federal land exchanges
Federal Land Policy and Management Act (FLPMA), 43 USC @1701	Federal lands, special management areas
Federal Noxious Weed Act of 1974, as amended	Noxious weeds
Federal Pollution Control Act, as amended 1972	Watersheds
Land and Water Conservation Fund Act of 1965	Outdoor recreation
Mining and Mineral Policy Act of 1970	Mining
Mining Law of 1872, as amended	Mining claims
National Environmental Policy Act (NEPA) 42 USC @4321 et seq., as amended	Federal undertakings
National Historic Preservation Act (NHPA)	Archaeological and historic properties
National Materials and Minerals Policy Research Development Act of 1980	Mineral resources
Public Rangelands Improvements Act of 1978	Rangeland and wildlife management
Resource Conservation and Recovery Act of 1986, as amended (RCRA)	Hazardous or solid waste
Sikes Act	Fish and wildlife management
Soil Conservation and Domestic Allotment Act of 1935	Watersheds
Taylor Grazing Act of 1934	Livestock grazing
Water Quality Act of 1987	Riparian areas, wetlands
Watershed Protection and Flood Control Act of 1954	Watersheds
Wild and Scenic Rivers Act (WSRA) 16 USC @1271 et seq.	Wild and scenic rivers
Secretary of the Interior Order 3175 (2 DM 512)	Indian trust assets
Executive Order 11593	Preservation of the cultural environment
Executive Order 11988	Flood plain management
Executive Order 11990	Wetlands, riparian zones
Executive Order 12898	Environmental justice

Executive Order 13007	Sacred sites
Executive Order 13112	Invasive species

Watershed Management

The Federal Land and Policy Act of 1967 (FLPMA) defines BLM's multiple use management mission to include protection of watersheds. FLPMA requires that public lands be managed to protect scientific, environmental, air and atmospheric, and water resources. FLPMA also requires (1) that BLM develop land use plans to guide the management actions on these lands and (2) that land use plans comply with state and federal air, water, and pollution standards.

FLPMA requires compliance with the following laws:

- Soil Conservation and Domestic Allotment Act of 1935.
- Watershed Protection and Flood Control Act of 1954.
- Colorado River Basin Salinity Control Act of 1974.
- Wild and Scenic Rivers Act of 1968.
- National Environmental Policy Act of 1969.
- Federal Pollution Control Act with amendments of 1972.
- Clean Water Act of 1989.
- Safe Drinking Water Act of 1977.

The Clean Air Act of 1970 and the 1990 amendments govern air quality. BLM Manual 7000 and executive orders provide field guidance in managing soil, water, and air.

Mineral Management

The IFNM Proclamation withdraws Monument lands from entry, location, sale, or leasing under the mining laws.

Overall guidance on managing mineral resources appears in the following:

- General Mining Law of 1872, as amended.
- Mining and Minerals Policy Act of 1970.
- Sec. 102 (a)(12) of the Federal Land Policy and Management Act.
- National Materials and Minerals Policy, Research and Development Act of 1980.
- State of Arizona statutes and rules.
- BLM's Mineral Resources Policy of 1984.

Section 3809.2-2 of Title 43 Code of Federal Regulations covers concerns for air, water, and solid waste. This regulation requires all operators to comply with state pollution control standards.

- *Locatable Minerals*: Development of locatable minerals is regulated by BLM's Surface

Management Regulations at 43 CFR 3809. The 3809 regulations require mineral exploration and development under the mining laws to prevent unnecessary or undue degradation of other resources. Mining activities will be evaluated on a case-by-case basis during the life of this plan.

- *Saleable Minerals:* The Mineral Act of 1947 and 43 CFR 3600 provide for the disposal and regulation of mineral materials. BLM will administer the sales of mineral materials to the public on a case-by-case basis.
- *Leasable Minerals:* The Mineral Leasing Act of 1920, Geothermal Steam Act of 1970, and 43 CFR 3100 to 3500 provide the regulatory framework for issuing mineral leases. BLM attaches stipulations to leases to protect natural and cultural resources in a lease area.

Hazardous Materials

BLM manages hazardous materials in compliance with the following statutes:

- Resource Conservation and Recovery Act (RCRA), or Public Law 94-580.
- Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), or Public Law 96-510, also known as the Superfund Act.
- Superfund Amendments and Reauthorization Act (SARA) Title III (E.O. 12580).

BLM responsibilities under these acts include conformance with federal RCRA enforcement regulations pertaining to the storage, handling, and disposal of hazardous materials and reporting unpermitted hazardous material discharges under the provisions of CERCLA. The BLM Tucson Field Office hazardous material's specialist and law enforcement will coordinate environmental conditions such as spills or illegal dumping and initiate the proper response.

Soils Management

The BLM must 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 use and activities.

BLM's current grazing regulations (43CFR part 4000) provide Standards and Guidelines for Rangeland Health. BLM has supplemented regulations to be more responsive to land management in Arizona. These regulations apply to all BLM-administered lands where livestock grazing is permitted. The standards provide objectives that must be achieved for BLM-managed soil, water, and vegetation resources. BLM evaluates activities proposed in erosion-prone areas through the National Environmental Policy Act process to determine expected impacts and mitigating measures needed to abate possible impacts.

Water Management

BLM's mandate of the water resource program consists of the following:

- To ensure the physical presence and legal availability of water on public lands.
- To ensure that those waters meet or exceed federal and state water quality standards for specific uses.
- To mitigate activities to prevent water quality degradation.

The water resource program is divided into three parts: (1) water inventory (2) water rights, and (3) monitoring.

Water Inventory: BLM policy is to inventory all water resources on public lands it administers and to document and store this data in its Water Data Management System.

Water Rights: BLM policy is to file for water rights on all water sources on public and acquired lands in accordance with State of Arizona water laws.

Water Quality: BLM monitors water quality to assess resource impacts from specific activities and to obtain baseline resource information.

Non point source pollution abatement authority is addressed in Section 319 of the Federal Clean Water Act Amendments of 1987 and the State of Arizona Environmental Quality Act (EQA) of 1986. The Arizona Department of Environmental Quality (ADEQ) is the state agency responsible for non point source water pollution control and abatement. ADEQ annually reports on the status of the water quality and any impaired waters. For more information see the ADEQ - Arizona Water Quality Assessment: 1998 - 305b Report & Arizona Provisional Water Quality Limited Waters List.

Air Quality

The objective of the BLM's air resource program is to maintain or improve air quality within National Ambient Air Quality Standards (NAAQS), achieve State Implementation Plan (SIP) goals for non-attainment areas, reduce emissions from point/non-point sources, and improve BLM's ability to understand and predict the effects of changing climatic regimes and atmospheric conditions that may cause ecological changes in climate-stressed environments.

- *Open Areas, Dry Washes, and River Beds:* The control of airborne dust from open areas, dry washes and river beds is addressed in Arizona Rules and Regulations for Air Pollution Control - R9-3-404 A-C.
- *Roadways and Streets:* Regulation, R9-3-405 A prohibits the use, repair, building, or rebuilding of roadways without taking reasonable dust abatement measures.
- *Mineral Tailings:* R9-3-408 addresses prohibition on permitting or allowing construction of mineral tailings' piles.

- *Fire Management:* R9-3-402 and 403 direct BLM to follow permitting procedures before conducting any prescribed burning projects, to ensure that smoke from fires does not degrade air quality. Section 118 of the Clean Air Act (49.501 of the Arizona Laws Relating to Environmental Quality) charges the Arizona Department of Environmental Quality to protect the health and welfare of Arizona residents from adverse impacts of air pollution. Those wishing to conduct prescribed burns must contact the Arizona Department of Environmental Quality.

Vegetation Management

The Federal Land Policy and Management Act mandates BLM to manage vegetation resources under the principles of multiple use and sustained yield to maintain or improve biological diversity. This planning effort has categorized lands supporting native vegetation communities into two distinct types: (1) rangelands and (2) riparian areas and wetlands.

Rangeland Resources

Management of rangelands in the planning area is guided by the Phoenix Resource Management Plan (BLM 1988), the Eastern Arizona Grazing EIS (BLM 1986) and the associated Rangeland Program Summary to the Grazing EIS (BLM 1987b). These plans were amended to adopt the Arizona Standards for Rangeland Health and Guidelines for Grazing Management. The Standards apply to all activities on BLM lands in Arizona. The Eastern Arizona Grazing EIS provides regulations for managing rangelands and for the livestock grazing program through the following objectives:

- Restore and improve rangeland condition and productivity.
- Provide for use and development of rangeland.
- Maintain and improve habitat and viable wildlife populations.
- Control future management actions.
- Promote sustained yield and multiple use.

Riparian and Wetland Resources.

Legal authority for BLM's management of riparian-wetland areas is based on many laws and executive orders, including the following:

- Taylor Grazing Act of 1934.
- Endangered Species Act of 1973.
- Federal Land and Policy Management Act of 1976.
- Emergency Wetland Resources Act of 1986.
- Water Quality Act of 1987.
- Executive Order 11988 (Floodplain Management).
- Executive Order 11990 (Protection of Wetlands).

On January 22, 1987, BLM issued its riparian area management policy, which defined the term riparian area, set management objectives, and outlined specific policy direction. This policy is the basis for BLM Manual 1737 (Riparian-Wetland Area Management), the Bureau-wide Riparian-Wetland Initiative for the 1990's, and the Arizona Riparian-Wetland Area Management Strategy. Riparian management plans will be consistent to the extent practicable, with State of Arizona riparian habitat, protection policy, "Protection of the Riparian Areas" February 14, 1991 (Executive Order 91-6).

Livestock Grazing

BLM manages its grazing program under provisions of the Taylor Grazing Act of 1934, the Federal Land Policy and Management Act of 1976, and the Public Rangelands Improvement Act of 1978. These acts, along with Title 43, Code of Federal Regulations Part 4100 and associated BLM manual policy, authorize the following:

- Issuance of grazing permits and leases.
- Detection and abatement of unauthorized use.
- Use supervision.
- Livestock grazing management.
- Range improvement facilities and treatments.

Actions pertaining to livestock grazing management conform to the Eastern Arizona Grazing EIS (BLM 1986), provisions of the Taylor Grazing Act of 1934, and the Public Rangeland Improvement Act of 1978. All proposed grazing and rangeland improvement practices conform to the Arizona Standards for Rangeland Health and Guidelines for Grazing Administration and the Best Management Practices developed by the Arizona Department of Environmental Quality for livestock grazing. BLM administers livestock grazing under the 43 CFR 4100 regulations consistent with preserving the values outlined in the IFNM Proclamation

Fish and Wildlife Management

Legislation, including the Federal Land Policy and Management Act, the Endangered Species Act, Public Rangelands Improvement Act, and the Sikes Act, direct BLM to manage habitats to meet the needs of fish and wildlife.

The Endangered Species Act of 1973 is the authority for conserving endangered and threatened species on public lands. Section 4(f) of this act directs the Secretary of the Interior to develop and implement recovery plans for the conservation and survival of endangered species. Section 7(a)(1) requires each federal agency to carry out proactive measures to recover listed species. Section 7(a)(2) requires each agency to avoid jeopardizing the existence of listed species through its actions.

BLM Manual 6840 does the following:

- Outlines the conservation of threatened and endangered species and the habitat on which they depend.
- Ensures that all actions that BLM authorizes, funds, or implements comply with the Endangered Species Act.
- Requires cooperation with the U.S. Fish and Wildlife Service in the planning and recovery of threatened and endangered species.
- States BLM's policy for special status candidate species.

BLM will use collaborative information and services from state agencies, federal agencies, universities, conservation groups, and organizations for proposals, the implementing of wildlife improvements, or any other wildlife management action. This plan amendment meets Sikes Act (1974) requirements for a wildlife habitat management plan. Section 205 of the National Environmental Policy Act requires interdisciplinary consultation.

Cultural Resources

The BLM administers cultural resources according to mandates set forth by a number of regulations, laws and acts, including the Federal Land Policy and Management Act (FLPMA) of 1976, the National Historic Preservation Act (NHPA) of 1966, and the Archaeological Resources Protection Act (ARPA) of 1979.

In Arizona, the BLM also operates under the terms of a national Programmatic Agreement (PA) and a Protocol with the Arizona State Historic Preservation Officer (SHPO). This Protocol provides the opportunity for SHPO to participate as a partner in the planning process, guides inventory, data recovery and impact mitigation procedures for cultural resources eligible for listing or listed on the National Register of Historic Places that are affected by BLM undertakings and actions.

In compliance with FLPMA and BLM policy, the BLM's cultural resource management program requires the BLM to inventory and preserve significant cultural properties located on land under its administration. In compliance with this legislation, the BLM's cultural resource management program at the field office level provides for: 1) collection and assimilation of information about the nature of the cultural resources known and expected to occur within the field area, 2) assessment of cultural resource use potentials, 3) assignment of resource uses, 4) planned steps to protect or realize assigned uses, and 5) authorization of appropriate uses.

To comply with the National Historic Preservation Act, activities that may affect properties listed on or eligible for the National Register of Historic Places are evaluated and potential impacts analyzed and mitigated under the terms of BLM's national cultural resources Programmatic Agreement and Arizona Protocol.

The Archaeological Resources Protection Act does the following:

- Prohibits the attempt or excavation, removal, damage, or trafficking of archaeological

- resources from public land by unauthorized persons.
- Provides for the authorized removal and excavation of cultural resources through a permitting process.
- Requires the Secretary of the Interior to prepare plans to determine the nature and extent of archaeological resources and to schedule land surveys in areas likely to contain the most scientifically valuable archaeological resources.

Native American Consultation

BLM must consult with Native Americans while preparing planning documents such as RMPs to meet its responsibilities under the following:

- Federal Land Policy and Management Act National Environmental Policy Act.
- American Indian Religious Freedom Act.
- Executive Order 13007.
- National Historic Preservation Act
- Indian Trust Responsibilities (Departmental Manual 303 Section 2, Principals for Managing Indian Trust Assets)

These responsibilities require BLM to inform tribal officials and representatives of opportunities to comment on and participate in developing BLM use plans, specifically (1) requesting their views, (2) asking which people such as tribal leaders or religious practitioners it should contact, and (3) making a good faith effort to pursue those contacts and elicit Native American interests and concerns.

Recreation Use Permits

The Land and Water Conservation Fund Act of 1965 is the main authority that assures accessibility to outdoor recreation resources. This act serves as the basis for the objectives of the BLM recreation program:

- Provide quality outdoor recreation opportunities and experiences.
- Protect visitor health and safety and natural and cultural resources.
- Provide universally accessible facilities.
- Resolve user conflicts.

Commercial recreation uses, special events, and group activities will have to apply for special recreation permits. BLM considers these applications on a case-by-case basis and addresses them under Title 43 CFR, Sub-part 8372 (Special Recreation Permits, Other than on Developed Recreation Site). Other criteria applied to the permits come from the NEPA guidelines. These criteria ensure consistency with management objectives such as the following:

- Suitability.
- Mitigation of potential ground disturbance.

- Amount of traffic generated by the permit.
- Conflict with other uses.

PARTICIPANTS IN THE PROCESS

Roles, Responsibilities

The planning structure described below takes advantage of a unique relationship with Pima County to assist in garnering support and allowing the community to participate strongly in the plan. Political support for Ironwood Forest National Monument is high. In fact, it was local political leaders, namely Pima County, that spearheaded efforts for designation as part of the broader Sonoran Desert Conservation Plan. Tribal leaders from the Tohono O'Odham Nation, as well as conservation groups, have given their vote of support. The vision to protect this valuable tract of Sonoran Desert shows that the decision to create the IFNM was not a "top down" action, but one that receives strong local support.

Management Team

The management team consists of the Monument Manager, Tucson Field Office Manager, and the State Director.

Position	Date to be On-board	Role/Responsibility
Monument Manager (Vacant)	May 2001	Provide management oversight, leadership, direction and supervision for the various Monument operations. Prepares and executes budget, hires and supervises staff. Serves as point person in the plan public participation process.
Field Office Manager (Vacant)	October 2001	Sets Monument Manager and Planning Team priorities. Ensures that management of lands and resources along agency administrative boundaries is arrived at in a collaborative manner to avoid different approaches and confusing direction. Briefs State Director on progress and recommends solutions to keeping planning effort on track, approves the pre-plan analysis; recommends draft and final products to State Director.

State Director Denise Meridith	On Board	Approves Draft plan and signs EIS, BLM's Record of Decision and final document; provides staff coordination and review; assists in protests; provides some scarce skill specialists for the interdisciplinary team as needed.
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Community Outreach/Partnership Team

The community outreach and partnership team will serve as the primary group to help coordinate and facilitate monthly meetings for the planning effort. Each partnership or organization will bring a unique perspective and valuable factual information for us to consider in the planning process. The discussion and education of each other will help bring the public to a common understanding, not necessarily agreement, of the natural and cultural resources in the area. Arizona Game and Fish can provide talks about terrestrial wildlife such as Big Horn Sheep Cactus ferruginous Pygmy Owl and Desert Tortoise. Local ranchers can describe their operations and provide field tours so that everyone has a common understanding. Recreation user groups can provide the group with unique perspectives on OHV, hiking, and camping. Environmental groups can provide valuable biologic information and perspective to the users regarding threatened and endangered species.

Position	Position Status	Role/Responsibility
Monument Manager	Vacant	See IFNM Plan-related duties listed above.
Community Planner	Vacant	Plans meetings with input from others, arranges locations, facilities, and equipment availability, helps prepare draft agendas, and manages meetings to ensure agendas being met and honored; mediates conflict such that resolution of issues can be accomplished, internally and externally.
Tucson Field Office Manager	Vacant	Assist in conducting public meetings and provides responses to questions and inquiries on a managerial level.
ID Team Members	Various	Participate in planning meetings and provide natural and cultural resource information. Provide presentations and lead field trips when appropriate.
State Land Department	Unknown	Participate in planning meetings and provide natural and cultural resource information. Provide presentations and lead field trips when appropriate.

Pima County	Unknown	Participate in planning meetings and provide natural and cultural resource information. Provide presentations and lead field trips when appropriate.
Sonoran Desert Museum	Unknown	Participate in planning meetings and provide natural and cultural resource information. Provide presentations and lead field trips when appropriate.
All Other interested Organizations	Unknown	Participate in planning meetings and provide natural and cultural resource information. Provide presentations and lead field trips when appropriate.
State Historic Preservation Officer	Unknown	Participate in planning meetings and provide natural and cultural resource information.

Interdisciplinary Team (I.D. Team): The I.D. team will work with the community planner and management team to ensure throughout all aspects of the plan to ensure the following objectives:

1. Complete the plan in a timely manner.
2. Develop information and provide professional expertise at public meetings.
3. Coordinate collection of resource information necessary to formulate alternatives and to serve as a base for planning decisions. Data collection will be obtained by using a combination of private contractors, BLM personnel, and community partners.
4. Coordinate with Arizona State Office Program Leads and management to ensure that data needs being collected are to acceptable BLM standards.
5. Coordinate with other agency counterparts, such as Pima County and State Land Office, as it relates to collection of data and coordinating resource management.

Position	Anticipated Date On-board	Role/Responsibility
Monument Manager (Vacant)	May, 2001	Provide management oversight, leadership, direction and supervision for the various IFNM operations.

Community Planner (Vacant)/ This may become a job share position with Pima County	May 2001	Will provide team leadership to resource staff in public scoping, developing community involvement in evaluating the current Resource Management Plan, and developing necessary management plan amendment.
Soil Water Air Specialist	TFO Staff	Will oversee water and air resource management planning and resource protection activities, completion of assessments.
Archaeologist (Vacant)	June 2001	Will oversee cultural resource management planning and resource protection activities, completion of surveys and assessments.
Wildlife/Range Specialists (Vacant)	June 2001	Will complete wildlife resource inventories and assessments related to planning activities, cactus ferruginous pygmy owl and long nosed bat surveys.
Supervisory Law Enforcement Officer	October, 2001	Provide expertise on law enforcement and border conflict issues as they relate to resource protection and visitor services.
Outdoor Recreation Planner (Vacant)	June 2001	Will be responsible for recreation management activities related to planning, resource protection and visitor services, including resource inventories, developing and implementing interim visitor management plan and OHV designations, and administering special recreation permits.
Computer Specialist (Vacant)	May 2001	Manage information technology systems for IFNM staff and administrative facilities.
Public Contact Specialist (Vacant)	July 2001	Public outreach and information programs, volunteers and community building.
Realty Specialist (Vacant)	July 2001	Will administer lands and realty program.
Geologist (Vacant)	July 2001	Will assist with managing existing mining claims, validity examinations, and provide technical input for planning.

Assistant Monument Manager (Vacant)	July 2001	Provide management oversight, leadership and supervision of IFNM staff.
Biological Technician	August 2001	Assist with wildlife resource and sensitive species surveys and assessments. Will serve as a field liaison to contractors collecting information for planning and management purposes.
Range/Recreation Technician	August 2001	Assist with recreation and range management program activities, range monitoring and evaluation, collection of visitor use information, administration of grazing permits, monitoring of permitted group activities, and range improvements. Will serve as a field liaison to contractors collecting information for planning and management purposes.
Editorial Assistant (Vacant)	January 2002	Provide technical support for preparing planning and related documents, and public information materials.
Staff Assistant (Vacant)	January 2002	Will provide administrative support for IFNM staff and headquarters, handling correspondence, financial, travel, filing and related office functions.

COMMUNICATION PLAN

The public participation opportunities for the major stages of the planning process are listed below. The schedule for these events will be published later. Every effort will be made to assure active public involvement throughout the process. Forms of communication will include use of Internet technology. A website will be developed that provides information regarding the planning process and related information, and will solicit comments from users and interested public.

Identify Issues, Planning Criteria, and Management Concern

Federal Register Notice of Intent, media articles, and website information regarding the preparation and content of the plan, an announced schedule of upcoming scoping meetings. Newsletters and meeting notices will be sent to people on the mailing list. We anticipate continual growth of the mailing list, due to growing interest by various organizations and the public, therefore the list will be actively managed.

Informal public open house scoping meetings to gather public input on the issues, management concerns to be resolved in the plan and on the planning criteria and process. Request for written comments on issues/scope of Plan with a 30-day comment period.

Formulate Alternatives

Informal public open house meetings with public, interested groups, agencies, etc., to discuss alternatives and make sure issues are addressed. Newsletters provide background information on issues and alternatives.

Public response via written, verbal responses in a 30-day comment period will be requested.

Issue the Draft IFNM Plan/EIS

Public Notice of the availability of the draft plan/EIS will include: Federal Register Notices regarding the availability of the draft plan/EIS and a 90-day period for public comments to be submitted; newspaper articles will be published in local/regional papers advertising the availability of the draft plan/EIS, the 90-day comment period, and the schedule of the public meetings to be held during the comment period. This information will also be posted to the website regarding availability of the draft plan/EIS and solicitation for public comment via email.

Public meetings held locally during the 90-day public comment period to gather verbal or written input on the draft plan/EIS will also be conducted.

Publish the Proposed Final IFNM Plan/EIS

The Final Plan/EIS will be sent to those on the mailing list as well as to all those that participate in the planning process during the preparation of the plan; the availability of the plan will be advertised in regional newspapers and other media, as well as posted to the website. A notice explaining the protest period of 30 days will be included.

Solicit Governor's consistency review (60 days).

Informal public input, written, verbal, and e-mail will be welcomed anytime in the process. Input is to be documented and routed to the BLM National Monument Manager then coordinated with the

Field and State Offices. A form for this type of input is in Appendix D.

Respond to Protests

Written responses will be sent to the public as needed.

Federal Register Notice will be published (if needed), requesting comments on significant changes made as result of a protest.

Publish Approved Plan

Notify public via news articles, e-mail, website, and transmittal letters of availability of approved Plan.

Stakeholders List

Major groups of stakeholders that have been identified are listed below. Additional stakeholders will be identified throughout the process. A mailing list identifying key people in these organizations, agencies, and interest groups has been compiled and will be managed internally, including responsibility for handling all mailings, and notifications of public meetings, input deadlines, etc., associated with the public participation process.

Interested public	Search/Rescue groups
Special Interest Groups	Resource Advisory Council
National, state, and local agencies	Media
Recreational Organizations	Grazing Permittees
Conservation Organizations	Special Recreation Use Permittees
State, county, and municipal elected officials	Mining Claimants
lien holders	Right-of-Way Holders
Interested businesses and consultants	Communication Site Holders
Native American Tribal Governments	Mineral Material Permittees
Adjacent private landowners	Land Use Permittees
	Land Withdrawal Proponents

Budget for Planning

The total budget for IFNM and Sonoran Desert Conservation planning consists of \$1.4 million for labor and \$1.8 million in operations and support costs. *The total planning budget over a four-year period is \$3,257,000.* The planning budget for Ironwood National Monument and Sonoran Desert Conservation Plan is divided into funding for labor and operations.

Two tables were created that itemize the costs necessary for planning. Table 1 shows the positions which comprise the Interdisciplinary and Management teams and the anticipated work months and associated costs for labor. Table 2 illustrates the operational costs associated with data collection, contracting, overhead, and publication of the drafts and finals. The tables were put together with the following assumptions in mind:

1. Work month allocations were divided out for the period of planning according to the anticipated time required for each resource specialist to accomplish the plan(s).

2. The labor allocation stays within the existing approved Table of Organization for the Ironwood.
3. The submitted budget maximizes contracting to the greatest extent possible.
4. A small amount of overhead costs is attributed to planning, i.e., vehicles, facilities, etc.
5. Labor costs were adjusted for inflation at the rate of 2.75 percent per year.
6. Costs were adjusted according to the submitted time frame for planning and data collection as shown in the Plan Preparation Schedule section of this report.
7. Labor costs for 2001 were calculated utilizing the anticipated reporting dates for the positions shown in Table 1.

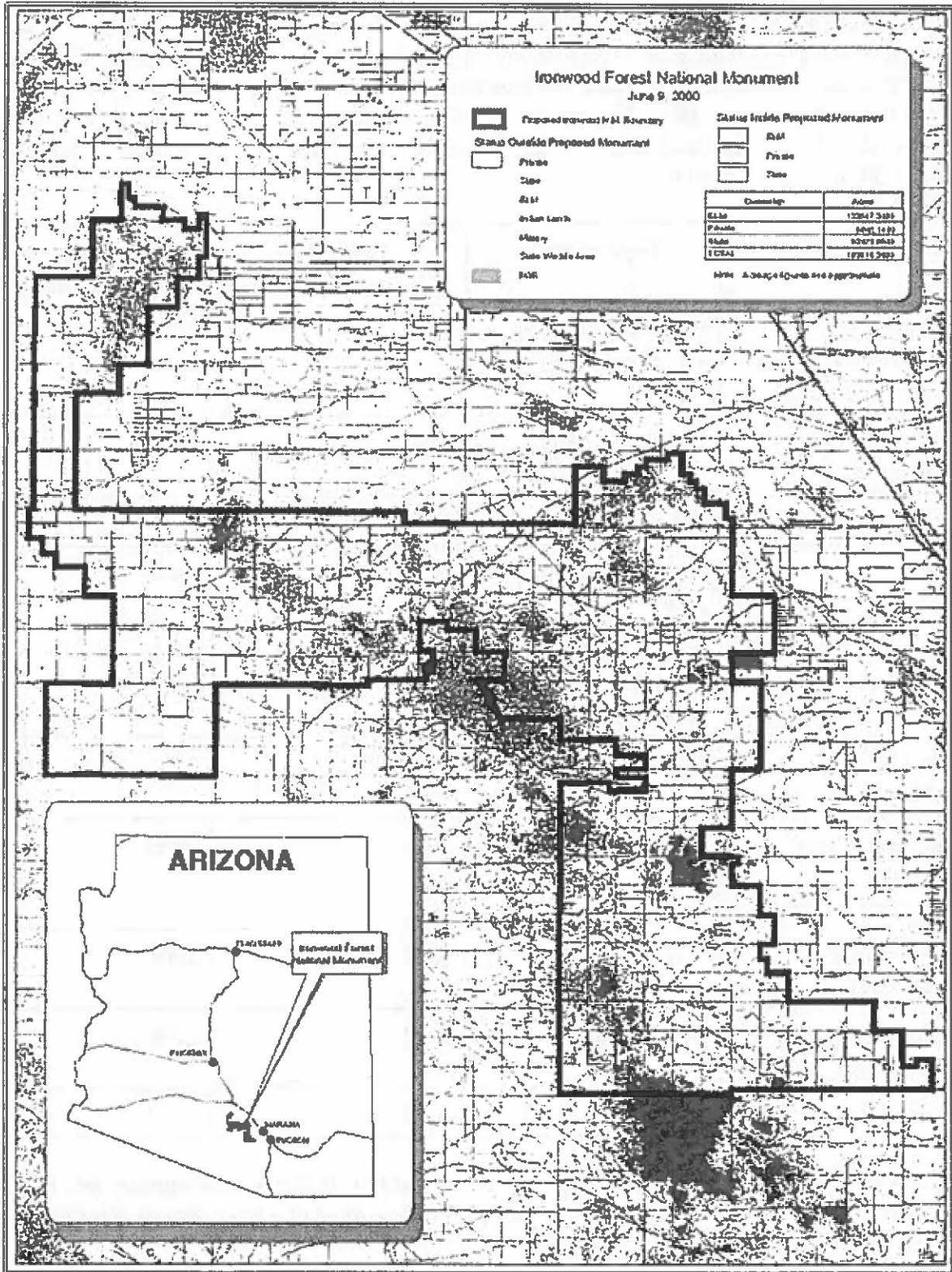
TABLE 1: Proposed Budget Monument Plan Preparation - Ironwood Forest National Monument, Sonoran Desert Conservation Plan

	FY-2001	FY-2002	FY-2003	FY-2004
IFNM PLAN COMPONENT				
Collection of Recreation Data including Visitor Use, Transportation/Access, Camping Areas, Travel Route inventory Collection of Cultural and Native American Site data. Collection of Wildlife and Vegetation Data, Threatened and Endangered Species.	\$5,000	\$715,000	\$575,000	\$83,500
Support Costs, Vehicles, Meeting Facilitation, Supplies Materials, Travel, Facility Costs, PCS Move Costs	\$190,000	\$55,000	\$55,000	\$55,000
Write Draft Plan and EIS - plan prep, internal reviews, contractor/printing costs.		\$15,000	\$15,000	

TABLE 1: Proposed Budget Monument Plan Preparation - Ironwood Forest National Monument, Sonoran Desert Conservation Plan

	FY-2001	FY-2002	FY-2003	FY-2004
IFNM PLAN COMPONENT				
Write Final Plan and EIS - comment analysis, prepare final, internal review, contractor/printing. Management Decisions - prepare ROD, Governor's Consistency Review, answer protests, misc. expenses,				\$15,000
Labor Costs Total	38 WM's \$175,794	95 WM's \$406,376	99 WM's \$429,688	99 WM's \$416,653
Total	\$370,794	\$1,191,376	\$1,074,688	\$570,153

Appendix A



Appendix B
PLAN PREPARATION SCHEDULE

The plan preparation schedule is reflecting anticipated time frames for hiring staff and consultants who will be working on the plan. The schedule also reflects the capabilities of the existing Tucson Field Office Staff to begin some initial work on the planning and subsequently transition to IFNM staff as they become available. The schedule also integrates this workload in with other planning efforts within the Tucson Field Office which have either been initiated or anticipate initiating in the near future. These include:

Name	Type of Plan	Initiated	Anticipated Completion
Las Cienegas Ntl Conservation Area (Empire-Cienega)	RMP Amendment and Activity Plan	1996	2001
Baboquivari Wilderness	Wilderness Plan	2000	2001 - 2002
Coyote Wilderness	Wilderness Plan	2000	2002
IFNM	RMP and Activity Plan	2001	2004
Sonoran Desert Conservation Plan	RMP Amendment Land Tenure Adjustments	2001	2002
Gila Planning Partnership	Activity Plan	2000	2003
San Pedro Riparian National Conservation Area	RMP/Activity Plan	2002	2006
White Canyon Wilderness	Wilderness Plan	2002	2004
Needles Eye Wilderness	Wilderness Plan	2002	2004
Tucson Field Office	RMP/Activity Plan	2003	2007

This pre-plan only addresses the needs for the Ironwood Forest National Monument and the Sonoran Desert Conservation Plan, pre-plans will be developed at a later date to identify needs for other planning efforts noted above.

Ironwood Forest National Monument Planning Schedule:

Planning Schedule reflects initial scoping meetings which transpired shortly after the IFNM was established in June of 2000. These meetings were to address concerns the local public expressed and to provide as factual information as possible. These initial meetings will be highly beneficial to the upcoming planning effort as they set the groundwork for identifying interested groups and issues.

The schedule also reflects longer time frames than usual for scoping at public meetings. This is to allow for partnership building and collaboration. The scoping process is also considered an education process, users will learn about the importance of wildlife habitats and Threatened and Endangered Species, conservation groups will learn about user interests and needs. This effort and time frame is necessary to establish support for the plan, once completed.

Task	Begin	End
Scoping Meetings	September 2001	July, 2002
Hire Staff	February 2001	March, 2002
Publish Notice of Intent	March 2001	April, 2001
Collection of Field Data	June 2001	December, 2002
Develop Draft Plan		
Purpose and Need	June 2001	October, 2001
Affected Environment	November 2001	March, 2002
Develop Alternatives	November 2001	October, 2002
Impact Analysis	November 2002	February, 2003
Section 7 consultation	November 2002	May, 2003
Publish Draft	May 2003	
Public Meetings on Draft, and Review Period	May 2003	November, 2003
Comment Analysis	December 2003	March, 2004
Preparation of Final	April 2004	June, 2004
Publish Final		July 2004
Issue Record of Decision		September 2004

Sonoran Desert Conservation Plan: Land Tenure Amendments

The Sonoran Desert Conservation Plan developed out of controversy over the endangered Cactus ferruginous pygmy-owl. The Pima County Board of Supervisors directed county staff to develop the SDCP, a significant component of the SDCP would be a Multi-species Habitat Conservation Plan which would satisfy government requirements for protection of the species. The plan identifies areas for protection of species and areas where developers can build and their appropriate stipulations.

The Phoenix RMP was signed in 1989, since that time several endangered species, such as the pygmy-owl has been listed. This effectively out dated some of the decisions in the Phoenix RMP, such as land tenure adjustments. Many of the BLM lands in and near the IFNM were identified for disposal, therefore creating the *need for an RMP Amendment to change the land tenure to retention lands.*

Task	Begin	End
Publish Notice of Intent	August 2001	August, 2001
Scoping Meetings	September 2001	September 2001
Collection of Field Data	August 2001	August 2001
Develop Draft Amendment	September 2001	April 2002
Publish Draft Amendment		May 2002
Public Meetings on Draft, and Review Period	May 2002	May 2002
Comment Analysis	June 2002	August 2002
Preparation of Final	September 2002	October 2002
Publish Final		November 2002
Issue Record of Decision		January 2003

APPENDIX C

PUBLIC PARTICIPATION SCHEDULE

PLANNING PHASE	PURPOSE	METHOD/ACTIVITY	DATES	RESPONSIBILITY	
ISSUE, PLANNING CRITERIA IDENTIFICATION	Announce upcoming scoping meetings. Request written comments on issues/scope of Plan.	Notice of Intent in <u>Federal Register</u> . 30 Day Comment Period.		Core Team	
	Develop a mailing list.	Newsletter to names on an IFNM Plan mailing list.		Team Leader, TFO Admin. Assistant	
	Explain planning process to public. Solicit issues and concern. Identify scope of Plan.	Press release to media Public Meetings in Tucson, Marana, Arizona City		Public Affairs	
	Explain planning process and consistency requirements to local and state government officials. Identify agency issues and concerns.	Meet with interested groups and organizations.		Core Team, TFO Manager	
	Explain planning process and consistency requirements to local and state government officials. Identify agency issues and concerns.	Meet with local governments and other agencies.		Core Team, TFO Manager	
	Review input from groups showing interest in Plan.	Public comment period.		Core Team & ID Team TFO Manager	
	Respond back to the public on issues to be addressed initially. Collect additional data where needed.	News article.		Core & ID Team, TFO Manager, Public Affairs	
	ALTERNATIVE FORMULATION	Describe alternatives that have been developed. Make sure issues are addressed. Assure focus of plan.	Newsletter to public, Plan mailing list.		Core & ID Team, Public Affairs
		Request comments on alternatives.	30 Day comment period.		
		Obtain comments on content.	Written, verbal responses comment period.		

APPENDIX C

PUBLIC PARTICIPATION SCHEDULE

PLANNING PHASE	PURPOSE	METHOD/ACTIVITY	DATES	RESPONSIBILITY
	Inform local, state, and federal agencies, interest group's key people of alternatives.	Meetings and letters.		Core Team, TFO Manager
DRAFT IFNM PLAN/EIS	Request comment on draft IFNM Plan/EIS. Announce upcoming public meetings.	Draft IFNM Plan/EIS mailed. 90 Day comment period.		Core Team, Printer
		Press release to local and Phoenix media.		Team Leader
		Notice of Availability in <u>Federal Register</u> .		Team Leader
	Describe components of the Draft Plan/EIS and solicit comments on it.	Public hearings - Case Grande, Eloy, Marana, Sells, Three Points, and Tucson		Core & ID Teams, TFO Manager
	Inform key individuals, agencies, government.	Meetings with groups, key people, government.		Core & ID Teams, TFO Manager
	Obtain comments on Draft Plan/EIS.	Written and verbal responses. 90 day comment period.		Public
PROPOSED IFNM PLAN/FINAL EIS	Give public opportunity to review proposed decisions and protest decisions if adversely affected.	Publish Proposed IFNM Plan/FEIS to public & mail list.		Core Team, TFO Manager
		Begin 60 day Governor consistency review. Include notice explaining protest period (30 days).		
	Opportunity to comment on any significant changes made as result of a protest.	Federal Register Notice requesting comments.		Core Team
		News release		Team Leader, Public Affairs
APPROVED PLAN/ROD	Notify public of final decisions.	News Article, Newsletter, transmittal letters,		Team Leader, Public Affairs
	Distribute Plan.	Mail approved plan to IFNM Plan mailing list.		Team Leader, TFO Administrative Staff Assistant

APPENDIX C

PUBLIC PARTICIPATION SCHEDULE

PLANNING PHASE	PURPOSE	METHOD/ACTIVITY	DATES	RESPONSIBILITY
IMPLEMENTATION SCHEDULE	Document & Prioritize Plan Implementation, Modification, and Monitoring	Prepare Office Document		Team Leader, TFO Manager and ID Team

APPENDIX D

CONTACT/COMMENT DOCUMENTATION

IRONWOOD FOREST NATIONAL MONUMENT MANAGEMENT PLAN
AND IMPLEMENTATION SCHEDULE

- 1. NAME OF COMMENTOR(S): _____
- 2. LOCATION OF CONTACT: _____
- 3. PERSON DOCUMENTING CONTACT: _____
- 4. DATE: _____

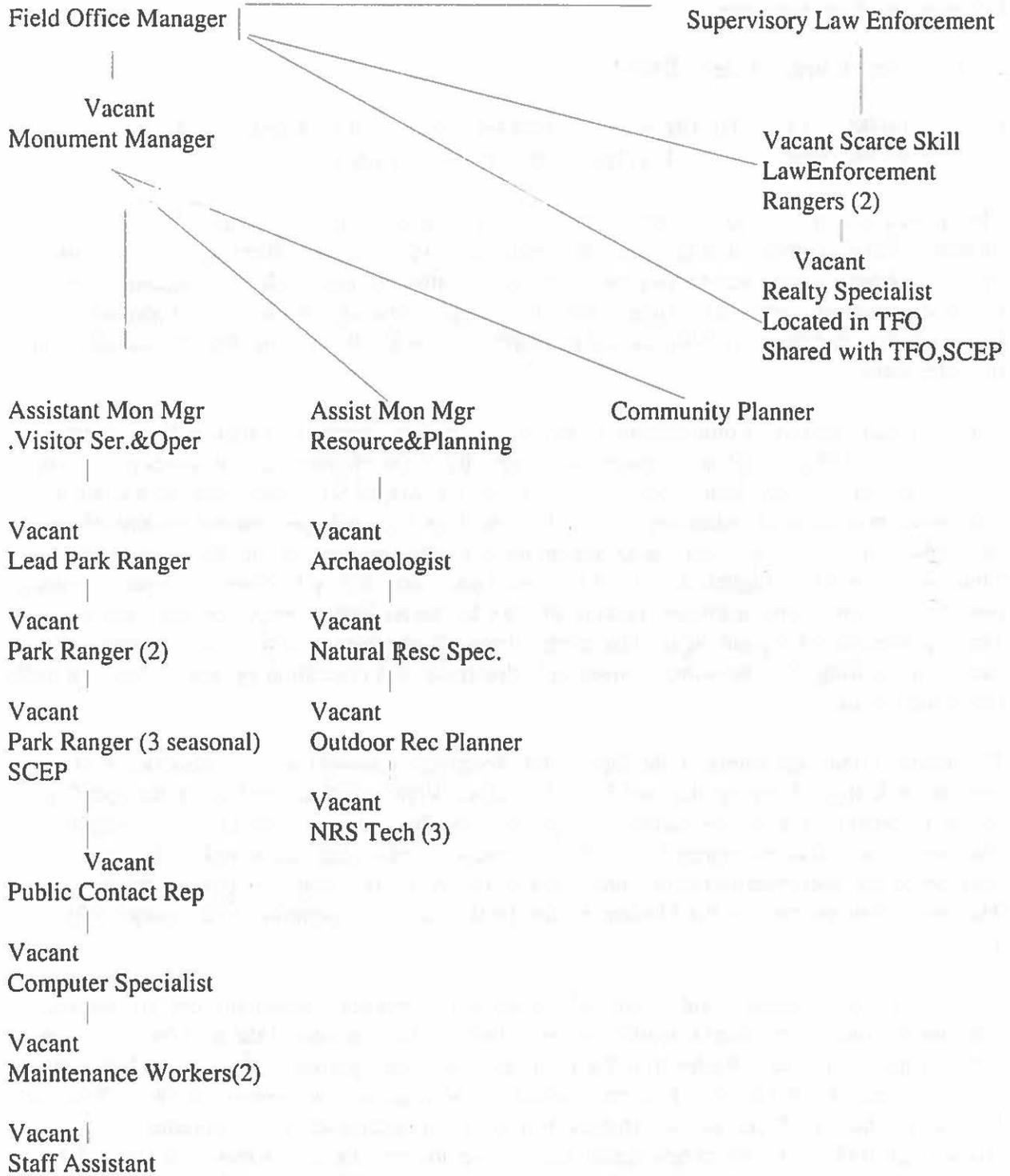
5. WHAT PART OF THE PLANNING PROCESS DOES THIS CONTACT DEAL WITH?

- | | |
|--|--------------------------------------|
| _____ A. Mailing List | _____ F. Maps |
| _____ B. Response to News Article/letter | _____ G. Issues |
| _____ C. Response to Federal Register Notice | _____ H. Management Objectives/Goals |
| _____ D. Schedule | _____ I. Management Actions |
| _____ E. Preplan Analysis | _____ J. Management Concerns |
| _____ K. Draft Plan: Which Chapter? | _____ |
| _____ L. Alternative(s): Which Ones? | _____ |
| _____ M. Final Plan: Which Chapter? | _____ |
| _____ N. Record of Decision: Which Section? | _____ |
| _____ O. Other: | _____ |

6. SUMMARY OF CONTACT AND INPUT (Use reverse side if necessary):

Appendix E

Proposed Table of Organization



THE WHITE HOUSE

Office of the Press Secretary

For Immediate Release, June 9, 2000

ESTABLISHMENT OF THE IRONWOOD FOREST NATIONAL MONUMENT
BY THE PRESIDENT OF THE UNITED STATES OF AMERICA

The landscape of the Ironwood Forest National Monument is swathed with the rich, drought-adapted vegetation of the Sonoran Desert. The Monument contains objects of scientific interest throughout its desert environment. Stands of ironwood, palo verde, and saguaro blanket the Monument floor beneath the rugged mountain ranges, including the Silver Bell Mountains. Ragged Top Mountain is a biological and geological crown jewel amid the depositional plains in the Monument.

The Monument presents a quintessential view of the Sonoran Desert with ancient legume and cactus forests. The geologic and topographic variability of the Monument contributes to the area's high biological diversity. Ironwoods, which can live in excess of 800 years, generate a chain of influences on associated understory plants, affecting their dispersal, germination, establishment, and rates of growth. Ironwood is the dominant nurse plant in this region, and the Silver Bell Mountains support the highest density of ironwood trees recorded in the Sonoran Desert. Ironwood trees provide, among other things, roosting sites for hawks and owls, forage for desert bighorn sheep, protection for saguaro against freezing, burrows for tortoises, flowers for native bees, dense canopy for nesting of white-winged doves and other birds, and protection against sunburn for night blooming cereus.

The ironwood-bursage habitat in the Silver Bell Mountains is associated with more than 674 species, including 64 mammalian and 57 bird species. Within the Sonoran Desert, Ragged Top Mountain contains the greatest richness of species. The Monument is home to species federally listed as threatened or endangered, including the Nichols turk's head cactus and the lesser long-nosed bat, and contains historic and potential habitat for the cactus ferruginous pygmy-owl. The desert bighorn sheep in the Monument may be the last viable population indigenous to the Tucson basin.

In addition to the biological and geological resources, the area holds abundant rock art sites and other archeological objects of scientific interest. Humans have inhabited the area for more than 5,000 years. More than 200 sites from the prehistoric Hohokam period (600 A.D. to 1450 A.D.) have been recorded in the area. Two areas within the Monument have been listed on the National Register of Historic Places, the Los Robles Archeological District and the Cocoraque Butte Archeological District. The archeological artifacts include rhyolite and brown chert chipped stone, plain and decorated ceramics, and worked shell from the Gulf of California. The area also contains the remnants of the Mission Santa Ana, the last mission constructed in Pimeria Alta.

Section 2 of the Act of June 8, 1906 (34 Stat. 225, 16 U.S.C. 431), authorizes the President, in his discretion, to declare by public proclamation historic landmarks, historic and prehistoric structures, and other objects of historic or scientific interest that are situated upon the lands owned or

controlled by the Government of the United States to be national Monuments, and to reserve as a part thereof parcels of land, the limits of which in all cases shall be confined to the smallest area compatible with the proper care and management of the objects to be protected.

WHEREAS it appears that it would be in the public interest to reserve such lands as a national Monument to be known as the Ironwood Forest National Monument:

NOW, THEREFORE, I, WILLIAM J. CLINTON, President of the United States of America, by the authority vested in me by section 2 of the Act of June 8, 1906 (34 Stat. 225, 16 U.S.C. 431), do proclaim that there are hereby set apart and reserved as the Ironwood Forest National Monument, for the purpose of protecting the objects identified above, all lands and interests in lands owned or controlled by the United States within the boundaries of the area described on the map entitled "Ironwood Forest National Monument" attached to and forming a part of this proclamation. The Federal land and interests in land reserved consist of approximately 128,917 acres, which is the smallest area compatible with the proper care and management of the objects to be protected.

All Federal lands and interests in lands within the boundaries of this Monument are hereby appropriated and withdrawn from all forms of entry, location, selection, sale, or leasing or other disposition under the public land laws, including but not limited to withdrawal from location, entry, and patent under the mining laws, and from disposition under all laws relating to mineral and geothermal leasing, other than by exchange that furthers the protective purposes of the Monument.

For the purpose of protecting the objects identified above, the Secretary of the Interior shall prohibit all motorized and mechanized vehicle use off road, except for emergency or authorized administrative purposes.

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

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

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

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

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

This proclamation does not reserve water as a matter of Federal law. Nothing in this reservation shall be construed as a relinquishment or reduction of any water use or rights reserved or appropriated by the United States on or before the date of this proclamation. The Bureau of Land Management shall work with appropriate State authorities to ensure that any water resources needed for Monument purposes are available.

Nothing in this proclamation shall be deemed to enlarge or diminish the rights of any Indian tribe.

Laws, regulations, and policies followed by the Bureau of Land Management in issuing and administering grazing permits or leases on all lands under its jurisdiction shall continue to apply with regard to the lands in the Monument.

Nothing in this proclamation shall be deemed to revoke any existing withdrawal, reservation, or appropriation; however, the national Monument shall be the dominant reservation.

Warning is hereby given to all unauthorized persons not to appropriate, injure, destroy, or remove any feature of this Monument and not to locate or settle upon any of the lands thereof.

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

WILLIAM J. CLINTON

Appendix G

Ironwood Monument Planning Labor Dollars

Table 1: Distribution of labor dollars by position.

Position	AWC	2001 WM's	2001 Cost	2002 Costs	2002 Costs	2003 Costs	2003 Costs	2004 Costs	2004 Costs
Field Manager	\$6,870.00	1	\$6,870.00	2	\$14,117.85	2	\$14,506.09	2	\$14,905.01
Monument Manager	\$6,870.00	5	\$34,350.00	6	\$42,353.55	6	\$43,518.27	6	\$44,715.00
Community Planner	\$5,097.00	5	\$25,485.00	12	\$62,846.01	12	\$64,574.28	12	\$66,350.07
Archaeologist	\$4,253.00	3	\$12,759.00	6	\$26,219.75	6	\$26,940.79	6	\$27,681.66
Natural Resource Specialist	\$4,253.00	3	\$12,759.00	6	\$26,219.75	6	\$26,940.79	6	\$27,681.66
Outdoor Recreation Planner	\$4,253.00	3	\$12,759.00	6	\$26,219.75	6	\$26,940.79	6	\$27,681.66
Computer Specialist	\$4,253.00	3	\$12,759.00	5	\$21,849.79	5	\$22,450.66	5	\$23,068.00
Public Contact Rep.	\$2,874.00	2	\$5,748.00	4	\$11,812.14	4	\$12,136.97	4	\$12,470.74
Realty Specialist	\$4,253.00	3	\$12,759.00	6	\$26,219.75	6	\$26,940.79	6	\$27,681.66
Geologist	\$4,253.00	3	\$12,759.00	6	\$26,219.75	6	\$26,940.79	6	\$27,681.66
Assistant Monument Mgr.	\$5,097.00	3	\$15,291.00	7	\$36,660.17	7	\$37,668.33	7	\$38,704.20
NRS Technician	\$2,874.00	2	\$5,748.00	8	\$23,624.28	8	\$24,273.95	4	\$12,470.74

NRS Technician	\$2,874.00	2	\$5,748.00	8	\$23,624.28	8	\$24,273.95	4	\$12,470.74
Editorial Assistant	\$2,874.00	0	\$0.00	9	\$26,577.32	12	\$36,410.92	12	\$37,412.22
Staff Assistant	\$2,874.00	0	\$0.00	4	\$11,812.14	5	\$15,171.22	5	\$15,588.43
Totals		38	\$175,794.00	95	\$406,376.25	99	\$429,688.57	91	\$416,563.53

IFNM Planning Operation Dollars

Table 2: Distribution of operation dollars according to task.

Task	Type	Cost 2001	Cost 2002	Cost 2003	Cost 2004	Total
Vehicles	Overhead	\$18,000.00	\$30,000.00	\$36,000.00	\$36,000.00	
Meeting Facilitation	Purchase	\$3,000.00	\$8,000.00	\$4,000.00	\$4,000.00	
Publication Costs	Contract			\$5,000.00	\$10,000.00	
Water Assessment	Contract		\$30,000.00	\$20,000.00		
Survey Terrestrial Wildlife	Contract		\$30,000.00	\$20,000.00		
Human Impacts and Limits Study	Contract		\$40,000.00	\$35,000.00		
Vegetation Survey	Contract		\$30,000.00	\$20,000.00		
Saguaro/Ironwood Regeneration Study	Contract		\$25,000.00	\$6,500.00	\$6,500.00	
Cactus ferruginous Pygmy Owl Surveys	Contract		\$25,000.00	\$25,000.00	\$25,000.00	
Lesser Longnosed Bat Surveys	Contract	\$15,000.00	\$25,000.00			
Desert Tortoise Natural History Survey	Contract	\$20,000.00		\$10,000.00		
Desert Bighorn Sheep Study	Contract		\$25,000.00			
Travel Route Inventory	Contract	\$10,000.00	\$5,000.00			
FIMMS Inventory	Contract			\$15,000.00		
Survey of Recreation Use Sites/Impacts	Contract		\$5,000.00			

Recreation Visitor Surveys/Characteristics	Contract	\$5,000.00	\$20,000.00			
Land Ownership GIS Data Layer Map	Contract		\$10,000.00			
Digital Orthophotography Maps	Purchase	\$3,000.00				
Archaeological class I,II,III Surveys	Contract	\$20,000.00	\$450,000.00	\$440,000.00		
Unlawful Activities GIS Map	Contract	\$5,000.00				
PCS Move Cost (\$40K Each)	Overhead	\$120,000.00				
Administrative Facility Costs	Overhead	\$25,000.00				
Boundary Surveys	Cadastral		\$50,000.00	\$0.00	\$0.00	
Fire Survey/Assessment	Overhead		\$7,000.00	\$7,000.00	\$7,000.00	
Geologic Maps	Purchase	\$1,500.00	\$500.00	\$500.00	\$500.00	
Mining Claim GIS Map	Contract		\$20,000.00	\$10,000.00	\$5,000.00	
Totals		\$245,500.00	\$835,500.00	\$654,000.00	\$94,000.00	\$1,829,000.00

Appendix H

Projected Data Needs and Supporting Funding Needs for Plan Development.

All new data collected will have information about the data collected (metadata) stored in a database. All metadata will meet Federal Geographic Data Committee (FGDC) standards.

Projected Data Needs for National Monument Plan					
Data Needed	Rationale	Proposed Data Source	GIS Implementation Status and Data Standards	Projected Cost & Time Required	Funding Need Beyond FY01 Allocation
Water Source and Use Assessment (water right claims filings and spring, tank, and well inventory)	Baseline data needed to assess valid existing rights and resources available to support IFNM purposes	ADWR water rights and well databases and coverages, PFO, TFO, SFO water rights paper files and electronic files	Water rights currently specified by 1/4 and 1/16 section on paper maps, paper files, and ADWR coverages. Data standard will be GPS quality data.	4 wm + vehicle, GPS equip = \$ 50K, 1 year	1 wm annually for follow-up inventories
Status and distribution of terrestrial wildlife	Effective management of wildlife species requires a clear understanding of presence/absence and status of such	Literature search of recent studies (U of AZ and AZ Sonora Desert Museum, etc.) Wildlife inventories (fieldwork)	Range polygons digitized on to 1:100,000 scale coverages	1 wm for lit. search 6 wm and vehicle needed for preliminary inventory (\$50k)	6 wm annually for follow-up inventories and status reviews in the field
Study to determine impacts of increased human-use disturbance on wildlife populations	Study is required to determine the upper limits of disturbance allowed (Limits of Acceptable Use)	U of AZ researchers Kevin Gutzweiller (Baylor University)	Sensitive area polygons digitized on to 1:100,000 scale coverages	1-2 years plus one vehicle for assistance (\$75k)	Two years minimum for the initial study. Follow-up research needed in 5 years
Status and distribution of vegetative communities (to include exotic species)	Effective management of vegetative communities requires a clear understanding of presence/absence and status of such	Literature search of recent studies (U of AZ and AZ Sonora Desert Museum, etc.) Vegetation inventories (fieldwork)	Range polygons digitized on to 1:100,000 scale coverages	1 wm for lit. search 6 wm and vehicle needed for preliminary inventory (\$50k)	6 wm annually for follow-up inventories and status reviews in the field

Saguaro, ironwood and palo verde regeneration study	Required to determine whether management results are compatible with acceptable levels of regeneration to continue the species	Contract work with U of AZ or the AZ Sonoran Desert Museum	Management zone polygons digitized on to 1:100,000 scale coverages	6 wm (\$25k) for first year repeated every third year for 15 years	\$13k per year for all out-years (through FY 2016)
Fire assessment and natural history of the ironwood forest vegetative community	Required to determine whether management results are compatible with acceptable levels of regeneration to continue the species	Contract work with U of AZ or the AZ Sonoran Desert Museum	Management zone polygons digitized on to 1:100,000 scale coverages	2 wm (\$7k) for the first year	Periodic check-up on fuel loading every five years (2 wm and \$7k per year)
CFPO habitat assessments and associated surveys	Baseline data to determine quality of habitat and presence or absence of pygmy-owl are essential to proper management of this Endangered species	Fieldwork for both habitat assessments as well as status and distribution of CFPO	Range polygons digitized on to 1:100,000 scale coverages. Field sightings and nests on to 1:24,000 coverages.	6 wm and one vehicle for the habitat assessments (\$25k) 6 wm and one vehicle for the CFPO inventory (\$25K)	\$50k needed to complete two more field seasons of CFPO inventories to adequately determine status and distribution of population
Lesser long-nosed bat natural history study	Baseline data to determine quality of habitat and presence or absence of bats and their dependence on flowering agave	Fieldwork for both habitat assessments as well as status and distribution	Range polygons digitized on to 1:100,000 scale coverages. Field sightings and roosts on to 1:24,000 coverages.	6 wm and one vehicle for the habitat assessments (\$25k) 6 wm and one vehicle for the bat inventory (\$25K)	Periodic checks to determine agave viability and use by the bats (\$5k once every five years)
Desert tortoise natural history study	Baseline data to determine quality of habitat and presence or absence and distribution of tortoise	Fieldwork for both habitat assessments as well as status and distribution, paper files, paper maps	Range polygons digitized on to 1:100,000 scale coverages. Field sightings and burrows on to 1:24,000 coverages.	6 wm and one vehicle for the habitat assessments (\$25k) 6 wm and one vehicle for the tortoise inventory (\$25K)	Periodic checks to determine tortoise population viability and distribution (\$5k once every five years)

Desert bighorn sheep natural history study	Baseline data to determine quality of habitat and presence or absence and distribution of sheep	Fieldwork for both habitat assessments as well as status and distribution	Range polygons digitized on to 1:100,000 scale coverages. Field sightings on to 1:24,000 coverages.	6 wm and one vehicle for the habitat assessments and sheep inventory and distribution (\$25k)	Periodic checks to determine sheep population viability and distribution (\$5k once every five years)
Existing Travel Route Inventory	To evaluate existing route system and establishing an area transportation system. Document route conditions.	Interpretation from USGS Digital Orthophotography, and on the ground verification and condition evaluation.	Arc coverage for National Monument lands in the planning area completed for initial identification of routes. Ground surveys/examination needed for all routes.	8 wm + vehicle costs, miscellaneous materials and supplies (\$5K). Need in 2001	1 wm + \$2K annually
Facilities and Improvements Inventory	To determine existing facilities condition, access and maintenance needs.	Field data and BLM records.	GPS quality data on all improvements	4 wm, vehicles and miscellaneous supplies (\$3K). Need in 2001	1 wm + \$2K
Recreation use areas and sites	To evaluate recreation impacts	Field	GPS quality polygons of use areas	2wm, vehicles and misc (\$2K). Need in 2001-02	2 wm + \$5K
Recreational Visitor Characteristics	To develop management objectives which reflect current recreational use, activities, visitor perceptions and preferences.	Visitor surveys	GPS quality coverage of user preference zones	6 wm, \$3K, vehicle and misc. supplies. Need in FY 2002	2 wm for each five year review
Land Ownership	To determine current surface and subsurface ownership within the planning area and adjacent lands. Needed for basic planning and to ensure interested party notifications.	Master Title Plats and county records.	Current Arc coverage available from ALRIS data contains known errors. Survey level data needed	2 wm Need in 2001	2 wm

GCDB base	For accurate geo-referencing of GIS data and parcel descriptions following land lines	BLM State Office information system	Geodetic survey grade data	0.5 wm	0.5 wm
Township and Range Line System	For georeferencing and location descriptions.	ALRIS	1:24,000 scale, available	na	
Section Line System	For georeferencing and location description	ALRIS	1:24,000 scale, available	na	
Digital Orthophotography	For general resource assessments	USGS	Partial coverage available at TFO	\$1000. Need in 2001	\$40K every five years for updated photos
Class I, II Cultural Resource Surveys, and Class III Surveys in specified areas.	Only about 2% of the national monument area has been surveyed for cultural resources. Locations, numbers and types of resources must be known in order to accomplish planning needs/goals.	Cultural surveys would be done by contracted, professional archaeological firm(s).	GIS technology would be applied to develop and conduct cultural survey. Data standard would be GPS quality data which can be digitized into AZSITE files.	4 wm. to write and monitor survey contract.	Contract for cultural resources survey = \$910K.
Geologic maps	Provide geologic resource data	Arizona Geological Survey, paper, digitized?	1:24,000 coverages	\$1500 for map acquisition, scanning, and projection	\$500/yr for updates
Mineral resource data	mineral potential assessment	TFO, paper reports	1:100,000 coverages (point data and polygons)	2 wm for research, report writing, and digitizing	2 wm
Mining claim map	Location of mining claims	TFO, ASO, Pima and Pinal County recorder's Office, Claimant	GPS?, metes and bounds surveys.	\$20K for contracting.	\$20K

Wastes and Hazardous Materials Assessment	To determine where wastes and hazardous materials exist on IFNM lands and plan for removal	Field reconnaissance	GPS locations and status coverages would be developed to track wastes and hazardous material finds and removals	2 wm plus vehicle use	Ongoing discovery as collateral duty for field staff
Unlawful Activities	Map patterns and trends in unlawful activities including dumping and resource theft.	LawNet database, paper case files, reports, and citations	GPS locations available for LawNet records. GPS quality data required for future records.	2 wm plus \$5000 contracting costs	1 wm/year for future updates.

Appendix I
Summary of Realty Actions in the Ironwood Forest National Monument

Township 9 South, Range 6 East

Sec.	Aliquot Part	Type	Serial #	Holder	Disposition/Remarks
10	SWSWNW	R/W Marker Site	A 1182*		44 LD 513
22 23 26 27 28 33 34	SESW,SE S2 ALL ALL SESE E2,SESW ALL	R/W Reservoir	PHX 86686**	Boettger, T.; Griffith, V.	Authorized, Perpetual
30 31	W2NW,SENW,E2 SW,W2SE N2NE,SENE,NES E	R/W 110' Pwrline	A 7274**	Tucson Elec. Power Co	Authorized, 50 Yrs (07/01/75)
30 31	W2,W2SE NE,NESE	R/W 105' Pwrline	A 7872	Tucson Elec. Power Co.	Authorized, Expires 06/30/2025
30 31	W2,W2SE NE,NESE	R/W 110' Pwrline	A 7874*		
30 31	W2,W2SE NE,NESE	R/W 55' Pwrline	A 2024	AZ Public Service	Authorized, 50 Yrs (04/07/70)

Township 10 South, Range 6 East

Sec.	Aliquot Part	Type	Serial #	Holder	Disposition/Remarks
3 4 5 7 8 9	ALL ALL SE SE ALL ALL	R/W Reservoir	PHX 86686**	Boettger , T.; Griffith, V.	Authorized, Perpetual
5 8 9	Lots 2,3; SENW,SWNE,SE NENE W2,SWSE	R/W 55' Pwrline	A 2024	AZ Public Service	Authorized, 50 Yrs (04/07/70)

5 8 9	Lots 3,4; SWNE,SE NENE W2NW,SENE,N2SW,NE NW,SWSE	R/W 110' Pwrline	A 7274	Tucson Elec. Power Co.	Authorized, 50 Yrs (07/01/75)
5 8 9	Lot 3; SENW,SWNE,SE NENE W2	R/W 105' Pwrline	A 7872	Tucson Elec. Power Co.	Authorized, Expires 06/30/2025

Township 10 South, Range 9 East

Sec.	Aliquot Part	Type	Serial #	Holder	Disposition/Remarks
30	Lot 1; NENW,N2NE	R/W 55' Pwrline	A 2024	AZ Public Service	Authorized. 50 Yrs (04/07/70)
30	Lots 2,3,4; N2,W2SW	R/W 50' Road	A 21399	Pinal Cnty. Hwy. Dept.	Authorized, Perpetual
29 30	NWNW N2, W2SW	R/W 200' RR	PHX 866-49**	AZ Souther n Railroad	Authorized, Perpetual

Township 11 South, Range 6 East

Sec.	Aliquot Part	Type	Serial #	Holder	Disposition/Remarks
5	Lots 1-4	R/W Road	A 28281**	Produce s Cotton Oil	Authorized, 20 Yrs (08/14/95)
13 (State)	NENENE	R/W Pwrline	A 7274	Tucson Elec. Power. Co.	Authorized, 50 Yrs (07/01/75) <u>IL 558 ROW Reserved</u> <u>AZA7872 Overlaps</u> <u>ROW</u>
25 26 27	N2N2 N2N2N2 N2N2N2	R/W 10' Pwrline	AR 23490	Trico Elec. Coop. Inc.	Authorized, 50 Yrs (01/20/60)

Township 11 South, Range 7 East

Sec.	Aliquot Part	Type	Serial #	Holder	Disposition/Remarks
17 20 29	W2SW W2W2 W2NW,E2SW	R/W Pipeline	AR 34423*		
18 19 29 33	Lots 1-3; E2SW,SWSE W2NE,NENW,N2SE,SE SE W2NW,E2SW SWSW	R/W 105' Pwrline	A 7274	Tucson Elec. Power Co.	Authorized, 50 Yrs (07/01/75)
18 19 29 33	Lots 3,4; SESESESW W2NE,NENW,N2SE,SE SE W2NW,E2SW SWSW	R/W 105' Pwrline	A 7872	Tucson Elec. Power Co.	Authorized, Expires (06/30/2025)
29 30 33 34 35	S2SE,SESW,N2SW Lots 1,2; NESE,S2NE,SE S2NE,NWNE,N2NW S2SE,NWSE,N2SW,SW NW S2SW	R/W 10' Pwrline	AR 23490	Trico Elec. Coop. Inc.	Authorized, 50 Yrs (01/20/60)

Township 11 South, Range 8 East

Sec.	Aliquot Part	Type	Serial #	Holder	Disposition/Remarks
7 10 15 18 20 21 29 32	Lots 16,17 SESE E2, NW, NWNE Lots 3,4,8,9,11,12,20; SWSE NW, SWNE, SWSE,NWSE, NESE NW W2E2 N2SE	R/W Pipeline	AR 34423*		

9 10 11 16 17 20	SE SENE,SE,S2SW NW N2 E2SE E2NW,W2E2	R/W 200' RR	PHX 86649**	AZ Southern Railroad	Authorized, Perpetual
10 11	SE NW,SW	R/W	A 31063	Pima Cty. Trans. & FC	Pending, <u>APPLICATION</u> <u>RECEIVED</u>
11 12 13	NENE SWNW,SW,W2SE NENE	R/W	A 31074	El Paso Energy Comm.	Pending, <u>APPLICATION</u> <u>RECEIVED</u>
11 12 13	NENE S2NW,NESW,W2SE NENE	R/W 25' Pipeline		El Paso Natural Gas	Authorized (12/09/81)
11 12 13	NWNE,E2NE W2NW,SESW,SW,W2S E,SESE NWNE,E2NE	R/W 25' Pipeline	PHX 86067	El Paso Natural Gas	Authorized (12/09/82)
16 20 21 29	W2W2SW E2E2E2 NWNWNW E2E2	R/W Pwrline	AR 25949	Trico Elec. Coop. Inc.	Authorized, 50 Yrs (07/14/60)
25 26 27 28 29 31 32	SWSE,S2SW S2S2 S2SE,NWSE,N2SW N2S2, S2N2 E2Se Lots 11,12,16,17,18,19; SENE,N2SE NENE, NWSWNE, SESWNE	R/W 10' Pwrline	AR 23490	Trico Elec. Coop. Inc.	Authorized, 50 Yrs (01/20/60)
28 29 32 33 34	SW E2SE Lots 1, 12, 13 Lots 2, 3	R/W 20' Road	A 7483	Tucson Elec. Power Coop.	Authorized, Expires 02/25/2024
33	That portion of unpatented MS 4745 and that portion lying outside MS 4745 in NE1/4SE1/4 (From HI)	R/W 10' Elec. Dist. Line	A 8447	Trico Elec. Coop. Inc.	Authorized, Expires 12/03/2004

36	NENE	R/W 12' Road	A 28723	Woodin, J.	Authorized, 20 Yrs (01/22/95)
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Township 11 South, Range 9 East

Sec.	Aliquot Part	Type	Serial #	Holder	Disposition/Remarks
18 19 20 29 33	Lots 2,3; SW NE, E2SE; NENENW SWSW E2NW NW, NESW, W2SE	R/W 25' Pipeline		El Paso Natural Gas	Authorized (12/09/81)
19 20 29	W2NE,SENE,E2SE SWSW NENE,E2NW,SWNE,W 2SE,SESE	R/W 25' Pipeline		El Paso Natural Gas	Authorized (12/09/82)
19 20 29	NE,NENW SWSW NW,SE	R/W	A 31074	El Paso Energy Comm.	Pending, <u>APPLICATION RECEIVED</u>
21 22 23 24 29 30 31	SESESE S2S2S2 NESE,S2SE,S2SW S2NE,NWSE,N2SW N2SE,NESW,S2SW S2SE,SESW Lot 1; NENW,NWNE	R/W 10' Pwrline	AR 23490	Trico Elec. Coop. Inc.	Authorized, 50 Yrs (01/20/60)
25 26 29 30 31	S2S2 S2S2 S2S2 S2SE N2NW,NWNE	R/W 10' Pwrline	PHX 84351	Trico Elec. Coop. Inc.	Authorized (05/12/88)
29 30 31	S2S2 N2N2,S2S2 N2N2N2	R/W 12' Road	A 28723	Woodin, J.	Authorized, 20 Yrs (01/22/95)
29	SWNE,NWSE	R/W 15' Pwrline	A 2789	El Paso Natural Gas	Authorized, 30 Yrs (05/17/84)
29	SENWSE,NESWSE,NW SESE	R/W 5' Pwrline	A 19134	Trico Elec. Coop. Inc.	Authorized, 10 Yrs (06/29/84)

29	NWSE	R/W 5' Pwrline	A 19135	Trico Elec. Coop. Inc.	Authorized, 10 Yrs (06/29/84)
29	SENWSW,W2SWSE	R/W 5' Pwrline	A 19136	Trico Elec. Coop. Inc.	Authorized, 10 Yrs. (06/29/84)
35 36	E2E2,SWNE,NWSE W2W2,SENW,NESW	R&PP Lease	A 1794701	Tucson Soaring Club	Authorized, 20 Yrs (01/06/93)

Township 11 South, Range 10 East

Sec.	Aliquot Part	Type	Serial #	Holder	Disposition/Remarks
19 30	Lots 1-4 Lots 1-4	R/W 30' Road		Pima Co. Trans. & FC	Authorized, Perpetual
19 20	NE,NENENW W2	R/W 30' Road	A 18708	Pima Co. Trans. & FC	Authorized, Perpetual
19 20	Lot 2; N2NE,SWNE,SENW	R/W 10' Pwrline	AR 23490	Trico Elec. Coop. Inc.	Authorized, 50 Yrs (01/20/60)
29 30	S2SW S2S2	R/W 10' Pwrline	PHX 84351	Trico Elec. Coop. Inc.	Authorized (05/12/88)

Township 12 South, Range 6 East - NONE

Township 12 South, Range 8 East

Sec.	Aliquot Part	Type	Serial #	Holder	Disposition/Remarks
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3	Lots 4,5,6,15	R/W 10' Elec. Dist. Line	A 8447	Trico Elec. Coop. Inc.	Authorized, Expires 12/03/2004 <u>Patent No. 02-92-0012</u> <u>to Asarco A25355</u> <u>ROW Subject To</u>
3	Lots 4,5,6,15	R/W 20' Road	A 7483	Tucson Elec. Power Coop.	Authorized, Expires 02/25/2024

Township 12 South, Range 9 East

Sec.	Aliquot Part	Type	Serial #	Holder	Disposition/Remarks
3 9 10 11 15	NWSESW SWSWNE SESENW SWSW NWNWSE	R/W Reservat ion	A 26228		Term. 01/20/95
3 10 11 23 24	SWNW,SW E2,E2NW SWSW NENE W2NW	R/W	A 31074	El Paso Energy Comm.	Pending, <u>APPLICATION</u> <u>RECEIVED</u>
3 4 10 11 23 24	W2SW,SESW;SWSWN W Lots 1,2 NE,NENW,NESE; NESESE SWSW E2NENE W2NW; SWSENW	R/W 25' Pipeline		El Paso Natural Gas	Authorized (12/09/81) <u>* Sec. 4 – Patent No.</u> <u>02-86-0040 (A20347</u> <u>(B)) ROW Reserved</u>
3 10 11 23 24	SWNW,W2SW,E2SW NENW,W2NE,SENE,E2 SE SWSW NENE W2NW	R/W 25' Pipeline	PHX 86067	El Paso Natural Gas	Authorized (12/09/82)
19	E2W2SE	R/W 10' Telegrap h	A 29993	US West Comm.	Authorized, 50 Yrs (02/02/61)

20	SESE	R/W Other	A 29018	USDA- ARS	Authorized (03/09/95) Expired (03/8/00)
22 23 24	S2S2N2 S2S2N2 S2S2N2	R/W 20' Road	A 18707	Pima Co. Trans. & FC	Authorized, Perpetual
24	E2E2NE	R/W 30' Road		Pima Co. Trans. & FC	Authorized, Perpetual
30	Lots 2,3,5; SENW	R/W 10' Pwrline	A 2205	Trico Elec. Coop. Inc.	Authorized (06/15/82)
19 30	SWSE Lots 1,2,3,5	R/W 5' Telegrap h	A 9739	US West Comm.	Authorized, 30 Yrs (10/30/78)
19 25 26 27 28 29 30	SWSE Lots 3,4 Lots 1-4 Lots 1-4 Lots 1-4 Lots 1-4 Lots 1,2	R/W 10' Pwrline	AR 30401	Trico Elec. Coop. Inc.	Authorized, 50 Yrs (03/05/62)

Township 12 South, Range 10 East

Sec.	Aliquot Part	Type	Serial #	Holder	Disposition/Remarks
6 7 18	Lots 4,5,6,7 Lots 1-4 Lots 1-4	R/W 30' Road		Pima Co. Trans. & FC	Authorized, Perpetual
7 18	E2SE Lot 4; NENE, W2NE, E2SW, N WSE	R/W 25' Pipeline	AR 5586	El Paso Natural Gas	Authorized, Perpetual

Township 13 South, Range 9 East

Sec.	Aliquot Part	Type	Serial #	Holder	Disposition/Remarks
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1 11 12	S2SW NENE N2N2	R/W 20' Road	A 21342	BR AZ Project Ofc.	Authorized, Perpetual
11 12	NENE N2N2N2	R/W 10' Pwrline		Trico Elec. Coop. Inc.	Authorized, Perpetual
13 23 24 26 27	SESE SENE,N2SE,SESW N2N2 NWNW S2NE	R/W 30' Road	A 18541	Pima Co. Trans. & FC	Authorized, 30 Yrs (09/28/83)

Township 13 South, Range 10 East

Sec.	Aliquot Part	Type	Serial #	Holder	Disposition/Remarks
7	N2NW	Comm. Site	A 21342	BR AZ Project Ofc.	Authorized, Perpetual
7	Lot 1	R/W 10' Pwrline		Trico Elec. Coop. Inc.	Authorized, Perpetual
17	E2W2	R/W 10' Road	A 27923	Ford, G.	Authorized, Expires 11/03/2024
29	N2N2	R/W 10' Pwrline		Trico Elec. Coop. Inc.	Authorized, Expires 05/14/2003
35	W2W2W2	R/W 25' Pwrline	AR 31023	AZ Elec. Power Coop.	Authorized, Expires 10/04/2011

Township 14 South, Range 9 East - NONE

Township 14 South, Range 10 East

Sec.	Aliquot Part	Type	Serial #	Holder	Disposition/Remarks
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1 12	E2E2W2 E2E2W2	R/W 10' Pwrline	AR 612	Trico Elec. Power Coop.	Authorized, Expires 07/24/2001
11	W2W2W2	R/W 25' Pwrline	AR 31023	AZ Elec. Power Coop.	Authorized, Expires 10/04/2011
12	S2S2SE	R/W 10' Pwrline	AR 3905	Trico Elec. Coop. Inc.	Authorized, Expires 05/14/2003

Township 14 South, Range 11 East

Sec.	Aliquot Part	Type	Serial #	Holder	Disposition/Remarks
7	E2E2W2, S2S2S2	R/W 10' Pwrline		Trico Elec. Coop. Inc.	Authorized, Expires 05/14/2003

Comprehensive Reference List of Colored Rights-of-Way Actions:

(Please note that the colors allow cross reference of the actions that affect more than one Township and Range in the IFNM.)

Serial #	Type	Holder
PHX 86686	R/W - Reservoir	Boettger, T.; Griffith, V.
A 7274	R/W - 110' Powerline	Tucson Electric Power Co.
A 7872	R/W - 105' Powerline	Tucson Electric Power Co.
A 2024	R/W - 55' Powerline	AZ Public Service
PHX 86649	R/W - 200' RR	AZ Southern Railroad
AR 23490	R/W - 10' Powerline	Trico Electric Coop. Inc.
AR 34423	R/W - Pipeline	
A 31074	R/W - APPLICATION	El Paso Energy Comm.
	R/W - 25' Pipeline	El Paso Natural Gas

PHX 86067	R/W - 25' Pipeline	El Paso Natural Gas
A 8447	R/W - 10' Elec. Dist. Line	Trico Electric Coop. Inc.
A 28723	R/W - 12' Road	Woodin, J.
PHX 84351	R/W - 10' Powerline	Trico Electric Coop. Inc.
	R/W - 30' Road	Pima Co. Trans. & FC
A 21342	R/W - 20' Road, Comm Site	BR AZ Project Ofc.
	R/W - 10' Powerline	Trico Electric Coop. Inc.
	R/W - 10' Powerline	Trico Electric Coop. Inc.
AR 31023	R/W - 25' Powerline	AZ Electric Power Coop.

Total Actions Affecting the IFNM:

- Applications Received (Pending) - 2
- Authorized - 39
 - Powerlines - 18
 - Roads - 11
 - Pipelines - 4
 - Telephone - 2
 - R&PP Lease - 1
 - Communication Site - 1
 - R/W Marker Site - 1
 - Reservoir - 1
 - Railroad - 1
 - Reservation - 1
 - Other (Bee Experimentation Site) (Expired) - 1

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1	2	3	4	5	6	7	8	9	10
1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

Summary of Mining Claims in the Ironwood Forest national Monument

Township	Range	Section	Number of claims	Claimants name
11 South	8 East	16	2	Silver Bell Mining LLC
		17	5	Silver Bell Mining LLC
		18	3	Silver Bell Mining LLC
		19	27	Silver Bell Mining LLC
		20	45	Silver Bell Mining LLC
		21	19	Silver Bell Mining LLC
		23	1	Sally Meeks
		27	22	Silver Bell Mining LLC
		28	1	Silver Bell Mining LLC
		30	17	Silver Bell Mining LLC
		31	53	Silver Bell Mining LLC
		33	1	Silver Bell Mining LLC
		34	3	Silver Bell Mining LLC
		35	1	Silver Bell Mining LLC
12 South	8 East	1	2	Silver Bell Mining LLC
		2	14	Silver Bell Mining LLC

		3	31	Silver Bell Mining LLC
12 south	9 East	7	5	Silver Bell Mining LLC
12 South	9 East	10	10	JABA(US)INC
		11	6	JABA(US)INC
		14	1	JABA(US)INC
		15	21	JABA(US)INC
		18	7	Silver Bell Mining LLC
		22	12	Robert Gilmore
		23	25	Robert Gilmore
		24	15	Robert Gilmore
		30	4	Willis partnership

The rest of the Public lands within the Ironwood Forest National Monument do not contain any active mining claims.

