



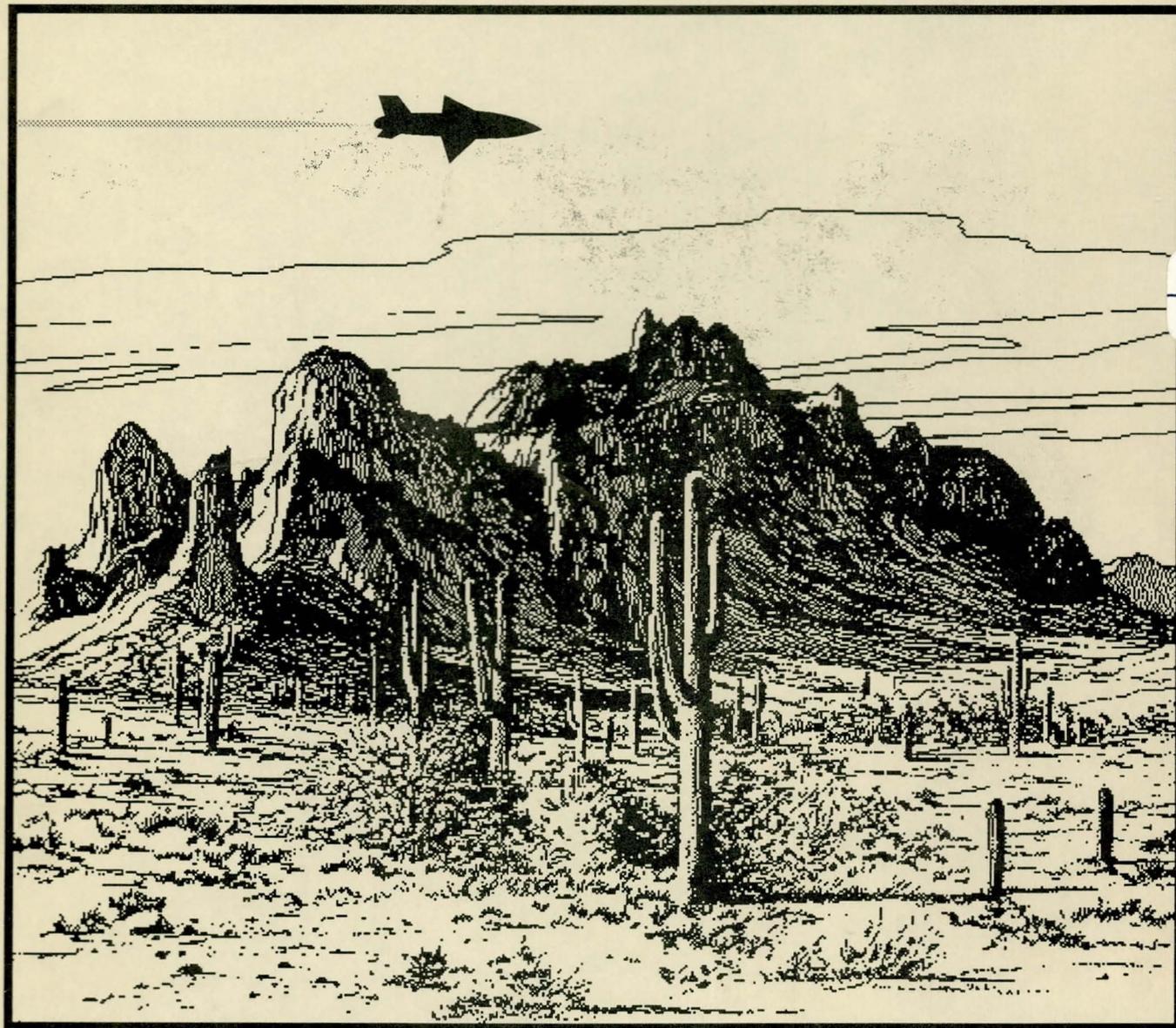
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LOWER GILA SOUTH

Resource Management Plan (Goldwater Amendment)





United States Department of the Interior



BUREAU OF LAND MANAGEMENT
PHOENIX DISTRICT OFFICE
2015 WEST DEER VALLEY ROAD
PHOENIX, ARIZONA 85027

IN REPLY REFER TO:

September 28, 1989

Dear Reader:

The document accompanying this letter is both an amendment to the Lower Gila South Resource Management Plan (RMP) and an Environmental Assessment (EA). The EA analyzes the impacts of implementing the proposed plan amendment. The amendment, if approved, will guide the Bureau of Land Management (BLM) in its management of the natural resources on the Barry M. Goldwater Air Force Range (BGR). This amendment/EA complies with Public Law 99-606 which directed the BLM to manage the natural resources on the BGR through the development of an RMP. This proposed RMP amendment is a modified version of the Proposed Action analyzed in the Draft Lower Gila South RMP (Goldwater Amendment) distributed to the public in March 1989.

Any participant in this planning effort who has an interest which is or may be adversely affected by the approval of the proposed RMP amendment, or any part of it, may protest such approval. The protest may raise only those issues which were submitted for the record during the planning process. Protests must be in writing and filed with the Director (760), Bureau of Land Management, Room 909, Premier Building, 1725 I Street NW, Washington, D.C. 20240 within the 30 day protest period. The protest period ends November 2, 1989.

Protests must include the following information: 1) The name, mailing address, telephone number and interest of the person filing the protest; 2) A statement of the issue or issues being protested; 3) A statement of the part or parts of the plan being protested; 4) A copy of all documents addressing the issue or issues that were submitted during the planning process by the protesting party or an indication of the date the issue or issues were discussed for the record; 5) A concise statement explaining why the State Director's decision is believed to be wrong.

Except for any portions under protest, the proposed RMP Amendment will become final after thirty (30) days. A Record of Decision (ROD) will be prepared documenting the final decision of the State Director. The ROD will be made available to the public through a Federal Register notice.

The Phoenix District and Lower Gila Resource Area would like to extend its thanks to all who have participated in this planning process and have contributed in the development of this document. Your help and cooperation has been valuable in providing the direction for natural resource management on the BGR. Bureau specialists and managers have carefully read and listened to all of the comments and in some cases have modified our recommendations. Once again, thanks for your participation.

Sincerely,

Carole K. Hamilton

Carole K. Hamilton
Area Manager
Lower Gila Resource Area

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PURPOSE AND NEED

The purpose of this action is to develop a land use plan for the Barry M. Goldwater Air Force Range (BGR) that is consistent with the multiple use objectives of the Bureau of Land Management (BLM) and the requirements of the Military Lands Withdrawal Act of 1986 (Public Law (PL) 99-606) (see Appendix I). This plan, called the Lower Gila South Resource Management Plan (Goldwater Amendment), will guide the BLM in its management of the BGR. The plan amends the Lower Gila South Resource Management Plan (1987) (LGS RMP) and complies with BLM Planning Regulations, 43 CFR 1600. Two alternatives are addressed: Proposed Action and the No Action Alternative.

On November 6, 1986, Congress passed the Military Lands Withdrawal Act (MLWA) withdrawing 2,664,423 acres of public land for the United States Air Force (USAF). These lands are in portions of Maricopa, Pima and Yuma Counties, Arizona. The lands will be used for an armament and high-hazard testing area and a training area for aerial gunnery, rocketry, electronic warfare and tactical maneuvering and air support. Currently the USAF schedules the eastern portion of the BGR and the United States Marine Corps (USMC) schedules the western portion of the BGR.

The law stipulated that the BLM, Department of the Interior (DOI), would be responsible for managing the lands and natural resources of the BGR, except for the 822,000 acres of the Cabeza Prieta National Wildlife Refuge (Public Law 99-606, Sec 3(c)), and that the management of these lands be consistent with military activities. Also, all BGR lands would be managed pursuant to the Federal Land Policy and Management Act of 1976 (43 U.S.C. 1701 et seq.), Public Law 99-606, and other applicable laws.

The MLWA stated the BLM would have a management plan for the BGR completed by November 6, 1989, three years after passage of Public Law 99-606. Prior to the passage of PL 99-606, the USAF completed a natural resources management plan to address the land within the BGR. This plan, the Luke Air Force Range Natural Resources Management Plan (1986) (LAFR Plan), was prepared by the University of Arizona (UofA) for the USAF. Portions of the LAFR Plan were used as a basis for the BLM's plan. The Executive Summary of the LAFR Plan has been included in Appendix II of this final document in order to provide more detailed descriptions of the BGR natural resources and LAFR Plan Recommendations.

This Lower Gila South Resource Management Plan (Goldwater Amendment) is also an environmental assessment (EA) of the environmental impacts that would be caused by implementing each of the following two alternatives:

The Proposed Action is to modify the existing LAFR Plan and incorporate the modified plan into the LGS RMP.

The No Action alternative would use the LAFR Plan without modification. Under No Action, the LAFR Plan would be implemented by the USAF with BLM involvement limited to existing Memoranda of Understanding and other agreements addressing management of such things as: 1) grazing trespass on the BGR; 2) management of grazing allotments adjacent to the BGR and 3) management of mining and leasing law on the BGR.

Description of the Planning Area

The planning area covers 1,842,423 acres of public land in southwestern Arizona (see Map 1). Within the planning area are 84,262 acres of state of Arizona land and 2,675 acres of private land leased by the USAF.

The BGR contains some of the nation's unique and well-preserved native desert. The area is a dramatic landscape of rugged mountain ranges and broad alluvial valleys that have experienced only scattered settlement since late prehistoric times. The area is one of the hottest and driest deserts of North America; however, well-adapted plant and animal life are abundant. The vegetation is typical of the Sonoran Desert, characterized by saguaro, barrel, cholla, prickly pear and organ pipe cacti, as well as agave, ocotillo, creosotebush, paloverde, mesquite and acacia trees.

PL 99-606 directed the BLM, USMC and USAF to enter into a Memorandum of Understanding (MOU) to outline the responsibilities of the two agencies. This MOU will address material discussed in Chapters 2, 12 and 13 of the LAFR Plan; therefore, these chapters will not be referred to in this LGS RMP (Goldwater Amendment). The LAFR Plan recommendations that were accepted are incorporated into the Proposed Action as "specific management actions." Where LAFR Plan recommendations are not sufficient to meet BLM needs, additional management actions were developed.

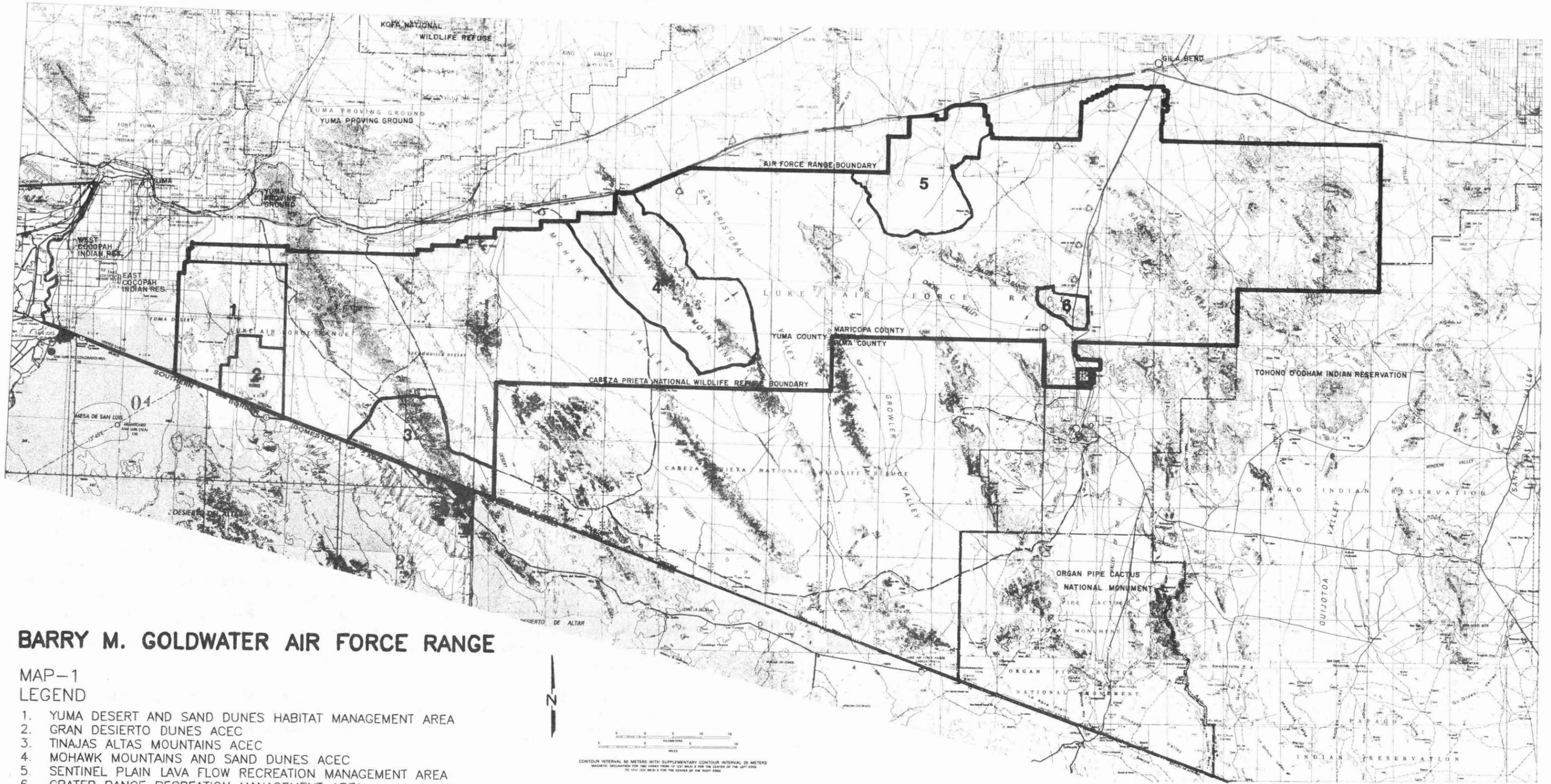
Each chapter of the LAFR Plan has been placed under the headings as shown below. Sections were added for Areas of Critical Environmental Concern (ACECs), Other Management Areas, Fire Management and Wild Horses and Burros.

Chapter from LAFR Plan	Resource Heading
2	Administrative-Management Framework (Eliminated)
3	Land Uses
4	Geological Resources
5	Water Resources
6	Soil Resources
7	Botanical Resources
8	Wildlife Resources
9	Atmospheric and Visual Resources
10	Cultural Resources
11	Road Network and Vehicle Use
12	Military Agencies (Eliminated)
13	Non-Military Agencies (Eliminated)
14	Outdoor Recreation Use and Management
15	Perimeter Land Use and Encroachment

DESCRIPTION OF THE PROPOSED ACTION AND ALTERNATIVE

Proposed Action

The proposed action is to modify the existing LAFR Plan and incorporate the modified plan into the LGS RMP. The LAFR Plan was developed with the USAF as the land management agency for the BGR and contained recommendations for resource management actions. With the passage of PL 99-606, the BLM is responsible for land management of the BGR while providing for the military use of the BGR.



BARRY M. GOLDWATER AIR FORCE RANGE

MAP-1
LEGEND

1. YUMA DESERT AND SAND DUNES HABITAT MANAGEMENT AREA
2. GRAN DESIERTO DUNES ACEC
3. TINAJAS ALTAS MOUNTAINS ACEC
4. MOHAWK MOUNTAINS AND SAND DUNES ACEC
5. SENTINEL PLAIN LAVA FLOW RECREATION MANAGEMENT AREA
6. CRATER RANGE RECREATION MANAGEMENT AREA

The proposed action alternative includes all appropriate or applicable management guidance, objectives, actions and prescriptions established by the LGS RMP. These are cited in Appendix III. The proposed action has the following resource specific management objectives and actions:

LAND USES

This section pertains to Chapter 3 in the LAFR Plan. Chapter 3 deals with proposing legislation that would continue the withdrawal of the BGR (formerly the Luke Air Force Range). Due to the passage of PL 99-606, many of the recommendations in Chapter 3 are no longer pertinent. Because of the wording of PL-99-606, additional management actions were developed.

Management Objective

To assure land uses will not interfere with current or future military use of the BGR and are consistent with BLM objectives and the LGS RMP.

Specific Management Actions

The BLM will:

- consider exchanges of state and private lands within the BGR for public lands outside the BGR (modified LAFR Plan Recommendation 3-3). The priority for acquisition will be non-federal lands within ACECs/Other Management Areas. The USAF is presently leasing some lands and seeking to acquire other non-federal holdings,
- complete or review all necessary field examinations and environmental assessments for any lease, right-of-way (R/W), Temporary Use Permits or any other allowable non-military land uses. Before authorizing proposals, the BLM will submit the proposal to the USAF offices for review and concurrence. The project will not be allowed without written concurrence from the USAF,
- restrict construction of overhead transmission lines to paralleling the existing Gila Bend to Ajo 69-kV transmission line. Underground facilities must be constructed on the west side of the Tucson Cornelia and Gila Bend railroad. All rights-of-way are subject to USAF concurrence. Above-ground utility installation outside these areas would create aircraft safety hazards and possibly constrain USAF training missions. **NOTE:** A utility corridor was established in the Lower Gila South Resource Management Plan to allow additional rights-of-way to meet the needs of the residents of Ajo. The width of this corridor was established as one mile and is inconsistent with BGR and USAF management direction and aircraft safety,
- inform all agencies and the public using the BGR of the location of areas protected by special designations and how land-use activities are circumscribed by these designations (LAFR Plan Recommendation 3-6),
- keep all agencies using the BGR fully informed as to the location in which ground activities and development may or may not occur (modified LAFR Plan Recommendation 3-8),

- communicate promptly to the public and other agencies, as necessary, new designations for land use, resource protection, safety and security (LAFR Plan Recommendation 3-10). Specific management actions in other sections address public information systems, techniques and policies to be implemented.

LAFR Plan Recommendations Not Incorporated in the Proposed Action

- 3-1. Assure that all BGR agencies gain a better understanding of the legal meanings and requirements of existing withdrawals affecting the BGR and communicate with each other regarding their responsibilities for the withdrawals.

This recommendation was excluded because the MOU required by PL 99-606 will outline USAF, USMC and BLM responsibilities.

- 3-2. Assure that the anticipated Congressional withdrawal for the BGR appropriately reflects the unique land use, resource protection and management requirements of the BGR.

This recommendation was excluded because PL 99-606 has been passed.

- 3-4. Investigate the possibility of purchasing private lands within the BGR.

This recommendation was excluded because it is not in the scope of this amendment. The USAF may pursue the purchase of private lands; however, it is out of the scope of BLM activities to purchase private lands.

- 3-5. Monitor proposed land designations within BGR, for example, wilderness, and comply with the legal and policy mandates associated with such designations.

This recommendation was excluded because wilderness designation outside of the Cabeza Prieta National Wildlife Refuge (CPNWR) is constrained by military activities. Special land use designations like ACECs are addressed under other sections of this plan. Management and policy mandates associated with such designations are addressed in the Federal Land Policy and Management Act, related regulations, policies and management guidance and the LGS RMP.

- 3-7. Provide information about the purpose, location and exact boundaries of specially designated State Natural Areas and Federal Research Natural Areas to all BGR agencies and minimize activities in those locations.

This recommendation was excluded because management actions in other chapters address boundaries and management prescriptions for BLM-administered ACECs and other management areas.

- 3-9. Verify the status and location of unpatented mining claims within the BGR.

This recommendation was no longer needed because all records are kept by the BLM.

3-11. Verify the location of specific boundaries of research natural areas and state natural areas within the BGR.

This recommendation was excluded because ACECs and Arizona State Natural Areas (SNAs) are addressed in other chapters. Boundary verification of SNAs or other land use classifications for designations not established by the Federal Land Policy and Management Act or part of the BLM land use planning system are outside the scope of the BLM's management responsibilities.

GEOLOGICAL RESOURCES

This section relates to Chapter 4 of the LAFR Plan. Chapter 4 deals with the possibility of either opening or closing the BGR to mineral entry, depending on Congressional action. Since PL 99-606 excluded all mineral entry from the BGR, the recommendations developed in this Chapter were not appropriate for the proposed action. Also, because of PL 99-606, mineral management is not within the scope of this amendment. The USAF could conduct the reconnaissance described in LAFR Plan Recommendation 4-2 if it would assist the military use of the BGR.

WATER RESOURCES

Chapter 5 in the LAFR Plan deals with water resources. The management actions developed from that plan's recommendations can only apply to users other than the USAF and USMC since this plan cannot direct military programs.

Assessments of groundwater resources, including aquifer characteristics, potentials for development and susceptibility to contamination, will be conducted on an as-needed basis. The BLM will utilize existing databases and, where data is insufficient, develop new groundwater information as the situation dictates. All water resources within the BGR will be inventoried and catalogued as to type of use, amount of use and water rights protecting the uses.

The BLM coordinates with the Arizona DEQ on water quality matters applicable to management and utilization of public land resources. BMPs will be developed for any activity which has the potential for generating non-point source pollution.

Management Objective

Manage water resources in a manner to optimize natural resource uses while ensuring that military uses are considered.

Specific Management Actions

The BLM will:

- keep ground water development and exploration to a minimum in ACECs, other management areas and other environmentally sensitive areas (modified LAFR Plan Recommendation 5-2),

- limit, to the greatest extent possible, all field activities relating to ground water exploration and development to designated roadways and previously disturbed areas (LAFR Plan Recommendation 5-4),

- coordinate with the Arizona Game and Fish Department (AGFD) to be sure all wells within the BGR are registered with the Arizona Department of Water Resources. Inventory all water sources, enter them into the BLM water data management system. Coordinate water rights filings for water sources with the USAF and AGFD (modified LAFR Plan Recommendation 5-6),

- keep informed of new federal and state water laws which might allow outside groups access to BGR ground water (LAFR Plan Recommendation 5-7),

- develop a systematic, readily available data base containing all hydrologic, geologic and geophysical studies conducted on the BGR (Plan Recommendation 5-5). The BLM presently is developing data base systems for this type of information,

- conduct a reconnaissance assessment of the ground water resources in the Yuma Desert Basin, Lechugilla Desert Basin, Mohawk Valley Basin, San Cristobal Valley Basin, Crater-Sauceda Valley Basin and the Sauceda-Sand Tank Valley Basin (LAFR Plan 5-3),

- monitor the water table levels to determine how perimeter water use may be affecting water reserves on the BGR (LAFR Plan 5-8).

LAFR Plan Recommendations Not Incorporated in the Proposed Action

5-1. Prohibit ground water exploration or development or both on the CPNWR for off-site uses.

This recommendation was excluded because the CPNWR is out of the scope of this amendment and BLM administration.

SOILS

This section pertains to Chapter 6 of the LAFR Plan. All recommendations in this section are being included as part of the proposed action. Some of the recommendations have been modified to conform with the intent of PL 99-606.

Management Objective

The management objective for this section is basically the same as the LAFR Plan goal developed in Chapter 6. The BLM will minimize human-induced acceleration of geologic processes and unnecessary damage to land forms and soils.

Specific Management Actions

The BLM will:

- restrict the operation of motorized vehicles and heavy equipment to established roadways and previously impacted areas, except when the use relates to a specific permitted project (LAFR Plan Recommendation 6-1),

- assess, as part of site appraisals for the NEPA evaluation process (that must precede initiation of new land-based activities), the vulnerability of soils to disruption and subsequent wind and water erosion (LAFR Plan Recommendation 6-2),

- update the soils map database with new information collected during site evaluations (LAFR Plan Recommendation 6-3),

- use the following techniques to minimize soil disturbance and conserve soil resources on previously unimpacted sites --

 - gaining access to the site, where possible, by using existing roads and trails,

 - using equipment, where possible, that creates the least amount of soil disturbance,

 - returning the disturbed areas to as close to predisturbed conditions as possible (LAFR Plan Recommendation 6-4),

 - minimize activities where it is known that soils are unstable and subject to wind erosion (LAFR Plan Recommendation 6-5).

BOTANICAL RESOURCES

This section relates to Chapter 7 of the LAFR Plan. All recommendations from this chapter are being included as specific management actions and one additional management action has been included.

Management Objectives

The management objectives for this section are similar to the goals developed in Chapter 7 of the LAFR Plan. The BLM will ensure the protection of plant communities and species diversity. The BLM will also comply with federal and state laws and regulations regarding threatened and endangered flora.

Specific Management Actions

The BLM will:

- give high priority to protecting vegetation from disturbances during any land-based activities (LAFR Plan Recommendation 7-1),

- conduct floristic surveys and monitoring for populations of sensitive, candidate threatened, endangered, rare or unique species (modified LAFR Plan Recommendation 7-2),

- utilize any newly gathered botanical information to update the vegetation map developed for the LAFR Plan (LAFR Plan Recommendation 7-3),

- enter all existing and new botanical information into its existing database to be used in future resource recommendations (LAFR Plan Recommendation 7-4),

- adhere to the intent of the Arizona Native Plant Law, Endangered Species Act (ESA) and all other applicable laws and regulations to protect the vegetative resources of the BGR (LAFR Plan Recommendation 7-5).

- develop a BGR-wide fire management plan, similar to CPNWR's, that makes fire-suppression decisions on the basis of threat to human life, property or endangered and threatened species. The plan will include participation by the USAF, USMC, BLM and USFWS (LAFR Plan Recommendation 7-6). A separate section of this amendment covers fire management.

WILDLIFE RESOURCES

This section relates to Chapter 8 of the LAFR Plan. The specific recommendations brought forward and modified for incorporation in this plan will be addressed in a comprehensive Habitat Management Plan (HMP) for the BGR.

Management Objectives

The BLM's management objective for this section is similar to the goal developed for Chapter 8 in the LAFR Plan, which is to ensure the protection of wildlife habitats, species diversity and viable populations.

Special designations and management prescriptions are developed for selected priority species in the ACEC/other management area section. These areas are: Mohawk Mountains and Sand Dunes, Tinajas Altas Mountains, Yuma Desert and Sand Dunes and Grand Desierto Dunes area. These areas are considered priority habitats.

Specific Management Actions

The BLM will:

- authorize predator control on the BGR if necessary to protect an endangered species under the ESA (LAFR Plan Recommendation 8-1),
- evaluate, through an HMP, the development and improvement of water sources for species dependent on open water (modified LAFR Plan Recommendation 8-3),
- comply with NEPA and ESA regulations for all wildlife projects. The BLM is required by law to meet the requirements of NEPA and ESA (LAFR Plan Recommendation 8-4),
- evaluate the cumulative impacts of land disturbance on wildlife habitat in order to establish criteria for protection of important habitat when making land use decisions (LAFR Plan Recommendation 8-5),
- establish wildlife inventories and monitoring for game and non-game species to provide information for guiding land use decisions (modified LAFR Plan Recommendation 8-6). Species addressed may include: flat-tailed horned lizard, desert bighorn sheep, mule deer, white-tail deer, Sanborn's long-nosed bat, peregrine falcon, Colorado Desert fringe-toed lizard, Yuma puma, desert tortoise and other species as needed,

- continue to support Sonoran pronghorn monitoring and other recovery efforts (LAFR Plan Recommendation 8-7); specific recovery efforts will be carried out through the HMP process as recovery actions are developed,

- eliminate all trespass grazing by livestock (cattle), goats and burros and construct fences where trespass is a problem (LAFR Plan Recommendation 8-8),

- develop a comprehensive HMP in cooperation with the AGFD, USAF, USMC and USFWS to enhance or maintain wildlife and wildlife habitat within the non-refuge portion of the BGR (the first, second, fourth and fifth specific management actions in this section would be further developed under the HMP); environmental consequences of these actions are indeterminate at this time, but will be described in an EA for the HMP (LAFR Plan Recommendation 8-9). This management action includes habitat prescriptions for the Yuma Desert and Sand Dunes Habitat Management Area,

- address in the HMP objectives for habitat expansion, maintenance or improvement for priority species,

- avoid new surface-disturbing activities within six miles of a permanent water source within Sonoran pronghorn range (Issue 5, page 8-18 of LAFR Plan),

- inventory, categorize and manage desert tortoise habitat on the BGR consistent with Desert Tortoise Habitat Management on the Public Lands: A Rangewide Plan (BLM 1988).

LAFR Plan Recommendations Not Incorporated in the Proposed Action

8-2. Establish the taxonomic validity and distribution of the Yuma puma (Felis concolor browni) before any additional harvest of mountain lions in the USMC sector of LAFR occurs in order to avoid possible violation of the ESA (Endangered Species Act).

Establishment of the taxonomic validity of this subspecies is not a responsibility of the BLM. Unless the subspecies is invalidated at some point in the future, the BLM will consider it a legitimate subspecies and treat it with all the consideration warranted by its state and/or federal status. Harvest of mountain lions on the BGR remains under the control of the Arizona Game and Fish Department and Commission.

ATMOSPHERIC AND VISUAL RESOURCES

This section relates to Chapter 9 of the LAFR Plan and considers air quality and visual resource management needs on the BGR. The BLM coordinates with the Arizona DEQ on air quality matters applicable to management and utilization of public land resources. BMPs will be developed for any activity which has the potential for generating non-point source pollution.

The BGR is not located within a non-attainment area for air quality and activities proposed are not anticipated to emit significant additional particulate or other aero-pollutants. For all activities within the BGR, Clean Water and Clean Air Act standards must be complied with.

Some recommendations are modified to reflect BLM visual resource management responsibilities.

Management Objectives

Establish and maintain visual resource conditions on the BGR through the application of BLM visual resource management principles on authorized activities. In most instances, specific management plans and activity planning will be used to inventory, delineate and map specific visual management classes. Until these plans and visual inventory/mapping are completed, areas would be managed under interim designations considered appropriate and addressed under the LAFR Plan (Section 9.4 Visual Resources).

Specific Management Actions

The BLM will:

- establish interim visual resource management classes for the following described areas (described either in the LAFR Plan or this RMP amendment):

Areas of Critical Environmental Concern would have Class 2 visual management objectives. Other management areas, mountain ranges and recreation travel corridors will also be managed under Class 2 objectives. The San Cristobal Valley will be managed under Class 4 criteria because of dart target intrusions. Target Range areas with extensive disturbance (Eastern USAF Section, the ISST Site, and the Baker Peaks 2nd LAAMB maneuvering area will also be Class 4.

All other areas not specifically addressed by this plan or the LAFR Plan will be considered Class 3 visual management areas for visual resource management purposes.

- control excessive fugitive dust at BLM-permitted construction sites and recreation activity areas (LAFR Plan Recommendation 9-2),

- protect mountain vistas from visual intrusions (LAFR Plan Recommendation 9-4) by developing, during site or project specific activity planning, visual resource management prescriptions needed to maintain appropriate visual resource management objectives,

- protect the visual resource quality on lands adjacent to the El Camino del Diablo and highways (Interstate 8 and State Route 85) by: 1) establishing portions of these roads as Scenic Byways in cooperation with the Arizona Department of Transportation (ADOT), the USAF and the USMC (modified LAFR Plan Recommendation 9-5) and by 2) using the visual resource management process during activity planning to maintain appropriate visual resource management objectives established for these byways,

- lessen, prevent or mitigate further degradation of visual and scenic resources on the BGR by assisting USAF and USMC military and environmental planners on the siting of future military training activities. Use of existing disturbed and impacted land areas for new training activities should be utilized wherever possible (modified LAFR Plan Recommendation 9-3),

- assist, if requested, USAF and USMC military and environmental planners on future plans for developing removal methods for errant tow targets in order to minimize or avoid damage to natural and cultural resources (modified LAFR Plan Recommendation 9-6).

- Monitor air quality trends (modified LAFR Plan Recommendation 9-1).

CULTURAL RESOURCES

This section deals with the cultural resources portion of the LAFR Plan (Chapter 10). All specific actions will be addressed in a Cultural Resource Management Plan.

Management Objective

The cultural resources of the BGR will be protected and managed in accordance with federal laws, regulations and BLM and USAF policies.

Specific Management Actions

The BLM will:

- prepare a Cultural Resource Management Plan in cooperation with USAF, USMC and USFWS (LAFR Plan Recommendation 10-2),

- conduct a cultural resource inventory prior to undertaking any BLM-sponsored BGR projects affecting cultural resources and act as lead agency for Section 106 compliance as outlined in the National Historic Preservation Act of 1966 (LAFR Plan Recommendation 10-5),

- provide special protection for significant cultural sites that are being impacted or threatened by the public. For sites being impacted or threatened by the military, a different process would be followed. Although the USAF and USMC have the responsibility to comply with Section 106 of the National Historic Preservation Act through consultation with the Arizona State Historic Preservation Officer, the BLM would be available to the military, at all times, as a consultant (LAFR Plan Recommendation 10-6),

- minimize impacts on cultural resources by avoiding cultural property locations whenever feasible and use previously disturbed areas as the preferred locations for ground-disturbing activities when practical (LAFR Plan Recommendation 10-7),

- inform personnel responsible for field operations about the location of cultural resources and appropriate avoidance procedures when land-disturbing activities are proposed in archaeologically sensitive areas, as directed in USAF Regulations for Historic Preservation (LAFR Plan Recommendation 10-9),

- coordinate management of cultural resources on non-refuge portions of LAFR with the cultural resource goals of Organ Pipe Cactus National Monument (OPCNM) and Cabeza Prieta National Wildlife Refuge (CPNWR) (LAFR Plan Recommendation 10-3). Coordination with OPCNM and CPNWR will be accomplished as part of the Cultural Resource Management Plan,

- when requested, assist the USAF and USMC in the implementation of a cultural resources education program for military and agency personnel and, if possible, local civilian populations, that will promote increased sensitivity to historic preservation, as directed in USAF Regulations for Historic Preservation (modified LAFR Plan Recommendation 10-8). Although the BLM has no responsibility for training military personnel, the BLM could participate in education programs if the military believes our assistance to be beneficial.

LAFR Plan Recommendations Not Incorporated in the Proposed Action

10-1. Provide for an archaeologist as part of the LAFR resources staff, as stipulated in USAF Regulations for Historic Preservation.

This was deleted because the passage of PL 99-606 shifts responsibility of management of the cultural resources to the BLM. The USAF can place an archaeologist on their resources staff as needed.

10-4. Develop a systematic and comprehensive inventory program, carefully designed to maximize useful information while minimizing cost.

This recommendation was excluded because it would be very unrealistic to do cultural inventories on an area as large as the BGR in a systematic and comprehensive manner.

ROAD NETWORK AND VEHICLE USE

This section addresses road and vehicle use policies on the BGR and establishes a framework for transportation planning and vehicle use management.

ROAD NETWORK

Management Objectives

Develop and maintain a BGR transportation plan and road system to meet military and other agency management needs, implement off-road vehicle management designations and provide safe public access. The transportation plan will allow for vehicle use on the BGR consistent with recreation management, natural and cultural resource goals and the military mission.

Specific Management Actions

The BLM will:

- develop a transportation plan for the non-refuge part of the BGR in order to facilitate effective management of an appropriate road system and network for military, agency and public use (modified LAFR Plan Recommendations 11-1, 11-2, 11-3, 11-4, 11-5 and 11-7)). The plan will establish the USAF and the BLM, in coordination with the USMC, as the planning authority for roads on parts of the BGR where the BLM has land management responsibilities (modified LAFR Plan Recommendation 11-2). This plan will be developed with input by other agencies and the public. Major provisions of this transportation plan are:

- plan all road development in compliance with NEPA, applicable environmental resource protection laws and regulations and BLM and USAF standards, including BLM Manual Section 9113 (LAFR Plan Recommendation 11-1),

- reduce new road construction to a minimum by coordinating access needs and avoiding conflicts and replication in road use, development and management (modified LAFR Plan Recommendations 11-3 and 11-4),

- close roads and trails not meeting clearly identified land management, public or military access needs and restoring these routes to a natural appearance either through natural or mechanical rehabilitation (modified LAFR Plan Recommendation 11-7),

- develop and maintain a comprehensive road and trail inventory which includes mileages, locations and classifications (LAFR Plan Recommendation 11-5).

VEHICLE USE

The major use of the BGR established by law is military use and training. Due to the parameters of the BGR's military mission, including security and safety hazards, the Department of Defense allows no off-road travel by vehicles. All vehicles must travel on either designated or established routes. Moreover, the USAF specifically prohibits unlicensed vehicles designed primarily for off-road use.

Under the BLM's off-road-vehicle management regulations, the BGR would be designated a limited use area, with all vehicle travel limited to designated or established roads. LAFR Plan Recommendations 11-6, 11-8, 11-9, 11-10, 11-11 and 11-12 are incorporated into this plan by the Specific Management Actions in this section.

Management Objectives

Establish guidelines for the management of public and agency vehicle activities on the BGR. Establish policies ensuring vehicle use of BGR lands is managed and directed to protect resources, promote the safety of all users and minimize conflicts among the various uses of the BGR.

Specific Management Actions

The BLM will:

- designate the BGR as a limited ORV use area, with all vehicles restricted to designated or established roads as stipulated by USAF, USMC and BLM regulations. Accordingly, all vehicle use will be allowed on existing Primary, Secondary, Tertiary, Patrol and Unimproved roads (totaling about 1,464 miles of established roadway). This road classification terminology has been employed by the American Association of State Highway Officials and adopted by USAF planners (see Appendix IV).

- permit no open or unrestricted ORV use areas or competitive ORV use or events,

- prohibit public off-road or cross-country vehicle travel. Random off-road travel resulting in the creation of new trails or the widening or extension of existing trails will not be permitted (modified LAFR Plan Recommendation 11-9),

- prohibit agency off-road use on all BGR lands as per BLM and USAF regulations except in designated USAF/USMC activity areas, in emergency or law enforcement situations and for permitted or authorized resource management tasks where off-road travel will not cause significant or irreparable harm to natural resources (modified LAFR Plan Recommendation 11-9). All authorized off-road use on the BGR must meet all NEPA and other environmental and resource protection laws (LAFR Plan Recommendation 11-10),

- adopt USAF General Vehicle Operating Rules (LAFR Plan Section 11.4) (Appendix V) derived from established federal regulations and agency policies and applied to the BGR under the authority of the BLM and the installation commander. These rules include:

1. all vehicles and operators must be licensed for highway driving under state of Arizona laws and regulations,
2. vehicles may not be operated in a reckless, careless or negligent manner,
3. vehicles may not be operated in a manner likely to cause damage to natural or cultural resources.

- identify and post, where appropriate, roads and trails open and closed to public use, using procedures compatible with existing USFWS and BLM signing standards (LAFR Plan Recommendation 11-6),

- prepare and provide public visitor use materials, maps and information clearly communicating road and vehicle use rules to all BGR users, including the closure of the BGR to off-road travel and prohibition of all-terrain vehicles that are not street-legal (LAFR Plan Recommendations 11-8 and 11-11),

- install appropriate fencing, signing and gates at principal BGR entry points to improve public access management, address public safety concerns and eliminate off-road vehicle use at entrance points,

- encourage the use of existing roads whenever possible to retrieve downed aircraft and errant target darts. When requested by the military, assist USAF and USMC planners in route selection and associated recovery efforts in order to provide maximum protection to vegetation, soils, recreation, scenic, visual, wildlife and cultural resources (modified LAFR Plan Recommendation 11-12).

OUTDOOR RECREATION USE AND MANAGEMENT

This section addresses outdoor recreation use. The existing LAFR Plan (Chapter 14) and the USAF Draft Five-Year Outdoor Recreation Plan contain 25

recreation-related recommendations. These recommendations were consolidated and grouped under Outdoor Recreation Use and Management into three principal sections for BLM management emphasis: 1) Visitor Services and Use Supervision, 2) Recreation Planning and Inventory and 3) Recreation Resource Management.

Management Objectives

This section addresses Special Recreation Management Areas (SRMAs)*, Extensive Recreation Management Areas (ERMAs)* and the management of recreation resources. The section also provides management prescriptions needed to meet objectives for each proposed SRMA or ERMA. These prescriptions will: 1) establish the conditions to be maintained, 2) establish the parameters for managing recreation activities, 3) define actions needed to maintain environmental and social conditions and 4) address ways other resources will use the area.

***Special Recreation Management Areas (SRMAs):** Areas where recognized recreation values exist or where significant public recreation issues or management concerns occur. Intensive or special types of recreation management are typically needed. Detailed recreation planning is required.

***Extensive Recreation Management Area (ERMA):** Areas where dispersed recreation is encouraged and visitors have a freedom of recreational choice with minimal regulatory constraint. Significant public recreation issues or management concerns are limited and minimal management supervision will suffice.

Visitor Services and Use Supervision

Specific Management Actions

The BLM will provide visitor services, information materials, natural resource law enforcement, interpretation and signing for public access and recreation on the BGR to the extent compatible with the military mission, public safety and natural and cultural resource protection. Major provisions and prescriptions for visitor services and use supervision include:

- enforce all public access permit requirements and regulations (modified LAFR Plan Recommendation 14-5). USAF regulations require all visitors and non-Department of Defense personnel on the BGR to complete an Application for Range Entry, obtain a Range Pass and review and sign a Hold Harmless Agreement (Appendix VI), review the Explosive Awareness Handout (Appendix VI) and notify the appropriate agency they are clear of the BGR,

- standardize procedures, documents and requirements employed in authorizing public use of the BGR and ensure coordination among the BLM, USFWS, USAF and USMC in simplifying visitor use procedures, including a computerized permitting system (modified LAFR Plan Recommendations 14-3 and 14-21),

- implement public safety protection measures appropriate to the BLM's land management responsibilities addressed in Section 14.10 of the LAFR Plan, including necessary signing (LAFR Plan Recommendation 14-11),

- assist the USAF and USMC in the establishment of visitor contact stations at the Gila Bend Air Force Auxiliary Field and the Marine Corps Air Station (MCAS) in Yuma to facilitate visitor clearance briefing and documentation (Modified LAFR Plan Recommendation 14-22),

- provide the public with up-to-date visitor use maps and materials to communicate BGR rules and regulations, access rules, off-road travel regulations, vehicle use rules, resource and cultural interpretation, hazards and rules of conduct as presented in this LGS Goldwater Amendment (LAFR Plan Recommendations 14-3, 14-4, 14-12, 14-13 and 14-14),

- issue Special Recreation Use Permits (SRUPs) for specific recreation uses on the public lands of the BGR when required by the BLM's Special Recreation Permit Policy. SRUPs would be issued as a means to protect recreation resources, control visitor use, manage individual or group use in ACECs/Other Management Areas and as a mechanism to manage any commercial recreation uses. Permits would be issued only with the concurrence of the USAF and when such activity does not impair or damage natural or cultural resources or interfere with military operations,

- establish, in cooperation with the USAF, USMC, USFWS, AGFD and interested citizens and organizations, a BGR environmental education program designed to be responsive to the environmental education needs of military personnel, other agencies using the BGR and user groups. Brochures, videos and other media would be utilized to enhance the awareness of BGR's fragile ecological settings and management needs to all clientele,

- implement a signing program based on sign needs identified in a BGR sign plan. Both interior and perimeter range signs are needed for visitor interpretation, rules, regulations, public safety, access and other considerations of public use and safety (modified LAFR Plan Recommendation 14-23). Minimal and non-intrusive signing will be installed in sensitive environmental, cultural or scenic areas and only where necessary to manage visitor use or protect natural resources. Installed signing will be sited so as to not impair the natural qualities of the BGR or diminish the backcountry experience of the visitor,

- develop an action plan or agreement describing interagency law enforcement, establishing range-wide radio frequencies/communication and search and rescue responsibilities among all affected agencies (USAF, USMC, BLM, USFWS, AGFD, U.S. Border Patrol) and all affected law enforcement jurisdictions (Arizona Department of Public Safety, U.S. Bureau of Indian Affairs, Tohono O'odham Tribal Police, Yuma County Sheriff, Pima County Sheriff and Maricopa County Sheriff) (modified LAFR Plan Recommendation 14-18). The Yuma Sector of the Border Patrol has a Desert Area Rescue Team based in Yuma and would offer their expertise and experience in cooperation with other search and rescue agencies.

Recreation Planning and Inventory

The BLM will implement recreation planning procedures to: 1) ensure that recreation use is appropriate to the settings, types and conditions of the natural and cultural resources found within the BGR and 2) establish conditions to manage recreation activities and maintain or enhance recreation opportunities in a manner consistent with the military use of the BGR.

Specific Management Actions

- establish the western and eastern portions of the BGR each as an Extensive Recreation Management Area (ERMA); implement appropriate management actions addressed in this plan to facilitate recreation use of each ERMA, ensure public safety using USAF recreation zoning classifications, protect natural resources and support the military mission (modified LAFR Plan Recommendations 14-6 and 14-7),

- prepare recreation activity planning for the following: Sentinel Plain Lava Flow Special Recreation Management Area (SRMA), Crater Range SRMA, Mohawk Mountains and Sand Dunes ACEC, Camino del Diablo Backcountry Byway, the Yuma Desert and Sand Dunes Habitat Management Area and the Gran Desierto Sand Dunes ACEC (see the ACEC/Other Management Area section which follows for specific recreation management actions),

- survey sites for a primitive campground and associated facilities north of the Tinajas Altas Mountains or in the Gila Mountains. The campground will be developed in a location that will not compromise USMC training needs, impair scenic values, impact wildlife habitats or migration areas or compromise visitor safety. Careful siting of this potential facility is imperative due to USMC live-fire areas to the west and the importance of this region to desert bighorn sheep movement,

- survey sites for primitive or undeveloped campgrounds in the East and West ERMAs. Surveys will examine locations that will not compromise military training needs, impair scenic values, impact wildlife habitats or migration areas or compromise visitor safety,

- manage recreation use by adopting and implementing the Limits of Acceptable Change System and Recreation Opportunity Spectrum (LAFR Plan Recommendation 14-19),

- develop and maintain visitor use records and statistics, including visitor perceptions, access patterns and recreation use habits/preferences (LAFR Plan Recommendation 14-10).

Recreation Resource Management

Specific Management Actions

The BLM will:

- permit camping on all lands within the BGR (unless otherwise posted closed or restricted to camping for resource protection purposes), permit primitive camping in all areas (except within one-quarter mile of all wildlife water sources), permit self-contained or vehicle-based camping within 50 feet of designated or established roads,

- enforce all off-highway vehicle and vehicle use regulations (LAFR Plan Recommendations 11-6, 11-7, 11-8, 11-9, and 11-10 and 11-11),

- prohibit woodcutting or wood collection for commercial or domestic use. No wood cutting permits will be issued for BGR lands. No vegetative material is to be removed from the BGR with the exception of specific cases deemed appropriate and properly permitted,

- permit campfires on BGR lands using dead and down wood. Wood can not be collected in ACECs and other areas specifically closed to wood collection by this RMP (Goldwater Amendment) or subsequent activity planning,

- monitor campfire wood collection along roads and travel routes to insure recreational firewood use by BGR recreation visitors does not seriously damage or impair scenic values and natural habitats (LAFR Plan Recommendation 14-24),

- implement a maximum 14-day length-of-stay limit for recreational camping parties or groups. Persons may occupy one site or multiple sites within a 25-mile radius on BGR public lands not closed or otherwise restricted for a total period of not more than 14 days in any 28-day period. Following a 14-day period, persons must relocate at least 25 miles from their previously occupied site,

- adopt, with the concurrence of the USAF, amended USAF Rules of Conduct for the BGR (see Appendix V) (LAFR Plan Recommendation 14-20),

- adopt, with the concurrence of the USAF and USMC, appropriate USAF Range Clearance Noncompliance Policies (see Appendix VII),

- recommend revocation, at the discretion of the USAF installation commander, BGR entry privileges for a period of up to one year or more to individuals violating management prescriptions, rules or regulations developed for BGR natural resource and recreation use, including failure to possess approved Range Passes, complete and sign Hold Harmless Agreements, violation of the Rules of Conduct, unauthorized off-road-vehicle activity and all other noncompliance of the rules and regulations prescribed by this LGS RMP (Goldwater Amendment) or subsequent activity planning.

LAFR Plan Recommendations Not Incorporated in the Proposed Action

14-15. Monitor more closely hunting and trapping activities to determine accurate levels or participation, areas of use and harvest levels.

This recommendation was excluded. Management of hunting and trapping activities pertaining to participation and harvest levels are the responsibility of the AGFD.

14-16. Prohibit trapping in locations where military use and closures do not allow daily access by trappers.

Much public concern was expressed on the 24-hour trap check required by the AGFD. This recommendation was excluded because the AGFD is responsible for trap check frequency and trapper compliance and stipulating areas open or closed to trapping.

14-17. Give consideration to implementation of a special permit and fee program for hunting and trapping as required by USAF regulations.

This recommendation was excluded because it would be initiated by the USAF and is outside BLM management responsibilities. The BLM does not impose fees for hunting and trapping activities by private citizens.

AREAS OF CRITICAL ENVIRONMENTAL CONCERN (ACECs)/OTHER MANAGEMENT AREAS

This section addresses ACECs/Other Management Areas. Each section presents appropriate, supporting management prescriptions. These proposals are in compliance with the BLM Resource Management Plan and recreation management guidelines.

Management Objectives

BLM will implement management prescriptions and activity planning for ACECs and other areas needing enhanced management attention. These areas possess special or sensitive resource values.

AREAS OF CRITICAL ENVIRONMENTAL CONCERN (ACEC)

Under the proposed action, three ACECs encompassing 191,500 acres will be designated. Each ACEC recommended under the proposed action was nominated for designation either by the public or by the BLM planning team. The planning team determined that the Tinajas Altas Mountains, the Gran Desierto Dunes and the Mohawk Mountains and Sand Dunes each meet the relevance and importance criteria required by the BLM planning regulations (CFR 1610.7-2(a)). These criteria are evaluated in the Description of the Affected Environment section of this plan. Management prescriptions and acreages involved for each ACEC are described below.

Tinajas Altas Mountains ACEC (53,000 acres)

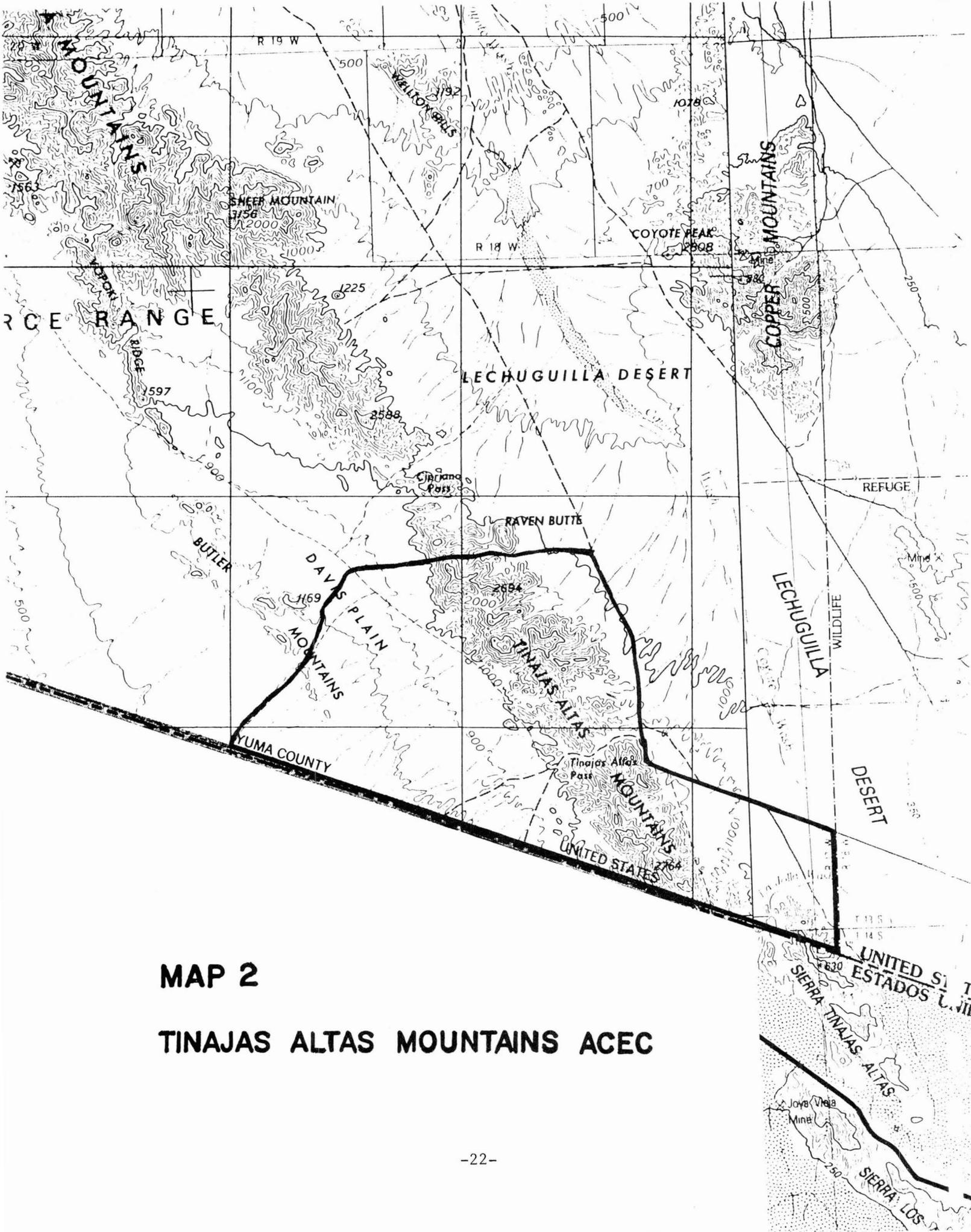
NOTE: Based on public comment and consultation with the USAF and USMC, the BLM has revised the final boundary and management prescriptions of the Tinajas Altas Mountains ACEC to: 1) enclose additional habitat and migration routes for the desert bighorn sheep in the lower Lechuguilla Desert and Sierra de la Lechuguilla Mountains; 2) provide additional protection for the historic and scenic resources south of the Camino del Diablo; 3) protect natural desert landscapes (with stands of saguaro and agave) south of the Camino del Diablo; 4) remove from ACEC consideration areas between Cipriano Pass and Raven Butte needed for USMC communication and training sites and 5) limit future USMC ground activities to designated or existing roads. These revisions will permit better management of recreation, cultural, scenic and natural resources and improve coordination with USMC military planners.

ACEC boundaries in the Raven Butte Area have been revised to exclude the permanent communication site on Raven Butte and associated ground training sites in the Raven Butte-Cipriano Pass areas. The extensive surface military use and training requirements in the Raven Butte area would be incompatible with the Tinajas Altas Mountains ACEC management prescriptions. The ACEC also would limit training opportunities in the future. New military equipment and systems could require different employment and need additional space in the Raven Butte area.

Management Prescriptions. Special management attention to maintain and preserve a variety of scenic, cultural, floral and faunal features associated with the Tinajas Altas Mountains and slickrock water potholes is needed for this area (see Map 2). Recreational use (camping, cross-country and off-trail vehicle use, trash), cultural theft and vandalism, wood harvest and theft, military operations and other ground-disturbing activities are affecting the natural resource values of this fragile Sonoran Desert habitat.

Resource features requiring special management include desert bighorn sheep habitat, historic graves and trails, Indian petroglyphs, the Davis Plain ironwood tree population and high value recreation values (scenery, sightseeing, hunting, photography, geologic and cultural study, camping, hiking and wildlife and plant observation. Management prescriptions are:

- limit military ground operations to designated or established roads and remove and reclaim* (see page 23) military ground operation sites (including USMC training site 58) in the ACEC,
- limit vehicle use to designated roads; post all other areas as closed to vehicle use,
- close roads and vehicle trails leading from the Camino del Diablo to the main Tinajas Altas rock pool complex (closure of several one-quarter-mile segments of multiple vehicle routes),
- establish one primary public travel route on the Camino del Diablo between benchmark 1146 and benchmark 1126 (1.5 miles) and close other parallel, ancillary or nonessential routes in the area,
- establish a hiking trail to the lower Tinajas Altas pool in conjunction with interpretive and resource protection efforts. Design trailhead and vehicle management structures so as to allow AGFD water tanker access to the lower potholes during drought periods,
- restore the natural appearance and setting of the Tinajas Altas High Tanks by closing and reclaiming numerous and visually distracting trails, tracks and campsites throughout the area between the lower pool and the Camino del Diablo.
- prohibit camping within one-quarter-mile of the Tinajas Altas High Tanks area,
- prohibit woodcutting, taking of dead or down trees and collection of any vegetation within the ACEC. Campfires will be permitted if wood is brought in from outside the ACEC. Wood for campfires may be collected on the BGR outside the ACEC, if it is dead and down. All appropriate means (brochures, signs, press releases, etc.) will be used to encourage visitors to use wood brought in from off the BGR or use alternative means of heating and cooking,
- prohibit new rights-of-way and other land use authorizations,
- establish long-term study plots to inventory and monitor natural resources per the existing USAF Ecosystem Management Plan. Coordinate all study plot implementation with the USAF,



MAP 2

TINAJAS ALTAS MOUNTAINS ACEC

- establish regular ranger supervision and patrol of the Tinajas Altas and Davis Plain areas to curtail unauthorized cross-country motorized vehicle use and illegal ironwood harvest,

- establish interpretive facilities describing the geologic, plant, wildlife and cultural components of the Tinajas Altas Mountains ACEC and associated segment of the Camino del Diablo,

- initiate reclamation procedures* (see below) on all areas of the ACEC with significant evidence of natural resource damage or impairment from off-road-vehicle use and other surface disturbing activities,

*reclamation, using appropriate BLM and USAF measures, will be attempted on ACEC areas where restoration efforts have a potential for success as determined by BLM Surface Reclamation Specialists. Reclamation will consist of recontouring disturbed surface areas, restoring (scarification) topsoil and restoring plant cover to the point where long-term natural succession is ensured).

Gran Desierto Dunes ACEC (25,500 acres)

NOTE: Based on consultation with the USMC, boundary revisions have been made to this ACEC, excluding live-fire target areas, observation installations and access roads. The size of the ACEC was reduced 3,000 acres by this revision. An additional 640 acres of dune area were added to the west side of the area.

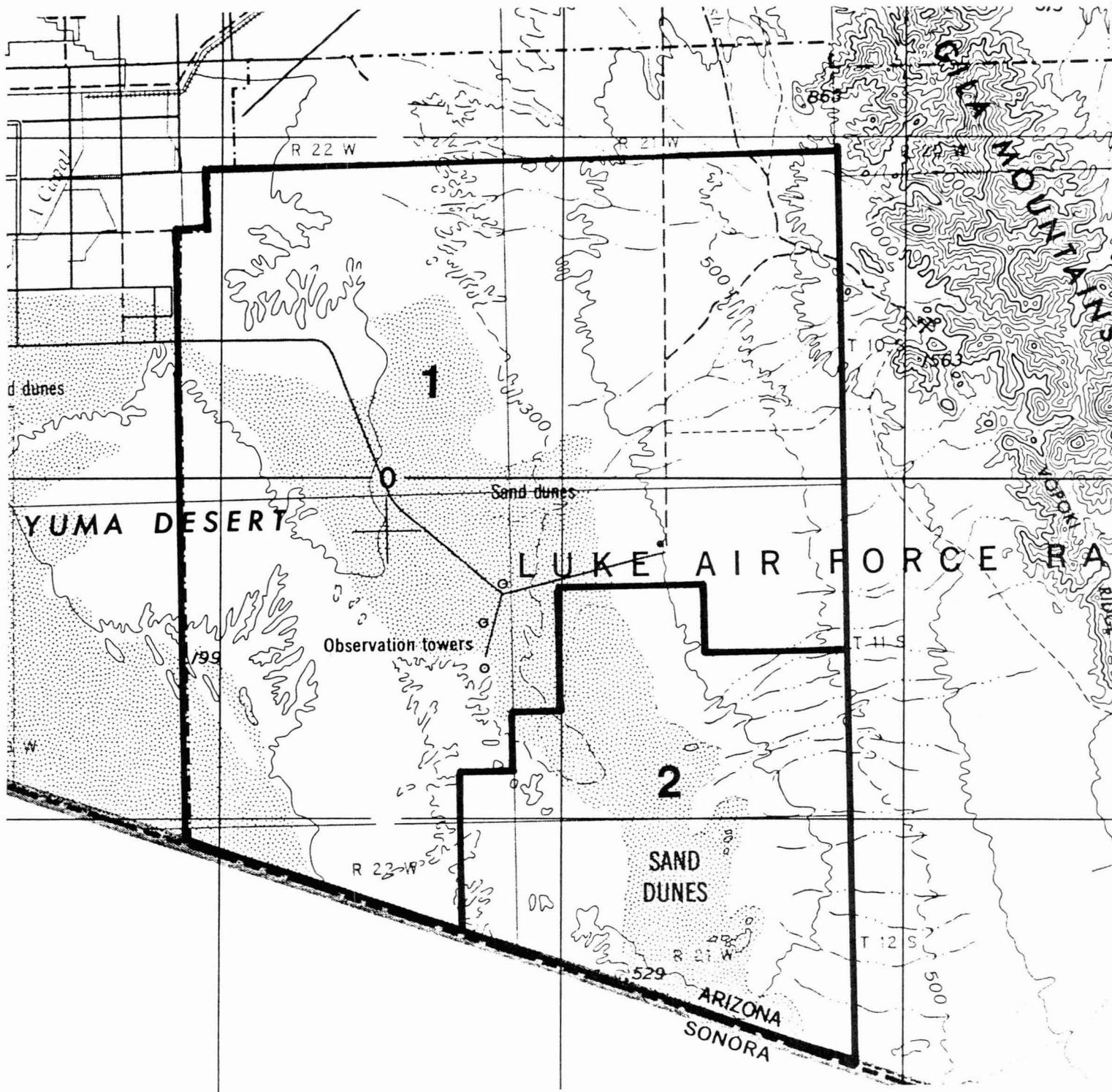
Management Prescriptions. Establishment as an ACEC will provide management direction and coordination needed to maintain unique plant and animal elements within a near pristine and rare dune system (see Map 3). Special resource qualities include habitat for the fringe-toed lizard and a variety of dune endemic plants including Helianthus niveus ssp. tephrodes, ammobroma sonorae, Euphorbia platysperma and Eriogonum deserticola. This ACEC is presently within a USMC training area generally closed to civilian visitation because of frequent live-fire air-to-ground training. These management prescriptions would be needed if future management direction is changed and the area becomes more available for public use.

Management prescriptions are as follows:

- limit vehicle use to designated roads; post all other areas (including dunes and dune fields) closed to vehicle use,

- establish interpretive facilities and information describing the geologic, floral and fauna components of the Yuma Desert Sand Dunes and Gran Desierto Dune system complex (interpretive sites and signs installed along roads in and around the ACEC),

- prohibit woodcutting, taking of dead or down trees within the ACEC. Campfires will be permitted if wood is brought in from outside the ACEC. Wood for campfires may be collected on the BGR outside the ACEC if it is dead and down. All appropriate means (brochures, signs, press releases, etc.) will be used to encourage visitors to use wood brought in from off the BGR or to use alternative means of heating and cooking,



MAP 3

1. YUMA DESERT AND SAND DUNES HABITAT MANAGEMENT AREA
2. GRAN DESIERTO DUNES ACEC

- establish long-term study plots to inventory and monitor natural resources per the existing USAF Ecosystem Management Plan. Coordinate all study plot implementation with the USAF,

- prohibit new rights-of-way and other land use authorizations,

- encourage military ground activities to stay within current training areas inside the Gran Desierto ACEC sand dune complex,

- reclaim, by appropriate BLM and USAF measures, military use areas with surface damage within the ACEC if identified as non-essential to current or future military training missions, but only on areas where restorative efforts have a potential for success, as determined by BLM Surface Reclamation Specialists (reclamation would consist of recontouring disturbed surface areas, restoring (scarification) topsoil and restoring plant cover to the point where natural long-term succession is ensured).

Mohawk Mountains and Sand Dunes ACEC (113,000 acres)

Management Prescriptions. The following prescriptions are provided for the long-term maintenance of a semi-stabilized dune field and a mountain range with associated habitat for desert bighorn sheep, Sonoran pronghorn antelope and various assemblages of rare or unusual Sonoran Desert sand dune plant communities (see Map 4). Management prescriptions include:

- limit vehicle use to designated roads. Prohibit and post closed to vehicle use all sand dune and dune field areas,

- establish interpretive facilities and information describing the geologic, floral and fauna components of the Mohawk Mountains and Sand Dunes ACEC, especially interpretive sites, points-of-interest and visitor use signing along Interstate 8 and dirt roads along Mohawk Wash,

- prohibit woodcutting, taking of dead or down trees within the ACEC. Campfires will be permitted if wood is brought in from outside the ACEC. Wood for campfire use may be collected outside the ACEC if it is dead and down. All appropriate means (brochures, signs, press releases, etc.) will be used to encourage visitors to use wood brought in from off the BGR or utilize alternative means of heating and cooking.

- establish long-term study plots to inventory and monitor natural resources per the existing USAF Ecosystem Management Plan. Coordinate all study plot implementation with the USAF,

- prohibit new rights-of-way and other land use authorizations except within the Interstate 8 utility corridor; encourage the installation of below ground utility services only in the Interstate 8 utility corridor within the BGR unless overhead facilities are required due to technical and/or operational circumstances,

- encourage military ground training activities to remain within current use areas within the ACEC. Coordinate with military planners on military activities to seek future training sites outside the ACEC or select less sensitive sites within the ACEC,

- reclaim, using appropriate BLM and USAF means, military use areas within the ACEC -- if identified as non-essential to current or future military training missions, but only on areas where restorative efforts have a potential for success, as determined by BLM Surface Reclamation Specialists (reclamation would consist of recontouring disturbed surface areas, restoring (scarification) of topsoil and restoring plant cover to the point where long-term natural succession is ensured),

- establish, in coordination with the Arizona Department of Transportation, the portion of Interstate 8 bordering the north boundary of the ACEC as a Scenic Byway with appropriate management prescriptions to maintain scenic views; provide interpretive signing where feasible about geology and habitat.

OTHER MANAGEMENT AREAS

Under the proposed action, four areas requiring special management attention or resource activity planning (encompassing 207,620 acres) would be recognized. Although these areas do not meet the relevance and importance criteria needed for establishment as ACECs, they do contain resource values that would benefit from enhanced management attention. Management goals and actions for each area are described below.

Yuma Desert and Sand Dunes Habitat Management Area (HMA) (84,500 acres)

NOTE: Based on public comment and consultation with the USAF and USMC, the BLM has revised the final boundary of the Yuma Sand Dune HMA to enclose additional dune-fringe areas representing habitat for the flat-tailed horned lizard and other plant and wildlife of the Yuma Desert. This revision will permit better management of these habitats and improve coordination with USMC military planners. About 24,125 acres were added to the HMA by this revision.

Management Goals and Prescriptions. Within the constraints of the ongoing military mission, implement management prescriptions necessary to maintain the ecological integrity and diversity of the Yuma Desert and Sand Dunes habitat (see Map 3), particularly habitat for the flat-tailed horned lizard and associated scenic, biological and recreation resources. Emphasis will be given to the protection and enhancement of flat-tailed horned lizard habitat in this area. Management prescriptions include:

- limiting vehicle use to designated roads only with no cross-country use or dune travel,
- establishing interpretive facilities and information signing near major access points describing the geologic, floral and fauna components of the Yuma Desert and Sand Dunes HMA,
- prohibiting woodcutting for commercial or domestic use,
- limit new rights-of-way and other land use authorizations in flat-tailed horned lizard habitat and other candidate species habitat,
- discouraging expanded training and target use in sand dune and other fragile habitat areas through coordination with the military,

- reclaiming, by appropriate BLM and USAF measures, military use areas with surface damage within the HMA if identified as non-essential to current or future military training missions, but only if areas have a potential for success, as determined by BLM Surface Reclamation Specialists (reclamation would consist of recontouring disturbed surface areas, restoring (scarification) topsoil and restoring plant cover to the point where long-term natural succession is ensured).

Sentinel Plain Lava Flow Special Recreation Management Area (SRMA) (92,000 acres)

Management Goals and Prescriptions. Within the constraints of the ongoing military mission, implement management prescriptions to maintain recreation, geologic and educational features associated with the Sentinel Plain Lava Flow (see Map 5).

The BLM will:

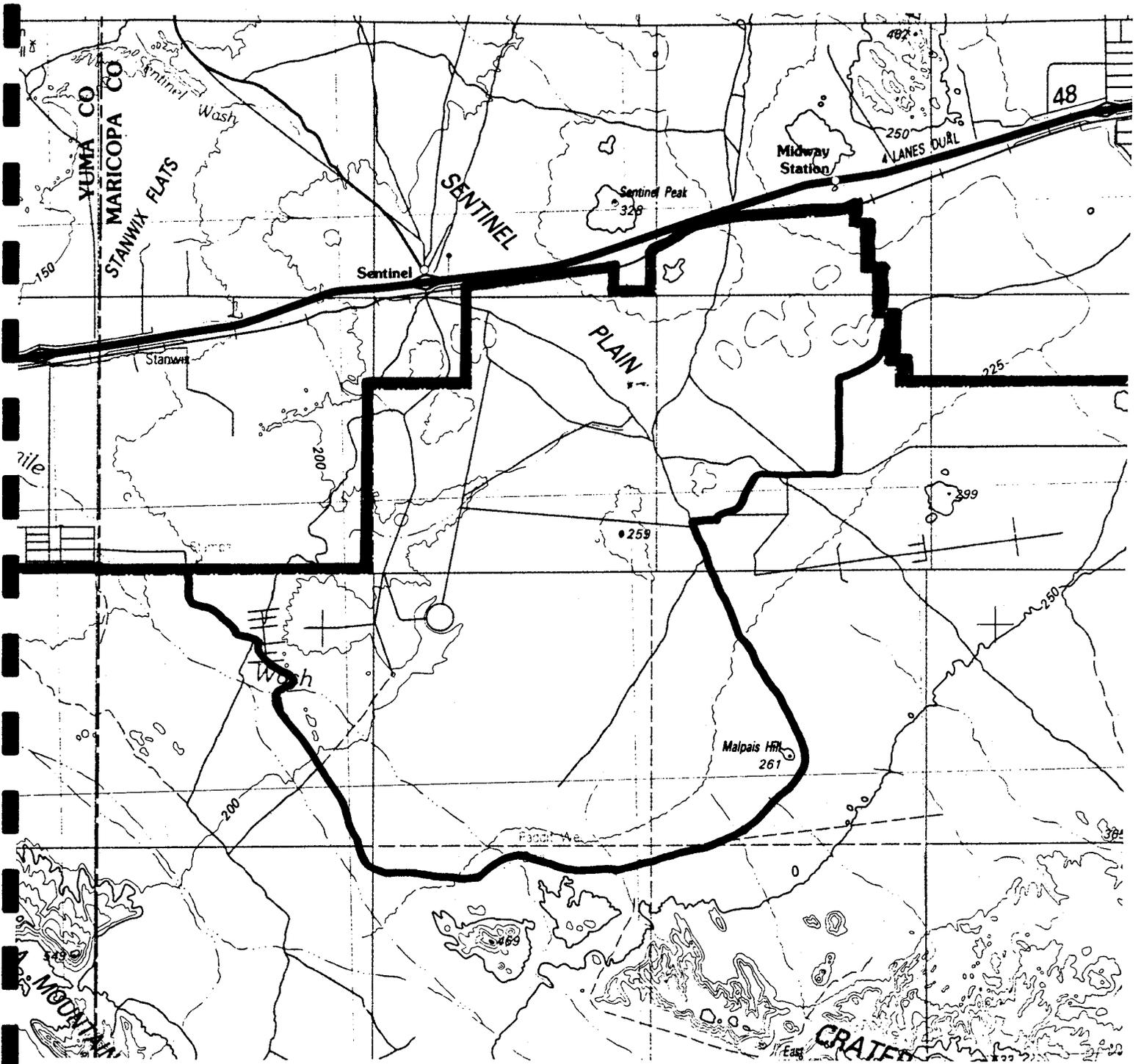
- limit vehicle use to designated roads,
- establish point-of-interest interpretative facilities and signing (describing features of geologic interest) near Interstate 8 (if appropriate and safe access is available) and at major entry points,
- prohibit new rights-of-way and other land use authorizations except those installed in the established Interstate 8 utility corridor; encourage the installation of below ground utility services within the corridor south of Interstate 8 unless overhead facilities are required due to technical and/or operational circumstances,
- minimize visual impacts on the area's geologic formations (from rights-of-way construction in the Interstate 8 utility corridor) by application of visual resource management guidelines.

Crater Range Special Recreation Management Area (SRMA)(11,920 Acres)

Management Goals and Prescriptions. Within the constraints of the ongoing military mission, implement management prescriptions to maintain the scenic values, volcanic geologic features, undisturbed Sonoran Desert plant communities and associated recreational opportunities for visitor use and enjoyment (see Map 6).

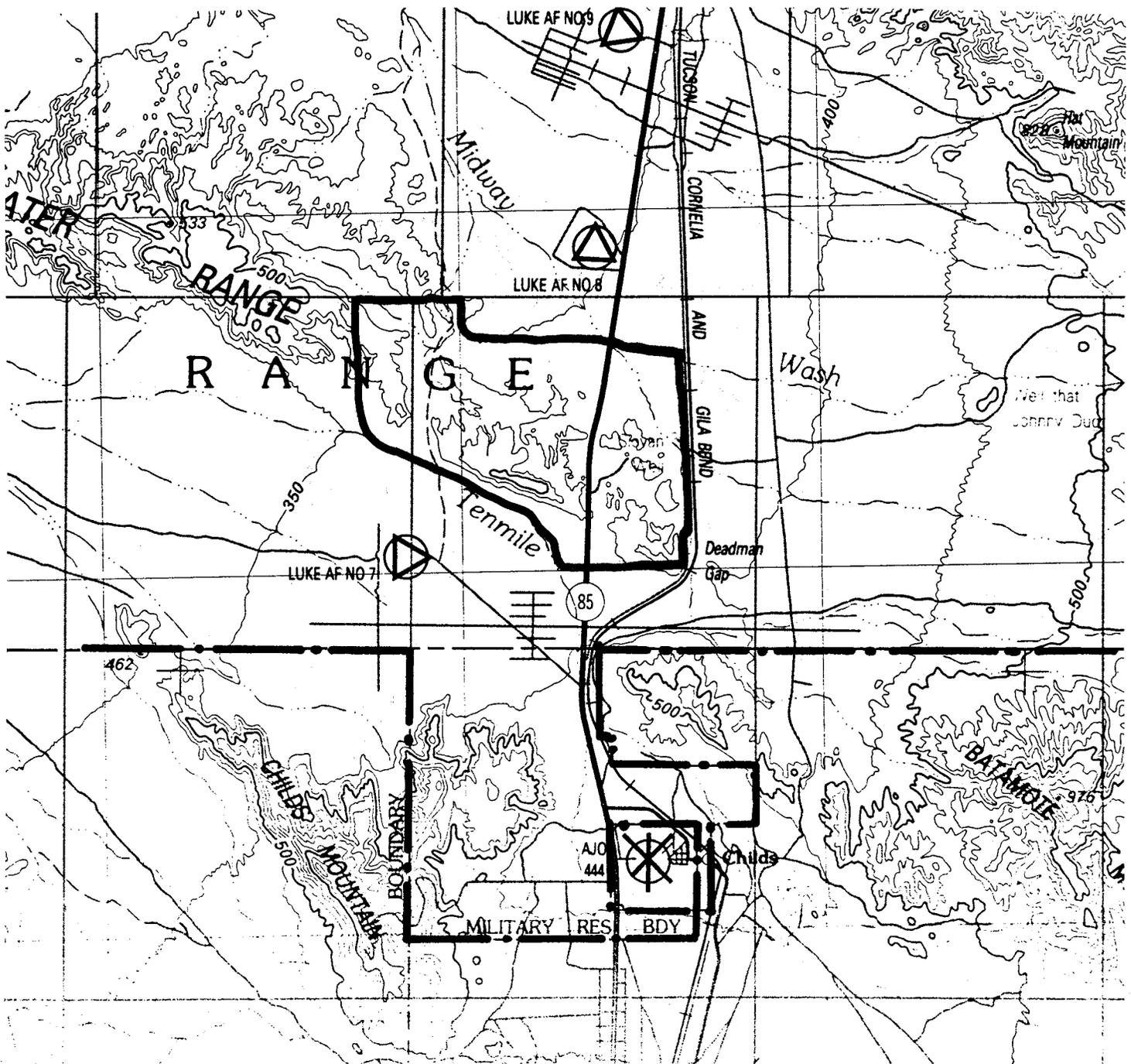
The BLM will:

- limit vehicle use to designated roads,
- establish point-of-interest interpretative (geologic and Sonoran Desert plant and animal ecosystems) and picnic facilities near State Highway 85 and at primitive road access points,
- establish the primitive dirt road on the west boundary of the SRMA as a scenic jeep trail and develop appropriate signing and interpretative services for public use, safety and enjoyment,



MAP 5

SENTINEL PLAIN LAVA FLOW
RECREATION MANAGEMENT AREA



MAP 6

CRATER RANGE RECREATION MANAGEMENT AREA

- establish, with USAF concurrence, the portion of Highway 85 bisecting the Crater Range SRMA as a Scenic Byway and one-mile-wide scenic corridor if the route satisfies BLM and ADOT Scenic Byway standards. Develop management prescriptions necessary to maintain scenic values,

- eliminate or reduce potential visual impacts from additional overhead powerline facilities (if future powerlines are needed) in the Ajo to Gila Bend utility corridor with careful application of visual resource management guidelines; protect all views from highway and other potential public viewing points, utilize areas paralleling the railroad on the east side of the SRMA for any future proposed below ground utility rights-of-way with USAF concurrence.

The Camino del Diablo (Devils Highway) Backcountry Byway (19,200 acres)

The BLM will:

- establish the Camino del Diablo as a Backcountry Byway and scenic corridor if the route satisfies BLM's Backcountry Byways criteria and has USAF concurrence. Allow no surface-disturbing activities within one-quarter mile of the Camino del Diablo,

- prohibit all firewood collection within 150 feet of the byway corridor. Outside of this 150 foot corridor, only dead and down wood can be collected,

- permit vehicle-based and self-contained camping only within 50 feet of the road unless otherwise posted,

- install interpretative and visitor use signs along the trail describing appropriate cultural, geologic and biological features (all signs will be planned to harmonize with the natural and historic settings); prepare and distribute brochures describing the route with the cooperation of USAF, USMC and USFWS,

- reclaim, using appropriate BLM and USAF measures, military use areas with soils and plant damage along the Camino del Diablo when and if present training areas are identified as non-essential to current or future military training missions. Reclamation would be attempted only on areas where restorative efforts would have a potential for success as determined by BLM Surface Reclamation Specialists (reclamation would consist recontouring of disturbed surface areas, restoring (scarification) topsoil and restoring plant cover to the point where long-term natural succession is ensured),

- limit new rights-of-way, other land use authorizations and surface disturbances in the backcountry byway and scenic corridor.

PERIMETER LAND USES AND ENCROACHMENT

This section refers to Chapter 15 of the LAFR Plan. Nearly all of the recommendations from this chapter are out of the scope of BLM activities and will need to be performed by the USAF, if the USAF believes it is necessary. Other recommendations are unnecessary because normal BLM operations eliminate the need for the recommendation. Therefore, there are no management objectives or specific management actions developed for this section. The

recommendations not incorporated in the proposed action and the reasons why they were excluded are discussed below.

- 15-1. Initiate and continue liaison contacts with the agencies and municipalities that manage perimeter lands to circumvent perimeter pressures (direct or indirect) before they become perimeter problems that may affect the natural resources and military mission of the BGR.

This recommendation was excluded because the USAF will need to address perimeter problems and their effect on the military mission. It is standard practice for the BLM to work with the public where natural resource problems are encountered.

- 15-2. Monitor the acreage and distribution of agricultural land use in perimeter areas and technological advances in agriculture that might increase agricultural demand for arid lands and potentially encroach on LAFR.

This recommendation is out of the scope of the BLM. The USAF can proceed with this recommendation if they deem it necessary.

- 15-3. Monitor stocking rates on perimeter grazing allotments and maintain a list of names, addresses and brands of permittees to be able to respond to trespass grazing.

Because the BLM works with livestock operators and has access to all BLM allotments and permittees, this recommendation is no longer necessary.

- 15-4. Maintain or construct fences where trespass grazing is a problem.

This recommendation was covered under specific management action in the wildlife section of this document.

- 15-5. Obtain a list of perimeter land owners to facilitate communication when necessary.

This recommendation is out of the scope of BLM activities. The USAF would perform this recommendation if it is needed for the military mission.

- 15-6. Work with the county agricultural extension agents to determine the extent and danger of pesticide drift into the BGR and any associated water quality problems.

This recommendation is out of the scope of BLM activities. The USAF would perform this recommendation if needed for the military mission.

- 15-7. Recognize that any shift in flight patterns stemming from conflicts with the Tohono O'odham Indian Tribe could have an impact on the BGR environment.

The USAF would have to consider this recommendation.

- 15-8. Monitor all geophysical and legal aspects of ground water management for any potential changes that may impact the natural resources on the BGR.

Because of the BLM's standard operating practices for groundwater management, this recommendation is no longer necessary.

- 15-9. Monitor the Yuma City and County planning and zoning meetings to keep apprised of changes that may directly or indirectly affect the natural resources and the military mission of the BGR.

This recommendation is not necessary for the BLM to perform its natural resource management activities. The USAF may decide to monitor these meetings in order to assure that military uses are not compromised.

- 15-10. Develop a media clipping file to monitor changes in use of perimeter lands and public perceptions of issues pertaining to BGR.

This recommendation is not necessary for BLM activities; however, the USAF may want to do this for military activities.

- 15-11. Monitor changes and growth of Yuma and other communities along Interstate 8 and communities in Mexico adjacent to the BGR to anticipate any perimeter pressure these populations may generate.

This recommendation is out of the scope of BLM activities and would be done by the USAF if needed.

- 15-12. Expand existing community public relations programs to inform citizens about military and BGR missions.

This recommendation is out of the scope of the BLM and would be accomplished by the USAF.

- 15-13. Initiate and maintain communication with SARH (Secretaria de Agricultural y Recursos Hidraulicos) and SEDUE (Secretaria de Desarrollo Urbano y Ecologia) in Mexico to monitor changes and trends in border region land use.

This recommendation is out of the scope of the BLM and would need to be handled by the USAF and the United States State Department.

WILDFIRE MANAGEMENT

There is no history of wildland fire on the BGR. No fires other than those caused by military activities have occurred in the last 15 years and these have been small and nonspreading due to the lack of continuous vegetation cover.

The only chance for a wildfire to occur and spread is in the higher elevations on the east end of the BGR and then only after exceptional wet springs when there is sufficient annual grass.

Currently the USAF responds to all fire on the BGR from the Air Force Auxiliary Field fire department at Gila Bend. Even though PL 99-606 identified the BLM as the responsible agency for suppression of wildland fires, there is little change expected to the current method of fire suppression and the response by the USAF. Fire management will be addressed in the Memorandum of Understanding between the USAF, USMC and the BLM.

Management Objectives

Suppress non-military caused wildfires with the lowest acreage loss and in the most cost-effective and efficient manner.

Specific Management Actions

The USAF will immediately report all non-military-caused wildfires to the BLM.

The USAF will respond to all fires. Upon initial attack, if it is determined that the fire is non-military in nature, they will continue the suppression action. If the fire is not controlled within two hours after initial attack, they will request assistance from the BLM.

The USAF will provide the information necessary to the BLM to complete the BLM Wildland Fire Report.

The USAF may request assistance from the BLM on military-caused wildland fires.

WILD HORSES AND BURROS

A burro herd is present on the eastern portion of the BGR. At this time it is not known how many burros there are, or the extent of their range on the BGR. Also, ownership still needs to be established to determine if, in fact, they are wild and free-roaming.

The USAF, through the LAFR Plan, has expressed concern over the presence of burros on the BGR and wants the herd to be removed.

Management Objectives

Determine the ownership of the burros. If the burros are wild and free-roaming, develop a capture-and-removal program. If the burros are owned by individuals, fencing and other methods of control would need to be developed.

Specific Management Actions

The BLM will:

- inventory the burro population to determine herd size and ownership;
- prepare a burro capture-and-removal plan in coordination with the USAF, Tohono O'Odham tribe and other affected parties,
- adopt captured burros through the adoption program or impound and sell, whichever is appropriate according to the determination of their ownership.

NO ACTION ALTERNATIVE

The No Action alternative would use the LAFR Plan without modification. Under No Action, the LAFR Plan and its recommendations would be implemented by the USAF with BLM involvement limited to existing Memoranda of Understanding and other agreements addressing management of such things as: 1) grazing trespass; 2) management of grazing allotments adjacent to the BGR and 3) management of mining and leasing law on the BGR.

The LAFR Plan was completed by the University of Arizona (UofA) for the USAF in 1986, prior to the passage of PL 99-606. This plan, with its recommendations, guides the current management on the BGR. While all of the recommendations have not yet been implemented, they have been accepted by the USAF.

DESCRIPTION OF THE AFFECTED ENVIRONMENT

The purpose of this section is to describe the resources found in the BGR. Some resources are only negligibly impacted by the alternatives; therefore, descriptions are correspondingly brief.

LAND USES

Land use within the BGR has been greatly restricted because of the withdrawal to the USAF. In particular, livestock grazing and mining have not been allowed since 1941.

The only rights-of-way (R/W) usage within the BGR is along Highway 85 (the Gila Bend to Ajo highway). The Tucson, Cornelia and Gila Bend Railroad and a wood pole powerline are along Highway 85. Future R/W uses may include a 230-kV powerline built from Gila Bend to Ajo; however, no powerline is planned presently. The BLM established a one-mile-wide utility corridor in the Lower Gila South RMP centering on Interstate 8. No other non-military R/W needs are expected on the BGR.

No special use permits or temporary use permits have been issued on the BGR, nor are any anticipated. Occasional authorizations to perform studies and gather natural resource information may be requested.

There are 84,262 acres of state land leased by the USAF within the BGR. Private land tracts totalling 2,675 acres are scattered throughout the BGR, with all acreage leased by the USAF.

Additional information about BGR land status is offered in Appendix II (Luke Air Force Range Natural Resources Management Plan-Executive Summary) of this amendment.

GEOLOGICAL RESOURCES

Since 1941, the BGR has been closed to mineral entry. About 200 existing mining claims were established prior to the USAF BGR withdrawal. Additional information about BGR mining claims and geologic resources is presented in Appendix II (Luke Air Force Range Natural Resources Management Plan - Executive Summary).

WATER RESOURCES

Water resources within the BGR are somewhat limited due to the landform position and the extreme arid climate. Surface water resources consist mostly of pothole catchments found in and near major mountain ranges of the BGR. Ground water resources are largely unknown, although several wells are located in and adjacent to the BGR. Additional information about BGR water resources is presented in Appendix II (Luke Air Force Range Natural Resources Management Plan - Executive Summary) of this amendment.

SOILS

Soils within the BGR are considered highly susceptible to erosion and are slow to recover after disturbance. Soil maps and further information may be found in Chapter 6 of the LAFR Plan. Additional information about BGR soil resources is given in Appendix II (Luke Air Force Range Natural Resources Management Plan - Executive Summary).

BOTANICAL RESOURCES

The BGR contains a combination of the Lower Colorado River Valley and Arizona Upland subdivisions of the Sonoran Desert characterized by creosote/bursage and paloverde/cactus shrub vegetation types. The creosotebush/bursage communities dominate the valleys and plains, while the paloverde/cactus shrub communities grow in the mountains and bajadas. A more complete description of the vegetation communities is included in the LAFR Plan. The only complete local flora survey is for the Cabeza Prieta National Wildlife Refuge (Simmons, 1966). A summary of botanical resources information is presented in Appendix II (Luke Air Force Range Natural Resources Management Plan - Executive Summary).

Botanical surveys in the BGR have documented the presence of four federal Category 2 candidate species, sand food (Pholisma sonorae), night-blooming cereus (Cereus greggii var. transmontanus), flat-seeded spurge (Euphorbia platysperma) and dune sunflower (Helianthus niveus ssp. tephrodes). No other threatened or endangered or federal candidate plant species are known to occur on the BGR. The eastern edge of the BGR is potential habitat for the endangered Tumamoc globeberry (Tumamoca macdougalii) and for the Category 1 candidate Acuna valley pineapple cactus (Echinomastus erectocentra var. acunensis). In addition, several species considered relatively rare in Arizona or sensitive due to the fragility of their habitat have been found. These include Schott's wire lettuce (Stephanomeria schottii), sand flat locoweed (Astragalus insularis var. harwoodii) and dune buckwheat (Eriogonum deserticola).

The night-blooming cereus has been found to be relatively common in southern Arizona and will be reclassified in 1989 by the U.S. Fish and Wildlife Service to Category 3C. Sand food, dune sunflower, Schott's wire lettuce, flat-seeded spurge, and dune buckwheat are all endemic species restricted to sand dune habitats. Because the amount of habitat is limited and sensitive to disturbance, these species are relatively rare in Arizona.

WILDLIFE RESOURCES

To date, management on the BGR has been primarily concerned with game species, specifically desert bighorn sheep and the endangered Sonoran pronghorn antelope. These game species, however, only represent a small fraction of the wildlife on the BGR.

Wildlife species and habitats that may be significantly affected by actions in the BGR alternatives are discussed below. Priority species and habitats to be addressed are Sonoran pronghorn antelope, flat-tailed horned lizard, desert bighorn sheep, mule deer, white-tailed deer, Sanborn's long-nosed bat, peregrine falcon, Colorado Desert fringe-toed lizard, Yuma puma and desert tortoise. For the purpose of this plan, "habitat expansion" refers to the creation of habitat from non-habitat for specific species.

Additional information about BGR wildlife resources is provided in Appendix II (Luke Air Force Range Natural Resources Management Plan - Executive Summary).

SONORAN PRONGHORN

The Sonoran pronghorn primarily inhabits the central corridor of the BGR, roughly between the Lechuguilla Desert on the west and Highway 85 on the east. This endangered species requires a large, uninterrupted expanse of desert producing annual and perennial grasses and forbs. The pronghorns may require free unconfined access to perennial water sources. Within the United States, this pronghorn ranges over 1,188,000 acres, 504,000 of which are on the BGR. There are opportunities for improving existing habitat; however, there is no known opportunity for habitat expansion on the BGR at this time.

FLAT-TAILED HORNED LIZARD

The flat-tailed horned lizard, a federal category 1 candidate species, occurs in dune-fringe areas, where patches of fine, wind-blown sands have been deposited. These sparsely vegetated flats are usually dominated by creosote bush, white bursage and big galleta grass. This lizard inhabits the far western portion of the BGR, west of the Lechuguilla Desert. An approximate 172,000-acre area encompasses the potential habitat found on the BGR. Currently, there is no known opportunity for habitat expansion.

DESERT BIGHORN SHEEP

Desert bighorn sheep live on nearly every mountain range on the BGR. Bighorns are symbols of rugged, wild and expansive land. They require free access to perennial open water in steep mountain habitat for their existence. Water is considered a major limiting factor to desert bighorns in much of Arizona. Bighorns eat forbs, grasses and browse, which are also favored by

domestic livestock and wild burros. Desert bighorns occupy approximately 340,000 acres of habitat in the BGR. Desert bighorn probably make use of all the suitable habitat within the BGR. There are opportunities to improve the habitat; however, there are no known opportunities for habitat expansion at this time.

MULE DEER

Mule deer range over the eastern half of the BGR east of the Mohawk Mountains and frequent hills, mountains and desert washes where they must rely on perennial open water for their existence. Large amounts of habitat in this harsh desert are required to support huntable populations of this animal. Approximately 921,000 acres of habitat support mule deer on the BGR. There are limited opportunities for habitat expansion.

WHITE-TAILED DEER

White-tailed deer are found primarily on the far eastern end of the BGR. They occupy mountainous terrain also used by desert bighorns and a herd of wild burros. The few water sources within white-tailed deer habitat on the BGR are probably a limiting factor to their population growth, along with possible burro-deer forage conflicts near perennial waters. Approximately 88,000 acres of the BGR are inhabited by white-tails. Currently, white-tails probably occupy all suitable habitat. There is no known opportunity for habitat expansion at this time.

SANBORN'S LONG-NOSED BAT

This bat, a federally listed endangered species, is known to occur on Organ Pipe Cactus National Monument and on the BGR within the Cabeza Prieta National Wildlife Refuge. They may also occur elsewhere on the BGR. They are a migratory species traveling north into the U.S. during the spring to feed on the flowers of columnar cactus and agave. They remain in the U.S. through the summer before returning to Mexico. There is very little known about their population characteristics, range or habitat needs.

More information about this species will have to be gathered before any management assessment can be made. There is no known opportunity for habitat expansion at this time.

PEREGRINE FALCON

The peregrine falcon, a federally listed endangered species, is known to occur on the BGR; however, it is not known if these sightings are associated with migration, seasonal use or resident birds. Peregrines need cliff faces for perches and aeries and a stable prey base.

More information needs to be gathered about this species on the BGR before management assessments can be made. There is no known opportunity for habitat expansion at this time.

COLORADO DESERT FRINGE-TOED LIZARD

The Colorado Desert fringe-toed lizard occurs mainly on fine, wind-blown sands in and near the Mohawk and Yuma dunes. It is unique in that it prefers barren dunes. The sand dune areas, which encompass fringe-toed habitat, are approximately 75,000 acres. There is no known opportunity for habitat expansion at this time.

YUMA PUMA

The Yuma puma, a federal category 2 candidate species, is recognized by many taxonomists; however, the validity of this subspecies is controversial because of the few specimens available for study. The current population status is not known, but it is suspected to occur in the western end of the BGR. This rare subspecies is dependent on deer and desert bighorn populations for its existence. If a population of Yuma pumas exists on the BGR, they probably occupy all suitable habitats. There may be opportunity to improve their habitat by increasing prey species populations. However, there is no known opportunity for habitat expansion at this time.

DESERT TORTOISE

Desert tortoise, a federal category 2 candidate species, occur throughout the BGR wherever suitable habitat exists. Key components of suitable habitat are boulder-strewn slopes and/or incised drainages. Desert tortoises are active above ground for only a few months out of the year, usually in the spring and summer. While active, they consume a variety of forbs and grasses. Little is known about their population characteristics or distribution on the BGR. There is no known opportunity for habitat expansion at this time.

OTHER SPECIES

In addition to the species listed above, other species of special concern that might be affected by actions presented in the alternatives include: Sonoran green toad, Gila monster, Swainson's hawk, ferruginous hawk, long-billed curlew, spotted bat, tropical kingbird, osprey, casque-headed frog, Great Plains narrow-mouthed toad, snowy egret, black-crowned night heron, crested caracara and Sprague's pipit.

Other species that occur on the BGR include: coyote, gray fox, ringtail, bobcat, peccary, red-tailed hawk, Gambel's quail, white-winged dove, sidewinder and rosy boa.

ATMOSPHERIC AND VISUAL RESOURCES

The physiography of the BGR is typical Basin and Range province, characterized by steep mountain ranges with wide open valleys and bajadas. This, along with vegetation, soils and geological rock formations, provides for a variety of visual resource features for observation in the BGR.

Assignment of visual resource management classes will ultimately be based on the management decisions made in this amendment. All actions considered during the planning process resulting in surface disturbances must consider the importance of visual values.

Visual Resource Management (VRM) classes were not mapped in the LAFR Plan or this amendment, but the classes discussed by the LAFR Plan would be used as guidance. Additional mapping and inventory would be needed before VRM classes are established.

Highly scenic areas needing special management attention (Tinajas Altas Mountains, Yuma Desert and Sand Dunes Habitat Management Area, Mohawk Mountains and Sand Dunes, Sentinel Plain Lava Flow and the Crater Range) and land along major recreation travel routes would be assigned Class I or Class II, based on the importance of their scenic values and natural landscapes.

Much of the eastern (USAF) and western parts (USMC) could be assigned Class I or II after visual resource inventories, based on scenic qualities and viewing distance. The San Cristobal Valley could be assigned Class III or IV ratings due to dart target intrusions. Target range areas with extensive disturbance (Eastern USAF Section, the ISST Site and the Baker Peaks Second LAAMB maneuvering area) would probably be considered Class IV. Four target ranges and tactical targets in the Eastern (USAF) Section of the BGR cannot be seen readily from State Highway 85 and a Class IV designation would be appropriate for these areas.

The atmospheric resources within the BGR are considered to be of good quality, meeting the federal and state air quality standards.

CULTURAL RESOURCES

Between 11,000 and 12,000 years ago, humans first set foot on what is now the BGR. These early inhabitants were nomadic big-game hunters called Paleo-Indian people. Sites to the south and east of the BGR have been found to contain artifacts in association with the remains of now-extinct large mammals.

These large game animals eventually were no longer found on the BGR. Evidence exists that later people subsisted on gathered plant resources as well as small game animals. These hunter-gatherers were people of the Archaic tradition. Archaic occupation in the Southwest spanned a period of more than 3,000 years. This culture left widespread but somewhat sparse remains, including rock alignments, cleared circles, trails, rock-pile shrines, stone tools and grinding implements.

Two innovations revolutionized the lifestyle of the people of the Archaic period: the beginning of farming and the introduction of pottery altered subsistence patterns greatly. As subsistence changed, so did settlement. Caring for agricultural fields encouraged people to settle into a more sedentary existence. Hunting and gathering continued to be practiced on the BGR, however, until well into the historic period. Prehistoric farming was never successfully undertaken, due primarily to the extremely arid conditions across the BGR.

After 700 A.D., prehistoric farmers from the Colorado River (Patayan) and the Gila and Salt Rivers (Hohokam) began to cross various parts of the BGR.

Shell traders and other groups traveled through the BGR over time. Today, the pottery of these Patayan and Hohokam travelers has been observed in various locations on the BGR.

The first Europeans to observe this region of the southwest were sixteenth century Spanish explorers. They needed to find an overland travel route from Mexico to California. While crossing the BGR, they met Piman-speaking peoples (Pima and Tohono O'Odham) along the way. These Piman-speaking peoples are related to the modern Pima and Tohono O'Odham.

Historic use of the BGR began initially as a travel corridor, then expanded to ranching and mining. Travel corridors of note on the BGR include El Camino del Diablo, the Juan Bautista de Anza Trail, Yuma Wagon Road, Chico Shuni Trail and the Sauceda to Sand Tank Mountains corridor. El Camino del Diablo is currently listed on the National Register of Historic Places (NRHP). The Juan Bautista de Anza Trail currently is under consideration for National Historic Trail status.

Mining and ranching were very important historic uses of the BGR (some information is provided in the LAFR Plan). Most of the mining was undertaken on the western side of the BGR, whereas most ranch activity took place on the eastern end.

On the whole, very little is known about the cultural resources on the BGR. Only an extremely small amount of acreage on the BGR has been surveyed by archaeologists. Based on available information, a total of 47 sites have been recorded. Three additional sites are known to exist on the BGR, bringing the total to 50 sites.

The types of sites recorded include camp sites, trails, stone features, rockshelters, rock art and artifact scatters. Historic resources found on the BGR vary from an aboriginal village to Anglo homesteads, mines, ranches, trails and camps.

In order to properly evaluate and manage these sites, cultural resource use categories (BLM Manual 8111 - Arizona Supplement) will be assigned to these sites. These uses are designed to provide a basis for evaluating cultural resources in the planning process. The six use categories include:

- Scientific use
- Conservation for future use
- Management use
- Sociocultural use
- Public use
- Discharged use

Scientific use sites are those suitable for study with existing techniques. The types of sites which occur fairly often and with some identifiable pattern would also be assigned to scientific use to await an appropriate research or mitigation proposal. The majority of sites would probably fall into this category -- artifact scatters, small mines, camp sites and small homesteads.

The very rare, unique or unusual sites most appropriately would be assigned to conservation for future use -- those whose potential requires more than existing techniques and those not eligible for research resulting in physical alteration. This category would allow preservation of a site until certain provisions are met at some time in the future. Examples include aboriginal villages, homesteads, mines, ranches, trails, intaglios, rock shelters and rock art sites.

The more common kinds of sites could be assigned to management use if it appears that a controlled study would provide information on different types and rates of site deterioration or the effectiveness of protection measures. The information from this type of study could aid in the future management of sites. Examples of this category could include camp sites, rock art and artifact scatters.

Sociocultural use may be applied to sites that are considered to be part of the heritage of a cultural or a social group. There may be village sites, rock art sites, intaglios, stone features (shrines) or rock shelter sites that have special meanings for different groups of Native American people.

Public use is a category for sites that can be utilized for interpretive exhibits, as well as education and recreation uses by the public. These sites cannot be very fragile and must have easy access, such as El Camino del Diablo, the Juan Bautista de Anza Trail and possibly homesteads, ranches and rock art sites.

Discharged use is assigned to sites that may have been formerly in other use categories, but no longer retain the characteristics that allow them to be placed in any other category. For example, a site subjected to data recovery as mitigation for a project and destroyed by the process could be in the discharged use category, as well as one whose information potential was so slight that it was exhausted at the time the site was recorded and no other use is appropriate.

Any future land use would not be constrained by the sites assigned to the discharged use category, as the records pertaining to the sites would constitute their only remaining importance.

Sites can be allocated to more than one use at a time, as long as those uses are not conflicting. For example, a small rock art site which is situated near a road would make a good interpretive site. Its location, however, makes it a possible target for vandalism and illegal collection. Signs would be placed at the site to help protect it. In order to test the effectiveness of the signs, a management study would be recommended to collect data on the rate of deterioration in comparison with unsigned sites. This site, therefore, would have to be assigned to public use as well as management use categories.

Use categories are helpful in determining significance. For example, all sites in the conservation for future use category likely would be eligible for inclusion on the NRHP. The application of criteria from the NRHP also is a tool for determining the significance of sites. However, sites can be more effectively managed if the use categories are fully utilized as a management tool as well.

Although only one site is listed on the NRHP, there are other sites on the BGR which have the potential to be eligible for the National Register. There is also a potential for yet undiscovered sites to meet the criteria.

Additional information about BGR cultural resources is given in Chapter 10 of the LAFR Plan and in Appendix II (Luke Air Force Range Natural Resources Management Plan - Executive Summary) of this amendment.

ROAD NETWORK AND VEHICLE USE

ROAD NETWORK

Most road and trail development on the BGR has been since the beginning of World War II. The majority of the more than 2,029 miles of road are less than 45 years old. More road mileage is being established every year and this (as well as past development) generally occurs without comprehensive planning. Varying considerably in design construction and use, many of the roads are necessary for agency missions or safety needs. Other roads unnecessarily duplicate functions and routes.

Six road classifications have been established by the USAF for vehicle routes on the BGR. Unimproved roads, tertiary roads and primitive tracks mileage is probably underrepresented due to lack of a comprehensive road inventory. The road classifications used on the BGR are defined in Appendix IV of this amendment.

<u>Road Class</u>	<u>Mileage</u>
Primary	35
Secondary	145
Tertiary	358
Patrol	123
Unimproved	803
<u>Primitive Track</u>	<u>565</u>
TOTAL	2,029

VEHICLE USE

Two types of vehicle use occur on the BGR: 1) by the public for recreation use and 2) by military and civilian government agencies for military training, natural resource management and law enforcement. Recreational vehicle use off designated or established roads is entirely unauthorized but does occur periodically in the BGR. The USAF requires that all vehicles stay on established roads and prohibits entry to the BGR of any unlicensed vehicles designed primarily for off-road recreational activity.

The USAF has closed all portions of the BGR to off-road or cross-country travel because such use has negative effects on the natural and cultural resources of the BGR, interferes with other land uses and is unsafe in areas where live ordnance lies on or under the surface. Exceptions to this closure include military and other governmental agency vehicles when used for natural resource, emergency, law enforcement or essential military missions. Despite

the USAF prohibitions of off-road travel, unauthorized off-road use does occur and impacts from this use on cultural and natural resources are observed.

OUTDOOR RECREATION USE AND MANAGEMENT

Land in the BGR is available for a variety of outdoor activities except when the military mission requires the closure of portions of the BGR. Principally, the BGR provides day use and weekend activities for local and regional residents since military use is mostly on weekdays. The entire BGR or portions of the BGR may be closed to recreation use at any time due to safety, national security or other military missions.

Recreation Use Zoning. Recreation use areas on the BGR presently are divided by the USAF into four zoning categories. Each zone is assigned appropriate recreation uses. The USAF presently considers Class I or intensive recreation use (developed facilities and concentrated public use) inappropriate because of safety and environmental conditions. Class II areas are zoned for open space dispersed recreation use and this zone represents most areas in the BGR. Special interest or management areas are Class III zones. Protective management takes precedence over recreation use in these areas, which includes existing and proposed SNAs, natural or man-made waterholes and other identified special ecological, geological, botanical, zoological or scenic resources. Class III areas usually are within the larger Class II recreation zones. This Class III USAF land use classification is comparable to the BLM's special recreation management area and ACEC land use classifications. Class IV zones are continually closed for military training missions. The zones are mapped and available for review in the LAFR Plan.

Visitor Entry. Authorized entry to the BGR is managed by requiring visitors to obtain Range Entry Permits (Appendix VI) and sign military Hold Harmless agreements. These procedures are used to track recreation use and length-of-stay on the BGR, ensure public safety and to release the U.S. Government for liability from injury or loss of life experienced by BGR visitors. An unknown number of visitors enter the BGR without authorization permits.

Recreation Opportunities. The BGR's diverse landforms and associated ecosystems provide many opportunities for dispersed outdoor recreation activities. Major recreation activities include backcountry driving, picnicking, nature study, hunting, trapping, hiking, backpacking, primitive and self-contained (vehicle-based) camping, photography, rock collecting, mountaineering, equestrian use and cultural, historic, geologic, botanical and zoological sightseeing.

Much of the BGR's recreation activity centers on the Camino del Diablo, an historic trail crossing Organ Pipe Cactus National Monument, the Cabeza Prieta National Wildlife Refuge and the BGR. Many tours of this route occur during cool weather month weekends as individual and groups of vehicles traverse the road. Primary attractions along the route include scenic landscapes, various wildlife populations, challenging primitive driving opportunities and observation of historic and archaeological features.

Big- and small-game hunting, along with upland game hunting opportunities, are available in public use areas in the BGR. The best hunting opportunities are in the eastern part of the BGR for bighorn sheep, mule deer, white-tailed deer, javelina, quail, dove and rabbits. The western part of the BGR provides fewer hunting opportunities, but a few bighorn sheep permits are issued each year. Big game is scarce in the western area and small-game hunting is usually in conjunction with other recreation activities.

Hiking, backpacking and primitive camping pursuits are best in the numerous mountain ranges and sand dune fields. Nature study is a growing activity as citizens and educational institutions observe rare or interesting geologic, soil, plant, wildlife and range habitat conditions.

Backcountry driving and vehicle-based camping and sightseeing remain the BGR's most popular recreation opportunities.

Estimating existing and projecting future use levels using current recreation data is not feasible. Much use on the BGR is unauthorized and goes unrecorded. Considering current visitation levels on the OPCNM and CPNWR, the increases in population within the three counties where the BGR is located and growing demand for open space recreation, it is anticipated that visitor use will increase in the future.

AREAS OF CRITICAL ENVIRONMENTAL CONCERN (ACECs)/OTHER MANAGEMENT AREAS AND STATE NATURAL AREA PROGRAM

The state of Arizona administers a Natural Area Program and the Natural Area Register provides a means to document areas with important natural resource qualities and to recognize management of these important sites.

The Crater Range, Mohawk Mountains and Sand Dunes and the Tinajas Altas Mountains have been placed on the Natural Area Register by the Arizona State Parks Board. A Letter of Understanding has been signed by the USAF, stating their recognition of natural resource values and describing current management conditions. The letter established communication between the USAF and Arizona State Parks and represented USAF acceptance of Natural Area Register listing. Two other areas that have been considered for establishment as state natural areas are the Yuma Dunes and the Sentinel Plain Lava Flow.

The five areas listed above were also evaluated as possible candidates for Areas of Critical Environmental Concern (ACECs). ACECs are areas where special management attention or action is needed to protect or preserve important natural or human resource values or protect human lives from natural hazards.

The Camino del Diablo is being considered for establishment as a Backcountry Byway, a BLM administrative classification analogous to the Scenic Byways programs for roads used by the Forest Service and ADOT.

The following narrative describes each of the established or proposed natural areas and the Camino del Diablo. In addition, each area nominated for ACEC consideration or identified by the BLM as an ACEC candidate is evaluated to ascertain if the tract satisfies ACEC designation criteria. The Gran

Desierto Sand Dunes were nominated for ACEC consideration by the Arizona Nature Conservancy. The Tinajas Altas Mountains, Mohawk Mountains and Sand Dunes and Crater Range State Natural Areas were considered by the BLM as potential ACECs due to their natural area status. The proposed Sentinel Plain Lava Flow was evaluated as a potential ACEC due to its consideration in the State of Arizona Natural Area Program. The Mohawk Mountains and Sand Dunes were also mentioned in the Nature Conservancy's Gran Desierto Dunes ACEC nomination as an area meriting special management protection.

Acres given for each area represent the acres enclosed by existing, proposed or studied state natural areas and acreage being appraised for possible ACEC designation.

Tinajas Altas Mountains State Natural Area (79,000 acres)
Tinajas Altas Mountains ACEC Evaluation (92,000 acres)

The Tinajas Altas, or High Tanks, are a large desert mountain range along the international border. The precipitous Tinajas Altas Mountains are highly scenic and the range is a classic geologic example of a northwest-to-southeast-trending granitic range within the Basin and Range Province. The tinajas, or slickrock water tanks, are among the finest examples of true tinajas and, due to their depth, maintain many animal species in times of drought. The tinajas also were associated with use of the historic Caminodel Diablo trail (Devil's Highway), a National Register of Historic Places site. The "High Tanks" are culturally significant for the role they played in providing settlers with reliable water as these travelers traversed the arid and unforgiving landscape of southern Arizona.

The weathering of the granitic mountain rockfaces have created a variety of micro-climates for an unusually diverse mixture of plants and animals not expected to reside in such hot and arid conditions. The mountains provide habitat requirements for a desert bighorn sheep herd. Other plant and animal species present include red-spotted toad, ironwood (Olneya testota), elephant tree (Bursera microphylla), Bigelow beargrass (Nolina bigelovii) and Kearney sumac (Rhus kearneyi).

Eastern portions of the Tinajas Altas Mountains State Natural Area parallel to and east and north of the Camino del Diablo receive extensive surface military use, including USMC training sites. Training sites include missile batteries, encampments, communication sites and stinger employment areas. The USMC has a substantial communication and radar site on Raven Butte. Areas around Raven Butte are used for air and ground support training. Evidence of surface military operations is noticeable in this area, with substantial soil and vegetation disturbance.

ACEC Consideration - Evaluation of Relevance and Importance

All of the Tinajas Altas State Natural Area (79,000 acres) and portions of the Cipriano Pass and Davis Plains areas (13,000 acres outside the state natural area) were evaluated for establishment as an ACEC.

Due to the extent and intensity of ground surface military activity east and north of the Camino del Diablo trail, these portions of the state natural

area were withdrawn from further consideration for ACEC status. Management prescriptions needed to manage these areas would constrain and compromise military training requirements of the USMC. Additionally, no cultural, wildlife, scenic or other natural resource values requiring special management attention were identified. Unauthorized civilian off-road travel in this area will be curtailed by application of standard BLM ORV management regulations and road management prescriptions.

Part of the state natural area north of Raven Butte was also withdrawn from further consideration for ACEC status. The concentration of USMC training and communication sites in the Raven Butte area (land between Cipriano Pass and Raven Butte) would be inconsistent with ACEC designation. Management prescriptions needed to manage this area would constrain and compromise training requirements of the USMC. In addition, the BLM's standard management prescriptions will be sufficient to protect resources in the area from unnecessary damage. Unauthorized civilian off-road travel in this area will be curtailed by the BLM's vehicle management regulations and road management prescriptions. Management prescriptions to be applied include closure of redundant roadways in the Cipriano Pass area.

Relevance - Known or Potential Threats. Ironwood poaching, off-road vehicle activity and military training use are the three major threats within the potential Tinajas Altas ACEC. Soils and vegetation in the northeast corner of the potential ACEC have been heavily impacted by ground-based military training. Ironwood (live and dead) has been stripped from the Davis Plain west of the Tinajas Altas Mountains and trucked into Mexico for use as domestic and brick kiln fuel. The old ironwood stumps being removed would be of scientific interest due to their immense ages of 900 to 1500 years.

The Tinajas Altas road (Camino del Diablo) continues to be a major departure point for ORV use. Scars from cross-country travel are found along the eastern and western bajadas of the Tinajas Altas mountain range as vehicles drive off existing routes and extend their use area to the base of the mountains. Scars on the desert pavement soils from public and military vehicle use will last for centuries. Off-highway travel in this area is growing due to increasing public awareness of recreational opportunities available on the BGR and the greater ownership of four-wheel-drive vehicles.

Preservation of these special and unique resource qualities will require extensive management attention and action as these irreplaceable values are vulnerable to increasing numbers of visitors and off-highway vehicle use. The resource values may be subject to rapid degradation unless stringent use supervision and management are provided.

Ground-based military training have impacted desert soils, plants and scenic values along the eastern bajada of the ACEC (between the base of the mountain range and the Camino del Diablo). The potential conflict between resource protection and military training needs to be resolved within the area to be established as an ACEC.

Importance. The proposed ACEC is an exceptional representative of the Sonoran Desert Basin and Range Province and remains ecologically viable despite increasing threats from public and military use. The flora and fauna comprise a mixture of rare, restricted and common Sonoran Desert species.

Although the Tinajas Altas ACEC is within one of the most arid regions in the southwestern desert, the tinajas supply desert bighorn sheep and numerous other species a crucial and rare feature -- dependable sources of water. Geologically, the range is a superb interpretive example of mountain building, volcanism and tinajas and taffoni formation.

The area is considered to be more than locally significant because of the presence of fauna, flora and cultural and scenic resource qualities of special worth, meaning and distinctiveness. The state of Arizona established most of the area under ACEC consideration and much of the surrounding area as a State Natural Area because of the undisturbed desert mountain range formations, including a series of rare tinajas. Habitat is provided to desert bighorn sheep. Significant cultural values of prehistoric and historic human use are present and recognized nationally by the listing of the Tinajas Altas High Tanks and the Camino del Diablo on the National Register of Historic Places. Both scenically and geologically, the Tinajas Altas Mountains are a superlative example of a northwest-to-southeast-trending granitic landscape of the Basin and Range Physiographic Province.

Summary of Analysis. The Tinajas Altas Mountains potential ACEC contains floral, fauna and scenic and cultural resource qualities of more than local significance. Despite numerous land uses, the area remains an excellent example of Sonoran Desert habitat under extreme climatic conditions. Without special management attention, public recreation, military training and wood poaching threaten natural, scenic and cultural values with irreplaceable loss. Special management attention is needed to avoid or lessen potential damage. Accordingly, 53,000 acres of the Tinajas Altas Mountains as described herein meet the ACEC criteria of relevance and importance as required by the BLM for ACEC designation.

As previously described, the BLM determined that 39,000 acres of the area studied as a potential ACEC did not meet the relevance and importance criteria required for designation as an ACEC. No reasonable special management actions or attention could be applied to this land.

**Yuma Dunes Proposed State Natural Area (110,000 acres)
Gran Desierto Dunes ACEC Evaluation (28,500 acres)**

Yuma Dunes Proposed State Natural Area. The Yuma Sand Dunes are immediately north of the U.S.-Mexico border approximately 18 miles east of Yuma, Arizona and include the northern portions of the Gran Desierto dune system, the largest active dune system in North America. The Yuma Dunes represent the majority of U.S. habitat for the flat-tailed horned lizard. In addition, several rare plants are believed to occur in the area. The entire area contains vast stretches of partially consolidated dunes of geologic interest.

Gran Desierto Dunes ACEC Evaluation. The potential Gran Desierto Dunes ACEC is within the Yuma Dunes proposed state natural area and encloses one of four major Sonoran Desert dune fields in Arizona. The potential ACEC includes the northern portions of the Gran Desierto dune system, the largest active dune system in North America. The majority of this dune system is in Sonora, Mexico and covers about 1,800 square miles.

The Gran Desierto dune system is made up of active crescent dunes with relatively few linear dunes. The ACEC includes a number of crescent dunes surrounded by sandy flats. Vegetation on the dunes and surrounding sand flats is sparse and several large crescent dunes are unvegetated.

The flora of the vegetated dune area includes a number of dune endemics: Pholisma sonorae, Euphorbia platysperma, Croton wigginsii and Eriogonum deserticola. Differentiation at the subspecific level is seen among Camissonia and Helianthus niveus and ecotypic variation has been noted for Larrea divaricata, Petalonyx thurberi and Plantago insularis. The Pholisma arenarium (scaley-stemmed sand plant) may also be present.

The dominant vegetation on the dunes forms a unique plant community which is endemic to the Gran Desierto. Dominants include Eriogonum deserticola, Croton wigginsii, and Ephedra tridentata. The sandy flats to the west of the dune field are dominated by creosotebush, bursage and big galleta.

Several vertebrates with limited distributions associated with dune and dune-fringe environments in the Sonoran Desert are present: flat-tailed horned lizard, fringe-toed lizard, shovel-nosed snake and the banded sand snake.

Portions of the Yuma Desert Sand Dunes both adjacent to and inside the proposed ACEC have been used for surface and air-to-surface military training. Some of the desert landscape reveals scars from vehicle use, military maneuvers and past public vehicle use. However, the area within the Gran Desierto ACEC has been minimally disturbed by past military activities or public use and is relatively undisturbed by human activity. The northern portion of the area considered for ACEC designation contains live fire target areas, strafing areas and mobile land targets, observation installations and towers and access roads. A considerable part of the Yuma Desert presently is closed to public entry much of the time due to live-fire USMC training sites.

ACEC Consideration - Evaluation of Relevance and Importance

Relevance - Known or Potential Threat or Risk. Of potential major threats which could irreparably damage the resource values of the proposed ACEC, off-road-vehicle use and expanded military ground use are the most potentially damaging. A similar but larger dune system, the Algodones Dunes, just west of Yuma, Arizona, receives considerable off-road-vehicle use throughout the year. This use is causing damage to dune vegetation. The potential exists for some use to shift to the Yuma Desert area over time, especially if military use restrictions on public visitation to the area are lifted or modified.

Ground-based military training could cause irreparable damage to the dune system. Special management attention will be needed in order to regulate and manage recreation use and coordinate military activities in dune and dune-fringe areas. Damage to dune habitat and associated flora and fauna components will be avoided with appropriate management prescriptions developed for the area.

Importance. The presence of unique plant and animals within a pristine dune ecosystem are biological resources of more than local significance. Three of the plants known in the proposed area -- Pholisma sonorae, Euphorbia platysperma and Helianthus niveus ssp tephrodes -- are currently listed as Category 2 plants by the USFWS. In addition to the above species, Eriogonum deserticola, Croton wigginsii, Triteliopsis palmeri and Stephanomeria schottii are considered sensitive plants and with the exception of the latter two species, all of the above-listed species are known in Arizona only from this site.

The flat-tailed horned lizard is currently listed as a Category 1 candidate and the Colorado fringe-toed lizard as a Category 2 candidate by the USFWS. The flat-tailed horned lizard is a state-threatened and the fringe-toed lizard is a state-candidate species.

The dominant dune plant community is an unusual assemblage found nowhere else in Arizona. Dune ecosystems are extremely limited in the Southwest deserts with only four major dune fields (Cactus Plain, Mohawk Dunes, Yuma Desert and the Pinta Sands) in Arizona. Each supports distinct vegetation and provides habitat for several rare plants and animals.

The entire ACEC is within a proposed SNA by the Arizona State Parks Natural Area Program.

Summary of Analysis. A 25,500-acre area meets the ACEC designation criteria established by the BLM. The area needs special management attention because: 1) the resources have a limited occurrence; 2) unique and rare biological resources of special significance are present and 3) current or potential future changes in land use may threaten identified significant and undisturbed resource values. Formal boundary delineation of 25,500 acres and coordinated BLM/USAF/USMC management direction will provide procedures to ensure long-term resource maintenance.

About 3,000 acres were dropped from the potential ACEC because of active USMC live-fire target areas, strafing targets, mobile land target, observation facilities and towers, and access roads. No reasonable management actions could be taken to protect the resources in those areas without constraining military use. The BLM feels standard and routine off-road-vehicle and surface management policies are sufficient to protect flat-tailed lizard habitat and dune features. All areas deleted from the potential ACEC will be enclosed within the Yuma Desert Sand Dunes Habitat Management Area.

Mohawk Mountains and Sand Dunes State Natural Area (85,000 acres)
Mohawk Mountains and Sand Dunes ACEC Evaluation (113,000 acres)

The Mohawk Mountains and Sand Dunes, located south of Interstate 8 and 13 miles southwest of Dateland, represent the largest dune system in Arizona. Dunes are scarce in the Sonoran Desert. Most of the dune system is west of the Mohawk Mountain Range and lies before a playa depression. The dune field, two miles across at the widest point, is the largest sand dune system in southern Arizona. Strict USAF access restrictions on the BGR, coupled with fencing along all of Interstate 8, have contributed to the presently undisturbed nature of the site.

The Mohawk Mountains are a high-relief, long and narrow wall-like mass of metamorphic rock, unusual in appearance due to poor canyon development. The Mohawk Mountains are the basin and range mountain chain least affected by canyon cutting in the Mohave and Sonoran Desert, a result of their young age, dry climate, narrowness and erosion resistant rocks.

The semi-stabilized sand dunes and precipitous mountain range create an undisturbed desert habitat for many plants and animals. The more notable species include elephant trees (Bursera microphylla), Indian tea (Ephedra trifurca), Schott's wire lettuce (Stephanomeria schottii), sand food (Pholisma sonorae), fringe-toed lizard, sidewinder rattlesnake, pocket gopher, mule deer, bobcat, coyote, woodrat, kit fox, jackrabbit and nighthawk. Desert bighorn sheep use and cross the area. The Mohawk Mountain area represents the easternmost locality of the fringe-toed lizard on the BGR. The southern end of the area provides potential range for the Sonoran pronghorn, one of the most rare and endangered animals of the Southwest.

ACEC Consideration - Evaluation of Relevance and Importance

The area appraised for ACEC designation was expanded from the land encompassed by the state natural area in order to include mountain areas of geologic interest and larger portions of sand dune, dune fringe and bajada areas on both sides of the Mohawk Mountains.

Relevance - Known or Potential Threat or Risk. Real estate developments just south of Mohawk Pass have created wide access roads over the mountain pediment. Improved access from such residential development and local population growth have contributed to increased recreational use of the area. Off-road-vehicle use is growing and dune buggy tracks are becoming more evident in areas along the fringe of the dunes, a result of both permitted and unauthorized entry on the BGR. Increased invasion of vehicles would be highly detrimental to the fragile dune plants and long-term off-road-vehicle use must be prevented if serious damage is to be averted to the dune system. Additional military training or expansion of existing USMC training uses is possible. The potential for long-term and irreparable damage is present.

Special management attention and BLM/USAF/USMC coordination will be needed over the long term in order to supervise and manage recreation use and military activities in bajada and dune areas. Irreplaceable damage to dune and bajada habitat and associated scenic, flora and fauna components can be avoided or lessened with appropriate management prescriptions developed for the area.

Importance. The Mohawk Mountains and Dunes represent the largest and least disturbed of the four major dune systems in Arizona's Mohave and Sonoran Desert regions. The area is also important for geologic and biological reasons due to its undisturbed semi-stabilized dune and mountain ecosystems, providing habitat for the fringe-toed lizard (state and federal candidate species) and desert bighorn sheep. Potential range for the Sonoran pronghorn antelope (state and federal listed) is found in the southern end of the ACEC and in the southeastern alluvial slopes of the Mohawk Mountains.

The relative lack of human disturbance of the fragile environment, combined with the unique minimally eroded mountain range and near pristine dune system, represents an irreplaceable natural resource of both regional and national significance. These findings are supported by the Arizona State Parks Board and the Arizona Academy of Science by their establishment and registration of the Mohawk Mountains and Sand Dunes State Natural Area.

Summary of Analysis. The proposed Mohawk Mountains and Dunes ACEC (113,000 acres) contain significant biologic and geologic resource qualities potentially threatened with damage from increased levels of off-road-vehicle recreation and military use. The dune and mountain ecosystem is also of more-than-local significance due to its rarity, large size and undisturbed condition. Special management attention and BLM/USAF/USMC coordination will be needed to maintain existing natural resource conditions. Accordingly, this area satisfies the criteria of importance and relevance required by BLM guidelines for ACEC designation.

Sentinel Plain Lava Flow Proposed State Natural Area (92,000 acres)
Sentinel Plain Lava Flow ACEC Evaluation (92,000 acres)

The Sentinel Plain Lava Flow represents the largest lava flow in southern Arizona. Covering 143 square miles within the BGR (82 additional square miles of this lava flow are found north of Interstate 8 outside the BGR), the lava flow is virtually flat. Portions of the plain surface are covered with recent eruptions showing little sign of erosion or weathering. This mesa, or plain, of olivine basalt is nearly 100 feet thick with a surface of desert pavement or accumulations of large, angular stones.

The most common plants are creosotebush and bursage. Some saguaro and small stunted paloverde trees dot the plain. The plant community is in a climax condition in the lava flow, but is sparse and scattered due to rocky surfaces, lack of soil and extremely arid, hot conditions. Birds, reptiles and mammals common to low elevation Sonoran Desert live in the area, but populations are not abundant. Opportunities exist for visitors traveling this highway to observe this unusual area, including an ADOT rest stop.

ACEC Consideration - Evaluation of Relevance and Importance

Relevance - Known or Potential Threat or Risk. There are no known or potential threats to the geologic, scenic, educational or scientific values associated with this lava flow. Current disturbance is minimal as vehicle travel is confined to several low-grade roads. Grazing and mineral exploration and development are not allowed in the BGR. Military use is primarily air-to-air. Considering current and anticipated BLM and USAF management needs and conditions, the potential of noticeable surface disturbance or ecological damage is limited.

Importance. This area does possess resource qualities giving it regional distinctiveness. The lava flow is the largest in southern Arizona and is mostly undisturbed by human activity. However, no threatened or endangered wildlife or plant species are known to inhabit the area and no circumstances are present or anticipated that would alter or modify existing natural resource conditions.

Summary of Analysis. The ACEC criteria requires that resources within a proposed ACEC must be "more than locally significant," be threatened by immediate or long-term resource uses and possess important resource qualities. The lava flow is regionally unique due to its large size. However, BLM resource specialists did not identify any existing or anticipated circumstances threatening to damage, alter or modify existing natural resource conditions. The Sentinel Plain Lava Flow area as described herein fails to satisfy the relevance criteria set forth in BLM guidelines.

**Crater Range State Natural Area (11,000 acres)
Crater Range ACEC Evaluation (11,000 acres)**

The Crater Range is a heavily eroded mountain range of primarily volcanic material and supports an excellent example of natural Sonoran Desert vegetation. The Tertiary volcanics have been subject to mechanical erosion through arid conditions and other weathering processes. Located 27 miles south of Gila Bend, the mountain range is divided by heavily traveled State Highway 85. The mountainous terrain is a highly scenic geologic feature, particularly for travelers along the Gila Bend to Ajo Highway and numerous vacationers in route to Puerto Penasco, Mexico. Visitors to the region could also enjoy photography, hiking, geologic interpretation and appreciation of aesthetic values. Opportunities exist for limited education and scientific study due to the natural condition of the Crater Range. Rock faces along the highway are impacted visually by painted and scratched graffiti.

ACEC Consideration - Evaluation of Relevance and Importance

Relevance - Known or Potential Threat or Risk. There are no known or potential significant threats or risks to the area's geologic or scenic resources or Sonoran Desert plantlife. Human use and evidence of disturbance in the area are minimal except for graffiti on rocks along Highway 85 and the area is posted by the USAF to prohibit casual recreational or ORV use off the state highway. Several unimproved jeep trails cross portions of the area, but these routes provide only limited access and are infrequently traveled. The area is not grazed and no other long-term uses affecting forage or plant cover are documented. The area is closed to mineral entry and no working mine properties exist.

USAF use of this area involves air-to-air training missions. Military use of surface areas in the Crater Range is minimal and no changes in surface use levels are expected.

The only long-term use affecting scenic/visual resources would be the possible installation of an upgraded or additional power transmission line (Gila Bend to Ajo) paralleling Highway 85 or the existing 69-kV powerline. Impacts on scenic/visual resources in the area from new or upgraded facilities would be similar to ones created by the existing overhead powerline. The current powerline is not considered substantially noticeable or intrusive visually.

Importance. This area does not possess resource qualities giving it special worth, meaning, distinctiveness or cause for concern. While the area is scenic and contains interesting geologic and plant features, these are similar to other Tertiary volcanic landscapes in Arizona. Moreover, no

circumstances are present or anticipated that would threaten, alter or modify current natural or scenic resource conditions. The area's scenic, plant and geologic resources are considered of only local significance. No threatened or endangered plant or wildlife populations unique to this area are present.

No individuals or organizations submitted comments describing unique or significant resource qualities or identified circumstances requiring special management action or attention to correct. BLM resource specialists also did not identify any significant resource qualities of regional or national importance.

Summary of Analysis. The ACEC criteria require that resources within a proposed ACEC must be "more than locally significant," be threatened by immediate or long-term resource uses and possess important resource qualities. None of these conditions occurred. Accordingly, the Crater Range potential ACEC as described herein fails to satisfy both the relevance and importance criteria set forth in BLM guidelines.

El Camino del Diablo - The Road of the Devil (19,200 acres)

The Camino del Diablo (The Road of the Devil) is a rough, unpaved route crossing the BGR in the vicinity of the Gila and Tinajas Mountains and through the Lechuguilla Desert. Traveling by vehicle along this route is among the most popular recreation pursuits on the BGR. Many historic figures used this route, including Melchior Diaz (a Spanish soldier), Father Kino, Juan Bautista de Anza, Father Garces and many travelers in search of gold and new lives in California in the 1849 through 1850s period. Visitors using this route today travel through natural landscapes with dramatic scenery and associated opportunities for recreation, nature study and cultural resource observation.

PERIMETER LAND USES AND ENCROACHMENT

Chapter 15 of the LAFR Plan extensively deals with surrounding land uses. As Phoenix and the surrounding communities expand, the areas outside of the BGR boundaries will experience population growth and a subsequent reduction in livestock and agricultural use.

Encroachment into the BGR can be expected mainly with livestock grazing and recreation. Although portions of the BGR boundary will be fenced to exclude cattle, it is inevitable that a few will find their way onto the BGR from time to time. When they do wander onto the BGR, they will be handled in the same manner as trespass livestock are on other public lands. As the population in the Southwest continues to expand, there will be a greater demand for recreation and places to recreate. This will result in increased recreation pressure on the BGR. Agricultural or developmental intrusions are not expected.

WILDFIRE MANAGEMENT

Due to the sparse vegetation on the BGR, the fire potential has been rated as extremely low. Additionally, it is felt that because of the sparseness of the fuels on the BGR, resource damage would be minimal because there would not be enough continuous fuels to carry the fire over any substantial area.

WILD HORSES AND BURROS

A small population of feral burros is reported to exist on the east side of the BGR. Estimates of the population vary from 50 by the AGFD to 150 by Air Force personnel. While it is the responsibility of the BLM to manage wild and free-roaming burros, it is recommended by the military and AGFD that the population be removed from the Range. While there is no specific chapter within the LAFR Plan that deals with feral burros, pages 8 through 18 discuss their presence and wildlife recommendation 8-8 calls for the removal of the burros from the BGR.

ENVIRONMENTAL CONSEQUENCES

General Assumptions and Conditions

In order to analyze the impacts of each alternative it was necessary to make the following assumptions:

- BLM will have the funding and work force to implement the selected alternative.
- Impacts are direct unless otherwise noted.
- Plan implementation will be monitored and management adjusted as necessary, based on new data derived from monitoring.
- Short-term impacts occur within five years and long-term impacts from five to 20 years after implementation of the plan.
- All impacts are long-term unless otherwise noted.
- Environmental assessments will be conducted prior to implementing any activity plans or BLM proposed ground disturbing natural resource actions.
- The BLM will review and comment on all NEPA documentation prepared by the USAF and USMC for military activities on the BGR.

PROPOSED ACTION

EFFECTS ON LAND USES

The Proposed Action will have no effect on the land ownership within the BGR. The military will still have the opportunity to acquire the private and state acreages within the BGR. Designating the Ajo to Gila Bend utility corridor will allow a route for R/Ws between Ajo and Gila Bend, thus ensuring that increased utility demands for Ajo could be met. Additionally it will confine the R/Ws to a small area. This will be a benefit to the military, allowing them to concentrate on only one area where powerlines or other aerial hazards may be present.

EFFECTS ON GEOLOGICAL RESOURCES

Because of the withdrawal legislation no change will occur and all mineral development will be disallowed. Only those mining claims existing prior to the original withdrawal could be developed.

EFFECTS ON WATER RESOURCES

Implementation of the Proposed Action will not have adverse impacts on ground water resources. The ground water resources will be protected, and the effects on the BGR from any new state or federal laws regarding ground water will be reviewed.

EFFECTS ON SOILS

The Proposed Action will have a beneficial impact by minimizing human-induced accelerations of geologic processes and unnecessary damage to land forms and soils. This would be accomplished by: 1) providing an assessment of the soils and how they will be affected by a proposed development or intensive use of an area; 2) limitations on off-road vehicle travel; 3) limiting new rights-of-way and other non-military activities in sensitive areas; and 4) initiating reclamation projects, where feasible, on damaged soils and land forms.

EFFECTS ON BOTANICAL RESOURCES

The botanical communities occurring on the BGR, including dune communities, will receive increased protection under the Proposed Action. This will be accomplished mainly through the implementation and enforcement of ORV, surface protection, fire wood and ACEC regulations. In addition, populations of sensitive, threatened, endangered, candidate and rare species will be identified and analyzed through surveys and monitoring. All existing and new botanical information will be entered into a data base. This data will then be available as needed to assure responsible management. All actions occurring on the BGR will comply with NEPA, Endangered Species Act, Arizona Native Plant Law, and all other appropriate regulations.

No adverse impacts to the BGR vegetative communities will result from implementing the Proposed Action.

EFFECTS ON WILDLIFE RESOURCES

SONORAN PRONGHORN

The Mohawk Mountains and Sand Dunes ACEC prescriptions will protect Sonoran pronghorn habitat which will be managed for maintenance and enhancement through the long term. ORV use will diminish somewhat in pronghorn habitat, and trespass livestock use will diminish on approximately 85,000 acres of habitat. The character of the habitat within six miles of permanent waters will not be degraded. The net effect of these actions will be beneficial through the long term as plant communities recover and human-pronghorn conflicts diminish.

FLAT-TAILED HORNED LIZARD

The Gran Desierto ACEC, the Yuma Desert and Sand Dunes HMA, the Tinajas Altas Mountains ACEC, special recreation management areas, and off-road vehicle and surface management prescriptions will protect a large portion of flat-tailed horned lizard habitat from surface-disturbing activities which would adversely impact the habitat of this species. ORV damage to the horned

lizard's habitat will diminish on approximately one-half of this habitat within the BGR. As the dune fringe plant communities recover, the habitat quality for flat-tailed horned lizards will improve over time.

DESERT BIGHORN SHEEP

The Mohawk and Tinajas Altas Mountains ACEC prescriptions will protect 50,000 acres of desert bighorn habitat from surface-disturbing activities. Similar prescriptions will protect another 8,000 acres of bighorn habitat in the Crater Range SRMA. Desert bighorns in the Saucedo and Sand Tank mountain ranges will be relieved of conflicts with burros and trespass livestock through the long term. As plant communities recover near water sources, forage for bighorns will improve. The net effect to desert bighorns will be beneficial through the long term.

MULE DEER

Mule deer habitat on 108,000 acres of the Sentinel and Crater Range SRMAs and part of the Mohawk Mountains and Sand Dunes ACEC will be protected from surface-disturbing activities. ORV conflicts will diminish through the long term. Trespass livestock use on 202,000 acres will be eliminated with resultant improvement in browse and water availability for mule deer. Burro use on 156,000 acres will be eliminated, relieving conflicts for water and forage in the Saucedo and Sand Tanks areas. Overall impacts to mule deer will be beneficial through the long term as plant communities recover and water availability improves.

WHITE-TAILED DEER

Approximately 88,000 acres of white-tailed deer habitat will improve as trespass livestock and wild burro use is eliminated. Conflicts for the limited water supplies will also be lessened. Impacts to white-tails will be slightly beneficial through the long term.

SANBORN'S LONG-NOSED BAT

Sanborn's long-nosed bat habitat will be protected primarily through implementation and enforcement of ORV and surface protection regulations. In addition specific objectives and actions will be addressed in the BGR HMP. The net effect on the species will be beneficial through the long term.

PEREGRINE FALCON

Peregrine falcon habitat will be protected by ACEC designations in the Tinajas Altas and Mohawk mountains. They will also benefit from the implementation and enforcement of ORV and surface protection regulations. The overall impact to the species will be beneficial over time.

COLORADO DESERT FRINGE-TOED LIZARD

Fringe-toed lizard habitat will be protected by ACEC and HMA designations. Specific actions will be implemented in these areas to assure protection. They will also benefit from the implementation and enforcement of ORV and surface protection regulations. The overall affect will be beneficial.

YUMA PUMA

Yuma puma habitat will be protected through ACEC designations. The Tinajas Altas Mountains and the Mohawk Mountains and Sand Dunes ACECs will encompass a large portion of current and/or potential puma habitat. Implementation and enforcement of ORV, ACEC and surface protection regulations will benefit the species. In addition all actions taken to protect and enhance prey species habitat will also benefit the Yuma puma.

DESERT TORTOISE

Desert tortoise habitat will be protected through the implementation and enforcement of ORV, ACEC and surface protection regulations. In addition desert tortoise habitat will be protected through the objectives and management actions presented in the Rangewide Plan incorporated into the BGR RMP Amendment by reference. The overall net affect will be beneficial.

EFFECTS ON ATMOSPHERIC AND VISUAL RESOURCES

Implementation of the Proposed Action will not have any significant impacts on atmospheric and visual resources.

EFFECTS ON CULTURAL RESOURCES

Under the Proposed Action, the cultural resources of the BGR will be beneficially affected in a variety of ways. These include the restrictions placed on ORV use, the control of visitor use, the limitations placed on land tenure adjustment, the restriction of utility corridors to existing routes, and the implementation of the management prescriptions of the ACECs and other management areas.

Since PL 99-606 excludes mineral entry on the BGR, a beneficial effect on cultural resources is realized due to the lack of prospecting and all of the surface disturbance which normally accompanies that activity.

Off-road vehicle use on the BGR is considered "limited" as travel is limited to designated or established roads. As long as roads are posted and identified as to official status, cultural resources will benefit from this protection. Sites will not be damaged by off-road vehicle travel.

Since visitor use and recreation opportunities will increase over the next few years, cultural resources may at the same time experience threats as well as benefits. As numbers of visitors increase, so does the chance of illegal collecting, vandalism and inadvertent surface damage. However, some sites may benefit from the placement of interpretive signing, visitor use boxes and regular patrolling programs.

Limitations on land tenure adjustment would allow state inholdings within the BGR to be traded only for other public lands. This will block the land pattern, thereby benefiting cultural resources by ensuring consistent management of this region.

Restrictions on the placement of utility corridors to existing facilities will be beneficial to cultural resources because previously disturbed areas would be utilized first. This placement would also keep the construction of new access roads to an absolute minimum, ensuring that cultural resources will be threatened less often.

The establishment of ACECs and other management areas on the BGR will benefit the cultural resources within those areas due to the type of intensive management and planning accorded to them. Protective measures will be initiated. Specific activity planning will outline the specific management concerns and issues each special management area would experience.

EFFECTS ON ROAD NETWORK AND VEHICLE USE

ROAD NETWORK

No significant adverse impacts to the road network are anticipated from implementation of the Proposed Action. About 1,464 miles of established road will remain open for military, public and management agency use. An estimated 565 miles of primitive track routes would be closed to vehicle use. Roads and trails not meeting military, agency or public access needs or unnecessarily duplicating functions or destinations with other roads will be closed. Where applicable or feasible, these roads will be reclaimed.

VEHICLE USE

Under this alternative, no civilian off-road vehicle travel would be permitted, no organized and competitive ORV races would be allowed, and no "open" or unrestricted ORV use areas would be designated. Visitors who desire or want these activities would have to go off the BGR to participate in these activities. Off-road driving by military and agency vehicles will continue to be prohibited except by: 1) military vehicles in designated activity areas; 2) in emergency situations; and 3) for authorized agency management undertakings. About 1,464 miles of Primary, Tertiary, Secondary, Patrol and Unimproved roads will remain open for BGR access.

In the short-term, on-the-ground enforcement personnel, signing, user maps and public information will begin to curtail unauthorized civilian off-road vehicle use on BGR lands.

Over the long term, stringent enforcement of off-road vehicle use regulations by BLM rangers will end cross-country off-road driving opportunities for the users who insist in driving through closed areas or off-road. This will be an adverse impact to those users, but is not significant because it will affect limited numbers of BGR visitors. Posting of signs, maps and public information dissemination will also contribute to increased compliance with vehicle use restrictions.

Enforcement of off-road vehicle designations, restrictions on types of off-road vehicles used, and requirements for vehicle and driver licensing will generate negative public reaction from many individuals who are use to, and who support, unrestricted off-road activities and vehicle types on the BGR.

EFFECTS ON OUTDOOR RECREATION USE AND MANAGEMENT

Under the Proposed Action, many recreation opportunities will be enhanced and recreation use facilitated. On the other hand, several recreation opportunities such as cross-country or off-road vehicle activity and wood collection for domestic use off the BGR would end.

The implementation of appropriate natural resource regulations and policies will ensure the long term maintenance and enhancement of scenic, geological, cultural, botanical and zoological features associated with high quality outdoor recreational experiences in the BGR.

Recreation Access. Access to the BGR will be simplified by designing and coordinating a simpler and consistent access procedure to be used by BLM, USAF, USMC and the Cabeza Prieta National Wildlife Refuge. Simplification of access procedures will enable more users to visit the BGR during appropriate use periods. Visitor contact stations would be established in Gila Bend and Yuma to facilitate access, and address permitting, safety, off-road travel restrictions and recreation opportunities.

About 1,464 miles of road would remain available for recreational access. under the Proposed Action.

Camping. Camping opportunities will be enhanced across the BGR. Dispersed campers will have a high-quality recreational experience with the choice of campsites along 1,464 miles of designated or established roads on the BGR.

Primitive campgrounds (if established in appropriate areas of the BGR) will offer needed primitive camping opportunities and provide concentrated visitor use areas away from sensitive scenic areas, cultural sites or wildlife/plant habitat. At the same time, recreation use and damaging long-term camping encroachment will be diverted from the Tinajas Altas Mountains and other camping areas on the BGR presently over-utilized by the public. Impacts associated with over-used camping areas (wood cutting, soils disturbance, vehicle trails, litter and trampling of vegetation) will lessen and the areas will begin to recover as camping is better dispersed. Scenic values, wildlife viewing and non-motorized recreation opportunities will all be enhanced as soils and plant life recover from trampling and compaction resulting from camping over-use.

Off-Road Vehicles. Under this alternative, no off-road vehicle travel would be permitted, no organized and competitive ORV races would be allowed, and no "open" or unrestricted ORV use areas would be designated. Recreationists who desire or want these activities would have to go off the BGR to participate in these activities.

Enforcement of off-road, ORV vehicle, and vehicle/driver licensing policies will generate negative public reaction from many individuals more familiar with, and supporting unrestricted vehicle activities anywhere in the BGR. Moreover, the requirement for vehicles to be licensed will curtail some users as they will be unable to bring unlicensed vehicles on the BGR. The closure of 565 miles of primitive track (generally undrivable and not used by most BGR visitors) would also be seen as curtailing recreation use by some users.

Visitor Services/Use Supervision. Recreation use will be enhanced by implementing a signing program and public information/visitor use services meeting BLM standards. BGR visitors will be fully informed about road locations and vehicle use policies. Presently, some off-road damage is caused by visitors becoming disoriented by the number of travel routes on the BGR and traveling off-road inadvertently as they search for roads and destinations. Signing will keep these visitors on established roads and directed to their destinations. In addition, visitor use and education materials will contribute to the quality of a visitor's recreational experience and enhance their appreciation of the BGR's natural and cultural resources.

The recreational experience of the visitor will be greatly enhanced by an interpretation program describing the BGR's variety of zoological, botanical, cultural and historic resources. Visitors to the Camino del Diablo, the Yuma Desert and Sand Dunes HMA, the Gran Desierto Sand Dunes ACEC, the Mohawk Mountains and Sand Dunes ACEC, the Tinajas Altas Mountains ACEC, the Sentinel Plain Lava Flow and the Crater Range special recreation management areas will benefit from on-the-ground interpretational signing and information.

ACECs/Other Management Areas and Recreation Management Areas. Implementation of the Proposed Action regarding ACECs/Other Management Areas will cause the loss or displacement of some recreation opportunities in several areas. First, all cross-country ORV use will be curtailed, resulting in the loss of many off-road use and riding areas. Second, camping at the Tinajas Altas pothole and all other water sources will be curtailed. These camping uses will be displaced to other areas. Third, vehicle-based or self-contained camping in all BGR areas will be restricted to within 50 feet of roads. Fourth, firewood cutting for domestic use in all areas and for recreation use in ACECs will be ended due to resource protection needs. However, campfires will be allowed in all areas unless otherwise posted.

On the other hand, designation of ACECs and other management areas facilitate public use and enjoyment of these areas and heighten visitor awareness and concern for the BGR's fragile natural and cultural resources. In turn, public awareness will help BLM achieve the identified resource management goals and objectives for each area.

Visitor-Use Days. Increased public awareness of the BGR's scenic and high value natural resource lands will increase public use of the BGR for dispersed recreation activities. Visitor use materials and burgeoning public awareness of the BGR's recreation opportunities, along with natural and historic interpretation measures, will be the principal factors contributing to increased visitation.

Visitor-use days associated with vehicle use and all other recreation activity will continue to increase despite the loss of off-road driving opportunities. The number of anticipated visitors cannot be quantified due to insufficient information. Displaced or lost visitor use associated with the abridgment of off-road/cross country driving will be supplanted by increased levels of visitation on designated and established roads, by visits to ACEC and special recreation management areas, improved permitting policies, ongoing interpretation programs, and BGR signing.

EFFECTS ON AREAS OF CRITICAL ENVIRONMENTAL CONCERN/OTHER MANAGEMENT AREAS

The establishment of three ACECs (totaling 191,500 acres) and four other management areas (totaling 207,620 acres), and ensuing implementation of the specific management actions described for each area, will provide enhanced long-term protection and maintenance of high-value natural and cultural resources present in each area. Signing, road and trail closures and designations, rights-of-way prohibitions, wood removal limitations, ranger patrol, reclamation projects, establishment of long-term study plots, and visitor interpretation/information will provide additional protection to soils, plant and wildlife habitat, cultural resources and scenic values from surface disturbing activities. Likewise, public use and enjoyment of these areas will be heightened, while concurrently achieving the identified resource management goals and objectives for each area.

Limiting all vehicle travel to designated or established roads and ending off-road military traffic in the Tinajas Altas Mountains ACEC will afford long-term protection to soils, plant and wildlife habitat, cultural resources and scenic values. Natural and mechanical reclamation techniques will restore damaged landscapes over the long term in all ACEC and management areas where damage to soils, vegetation, wildlife habitat and scenic values is evident.

Water sources for wildlife, especially the Tinajas Altas High Tanks, will be better protected as barriers, signs, public information and ranger patrol ends camping, littering and off-road vehicle use in these areas.

Interpretation of each ACECs and other management areas scenic, geologic, wildlife, cultural, plant and ecological values will improve public behavior and use in, and appreciation of, these fragile Sonoran Desert areas.

The prohibition of woodcutting in the ACECs will reverse the trend of vegetation denudation in some areas like the Davis Plain, and prevent similar problems from occurring in the future in other areas likewise susceptible to over-utilization of wood and plant materials.

The establishment of regular ranger patrols in ACECs and other management areas will curtail off-road travel, cultural theft and vandalism, wood cutting and collection, harassment of wildlife, and violation of camping and water source use policies.

Surface disturbances, and associated impacts to soils, plants, wildlife, scenery, cultural, and recreational values will be curtailed, mitigated, or reclaimed in these areas. Habitat for identified important or relevant wildlife and plant species will be better preserved due to: 1) curtailment of off-road vehicle travel; 2) closely monitored and supervised public visitation, 3) prohibition of new rights-of-way; and 4) initiation of surface reclamation efforts in disturbed areas.

EFFECTS ON PERIMETER LAND USES AND ENCROACHMENT

Generally there would be no impact to Perimeter Land Use and Encroachment. One beneficial impact could occur to the neighboring community of Ajo. An established utility corridor from Gila Bend to Ajo would ensure that, if Ajo does expand, increased utility needs can be accommodated.

EFFECTS ON WILDFIRE MANAGEMENT

The fire management practices on the BGR have not yet been established. However, because of the sparse vegetation and the past fire history of almost no fires on the BGR, impacts from fire on BGR natural resources would be negligible.

EFFECTS ON WILD HORSES AND BURROS

The Proposed Action will eliminate burro populations from the BGR. It is yet unknown how many animals this will affect (estimates range between 50-150).

NO ACTION ALTERNATIVE

EFFECTS ON LAND USES

The No Action alternative would result in adverse impacts due to the absence of a designated utility corridor between Ajo and Gila Bend. Without this corridor there would be no assurance that increased utility needs in Ajo would be met, and there would be no way to confine rights-of-way for the benefit of USAF activities.

EFFECTS ON GEOLOGICAL RESOURCES

The impacts would be the same as the Proposed Action.

EFFECTS ON WATER RESOURCES

The No Action alternative would have no adverse impacts on ground water resources. The No Action alternative calls for the development of a hydrological data base and monitoring of water tables in and around the BGR.

EFFECTS ON SOILS

Land uses with detrimental effects on soils (compaction, erosion, organic matter disruption) would continue and possibly increase under the No Action alternative. The lack of ACEC, other management area, and special recreation management area land use prescriptions, including the prohibition or limitation of rights-of-way in most of these areas, could contribute to increased surface disturbing activities. Moreover, continued cross-country and off-road vehicle travel, along with detrimental camping practices, could persist or expand in some areas due to the lack of ranger patrol and use supervision. Lack of on-the-ground recreation use supervision could increase impacts to areas already experiencing soil damage, and extend injury to areas now relatively undisturbed. Military use could continue in the Tinajas Altas Mountains area south of Raven Butte, contributing to increased soil damage in that area.

EFFECTS ON BOTANICAL RESOURCES

The No Action alternative would adversely impact the botanical resources of the BGR. This would result from the lack of specific management prescriptions in ACECs, other management areas, special recreation management areas, and the lack of enforcement authority. The implication would be

continued degradation, and long term damage to the resource as a whole, particularly in the ACEC and special management areas. Damage to the fragile dune habitats would cause serious reductions in populations of several Category 2 federal candidate plant species.

EFFECTS ON WILDLIFE RESOURCES

SONORAN PRONGHORN

No proactive management to discourage surface-disturbing activities in Sonoran pronghorn habitat would be undertaken, and ORV activity would continue on the far western edge of pronghorn habitat. The character of habitat within six miles of permanent waters in Sonoran pronghorn habitat would slightly degrade with ORV use and trespass livestock use. Because these impacts would not increase in the long term, they would have a neutral to slightly adverse effect on Sonoran pronghorns.

FLAT-TAILED HORNED LIZARD

The Yuma Dunes and Tinajas Altas Mountains areas would continue to be subject to ORV use and other surface-disturbing activities. ORV activity would increase slightly in the long term. Flat-tailed horned lizard habitat would experience slight adverse affects in the long term if existing trends were to continue on habitat areas.

DESERT BIGHORN SHEEP

Desert bighorn habitat in the Mohawk and Tinajas Altas Mountains would not be precluded from surface-disturbing activities, and ORV use around the Tinajas Altas Mountains would continue. This would cause continued conflicts within 50,000 acres of bighorn sheep habitat. Desert bighorns in the Saucedo and Sand Tank Mountains would be subject to conflict with wild burros for water and forage near permanent water sources. If burro populations were to increase, impacts would be slightly adverse in the long term. Wild burro and livestock impacts to desert bighorn habitat would occur over 190,000 acres.

MULE DEER

All mule deer habitat on the BGR would be subject to surface-disturbing activities along existing trends. Off-road use would continue in some areas, particularly washes on the eastern part of the range, sometimes disrupting mule deer activities. These impacts would occur over approximately 350,000 acres where livestock and mule deer ranges overlap. If the burro herd were to increase, impacts to mule deer would be slightly adverse in the long term.

WHITE-TAILED DEER

Overall long-term impacts to the 88,000 acres of white-tailed deer would be negligible to neutral under No Action. Slight adverse effects would be observed if the burro herd were to increase.

SANBORN'S LONG-NOSED BAT

Without the implementation and enforcement of management prescriptions, current and/or potential habitat for this species would continue to degrade over time. In addition, increased disturbance from mounting human activity would result in adverse impacts.

PEREGRINE FALCON

Without ACEC designations and use supervision in the Mohawk and Tinajas Altas Mountains, peregrine falcons will be susceptible to human disturbance. This would result in neutral to slightly adverse impacts.

COLORADO DESERT FRINGE-TOED LIZARD

Habitat degradation would continue with the: 1) absence of management prescriptions on the Mohawk and Yuma Desert dunes (ACECs, HMAs,); 2) lack of use supervision governing recreation activities; and 3) potential for increased surface disturbances from civilian and military uses. Without special management attention afforded this species under ACEC, HMA and other special land use designations, the fringe-toed lizard could be adversely affected over the long term.

YUMA PUMA

Without management prescriptions, enforcement and ACEC designations the Yuma puma would be susceptible to continued human activities. This would result in neutral to slightly adverse impacts

DESERT TORTOISE

Without management prescriptions and enforcement, particularly of ORV's and other surface disturbances, impacts to tortoise would be slightly adverse to adverse.

EFFECTS ON ATMOSPHERIC AND VISUAL RESOURCES

The impacts would be the same as under the Proposed Action.

EFFECTS ON CULTURAL RESOURCES

Under the No Action alternative, many of the same beneficial impacts associated with the Proposed Action would occur. For example, restrictions placed on ORV use, prohibition of mineral entry, and limitations on land tenure adjustment would be the same for both alternatives, thereby reducing impacts to cultural resources on the BGR.

However, there are four concerns this alternative does not address. These four concerns are ACECs/other management area designations, utility corridors, tighter controls on recreational use, and sensitivity of site location information. The ACEC and other management area designations lend protection and management prescriptions to approximately 427,000 acres, and the cultural resources located on them. Since these designations would not occur, this extra layer of protection for cultural resources would not be in place.

Also, under this alternative, less control would be exercised over the recreational use of the BGR. This would probably result in an increase in ORV damage, vandalism and illegal collection of cultural resources.

Under the No Action alternative, utility corridors would not be designated and future R/W projects would not be confined to just one environmentally acceptable corridor. This should result in the construction of multiple scattered utility corridors and new road construction, which would lead to greatly improved access. The resulting impacts would include increased vandalism, illegal collecting and ORV damage.

Finally, the cultural resources of the BGR would be threatened by allowing field personnel, both military and other agencies, knowledge of site locations. Although Recommendations 10-9 and 13-6 suggest this, site information is sensitive and is not to be given out indiscriminately. The No Action alternative calls for modifying or restricting military activities and may conflict with PL 99-606 guidelines.

EFFECTS ON ROAD NETWORK AND VEHICLE USE

ROAD NETWORK

As the LAFR Plan provides only limited guidance on evaluating what routes would remain available for public use, the actual impacts to the road network are difficult to determine. An assumption is made that the "de factor" recreation corridors (with 109 miles of road) described in the LAFR Plan would remain available and possibly other routes, (totalling up to 1,355 miles of road) would be evaluated further to determine their status as open, restricted or closed to public use. Access to many areas of the BGR could become unavailable as travel would be limited to open roads and along "de factor" recreation corridors described in the LAFR Plan.

VEHICLE USE

The No Action alternative could result in lost or diminished public access opportunities if indeterminate amounts of road are limited or closed to public use. Additionally, off-road riding and driving opportunities (although unauthorized by USAF policies and regulations) would be lost or displaced on all BGR lands due to enactment of off-highway travel restrictions. Opportunities for off-road and cross-country travel, except for emergencies, would be completely forgone over the long-term, the same as under the Proposed Action alternative. Vehicle users wishing to participate in off-road and cross-country riding activities would be unable to pursue this activity on the BGR. However, lack of LAFR Plan enforcement capability would make successful implementation of vehicle use and type restrictions, route closures and off-road travel limitations unlikely over the long term.

EFFECTS ON OUTDOOR RECREATION USE AND MANAGEMENT

Recreation Access. Under this alternative, traditional and existing recreation uses could be somewhat restricted as indeterminate amounts of road mileage might be closed. Many areas regularly visited by recreationists might become unavailable, due to possibly more limited access. Many popular recreation attractions and use areas are outside "de factor" recreation

corridors and their long-term availability to public use is unknown. Comprehensive road planning would have to be done by the USAF to ascertain routes remaining open, closed or restricted to public access.

Access requirements and documents needed for public access to the BGR would be standardized and simplified under the LAFR Plan, so visitor use of the BGR would be less difficult. Visitor centers would be established in Gila Bend and Yuma to facilitate permitting procedures. Interpretation services addressing safety, off-road travel and resource use/damage would also be provided at these locations, enhancing visitor awareness of the BGR's recreation opportunities.

Camping. No primitive campground facilities would be offered for the visitor in the BGR. Thus, public demand for primitive or minimally developed campgrounds would not be met. Additionally, the quality of dispersed camping experiences might decline if less roads are available for public travel over the long-term. Less road mileage would concentrate vehicles and campers along remaining open routes. Subsequently, campers could be more susceptible to vehicle-based dust, noise and impacts to solitude.

Off-Road Vehicles. Under this alternative, no off-road vehicle travel would be permitted, no organized and competitive ORV races would be allowed, and no "open" or unrestricted ORV use areas would be designated. Recreationists who desire or want these activities would have to go off the BGR to participate in these activities.

Enforcement of off-road, ORV vehicle, and vehicle/driver licensing policies under the No Action alternative will generate negative public reaction from many individuals who are more used to, and who support unrestricted vehicle activities anywhere in the BGR. Moreover, the requirement for vehicles to be licensed will curtail some users as they will be unable to bring unlicensed vehicles on the BGR. However, lack of LAFR Plan enforcement capability would make successful implementation of vehicle use restrictions, licensing requirements, road closures and off-road travel limitations unlikely over the long term.

Visitor Services/Use Supervision. Recreation use will be enhanced by implementing a signing program, public information programs and visitor use services. BGR visitors will be fully informed about road locations and vehicle use policies. In addition, visitor use and education materials will contribute to the quality of a visitor's recreational experience and enhance their appreciation of the BGR's natural and cultural resources. However, in some instances, the recreational experience of the visitor may be diminished by reduced levels of on-the-ground interpretation and use supervision. Particularly lacking would be the levels of management attention, visitor use supervision and interpretation afforded areas prescribed for special management attention under the Proposed Action (ACECs, HMAs, and special recreation management areas).

ACECs/Other Management Areas and Recreation Management Areas. None of these designations would be established under No Action. Non-designation of ACECs and other management areas could diminish public use and enjoyment of these areas and reduce visitor awareness and concern about the BGR's fragile natural and cultural resources. The quality of recreational experiences and opportunities in these areas could decline or remain static over the long-term.

Visitor-Use Days. Visitor-use days associated with vehicle use and all other recreation activity will remain change based on the amount of public access available over the long-term. The number of anticipated visitors can not be quantified due to insufficient information. Interpretation and environmental education, along with a signing program, will enhance the quality of the visitor's recreation experience.

EFFECTS ON AREAS OF CRITICAL ENVIRONMENTAL CONCERN/OTHER MANAGEMENT AREAS

No ACECs or other management areas would be established by the No Action alternative. Although the Tinajas Altas Mountains, Crater Range, and Mohawk Mountains and Sand Dunes would remain established state natural areas, these are not federal or administrative designations. The state has no authority to develop or implement natural resource management prescriptions to ensure long-term protection of those areas. The SNA designation affords these lands no additional protection from land uses detrimental to their natural resource or cultural values. Likewise, no additional protection would be offered the Sentinel Plain Lava Flow, the Yuma Desert and Sand Dunes, or the Gran Desierto Sand Dune areas. The mandates of ACEC management, associated BLM regulations and policies, and the identified specific management actions needed to protect these areas could not be implemented.

In the absence of ACEC/other management area management prescriptions (described in the Proposed Action) and civilian law enforcement, off-road vehicle use, detrimental camping practices, soil damage, cultural resource vandalism, wood collection and plant trampling, disruption of wildlife habitats and damage to scenic resources in these areas could continue to some degree. In particular, USMC surface military training in the Tinajas Altas Mountains SNA would continue, specifically west and south of the Camino del Diablo.

EFFECTS ON PERIMETER LAND USES AND ENCROACHMENT

Community expansion of Ajo could be made more difficult due to a lack of a designated utility corridor between Ajo and Gila Bend. However, this would only be a factor if the expansion depended on increased utility capabilities. No other impacts were identified.

EFFECTS ON WILDFIRE MANAGEMENT

The impacts to wildfire management would be that the USAF would be responsible for suppression of wildfires on the BGR.

EFFECTS ON WILD HORSES AND BURROS

The impacts would be the same as the Proposed Action.

MITIGATING MEASURES

The description of the Proposed Action includes any mitigation that the interdisciplinary team felt was necessary in order to protect the environment on the BGR. The "built-in" mitigation in the Proposed Action was developed in such a manner that the constraints of PL 99-606 regarding military use were realized, and would be consistent with the military mission. The Proposed

Action also stipulates that for BLM-permitted activities, the mitigation would be developed through an environmental assessment, and site-specific mitigation would be developed for each activity.

CONSULTATION AND COORDINATION

Introduction

The Lower Gila South RMP Plan Amendment (Goldwater Amendment) and Environmental Assessment (EA) was prepared by an interdisciplinary team of resource specialists from the Phoenix District Office and Lower Gila Resource Area. Preparation of this RMP Plan Amendment/EA began in March 1988. The draft Goldwater Amendment and EA was published and distributed to the public for review in February 1989.

Public Involvement and Consultation During Development of the RMP Plan Amendment

An active public participation program was conducted throughout the preparation of this document. Consultation and coordination with other agencies, organizations and individuals occurred in a variety of ways throughout plan preparation. Meetings were held with interested citizens, agencies and organizations prior to the development of both the Draft and Final Plan Amendment/EA. Based on comments received at these meetings and written comments received during the 115-day public comment period, changes have been made in the Final Plan Amendment.

The following section highlights public participation activities that occurred during the development of this Plan Amendment/EA.

- | | |
|-------------------|---|
| February 25, 1988 | Federal Register Notice announcing the initiation of the Lower Gila South RMP Amendment/EA (Goldwater Amendment) and inviting public participation. |
| March 16, 1988 | Public Open House in Gila Bend, Arizona to solicit planning issue comments. |
| March 17, 1988 | Public Open House in Phoenix, Arizona to solicit public planning issue comments. |
| March 1, 1989 | Publish Draft Plan Amendment/EA and begin public comment period extending to June 23, 1989. |
| May 22, 1989 | Public Open House in Gila Bend, Arizona to solicit public comments on Draft Plan Amendment/EA. |
| May 23, 1989 | Public Open House in Yuma, Arizona to solicit public comments on Draft Plan Amendment/EA. |
| September 6, 1989 | Meeting with USAF in Phoenix, Arizona on preliminary Final Plan Amendment/EA. |

September 13, 1989 Meetings with Border Patrol, USFWS and AGFD and other interest groups on preliminary Final Plan Amendment/EA, Yuma, Arizona.

September 14, 1989 Meeting with USMC and USAF in Yuma, Arizona on preliminary Final Plan Amendment/EA.

Public Comments on the Draft Environmental Assessment (Goldwater Amendment)

Written public comments on the Draft Lower Gila South RMP (Goldwater Amendment) have been reproduced on the following pages. The comments have been numbered in the order received. Specific responses to the comments follow letter number 49.

The BLM wishes to thank those who took time to review the Draft Lower Gila South Plan Amendment and submit comments on the environmental analysis and the alternatives.

The following officials, agencies, organizations and individuals submitted written comments.

<u>Letter Number</u>	<u>Respondent</u>
1	Department of Health and Human Services - Public Health Service
2	Henry, Bob and Susanna
3	National Trappers Association, Inc.
4	Massey, Jamie
5	Maggiacoma, Lawrence
6	National Parks and Conservation Association
7	Sunderland, Larry
8	United States Air Force
9	Hickox, Sandra
10	DiNardo, Gary - Voices for Animals
11	Smith, Richard A.
12	Western Area Council of Governments
13	Arizona Roamers Sand Buggy Club
14	Sayner, Flavia
15	Sanford, John
16	Lewis, Jeremy W.
17	Wildlife Society, Arizona Chapter
18	Cohen, Neil M.
19	Mason, Richard M.
20	Weil, Ed
21	Zeloznicki, Susan J.
22	Arizona Game and Fish Department
23	Sierra Club, Grand Canyon Chapter
24	University of Arizona
25	Colvin, John F., Jr.
26	Yuma Audubon Society
27	United States Marine Corps
28	United States Fish and Wildlife Service

Letter
Number

Respondent

29	Defenders of Wildlife
30	Martin, Ronald
31	Arizona Trappers Association
32	Arizona Nature Conservancy
33	National Trappers Association, Inc.
34	Arizona Muzzleloading Association
35	Yuma Valley Rod and Club, Inc.
36	Jordan, Dennis L.
37	Wright, Roberta S.
38	Sunderland, Larry
39	Bowlan, Buel
40	Venburg, Diane L.
41	Mierb, Geri
42	Cabeza Prieta National Wildlife Refuge
43	The Humane Society of the United States
44	Meyers, Mary Jo
45	Friends of Cabeza Prieta
46	United States Border Patrol - Immigration and Naturalization Service
47	Williams, Will
48	Wilson, Jean E.
49	United States Environmental Protection Agency



Centers for Disease Control
Atlanta GA 30333

March 3, 1989

Carole Hamilton
Lower Gila Resource Area Manager
2015 W. Deer Valley Road
Phoenix, Arizona 85027

Dear Ms. Hamilton:

We have learned that your office is developing documentation under the National Environmental Protection Act (NEPA) entitled "Goldwater Plan Amendment." While we have no specific comments to offer on your project at this time we are writing to urge your consideration of any perceived safety and health impacts posed by this project. As a guide, we have enclosed a list of potential health impacts for your review. We hope these suggestions may be helpful in developing a comprehensive analysis of potential environmental impacts associated with your proposed project.

Please insure that we are included on your mailing list for further documents which are developed under the National Environmental Policy Act (NEPA).

Sincerely yours,

David E. Clapp, Ph.D., P.E.
Environmental Health Scientist
Special Programs Group
Center for Environmental Health
and Injury Control

Enclosure

I. AIR QUALITY:

- A. Dust control measures during construction.
- B. Open burning.
- C. Indoor Air Quality.
- D. Compliance with air quality standards.

II. WATER QUALITY:

- A. Potable water (chemical, microbiological, and radiological quality).
- B. Body contact recreation.
- C. Compliance with waste water treatment standards.

III. NON-HAZARDOUS SOLID WASTE:

- A. Any unusual or suspected health effects associated with solid waste disposal.
- B. Effects of littering and provisions for cleanup, particularly conditions which might lead to vector harborage.

IV. NOISE:

- A. Ambient noise levels during construction, implementation, etc.
- B. Effectiveness of any proposed noise reduction measures following construction, implementation, etc.

V. RADIATION:

- A. Exposures to ionizing and non-ionizing radiation which may adversely affect human health.

VI. HAZARDOUS WASTES:

- A. Solid, liquid, or gaseous wastes which because of their physical, chemical or infectious characteristics pose a substantial threat to human health.

VII. WETLANDS AND FLOODPLAINS:

- A. Contamination of the food chain.
- B. Construction in floodplain which may endanger human health.

VIII. OCCUPATIONAL HEALTH AND SAFETY:

- A. Evaluation of the occupational and public health hazards associated with the construction and operation of the proposed project.
- B. Evaluation of any occupational and public health hazards associated with the operation of a proposed program (e.g., pesticide application, disposal of toxic chemicals, etc.).
- C. General worker safety/injury control provisions.

Bob and Susanna Henry
Somerton, Arizona 85350

Carole K. Hamilton
Area Manager
Lower Gila Resource Area
Bureau of Land Management
2015 W. Deer Valley Road
Phoenix, Arizona 85027

9 March 1989

VIII. LAND USE AND HOUSING:

- A. The provision of adequate ventilation, heating, insulation and lighting.
- B. Vector control provisions.
- C. Impacts of a project upon the displacement and/or relocation of persons.

Dear Ms. Hamilton:

We are year-around residents of Yuma, Arizona and have made several trips to the Barry M. Goldwater Air Force Range. We are concerned about its future management and are pleased to have had the opportunity to review the Proposed Amendment to the Lower Gila South RMP (Goldwater Amendment).

We feel that the plan should address a range of alternatives (other than "no action" and the proposed alternative). We feel that in particular an alternative should be developed that designates more vehicle ways open to recreational use, creates no "administrative use only" roads for exclusive use by BLM and the military, and prohibits ORV racing events.

We feel that the proposed action does not leave enough roads or vehicle ways open for recreation use. Specifically, we would like to see the following routes left open:

- (1) The road to Dripping Springs on the east side of the Gila Mountains,
- (2) the road along the south side of Raven Butte on the east side of the Tinajas Altas Mountains,
- (3) the road to the Baker Peaks picnic area south of Wellton,
- (4) the road along the west side of the Mohawk Mountains (between the Mohawk Mountains and the Mohawk Dunes), and
- (5) the road accessing the Copper Mountains (on the east side of the Copper Mountains).

We feel that by severely limiting public access, as in the proposed alternative, the public is more likely to "break the rules" and drive off of the designated routes. If reasonable access is left open to each mountain range, the BLM regulations are more likely to be followed.

We are concerned about the mention of organized ORV events in the plan. We feel that the BLM in southwestern Arizona and southeastern California has already designated enough land open for these events close to population centers. For example, the El Centro Resource Area in California has already made nearly

2-1

2-2

2-2

half of the Algodones/Imperial Sand Dunes open for these events, and the Havasu and Indio Resource Areas have already provided land for the Parker Score 400. We also feel that the military has done enough damage to the BGR with off-road vehicles without the BLM encouraging more damage.

We are pleased to see that the BLM intends to remove all burros and goats from the BGR. It is encouraging to see liberal application of the 1971 Wild and Free-Roaming Horse and Burro Act and the Arizona Livestock Laws. This will improve the value of the BGR as wildlife habitat.

2-3

We feel that the mention of prescribed fire (on page 24) on the BGR is ludicrous. Fires in the Sonoran Desert, when they occur, are quite damaging to vegetation and are not beneficial to the plants or to wildlife.

2-4

Placing signs on the BGR by the BLM and the military should be kept to a minimum. It would be discouraging, after a long day travelling on the Camino Del Diablo without seeing any other people (or very few), to round a corner and see a huge BLM sign announcing that you have reached the Cipriano Pass campground. We realize that to designate roads, signing will be necessary. The signing should be done in as inobtrusive a manner as is possible.

We are pleased to see the concern expressed by the BLM over removal of ironwood trees for firewood. We are pleased to see the development of restrictions to curtail indiscriminant collecting by U.S. and Mexican citizens.

We noticed one mistake: on page 33, change Organ Pipe National Park to Organ Pipe Cactus National Monument.

Once again, thank you for the opportunity to comment on the Plan.

Sincerely,

Susanna G. Henry
Robert S. Henry



Trappers Association, Inc.



3

Member Supported

P.O. Box 3667 • 216 North Center • Bloomington, IL 61702 • (309) 829-2422

Joseph Melton
Arizona Director
339 May Ave.
Yuma, Arizona 85364

March 18, 1989

Bureau of Land Management
Phoenix District Office
2015 West Deer Valley Road
Phoenix, Arizona 85027

Attn. Carole K. Hamilton

The Arizona Trappers Association represents around 1200 Arizona Trappers as well as being affiliated with the National Trappers Association representing 47 other state affiliates. The National Trappers Association, in general, and the Arizona Trappers Association, in particular, are proud to present our views to the Bureau of Land Management concerning the Lower Gila River Resource Management Plan.

These Trapper Associations are dedicated to the promotion of sound wildlife management programs for furbearer species.

We want to go on record supporting the use of hunting, including trapping, as a management tool to regulate wildlife populations and prevent damage to the habitat. Only by utilizing wise resource management practices coupled with appropriate wildlife management tools will we truly benefit furbearers and all species they interact with.

3-1

We strongly oppose the proposed Areas of Critical Environment Concern (ACEC) as proposed by the Bureau of Land Management. The Management prescriptions for these areas does not allow RESOURCE management but projects PROTECTIONIST management.

3-2

These management road closure prescriptions would effectively remove access into critical trapping and hunting areas. Without access these areas are virtually worthless as far as Wildlife resource management is concerned. Letting surplus animal populations starve to death is not wildlife management nor can it be called conservation.

Additionally these proposed prescriptions would eliminate predator control by removing access for hunters and trappers. Without control of surplus predators, coyotes and bobcats in particular, many species would be suppressed due to predation on their fawns. These species include Sonoran Prongehorn (an endangered species), Mule deer, Whitetail deer, and Bighorn sheep. A bighorn sheep ewe has been reported being killed at one of the Tinaja Altas Tanks by a bobcat. This report was made by a Game and Fish Biologist. This was an adult Bighorn sheep and there is no way to know how many fawns of these species fall prey to these predators.

National Trappers Association, Inc.

Member Supported



P.O. Box 3667 • 216 North Center • Bloomington, IL 61702 • (309) 829-2422

National Trappers Association, Inc.

Member Supported



P.O. Box 3667 • 216 North Center • Bloomington, IL 61702 • (309) 829-2422

It is known that the Sonoran Antelope, an endangered species, goes up into the foothills to have their young but return without them. Whether the young are aborted or taken by predators is unknown. However the predation of fawns on the Anderson Mesa Antelope herd is well documented. Predator removal from that area has increased fawn survival from below 20 percent to over 100 percent.

The National Trappers Association and the Arizona Trappers Association hereby request public hearings now be held on this management plan to allow these issues to be addressed. Now that a plan has been drafted we do have specific issues to deal with.

3-3 These hearings should be held in local communities bordering these areas. It is extremely frustrating to people living on or near these areas to be denied reasonable use by some Bureaucrat in Washington or other regional office because these people have no-one to voice their opinions too.

3-4 Two extremely important furbearers not even listed in your report that inhabit these areas are the Ringtail and the Grey Fox. The latter being the most plentiful furbearer harvested in Arizona. These areas contain high populations of Grey Fox, Bobcat, Coyote, Kit Fox, and Ringtails. These furbearers supply us with a natural renewable resource which creates jobs for some 1200 trappers and an unknown number of hunters in this state as well as revenues of several million dollars.

And last, we believe the Bureau of Land Management should exemplify the highest standard of professional resource management on lands administered by them. We certainly do not want sound furbearer management programs jeopardized by preservationist attitudes. We want the Bureau of Land Management and all Americans to understand the following:

1. There are more wild furbearers in the United States today than there were 100 years ago.
2. Government quotas and strict conservation practices keep wildlife, including furbearers, at optimum levels.

3. There are no furbearing animals in the United States or Canada which are endangered or threatened by fur harvesting today.
4. Millions of Americans depend on fur harvesting for their livelihood. These people have a vested interest in protecting the natural environment.
5. Natural fur, used in coats and other garments, is a renewable resource.
6. Nothing is wasted in the production of wildfur garment. Furbearers provide food, organic fertilizer, medicines, and other biodegradable products.
7. Conversely, synthetic materials exhaust our limited supply of oil and other non-renewable resources while contributing to our growing pollution problem.
8. Wildlife management programs ensure the necessary supply of natural wildfur for today's needs and those of tomorrow.

Please continue utilizing trapping and hunting as a wildlife management tool for furbearers on lands administered by the Bureau of Land Management.

Sincerely,

Joseph Melton
Joseph Melton
Arizona Director
National Trappers Association

Phoenix, AZ 85014
April 3, 1989

Dear Ms. Hamilton:

I've long been aware that trappers are allowed on the Goldwater Gannery Range. What I just now learned is that trappers may check their traps only on weekends. This alarms me as it should anyone with an ounce of compassion. The image of an animal spending five days in a trap moves me to ask that you look into this matter.

As you may know, 65 countries and 3 U.S. states have outlawed trapping. Vets compare being caught in a leghold trap with having a hand slammed in a car door and, despite the self-serving proclamations of Arizona Game & Fish, trapping is not an effective wildlife management tool for it is completely indiscriminate.

Some trappers may claim their traps are set on Saturday then checked and tripped on Sunday. Please hesitate in believing them. There is a commercial enterprise devoid of ethical considerations. I ask that you consider ethics then act accordingly. Respectfully,

Jamie Massey

4



From the desk of

LAWRENCE M. MAGGIACOMA

5

4-3-89

Dear Carole Hamilton,

I oppose any and all trapping on the Goldwater Gannery Range. Arizona trapping law required daily trap check. Trappers are not above the law and they are accountable, as we all are, for following the law.

It is time for special interests who exploit my resources for profit and greed to hear the words NO you may not. It is time to end the suffering brought to the defenseless which includes reject wild animals, pets, men, women and child. Let's not extend the danger.

Sincerely,
Larry Maggiorana



RUSSELL D. BUTCHER
Southwest-8-California Representative

April 2, 1989

RE: Goldwater Amendment:
Lower Gila South RMP/EA

Carole K. Hamilton
Area Manager
Lower Gila Resource Area
Phoenix District Office
Bureau of Land Management
2015 W. Deer Valley Road
Phoenix, Arizona 85027

Dear Ms. Hamilton:

National Parks and Conservation Association, a nonprofit membership organization, founded 70 years ago to promote the protection, enhancement, and public understanding of the National Park System and related public lands, appreciates this opportunity to comment on the Goldwater Amendment: Lower Gila South Resource Management Plan/Environmental Assessment.

We first want to compliment the Department of Defense (U.S. Air Force and U.S. Marine Corps) and the Department of the Interior (BLM) for working cooperatively, in accordance with Congressional authorization, toward developing a land use plan for the 1,842,423-acre BLM part of the Barry M. Goldwater Range, in southwestern Arizona. (PL 99-606 (in 1986) uniquely directed the BLM and the military to enter into a Memorandum of Understanding for purposes of managing and protecting the natural and cultural resources--such management to be consistent with military activities ("armament and high-hazard testing area and a training area for aerial gunnery, rocketing, electronic warfare, and tactical maneuvering and air support"). This is an unusual land management challenge for the BLM, and it cannot be easy to carry out this mission, while responding to the needs of the military.

We and others have long felt that parts of this awesomely rugged, dry desert, stretching west of Organ Pipe Cactus National Monument/Cabeza Prieta National Wildlife Refuge, between Interstate-8 and the Mexican border, deserve enhanced protective management.

In the 1960s, for example, then Interior Secretary Stewart L. Udall recommended that Organ Pipe Cactus National Monument be expanded to include Cabeza Prieta refuge and the spectacularly scenic Tinajas Altas Mountains, and that this entire area be re-designated as the Sonoran Desert National Park.

National Parks and Conservation Association
Box 67, Cottonwood, Arizona 86326
(602) 634-5758

2-NPCA re Goldwater amendment, Lower Gila South

The November 1965 Arizona Highways Magazine featured an article on this 1,242,000-acre park proposal. The November 1979 issue of the magazine published an article on El Camino del Diablo, which runs through this area.

In 1988, our Association--again recognizing the extraordinary scenery, ecological, geological, and other values--included this same area on a list of special places around the United States which, on the merits, contain qualities worthy of addition to the National Park System.

We are therefore pleased to see that this document recommends enhanced protective management for natural and cultural resources and for several key areas, including the magnificent Tinajas Altas Mountains.

Specifically, we support your recommendations to establish:

- a 56,000-acre Tinajas Altas Mountains Area of Critical Environmental Concern (ACEC);
- a 28,500-acre Gran Desierto Dunes ACEC;
- a 113,000-acre Mohawk Mountains and Sand Dunes ACEC;
- a 60,375-acre Yuma Desert & Sand Dunes Habitat Management Area (HMA);
- a 92,000-acre Sentinel Plain Lava Flow Natural Area;
- an 11,920-acre Crater Range Special Recreation Management Area (SRMA); and
- a 19,200-acre Camino del Diablo Historic Trail.

We support such other proposals as...

- exchanging out state lands, to consolidate federal ownership;
- protecting ground water resources;
- restricting the use of civilian motorized vehicles;
- protecting important plant communities and species diversity (giving a top priority to protecting natural vegetation from land-based activity disturbances);
- protecting and enhancing wildlife habitat and water sources;
- continuing to support Sonoran pronghorn protection;
- eliminating trespass grazing by cattle, goats, and burros;

3-NPCA re Goldwater amendment, Lower Gila South

- developing a comprehensive habitat management plan in cooperation with the Fish & Wildlife Service, Arizona Game & Fish Department, and the U.S. Air Force;

- preparing a cultural resources management plan in operation with Fish & Wildlife and the Air Force;

- providing appropriate protection for significant cultural sites that are being threatened or impaired by the public, or where it is reasonable to anticipate impairment in the future;

- developing a transportation plan (for effective management of an appropriate road system for the public, the BLM, and the military);

- closing roads/trails not meeting clearly identified needs, and restoring those routes to a natural condition;

- limiting all motor vehicles to designated roads; and

- providing interpretive services, materials, and appropriate signing to enhance the visitor's understanding and appreciation of the awesome and fragile desert environment and to create a public awareness of the regulations established to protect the desert.

6-1

Regarding the ACECs, in particular, we are pleased to see an array of proposed protective management constraints, including a prohibition against woodcutting/firewood collecting. We suggest that this prohibition should be applied throughout the entire BLM-administered Barry M. Goldwater Range, since woody desert vegetation (notably the desert ironwood tree) tends to be extremely slow growing. Over time, cutting/collecting can simply eliminate this important source of natural nutrient recycling.

We also agree with the plan to establish appropriate interpretive facilities in ACECs; but these should be designed and situated so as not to detract from the visitor's visual enjoyment of the resource(s) being interpreted.

Regarding a utility corridor in the vicinity of I-8, we strongly support BLM's encouraging the underground installation of utility lines through the proposed Mohawk Mountains and Sand Dunes ACEC. In fact, we are also concerned about powerlines along I-8, in general. Since this freeway, between Gila Bend and Yuma, was completed (in the early 1970s-?), we have especially enjoyed the unobstructed panoramas of the wild, moonscape-like desert in this area.

6-2

We urge that if powerlines are placed along I-8 (assuming they cannot be placed underground for a longer stretch than you propose), every effort be made--through tower design and color, nonspecular transmission lines, etc.--to blend as much as possible with the natural environment. Furthermore, would

4-NPCA re Goldwater amendment, Lower Gila South

6-2

it not be preferable to run such a line or lines to the north of the freeway, rather than to the south, thus avoiding any visual impairment southward into the area between I-8 and the Mexican border?

Finally, the key to the ultimate effectiveness of protective management prescriptions is a combination of public education, adequate field patrols, and routine monitoring of natural and cultural resources and of the impacts of human activities upon those resources. We urge that everything possible be done to encourage adequate funding and staffing to carry out these critical needs.

Surely one of the major challenges is to discourage recreational off-roading which, in fragile desert environments such as this, is so destructive of fragile, often irreplaceable natural and cultural resource values.

Unfortunately, there are some who view an awesome expanse of desert as merely a "wasteland," as an ideal place to "raise some hell" and tear around at will. Yet, the marks made by such thoughtless or deliberate activity will remain on the face of the land for many decades and generations to come.

It is, therefore, most urgent, in our view, to gain the support and cooperation of the recreationists, so their own groups and representatives will assume a share of the responsibility...by regulating their own activities.

We very much appreciate your proposals to increase the level of protection for this fascinating part of the Southwest desert. While some impairment of the area has already occurred, such enhanced protection will, we hope, serve to slow if not stop harmful human impacts and safeguard places of special value.

We wish you success in implementing this land use plan's worthy objectives.

Sincerely,



Russell D. Butcher

cc: NPCA headquarters

LARRY SUNDERLAND
SCOTTSDALE, AZ. 85251

TO: CAROL HAMILTON

4/3/89

BLM MGR, LOWER GILA RIVER RESOURCE AREA
2015 W. DEER VALLEY RD.
PHOENIX, AZ 85027

AS PER YOUR REQUEST, THE FOLLOWING COMMENTS ARE OFFERED REGARDING ANIMAL TRAPPING ON THE MILITARY WEAPONS RANGES IN SOUTHERN ARIZONA. I AM SPECIFICALLY CONCERNED ABOUT HUMAN SAFETY AND WELFARE ON THE ARMY WEAPONS TEST AND PROVING GROUNDS NORTH OF YUMA AND THE BARRY M. GOLDWATER GUNNERY RANGE JUST EAST OF THAT CITY. I DO NOT BELIEVE THAT TRAPPING ON THOSE RANGES IS COMPATIBLE WITH THEIR DESIGNATED MILITARY USE AND, AS SUCH, SHOULD NOT BE ALLOWED FOR A WIDE VARIETY OF REASONS. BOTH AREAS ARE CURRENTLY APPROVED FOR TRAPPING BY THE ARIZONA GAME AND FISH COMMISSION. IN REPLY TO MY REQUEST IN JUNE, 1988, THAT TRAPPING BE RESTRICTED ON THESE RANGES, THE DIRECTOR, AG&F DEPT WROTE: "THE DEPARTMENT FEELS THAT THESE AREAS ARE EXCELLENT TRAPPING AREAS AS VERY LITTLE CONFLICT WITH THE GENERAL PUBLIC OCCURS." I STRONGLY DISAGREE FOR THE FOLLOWING REASONS.

AS STATED ABOVE, MY MAJOR CONCERNS ARE FOR HUMAN SAFETY AND WELFARE, NOT SIMPLE TRESPASS. THE HAZARDS TO ALL LIVING CREATURES IN CERTAIN AREAS OF THESE RANGES IS OBVIOUS,

NOT JUST FROM WEAPONS FIRE AND ITS ASSOCIATED FALLING DEBRIS BUT FROM UNRECOVERED COMPONENTS WHICH, FOR A VARIETY OF REASONS, MAY BE FOUND FROM TIME TO TIME LYING ON THE GROUND. THOSE AREAS WHICH ARE SUBJECT TO SUCH CONTAMINATION SHOULD BE CLEARLY DEFINED AND ARIZONA TRAPPING REGULATIONS AMENDED TO PROPERLY REFLECT THESE DANGER AREAS AS UNAUTHORIZED FOR TRAPPING.

IN A BROADER SENSE, NATIONAL SECURITY COULD CONCEIVABLY BE COMPROMISED SHOULD ANY MISSILE, WEAPONS, OR MUNITIONS COMPONENTS FOUND ON THE GROUND FALL INTO THE HANDS OF UNAUTHORIZED PERSONS.

FURTHERMORE, I STRONGLY OBJECT TO THE MORAL JEOPARDY IMPOSED ON OUR FIGHTING MEN BY THE NEEDLESSLY AGGRAVATED RISK OF ACCIDENTAL DEATH OR INJURY TO A TRAPPER OR ANY OTHER HUMAN BEING ON THE GROUND DURING PEACETIME WEAPONS TEST OR TRAINING MISSIONS. MOST MILITARY PERSONNEL CAN ACCEPT THE RESULTS OF COMBAT DURING WARTIME WITH A REASONABLY CLEAR CONSCIENCE, BUT TO PLACE THEM IN A POSITION OF POSSIBLY JEOPARDIZING HUMAN LIFE IN PEACETIME, EVEN ACCIDENTALLY, IS ABSOLUTELY UNTHINKABLE.

ANIMAL TRAPPING HAS BEEN CLASSIFIED BY THE AG&F COMMISSION AS A COMMERCIAL ENTERPRISE, NOT A SPORT, AND, AS SUCH, IS AUTHORIZED STATE WIDE INCLUDING THE MILITARY WEAPONS TEST AND GUNNERY RANGES CITED ABOVE. (2) TRAPPING IS DONE

primarily during the four months of November thru February each winter. To solve the travel and logistic problems associated with moving heavy traps, equipment and unskinned animal carcasses over extended distances, most trappers resort to the use of an off road vehicle. The traps, once set, are left in place for several days or even weeks. For humane reasons, Arizona law requires each trap set to be checked daily regardless of the weather or terrain conditions.

The daily check requirement gives rise to some very troublesome problems, especially where daily access can not always be assured. Most people cringe at the thoughts of forcing an entrapped animal to languish in pain without food or water for even 24 hrs. The mere thought of extending that time to days or even a week is absolutely abhorrent. Humane organizations and animal rights groups would descend on these ranges en masse if they ever learned the requirement for the daily trap check was being ignored.

Since these daily trapping incursions conflict so greatly with the military use of the ranges, the thorny question is then raised as to who responsibility for breaking the law when the military commander must deny the trapper daily access to his trap line. Obviously, that situation should not provide an acceptable excuse for the trapper to ignore the daily check requirement.

The wide spread use of vehicles for the daily inspection of trap lines has resulted in inordinate and unjustified damage to public lands during times of inclement weather. Off-road damage currently being done to our public lands during the winter months is, in fact, caused by the commercial trapping industry. This land abuse must be stopped.

Due to the ~~enormous~~ ^{enormous} size of these ranges it is most unrealistic to expect the military to accept full responsibility for keeping the trappers out when the AGTF commission fully supports such activity. The military commander can not be likened to the private property owner whose primary concern is simple trespass. The overwhelming liability for human safety and welfare places an inordinate responsibility on the military to assure adequate protective measures are taken. This is an obligation which is not found in the private sector. The taxpayer must ultimately bear the burden of this effort as well as the costs of any accidents which might occur. Clearly, the greatest public good would be achieved by legally limiting trapping activity on these ranges to those areas

Which pose NO THREAT TO HUMAN SAFETY. This could be done quickly AND easily WITH THE AGTF Commission publishing A simple Rule OR Regulation. Such ACTION would save UNTOLD defense DOLLARS presently being spent IN AN effort TO OTHER wise keep The RANGES reasonably safe.

By Avoiding Their Responsibilities AND failing TO properly Address The issue of human SAFETY AND welfare surrounding TRAPPING ON military RANGES, The AGTF Commission has clearly passed The Buck AND set The military up TO be the scapegoat SHOULD AN accident occur. I do NOT believe such ACTION best serves The public interests.

A LACK of enforcement capability precludes The military FROM INITIATING A TRAPPING ban ON their own. SHOULD The military post NO TRAPPING signs, AS A prudent property owner might do, THEN enforcement becomes A military responsibility. The respective services simply do NOT have The resources needed TO commit TO such AN effort. If, ON The OTHER hand, The AGTF Commission were TO declare TRAPPING illegal IN selected AREAS, THEN enforcement responsibility would rest WITH THAT STATE Agency. The economics ARE very clear.

CONTRARY TO WHAT AGTF HAS STATED, however, enforcement(S) of GAME regulations and

Poaching LAWS ON These RANGES is NOT A Rightful military Responsibility. I STRONGLY object TO The expenditure of defense dollars TO provide GAME WARDENS OR simply enhance The opportunity for monetary gain by A chosen few. The problem could be more easily solved by simply making TRAPPING in such AREAS illegal.

Finally, much confusion surrounds ANY AUTHORIZED public use of These lands. Obviously, AGTF MUST consider These RANGES AS somehow open TO public entry. AND, if TRAPPERS ARE allowed daily off-ROAD Access, THEN The general public is ENTITLED TO A similar privilege. Yet, posted signs AND WARNINGS printed ON CURRENT maps would indicate THAT off-ROAD Travel is highly RESTRICTED. The WARNING printed ON The latest ARIZONA Highways map Reads: "DO NOT leave Right of way ON MAIN Traveled Roads. Use roads open TO public ONLY, observe ALL WARNING signs." THAT STATEMENT would lead MOST LAW abiding citizens TO believe THAT off ROAD Travel WAS simply NOT allowed.

If, however, These ranges ARE ACTUALLY open TO off-ROAD Travel for Trappers, THEN The general public is ENTITLED TO The same consideration. BUT, TO simply open The RANGES TO public access would NOT be A viable option. ENTRY (6) CONTROL AND The cost

Of conducting search and rescue efforts before any use of the range could be resumed should anyone fail to exit on schedule or simply fail to properly check out would be prohibitive. Obviously some clarification is needed.

Any reduction of illicit off-road travel should be of great interest to the immigration service as well as the drug enforcement agencies. After all, some 90 miles of the Goldwater Range lies along the Mexican border and closely parallels Route 2 in that country. Reports of nighttime campfire sightings deep within the range are not altogether uncommon.

Perhaps the time has come to reexamine the land use plans for these two big chunks of Arizona real estate. And, after considering all the alternatives, I would hope that considerations for human safety and welfare would be given the priority it rightfully deserves in the administration of these ranges.

Respectfully
Larry Sunderland



DEPARTMENT OF THE AIR FORCE
HEADQUARTERS 832D COMBAT SUPPORT GROUP (TAC)
LUKE AIR FORCE BASE AZ 85309-5000

PLY TO
TN OF: 832CSG/DEVN (1Lt Monroe, 856-3621)

5 APR 1989

SUBJECT: Lower Gila South Resource Management Plan (Goldwater Amendment) and Environmental Assessment

TO: Carole K. Hamilton, Area Manager
Bureau of Land Management
Lower Gila Resource Area
2015 West Deer Valley Road
Phoenix, AZ 85027

1. The Natural Resources Management Section at Luke AFB has reviewed the Goldwater Amendment to the Lower Gila South Resource Management Plan. The plan and Environmental Assessment (EA) have previously been reviewed by our office in draft form (letter dated 15 Dec 1988), but we have additional comments and concerns that your office may wish to consider before the amendment and EA are approved.

2. Specific comments and concerns are attached. In general, we have the following major concerns:

8-1 a. The No Action Alternative as described in the plan amendment and EA may not be a true alternative of no action as intended by the Council on Environmental Quality regulations for implementing the National Environmental Policy Act of 1969.

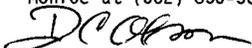
8-2 b. Our office is concerned that no contact has been initiated by the Bureau of Land Management to develop a Memorandum of Understanding, Habitat Management Plan, Cultural Resources Management Plan, Transportation Plan, Interagency Search and Rescue Action Plan, and Burro Capture and Removal Plan for the Goldwater Range. We are prepared to cooperate and actively participate in the development of these documents in a timely fashion.

8-3 c. Off-road vehicle racing on the Goldwater Range is inconsistent with the military mission and natural resources management policies established by the U.S. Air Force. We are concerned about the appropriateness of this proposed activity on the Goldwater Range and desert ecosystems.

3. We apologize for the delay in commenting on the Goldwater Amendment to the Lower Gila South Resource Management Plan. However, given the obvious interest that the U.S. Air Force has in Goldwater Range and the management

Readiness is our Profession

of its natural resources, we felt our comments and concerns should be voiced before the amendment and EA are approved. We would be more than happy to meet and discuss our concerns should you have any questions. If you need further information or have any questions, please contact Capt Dixon or 1Lt Monroe at (602) 856-3621.


DALE C. OLSON
Deputy Base Civil Engineer

1 Atch
Detailed Comments

- 8-1 | 1. Page 1. The Council on Environmental Quality (CEQ) regulations for implementing the National Environmental Policy Act (NEPA) of 1969 (40 CFR Ch V, 1502.14) direct federal agencies to rigorously explore and objectively evaluate all reasonable alternatives, including the alternative of no action. We question whether adopting the Luke Air Force Range (LAFR) Natural Resources Management Plan without modification as the No Action Alternative is a true alternative of no action as intended by NEPA and CEQ. We realize that a No Action Alternative in which the Bureau of Land Management (BLM) clearly describes the existing environment without any management action on its part, is contrary to the Military Lands Withdrawal Act of 1986 (Public Law 99-606). However, the EA should probably be written to reflect such a true No Action Alternative (which would obviously be eliminated from further study) with two alternatives: the Proposed Action as described (modified LAFR plan) and a third alternative (LAFR plan without modification).
- 8-2 | 2. Page 2. To date, we have received no contact from your office concerning the Memorandum of Understanding (MOU) which will outline the responsibilities of the various agencies involved with natural resources management on the Barry M. Goldwater Air Force Range. We suggest that this matter be acted upon to ensure that the MOU is developed and implemented in a timely fashion.
- 8-2 | 3. Pages 8-9. Again, we have received no contact from your office concerning the development of a comprehensive Habitat Management Plan (HMP). Our office is keenly interested in cooperating in this endeavor and is ready to do so at any time.
- 8-3 | 4. Page 11. We are also prepared to cooperate fully in the development of a Cultural Resources Management Plan (CRMP) for the Range.
- 8-3 | 5. Page 12. The development of a Transportation Plan for the range will require our participation as well, which we are fully prepared to offer.
- 8-3 | 6. Page 14. As stated on Page 13, no off-road travel by ORVs is allowed on the Range due to the military mission, security, and safety hazards. Commercial and competitive ORV activities, including intensive ORV use areas would be inconsistent with the military mission and natural resources management policies for the Range.
- 8-4 | a. It may be prudent to provide a definition of Special Recreation Management Areas (SRMA) Extensive Recreation Management Areas (ERMA), Areas of Critical Environmental Concern (ACEC) and other special management area designations used in the amendment.
- 8-4 | b. The permitting process currently used to authorize public use of the Range is coordinated among the U.S. Fish and Wildlife Service (USFWS), U.S. Air Force (USAF), and U.S. Marine Corps (USMC).
- 8-2 | 7. Page 15. The development of an action plan for interagency search and rescue responsibilities will also require our active participation.

- 8-5 a. We are unclear what the establishment of ERMAs on the western and eastern portions of the Range means to the military mission, as well as recreational use of the Range. In addition, boundaries for these areas are not identified. These statements are vague and should be clarified.
- 8-6 8. Page 16. How will the BLM enforce ORV regulations, and prohibit woodcutting on the Range? These tasks would obviously require several full-time BLM rangers to patrol the Range.
- 8-2 a. Have the plans for ACECs been developed? If they have, has the BLM prepared these plans in a manner consistent with the military mission of the Range? Our office would be very interested in reviewing these plans before implementation.
- 8-7 b. What are the existing management practices or projected land use trends that could damage the special or sensitive resource values of the areas identified for possible designation as ACECs?
- 8-4 9. Page 19. Definitions for management area designations should be provided.
10. Page 25. The USAF is full prepared to assist in the development of a burro capture and removal plan. We wish to expedite the removal of burros from the Range as soon as possible.
- 8-1 a. As previously mentioned, we question if incorporating the LAFR plan into the Lower Gila South Resource Management Plan is a true No Action Alternative. If management prescriptions and recommendations outlined in the LAFR plan are out-of-scope of BLM activities and responsibilities, then how could the BLM incorporate the LAFR plan without modification into the Lower Gila South Resource Management Plan? We suggest that the No Action Alternative be revised accordingly.
- 8-8 11. Pages 26-42. Cultural Resources, Outdoor Recreation use, and ACEC/Other Management Areas receive a greater amount of discussion than other resources. We realize that much of the information for these other resources can be found in the LAFR Plan, but not everyone reading this amendment may have access to the LAFR Plan. We suggest that these resources be described more thoroughly.
- 8-9 12. Page 27. No mention is made of Sanborn's long-nosed bat which was listed as an endangered species in October 1988, and is potentially found on the range.
13. Page 41. We strongly support the notion that all management direction of the Range be coordinated among the BLM, USAF, USMC, and USFWS.
- 8-10 If livestock grazing is predicted to decline around the Range, why expect continued encroachment if the BLM plans to fence areas where trespass livestock grazing is a problem? Is it likely that fencing in problem areas will not be effective in eliminating trespass cattle from the Range?
- 8-11 14. Page 42. It may be premature to assume that the USAF and USMC will accept management prescriptions that may restrict the military mission by which the Range is withdrawn.
- 8-12 15. Page 44. How will conflicts between desert bighorn sheep and feral burros and livestock be relieved? If trespass livestock grazing can be eliminated, these conflicts can be resolved. However, you previously stated that livestock grazing will continue to encroach upon the Range. These statements seem to be contradictory.
- 8-3 16. Page 47. Off-road-vehicle racing on the Range would be inconsistent with the military mission and natural resources management policies for the Range. The establishment of long-term ORU open or intensive use areas open to cross-country and off-road travel is counter to existing policies and regulations. We seriously question the appropriateness of this activity on the Range and desert ecosystems.
- 8-13 17. Pages 48-50. We question whether the effects of the proposed No Action Alternative were adequately evaluated. For example: 5 of the 6 recommendations for botanical resources in the LAFR Plan are adopted in the Proposed Action. Yet, the No Action Alternative, which would include the same recommendations plus one, results in an adverse impact because of less protection. Other inconsistencies are also evident in this section/
- 8-14 a. We strongly agree that trespass livestock grazing and feral burros are a problem on the Range, particularly near Gila Bend. However, the LAFR Plan also includes recommendations to eliminate trespass livestock and burros, which would not necessarily continue unchecked under the proposed No Action Alternative.
- 8-15 b. We seriously question if lost off-road riding and driving opportunities, which are unauthorized activities anyway, represent an adverse impact.
- 8-16 18. Page 51. Cipriano Pass is described as a developed recreation site in this section. On Page 47, the area is described as a campground and visitor service established to offer primitive camping and a concentrated visitor use area; and on Page 7, as a primitive campground and associated facilities. The intent of the Luke AFB 5-Year Outdoor Recreation Management Plan was to provide a primitive campground in the vicinity of Cipriano Pass. The inconsistencies in the description of this area in the amendment should be corrected.

Ms. Sandra Lynn Hickox

Phoenix, Arizona 85044

April 4, 1989

Ms. Carole Hamilton
Bureau of Land Management
2015 W. Deer Valley Rd.
Phoenix, AZ 85027

Dear Ms. Hamilton:

9-1

I just heard about the weekend trapping at the Goldwater Gunnery Range and am asking your bureau to stop all trapping until the matter of having traps checked daily can be settled. The six-day lapse which now occurs between Sunday evening and the next Saturday is unacceptable and currently against Arizona law.

I hope you will give this matter serious consideration.

Sincerely,

Sandra Hickox

Sandra Hickox



P.O. Box 43026 Tucson, Arizona 85733 (602) 883-9537

April 4, 1989

Ms. Carole Hamilton
Bureau of Land Management,
Lower Gila Resource Area
2015 W. Deer Valley Road
Phoenix, Arizona 85027

Dear Ms. Hamilton,

This letter is in regard to the upcoming re-negotiation of the BLM agreement for land use of the Goldwater Gunnery Range.

10-1

Our perspective on this matter comes from our concern about trapping animals on the land. As you know, the Arizona Game and Fish Department requires trappers to check their lines every 24 hours and we feel that the limited access to the range precludes the adherence to that rule. For that and other reasons, we're strongly requesting that BLM negotiate a lease that excludes trapping from the range.

We're opposed to all trapping and I hope you agree that protecting all of the animals on the range from trappers is a humane act on the part of BLM.

Sincerely yours,

Cary DiNardo

Cary DiNardo

Ms CAROLE HAMILTON
B.L.M. MANAGER
2015 W. DEER VALLEY RD
PHX, AZ 85027

11

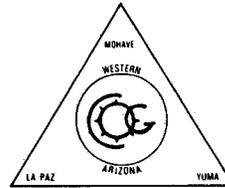
DEAR MS. HAMILTON,
IT HAS BEEN BROUGHT TO MY ATTENTION RECENTLY THAT THERE MAY BE SOME ILLEGAL ACTIVITY TAKING PLACE ON THE GILABENDO GUNNERY RANGE WITH REGARDS TO THE TRAPPING OF ANIMALS THERE.

IT IS MY UNDERSTANDING THAT THESE TRAPPERS ARE ONLY ALLOWED ON THE RANGE SATURDAYS AND SUNDAYS YET THE LAW STATES THEY MUST CHECK THEIR TRAPS EVERY DAY. WHAT GOES ON MONDAY THRU FRIDAY? COULD YOU INVESTIGATE THIS MATTER AND PROVIDE ME WITH ANY INFORMATION YOU MIGHT HAVE ON THIS SUBJECT? I APPRECIATE A REPLY AT YOUR EARLIEST CONVENIENCE.

VERY TRULY YOURS

Richard A. Smith

RICHARD A. SMITH



WESTERN ARIZONA
COUNCIL OF GOVERNMENTS

AREA OFFICE
206 N. 4th Street
Kingman, Arizona 86401
(602) 753-6247

MAIN OFFICE
1100 S. Maple Avenue
Yuma, Arizona 85364
(602) 782-1886

AREA OFFICE
1317 Joshua
Parker, Arizona 85344
(602) 669-9466

April 1, 1989

Ms. Carole K. Hamilton
US Department of Interior - BLM
2015 W. Deer Valley Road
Phoenix, Arizona 85027

Dear Ms. Hamilton;

I have reviewed the Executive Summary of the Luke Air Force Range Natural Resources Management Plan, and the Lower Gila South Resource Management Plan. Western Arizona Council of Governments is the designated 208 Water Quality Management Planning Agency for Western Arizona.

In reviewing these documents our particular interest is activity related to surface and groundwater quality.

- 12-1 | Historically little has been done, recorded, or planned to maintain the integrity of water resources within this area. A map of the area should be included in the RMP in the introduction.
- 12-2 | Continual reference to the LAFR Plan makes the RMP exceedingly difficult to read, with comprehension.

I am unable to determine what resources exist from these documents, thus any comments on proposed actions and their impacts are meaningless.

Some method of cutting through the maze of agencies and holding one entity responsible, must be established if a meaningful management plan, in fact, is to be implemented.

Sincerely,
William T. Riley
William Riley
Resources Planner

WTR/cen

12

To: BLM
 FROM BOB MCKNIGHT, ARIZONA ROAMERS SAND BUGGY CLUB

SUBJECT: ADMINISTERING GOLDWATER RANGE

1. VOLUNTEERS
 2. DISBURSED CAMPING
 3. PROVISIONS FOR AIR RECREATIONAL VEHICLES
 4. COMMUNICATIONS SITES, AMATEUR RADIO
 5. FIREARM USE, NON-HUNTING
 6. INFORMATION ON RECREATIONAL USE OF RANGE
- PS7. LICENSING OF ORVs

1. AFTER READING THE BLM PLAN FOR THE RANGE, IT APPEARS THAT THERE IS PROBABLY SEVERAL MAGNITUDES MORE WORK THAN THERE IS FUNDS. I WOULD SUGGEST THAT THE RANGE BE OPENED IN SECTIONS CONTINGENT ON THE SECTION BEING COMPLETED AS A USEABLE, MANAGEABLE AREA BEFORE IT IS OPENED. IN PLANNING A SECTION, MAKE PROVISION FOR AS MUCH AS POSSIBLE BEING DONE BY VOLUNTEERS. CONTACTING THE VARIOUS ORGANIZED GROUPS THAT WILL BE USING THE RANGE DURING THE PLANNING STAGE WILL HELP THE AGENCY DETERMINE THE EXTENT OF VOLUNTEERS AND THEIR CAPABILITIES. SOME GROUPS TO CONTACT MIGHT BE ORV CLUBS, HIKING CLUBS, ENVIRONMENTAL GROUPS, CIVIL AIR PATROL, EXPERIMENTAL AIRCRAFT ASSOCIATION CHAPTERS, AND I'M SURE THAT THERE ARE MANY MORE.

13-1

2. THE CONCEPT OF 50 FOOT SPACE ALONG THE ROAD FOR DISPERSED CAMPING NEEDS A LITTLE REFINEMENT. FOR A HIKER OR TWO THAT WILL JUST BE PARKING THEIR CAR AND THEN LEAVING THE ROAD, IT'S NOT TO DIFFICULT TO FIND A SPOT THAT CAN BE USED WITH LITTLE DAMAGE. AS THE GROUPS GET BIGGER AND THE STAY IS LONGER, I BELIEVE THAT A LITTLE MORE MANAGEMENT IS REQUIRED. WHILE MOST RESPONSIBLE GROUPS WILL LOOK FOR AN AREA THAT IS ALREADY CLEARED, THERE ARE MANY AREAS WHERE IT IS DIFFICULT TO LOCATED SUCH SPOTS. IF THE MAPS GAVE MORE DETAIL ON WHERE BLM WOULD PREFER THE DISPERSED CAMPING TO TAKE PLACE, I THINK THEY WOULD FIND THE PUBLIC COOPERATING IN MOST INSTANCES. BLM WOULD NOT NEED TO CLEAR IT OFF, JUST DESIGNATE THAT IT WAS A PREFERRED SITE.

13-2

3. AT THE PRESENT TIME, THE ARV IS NOT A BIG GROUP, BUT I BELIEVE THAT DESIGNATING A FEW SPOTS FOR THEIR GROUND ACTIVITY WOULD PROMOTE COOPERATION BETWEEN THE AIRMEN AND THE BLM. ALSO THEY COULD BE VERY HELPFUL IN PATROLLING THE AREA.

13-3

4. WHEN YOU DESIGNATE COMMUNICATION SITES, PLEASE MAKE PROVISION TO INSURE THAT AMATEUR REPEATERS DON'T GET LOCKED OFF THE SITE. THIS GROUP COULD BE VERY HELPFUL IN ASSISTING PATROL OF THE AREA.

5. FIREARM USE ON THE RANGE. A VERY CONTROVERSIAL ISSUE. PROBABLY SOME OF THE GUN CLUBS COULD COME UP WITH SOME VERY

WORKABLE SOLUTIONS TO THE PROBLEM. THERE ARE TWO TYPES OF FIREARM USERS THAT SCARE THE HELL OUT OF ME. THE ONE THAT MIXES ALCOHOL (SUBSTANCE ABUSE) AND GUNPOWDER AND THE ONE THAT JUST HIKES ACROSS THE DESERT SHOOTING AT WHATEVER HAPPENS TO MEET HIS FANCY. AS AN ORV OPERATOR, I HAVE NO PROBLEM WITH THE EXISTING ROADS AND TRAILS CONCEPT. I THINK THAT SOME RESTRAINT IS NEEDED ON FIREARMS, UNFORTUNATELY I CAN'T COME UP WITH A CONCEPT THAT IS BETWEEN A RANGE AND JUST HIKING ACROSS THE DESERT SHOOTING AT ANY AND EVERYTHING.

6. INFORMATION ON THE RECREATIONAL USE OF THE RANGE. IT SOUNDS LIKE THIS IS GOING TO HAVE TO BE ONE OF THE MOST DISCIPLINED RECREATIONAL AREAS IN THE STATE. I HOPE THAT THE BLM CAN ACCOMPLISH THE FEAT OF SELLING THE PUBLIC THAT DISCIPLINE IS IN THEIR BEST INTEREST AND THAT DISCIPLINED USE OF AN AREA IS NOT PROHIBITING THE USE OF AN AREA. TO THIS END, I THINK THAT INFORMATION OF THE AREA AND ITS USE SHOULD HAVE A HIGH PRIORITY. ONE OF THE BASIC SHORTCOMINGS HAS BEEN THE AVAILABILITY OF CURRENT, ACCURATE, AND INFORMATIVE MAPS. SIGNING THE AREA WITH VANDAL RESISTANT SIGNING IS IMPORTANT. IT WILL PROBABLY TAKE SEVERAL TRYS AT DESIGNING AN INFORMATIVE SIGN THAT WILL BE LEFT ALONE. WRITTEN BROCHURES, BOOKLETS, AND BOOKS ARE THE CONVENTIONAL WAY TO GET THE JOB DONE. I BELIEVE SOME CHARGE FOR THIS INFORMATION WILL HAVE TO BE MADE OR THEIR SIMPLY WILL NOT BE ENOUGH MONEY TO GET THE JOB DONE. I THINK YOU NEED TO EXPLORE THE POSSIBILITY OF PUTTING OUT VIDEO TAPES TO EDUCATE AND INFORM. TO CUT COSTS, PERHAPS SOME HIGH SCHOOL STUDENTS AND PERHAPS COLLEGE DRAMA CLASSES COULD BE SOLICITED. THERE ARE PRIVATE SCHOOLS THAT TEACH STUDENTS THE ART OF CINEMATOGRAPHY THAT MIGHT BE INTERESTED IN PRESENTING AN AREA. THE LOCAL TV STATIONS ARE ALWAYS OUT FIMING AREAS TO TRAVEL TO, PERHAPS THEY WOULD ALLOW THE DISTRIBUTION IF THEY WERE GIVEN CREDIT FOR THE CREATION. I THINK THE PUBLIC WOULD BE GLAD TO PREVIEW AN AREA BEFORE THEY ACTUALLY TRAVELED TO IT. THE TAPES COULD BE RENTED, SOLD, OR LOANED.

IF YOU NEED TO CONSULT ON THE SUBJECT OF VOLUNTEERS, I WOULD LIKE TO SUGGEST ST. LUKES HOSPITAL'S VOLUNTEER PROGRAM. FOR CONTROLLING LARGE GROUPS OF PEOPLE WITH A VOLUNTEER ORGANIZATION, I WOULD REFER YOU TO PAUL POBERENZY, WHO FOUNDED THE EXPERIMENTAL AIRCRAFT ASSOCIATION AT OSHKOSH, WISCONSIN. EVERY YEAR THEY PUT ON ONE OF THE BIGGEST AIRSHOWS IN THE WORLD. THE CROWD IS THE BEST BEHAVED. THE ORGANIZATION HAS TO BE SEEN TO BE APPRECIATED. AND THEY DO IT ALMOST TOTALLY WITH VOLUNTEERS.

THANKS FOR YOUR TIME

Bob McKnight
 BOB MCKNIGHT
 2942 N. 28TH ST.
 PHOENIX, ARIZONA 85016
 602-956-5935

4-4-89

13-4

P.S. 7. LICENSING OF ORV. I STRONGLY SUPPORT THE CONCEPT OF FINANCIAL RESPONSIBILITY FOR ONES ACTIONS. BUT I BELIEVE THAT BLM SHOULD ADDRESS THE PROBLEM OF FINANCIAL RESPONSIBILITY OF ALL USERS OF THE LAND AND NOT JUST A FEW USERS. THE REQUIREMENT TO LICENSE VEHICLES CARRIES WITH IT THE REQUIREMENT TO HAVE LIABILITY INSURANCE. LIABILITY INSURANCE IS BOTH DIFFICULT AND EXPENSIVE TO OBTAIN. IN MY OWN CASE (DRIVING A VW SAND RAIL WHICH IS EASY ON ME AND THE ROAD) I HAVE BEEN QUOTED A PRICE OF APPROX., \$800 A YEAR FOR A VEHICLE THAT WILL PROBABLY DRIVE ABOUT 1000 MILES PER YEAR ON BASICALLY DESERTED ROADS. ONE COULD ONLY ASSUME FROM THIS THAT DRIVING ON THESE ROADS WAS EXTREMELY DANGEROUS. I HAVE BEEN DRIVING THESE ROADS IN PICKUPS, JEEPS, SANDBUGGIES, AND MOTORCYCLES SINCE THE LATE 40s AND HAVE HAD NO PROBLEMS AND SEEN OR HEARD OF VERY FEW (NOT TALKING ABOUT 3 WHEEL ATCs). SO WHILE I STRONGLY SUPPORT FINANCIAL RESPONSIBILITY, INSURANCE MUST BE AVAILABLE AT A PRICE COMENSURATE WITH THE RISK OR THE REQUIREMENT FOR INSURANCE BECOMES A DE FACTO PROHIBITION AGAINST THE VERY VEHICLES THAT ARE DESIGNED TO PROTECT THE ENVIROMENT.



These photos
of wild and
domestic animals
tell the story
of hidden, secret
torture.

Ban the leghold TRAP!



**THIS
CRUELTY
must be
STOPPED**

Good Shepherd Foundation, Inc.
210 No. Auburn Street, Grass Valley, CA 95945

DEAR CAROL HAMILTON;

Please make sure that
the CRUEL TRAPPING OF
ANIMALS AT "BARRY GOLDWATER
GUNNERY RANGE" IS BANNED.
It is GRUESOME AND BARBARIC. Sincerely,
Flavia S.

John Sanford
3744 N. 12th St.
Phoenix, AZ 85014

Carole Hamilton
Manager, BLM
Lower Gila Resource Area
2015 W. Deer Valley Rd.
Phoenix, AZ 85027

Dear Ms. Hamilton,

15-1 | It has recently come to my attention that Luke AFB allows week-end trapping on the Barry Goldwater Gunnery Range. You are probably aware that the law requires trappers to check their traps every other day. I find it difficult to believe that trappers are setting their traps on Saturday and either springing them or retrieving them on Sunday. And so, I am asking you to look into this matter and perhaps call a public hearing on the subject.

I would appreciate being informed of any developments regarding this issue. Thankyou.

Sincerely,

John Sanford

John Sanford

Dear Carole

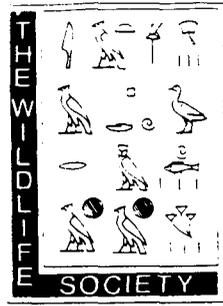
Am writing to you my opinion on the trapping that is now going on in the Goldwater Gunnery Range. I am against it 100%!

Trapping is possibly the ~~most~~ cruelist most punishing form of animal death we have

The fact that in 1989 it still occurs is an abomination

16-1 | The fact that it occurs on the Gunnery range is illegal! The law states that all traps must be tended daily

THE WILDLIFE SOCIETY, ARIZONA CHAPTER
P.O. Box 11135
Phoenix, AZ 85017



April 6, 1989

16-1

That does not occur in the
summer range or no one is
allowed during the week-days.
Trappers leave their traps there
all week long.

I urge you to prohibit this
sort commentary on news abuse
of nature.

Sincerely yours
Jeremy Lewis

JEREMY M. LEWIS
PHOENIX, AZ 85008

Carole K. Hamilton, Area Manager
Lower Gila Resource Area
Bureau of Land Management
Phoenix District Office
2015 W. Deer Valley Road
Phoenix, Arizona 85027

Dear Ms. Hamilton:

The Arizona Chapter of the Wildlife Society is a group of professional biologists concerned with the proper management of fish, wildlife, and plant communities in Arizona. We appreciate this opportunity to comment on the BLM Lower Gila South RMP, Goldwater Amendment. We applaud your agencies commitment and recognition to the needs of an aggressive management program for these unique resources within the Barry Goldwater Range (BGR).

Upon review of the BGR, our Society concurs with the analysis that the recommended areas for ACEC designation have significant biological resource qualities and meet the standards for inclusion. We would also support the proposed action to eliminate burros on the BGR. This would be beneficial to both the habitat and the wildlife that exists in the area.

17-1

However, we have a concern that floral T/E and candidate species are not getting serious consideration in the evaluation process. BGR has an exceptional vegetative resource which deserves an aggressive management approach. We would recommend a comprehensive floristic survey to obtain proper inventories to provide information to guiding land use decisions. We would solicit that to conduct a survey only when it is necessary to comply with NEPA standards, may result in valuable habitat loss to undocumented areas that may be vulnerable to uses not requiring NEPA evaluation. This would also assist your agency in addressing "Descriptions of the Affected Environment". We feel that the single statement on page 27, "Unique and rare plants do grow in the Yuma and Mohawk Dune regions" lacks depth of understanding in this area and deserves further consideration.

17-2

Another area of concern was a point also made on page 27 under Wildlife. There are species of special concern on the BGR and a blanket statement that "too little data are available to assess environmental consequences at this time." should be an indicator that since these species are of special concern and priority status, deserving serious consideration as part of the affected environment.

Thank you for the opportunity to comment on this plan.

Sincerely,



Thomas K. Ohmart, Chairman
Conservation Affairs Committee

April 4, 1989

Carole Hamilton
BLM Manager
Bureau of Land Management
Lower Gila Resource Area
2015 West Deer Valley Road
Phoenix, AZ 85027

Dear Ms. Hamilton:

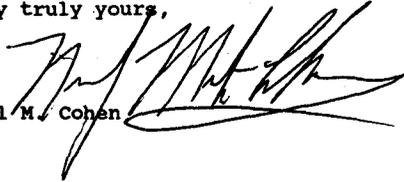
I urge you to consider the trapping issue on the Goldwater Gunnery Range. My recommendation would be for its elimination.

18-1

I doubt that there is such a thing as "weekend trapping". More likely, traps are set and left unchecked until the following weekend. This is beyond the bounds of humanity. Additionally, animals not targeted by trappers could be caught and killed needlessly.

It is my hope that you, at the very least, have a public hearing to gain more information and to understand the sentiments of the State's residents.

Very truly yours,



Neil M. Cohen

April 4, 1989

Carole,

19-1

It has been brought to my attention that the Trapping being done at the Barry Goldwater Gunnery Range is only allowed on the weekends. Since Trappers are required to check their traps every day, how is this enforced by the BLM?

I would hereby request that a Public hearing be initiated as soon as possible, to investigate this situation.

Thank You,

Richard M. Mason

Richard M. Mason

Dear Ms. Hamilton,

20-1

I AM WRITING YOU CONCERNING TRAPPING ON THE BARRY GOLDWATER GUNNER RANGE. I UNDERSTAND THAT YOU HAVE SOME CONTROL OVER THIS RANGE. MY MAIN CONCERN, AS I UNDERSTAND THE POLICY, IS THAT TRAPPERS HAVE ACCESS TO THE RANGE ON WEEK-ENDS TO SET TRAPS, BUT NO ACCESS DURING THE WEEK TO CHECK THESE TRAPS. IF I AM CORRECT IN THIS ASSUMPTION THEN THIS APPEARS TO ME TO BE BEYOND HUMANE TREATMENT FOR THE ANIMALS. THEY MAY BE TRAPPED AND REMAIN SO OVER A PERIOD OF 5 DAYS. THIS WOULD BE UNCONSCIONABLE AND DEFINITELY INHUMANE. IF THERE IS ANYTHING YOU CAN DO TO PREVENT THIS UNACCEPTABLE ACTION, I WOULD APPRECIATE IT. IF THIS IS NOT THE CASE AS I UNDERSTAND IT THEN I WOULD APPRECIATE BEING CORRECTED.

Thank you
Sincerely
Ed Weil

Phoenix, AZ 85008

Commissioners:

RANCES W. WERNER, Tucson, Chairman
 THOMAS G. WOODS, JR., Phoenix
 HILLIP W. ASHGROFT, Eagar
 ORDON K. WHITING, Kingdyke
 BARRY D. ADAMS, Bullhead City

Director
 ANNE L. SHROUFE



ARIZONA GAME & FISH DEPARTMENT

2222 West Greenway Road Phoenix, Arizona 85023 942-3000

April 7, 1989

SUSAN

COMMUNICATIONS

April 4, 1989

Carole Hamilton
 BLM Manager
 Bureau of Land Management
 Lower Gila Resource Area
 2015 West Deer Valley Road
 Phoenix, AZ 85027

Dear Ms. Hamilton:

It has come to my attention that questionable trapping practices are being allowed on the Goldwater Gunnery Range. It is my understanding that trapping is allowed only on the weekends.

Reviewing the trapping industry and their practices suggests that there is no such thing as "weekend trapping". More likely, the traps are set and checked only on the weekends. If this is the case, animals could be left to die slowly and painfully. Additionally, other animals who might wander into the traps would be left to die without monitoring or concern. Including protected and potentially endangered species. Or lost pets.

I hope that you will consider a public hearing on this issue. My ultimate goal would be to see the elimination of all trapping on this BLM land and another use for the acreage.

If I can be of any help with this effort, please feel free to call upon me.

Very truly yours,

Susan J. Zeloznicki

21-1

Ms. Carole K. Hamilton, Area Manager
 Bureau of Land Management
 Lower Gila Resource Area
 2015 West Deer Valley Road
 Phoenix, Arizona 85027

Dear Ms. Hamilton:

Re: "Lower Gila South Resource Management Plan (Goldwater Amendment)"

The Department has reviewed the "Lower Gila South Resource Management Plan (Goldwater Amendment)", and we respectfully submit the following comments and concerns.

General Comments

The Department believes the management plan amendment reflects a very positive attitude and recognition of the special biological values of the Barry M. Goldwater Range (BGR). Furthermore, it is understood that the management of the BGR is constrained by the requirements of military operations and Public Law 99-606.

The designation of ACECs and other special management areas to enhance resource protection is generally supported by the Department, although certain management prescriptions are of concern. The management objectives and actions outlined for inclusion into the HMP and Transportation Plan will provide the foundation for sound resource management. Especially supported is the recognized need for comprehensive inventories of the biological resources on the BGR.

A major issue we perceive, however, is public access for hunting and trapping. On December 4, 1987 the Arizona Game and Fish Commission adopted the following:

"It is the policy of the Arizona Game and Fish Commission to place high priority on preserving existing access to public and state trust lands for hunting and fishing, and to place high priority on improving access to such lands in areas of the state where access to such lands is currently difficult or non-existent. For purposes of this policy, the Commission defines the term "public and state trust lands" as those federal public and reserved lands,

state trust lands, and other lands within the State of Arizona, owned, controlled or managed by the United States, the State of Arizona, agencies or political subdivisions thereof upon which hunting and fishing are lawful."

- 22-1** | Currently, the hunting and trapping public utilize many more roads than are indicated as "Recreation Corridors" on Map 2-1. Licensed trappers frequently obtain range pass clearance through Gila Bend Air Force Auxiliary Field to trap on the eastern portion of the BGR in the vicinity of the Sand Tank and Saucedo Mountains. Trappers coordinate with Fleet Liaison at Marine Corps Air Station in Yuma and lawfully trap the Marine controlled portion of the Range west of the Mohawk Mountains. Bighorn sheep hunters obtain appropriate clearance and hunt mountain ranges throughout the BGR every year. There are existing roads in many areas of the Range which have been traditionally used by hunters and trappers, as well as military and agency personnel, with no demonstrable impact to wildlife, such as the road from Tacna to the Copper Mountains, the road between the Mohawk Dunes and the Mohawk Mountains, and the road to Dripping Springs in the Gila Mountains from El Camino del Diablo.

We hope that the issue of public access can be adequately resolved before finalization of the subject plan amendment.

- 22-2** | Another general concern is that the subject plan amendment does not present or analyze a range of alternatives, as do most Resource Management Plans. We view this as a serious deficiency. We believe that the plan amendment should analyze alternative ACEC boundaries and management prescriptions based on the Bureau's "Areas of Critical Environmental Concern Policy and Procedures Guidelines", which recognize and provide for multiple-use management including hunting, trapping, and camping.

Specific Comments by Page

Page 1, Paragraph 5

- 22-3** | To say that "The No Action alternative would use the LAFR plan without modification" is questionable. There was no public involvement during the development of the LAFR plan and very minimal review; it is very questionable whether the LAFR plan could comply with the National Environmental Policy Act or the Federal Land Policy and Management Act.

Page 2, Paragraph 1

- 22-4** | Reference to the Mohave Desert is somewhat inappropriate. Though there are species found in the planning unit from both the Sonoran and Mohave deserts, a more accurate generalization of this desert region would be: The vegetation is that of the Lower Colorado Valley subdivision of Sonoran desertscrub with an interspersed of the Arizona Upland subdivision (Brown, D. (ed)

- 22-4** | 1982. Biotic communities of the American southwest--United States and Mexico). The vegetation is typically characterized by broad valleys of creosotebush and white bursage. The giant saguaro cactus and paloverde and ironwood trees are often found on alluvial fans and/or mountain slopes. Also present are...

Page 5, Paragraph 9

- 22-5** | There are water sources on the BGR for which the Arizona Game and Fish Department already holds a Certificate of Water Right. We recommend close coordination with our Department before BLM files for water rights on developed wildlife water sources.

Page 7, Botanical Resources

- 22-6** | By definition, a "comprehensive floristic survey for T/E and candidate species" would not be restricted to only those surveys of areas prior to development so to meet NEPA compliance (T/E clearances). Considering the unique vegetation resources included on the BGR, a truly comprehensive inventory and monitoring of special status plant species should be initiated as outlined for wildlife species on page 8 (bottom of page).

Pages 8 and 9, Special Management Actions

The Department supports BLM's interest to establish comprehensive inventories and monitoring for wildlife species, and wishes to be a cooperator in this action.

- 22-7** | We believe any plans to fence areas must be carefully reviewed, in order that a worse problem is not created by interrupting wildlife movement, especially for Sonoran pronghorn. Furthermore, fences constructed should be to big game specifications.

The Department is supportive of the cooperative effort to develop a comprehensive HMP to enhance and maintain wildlife and wildlife habitat within the non-refuge portion of the BGR.

Page 12, Road Network

The Department supports a cooperative effort to develop a transportation plan for the non-refuge portion of the BGR.

Page 14, Paragraph 3

- 22-8** | What is BLM's interpretation of "commercial hunting" in this paragraph? We believe this term needs to be defined.

Page 15, Paragraph 4

- 22-9** | What studies have been done to document the need for a primitive campground in the Cipriano Pass area? Have the impacts of such a campground to movement of bighorn sheep been addressed? We

22-9 | believe a thorough analysis of this potential conflict should be done.

Page 17, Tinajas Altas Mountains ACEC

22-10 | To close the ACEC to vehicle-based or self-contained camping implies that such camping has a greater impact than tent camping; this philosophy is hard to accept. We would agree that long-term camping with self-contained vehicles is not desirable, however.

22-11 | We seriously question the prohibition of open camp fires on the ACEC where dead and down wood is used. Current bighorn sheep management in the Tinajas Altas provides for limited sport hunting. Since the bighorn hunt normally is held in December, an open camp fire is often desirable, especially if camped "on the mountain." The Department does not recognize a threat to the remaining ironwood tree population by such use.

Page 18, Mohawk Mountains and Sand Dunes ACEC

22-12 | We view the limitation on camping to within 50 feet of designated roads as too restrictive. The Kofa National Wildlife Refuge limits camping to within 300 feet of roads, which puts the camp away from the road dust. Such a restriction would be more reasonable.

Again, we question the prohibition of open camp fires on the ACEC (the Mohawk Mountains portion) where dead and down wood is used. The Mohawks are also hunted for bighorn sheep, and a campfire is a desirable and satisfying aspect of the recreational experience.

Page 21, The Camino del Diablo Historic Trail

22-13 | We recommend the deletion of the word "recreational" from the following statement: "prohibit all recreational firewood collection...". The implication is that commercial firewood collection would be permitted.

Page 26, Land Uses

The other non-military land uses could all be classified as recreational uses, rather than in addition to recreation.

Also, sport hunting is regulated on the BGR; however, little information is available on small game hunter use/participation on the BGR.

Page 27, Botanical Resources

Reference to Mohave Desert vegetation is inappropriate (see comments for page 2).

Given the unique habitats/vegetation communities and variety of unique and rare plant species present on the BGR, the description

22-4 | of the "Affected Environment" should include a more detailed description than "Unique and rare plants do grow in the Yuma and Mohawk dune regions."

Page 27, Wildlife

By State definition (Title 17-101, A.R.S.), "antelope" are "game mammals" and "big game"; however, there is no open season on the Sonoran pronghorn antelope subspecies.

No "detailed wildlife resource information on the BGR is in the LAFR Plan."

The observation that "too little data are available" for a number of species of special concern is very true. However, a lack of information does not relinquish the responsibility to address these species and consider them as part of the affected environment. Several additional species should be addressed, due to their priority status, distribution on the BGR, and especially, due to the lack of data. These species include:

Sanborn's long-nosed bat (Leptonycteris sanborni). This species is Listed Endangered under the Endangered Species Act and is also included as State Endangered on the list of Threatened Native Wildlife in Arizona (1988). This bat has not been included on any list of special status species found in this RMP amendment. It is known to occur in the vicinity of the eastern portion of the BGR. The very lack of information on this high priority species requires special consideration in the planning process.

22-14

Peregrine falcon (Falco peregrinus). A Federal Endangered species and a State Candidate (TNW). Though little is known about this raptor on the BGR, identification of potential nesting habitat on or near the BGR should be identified in the planning process (i.e. Growler Mountains immediately adjacent to the planning area).

Colorado desert fringe-toed lizard (Uma notata rufopunctata). This lizard is included as both a State (TNW) and Federal (1989 NOR) Candidate species. This species is found in and in association with dune habitats on the western portion of the BGR. Adequate information is available on the distribution and ecology of this species for specific consideration in this plan.

Mountain Lion. Based on Hoffmeister (Mammals of Arizona, 1986), two subspecies of the mountain lion are found on the BGR, including the Yuma puma (Felis concolor browni), which is listed as State Endangered (TNW 1988) and as a Federal Candidate. This situation should be addressed in the planning documentation.

Without some explanation, we question the basis for the statement that there would not be significant effects to javelina from any alternative.

Page 27, Sonoran Pronghorn

22-15 The statement that there are no known opportunities for habitat expansion is misleading. Some habitat is used year round and some only seasonally. There are probably opportunities to make year-round habitat out of seasonally used areas with the addition of free water. It is doubtful that there is sufficient information or studies to support the statement.

Page 27, Flat-tailed Horned Lizard

22-16 The habitat of the flat-tailed horned lizard is somewhat misrepresented. This lizard is not found directly on sand dune habitats. Deleting "dune areas" from the habitat description will improve the narrative. The distribution of this lizard on the BGR would be more accurately described as west of the Gila-Tinajas Altas mountains. If the calculation of acres of potential flat-tail habitat include sand dunes, the area is overestimated.

22-17 The statement that there are "no known opportunities for habitat expansion" is confusing. What is being addressed--the expansion of appropriate habitat, the enhancement of occupied habitat, or the dispersal into appropriate but currently unoccupied habitat? Given both the general lack of area-specific data and explicit definition, it is suggested that this and all references (including all other species) to "opportunities for habitat expansion" be deleted.

Page 28, Paragraph 5

We believe "physiology" should be physiography.

Page 35, Last Paragraph

We recommend removing Sonoran pronghorn from the list of species inhabiting the dune and/or mountain habitats of the Mohawk ACEC. However, the later statement is correct in that the southern end of this area (including the alluvial slopes around the east side of the mountains) provides potential range for this animal.

22-13 Fringe-toed lizards have been recorded east of the Mohawk dunes. An historic record (1950s) exists from dune habitats at Dateland (apparently this was prior to the stabilization of the dunes at Dateland by exotic vegetation).

Page 36, Paragraph 4

The fringe-toed lizard is a State Candidate species and the bighorn sheep is no longer included as State listed on the list of Threatened Native Wildlife in Arizona (1988).

Page 36, Last Paragraph

The Department concurs with the analysis that the Mohawk Mountains and Dunes have significant biological resource

qualities deserving of ACEC designation.

Page 38, Paragraph 5

22-13 The statement that "Habitat is provided to the state listed endangered desert bighorn sheep" is misleading. The desert bighorn sheep is not now state listed in Arizona and never was listed as endangered. Management actions, such as water development on the ground, have improved the habitat of desert bighorn in many areas.

Page 38, Last Paragraph

The Department concurs with the analysis that the Tinajas Altas have significant biological resource qualities deserving of ACEC designation.

Page 40, Paragraph 5

22-13 Though the flat-tailed horned lizard is associated with sandy soil habitats, it is not correctly stated that this species is found in "dune environments."

Page 41, Paragraph 2

22-13 On the 1989 Notice of review, the flat-tailed horned lizard is included in Category 1 and the Colorado desert fringe-toed lizard is included in Category 2. The flat-tail is a State Threatened and the fringe-toed lizard a State Candidate species (TNW 1988).

Page 41, Paragraph 5

The Department concurs with the analysis that the Yuma Sand Dunes and Gran Desierto Dunes have significant biological resource qualities deserving of ACEC designation.

The Yuma Desert and Sand Dune Habitat Management Area (page 19) is directly west of the Yuma Dunes ACEC. Many of the same resource values that are present on the ACEC are also present in the non-ACEC special management area, including high quality flat-tailed horned lizard habitat. It is important to recognize that this lizard is a high priority species, and that the habitat present on the BGR constitutes virtually all the "protectable" habitat for this lizard in Arizona. However, the Department recognizes that there have been numerous impacts (civilian and military) to this area which have compromised its appropriateness as an ACEC. Therefore, designating this area as a special management area appears to be a prudent alternative. The management goals and guidelines for this area (page 19-20) provide the latitude to emphasize flat-tailed horned lizard habitat management.

Page 43, Sonoran Pronghorn

22-18 The acreage estimate for "protected Sonoran pronghorn habitat" on the Mohawk ACEC appears to include dune habitat. It is not

April 7, 1989

23



SIERRA CLUB

Grand Canyon Chapter - Arizona
RINCON GROUP

Paul W. Huddy
821 N. Treat Ave.
Tucson, AZ 85716
April 5, 1989

22-18| expected that pronghorn will utilize dune (loose sand) habitats, and this figure should be adjusted accordingly.

Page 44, Flat-tailed Horned Lizard

22-13| The flat-tail is not found in the "dune community." Acreage estimates of protected habitat and habitat recovery should be adjusted accordingly.

Page 46, Last Paragraph

Reference is made to an "active interpretation program", explaining the resource values of the BGR (additional reference is made throughout the plan to provide various types of information materials to different user groups). It is further suggested, that some type of brochure be developed explaining the very harsh but fragile ecological setting of BGR and highlight several of the special species on BGR. This brochure can be made available to the public, but especially to military personnel. With the high turn over of military personnel, and many who have never been in the desert, some type of environmental education material may help instill a deeper appreciation of the BGR desert habitats and result in an enhanced habitat management.

22-19| In summary, the Department appreciates the opportunity to review this plan amendment and to provide critical comment. Our agency continues to have a strong interest in the natural resources on the BGR, and we sincerely desire to be a part of the cooperative effort to wisely manage these resources. We would strongly encourage the Bureau to expedite the development of a new MOU that would formally establish the relationship of the various cooperators in this endeavor.

Sincerely,

Duane L. Shroufe
Duane L. Shroufe
Director

DLS:RKW:lk1

cc: Larry Voyles, Supervisor, Yuma Regional Office
Wildlife Management Division
Arizona State Clearinghouse, AZ 89-80-0006

Phoenix District Office
U. S. Bureau of Land Management
2015 W. Deer Valley Road
Phoenix, AZ 85027

Dear Sirs:

The Rincon Group of the Sierra Club would like to take this opportunity to comment on the proposed amendment to the Lower Gila South Resource Management Plan (RMP) for the Barry M. Goldwater Air Force Range (BGR). Although the proposed action contains many good recommendations, we are very concerned about several proposals that we feel are inconsistent with BLM regulations and with the protection of the environmental resources in question.

23-1| Principal among these is the proposal relating to "commercial and competitive ORV activities (p 14), "ORV racing" (p 47) and establishment of "intensive ORV use areas ... with few restrictions" (p 14). This clearly conflicts with other stated management objectives, e.g.

- o "give high priority to protecting vegetation from disturbance during any land-based activities" (p 7)
- o "ensure the protection of wildlife habitats" (p 8).
- o "designate the BGR as a limited ORV use area, with all vehicles restricted to designated roads and trails" (p 13)
- o "actively enforce all off-road vehicle and public access requirements and regulations" (p 15).

Considering the nature and importance of the resource, this is hardly an appropriate place for ORVs.

As acknowledged on page 2 of the document,

The BGR contains some of the nation's unique and well-preserved native desert.

This surely must be the guiding concept in any proper management of this highly vulnerable and fragile land. It would therefore be expected that the primary goal of the BLM would be the continued preservation of this unique and valuable public resource. ORVs being a direct threat to that, we strongly object to such proposals. There are certainly other locations more suitable for ORV activity.

23-2| A second item of concern is the proposal to "develop a primitive campground and associated facilities near Cipriano Pass" (p 15). As the major pass in that range, this is certainly an important wildlife corridor. Plugging that up with a campground cannot help but have

23-2

deleterious effects on wildlife. It will also encourage more vehicular traffic in the area and to the West of the Gila Mountains, under the Marine Corps flight run-in lines for live-fire targets. The consequences of these conflicting activities could be serious. If the intent of this proposal is to move camping away from the sensitive, important and overused Tinajas Altas area, then it is certainly laudable, but we strongly urge selection of a better location.

This also illustrates some of the inadequacies of the section on "Environmental Consequences," which makes no mention of the great damage that can be caused by ORVs to such a dry, fragile desert environment. This section deserves much more consideration.

In other surroundings, any part of the region under consideration would be worthy of ACEC designation. We hope that it will all be managed with awareness and appreciation for that. That the Tinajas Altas area is especially critical is clear. However, we are concerned that the original area proposed for the ACEC has been reduced to 56,000 acres and feel that other, more constructive approaches should be used in dealing with the excluded acreage. This is an important opportunity for the BLM to work cooperatively with military authorities to develop positive management and use policies that will be good for not only the land in question but other such land in similar circumstances. We urge you to address the issue in this spirit.

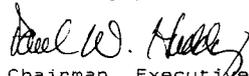
23-3

Finally, we believe that the continued proliferation of man-made water sources should be seriously researched and evaluated before any more of this is allowed. The unstated purpose of this seems to be to raise the population of bighorn sheep to artificially high levels to support expanded hunting. As a result, the bighorn sheep population is said to have increased from 50 to over 500 in the past fifty years. Have there been any substantive scientific studies to examine such basic issues as the appropriate carrying capacity of the range, other factors affecting bighorn populations, the effects of larger populations on other limited resources such as forage, as well as other native flora and fauna, and the effects of greater water availability on other wildlife populations? For instance, will more water attract other large ungulates to the detriment of the bighorns? How does this affect the special Sonoran pronghorn situation? These and many more questions should be thoroughly analyzed before any more water sources are created.

In closing, we feel that an outstanding natural area of such unique importance merits more serious consideration than is reflected in this document. The Sierra Club membership includes quite a few individuals who are very familiar with the BGR and adjacent lands and fields of knowledge important to their management. We would be pleased to work with the BLM in preserving and protecting this precious public heritage.

We appreciate the opportunity to comment on this document and look forward to seeing the modifications necessary for the BLM to provide real, substantive protection to this "unique and well-preserved native desert." We would appreciate it if you would advise us of the next steps in the development of your RMP and include us in this and other activities.

Sincerely yours,



Chairman, Executive Committee



THE UNIVERSITY OF ARIZONA

TUCSON, ARIZONA 85721

COLLEGE OF AGRICULTURE

SCHOOL OF RENEWABLE NATURAL RESOURCES
325 BIOLOGICAL SCIENCES EAST BUILDING

April 7, 1989

Carole K. Hamilton
Area Manager
Lower Gila Resource Area
Bureau of Land Management
Phoenix District Office
2015 West Deer Valley Road
Phoenix, AZ 85027

Dear Manager Hamilton:

The following comments refer to the Lower Gila South Resource Management Plan (Goldwater Amendment), and are in compliance with the public review period for the above document.

The document is designed, according to your letter of introduction, to serve both as a management plan and as an environmental assessment. Review of this report shows the planning effort to be inadequate in both areas. The RMP and EA have major inconsistencies and fail to recognize the highly complex nature of the BGR. The document further demonstrates that the authors of the plan have limited knowledge of the area and do not fully understand the importance of close interagency interaction, the significance of the international border lands, or the critical need for developing a strong data base for competent resource decision making.

It is clearly disappointing that this document is offered as a comprehensive, informed, and coordinated decision making program for the BGR. Outlined below are a few general and specific points that represent our concerns.

24-1

1. The document frequently states that a certain resource based action is "...outside the scope of this amendment". This phrase appears to be a convenient justification for ignoring or not dealing with important resource management issues.

- 24-2 | 2. There is no indication in the amendment as to what happens to public review comments, and if or when a revised BGR plan will be available for a second round of public comment.

Land Uses

- 24-3 | 3. The BGR amendment does not incorporate certain LAFR recommendations. Specifically, on page 13 of the amendment, LAFR recommendations 3-5, 3-7, and 3-11 have been eliminated. Rationale for eliminating these recommendations offered in the amendment states that these proposals "are addressed under other sections of the plan". Review of the amendment does not show adequate treatment of these recommendations elsewhere. Further expansion and clarification is needed.

Water Use

- 24-4 | 4. LAFR recommendations 5-3 and 5-8 were eliminated because they are "...outside the scope of BLM activities". Proactive resource management would clearly incorporate these proposals into the BLM management scheme.

Wildlife

- 24-5 | 5. On page 8 of the amendment, under the heading Specific Management Action, the BLM proposes to develop and "improve water resources for certain desert wildlife, including Sonoran Pronghorn Antelope". There is considerable disagreement among wildlife biologists and wildlife researchers as to the need for developing water resources for Sonoran Pronghorn. Data do not exist that demonstrate that this species requires free and open water sources. The BGR amendment would be scientifically inaccurate to suggest this requirement. Page 27 of the amendment, though, states that "the pronghorn require free, unconfined access to perennial water sources". Until scientific, well-founded evidence of such a requirement is available, the BLM should refrain from endorsing this concept.

- 24-6 | 6. LAFR recommendation 8-2 has been eliminated from the proposed action. The justification is based on a vague statement suggesting "...normal coordination between the BLM, USFWS, and AGFD". It is unclear as to what "normal coordination" has to do with establishing the taxonomic validity and distribution of the Yuma Puma (Felis concolor browni). This recommendation should not be eliminated.

Off Road Vehicle Use Management

- 24-7 | 7. Treatment of this issue in the BGR amendment has perhaps the greatest inconsistency. On one hand the Range would be designated as a limited use area with ORV travel restricted to designated roads and trails; protection of the resource, public safety, and military missions and security being the constraining factors. On the other hand, the BLM would provide special permits for competitive ORV activities, establish intensive ORV use areas, and thereby promote cross country ORV travel. Further, the EA portion of the amendment does not thoroughly address the impacts of such use and the attempt is woefully inadequate. Open, unrestricted, and crosscountry ORV travel is inappropriate for the Range and would severely impact the fragile desert ecosystem and cultural resources.

Outdoor Recreation Use

- 24-8 | 8. The BGR amendment proposes to develop a Cipriano Pass primitive camping area and provide a concentrated visitor use area. These two concepts seem incompatible with resource protection. Cipriano Pass is in essence the only open corridor to the west of the Tinajas Altas and Gila Mountains. This area may indeed be a critical wildlife corridor that would be greatly affected by concentrated recreation use. We support elimination of camping at Tinajas Altas but find Cipriano Pass to be an unsuitable substitute.
9. In addition, focusing recreation activities at Cipriano Pass would funnel recreation use to the west portion of the Range where the Yuma USMC conducts live fire activity. Clearly, this action would place the health and safety of the users in jeopardy.

Other Management Areas

- 24-9 | 10. On page 21 of the Amendment, BLM proposes to "design and erect additional overhead powerline facilities...". Why is this action within the scope of the amendment while other resource issues identified above are not?

The above comments reflect but a few of our concerns regarding the BGR amendment plan. We entreat you to consider the BGR document as a beginning step in writing a truly comprehensive plan representing elemental consideration for an EA. The document as it stands does not meet appropriate standards for multiple use resource management or environmental assessment.

In the spirit of offering our comments for the protection of the natural and cultural resources of the Range, we express our appreciation for the opportunity to review this document. Please inform us of the planned next step by the BLM regarding the proposed amendment document.

Yuma, AZ 85364
April 7, 1989

Sincerely,

Stanley K. Brickler Brock M. Tunnicliff
Stanley K. Brickler, Ph.D. Brock M. Tunnicliff, Ph.D.

Carole K. Hamilton, Manager
Lower Gila Resource Area
BLM, Phoenix, Dist. Off.
2015 West Deer Valley Road
Phoenix, AZ 85027

Re: Lower Gila South, Resource Management Plan
GOLDWATER AMEMDMENT

Comments about the subject Plan Amendment and Environmental Assessment will be brief.

25-1 More hearings should be held to explain the Amendment and allow public response for more public acceptance or resolution of conflicting viewpoints. The Act says to have a "Plan" by November 6, 1989 - you did that, now let's get it accepted by those who will use or not use and manage or not manage the resources.

Trade the State Land on Goldwater Range for BLM holdings elsewhere.

25-2 Road closures will prevent access by both the public and managing agencies. This will prevent sustaining wildlife resources and recreation opportunities. Not a welcome action in a largely Federal owned area. (Yuma County appx 12% private land.)

25-3 Considerable discussion and clarification is needed in regard to addition of the portion West of the Cabeza Prieta NWR to the Refuge. This should definitely be presented to the public in hearings held in Yuma, Maricopa and Pima Counties.

REMOVE ALL WILD HORSES AND BURROS FROM ALL THE RANGE.

These comments are not as comprehensive as they should be, but there has been limited exposure to the public and not enough time to review the information. Perhaps someone from the Yuma BLM District Office could convey the message.

If you have any questions or want further information, please let me know. Also, if hearings are to be held, please advise.

John F. Colvin, Jr.
John F. Colvin, Jr.
Retired

cc: Sen. John McCain
Sen. Dennis DeConcini
Rep. Bob Stump
Rep. Morris Udall
Dave Crist, Chm., Yuma NRC

April 6, 1989

Ms. Carole K. Hamilton, Area Manager
Lower Gila Resource Area
Bureau of Land Management
2015 West Deer Valley Road
Phoenix, AZ 85027

Dear Ms Hamilton,

Enclosed are the comments of Yuma Audubon Society on the Goldwater Amendment to the Lower Gila South Resource Management Plan.

Page 2, line 6: Delete "Mohave".

26-1 | Page 4, item 3-4: If purchase of private lands is not possible, what about exchange, especially where resource values are high?

Page 5, Water Resources Management Objective: Considering that water is probably a limiting factor for some fauna and flora, we suggest the objective be rewritten to say, "Conserve water resources to optimize . . ."

26-2 | Page 5, 1st Management Action: We suggest prohibiting groundwater development in ACECs, management areas, SNAs, and other environmentally sensitive areas unless absolutely needed for military purposes.

26-3 | Page 13, 3rd Management Action: The Tinajas Altas Road (just east of the Gila-Tinajas Altas Ranges) is shown on map 2-1 as a recreation corridor, but is not listed here.

26-4 | Page 14, lines 5-9: Special use permits for specific purposes are not fair to the general public. Either there should be no special permits, or applications should be considered for any purpose which does not impair resource values or conflict with military operations. What is commercial hunting?

26-5 | Page 14, lines 10-12: We do not favor open ORV areas. We have seen too many areas nearby in California decimated by such designations. In any case, the designation process should be subject to public review.

26-6 | Page 17, Gran Desierto Dunes ACEC: The flat-tailed horned lizard (FTHL) has recently been moved to Category 1 and a listing package has been prepared by the Fish and Wildlife Service's Laguna Niguell Office. Given its impending listing and the very small range of this lizard in Arizona, the ACEC should be expanded to include the Yuma Desert and Sand Dunes HMA, and possibly lands all the way to the northern boundary of the BGR. FTHL habitat outside BGR continues to be developed as cropland (South Mesa) and residential (especially the Foothills area). Also many of the dune components, such as the fringe-toed lizard and Stephanomeria schottii, occur throughout the Yuma desert area, suggesting the entire area should be managed as a system.

Page 20, lines 7-11. Suggest discouraging or prohibiting training and target

26-6 | use in high quality FTHL habitat. The California Desert District has developed criteria for rating FTHL habitat. Protecting dune areas will not protect the FTHL since it is not a dune inhabitant.

Page 27, last 2 lines: The FTHL is not a dune inhabitant.

26-7 | Page 28, 2nd line: 172,000 acres is probably too high. We estimate 120,000 acres is probably closer.

Page 40, line 4: The Gran Desierto Dunes are the largest dune system in the Western Hemisphere.

26-6 | Page 41, line 11: FTHL was recently moved to Category 1.

Page 44, lines 9-10: See comment for page 27.

Sincerely,

C Meister

Cary Meister, President

J M Rorabaugh
J M Rorabaugh, Conservation Committee
Yuma Audubon Society
Box 6395
Yuma, AZ 85364



UNITED STATES MARINE CORPS
U.S. MARINE CORPS AIR STATION
YUMA, ARIZONA 85369-5000

IN REPLY REFER TO:
6280
3JA3
12 APR 1989

6280
3JA3

Bureau of Land Management
Phoenix District Office
Attn: Carole Hamilton, Area Manager
2015 West Deer Valley Road
Phoenix, AZ 85027

Dear Ms. Hamilton,

The lower Gila South Resource Management Plan and Environmental Assessment has been reviewed by the Marine Corps Air Station (MCAS) as you requested. We generally concur with the document, and note that it broadly supports Marine Corps training activity in the Barry Goldwater Range (BGR).

The following are our comments which are directed at specific portions of the subject plan, identified by page number and paragraph:

- 27-1 a. Page 9, third paragraph from the top - The Bureau of Land Management (BLM) will develop a comprehensive Habitat Management Plan (HMP) in cooperation with the U.S. Air Force (USAF), U.S. Fish and Wildlife Service (USFWS) and Arizona Game and Fish Department (AGFD). We request the U.S. Marine Corps (USMC) be included in the process for areas on the western half of BGR.
- 27-1 b. Page 12, last paragraph - The BLM will develop a transportation plan that will establish the USAF staff and BLM as the planning authority for roads on parts of the BGR where BLM has resource management responsibilities. We request the USMC be included in that planning authority for the western half of BGR.
- 27-2 c. Page 13, fourth paragraph from the bottom - The BLM will designate the BGR as a limited Off Road Vehicle (ORV) Use Area, with all vehicles restricted to designated roads and trails (as stipulated by the BLM and USAF). We request the USMC be included in the stipulating authority.
- 27-2 d. Page 14, third paragraph from the top - The BLM will permit competitive ORV activities (among other activities). Recommend conservative consideration be given this use, and only after thorough environmental evaluation has been performed.
- 27-3 e. Page 16 - The establishment of the Tinajas Altas Mountains Area of Critical Environmental Concern (ACEC), as described on pages 16-17 and depicted on Map 2-3 of the plan will interfere with our training mission. Specifically the ACEC should not include the Raven Butte Mountain Complex. This area has historically been used for military training and the 6280

27

- 27-3 proposal would "discourage new expansion" and "reclaim ... areas within the ACEC if identified as nonessential to existing or future military training mission". We believe this proposal could limit training opportunities in the future. New military equipment and weapons systems may require significantly different employment requiring additional space. To preclude the possible conflict between military use and the BLM or other interested groups, we propose the Raven Butte Complex be excluded from the ACEC. The eastern boundary should be defined as the eastern slope of the Tinajas Mountains excluding Signal Butte proper.
- 27-4 f. Page 17, last paragraph - Recreational Vehicle use of designated roads within the Gran Desierto Dunes ACEC will be permitted. Recommend care be taken to ensure "designated roads" are outside the safety zones around the conventional bombing targets (Cactus West and Moving Sands).
- 27-5 g. Page 18, second paragraph from the top - Interpretive facilities within the Gran Desierto Dunes ACEC. Same recommendation as paragraph f above.
- 27-5 h. Page 21, bottom one-third of the page - The Camino del Diablo (Devils Highway) Historic Trail (19,200 acres). The acreage listed is not in concert with the written description. The narrative describes a mile wide path along the Historic Trail. Map 2-3 depicts the trail extending west out of the Cabeza Prieta National Wildlife Refuge (CPNWR) to Tinajas Altas. The trail then branches, with two forks extending north to the northern boundary of the range - a fork on the eastern as well as on the western side of the Gila Mountains. This would be an area significantly larger than 19,200 acres. The Camino del Diablo has been listed on the National Register of Historic Places. According to the Luke Natural Resource Plan "...only the portion from Sonoyta to Tinajas Altas was included on the nomination form". The historic significance of the Trail is recognized, however, the area described in the subject plan is considered excessive. Many of the ground training sites utilized in the past have been located in close proximity to this road in order to minimize the creation of new roads. Further communication (LtCol Poley and Gary Foreman, BLM, on 1 March 1989) indicates the original intent was to allow no surface disturbing activities within one-quarter mile of the Trail (one-half mile wide path along the route of the Trail). This sized area would approximate the 19,200 acres. Recommend the training areas be situated at least one-quarter mile from the Camino del Diablo, with access roads to those training sites. This would minimize public exposure to the disturbed sites.

6280
3JA3

UNITED STATES
DEPARTMENT OF THE INTERIOR
FISH AND WILDLIFE SERVICE

ECOLOGICAL SERVICES
3616 W. Thomas, Suite 6
Phoenix, Arizona 85019

April 18, 1989

27-6

j. Page 37, second paragraph from the top - The Tinajas Altas Mountains Natural Area is described as providing a variety of micro-climates for plants and animals. Sonoran Pronghorn Antelope are said to be present. This area is west of the present range of the Sonoran Pronghorn. The USFWS has no recorded sightings in this area during the past 20 years. Recommend deleting "Sonoran Pronghorn Antelope" from this paragraph.

27-2

k. Page 47, second paragraph from the top - BLM will permit ORV racing in appropriate areas. Same recommendation as paragraph d above.

We appreciate the opportunity to review this document. If you have any questions regarding our comments, please contact our Environmental Engineer, Mr. Carl Johnson, at (602) 726-2809.

Sincerely,

K. O. GALER
Commander, U.S. Navy
Facilities Management Officer
By direction of
the Commanding Officer

MEMORANDUM

TO: Area Manager, Bureau of Land Management, Lower Gila Resource Area,
Phoenix District Office, Phoenix, Arizona

FROM: ~~ACTING~~ Field Supervisor

SUBJECT: Amendment to Lower Gila Resource Management Plan (RMP) and
Environmental Assessment (EA) for the Barry M. Goldwater Air Force
Range (BGR).

Thank you for providing this office of the Fish and Wildlife Service (Service) with a copy of the subject document.

The Service has reviewed the RMP/EA and offers the following comments for your consideration.

COMMENTS

Generally, the Service supports the Bureau of Land Management's (BLM) proposed plan amendment for management of the natural resources on the BGR. We believe it supports wildlife and habitat conservation and presents an opportunity to further protect this fragile desert ecosystem.

28-1

Our records indicate that the candidate category 1 plant species Neolloydia (Echinomastus) erectocentra var. acunensis (acuna cactus) occurs in the Saucedo Mountains and may occur in the Sand Tank Mountains. We believe this plan RMP/EA should identify the possible occurrence of this species on the BGR and should discuss survey and recovery actions.

We commend the BLM in identifying and designating the Yuma Desert and Sand Dunes Habitat Management Area (1) and the Gran Desierto Dunes Area of Critical Environmental Concern (2). These areas deserve special attention due to their unique and specific plant and animal communities.

The Service appreciates the opportunity to review this document. If you have any questions concerning our comments, please contact Jeff Krausmann or me (Telephone: 602/261-4720 or FTS 261-4720).

Gilbert D. Metz
Acting Field Supervisor

cc: Regional Director, Fish and Wildlife Service, Albuquerque, New Mexico
(Fish and Wildlife Enhancement)
Director, Arizona Game and Fish Department, Phoenix, Arizona

Defenders OF WILDLIFE

May 9, 1989

Bureau of Land Management
Phoenix District Office
Attn: Carole K. Hamilton
2015 W. Deer Valley Road
Phoenix, AZ. 85027

Dear Ms. Hamilton:

I am writing to offer comments on the management of the Barry M. Goldwater Air Force Range. Specifically, I am addressing the problems inherent in allowing commercial trapping of furbearers on the Goldwater Range.

Under state law, the Arizona Game and Fish Commission treats the above Range as a legitimate trapping area, despite the fact that it is a restricted use area. The restricted status makes it much more difficult for trappers to obey the state law requiring that all traps be checked daily. Indeed, unless the traps are set immediately adjacent to the main roads, it is illegal to set or to check them. Off-road travel is not allowed on the Range, as I interpret the warning signs.

Since access to the Goldwater Range may be withdrawn at any time, this means that trappers may not be able to check their traps daily, leading to much additional suffering by any animals in their traps. If, however, trappers do have daily access to the Range, it would seem to follow that the general public should also enjoy such access. Obviously, the Range would no longer be available for weapons testing under such conditions, due to the human health and safety problems of such human access.

Given the above problems with trapping on the Goldwater Range, it seems clear that the only rational management response is to withdraw the entire Range from all trapping use. Daily entry by trappers over the four month trapping season means that the military is saddled with both the expense of searching for human presence before using the Range, and for any liability due to injury or death. This is not, in my opinion, a legitimate use of the taxpayer's money, especially for a very few individuals trapping for profit.

As the Southwest representative for Defenders of Wildlife, I request that you recommend that the Goldwater Range be closed to all trapping activities.

Thank you for this opportunity to comment.

Sincerely,

Steve Johnson

SOUTHWEST OFFICE: 13795 N. COMO DRIVE, TUCSON, ARIZONA 85741 • (602) 297-1434
NATIONAL OFFICE: 1244 NINETEENTH STREET, NW • WASHINGTON, DC 20036 • (202) 659-9510

1

29

30

PUBLIC COMMENT FORM

Please print neatly or type. Please be as specific and detailed as possible in your comments. If necessary, please continue writing on the reverse side of this sheet.

COMMENTS: I AM DAMND CONCERNED AND WANT ALL THE EXISTING ROADS LEFT OPEN, WE IN GILABEND SPEND A GREAT DEAL OF OUR TIME IN THIS DESERT. YOU ARE SHUTTING DOWN OUR RECREATION!!!

Please print below:

RONALD G. MARTIN

Name

Phone Number

P.O. BOX 162 GILA BEND, ARIZ 85337

Mailing Address

Please complete this form and return it at the end of the meeting, or send your completed form with your comments to the address below:

PHOENIX DISTRICT OFFICE
BUREAU OF LAND MANAGEMENT
2015 W. Deer Valley Rd.
Phoenix, Arizona 80527

Your comments and cooperation will be greatly appreciated.

5-22-89

Page 1

31

Arizona Trappers Association

Response to BLM's Goldwater Amendment

In opening I wish to state that the Arizona Trappers Association supports hunting, including trapping, as a wildlife management tool. We do not support preservation, the use of starvation for wildlife management practices, nor do we support protectionist ideals.

The BLM has been handed a RMP supposed to have input from different user groups, however the Military hired the University of Arizona to draft this range management plan. Little, if any, wildlife concerns were addressed in this original plan. Now BLM copied the U. of A. plan without proper hearings and the Arizona Trappers Association wishes to now thank BLM for the opportunity to now address these vital issues.

First let me say if we vote Proposed Action then the BLM plan would be approved if we vote the No Action Alternative the the original U. of A. plan would be approved. I therefore wish to support neither plan but address each issue and submit the corrections necessary to address wildlife concerns.

Page 6. Last Paragraph

-restrict the operation of civilian motorized vehicles and heavy equipment to established roadways and previously impacted areas, except when the use relates to a specific permitted project ADD "OR THE AGFD FOR WATERHOLE PROJECTS, WILDLIFE SURVEYS OR HARVESTING OF WILDLIFE RESOURCES".

Page 13 delete paragraph four entirely
page 13 under SPECIFIC MANAGEMENT ACTIONS

1st paragraph -designate the BGR as a limited ORV use area, with all vehicles restricted to designated roads and trails ADD "OR DRY WASHES" U. of A. plan states off road damages natural and cultural resources so off road is closed. Using the bottom of dry washes does not affect natural or cultural resources.

RMP also states danger of off road as unexploded ammo. so off road closed. Trappers and Hunters must obtain Range Entry Passes which include hold harmless agreements removing all responsibility from military. This is no excuse for closing off road to trappers and hunters which require access to fully effect harvest of wildlife.

Page 13 -designate as primary public use recreation corridors Mowhawk Valley Road, the Sand Tank Mountain Road and the El Camino del Diablo Trail. Other roadways would be limited to administrative use and closed for public use, unless "delete" OTHERWISE POSTED and add "USED FOR HARVESTING, MANAGEMENT, SURVEYING WILDLIFE OR IMPROVEMENTS TO WILDLIFE HABITAT." The Range entry pass along with proper hunting or trapping license would then qualify those hunting or trapping in those areas. I would also like to refer you the the Department of Defense directive Number 5500.5 MANAGEMENT, CONSERVATION AND HARVESTING OF FISH AND GAME RESOURCES. Under Policy Paragraph A, B, and C.

Page 14 Last paragraph on page add AGFD to group of coordinators.

The presentation of proper hunting or trapping licenses would then allow Hunters and Trappers access permits to BGR.

Page 15 Paragraph four -develop a primitive campground and associated facilities near Cipriano Pass. The campground will be developed in a location that will not compromise USMC training needs (Luke Air Force Base Five Year Outdoor Recreation Management Plan) ADD "AND IS IN AN AREA THAT DOES NOT CONFLICT WITH MIGRATION PATTERNS OF BIG HORN SHEEP USING THAT PASS."

Page 2

Paragraph 5 -actively enforce all off-road vehicle and public access requirements and regulations ADD "AS AMMENDED".
Paragraph 9 -establish the western and eastern portions of the BGR as Extensive Recreation Management Areas ERMAs; implement appropriate management actions addressed in this plan and IAFR Plan to facilitate recreation use, ensure public safety using existing USAF zoning classifications, protect natural resources and support the military mission, ADD "WHILE ALLOWING SPORTSMEN ACCESS TO PROPERLY HARVEST WILDLIFE, UNDER AGFD SUPERVISION."

-Page 16 Tinajas Altas Mountains ACEC

The Arizona Trappers Association rejects this ACEC totally. Since 1965 a select few have been trying to take this area into CPNWR or make it into a National Park however the public has defeated them each time. How long do we have to defend wildlife from the U. of A. and their selected few and when do we return wildlife management to the Arizona Game and Fish Department where it belongs. These selected few were so sure that the Tinajas Altas would be added to the CBPWR that refuge signs were posted along the new proposed boundaries. I suspect you can still find the signs on the western side of the Tinajas. However these proposals were defeated yet here we are defending them again. These ACECs and natural areas are what the U. of A. want but is not the feelings of the people living near these areas. The Tinajas Altas has a very valuable natural wildlife area and we stand to defend them.

The excuses of camping, ORVs, and trash is not an excuse for closing this area. All roads go to the water holes naturally there are more activity at the hole than anywhere else that's what everyone is going to. That water hole is the hub of roads coming from Mexico on both sides of the Tinajas Altas through what is called smuggler pass and is still used today for those purposes.

We already have laws about camping near a water hole as well as laws about littering. There are some that feel that so called "cultural resources" is nothing more than litter or trash from earlier campers who drilled holes in rocks and painted other ones. How many years until people will be studying our trash. Already people finding wagon parts, harness, ect. think they have a real treasure and these items are less than 50 years old. Who is to say that trash from years ago is cultural history and trash from today is just junk.

Page 18 Mohawk Mountains and Sand Dunes ACEC

The Trappers Association rejects this ACEC because the Mohawk Mountain range is completely closed off. We will support only the Sand Dunes to the west of the Mohawk Mountains and reject all other proposals as the no camping and no fire restrictions are completely out of line.

Page 19 Yuma Desert and Sand Dunes Habitat Management Area.

The Arizona Trappers Association oppose the closing of camping or the closure of dune travel as the eastern portion of this area is used for recreation purposes.

Page 20 Sentinel Plain Lava Flow Natural Area

We oppose these restrictions because this area could possibly be targeted for predator control work for Sonoran Antelope and allowances should be made accordingly.

Page 21 Crater Range Paragraph 4 -limit off-highway and recreational vehicle use to designated roads and trails ADD DRY WASHES ; allow camping within CHANGE 50 feet" TO 150 FEET." of all roads ADD "OR DRY WASHES".

31-1

31-3

31-2

page 21 Camino del Diablo Historic Trail
Change camping to 150 feet from road there by allowing the use of available shade trees.

31-4 Page 22 2nd paragraph -prohibit new rights-of-way and other land use authorizations in the recreation use corridor-- except for R/Ws essential to WTI training, target and non-target training areas and other military missions. Add "OR AGFD TO CONSTRUCT, MAINTAIN OR RESEARCH WATER HOLES, CATCHMENT'S OR IMPLEMENT HARVEST OF WILDLIFE ALONG THESE ROUTES."

Page 24 Under WILDFIRE MANAGEMENT

31-5 The Arizona Trappers request all restrictions to camp fires on BGR be removed because of the lack of continuous vegetation cover as BLM states under this heading.

Page 25 WILD HORSES AND BURROS

The Arizona Trappers Association supports BLM's Burro removal plan to eliminate wildlife conflicts for forage or water.

Page 26 paragraph 4 Other non-military land uses on the BGR are recreation, hunting, trapping and ORV use. In the past, these uses have not been closely regulated, so the amount of use is not known.

This statement from the U. of A. again shows their lack of involvement with the AGFD as Big game hunting in these areas are closely regulated with Big Horn Sheep hunters checking in and out with AGFD. Trappers are required by regulation to send in a harvest report with numbers of species and areas the species were harvested in before the following years trapping license will be issued. These records are available from AGFD showing the number of trappers as well as the exact number of each species taken in these units. This alone proves that the U. of A. plan was just a natural and cultural resource plan with little or no input into wildlife issues.

Page 26 Water Resources

The Arizona Trappers Association realizes that water is the key element to wildlife survival and since these water sources are normally in and near major mountain ranges requests BLM to remove all access restrictions from these mountain ranges. We also recommend a study be conducted, in conjunction with Military, AGFD, and BLM, to locate new sources or sites for future water-hole projects.

Page 27 Sonoran Pronghorn

The Arizona Trappers Association disagrees with the U. of A. that there are no know opportunities for habitat expansion on the BGR.

With new water sources being developed new areas can be made available. With predator control new populations of Antelope could be reached to utilize the new areas.

Page 28 Desert Bighorn Sheep

The Arizona Trappers Association realizes that the we cannot grow more mountains within this range however we can vastly improve the habitat within this area with the development of water sources and a Predator control project to keep predator levels to a minimum instead of maximum. These same applications apply to Mule Deer and Whitetail Deer. The areas on the eastern part of BGR contain high populations of Mountain Lion which also reduce deer populations. I personally have trapped in this area and on one line I had 4 different lions working the same area. One large male, one female with cub, and one female by itself. These lion were within 20 miles of line and the only wildlife sign besides predators that was in that area was Javelina. These lions scat revealed that they were mainly feeding on Jack Rabbits as all other game had been chased from the area.

31-6 Page 31 Road network and Off-Road use
The Arizona Trappers Association questions the Off-Road restrictions. In the U. of A. plan (a natural and cultural plan) it states that off road is damaging to natural and cultural resources. This was accepted by the military without input from user groups. We contend that the use of dry washes, which is the only access to the interior of Mountain ranges, is not damaging to natural or cultural resources. An example is the use of dry washes for roads in the KOFA Wildlife Refuge when crossing the mountain ranges. After a rain the only way to tell where these roads are is when you leave or enter these washes. All signs of human travel are removed by the rains. These roadways are only visible out of the washes and anyone not familiar with the wash cannot even find the road.

The other issue that U. of A. suggest is un-exploded arsenal. This is true in some areas which are well defined and restricted to entry however many areas have very limited amounts and usually spent casings from earlier days when the P-51 Mustang pulled tow targets for jets to shoot at. This was in the early fifties. Today impact areas are well defined and much of military training is computerized which eliminates using live ammo except in specific areas.

The Trapper Association feels that trappers and hunters upon filling out Range Entry passes and signing Hold Harmless agreements as well as being assigned specific areas of use eliminate Military responsibility and is not a valid reason for off road closures. The dry washes that provide access to the interior of these mountain ranges is critical to sportsmen to harvest and remove wildlife resources from these areas.

Page 38 Damage to Tinajas Altas

The quotes about "cross country travel are found along the eastern and western bahadas of the range as vehicles extend their ranges," These road networks are roads that go into Mexico and people have been using these roads to Tinajas Altas tanks for years. All roads from all directions end up at the tanks that was the place all people were trying to reach because of the source of water. The pass through the mountains at the tanks is called Smuggler Pass where smuggling has continued into the United States for many years and is still active today. As stated earlier the Arizona Trapper Association rejects all ACEC restrictions in mountain ranges that prevents management, harvest, access to, or research of, wildlife and wildlife habitat.

Page 45 OFF-ROAD USE

We support off-road use to be extended to DRY WASHES allowing access into interior of mountain ranges for management, harvest, and studying of wildlife and wildlife populations.

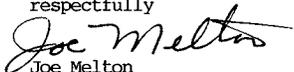
Page 46 OUTDOOR RECREATION USE

Under the proposed action, many recreation opportunities will be enhanced and recreation use facilitated. On the other hand, several recreation opportunities such as cross-country ORV activity, wood collection for domestic use, "TRAPPING" and vehicle-based or self-contained camping in several ACEC and special management areas will be greatly curtailed or "ENDED". This states quite clearly that Trapping, including hunting, will be ended.

The Arizona Trappers Association rejects any ACEC that restricts access to harvest wildlife populations within these Mountain Ranges. These ranges have high populations of Grey Fox, Bobcat, and Ringtail as well as traveling populations of Coyote and Kit Fox who enter these ranges utilizing the availability of water sources. Access to these ranges is also critical for hunters as well as AGFD personnel to manage and survey wildlife populations as well as monitor water levels in various catchments and tanks.

In closing the Arizona Trappers Association would like to direct BLM's and Military's attention to Public Law 99-606 Section 11. "All hunting, fishing, and trapping on the lands withdrawn by this Act shall be conducted in accordance with the provisions of section 2671 of title 10, United States Code," I have here attached a copy of Public Law 85-337 an amendment to Sec. 4 Chapter 159 of Title 10, United States Code "(a) The Secretary of Defense shall, with respect to each military installation or facility under the jurisdiction of any military department in a State or Territory--" I next direct your attention to number "(3) develop, subject to safety requirements and military security, and in cooperation with the Governor (or his designee) of the State or Territory in which the installation or facility is located, procedures under which designated fish and game or conservation officials of that state or territory may, at such time and under such conditions as may be agreed upon, have full access to that installation or facility to effect measures for the management, conservation and harvesting of fish and game resources." I now direct your attention to DEPARTMENT OF DEFENSE DIRECTIVE 5500-5 SUBJECT; MANAGEMENT, CONSERVATION, AND HARVESTING OF FISH AND GAME RESOURCES. 1. PURPOSE To implement section 4 of Public Law 85-337 (Section 2671 of Title 10, United States Code) which confers certain responsibilities on the Secretary of Defense with respect to the management, conservation and harvesting of fish and game resources on military reservations and facilities. Now your attention to C. under POLICY "Commanders of installations referred to in A above will develop, subject to safety requirements and military security, and in cooperation with the Governor or his designee of the State or Territory in which installations or facilities under their control are located, procedures under which designated fish, game or conservation officials of that State or Territory may, at such time and under such conditions as may be agreed upon, have full access to installations or facilities to effect measures for the management, conservation and harvesting of fish and game resources. " This states very clearly that FULL ACCESS will be authorized. Paragraph A states who will direct these programs which are Federal and State Conservation authorities. Nowhere does it state that Universities will dictate wildlife management or wildlife management procedures.

respectfully


 Joe Melton
 Yuma County Director
 Arizona Trappers Association
 339 May Ave.
 Yuma, Arizona 85364



The Arizona Nature Conservancy

300 East University Boulevard, Suite 230, Tucson, Arizona 85705
 (602) 622-3861

Carole K. Hamilton
 Area Manager
 Lower Gila Resource Area
 Bureau of Land Management
 2015 W. Deer Valley Rd.
 Phoenix, AZ 85027

17 May, 1989

Dear Ms. Hamilton,

I am writing on behalf of the Arizona Nature Conservancy to comment on your Resource Management Plan Amendment for the Barry Goldwater Range. Our particular area of concern is rare and sensitive biological resources, including plant and animal species and ecological communities.

Your plan does a good job of protecting the most significant and unusual biological resources of the Goldwater Range by the designation of Areas of Critical Environmental Concern and Special Management Areas. The sand dune habitats of the Goldwater Range are one of the few occurrences of sand dune endemic plants and animals of the Gran Desierto in the United States, and the sand dunes on the Goldwater Range are the least disturbed of Sonoran dune habitats in the U.S. All of the sensitive sand dune habitat of the Goldwater Range was appropriately identified for ACEC designation in your plan. A number of rare plants endemic to isolated mountains of the Sonoran Desert are also protected by the Tinajas Altas ACEC. We strongly support your decision to protect these nationally significant biological resources by ACEC designation.

32-1 The highest known population density of Flat-tailed Horned Lizard, a species that is currently being seriously considered for listing as Threatened by the U.S. Fish and Wildlife Service, is found in the Yuma Desert and Sand Dunes HMA. This species was not specifically mentioned in your management goals for this HMA. Protection of the Flat-tailed Horned Lizard should be specifically targeted as a major management goal in this HMA due to the lizard's rarity, and the importance of this area to the survival of the species.

32-2 We disagree with designation of any areas open to cross-country, off-road vehicle travel (pg. 47). The Goldwater Range is located in one of the most arid parts of the United States, and as such its natural communities are extremely slow to recover from disturbance such as ORV traffic. Also a number of the sensitive wildlife species such as Sonoran Pronghorn, Desert Tortoise, and Flat-tailed Horned Lizards may be very susceptible to the damaging effects of unrestricted ORV traffic.

National Trappers Association, Inc.

Member Supported

P.O. Box 3667 • 216 North Center • Bloomington, IL 61702



33

Thank you very much for the opportunity to comment on your plan for the Goldwater Range. The Goldwater Range includes some of the ecological treasures of Arizona in the form of fragile sand dune communities, and you are to be congratulated for planning for the protection of these communities by the designation of ACECs in sand dune areas.

Sincerely,

Peter L. Warren
Public Lands Protection Planner

May 23, 1989

Carole K. Hamilton
Bureau of Land Management
Phoenix District Office
2015 West Deer Valley Road
Phoenix, Arizona 85207

Attn. Carole K. Hamilton

The National Trappers Association represents 47 State Affiliates including the Arizona Trappers Association.

We would like to support the Arizona Trappers Association in their findings regarding the Goldwater Amendment.

We want to go on record supporting the use of hunting, including trapping, as a management tool to regulate wildlife populations and prevent damage to the habitat. Only by utilizing wise resource management practices coupled with appropriate wildlife management tools will we truly benefit furbearers and all species they interact with.

We strongly support the Arizona Game and Fish Department in their practice of sound wildlife management practices and suggest they be allowed to practice these policies with your full support. Only by the five effected groups working together will we truly benefit wildlife and our natural renewable resources.

respectfully

Joseph Melton
339 May Ave.
Yuma, Arizona 85364

Arizona Muzzleloading Association



May 23, 1989

Carole K. Hamilton
Bureau of Land Management
Phoenix District Office
2015 West Deer Valley Road
Phoenix, Arizona 85207

Attn. Carole K. Hamilton

As president of the Arizona State Muzzleloading Association I want to thank you for allowing the extended time for our comments regarding the Goldwater Amendment.

We would like to align our support with the Arizona Trappers Association, the National Trappers Association and the Yuma Valley Rod and Gun Club.

It is imperative that the Arizona Game and Fish Department manage our wildlife resources. Public law requires this and we stand in full support of these laws. We want to go on record as supporting hunting as a wildlife management tool and do not support preservation attitudes which use starvation to manage wildlife populations.

The Arizona State Muzzleloading Association enlists your support to work in mutual agreement with the AGFD pertaining to your land management policies dealing with the Barry Goldwater Range.

This 2.6 million acre area requires the co-operation of all managing parties to fully benefit wildlife and wildlife habitat.

We would like to enlist our support to address future policy matters that would be of assistance to directing the BLM in drafting or planning management prescriptions for this area.

respectfully

Joseph Melton
Joseph Melton, President
Arizona State Muzzleloading Assn.
339 May Ave.
Yuma, Arizona 85364



The Yuma Valley Rod & Gun Club, Inc

ORGANIZED
1936



INCORPORATED
1938

P. O. BOX 1808 • YUMA, ARIZONA 85364

May 18, 1989

Bureau of Land Management
Phoenix District Office
2013 West Deer Valley Road
Phoenix, Az. 85027

To Whom it May Concern:

We have reviewed the "Lower Gila South" Resource Management Plan (Goldwater amendment) and also have closely reviewed the comments made by the Arizona Trappers Association.

We totally concur with the comments, directions, additions and deletions made by the Arizona Trappers Association. The Yuma Valley Rod & Gun Club would therefore, like to convey to the BLM our total support for all comments made by the Trappers Association.

The documentation by the Arizona Trappers Association will also, therefore, be the official stand taken by the Yuma Valley Rod & Gun Club, Inc.

Sincerely,
Don Forst
Legislative Committee
Yuma Valley Rod & Gun Club, Inc.

PUBLIC COMMENT FORM

Please print neatly or type. Please be as specific and detailed as possible in your comments. If necessary, please continue writing on the reverse side of this sheet.

COMMENTS:

You or the Government - Did this ~~very~~ thing to the Indians - Here is your land Don't leave it!

We are all Tax paying people, You shut us out of these areas, How am I to teach my boys of Wild life, And the beauty of the Desert. How are we to maintain the natural as well as man made watering holes for the animals of the desert. We need the roads that are there now for access for camping hunting picnicing. The taxes we pay are your wages?

Thank you for reading this
Dennis Jordan

Please print below:

Dennis L Jordan

Name

Phone Number

PO Box 546 Gila Bend, Az. 85337

Mailing Address

Please complete this form and return it at the end of the meeting, or send your completed form with your comments to the address below:

PHOENIX DISTRICT OFFICE
BUREAU OF LAND MANAGEMENT
2015 W. Deer Valley Rd.
Phoenix, Arizona 80527

Your comments and cooperation will be greatly appreciated.



I ask for the privilege of not being born
... not to be born until you can assure me
of a home and a master to protect me, and
a right to live as long as I am physically
able to enjoy life ... not to be born until
my body is precious and men have ceased to
exploit it because it is cheap and plentiful.

♪ raw ♪

Tucson, AZ 85746
24 May 1989

Ms. Carol K. Hamilton
Bureau of Land Management
Phoenix District
2015 W. Deer Valley Rd.
Phoenix, AZ 85027

Dear Ms. Hamilton:

It has come to my attention that the BLM is going to decide about trapping on the gunnery range near Gila Bend in the near future. Since trappers are required by law to check their traps once every 24 hours, it seems to me that discontinuing trapping all together would be to the government's advantage. How are these trappers going to get the kind of access needed in order to do what they're supposed to? Since this group is not known for their conscientious compliance with the law anyway, I think that to continue to allow trapping on the range will only give trappers more of an excuse not to check traps.

Sincerely, -

Roberta S. Wright

RSW/nn

37-1

PUBLIC COMMENT FORM

Please print neatly or type. Please be as specific and detailed as possible in your comments. If necessary, please continue writing on the reverse side of this sheet.

COMMENTS: The BARRY M Goldwater Air Force Range located in Southwestern Arizona has escaped any commercial development, mining or agribusiness exploitation for almost a half century. Comprising more than 4000 sq miles, it now contains the last unspoiled remnants of the Sonoran Desert. These treasured pristine desert areas with their unique flora and fauna are worthy of preservation for future generations to experience and enjoy. They should be protected until their full value and use can be determined. Without such protection, further opening of the range or the encouragement or expansion of public use could prove disastrous to the fragile desert environment and its associated natural resources.

Please print below:

(Continued Attached)

LARRY SUNDERLAND

Name

Phone Number

Scottsdale AZ, 85251

Mailing Address

Please complete this form and return it at the end of the meeting, or send your completed form with your comments to the address below:

PHOENIX DISTRICT OFFICE
BUREAU OF LAND MANAGEMENT
2015 W. Deer Valley Rd.
Phoenix, Arizona 80527

Your comments and cooperation will be greatly appreciated.

38-1

Therefore, I am requesting the ARIZONA Congressional Delegation to explore the possibility of securing an executive order closing the range to all public access until a comprehensive natural resources management plan can be developed and implemented. This plan should include a moratorium on all range development, including the building or improvement of roads, except that essential to the military mission. Exploitation of wildlife by the commercial trapping industry must be curtailed. Within the range, wild animal populations must be allowed to recover and stabilize. Travel on the range should be limited to that necessary to the military mission, law enforcement including border patrol, and search and rescue missions. To further minimize damage to the terrain from off road vehicles, maximum use should be made of helicopters for surveillance and investigations.

In the meantime the following actions should be taken.

1. Wild animal trapping should be prohibited in those areas identified by the military as unsuitable for public access or where daily access can not be assured. State laws requiring daily checks of all traps set must not be compromised.

2. To prevent further off road damage, use of all vehicles on the range should be held to a minimum consistent with the assigned mission.

(3)

Their use should be closely monitored and controlled. This is especially true of animal trappers who rely heavily on the use of off road vehicles to make daily checks of traplines regardless of adverse weather or terrain conditions. The resultant damage is extensive. It is also important to keep in mind that human safety and welfare considerations dictate that all animal traps be placed a safe distance from any road.

38-2

3. Specific action should be taken to relieve the military of all game law enforcement responsibility. As with the management of other natural resources, the military has neither the tools nor the trained personnel needed to do a proper job. Furthermore, the Arizona Game and Fish Department receives all the revenues derived from the sale of trapping licenses and already has the necessary trained manpower. Clearly, full responsibility for game law enforcement should rest with that state agency.

38-3

4. If public use of the range is to be encouraged then wording on all posted signs and the warnings printed on maps must be changed. Present wording would lead most law abiding citizens to believe that all public entry was simply denied. This false impression tends to discourage use of the range for public recreational purposes. Present usage is largely restricted to those few who live in the

(4)

38-3

local area and have personal knowledge of range entry procedures. Clearly, wider dissemination of entry schedules and procedures is needed.

These actions are not considered unduly restrictive. Yet, they will help minimize further damage and destruction of this desert treasure until such time as a comprehensive natural resources management plan can be put in place. For a wide variety of reasons, some agency other than the military should have primary oversight responsibility for natural resource management on the range.

Although these comments have addressed the problems on the Air Force Gunnery Range located east of Yuma, they are equally applicable to the Army Proving grounds located just north of that city. In fact, they may have broad application to any large military installation. After all, heightened public interest and concern for the environment and publicly owned natural resources has not yet reached its pinnacle.

Larry Lumberland

PUBLIC COMMENT FORM

Please print neatly or type. Please be as specific and detailed as possible in your comments. If necessary, please continue writing on the reverse side of this sheet.

COMMENTS: I believe this is an example of where the USA shows they care little about the rights of people to use the public lands. These areas around the Gila Bend Gunnery Range have not been abused. What is the real motive to close roads and limit access?

Probably the use of the name Goldwater in the Plan would offend Goldwater himself!

Please print below:

Name Buel BOWLAN Phone Number _____
 Mailing Address P.O. Box 16 GILA BEND, AZ 85337

Please complete this form and return it at the end of the meeting, or send your completed form with your comments to the address below:

PHOENIX DISTRICT OFFICE
 BUREAU OF LAND MANAGEMENT
 2015 W. Deer Valley Rd.
 Phoenix, Arizona 80527

Your comments and cooperation will be greatly appreciated.

PUBLIC COMMENT FORM

Please print neatly or type. Please be as specific and detailed as possible in your comments. If necessary, please continue writing on the reverse side of this sheet.

COMMENTS:

As a member of People for the Ethical Treatment of Animals, and our local Concerned Arizonans for Animal Rights and Ethics, I am writing to protest the trapping which occurs on the Gila Bend BLM land. At the meeting, I was informed that 30-35% of the base is closed at times when artillery is fired, however trappers may obtain permits to set traps when the "hot spots" are not active. My concern arises when the "hot spots" are reactivated and the trappers, or the game and fish officers are not allowed back →

Please print below:

Name DIANE L. VENBERG Phone Number _____
 Mailing Address TEMPE, AZ 85283

Please complete this form and return it at the end of the meeting, or send your completed form with your comments to the address below:

PHOENIX DISTRICT OFFICE
 BUREAU OF LAND MANAGEMENT
 2015 W. Deer Valley Rd.
 Phoenix, Arizona 80527

Your comments and cooperation will be greatly appreciated.

40-1

(cont.) to the set traps. This arrangement would appear to make the "24-hour law" impossible. I also doubt that such a small staff of game and fish officers could patrol the area sufficiently to make sure that the trappers are checking their contraptions once a day.

The fact that trapping is considered "recreational" is appalling. The AZ Game and Fish has given me the figure of trappers who commercially sell the pelts they obtain at 80%. This means that the majority of trappers are making partial or entire livelihoods off Arizona's wildlife.

Trapping in itself is unethical and inhumane. Wild animals break their teeth, twist and dislocate their limbs and even chew off their own paws trying to free themselves. Blunt edged traps are not more "humane" than saw toothed. The animal can still be easily preyed upon by larger animals since he has no way to outrun or fight back. Trapping is also indiscriminate - as many as 3 out of 4 creatures trapped are not what the trapper desires, therefore he tosses the "trash animal."

-3-

Are the BLM and the Military, along with the Game and Fish Dept proud to be backing this barbaric, outdated practice? AZ is one of only your states which still allow this merciless killing to continue. I urge you to assist in besieging the legislature with protests against trapping. We cannot continue to allow the small amount of trappers to torment and kill our wildlife in such a cruel method.

Sincerely,

Diane O. Kenney

41

PUBLIC COMMENT FORM

Please print neatly or type. Please be as specific and detailed as possible in your comments. If necessary, please continue writing on the reverse side of this sheet.

COMMENTS:

I am opposed to trapping of animals as it is very cruel & unnecessary. I feel that it should be banned in Arizona as it is in other states. It is definitely not a form of recreation and should not be termed as such. Arizona needs to move with the times on its outdated laws.

Please print below:

Name GERI M. ERA Phone Number _____
 Mailing Address TEMPE, AZ 85283

Please complete this form and return it at the end of the meeting, or send your completed form with your comments to the address below:

PHOENIX DISTRICT OFFICE
 BUREAU OF LAND MANAGEMENT
 2015 W. Deer Valley Rd.
 Phoenix, Arizona 80527

Your comments and cooperation will be greatly appreciated.



United States Department of the Interior

CABEZA PRIETA NATIONAL WILDLIFE REFUGE
 1611 N. 2ND AVENUE
 AJO, ARIZONA 85321
 (602) 387-6483



42

June 5, 1989

Carole K. Hamilton
 Bureau of Land Management
 Phoenix District Office
 2015 W. Deer Valley Road
 Phoenix, Arizona 85027

Dear Ms. Hamilton;

I attended the Bureau of Land Management (BLM) public meeting at Gila Bend AFB on May 22, 1989. I wish to congratulate the BLM on a very orderly and productive public meeting. I would like to address some specific proposed actions contained within the Goldwater Amendment to the Lower Gila South Resource Management Plan. These actions impact Cabeza Prieta NWR both directly and indirectly.

Areas of Critical Environmental Concern (ACEC)

I strongly support the designation of ACEC status to the Mohawk Mountains - Sand Dunes and Tinajas Altas Areas. Restriction of civilian and military off-road vehicle use in the Mohawk ACEC will help protect this portion of Sonoran Pronghorn Antelope habitat from further degradation. The Tinajas Altas ACEC contains endangered plant and animal species and an important watering hole for Bighorn Sheep. These resources would be further protected by ACEC designation. We also strongly support restricting vehicle access into the Tinajas Altas water holes.

Outdoor Recreation Use.

I would strongly support the proposed computerized permit system. We have experienced problems with visitors believing a range pass also gave them access to the Cabeza Prieta NWR. A Computerized system will eliminate such problems while creating easier administrative procedures for visitors to follow.

42-1

The proposed campground and visitor service at Cipriano Pass concerns us because it could restrict sheep movements between the Gila and Tinajas Altas Mountains. The Gila Mountains have no dependable sources of water for Bighorn Sheep, making access to the Tinajas Altas Mountains very important.

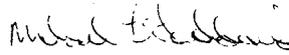
42-2

I am also concerned about the location of proposed off-road vehicle open, intensive use, and racing areas. We feel these areas should be located away from the CPNWR boundary so as to minimize potential vehicle trespass problems on the Refuge.

42-3

The last point I wish to make is the importance of keeping both the Camino del Diablo and Mohawk Valley roads open. These two roads are our primary access routes into the western portion of the Refuge. Closing them would put a severe burden on our management activities.

Sincerely,



Michael Goddard
Acting Refuge Manager

MLG:lg



The Humane Society of the United States
2100 L Street, NW
Washington, DC 20037
(202) 452-1100

June 8, 1989

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Ms. Carole K. Hamilton
Bureau of Land Management
2015 West Deer Valley Road
Phoenix, AZ 85027

Dear Ms. Hamilton:

Thank you for the opportunity to comment on the Goldwater Amendment to the Lower Gila South Resource Management Plan and Environmental Assessment.

On behalf of the 987,000 members and constituents of The Humane Society of the United States (HSUS), I object to the fact that the Amendment continues to allow trapping on the Army Weapons Test and Proving Grounds and the Barry M. Goldwater Gunnery Range in southern Arizona. Trapping is clearly not consistent with the purposes for which these military lands are used.

We urge the Bureau of Land Management (BLM) to persuade the Arizona Game & Fish Commission to ban trapping on these areas for the following reasons:

- the lands in question are extensive; it is unreasonable to expect the military to enforce trapping regulations and assure human safety and welfare.

- some of the lands are not accessible on a daily basis because of military security precautions. Arizona Game & Fish Department regulations require that traps be inspected daily. It is therefore a violation of the Arizona game regulations to allow trapping on lands that cannot be inspected on a daily basis.

43-1

PUBLIC COMMENT FORM

Ms. Hamilton
June 8, 1989
Page Two

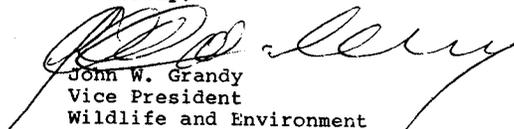
Please print neatly or type. Please be as specific and detailed as possible in your comments. If necessary, please continue writing on the reverse side of this sheet.

43-1

- the use of off road vehicles is common among trappers there due to the extended distances they need to travel. These vehicles not only disturb the fragile environment but also pose a possible security threat to the military. Furthermore, it is not equitable to allow access to one special interest group, while denying access to the general public. It is far better to ban all public use, including trapping, in these sensitive areas.

Thank you for your consideration of this important matter. If I can be of any assistance to you in the future, please feel free to contact me.

Sincerely,


John W. Grandy
Vice President
Wildlife and Environment

JWG:kb

COMMENTS: It is my belief that the animals should be left alone! Trapping is very cruel and inhumane and I believe it should be outlawed. To catch an animal by one leg and leave it in pain w/no food or water for any length of time is cruelty to animals. Furthermore, any person who would leave an animal (such as a dog or cat) in the sun; without food & water; or in pain, would be subject to prosecution and imprisonment for "cruelty to animals"!! Yet, because bobcats, skunks, coyotes, rabbits, etc. are wild trappers feel it's ok to harm & kill them! Not so! None can we rationalize and say we do this for food. It is done for money & vanity; the vanity of wearing furs that belong on & to the animals God placed them on!
So you see trapping is really already against the law because it is cruelty to animals.
Please stop trapping! So let's outlaw it!

Please print below:

Mary Jo W. Meyers
Name

Phone Number

P.O. Box 62471 Phoenix, AZ. 85082-2471
Mailing Address

Please complete this form and return it at the end of the meeting, or send your completed form with your comments to the address below:

PHOENIX DISTRICT OFFICE
BUREAU OF LAND MANAGEMENT
2015 W. Deer Valley Rd.
Phoenix, Arizona 80527

Your comments and cooperation will be greatly appreciated.

Sorry, this took so long to send in!



45

FRIENDS OF CABEZA PRIETA

Paul W. Huddy
821 N. Treat Ave.
Tucson, AZ 85716
June 15, 1989

Phoenix District Office
Bureau of Land Management
2015 W. Deer Valley Road
Phoenix, AZ 85027

Dear Sirs:

Friends of Cabeza Prieta was formed recently because of public concern about the need to preserve the extraordinary natural resources of the Cabeza Prieta and Kofa National Wildlife Refuges and surrounding area. The organization includes many of the leading authorities on the wildlife, biology, ecology, geology, archeology, history and natural resource management of the area, as well as most of the major wildlife and environmental organizations of the U.S. and community leaders from around the state of Arizona. We would like to comment briefly on the BLM's draft "Resource Management Plan (Goldwater Amendment)" and request that this be made part of the record.

Members of our organization attended the recent meetings in Gila Bend and Yuma and were pleased to hear clarifications of much that was puzzling about this document. Do we understand correctly that this is a preliminary draft that was meant as a device to involve various parties concerned and coordinate with them?

We recognize that the BLM is just beginning to become acquainted with the Goldwater Range and that the process will take a while before your new staff becomes familiar with the area. However, the lack of knowledge and detail that was reflected in this plan was a source of serious concern when it was first distributed because there was no indication that this was a preliminary draft. As a management plan, it is completely inadequate and we assume that a much more complete and detailed draft plan will be offered for public review and comment at a later date. Is this correct?

We feel that broad involvement and coordination is very necessary to the development of the plan. Aside from the Air Force and Marine Corps, we would urge you to work closely with the U. S. Fish and Wildlife Service personnel at the Cabeza Prieta Refuge and with the members of the team that prepared the LAFR Report, who are certainly among the most knowledgeable professionals available on this area. We would also appreciate involvement of public organizations such as our own, the Sierra Club (Southwest Regional Office, Grand Canyon Chapter, and the

local Groups in Yuma, Phoenix, and Tucson). Defenders of Wildlife, the Wilderness Society, Arizona Native Plant Society, and the Yuma, Maricopa and Tucson Audubon Societies.

Because so much is omitted from this plan, it is difficult to comment at this time. However we would like to reply to a few items.

(1) "The BGR contains some of the nation's unique and well-preserved native desert." (p 2)

Very true. In fact, this is one of the last remnants of intact, undisturbed Sonoran desert of sufficient size to sustain itself ecologically. It is therefore a very valuable and very special natural resource. Is it your intention to protect and preserve it? If so, we would like to see a clear, unequivocal statement in the management plan that the primary natural resource management policy is to protect and preserve the desert in the Goldwater Range in its natural, undisturbed condition.

(2) The Tinajas Altas area is "an exceptional representative of the Sonoran Desert basin and range province and remains ecologically viable despite increasing threats from public and military use. ... Special management attention is needed to avoid or lessen potential damage." (p 38)

We strongly agree and urge immediate effective action to accomplish this. Vehicular damage and associated impacts are presently of greatest concern. Vehicles should be limited strictly to existing roads in that area. Vehicular access to the immediate vicinity of the Tinajas themselves should be physically prevented with barriers and a parking area designated so that access is by foot over a distance of at least one half mile. This should reduce damage and trash considerably. We understand now that the intent of the proposed campground at Cipriano Pass was to alleviate pressure on the Tinajas, but feel that this location is inappropriate because it concentrates human activity in the middle of a major pass that is important to wildlife.

(3) "Permit ... commercial and competitive ORV activities ... intensive ORV use areas ... few restrictions." (p14)

Off-Road Vehicle activity of any kind is highly destructive in this very arid and fragile environment - it does not belong here. Representatives of the Air Force and Marine Corps have stated that ORV activity would also adversely affect their missions on the BGR. It is our understanding from the meetings that these proposals were nothing more than passing thoughts and that the BLM has no intention of implementing them now. Is this correct?

(4) "The BLM will ... strategically develop and improve water sources for desert bighorn sheep, Sonoran pronghorn antelope, desert mule deer, and other species dependent on open water." (p 8)

This is very serious issue that deserves considerably more study before implementation. Some wildlife experts have serious reservations about

45-2

45-2

45-3

45-1

45-5

45-6



U.S. Department of Justice

Immigration and Naturalization Service

46

U.S. Border Patrol

Chief Patrol Agent

350 First St.
P.O. Box 2708
Yuma, AZ 85364

June 22, 1989

YUM 1221/57-C

United States Department of the Interior
Bureau of Land Management
Phoenix District Office
2015 West Deer Valley Road
Phoenix, AZ 85027

Attn: Ms. Carole K. Hamilton, Area Manager
Lower Gila Resource Area

Dear Ms. Hamilton:

The Yuma Sector, U.S. Border Patrol, welcomes the opportunity to comment on the proposed amendment to the Lower Gila South Resource Management Plan, Barry M. Goldwater Air Force Range and its impact on Border Patrol operations in the Yuma Sector.

Prior to commenting on our concerns proposed on the Goldwater Amendment, it should be noted the U.S. Border Patrol is most cognizant of the importance of protecting our natural resources. We appreciate the enormous responsibility the Bureau of Land Management has in preserving and protecting our natural resources.

The Border Patrol is proud of its spirit of cooperativeness with other Federal State, County, and local agencies as evidenced by the outstanding rapport established and maintained on the Cabeza Prieta Game Range. Our officers, while routinely enforcing the Immigration and Nationality Act, have provided information to appropriate officials when game range violations are encountered and have assisted in the arrest and prosecution of those violators.

The Luke Air Force Range Natural Resource Management Plan, Executive Summary, states the role of the U.S. Border Patrol on the range on page 1-16. Particular attention should be drawn to the following statement:

"Many intercepts are also lifesaving efforts to rescue aliens who grossly underestimate the rigors of the LAFR (Luke Air Force Range) terrain and heat. The immediacy of the intercept, by means of off-road driving, is often critical to the success of the life saving effort."

45-6 the wisdom of this. The proposed action may directly conflict with the stated management objective, "to ensure the protection of wildlife habitats, species diversity and viable populations." The federally listed endangered pronghorn antelope may well become even more endangered through the continued proliferation of water sources. According to wildlife biologists familiar with this species, it is not at all clear that it is "dependent on open water." In fact the absence of same may well be a blessing to the pronghorn, because it limits the range of its predators. We strongly recommend that no further artificial water sources be developed until good solid scientific studies by independent experts resolve this and associated issues.

(5) Sentinel Plain lava flow and ACEC designation. (p 39)

45-7 The Sentinel Plain lava flow was rejected for ACEC status because of judgements about its significance, apparent threats to it and resource qualities. It is also stated that this is "similar to other tertiary volcanics in southern Arizona." While other tertiary volcanics exist in southern Arizona, they tend to have their own particular character. Sentinel Plain, as noted, is distinguished by being the largest and it does have significant geological interest. We are not aware of any such volcanic fields here that are protected by management status. The argument above may be applied to all of them and we therefore could end up with none of them in time. Is there some other management objective in mind for this area? If the concern is related to a utility corridor along the interstate highway, perhaps the rest of the field could be managed for protection. Wouldn't it be prudent to protect it while that is still possible? As the BLM recently determined from an evaluation of the lands under its own management, pristine desert is hard to find nowadays. Why not take care of what little we have left? What would be your alternative to ACEC status?

(6) Access needs to be addressed more comprehensively.

45-8 At the meetings, attendees were invited to mark routes that they would like to see dedicated to vehicular access. We are still not sure of the purpose of this, but the proverbial cart appears to be coming before the horse. It seems that proper planning procedure would involve identification of activities and destinations, comparison with other factors, setting goals and priorities and then looking at routes. Isn't this part of the Transportation Plan, which was supposed to follow at some later date? Please advise. This is a very important element of this plan and we are very concerned about it.

There are many other issues that should be addressed. We look forward to the next stage of the process and an opportunity to review a more complete draft management plan. This is a very special and valuable public natural resource and we will be pleased to contribute to protecting and preserving it.

We look forward also to your reply.

Sincerely yours,

Paul W. Huddy

The Attorney General has mandated the U.S. Border Patrol, under Section 103 of the Immigration and Nationality Act, to "guard the boundaries and borders of the United States against the illegal entry of aliens." The authority of patrol agents and aircraft pilots to exercise the power and duties of Immigration officers, as specified in the Act, is contained in 8 CFR 103.1(g). Authority to perform specific acts is contained in Section 287 of the Act.

In order to detect the movement of illegal aliens, smugglers of aliens, or drug traffickers through the range a number of drag roads are maintained. When tracks are detected on the drag roads indicating a person(s) has entered the United States, other roads and trails are utilized in an attempt to follow and apprehend them. In some pursuits, off-road travel is required to ultimately apprehend the alien(s). In many cases, these pursuits are truly life-savings efforts due to the aliens being unprepared for the rigorous and vast terrain they are attempting to traverse. Often there is little indication from the footprints or "sign" that would indicate whether the aliens are having difficulty or not. To wait and hope the aliens cross an established road further north or east could and would be disastrous with the loss of human life being the end result.

The accompanying map, provided by BLM, has been highlighted to indicate some features of the Border Patrol activity on the range. Some of the common routes of travel by illegal aliens have been highlighted in yellow. However, there are many variations to the routes shown, as aliens attempt to evade the routinely travelled areas.

Highlighted in blue are the primary drag roads utilized on an almost daily basis in the effort to detect movement of people through the range. Due to the daily nature of travel on these roads and the necessity that they be relatively smooth so as to enhance vehicular travel and assist in detecting a disturbance caused by foot traffic, we periodically grade these roads and pull tire drags to maintain a smooth condition. We ask that no restriction be placed on the maintenance of these roads and if these roads are closed to routine travel, that we be granted access for daily operations. It should be noted that with the daily activities of our agents on these roads and the sector's aircraft patrolling almost daily, enhanced enforcement would be present with our agents working in harmony with your rangers to detect and apprehend violators in restricted areas.

46-1

Many of the other roads that we utilize on an infrequent basis are highlighted in pink on the accompanying map. The use of these roads, and the frequency of use is dictated by the routes of travel aliens take. Roads and trails are used to gain time for better interception. Resorting to off-road travel is typically a result of an inability to follow the aliens footprints beyond a certain point and generally results in apprehension. Although we would be willing to restrict off-road travel somewhat, we ask

46-1 that no restriction be placed on our use of these roads during tracking operations. We would be willing to report any off-road travel to your office in a timely fashion, if required. Again, these efforts frequently involve the saving of human life. Since 1980, the Yuma Sector, U.S. Border Patrol has documented over two hundred rescues in the area of the range. These rescued individuals would have perished without Border Patrol intervention.

46-2 If the proposed fencing is installed as a means of restricting travel in any of the areas of the range, we request the Border Patrol be provided keys to the gates or a means for immediate access.

46-3 Per recommendation on page 14-18, the Border Patrol would offer our expertise and experience in cooperation with other agencies involved in search and rescue responsibilities. It should be noted that the Yuma Sector established the Desert Area Rescue Team to minimize desert deaths. The rescue team is comprised of highly qualified, skilled and medically trained personnel who can be activated seven days a week, 24 hours a day.

The Yuma Sector would welcome an opportunity to meet with Bureau of Land Management personnel to discuss the impact of the proposed amendment on sector operations. It is our belief that our presence on the range in conjunction with Land Management rangers would provide an enhanced enforcement presence to protect the natural resources in that area.

For further information or assistance, contact ACPA John Elton at (602) 782-9548 or P.O. Box 2708, Yuma, Arizona 85366-2708.

Sincerely,



L. Gene Corder
Chief Patrol Agent

47

PUBLIC COMMENT FORM

Please print neatly or type. Please be as specific and detailed as possible in your comments. If necessary, please continue writing on the reverse side of this sheet.

COMMENTS:

I FEEL THAT ARIZONA HAS ADEQUATE WILDERNESS AREAS.

AS FOR THE FEDERAL LAND OF THE BARRY GOLDWATER RESERVATION: THE PERMIT SYSTEM HAS WORKED ADEQUATELY FOR MANY YEAR AND SHOULD BE CONTINUED. THIS IS PUBLICLY OWNED LAND AND SHOULD BE MADE AVAILABLE TO THE TAX PAYERS WHO CHOOSE TO USE IT WHEN AVAILABLE. I OPPOSE IT BEING CLOSED AND OFF LIMITS.

Please print below:

WILL WILLIAMS
Name _____ Phone Number _____
Cave Creek, Az. 85331
Mailing Address _____

Please complete this form and return it at the end of the meeting, or send your completed form with your comments to the address below:

PHOENIX DISTRICT OFFICE
BUREAU OF LAND MANAGEMENT
2015 W. Deer Valley Rd.
Phoenix, Arizona 80527

Your comments and cooperation will be greatly appreciated.

48

PUBLIC COMMENT FORM

Please print neatly or type. Please be as specific and detailed as possible in your comments. If necessary, please continue writing on the reverse side of this sheet.

COMMENTS:

- 48-1 | 1. DO NOT INCLUDE ANY PART OF THE CABEZA PRIETA WILDLIFE REFUGE INTO ANY PLAN - KEEP + MANAGE AS A WILDLIFE REFUGE TO INSURE PROSPERITY OF ALL WILDLIFE + HABITAT.
2. PROTECT THE NEEDS OF ALL WILDLIFE IN ALL AREAS OF THE BARRY GOLDWATER RANGE/GILA SOUTH.
3. INSURE THE NEEDS OF MILITARY AGENCIES UTILIZING THE AREAS INVOLVED IN THIS PLAN. DON'T "PLAY" WITH OUR COUNTRIES DEFENSE.
4. PROTECT + INSURE THE CONTINUED USE OF ALL AREAS INVOLVED BY THE U.S. BORDER PATROL SO THEY CAN DO THEIR JOB.
5. KEEP ENOUGH ROADS OPEN TO PUBLIC USE FOR RETRIEVING LEGAL GAME HUNTED OR TRAPPED.
- 48-2 | 6. AS FIRE POTENTIAL IS VERY LOW IN MOST AREAS INVOLVED, CONTAINED FIRES FOR COOKING + WARMTH SHOULD BE PERMITTED

Please print below:

JEAN E. WILSON
Name _____ Phone Number _____
YUMA, AZ. 85365
Mailing Address _____

Please complete this form and return it at the end of the meeting, or send your completed form with your comments to the address below:

PHOENIX DISTRICT OFFICE
BUREAU OF LAND MANAGEMENT
2015 W. Deer Valley Rd.
Phoenix, Arizona 80527

Your comments and cooperation will be greatly appreciated.

49

28 JUN 1989



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
215 Fremont Street
San Francisco, Ca. 94105

28 JUN 1989

Carole K. Hamilton, Area Manager
Lower Gila Resource Area
Phoenix District Office
U.S. Bureau of Land Management
2015 West Deer Valley Road
Phoenix, Arizona 85027

Dear Ms. Hamilton:

The U.S. Environmental Protection Agency (EPA) has reviewed the Draft Environmental Assessment (EA) and Amendment to the Lower Gila South Resource Management Plan for the BARRY M. GOLDWATER AIR FORCE RANGE, Maricopa, Pima, and Yuma Counties, Arizona. Our comments on this EA are provided pursuant to Section 309 of the Clean Air Act, the National Environmental Policy Act (NEPA), and the Council on Environmental Quality's (CEQ) Regulations for Implementing NEPA (40 CFR 1500-1508.)

The Plan Amendment and EA proposes that the Bureau of Land Management (BLM) adopt, with modifications, the existing Luke Air Force Range Natural Resources Management Plan. The Plan Amendment and EA will guide resource management actions on approximately 1,800,000 acres within the Goldwater Range. The 1,800,000 acres are withdrawn from all forms of appropriation under the public land laws (including the mining laws and the mineral leasing and geothermal leasing laws) and are reserved for use by the U.S. Department of Defense (DoD). Uses that cannot occur, and are thus not addressed in the EA, include livestock grazing; minerals exploration, leasing and entry; wilderness; and open areas for offroad vehicles. Management concerns that are addressed include wildlife management, recreation, construction of new roads, and development of utility corridors.

It is important for the BLM and the DoD to ensure that compliance with Federal and State environmental protection requirements is an integral component of future decision-making actions within the Goldwater Range. Accordingly, we request that BLM and/or DoD (as appropriate) ensure the following in their future management actions.

49-1

1) BLM and/or DoD should coordinate water quality and air quality planning, compliance with water quality and air quality standards, mitigation measures, and monitoring with the Arizona Department of Environmental Quality (ADEQ).

Under the Clean Water Act and Clean Air Act, EPA has delegated a number of permitting, compliance and enforcement authorities to the State of Arizona, which in turn has granted these authorities to ADEQ.

49-1

Although surface water resources in the Goldwater Range are extremely limited, we recommend attention to nonpoint source water pollution control, in accordance with Section 319 of the Clean Water Act, as amended in 1987. Future planning should assess whether individual projects (construction of utility corridors, new roads, etc.) may potentially cause nonpoint source water pollution problems.

Similarly, we suggest that air quality mitigation measures (e.g., the control of fugitive dust at BLM-permitted construction sites and activity areas) be coordinated with ADEQ, to ensure compliance with air quality standards.

49-2

2) BLM and/or DoD should coordinate with the ADEQ, the U.S. Fish and Wildlife Service (FWS), and the Arizona Department of Game and Fish (ADGF) on the development of wildlife management plans and on any activities that may cause adverse impacts to beneficial (protected) uses, threatened or endangered species, biological communities, and fish and wildlife resources. Such activities could include the development of utility corridors, the construction of new roads, and the expansion of surface military uses outside existing target and ground use areas.

We also suggest that DoD consult with FWS and ADGF on the impacts of noise (e.g., from supersonic training operations) on threatened or endangered species (especially for species that are sensitive to frequent or prolonged sonic booms during breeding, calving or nesting seasons).

49-3

3) BLM and/or DoD should have a mechanism in place to ensure that all future site-specific environmental analyses for land exchanges or land acquisitions include an inventory for hazardous substances. For a definition of "hazardous substances" please see Section 101(14) of the Comprehensive Environmental Response, Compensation and Liability Act of 1980, as amended by the Superfund Amendments and Reauthorization Act of 1986 (CERCLA/SARA).

It is important for Federal agencies to determine that any lands which the Federal Government acquires are not contaminated with CERCLA hazardous substances, in order to minimize potential costs or liabilities to the Government of the United States.

28 JUN 1989

49-4 4) If the Department of the Interior, DoD or other Federal agencies disposed of any hazardous substances in the Plan Amendment Area, or discovers evidence of such disposal in the future, they must promptly notify EPA and comply with all applicable requirements of CERCLA/SARA and the National Contingency Plan.

49-5 5) The EA (page 17) states that Weapons and Tactics Instruction (WTI) areas within proposed Areas of Critical Environmental Concern will be reclaimed and restored. The Final EA should disclose whether unexploded ordnance will be removed from reclamation sites or neutralized in place prior to reclamation efforts. If removal is proposed, the Final EA should discuss what would be done with the ordnance and applicable Federal requirements (i.e., the Resource Conservation and Recovery Act).

The Final EA should also discuss whether any remedial cleanup efforts are under consideration to remove various toxic residues associated with rocket propellants, TNT, phosphorous flares, and exploded and unexploded ordnance (exploded munitions may leave toxic residues of lead, chromium, magnesium, cadmium and other heavy metals).

We appreciate the opportunity to comment on the proposed Plan Amendment and Environmental Assessment. Please send us two copies of the Final Environmental Assessment when it is issued. If you have any questions, please contact me at 415-974-8292 (FTS 454-8292) or David Tomsovic of my staff at 415-974-7451 (FTS 454-7451).

Sincerely yours,



Jacqueline Wyland, Chief
Office of Federal Activities

cc: BLM, Arizona State Director (Mr. Bibles)
DOI, Regional Environmental Coordinator, San Francisco
(Pat Port)
Air Force, Luke Air Force Base (Lt. Michelle Monroe)

ANALYSIS AND RESPONSE TO COMMENTS

Comment 2-1.

The range of alternatives is consistent with the scope of the plan and with what is practical and reasonable.

The roads described in your letter will remain open and be included in the Transportation Plan. BLM will develop a Transportation Plan to address transportation planning, vehicle use management, signing needs, and other issues associated with visitor access and associated vehicular travel on the BGR. The plan will identify:

- routes appropriate and safe for recreation access;
- routes needed for administrative use only;
- routes unneeded or providing redundant recreational or administrative access.

The plan will be prepared with full public participation and developed with input from USAF, USMC, USFWS, AGFD and Border Patrol planners, and users of the BGR. Until the plan is developed in 1989 and 1990, visitors will continue to use designated or established roads.

Comment 2-2.

BLM and USAF land use planners have determined off-road vehicle racing would be inconsistent with the BGR military mission and natural resource management policies. Moreover, no areas on the BGR appear appropriate for establishment of off-highway events (authorized under Special Recreation Use Permits) or intensive "open" or unrestricted ORV use areas. Accordingly, off-highway vehicle events will not be authorized and open off-highway vehicle open use areas will not be designated in the final Lower Gila South RMP (Goldwater Amendment).

Comment 2-3.

This section has been modified to reflect your concern. No opportunities exist for prescribed fires on the BGR at this time, therefore this objective has been eliminated.

Comment 2-4.

Signing needs will be addressed in the Transportation Plan developed for transportation planning and vehicle use management. The plan will be developed with public input. Signing installed on the range will be compatible with the natural setting and recreation, scenic, visual and cultural resource management objectives.

Comment 3-1.

An Area of Environmental Concern (ACEC) is a public land area where BLM has determined, through the land use planning process, that special management attention is needed to protect and prevent irreparable damage to important historic, cultural, scenic values, wildlife resources and other natural values

or systems or processes, or to protect life and safety from natural hazards. An ACEC requires increased management attention and priority in BLM planning and on-the-ground management initiatives.

The Federal Land Policy and Management Act (FLPMA) of 1976 defined the purpose of an ACEC and directed the Secretary of the Interior to: promptly develop plans and regulations for ACEC protection (FLPMA Section 102); give priority to ACECs in developing and maintaining inventories of the public lands (FLMPA Section 210); and prioritize the designation and protection of ACECs in the development or revision of BLM land use plans (FLPMA Section 202).

BLM planning regulations require areas having potential for ACEC designation and management to be identified and evaluated throughout the resource management planning process (43 CFR 1610.7-2).

Comment 3-2.

Management prescriptions elaborated for each ACEC during preparation of this RMP amendment are expressly developed to manage the identified important and relevant resource values of an area. Management prescriptions are unique to each specific ACEC and will include terms and conditions specifically developed to protect the ACECs identified important or relevant resource values or initiate needed corrective action.

For example, cross-country vehicle travel in the Tinajas Altas ACEC proposal is eroding soils, damaging vegetation and impairing scenic values. Accordingly, an ACEC management prescription allows travel on designated roads only within this area. Another specific management prescription is the closure of vehicle trails leading to the lower Tinajas Altas tank. This prescription is needed to eliminate litter, soil erosion, and overnight use near the lower tank, permitting wildlife unrestricted access to this water source.

The restriction on off-road travel will not limit the ability to manage wildlife as use can be authorized, when needed, to access wildlife project or survey areas.

Comment 3-3.

On May 22 and 23, 1989, public workshops were held in Gila bend and Yuma respectively to seek public input in the finalizing of the Lower Gila South RMP (Goldwater Amendment).

Comment 3-4.

The two species mentioned have been included in the wildlife section of the Description of the Affected Environment in the proposed plan.

Comment 4-1.

The Military Lands Withdrawal Act of 1986 (Public Law 99-606) made BLM responsible for natural resource management on the BGR, including wildlife habitat. The taking of wildlife with traps is under the jurisdiction of the Arizona Game and Fish Commission.

Licensed trappers are permitted to use the BGR during trapping seasons. The Arizona Game and Fish Commission establishes trapping seasons and limits. Trapping is among the public use activities allowed on the BGR by the USAF. Trapping is subject to all prescriptions and regulations associated with public use of the BGR, including all USAF regulations and policies and BLM management prescriptions established by this plan. In addition, trapping is licensed and regulated by the Arizona Game and Fish Commission and is subject to the rules and regulations enacted by the Commission.

The Arizona Game and Fish Department monitors all trapping on the BGR, patrols the area, and investigates reports of violations. Public access to the BGR is permitted by the USAF, subject to the overriding military mission. With the possession of proper permits, the public can enter the BGR for authorized activities. Some of the BGR is available for public use (under permit) every day of the week. On other occasions, some or parts of the BGR may be completely closed or restricted to certain days of the week or times of the year. Closures to the public may be instituted due to public safety, national security or military missions.

Trappers and all other visitors to the BGR must adhere to the same BGR entry and exiting policies and regulations established by the USAF, USMC and BLM. To enter the BGR the visitor must first contact the appropriate military office (USAF for the eastern BGR or the USMC for the western BGR), complete a Range Entry application, review and sign a Hold Harmless Agreement, review other pertinent USAF/USMC literature, and obtain approved Range Passes. Failure to follow these procedures can result in revocation of BGR entry privileges.

Comment 5-1.

See comment response 4-1.

Comment 6-1.

Firewood collection and campfire prescriptions in the BGR and within ACECs have been revised and clarified due to public concerns. Collection of dead and down wood for recreational campfires on the BGR is permitted except in ACECs and within 150 feet of the Camino del Diablo. Campfires are allowed in ACECs, but dead and down wood must be brought into the ACEC from BGR lands outside the ACEC. Outside of ACECs and some other special management areas, utilization of wood for campfires is not considered a resource management problem at this time. All wood collection on the BGR for recreation use will be monitored and limitations employed if over-use or resource damage occurs. No wood cutting permits will be issued on the BGR.

Comment 6-2.

At the present time there are no proposals to construct transmission lines or any other surface disturbing utility use within the Interstate 8 utility corridor. If new power transmission lines are proposed, BLM would attempt to site the new right-of-way to the north of Interstate 8. The USAF would have to concur with all rights-of-way development within the BGR. Pipelines and other buried utility lines could be placed south of Interstate 8 if needed. Such below ground installations would not create substantially noticeable visual impacts on the landscape.

Comment 7-1.

See comment response 4-1.

Comment 7-2.

Currently all BGR vehicle users must stay on existing or established roads per USAF and BLM regulations. Off-road vehicle damage on the BGR public lands is probably attributable to a variety of users whether they are public or military. The evidence of off-highway vehicle travel currently noticed by visitors is most likely a combination of 45 years of military training and civilian travel, and occurred before BLM was assigned natural resource management responsibilities for the BGR. Implementation of BLM public off-road vehicle regulations, ranger patrol, and increased evaluation of off-road military travel by military planners and BLM will lessen or end off-road vehicle damage to the BGR's natural resources.

Comment 7-3.

The BGR is open to visitation and recreation use to all individuals. Entry to the range is available in many areas to visitors with the proper military permits. All individuals entering and using the Barry M. Goldwater Air Force Range are required to complete a Range Entry Application, sign a Hold Harmless Agreement, and receive an Explosive Safety Awareness handout. All visitors are subject to the same management conditions, rules and regulations formulated by the USAF, USMC, or BLM, including off-road vehicle travel designations and recreation use prescriptions (rules of conduct). Arizona Department of Transportation Highway Maps do not illustrate existing road networks within the BGR.

Comment 8-1.

The BLM and USAF discussed the potential range of alternatives early in the development of the draft Lower Gila South RMP Amendment (Goldwater Amendment). Subsequent to those discussions BLM developed the BGR No Action Alternative in compliance with the Council on Environmental Quality (CEQ) Regulations (40 CFR 1502.14 (d)).

The no action alternative "may be thought of in terms of continuing with the present course of action until that action is changed." ("Forty Most Questions Concerning CEQ's National Environmental Policy Act Regulations," Council on Environmental Quality, Federal Register, Vol. 46, No. 55, March 23, 1981).

The LAFR Plan, modified to comply with laws and regulations directing BLM administration, was used as the no action alternative because it currently the principal land use base used by USAF personnel to guide BGR natural resource management.

Comment 8-2.

Following completion of the Goldwater Plan Amendment, a Memorandum of Understanding, Habitat Management Plan, Cultural Resources Management Plan, Transportation Plan, Interagency Search and Rescue Action Plan, a Law Enforcement Agreement, and a Burro Capture and Removal Plan will be developed

in cooperation with all affected agencies. ACEC planning will be accomplished either within other resource activity plans or as separate ACEC plans, as appropriate. ACEC planning will be accomplished in consultation with all affected agencies.

Comment 8-3.

See comment response 2-2.

Comment 8-4.

Definitions of Special Recreation Management Areas (SRMA), Extensive Recreation Management Areas (ERMA), and other management area designations used in this planning amendment have now been included in this document. Areas of Critical Environmental Concern (ACECs) are fully described in comment response 3-1.

Comment 8-5.

The purpose of Extensive Recreation Management Areas (ERMAs) is more completely described in this final plan amendment under the Outdoor Recreation Use and Management section.

Comment 8-6.

BLM ORV regulations and wood cutting limitations will be accomplished through several means including: BLM Ranger patrol, enforcement of Range Pass requirements, signing programs, visitor information brochures and other visitor services, and public education. BLM Rangers will have the discretion to issue citations for violators of BGR natural resource management policies.

Comment 8-7.

The existing environmental practices or projected land use trends that could damage the special or sensitive resource values of ACEC candidates are described in the Evaluation of Relevance and Importance analysis presented for each potential ACEC.

Comment 8-8.

Visitor management and services, resource protection, outdoor recreation use, cultural resources, ACEC/Other Management Area planning, and wildlife habitat management are BLM's primary management emphasis for BGR natural resources management. Accordingly, greater amounts of information about these subjects must be presented to BLM decision-makers, participating agencies and interested publics in order to permit informed decisions and public comments. Some of the resource data collected in the Luke Air Force Range Natural Resource Management Plan is not applicable to BLM resource management responsibilities. LAFR Plan natural resource recommendations not brought forward by this final Goldwater Amendment will not be implemented by BLM.

The Luke Air Force Range Natural Resource Management Plan-Executive Summary has been included as part of this final document in order to provide interested parties more detailed descriptions of BGR natural resources.

Comment 8-9.

A description of the Sanborn's long-nosed bat has been added to the Wildlife Resources section of the Description of the Affected Environment.

Comment 8-10.

Your concerns have been addressed under the revised Perimeter Land Uses and Encroachment section of this plan.

Comment 8-11.

Management responsibilities and prescriptions for each participating agency involved in the management or use of the Barry M. Goldwater Range will be outlined in a Memorandum of Understanding (MOU). The USAF, USMC and BLM will participate in the development and execution of this MOU. The MOU will be developed by these participating agencies after completion and approval of this Final Lower Gila South Resource Management Plan (Goldwater Amendment).

Comment 8-12.

Fencing will be erected on BGR lands where cattle encroachment continues to be observed. Sections of the document indicated in your letter have been revised to clarify this issue.

Comment 8-13.

The No Action alternative would have a greater adverse impact because it would provide less protection for the vegetative resources because of a lack of specific management prescriptions in ACECs, habitat management areas and recreation management areas. The effects vary because of the absence of ACEC and other protection.

Comment 8-14.

It is true that under the No Action alternative these problems would not necessarily continue unchecked. BLM has responsibility for management of wild and free roaming burro and would have to examine the burro herd to determine ownership. This Plan Amendment presents specific objectives and planned actions on burro management to be pursued by BLM. When the Goldwater Amendment is approved and signed, BLM will implement all resource management prescriptions developed by this plan.

Comment 8-15.

Based on current conditions observed on the BGR, cross-country travel by vehicles, authorized or not, appears to be a popular activity. Under BLM management practices, travel cross-country off existing roads and trails will not be permitted. Visitors who have participated in this recreation activity will no longer be able to do so under the management prescriptions and BLM use supervision proposals presented in the Proposed Action.

Comment 8-16.

The text has been revised to discuss a primitive campground. A primitive campground near Cipriano Pass was identified as a need in the Luke Air Force Base 5-Year Outdoor Recreation Management Plan, but this proposal is no longer part of the Proposed Action. The campground would alleviate camping pressure and public use encroachment on the Tinajas Altas Mountains ACEC and associated natural features, water resources and indigenous wildlife. We agree that a need for such a facility is present, but not necessarily in the Cipriano Pass area. BLM and the USAF will survey the BGR for sites suitable for primitive campground development.

Siting of primitive campgrounds must be carefully done to prevent impacts to wildlife populations and habitat, scenic values, visitor use patterns, soils and plant conditions, and military operations. We are modifying the primitive campground proposals presented in this plan to reflect these concerns. A site study and survey of potential campground sites in the BGR will be conducted. A primitive campground in the Cipriano Pass area may be considered along with other campground site candidates posed by BLM planners, military and other management agencies, and public input.

Comments 9-1, 10-1 and 11-1.

See comment response 4-1.

Comment 12-1.

Management prescriptions presented under the Water Resources section outline BLM responsibilities involving BGR water management issues. Map One in the final Goldwater Amendment provides an overview of the planning area.

Comment 12-2.

The Luke Air Force Range Natural Resource Management Plan-Executive Summary has been included in this final document as Appendix II, in order to provide more detailed descriptions of BGR natural resources.

Comment 13-1.

Camping with self-contained or recreational vehicles will be permitted within 50 feet of established or designated roads along BGR roads. ACECs and other management areas will be subject to the same policies unless other management prescriptions are considered appropriate and brought forward by this RMP amendment or subsequent ACEC or other activity planning. Due to the presence of military ordinance, it is imprudent and unsafe to have visitors scouting for campsites beyond the 50 foot parameter. For informational purposes, camping within 50 foot of designated roads is the standard applied to the Cabeza Prieta National Wildlife Refuge. Therefore, BLM and USFWS policies in the area will be consistent.

Comment 13-2.

The Barry M. Goldwater Gunnery Range is withdrawn for military training activity. Administered by the Tactical Air Command of the USAF through Luke Air Force Base, the range is jointly used by the Air Force and the United States Navy/United States Marine Corps. Use of air space above the range is restricted by military authorities and the Federal Aviation Administration (FAA). Any civilian use of this airspace is outside the scope of BLM management authorities and must be pursued through the appropriate military authorities and the FAA.

Comment 13-3.

There are no proposals to construct non-military communications sites within the BGR. If communication sites are proposed, an environmental assessment will be prepared along with a communication site management plan. All communication site rights-of-way would be subject to USAF review and concurrence before a communication site is authorized.

Comment 13-4.

The USAF requires that civilian vehicles used on the BGR be licensed.

Comments 15-1 and 16-1.

See comment response 4-1.

Comment 17-1.

BLM will conduct floristic surveys and monitoring for populations of sensitive, threatened, endangered, rare or unique species.

Comment 17-2.

Affected Environment sections of this plan addressing Botanical Resources and botanical analysis within Areas of Critical Environmental Concern have been expanded to provide readers with more detailed descriptions of botanical resources on the BGR.

Comments 18-1, 19-1, 20-1 and 21-1.

See comment response 4-1.

Comment 22-1.

BLM will develop a Transportation Plan addressing specific transportation planning, off-highway vehicle management and other issues associated with vehicular travel on the BGR. The plan will identify:

- routes appropriate and safe for recreation access;
- routes needed for administrative use only;
- routes unneeded or providing redundant recreational or administrative access.

The plan will be prepared with full public participation and developed with

input from USAF, USMC, USFWS, AGFD and Border Patrol planners. Until the plan is developed in 1989 and 1990, visitors will continue to use existing roads. The routes depicted as recreation corridors on the maps within the draft Lower Gila South RMP (Goldwater Amendment) were considered the primary public vehicle travel roads through the BGR. Additional roads will be open for public use under the Proposed Action, however.

Comment 22-2.

The subject Plan Amendment does not present or analyze a range of alternatives for Areas of Environmental Concern (see comment response 8-1). An ACEC is an area of public land where BLM has determined, through the land use planning process, that special management attention is needed to protect and prevent irreparable damage to important historic, cultural, scenic values, wildlife resources and other natural values or systems or processes, or to protect life and safety from natural hazards.

ACEC areas delineated on the maps accompanying this RMP amendment outline lands which have been screened and found to meet the relevance and importance criteria required for potential ACECs. During the initial screening of ACEC nominations, areas that did not meet the relevance and importance criteria or were not needed to protect relevant or important values were removed from further consideration as ACEC candidates.

Management prescriptions for some of the ACECs have been modified or re-written to clarify access, hunting, trapping, camping and campfire concerns raised by your letter and by other respondents.

Comment 22-3.

The document has been revised to correct this error. See comment response 8-1 for further clarification.

Comment 22-4.

This section has been rewritten to more accurately reflect ecosystems of the desert regions encompassed by the BGR.

Comment 22-5.

This section of the Goldwater Amendment has been changed to more accurately reflect BLM water right filings. BLM will not file for waters held by AGFD or the USAF and will coordinate all BGR wildlife water right filings with both AGFD and USAF.

Comment 22-6.

See comment responses 17-1 and 17-2.

Comment 22-7.

All proposed fences will be reviewed in compliance with NEPA. Wildlife concerns will be incorporated into the location, design and construction of the fence.

Comment 22-8.

The reference to "Commercial hunting" has been edited from the final plan amendment/EA.

Comment 22-9.

Changes to the draft have been made and installation of a Cipriano Pass campground is no longer part of the Proposed Action. See comment response 8-16 for additional analysis of campground siting issues.

Comment 22-10.

Camping prescriptions for the ACECs and other management areas have been modified to permit vehicle-based or self-contained camping along designated or existing roads in the ACECs. Specific management plans developed for each ACEC or management area may identify certain areas not appropriate for self-contained camping. Until such plans are developed, camping along roads will be permitted except in areas specifically closed to such use by the BLM, USAF, or USMC. Public and other agency (USAF, USMC, USFWS, AGFD, Border Patrol, etc.) involvement in the formulation of ACEC and other site specific management plans will be sought and encouraged.

Comment 22-11.

Use of dead and down wood for campfires on the BGR by recreation visitors will be allowed in non-ACEC areas. Wood cutting and harvest for commercial or domestic use will not be permitted or authorized on the BGR. Campfires will be allowed BGR lands.

Comment 22-12.

See comment response 13-1.

Comment 22-13.

Changes, modifications or deletions have been made in the indicated sections of the Goldwater Amendment as suggested.

Comment 22-14.

The section has been revised. Additional analysis of the Sanborn's long-nosed bat, peregrine falcon, Colorado desert fringe-toed lizard and mountain lion are presented in the final Goldwater Amendment.

Comment 22-15.

For the purpose of this plan the phrase "habitat expansion" refers to the creation of wildlife habitat from non-habitat for specific species. However, there are opportunities for improving existing habitat.

Comment 22-16.

This section has been revised to more accurately describe the habitat of the flat-tailed horned lizard.

Comment 22-17.

See comment response 22-15.

Comment 22-18.

Since accurate amounts of current and potential habitat have not been determined for this species within the ACEC, any estimate is subject to debate. Therefore the reference to an acre amount has been deleted.

Comment 22-19.

This is an excellent suggestion and will be incorporated into the final RMP (Goldwater Amendment). A brochure and associated education program describing the ecological setting of the Goldwater Range will provide BLM, military and visitors valuable information about the fragile resources on the BGR. In addition, needed information addressing proper desert or arid land use ethics can be conveyed to visitors and military personnel. The participation of AGFD, USMC, USAF and other interested groups will be appreciated in the preparation of these environmental education materials.

Comment 23-1.

See comment response 2-2.

Comment 23-2.

Installation of a primitive campground at Cipriano Pass is no longer part of the Proposed Action. See comment response 8-16 and 22-9 for additional discussion of the campground issue.

The impacts of off-road vehicle use on desert environments have been evaluated in the environmental consequences section of this Plan Amendment/EA. As both the LAFR Plan and BLM plan both limit vehicles to established or designated roads, impacts from off-road use on soils, vegetation and wildlife habitat will decline under both alternatives.

Comment 23-3.

During the preparation of this RMP amendment, the Tinajas Altas Mountains were examined to determine if they met the Area of Environmental Concern (ACEC) criteria. The area studied for ACEC status generally corresponded with the State of Arizona Tinajas Altas Mountains Natural Area. State of Arizona Natural Areas are administrative designations only and the state has no authority to regulate or propose natural resource management policies on such areas enclosing federally administered land. About 92,000 acres were examined for possible establishment as an ACEC.

During field investigations it was found that surface military training activities and many off-highway vehicle trails utilize part of the lands under ACEC consideration, primarily a 12,000 tract between Raven Butte and Cipriano Pass and a 27,000 acre tract north of the Camino del Diablo. ACEC designation around the Raven Butte Mountain communication complex would constrain future USMC training operations in the area. The 27,000 acre area north of the

Camino del Diablo did not possess high value or threatened cultural, wildlife, scenic or botanical resource values that could be better managed or protected with ACEC designation. The area north of the Camino del Diablo is also utilized for Hawk Missile sites with at least two active sites present (site 34 and 35) at this time.

Prescriptions needed to manage these two tracts, particularly regarding surface use and vehicle travel, would constrain and compromise military training requirements of the USMC. Unauthorized civilian off-road vehicle travel will be quickly curtailed by BLM Rangers and ORV regulations. USMC training activities would be regulated by detailed environmental assessments and use of identified ground areas. Standard BLM management policies and practices, along with military cooperation, will quickly improve natural resource management conditions in the portion of the State Natural Area not established as an ACEC.

After consultation with the USAF and USMC, and the review of public comments, BLM decided to revise the ACEC boundary on the southeast to include the lower portion of the Lechuguilla Desert and the Sierra de la Lechuguilla range. Bighorn sheep use the area for migration to and from Mexico. The landscape is natural with stands of saguaro and agave, and the lands will form a scenic backdrop to the south for travelers along the Camino del Diablo.

The other 53,000 acres of the Tinajas Altas Mountain range were found to contain unique flora, fauna, scenic and cultural resource qualities. Public recreation, military use, off-highway vehicle travel and wood poaching threatened both natural and cultural resource values with irreplaceable loss. Special management was needed to protect the area and restore and correct damage caused by past management practices. Accordingly, meeting all relevance and importance criteria required for designation, the Tinajas Altas Mountains are proposed for establishment as an ACEC in this final plan. Under ACEC management, the area will remain an excellent example of Sonoran Desert habitat and natural conditions would be restored across ACEC areas.

Comment 23-4.

A cooperative habitat management plan (HMP) and EA addressing overall habitat management will be developed. Wildlife populations and habitat management objectives, along with any associated water developments, will be determined within the HMP. Any water developments approved for the BGR will be carefully planned and analyzed through the environmental assessment process. The EA will analyze the effect of water development on the surrounding flora and fauna. Any new information on the impacts of water developments on desert bighorn sheep carrying capacity will be reflected in the HMP/EA.

Comment 24-1.

Before this final plan was completed, we reviewed all LAFR Plan Recommendations excluded in the draft plan. Some of the LAFR Plan Recommendations originally excluded were accepted in their entirety or were modified and incorporated into this final plan. Please refer to the Description of the Proposed Action and Alternative section for a review of all LAFR Plan recommendations.

Comment 24-2.

All public comments on the draft Environmental Assessment on the Goldwater Amendment have been carefully reviewed. Many changes in this final plan have been made. The cover letter accompanying this Final Environmental Assessment on the Goldwater Amendment provides information on protesting this action; other comments on the document should be made to the District Manager within 30 days (40 CFR 1506.10(b)(2)).

Comment 24-3.

LAFR Plan Recommendation 3-5 was excluded because wilderness designation on BGR lands is not an issue in this planning amendment. Land use designations like ACECs, Special Recreation Management Areas and Habitat Management Plans are addressed in other sections of this plan along with specific management actions. Recommendation 3-7 and 3-11 were excluded because boundary verification of State Natural Areas and other land use classifications not established by FLPMA or part of BLM land use planning system are out of the scope of BLM's management responsibilities. Management prescriptions addressed under the specific management action for each ACEC and Special recreation Management Area describe boundaries and management actions for these areas. BLM's management proposals will minimize, eliminate or reclaim ground-disturbing or unauthorized activities in the seven special management areas established by this plan.

Comment 24-4.

Assessments of groundwater resources, including aquifer characterizations, potentials for development, and susceptibility to contamination, will be conducted on an as-needed basis. BLM will utilize existing data bases and, where data is insufficient, develop new groundwater information as the situation dictates. All water resources within the BGR will be inventoried and catalogued as to type of use, amount of use, and water rights protecting the uses.

Comment 24-5.

There has been some recent evidence that Sonoran pronghorn herd locations are associated with water sources. This would indicate water developments may be useful in the habitat management of the species. Any water development for the pronghorn will be carefully researched, planned and documented in a cooperative habitat management plan/EA before any additional water sources are installed.

The EA will document effects on the surrounding flora and fauna from water developments.

Comment 24-6.

The section has been revised in the wildlife section of the Proposed Action to clarify BLM's position on determining taxonomic validity.

Comment 24-7.

See comment response 2-2.

Comment 24-8.

See comment response 8-16 and 22-9.

Comment 24-9.

BLM will review rights-of-way proposals for proposed utility line development in this area, but the USAF must concur with all rights-of-way before they can be issued. All future powerline rights-of-way through the area will be placed parallel to the existing 69 kV powerline. All future underground utility uses will run parallel to the existing tracks of the Tucson, Cornelia and Gila Bend railroad. No rights-of-way proposals are presently under consideration for this area of the BGR. The final document has been revised to correct this section.

Comment 25-1.

See comment response 3-3.

Comment 25-2.

See comment response 2-1.

Comment 25-3.

The addition of the Tinajas Altas Mountains to the Cabeza Prieta National Wildlife Refuge is not addressed or proposed by this Lower Gila South Resource Management Plan (Goldwater Amendment).

Comment 26-1.

A land exchange program is a viable means of acquiring nonfederal lands within the BGR and has been incorporated into the final plan.

Comment 26-2.

All surface disturbing activities for activities associated with ground water development will be handled in compliance with NEPA regulations and appropriate BLM rules and policies. No new rights-of-way will be issued in ACECs or other areas as prescribed in the proposed final Plan Amendment. The State of Arizona manages ground water resources.

Comment 26-3.

The Tinajas Altas Road is considered a primary recreation use and travel corridor and is described in the final plan as such a route.

Comment 26-4.

Special Recreation Use Permits (SRUPs) are required for certain activities on public lands administered by the BLM. These activities include commercial recreation uses (such as back-country tours and guided hunting and outfitter use), off-road vehicle use involving 50 or more vehicles and competitive uses requiring contestants or participant registration. In addition, permits may

be needed in "special areas" where the BLM manager determines the resources require special management and permitted recreation control measures are needed for their protection. Commercial hunting has been changed to guided or outfitter hunting, terms more accurately reflecting SRUP activities.

Comment 26-5.

See comment response 2-2.

Comment 26-6.

The Yuma Desert and Sand Dunes Habitat Management Area (HMA) will be expanded to the north and east in this final plan. After reviewing public comments and consulting with the USAF and USMC, BLM proposes to expand the HMA to include dune-fringe areas with habitat of the flat-tailed horned lizard and other dune components. Habitat management for the flat-tailed horned lizard (a Category 1 Species) and other Yuma Desert and Sand Dune plant and wildlife species will be emphasized in both the Gran Desierto Dunes ACEC and HMA. The Yuma Desert and Sand Dunes HMA did not meet ACEC criteria as evaluated in the Description of the Affected Environment.

Comment 26-7.

Habitat figures for this species are subject to debate and no habitat acreage is being estimated at this time.

Comment 27-1.

The USMC will be a participant in the described management plans prescribed for the BGR. See Comment Response 8-2 for additional information.

Comment 27-2.

See Comment Response 2-2.

Comment 27-3.

The Raven Butte Mountain Complex has been excluded from the proposed ACEC. Establishment as an ACEC would interfere with USMC training missions and future training opportunities. Moreover, the area has been used for many years for USMC training and the prescribed ACEC recommendations could not be implemented in the Raven Butte area without seriously constraining ongoing military activities. Off-road or cross-country vehicle travel is BLM's principal resource management concern in this area. BGR off-road vehicle management prescriptions, ranger patrol and military use restrictions will effectively manage civilian vehicle use in the Raven Butte area.

Comment 27-4.

BLM and the USMC will jointly review roads and other facilities available for public use in the Yuma Desert and Sand Dunes Habitat Management Area and Gran Desierto Dunes ACEC to ensure all public visitation is confined to safe areas well removed from the Cactus West and Moving Sands conventional bombing targets.

Public use and visitation to this part of the BGR is presently highly restricted due to USMC live fire activity.

Comment 27-5.

The Camino del Diablo Backcountry Byway (Historic Trail) was proposed as a one-half mile wide corridor, or one-quarter mile either side of the existing trail. This proposal would total 19,200 acres. The final plan will be amended to more clearly reflect this proposal. In addition, the final plan will incorporate your suggestion that future USMC training sites be sited one-quarter mile from the trail. This quarter-mile move will ensure minimal public observation of training areas.

Comment 27-6.

The description of the Tinajas Altas Mountains ACEC has been amended to remove references to the Sonoran pronghorn antelope.

Comment 28-1.

The Botanical sections of this plan have been revised and now include reference to acuna cactus.

Comment 29-1.

See comment response 4-1.

Comment 31-1.

Vehicle use will be allowed on established roads as defined under the vehicle use management prescriptions described in the Description of the Proposed Action and Alternative-Proposed Action, Vehicle Use. About 1,464 miles of established road will be open for public access.

Comment 31-2.

See comment response 8-16.

Comment 31-3.

Camping, campfires and recreation use will continue in the Mohawk Mountains and Sand Dunes ACEC and Yuma Desert and Sand Dunes HMA. Vehicle access to and through these areas will continue on established or designated roads.

Comment 31-4.

Rights-of-way are not issued to wildlife projects or developments. Wildlife projects are evaluated through a Habitat Management Plan and impacts to the environment are analyzed in an environmental assessment (EA). Upon completion of the EA, BLM will approve the project if there are no adverse impacts or when appropriate mitigation measures have been applied.

Comment 31-5.

Campfires will be allowed on BGR lands.

Comment 31-6.

See comment response 31-1.

Comment 32-1.

See comment response 26-6.

Comment 32-2.

See Comment Response 2-2.

Comment 37-1.

See comment 4-1.

Comment 38-1.

See comment response 4-1.

Comment 38-2.

The Arizona Game and Fish Department has the responsibility for all game and wildlife law enforcement on the BGR. The military is responsible for ensuring that the Range Entry Application and Hold Harmless agreements are completed and signed by potential BGR visitors and that all visitors possess Range Entry Permits.

Comment 38-3.

The BGR is open to public recreation visitation. Daily entry to the range is available in many areas to visitors with the proper military permits. All individuals entering and using the Barry M. Goldwater Air Force Range are required to complete a Range Entry Application, sign a Hold Harmless Agreement, and receive an Explosive Safety Awareness handout. Obtaining permits to visit the range takes prior planning and initiative on the part of visitors in order to obtain and complete all permit application paperwork and obtain a range entry pass. User maps and other amenities also are presently not available and visitors must acquire their own detailed maps for range use. Arizona Department of Transportation highway maps do not reflect the existing road network within the Barry M. Goldwater Air Force Range.

Comment 39-1.

No roads are being closed or public access denied. Closure of unneeded roads will be addressed in the Transportation Plan. See Comment Response 22-1 for additional analysis.

Comment 40-1.

See comment responses 38-3 and 4-1.

Comment 42-1.

See Comment Response 8-16.

Comment 42-2.

See Comment Response 2-2.

Comment 42-3.

Both the Camino del Diablo and the Mohawk Valley Roads are considered primary access corridors. BLM and the USAF will develop a Transportation Plan to address specific transportation planning and vehicular access and use in the BGR. The plan will be prepared with full public participation and developed with input from all affected agencies. See Comment Response 2-1 for additional information involving transportation plan preparation.

Comment 43-1.

See comment response 4-1.

Comment 45-1.

See comment response 24-2.

Comment 45-2.

BLM recognizes the fragility of this desert ecosystem and as stated in the Purpose and Need section, we will manage the resources on the BGR under the concept of multiple-use which includes conservation and protection.

Comment 45-3.

Vehicle use will be restricted to designated routes within the Tinajas Altas Mountains ACEC. Roads and vehicle trails leading to the lower pool area at the base of the Tinajas Altas tanks will be closed at a point near the Camino del Diablo route, about one-quarter mile east of the lower tinajas. Other soil, plant and associated damage will also be reclaimed where needed.

Comment 45-4.

See comment response 8-16.

Comment 45-5.

See comment response 2-2.

Comment 45-6.

See comment response 23-4 and 24-5.

Comment 45-7.

BLM designates ACECs through the Resource Management Plan (RMP) process. To be considered as an potential ACEC or ACEC candidate in the RMP, the area must satisfy the criteria of being both relevant and important. The relevance factor must be met first for an area to be considered for ACEC designation. The Sentinel Plain Lava Flow did not meet the Relevance criteria as set forth

in BLM ACEC planning guidelines. Therefore it could not be considered for ACEC designation. The Relevance and Importance analysis for the Sentinel Plain Lava Flow area are presented in the Affected Environment section of this RMP amendment.

The area's volcanic features will be interpreted and protected, and visitor use managed, within a Special Recreation Management Area. Educational and recreation values will be emphasized. A management plan will outline off-road vehicle limitations, interpretative measures to be installed, and recreational attributes to be highlighted. Except for two highly restricted utility corridors (aligned and parallel to existing utilities (69 kV powerline and railroad tracks) all other surface disturbing land uses will be minimal. The public will be invited to participate in preparation of the recreation management plan.

Comment 45-8.

See Comment Response 2-1.

Comment 46-1.

Existing Border Patrol road maintenance and drag roads will not be changed by this plan. The Border Patrol will be asked to participate in the development of a Transportation Plan addressing transportation, search and rescue and law enforcement needs on the BGR.

Comment 46-2.

Access needs of the Border Patrol will be taken into account by the BLM, USAF, and the USMC before management fencing is installed on the BGR. Means for Border Patrol access will be accommodated. The Border Patrol will be asked to comment on any fencing proposals potentially affecting their operations before such projects are initiated.

Comment 46-3.

Participation of the Border Patrol in Search and Rescue operations on the BGR will be welcomed and can be formally incorporated into BGR range management through a management agreement between the USAF, USMC, BLM and local affected law enforcement authorities.

Comment 48-1.

See Comment Response 25-3.

Comment 48-2.

See Comment Response 2-3 and 6-1.

Comment 49-1.

BLM coordinates with the Arizona DEQ on water quality and air quality matters applicable to management and utilization of public land resources. BMPs will be developed for any activity which has the potential for generating non-point source pollution.

The BGR is not located within a non-attainment area for air quality, and activities proposed are not anticipated to emit significant additional particulate or other aero-pollutants. For all activities within the BGR, Clean Water and Clean Air Act standards must be complied with.

Comment 49-2.

Where applicable, all indicated coordination with the described agencies will be conducted by BLM.

Comment 49-3.

Prior to the completion of a land exchange, BLM is required to inventory the lands to be acquired for the presence of hazardous materials. If hazardous materials are present, we will not accept title to those lands until the materials are completely removed.

Comment 49-4.

The Department of the Interior, the Department of Defense and all other Federal agencies operating on the BGR will notify EPA and comply with all applicable requirements of RCRA involving disposal of hazardous substances. The National Contingency Plan and CERCLA comes into force for unauthorized, illegal or accidental disposal.

Comment 49-5.

The USAF and USMC will make the decision whether or not military training sites will be cleared of unexploded ordnance and residues associated with rocket propellants. However, BLM will review these actions before they occur.

LIST OF PREPARERS

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BA in Anthropology, Arizona State University. Cheryl was responsible for writing the cultural resources portion of this amendment. She has worked six years for the BLM.

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Carolyn provided the word processing, typesetting and proof-reading support for this amendment. She has worked for the Federal Government for 11 years and two years for BLM.

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Barry Long, Hydrologist
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Debbie Morrell, Secretary - District Manager's Office
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UNITED STATES AIR FORCE AND UNITED STATES MARINE CORPS

The following people from Luke Air Force Base and the Marine Corps Air Station (Yuma, Arizona) provided technical assistance and review for this RMP Amendment/EA.

Lt. Colonel Russ Grove, USMC, Marine Corps Air Station (MCAS), Yuma
Lt. Colonel Dave Johnson, USMC, MCAS
Lt. Michelle Monroe, USAF, Luke Air Force Base
Ensign Geoffrey Burley, USMC, MCAS Environmental Division
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APPENDIX I
WITHDRAWALS OF PUBLIC LAND FOR MILITARY PURPOSES
(PUBLIC LAW 99-606)

PUBLIC LAW 99-606 [H.R. 1790]; November 6, 1986

**WITHDRAWALS OF PUBLIC LANDS FOR
MILITARY PURPOSES**

An Act to withdraw certain public lands for military purposes, and for other purposes.

*Be it enacted by the Senate and House of Representatives of the
United States of America in Congress assembled,*

SECTION 1. WITHDRAWALS.

(a) **BRAVO-20 BOMBING RANGE.**—(1) Subject to valid existing rights and except as otherwise provided in this Act, the lands referred to in paragraph (2) of this subsection, and all other areas within the boundary of such lands as depicted on the map specified in such paragraph which may become subject to the operation of the public land laws, are hereby withdrawn from all forms of appropriation under the public land laws (including the mining laws and the mineral leasing and the geothermal leasing laws). Such lands are reserved for use by the Secretary of the Navy for—

(A) testing and training for aerial bombing, missile firing, and tactical maneuvering and air support; and

(B) subject to the requirements of section 3(f), other defense-related purposes consistent with the purposes specified in this paragraph.

(2) The lands referred to in paragraph (1) of this subsection are the public lands comprising approximately 21,576.40 acres in Churchill County, Nevada, as generally depicted on the map entitled "Bravo-20 Bombing Range Withdrawal—Proposed", dated April 1986, and filed in accordance with section 2.

(3) This section does not affect the withdrawals of July 2, 1902, August 26, 1902, and August 4, 1904, under which the Bureau of Reclamation utilizes for flooding, overflow, and seepage purposes approximately 14,750 acres of the lands withdrawn and reserved by this subsection.

(b) **NELLIS AIR FORCE RANGE.**—(1) Subject to valid existing rights and except as otherwise provided in this Act, the public lands described in paragraph (2) of this subsection are hereby withdrawn from all forms of appropriation under the public land laws (including the mining laws and the mineral leasing and the geothermal leasing laws). Such lands are reserved for use by the Secretary of the Air Force—

(A) as an armament and high-hazard testing area;

(B) for training for aerial gunnery, rocketry, electronic warfare, and tactical maneuvering and air support; and

(C) subject to the requirements of section 3(f), for other defense-related purposes consistent with the purposes specified in this paragraph.

(2) The lands referred to in paragraph (1) of this subsection are the lands comprising approximately 2,945,000 acres of land in Clark, Nye, and Lincoln Counties, Nevada, as generally depicted on the map entitled "Nellis Air Force Range Withdrawal—Proposed", dated January 1985, and filed in accordance with section 2.

(c) **BARRY M. GOLDWATER AIR FORCE RANGE.**—(1) Subject to valid existing rights and except as otherwise provided in this Act, the lands described in paragraph (2) of this subsection are hereby withdrawn from all forms of appropriation under the public land laws (including the mining laws and the mineral leasing and the geothermal leasing laws). Such lands are reserved for use by the Secretary of the Air Force for—

- (A) an armament and high-hazard testing area;
- (B) training for aerial gunnery, rocketry, electronic warfare, and tactical maneuvering and air support; and
- (C) subject to the requirements of section 3(f), other defense-related purposes consistent with the purposes specified in this paragraph.

(2) The lands referred to in paragraph (1) of this subsection are the lands comprising approximately 2,664,423 acres in Maricopa, Pima, and Yuma Counties, Arizona, as generally depicted on the map entitled "Luke Air Force Range Withdrawal—Proposed", dated January 1985, and filed in accordance with section 2.

(d) **MCGREGOR RANGE.**—(1) Subject to valid existing rights and except as otherwise provided in this Act, the public lands described in paragraph (2) of this subsection are hereby withdrawn from all forms of appropriation under the public land laws (including the mining laws and the mineral leasing and the geothermal leasing laws). Such lands are reserved for use by the Secretary of the Army—

- (A) for training and weapons testing; and
- (B) subject to the requirements of section 3(f), for other defense-related purposes consistent with the purposes specified in this paragraph.

(2) The lands referred to in paragraph (1) of this subsection are the lands comprising approximately 608,384.87 acres in Otero County, New Mexico, as generally depicted on the map entitled "McGregor Range Withdrawal—Proposed", dated January 1985, and filed in accordance with section 2.

(3) Any of the public lands withdrawn under paragraph (1) of this subsection which, as of the date of enactment of this Act, are managed pursuant to section 603 of the Federal Land Policy and Management Act of 1976 (43 U.S.C. 1782) shall continue to be managed under that section until Congress determines otherwise.

(e) **FORT GREELY MANEUVER AREA AND FORT GREELY AIR DROP ZONE.**—(1) Subject to valid existing rights and except as otherwise provided in this Act, the lands described in paragraph (2) of this subsection are hereby withdrawn from all forms of appropriation under the public land laws (including the mining laws and the mineral leasing and the geothermal leasing laws), under an Act entitled "An Act to provide for the admission of the State of Alaska into the Union", approved July 7, 1958 (48 U.S.C. note prec. 21), and under the Alaska Native Claims Settlement Act (43 U.S.C. 1601 et seq.). Such lands are reserved for use by the Secretary of the Army for—

- (A) military maneuvering, training, and equipment development and testing; and
- (B) subject to the requirements of section 3(f), other defense-related purposes consistent with the purposes specified in this paragraph.

(2) The lands referred to in paragraph (1) of this subsection are—

(A) the lands comprising approximately 571,995 acres in the Big Delta Area, Alaska, as generally depicted on the map entitled "Fort Greely Maneuver Area Withdrawal—Proposed", dated January 1985, and filed in accordance with section 2; and

(B) the lands comprising approximately 51,590 acres in the Granite Creek Area, Alaska, as generally depicted on the map entitled "Fort Greely, Air Drop Zone Withdrawal—Proposed", dated January 1985, and filed in accordance with section 2.

(f) **FORT WAINWRIGHT MANEUVER AREA.**—(1) Subject to valid existing rights and except as otherwise provided in this Act, the public lands described in paragraph (2) of this subsection are hereby withdrawn from all forms of appropriation under the public land laws (including the mining laws and the mineral leasing and the geothermal leasing laws), under an Act entitled "An Act to provide for the admission of the State of Alaska into the Union", approved July 7, 1958 (48 U.S.C. note prec. 21), and under the Alaska Native Claims Settlement Act (43 U.S.C. 1601 et seq.). Such lands are reserved for use by the Secretary of the Army for—

- (A) military maneuvering;
- (B) training for artillery firing, aerial gunnery, and infantry tactics; and
- (C) subject to the requirements of section 3(f), other defense-related purposes consistent with the purposes specified in this paragraph.

(2) The lands referred to in paragraph (1) of this subsection are the lands comprising approximately 247,951.67 acres of land in the Fourth Judicial District, Alaska, as generally depicted on the map entitled "Fort Wainwright Maneuver Area Withdrawal—Proposed", dated January 1985, and filed in accordance with section 2.

SEC. 2. MAPS AND LEGAL DESCRIPTIONS.

(a) **PUBLICATION AND FILING REQUIREMENT.**—As soon as practicable after the date of enactment of this Act, the Secretary of the Interior shall—

(1) publish in the Federal Register a notice containing the legal description of the lands withdrawn and reserved by this Act; and

(2) file maps and the legal description of the lands withdrawn and reserved by this Act with the Committee on Energy and Natural Resources of the United States Senate and with the Committee on Interior and Insular Affairs of the United States House of Representatives.

(b) **TECHNICAL CORRECTIONS.**—Such maps and legal descriptions shall have the same force and effect as if they were included in this Act except that the Secretary of the Interior may correct clerical and typographical errors in such maps and legal descriptions.

(c) **AVAILABILITY FOR PUBLIC INSPECTION.**—Copies of such maps and legal descriptions shall be available for public inspection in the offices of the Director and appropriate State Directors of the Bureau of Land Management; the office of the commander, Bravo-20 Bombing Range; the offices of the Director and appropriate Regional Directors of the United States Fish and Wildlife Service; the office of the commander, Nellis Air Force Base; the office of the commander, Barry M. Goldwater Air Force Base; the office of the commander, McGregor Range; the office of the installation commander, Fort Richardson, Alaska; the office of the commander, Marine Corps Air Station, Yuma, Arizona; and the office of the Secretary of Defense.

(d) **REIMBURSEMENT.**—The Secretary of Defense shall reimburse the Secretary of the Interior for the cost of implementing this section.

SEC. 3. MANAGEMENT OF WITHDRAWN LANDS.

(a) **MANAGEMENT BY THE SECRETARY OF THE INTERIOR.**—(1) During the period of the withdrawal, the Secretary of the Interior shall manage the lands withdrawn under section 1 (except those lands within a unit of the National Wildlife Refuge System) pursuant to the Federal Land Policy and Management Act of 1976 (43 U.S.C. 1701 et seq.) and other applicable law, including the Recreation Use of Wildlife Areas Act of 1962 (16 U.S.C. 460k et seq.), and this Act. Lands within the Desert National Wildlife Range and the Cabeza Prieta National Wildlife Refuge shall be managed pursuant to the National Wildlife Refuge System Administration Act of 1966 (16 U.S.C. 668dd et seq.) and other applicable law. No provision of this Act, except sections 4, 11, and 12, shall apply to the management of the Desert National Wildlife Range or the Cabeza Prieta National Wildlife Refuge.

(2) To the extent consistent with applicable law and Executive orders, the lands withdrawn under section 1 may be managed in a manner permitting—

(A) the continuation of grazing pursuant to applicable law and Executive orders where permitted on the date of enactment of this Act;

(B) protection of wildlife and wildlife habitat;

(C) control of predatory and other animals;

(D) recreation; and

(E) the prevention and appropriate suppression of brush and range fires resulting from nonmilitary activities.

(3)(A) All nonmilitary use of such lands, other than the uses described in paragraph (2), shall be subject to such conditions and restrictions as may be necessary to permit the military use of such lands for the purposes specified in or authorized pursuant to this Act.

(B) The Secretary of the Interior may issue any lease, easement, right-of-way, or other authorization with respect to the nonmilitary use of such land only with the concurrence of the Secretary of the military department concerned.

(b) **CLOSURE TO PUBLIC.**—(1) If the Secretary of the military department concerned determines that military operations, public safety, or national security require the closure to public use of any road, trail, or other portion of the lands withdrawn by this Act, the Secretary may take such action as the Secretary determines necessary or desirable to effect and maintain such closure.

(2) Any such closure shall be limited to the minimum areas and periods which the Secretary of the military department concerned determines are required to carry out this subsection.

(3) Before and during any closure under this subsection, the Secretary of the military department concerned shall—

(A) keep appropriate warning notices posted; and

(B) take appropriate steps to notify the public concerning such closures.

(c) **MANAGEMENT PLAN.**—The Secretary of the Interior (after consultation with the Secretary of the military department concerned) shall develop a plan for the management of each area withdrawn

under section 1 during the period of such withdrawal. Each plan shall—

(1) be consistent with applicable law;

(2) be subject to conditions and restrictions specified in subsection (a)(3) of this section;

(3) include such provisions as may be necessary for proper management and protection of the resources and values of such areas; and

(4) be developed not later than three years after the date of enactment of this Act.

(d) **BRUSH AND RANGE FIRES.**—The Secretary of the military department concerned shall take necessary precautions to prevent and suppress brush and range fires occurring within and outside the lands withdrawn under section 1 as a result of military activities and may seek assistance from the Bureau of Land Management in the suppression of such fires. The memorandum of understanding required by subsection (e) shall provide for Bureau of Land Management assistance in the suppression of such fires, and for a transfer of funds from the Department of the Navy, Army, or Air Force, as appropriate, to the Bureau of Land Management as compensation for such assistance.

(e) **MEMORANDUM OF UNDERSTANDING.**—(1) The Secretary of the Interior and the Secretary of the military department concerned shall (with respect to each land withdrawal under section 1) enter into a memorandum of understanding to implement the management plan developed under subsection (c). Any such memorandum of understanding shall provide that the Director of the Bureau of Land Management shall provide assistance in the suppression of fires resulting from the military use of lands withdrawn under section 1 if requested by the Secretary of the military department concerned.

(2) The duration of any such memorandum shall be the same as the period of the withdrawal of the lands under section 1.

(f) **ADDITIONAL MILITARY USES.**—(1) Lands withdrawn by section 1 (except those within the Desert National Wildlife Range or within the Cabeza Prieta National Wildlife Refuge) may be used for defense-related uses other than those specified in such section. The Secretary of Defense shall promptly notify the Secretary of the Interior in the event that the lands withdrawn by this Act will be used for defense-related purposes other than those specified in section 1. Such notification shall indicate the additional use or uses involved, the proposed duration of such uses, and the extent to which such additional military uses of the withdrawn lands will require that additional or more stringent conditions or restrictions be imposed on otherwise-permitted nonmilitary uses of the withdrawn land or portions thereof.

SEC. 4. SPECIAL WILDLIFE RULES.

(a) **NELLIS AIR FORCE RANGE.**—(1) Neither the withdrawal under section 1(b) nor any other provision of this Act shall be construed to amend—

(A) the National Wildlife Refuge System Administration Act of 1966 (16 U.S.C. 668dd et seq.) or any other law related to management of the National Wildlife Refuge System; or

(B) any Executive order or public land order in effect on the date of enactment of this Act with respect to the Desert National Wildlife Refuge.

(2) Neither the withdrawal under section 1(b) nor any other provision of this Act shall be construed to amend any memorandum of understanding between the Secretary of the Interior and the Secretary of the Air Force regarding the administration and joint use of a portion of the Desert National Wildlife Range. The provisions of the memorandum of understanding between the Secretary of the Interior and the Department of the Air Force regarding Air Force operations on the Desert National Wildlife Range in effect on March 15, 1986, shall not be amended sooner than 90 days after the Secretary of the Interior has notified the Committee on Interior and Insular Affairs of the House of Representatives, the Committee on Energy and Natural Resources of the Senate, the Committees on Armed Services of the Senate and the House of Representatives, the Committee on Merchant Marine and Fisheries of the House of Representatives, and the Committee on Environment and Public Works of the Senate of any proposed amendments to such provisions.

(b) **BARRY M. GOLDWATER AIR FORCE RANGE.**—(1) Neither the withdrawal under section 1(c) nor any other provision of this Act shall be construed to amend—

(A) the National Wildlife Refuge System Administration Act of 1966 (16 U.S.C. 668dd et seq.) or any other law related to management of the National Wildlife Refuge System; or

(B) any Executive order or public land order in effect on the date of enactment of this Act with respect to the Cabeza Prieta National Wildlife Refuge.

(2) Neither the withdrawal under section 1(c) nor any other provision of this Act shall be construed to amend any memorandum of understanding between the Secretary of the Interior and the Secretary of the Air Force regarding the administration and joint use of a portion of the Cabeza Prieta National Wildlife Refuge. The provisions of the memorandum of understanding between the Secretary of the Interior and the Department of the Air Force regarding Air Force operations on the Cabeza Prieta National Wildlife Refuge in effect on March 24, 1975, shall not be amended sooner than 90 days after the Secretary of the Interior has notified the Committee on Interior and Insular Affairs of the House of Representatives, the Committee on Energy and Natural Resources of the Senate, the Committees on Armed Services of the Senate and the House of Representatives, the Committee on Merchant Marine and Fisheries of the House of Representatives, and the Committee on Environment and Public Works of the Senate of any proposed amendments to such provisions.

SEC. 5. DURATION OF WITHDRAWALS.

(a) **DURATION.**—The withdrawal and reservation established by this Act shall terminate 15 years after the date of enactment of this Act.

(b) **DRAFT ENVIRONMENTAL IMPACT STATEMENT.**—(1) No later than 12 years after the date of enactment of this Act, the Secretary of the military department concerned shall publish a draft environmental impact statement concerning continued or renewed withdrawal of any portion of the lands withdrawn by this Act for which that Secretary intends to seek such continued or renewed withdrawal. Such draft environmental impact statement shall be consistent with the requirements of the National Environmental Policy Act of 1969 (42 U.S.C. 4321 et seq.) applicable to such a draft environmental

impact statement. Prior to the termination date specified in subsection (a), the Secretary of the military department concerned shall hold a public hearing on any draft environmental impact statement published pursuant to this subsection. Such hearing shall be held in the affected State or States in order to receive public comments on the alternatives and other matters included in such draft environmental impact statement.

(2)(A) For purposes of such draft environmental impact statement published by the Secretary of the Navy, the term "lands withdrawn by this Act" shall be deemed to include lands withdrawn by public land orders 275, 788, 898, and 2635 and lands proposed for withdrawal as specified in the draft environmental impact statement for the proposed master land withdrawal, Naval Air Station, Fallon, Nevada.

(B) For purposes of this subsection, lands withdrawn by section 1(b) shall be deemed to include lands withdrawn by Public Law 98-485.

(c) **EXTENSIONS OR RENEWALS.**—The withdrawals established by this Act may not be extended or renewed except by an Act or joint resolution.

SEC. 6. NEVADA REPORT.

(a) **SPECIAL NEVADA REPORT.**—No later than five years after the date of enactment of this Act, the Secretary of the Air Force, the Secretary of the Navy, and the Secretary of the Interior shall submit to Congress a joint report. In addition to the other matters required by this section, the report shall include an analysis and an evaluation of the effects on public health and safety throughout Nevada of—

- (1) the operation of aircraft at subsonic and supersonic speeds;
- (2) the use of aerial and other gunnery, rockets, and missiles; and
- (3) the uses specified in section 1.

(b) **EVALUATION OF CUMULATIVE EFFECTS OF CONTINUED OR RENEWED WITHDRAWAL.**—Each of the military departments concerned and the Secretary of the Interior shall, in the report required by this section, evaluate the cumulative effects of continued or renewed withdrawal for military purposes of the military department concerned of some or all of the lands withdrawn by sections 1(a) and 1(b) on the environment and population of Nevada. In performing this evaluation, there shall be considered—

- (1) the actual and proposed withdrawal for military and related purposes of other lands in Nevada, including (but not limited to)—

(A) lands withdrawn by sections 1(a) and 1(b) of this Act and by Public Law 98-485 (98 Stat. 2261);

(B) lands withdrawn by Public Land Orders 275, 788, 898, and 2635;

(C) lands proposed for withdrawal as specified in the draft environmental impact statement for the proposed master land withdrawal, Naval Air Station, Fallon, Nevada; and

(D) lands withdrawn or being considered for withdrawal for use by the Department of Energy; and

- (2) the cumulative impacts on public and private property in Nevada and on the fish and wildlife, cultural, historic, scientific, recreational, wilderness, and other values of the public lands of Nevada resulting from military and defense related uses of the

lands withdrawn by sections 1(a) and 1(b) and the other lands described in paragraph (1) of this subsection.

(c) **MITIGATION MEASURES.**—The report required by this subsection shall include an analysis and an evaluation of possible measures to mitigate the cumulative effect of the withdrawal of public lands in Nevada for military and defense-related purposes, and of use of the airspaces over public lands in Nevada for such purposes, on people and property in Nevada and the fish and wildlife, cultural, historic, scientific, wilderness, and other resources and values of the public lands in Nevada (including recreation, mineral development, and agriculture).

SEC. 7. ONGOING DECONTAMINATION.

(a) **PROGRAM.**—Throughout the duration of the withdrawals made by this Act, the Secretary of the military department concerned, to the extent funds are made available, shall maintain a program of decontamination of lands withdrawn by this Act at least at the level of cleanup achieved on such lands in fiscal year 1986.

(b) **REPORTS.**—At the same time as the President transmits to the Congress the President's proposed budget for the first fiscal year beginning after the date of enactment of this Act and for each subsequent fiscal year, each such Secretary shall transmit to the Committees on Appropriations, Armed Services, and Energy and Natural Resources of the Senate and to the Committees on Appropriations, Armed Services, and Interior and Insular Affairs of the House of Representatives a description of the decontamination efforts undertaken during the previous fiscal year on such lands and the decontamination activities proposed for such lands during the next fiscal year including:

- (1) amounts appropriated and obligated or expended for decontamination of such lands;
- (2) the methods used to decontaminate such lands;
- (3) amount and types of contaminants removed from such lands;
- (4) estimated types and amounts of residual contamination on such lands; and
- (5) an estimate of the costs for full decontamination of such lands and the estimate of the time to complete such decontamination.

SEC. 8. REQUIREMENTS FOR RENEWAL.

(a) **NOTICE AND FILING.**—(1) No later than three years prior to the termination of the withdrawal and reservation established by this Act, the Secretary of the military department concerned shall advise the Secretary of the Interior as to whether or not the Secretary of the military department concerned will have a continuing military need for any of the lands withdrawn under section 1 after the termination date of such withdrawal and reservation.

(2) If the Secretary of the military department concerned concludes that there will be a continuing military need for any of such lands after the termination date, that Secretary shall file an application for extension of the withdrawal and reservation of such needed lands in accordance with the regulations and procedures of the Department of the Interior applicable to the extension of withdrawals of lands for military uses.

(3) If, during the period of withdrawal and reservation, the Secretary of the military department concerned decides to relinquish

all or any of the lands withdrawn and reserved by this Act, such Secretary shall file a notice of intention to relinquish with the Secretary of the Interior.

(b) **CONTAMINATION.**—(1) Before transmitting a notice of intention to relinquish pursuant to subsection (a), the Secretary of Defense, acting through the military department concerned, shall prepare a written determination concerning whether and to what extent the lands that are to be relinquished are contaminated with explosive, toxic, or other hazardous materials.

(2) A copy of such determination shall be transmitted with the notice of intention to relinquish.

(3) Copies of both the notice of intention to relinquish and the determination concerning the contaminated state of the lands shall be published in the Federal Register by the Secretary of the Interior.

(c) **DECONTAMINATION.**—If any land which is the subject of a notice of intention to relinquish pursuant to subsection (a) is contaminated, and the Secretary of the Interior, in consultation with the Secretary of the military department concerned, determines that decontamination is practicable and economically feasible (taking into consideration the potential future use and value of the land) and that upon decontamination, the land could be opened to operation of some or all of the public land laws, including the mining laws, the Secretary of the military department concerned shall decontaminate the land to the extent that funds are appropriated for such purpose.

(d) **ALTERNATIVES.**—If the Secretary of the Interior, after consultation with the Secretary of the military department concerned, concludes that decontamination of any land which is the subject of a notice of intention to relinquish pursuant to subsection (a) is not practicable or economically feasible, or that the land cannot be decontaminated sufficiently to be opened to operation of some or all of the public land laws, or if Congress does not appropriate a sufficient amount of funds for the decontamination of such land, the Secretary of the Interior shall not be required to accept the land proposed for relinquishment.

(e) **STATUS OF CONTAMINATED LANDS.**—If, because of their contaminated state, the Secretary of the Interior declines to accept jurisdiction over lands withdrawn by this Act which have been proposed for relinquishment, or if at the expiration of the withdrawal made by this Act the Secretary of the Interior determines that some of the lands withdrawn by this Act are contaminated to an extent which prevents opening such contaminated lands to operation of the public land laws—

(1) the Secretary of the military department concerned shall take appropriate steps to warn the public of the contaminated state of such lands and any risks associated with entry onto such lands;

(2) after the expiration of the withdrawal, the Secretary of the military department concerned shall undertake no activities on such lands except in connection with decontamination of such lands; and

(3) the Secretary of the military department concerned shall report to the Secretary of the Interior and to the Congress concerning the status of such lands and all actions taken in furtherance of this subsection.

(f) **REVOCATION AUTHORITY.**—Notwithstanding any other provisions of law, the Secretary of the Interior, upon deciding that it is in

the public interest to accept jurisdiction over lands proposed for relinquishment pursuant to subsection (a), is authorized to revoke the withdrawal and reservation established by this Act as it applies to such lands. Should the decision be made to revoke the withdrawal and reservation, the Secretary of the Interior shall publish in the Federal Register an appropriate order which shall—

- (1) terminate the withdrawal and reservation;
- (2) constitute official acceptance of full jurisdiction over the lands by the Secretary of the Interior; and
- (3) state the date upon which the lands will be opened to the operation of some or all of the public lands laws, including the mining laws.

SEC. 9. DELEGABILITY.

(a) **DEFENSE.**—The functions of the Secretary of Defense or of a military department under this title may be delegated.

(b) **INTERIOR.**—The functions of the Secretary of the Interior under this title may be delegated, except that an order described in section 7(f) may be approved and signed only by the Secretary of the Interior, the Under Secretary of the Interior, or an Assistant Secretary of the Department of the Interior.

SEC. 10. WATER RIGHTS.

Nothing in this Act shall be construed to establish a reservation to the United States with respect to any water or water right on the lands described in section 1 of this Act. No provision of this Act shall be construed as authorizing the appropriation of water on lands described in section 1 of this Act by the United States after the date of enactment of this Act except in accordance with the law of the relevant State in which lands described in section 1 are located. This section shall not be construed to affect water rights acquired by the United States before the date of enactment of this Act.

SEC. 11. HUNTING, FISHING, AND TRAPPING.

All hunting, fishing, and trapping on the lands withdrawn by this Act shall be conducted in accordance with the provisions of section 2671 of title 10, United States Code, except that hunting, fishing, and trapping within the Desert National Wildlife Range and the Cabeza Prieta National Wildlife Refuge shall be conducted in accordance with the National Wildlife Refuge System Administration Act of 1966 (16 U.S.C. 668dd et seq.), the Recreation Use of Wildlife Areas Act of 1962 (16 U.S.C. 460k et seq.), and other laws applicable to the National Wildlife Refuge System.

SEC. 12. MINING AND MINERAL LEASING.

(a) **DETERMINATION OF LANDS SUITABLE FOR OPENING.**—As soon as possible after the enactment of this Act and at least every five years thereafter, the Secretary of the Interior shall determine, with the concurrence of the Secretary of the military department concerned, which public and acquired lands (except as provided in this subsection) described in subsections (a), (b), (d), (e), and (f) of section 1 of this Act the Secretary of the Interior considers suitable for opening to the operation of the Mining Law of 1872, the Mineral Lands Leasing Act of 1920, as amended, the Mineral Leasing Act for Acquired Lands of 1947, the Geothermal Steam Act of 1970, or any one or more of such Acts. The Secretary of the Interior shall publish a notice in the Federal Register listing the lands determined suit-

able pursuant to this section and specifying the opening date, except that lands contained within the Desert National Wildlife Range in Nevada or within the Cabeza Prieta National Wildlife Refuge in Arizona shall not be determined to be suitable for opening pursuant to this section.

(b) **OPENING LANDS.**—On the day specified by the Secretary of the Interior in a notice published in the Federal Register pursuant to subsection (a), the land identified under subsection (a) as suitable for opening to the operation of one or more of the laws specified in subsection (a) shall automatically be open to the operation of such laws without the necessity for further action by either the Secretary or the Congress.

(c) **EXCEPTION FOR COMMON VARIETIES.**—No deposit of minerals or materials of the types identified by section 3 of the Act of July 23, 1955 (69 Stat. 367), whether or not included in the term "common varieties" in that Act, shall be subject to location under the Mining Law of 1872 on lands described in section 1.

(d) **REGULATIONS.**—The Secretary of the Interior, with the advice and concurrence of the Secretary of the military department concerned shall promulgate such regulations to implement this section as may be necessary to assure safe, uninterrupted, and unimpeded use of the lands described in section 1 for military purposes. Such regulations shall also contain guidelines to assist mining claimants in determining how much, if any, of the surface of any lands opened pursuant to this section may be used for purposes incident to mining.

(e) **CLOSURE OF MINING LANDS.**—In the event of a national emergency or for purposes of national defense or security, the Secretary of the Interior, at the request of the Secretary of the military department concerned, shall close any lands that have been opened to mining or to mineral or geothermal leasing pursuant to this section.

(f) **LAWS GOVERNING MINING ON LANDS WITHDRAWN UNDER THIS ACT.**—(1) Except as otherwise provided in this Act, mining claims located pursuant to this Act shall be subject to the provisions of the mining laws. In the event of a conflict between those laws and this Act, this Act shall prevail.

(2) All mining claims located under the terms of this Act shall be subject to the provisions of the Federal Land Policy and Management Act of 1976 (43 U.S.C. 1701 et seq.).

(g) **PATENTS.**—(1) Patents issued pursuant to this Act for locatable minerals shall convey title to locatable minerals only, together with the right to use so much of the surface as may be necessary for purposes incident to mining under the guidelines for such use established by the Secretary of the Interior by regulation.

(2) All such patents shall contain a reservation to the United States of the surface of all lands patented and of all nonlocatable minerals on those lands.

(3) For the purposes of this section, all minerals subject to location under the Mining Law of 1872 are referred to as "locatable minerals".

(h) **REVOCATION.**—Notwithstanding any other provision of law, the Secretary of the Interior, if the Secretary determines it necessary and appropriate for the purpose of consummating an exchange of lands or interests therein under applicable law, is hereby authorized and directed to revoke the Small Tract Act Classification S.T.049794 in Clark County, Nevada.

SEC. 13. IMMUNITY OF UNITED STATES.

The United States and all departments or agencies thereof shall be held harmless and shall not be liable for any injuries or damages to persons or property suffered in the course of any mining or mineral or geothermal leasing activity conducted on lands described in section 1 of this Act.

SEC. 14. SHORT TITLE.

Sections 1 through 15 of this Act may be cited as the "Military Lands Withdrawal Act of 1986".

SEC. 15. REDESIGNATION.

The Luke Air Force Range in Arizona is hereby redesignated as the "Barry M. Goldwater Air Force Range". Any reference in any law, regulation, document, record, map, or other paper of the United States to the Luke Air Force Range shall be deemed to be a reference to the "Barry M. Goldwater Air Force Range".

SEC. 16. BOUNDARY ADJUSTMENT TO CUYAHOGA VALLEY NATIONAL RECREATION AREA.

Section 2 of the Act entitled "An Act to provide for the establishment of the Cuyahoga Valley National Recreational Recreation Area", approved December 27, 1974 (16 U.S.C. 460ff et seq.), is amended as follows:

(1) In subsection (a), strike out "numbered 655-90,001-A and dated May 1978" and insert "numbered 644-80,054 and dated July 1986".

(2) At the end of subsection (a), insert the following:
"The recreation area shall also comprise any lands designated as 'City of Akron Lands' on the map referred to in the first sentence which are offered as donations to the Department of the Interior or which become privately owned. The Secretary shall revise such map to depict such lands as part of the recreation area."

(3) In subsection (b), after the first sentence, insert the following:

"The Secretary may not acquire fee title to any lands included within the recreation area in 1986 which are designated on the map referred to in subsection (a) as 'Scenic Easement Acquisition Areas'. The Secretary may acquire only scenic easements in such designated lands. Unless consented to by the owner from which the easement is acquired, any such scenic easement may not prohibit any activity, the subdivision of any land, or the construction of any building or other facility if such activity, subdivision, or construction would have been permitted under laws and ordinances of the unit of local government in which such land was located on April 1, 1986, as such laws and ordinances were in effect on such date."

Approved November 6, 1986.

APPENDIX II
LUKE AIR FORCE RANGE NATURAL RESOURCES MANAGEMENT PLAN
EXECUTIVE SUMMARY

LUKE AIR FORCE RANGE
NATURAL RESOURCES
MANAGEMENT PLAN

NATURAL RESOURCES MANAGEMENT PLAN
FOR
LUKE AIR FORCE RANGE:
EXECUTIVE SUMMARY

PREPARED FOR

UNITED STATES AIR FORCE—TACTICAL AIR COMMAND
LUKE AIR FORCE BASE, ARIZONA

by

NATURAL RESOURCES PLANNING TEAM

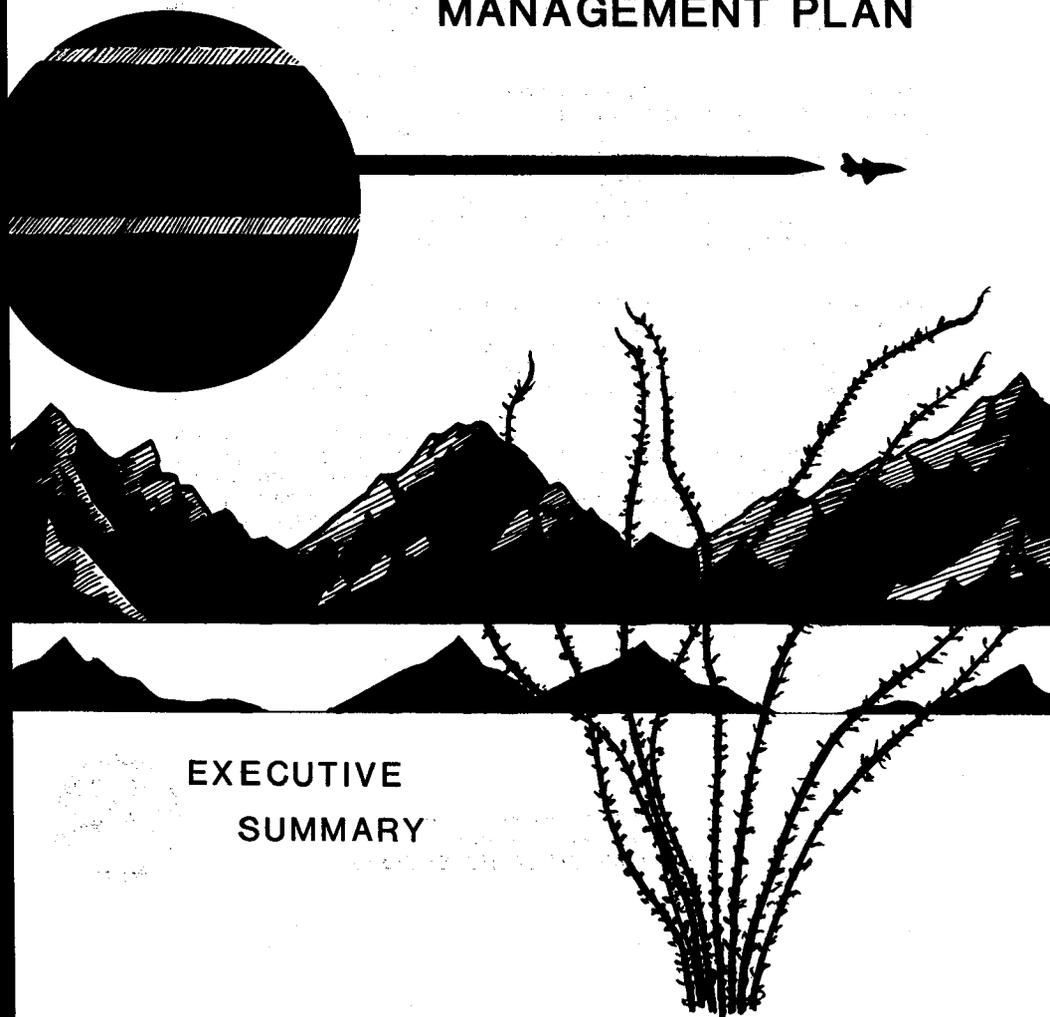
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EXECUTIVE
SUMMARY

SCHOOL OF RENEWABLE NATURAL RESOURCES
COLLEGE OF AGRICULTURE
UNIVERSITY OF ARIZONA

November 1986





DEPARTMENT OF THE AIR FORCE

HEADQUARTERS 832D AIR DIVISION (TAC)
LUKE AIR FORCE BASE AZ 85309-5000

OFFICE OF THE COMMANDER

To the People of Arizona and Users of the Luke Range

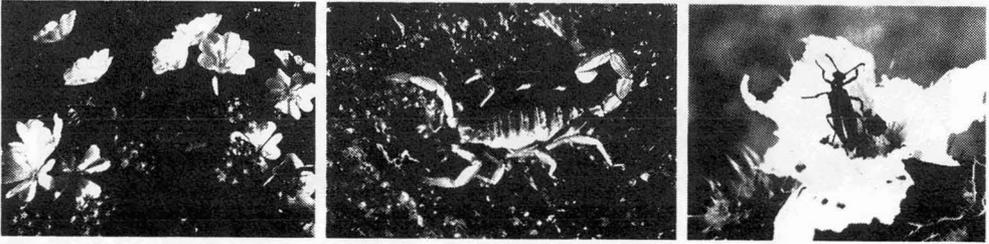
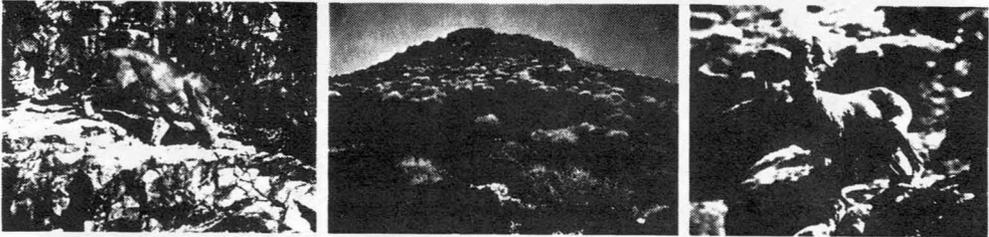
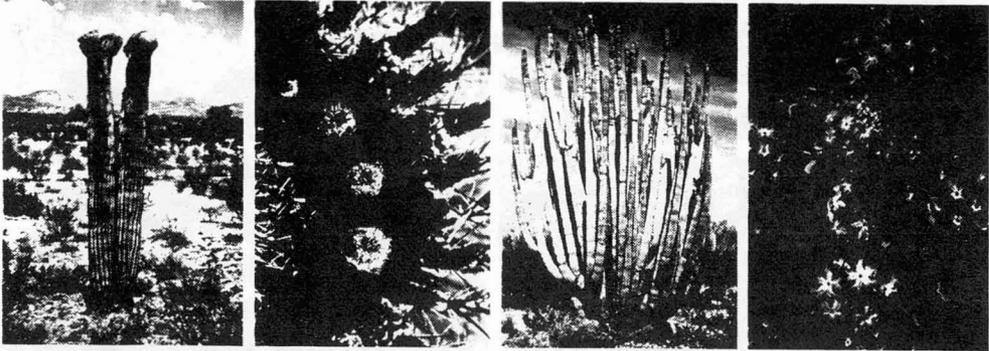
1. Luke Air Force Base is proud to present the Luke Air Force Range Natural Resources Management Plan, which is the most comprehensive and ambitious natural resources initiative in the Air Force today. This document is a comprehensive plan which defines the full extent of resource planning needs for the Luke Air Force Range and establishes a framework for coordinating and directing resource management activities.

2. Natural resources on Air Force lands comprise a large portion of the nation's total natural resources. The defense mission does not reduce the Air Force's obligation to act as a responsible steward for these lands and resources. The Luke Air Force Range Natural Resources Management Cooperative Agreement of 1982 was the first step in meeting our natural resources management obligations.

3. In the Cooperative Agreement between the Air Force, Navy/Marine Corps, U.S. Fish and Wildlife Service, Bureau of Land Management, and the Arizona Game and Fish Department, the Air Force accepted responsibility to prepare a Management Plan that would integrate and facilitate the management of Luke Air Force Range as an interrelated unit. Luke AFB invoked the Intergovernmental Personnel Act (IPA) of 1970 to acquire the services of the University of Arizona School of Renewable Natural Resources personnel to work directly for the Air Force in developing the Luke Air Force Range Natural Resources Management Plan.

4. This plan is the result of over three years of intensive research, cooperation and coordination between the many users of the Luke Air Force Range. The effort has been a most significant undertaking because natural and cultural resources of the Range are vital national assets which are inherent to the strength of our national defense.

BILLY G. McCOY
Brigadier General, USAF
Commander

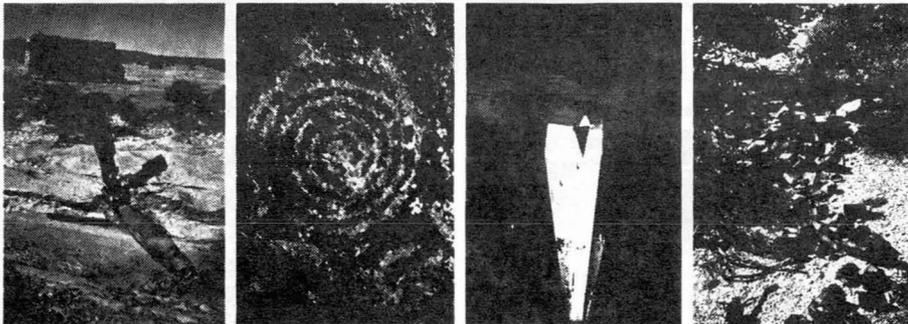


NATURAL RESOURCES OF LUKE AIR FORCE RANGE

Top row to bottom row, left to right:

- Screech owl
- Saguaro cactus in bloom
- Diamondback rattlesnake
- Cristate saguaro
- Barrel cactus in bloom
- Organ pipe cactus
- Sand verbena
- Mountain lion
- Raven Butte at dawn
- Desert bighorn sheep
- Coyote
- Cabeza Prieta Mountains
- Pinacate beetle
- Sand verbena and white primrose
- Giant desert hairy scorpion
- Prickly poppy with beetle





HUMAN USES ON LUKE AIR FORCE RANGE

Top row to bottom row, left to right:

- Manned range tower
- Warning sign on Range boundary
- O'Neill's grave
- Cabeza Prieta Tanks
- Munitions burial site
- Four-wheel-drive vehicle and recreationist on El Camino del Diablo
- Damage caused by off-road vehicle travel
- Tactical target and bomb debris
- Prehistoric petroglyph
- Jettisoned aerial tow target
- Can dump at historic mine
- Monument built by Boy Scouts at Tule Well
- USGS directional sign
- Historic grave marker
- Grave stones commemorating pilots killed in Range accidents
- USMC Hawk missile firing
- International boundary marker and fence

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SPECIAL ACKNOWLEDGEMENTS

The Planning Team wishes to extend special acknowledgement to Colonel Arley McRae (Ret.) whose leadership as Base Commander, Luke Air Force Base, was instrumental in the development of this Plan. Special gratitude is also extended for the continuing support and insight provided by the military and civilian staffs of Luke Air Force Base, Gila Bend Air Force Auxiliary Field, and Marine Corps Air Station, Yuma. The cooperation of these professionals was essential to the planning process.

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PREFACE

This document is an excerpt from the Natural Resources Management Plan for Luke Air Force Range. That larger publication, containing 19 chapters, is in limited distribution. This Executive Summary, which is identical to the first chapter of the complete Plan, provides the reader with an overview of the significance and condition of natural and cultural resources on the Luke Air Force Range (LAFR), past and present land uses, and the status of past and present resource management. Further, the Summary presents the most important findings, functions, and recommendations of the Plan. That Plan is a guidance document that outlines methods for the U.S. Air Force to employ in its role as the coordinator of multiple agency use and management of the Range. The most important changes recommended by the Plan are (i) the formulation of a new administrative-management framework through which the several agencies involved with or influencing resources on the Range can interact in a systematic fashion and (ii) the adoption of common resource management goals by LAFR agencies. This Summary contains a complete listing of the management goals and an overview of the framework and its basic functions. If additional details about these or any other components of the Plan are needed, the reader is referred to that document. This Summary should provide sufficient information about LAFR that the purpose and major functions of the NRMP will be apparent.

During the preparation of this Plan, work began in Congress on a new withdrawal bill for LAFR. That bill was passed just prior to the adjournment of the 99th Congress in October 1986 while this document was in press. The new law consolidates the withdrawal of the 2,664,423-acre Range in one legal instrument and has a duration of 15 years. Mining, mineral leasing, and geothermal development and other forms of appropriation, such as agriculture or livestock grazing, are excluded from the Range (including the Cabeza Prieta National Wildlife Refuge). These exclusionary provisions continue the historic policies that have been funde-

mental to management of the Range since its creation during World War II. Responsibility for land management on the Range, outside of the Wildlife Refuge, has been assigned to the Secretary of the Interior. The Bureau of Land Management is the operative agency of the Department of the Interior in this case.

This Plan correctly assumed that the Range would remain closed to economic development. A further assumption, as outlined in Chapter 2 of the Plan, is that the Air Force, not the BLM, will be the principal agency responsible for day-to-day management of natural resources. This assumption still appears advantageous to both agencies for practical reasons related to the operation of the Range. To insure this status, the cooperative agreement between these agencies may need revision.

A final but very notable change specified by the new withdrawal legislation is redesignation of the Range as the "Barry M. Goldwater Air Force Range" in recognition of Senator Goldwater's long service to his country as an Air Force officer and pilot and as a member of the U.S. Senate. The Senator helped lay out the boundaries of the Range when he was a lieutenant with the U.S. Army Air Corps in World War II.

The changes specified in the new withdrawal came too late to be incorporated directly into this document. Contingencies for these changes and others have, however, been outlined in this NRMP and the intent and purpose of the Plan and the shared agency responsibilities for environmental stewardship are preserved.

Many individuals representing a wide spectrum of expertise contributed to the development of this Plan. Their efforts are collectively and gratefully acknowledged here. These contributors and their respective agencies are individually identified in the complete plan.

1.1 INTRODUCTION

Luke Air Force Range (LAFR) is an important military facility, used principally for aircrew training. This expansive Range (4,163 square miles) also contains some of the nation's most unique and well-preserved native desert. Found here is a dramatic landscape of rugged mountain ranges and broad alluvial valleys that have experienced only scattered settlement since late prehistoric times. The Range is one of the hottest and driest deserts of North America. But well-adapted plant and animal life is abundant. The vegetation is that of the Sonoran Desert, typically characterized by the giant saguaro cactus. Also present are various forms of barrel, cholla, and prickly pear cacti, organ pipe cactus, agave,



ocotillo, creosote bush, and palo verde, mesquite, and acacia trees. Over 400 taxa of vascular plants have been identified. Wildlife resources are represented by at least 62 species of mammals, over 200 species of birds, 5 amphibian species, and 37 species of reptiles. Although reptiles and small rodents are often viewed as the typical desert dwellers, LAFR is also home to two highly important mammal species. The survival of the endangered Sonoran pronghorn, in the United States, is dependent on habitat unique to the Range. Also of special note is the desert bighorn that occupies the mountain slopes of the Range.

LAFR has long been a crossroads of human wanderings. Evidence suggest that as early as 11,000 years ago hunters may have stalked mammoth and other large mammals on the Range. Since that time, various groups of prehistoric peoples have visited and used the area. Cultural remains from these early visitors are scattered throughout the Range. LAFR also became an important travel route for Spanish explorers and American pioneers. The hot, harsh climate and rugged terrain soon lent the name El Camino del Diablo (the Road of the Devil) to the most frequently traveled route along which many perished. The Camino is today a national historic landmark.

Much of the relatively undisturbed character of the LAFR environment is owed to the military reservation that has excluded a variety of land practices (such as mining, livestock grazing, agriculture, and intensive recreation) that have

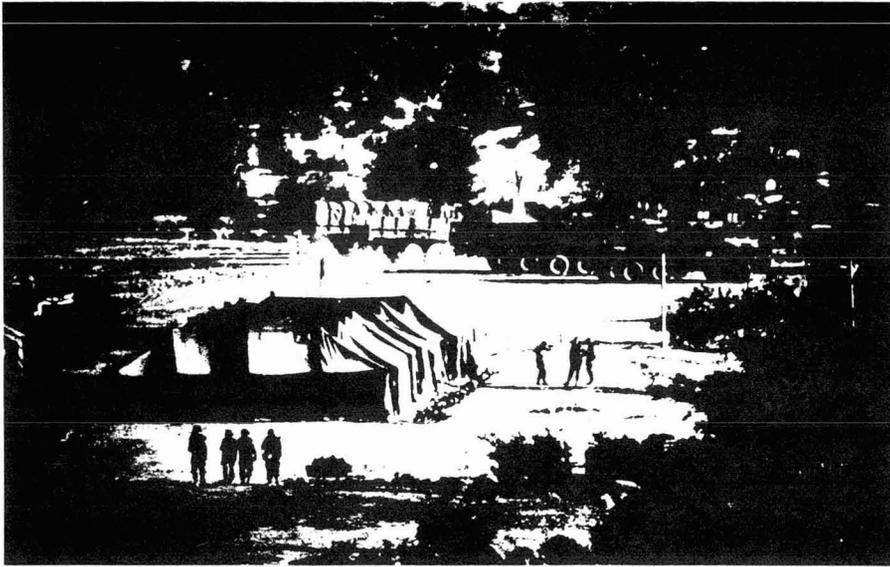
significantly altered surrounding areas. Although some military practices have been destructive, historically the preponderance of those impacts have been restricted to specific target and other use zones; most of the area has remained undisturbed. The protective aspects of military use for the Range environment have become strained, however, as the cumulative impacts from expanding military and nonmilitary uses have taken their toll on the area's natural and cultural resources.

Recognition of these environmental threats has led to the formulation of the "Luke Air Force Range Natural Resources Management Cooperative Agreement" (NRMCA) between the U. S. Air Force (USAF), the U. S. Navy/Marine Corps (USN/USMC), the U. S. Fish and Wildlife Service (USFWS), the Bureau of Land Management (BLM), and the State of Arizona Game and Fish Department (AGFD). This 1982 agreement was developed to improve the efficiency of resource conservation and management on the Range. In response to the directives of that agreement, this Natural Resources Management Plan (NRMP) has been developed for LAFR by the School of Renewable Natural Resources, College of Agriculture, University of Arizona in conjunction with Luke Air Force Base (AFB). Plan development began in 1983. This NRMP provides the Air Force with the basis for proper management of the natural and cultural resources of LAFR, and a means to effectively coordinate the cooperative efforts of the NRMCA agencies.



Military Use Overview

Luke Air Force Range, located in the extreme southwestern corner of Arizona (Map 1.1), has been an important facility for training pilots in aerial and air-to-ground combat since 1941. Initially established on approximately 1.1 million acres, the Range was quickly expanded during World War II to include about 2.1 million acres, and was enlarged again in 1962 to its current size of 2,664,423 acres (see Chapter 3, NRMP). LAFR is highly valued for its year-round flying weather and expansive, unencumbered air and land space that can accommodate a variety of military training needs. This combination of features is unequalled elsewhere in the continental United States. As urban and other development



pressures force restrictions on the operation of military aircraft at other range locations, LAFR will become increasingly vital to the nation's defense.

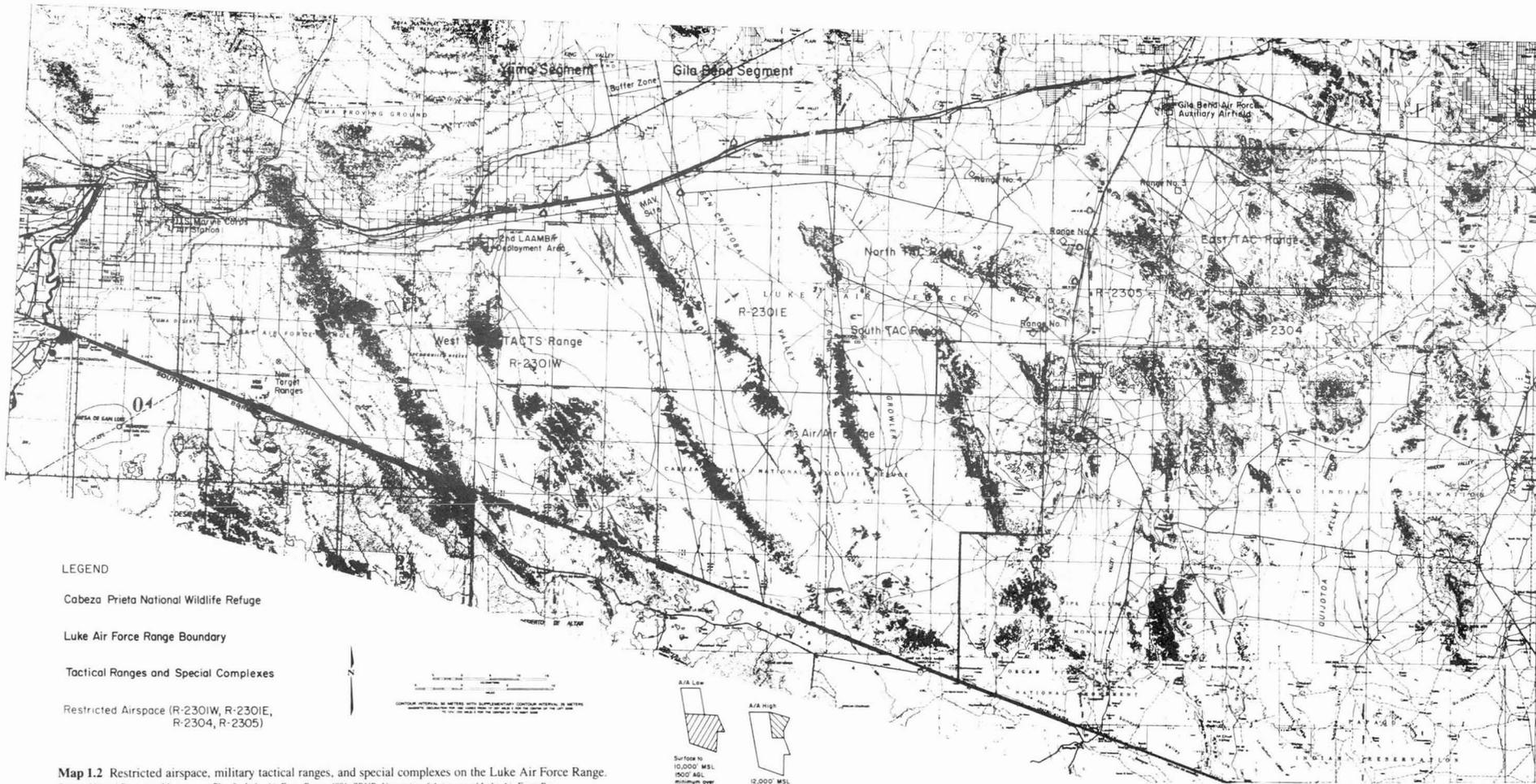
The Range is administered by the Tactical Air Command (TAC) of the USAF through Luke AFB, Arizona, but is jointly operated by the Air Force and the USN/USMC. Two military-use segments have been established on the Range to segregate USAF and USN/USMC operations (Map 1.2). Aircrew training continues to be the primary military use of the area. Other uses include readiness training for an air defense missile battalion, development and testing of basing systems for ICBMs (Intercontinental Ballistic Missile), and other special programs for military training and development. Future use of the Range could include continued operation and gradual expansion of various target and flight ranges, development of new targets and training areas, proliferation of roads, and deployment of a defensive ICBM system.

Natural Resource Significance

The importance of the LAFR environment has been signified in a number of existing and proposed land status designations (see Chapter 3, of this Plan). Almost one-third of the area destined to become part of the military reservation was designated in 1939 as the Cabeza Prieta National Game Range (later renamed the Cabeza Prieta National Wildlife Refuge—CPNWR). The Refuge, administered by the USFWS, was established to provide protection to the

desert bighorn sheep and other indigenous species including the Sonoran pronghorn. Three state natural areas (SNA) were designated in 1982 in the non-Refuge portions of the Range. Included in these SNAs are the Tinajas Altas Mountains, the Mohawk Mountains and Sand Dunes, and the Crater Range. These areas received SNA status because they are outstanding examples of important ecosystems and geologic features in Arizona. Among the land status designations that have been proposed for LAFR are wilderness classification for and expansion of CPNWR, establishment of a Yuma Dunes SNA, and inclusion of CPNWR and other parts of the Range in an international biosphere reserve that would also contain adjacent park lands in Mexico and Organ Pipe Cactus National Monument (OPCNM).





LEGEND

- Cabeza Prieta National Wildlife Refuge
- Luke Air Force Range Boundary
- Tactical Ranges and Special Complexes
- Restricted Airspace (R-2301W, R-2301E, R-2304, R-2305)

Map 1.2 Restricted airspace, military tactical ranges, and special complexes on the Luke Air Force Range.
 Source: Natural Resources Management Plan for Luke Air Force Range. 1986. SRNR, University of Arizona and Luke Air Force Base.



Resource Protection and Management— A Perspective of the Past

The beneficial relationship between the military reservation and resource conservation has contributed importantly to the past protection of much of the LAFR environment. In fact, the Range was identified, in 1976, as "the best major reserve of unspoiled desert in the Southwest...."* This finding reflected both the considerable extent of disturbance in surrounding areas and the fact that many damaging land uses have been excluded from the Range by military use. In comparison to some current activities, past military use of LAFR had limited impact on most of the Range environment. Since the 1976 publication of the above finding, however, ground-based activities by the military have increased significantly on the non-Refuge portions of the Range. Impacts are most severe in and around designated targets where air-to-ground gunnery and bombing have resulted in considerable disruption or destruction of portions of the desert. Roads used for access to various targets, other facilities, and training exercises have also caused important land disturbances, and have provided opportunity for the proliferation of unnecessary backcountry roads. Additionally, important environmental impacts have also accumulated from other agency and public uses of the Range. The Range still contains extensive areas of unspoiled desert, but these tracts are now principally limited to areas of the CPNWR. Relatively undisturbed areas are also found on mountain slopes and peaks, and on some scattered bajada and valley plains outside of the Refuge, but in contrast to the 1976 report, the environmental quality of the installation has diminished.

*Wachter, B. G., W. B. Bull, and S. J. Reynolds. 1976. The Mojave-Sonoran Natural Region Study. U. S. Department of the Interior, National Park Service, Denver Service Center, Denver, CO. 389 pp.



Resource management on LAFR is presently ineffective owing to several factors. First, dedication of the Range to military use has overshadowed some critical resource problems. Second, as defense agencies, the USAF and USN/USMC have not had the perspective or personnel for resource management. That situation has improved, at least in terms of perspective, but locally, the military still lacks professionally trained resource personnel. And third, management of LAFR is complicated by the involvement, in varying capacities, of up to 35 federal, state, and local agencies. As a result of these factors, no comprehensive system to conserve and manage the resources of the Range has been developed. Pending implementation of this Plan, the Range remains without a qualified, central authority to oversee resource conservation and management, long-term goals to direct such efforts, or a decision-making framework to coordinate the activities of the multiple agencies involved with the Range in a manner responsive to resource needs.

A number of cooperative agreements have been established between the USAF, USN/USMC, USFWS, BLM, AGFD, and some other parties to improve resource management on the Range. The agreements focus the expertise of the appropriate agencies on various management issues (see Chapter 2, NRMP). NRMCA is the most recent and comprehensive of these agreements. This agreement outlines specific administrative and management responsibilities for the individual signatories. Additionally, the agreement supports the function of a Natural Resources Committee, composed of the signatories. The Committee serves as a forum for inter-agency discussion and cooperation on resource management issues.

Although the management of some resources (for example, wildlife) has been enhanced by the various interagency agreements, the basic problems of central responsibility, appropriate goals, and decision-making framework for comprehensive resource management have not been corrected. In short, the agreements do not constitute a plan for resource management. The absence of a comprehensive management system has allowed significant environmental damage to occur. Some of this damage has been an unavoidable consequence of military and other authorized uses. But, much of the damage has occurred, and continues to occur, because

either the causal activities did not receive prior environmental assessment and authorization or the negative environmental aspects of authorized activities were not controlled or mitigated.

Unauthorized activities (in other words, those not environmentally cleared) often occur on the Range as an extension of routine agency functions into geographical areas that have not been approved for the actions in question. Such transgressions may be as simple as negligent off-road driving by a single vehicle or can involve much more intensive development and disturbance of a site, such as construction of a water catchment or a military staging area. Although individually they may not appear to be noteworthy, collectively such impacts are important.

Improper environmental assessment of many proposed actions by military and nonmilitary agencies has also led to a substantial amount of unwarranted resource damage. The most serious limitations to the assessment process have been inadequate recognition of (i) the interrelationships of various ecological factors; (ii) the full environmental consequences of many proposed actions; and (iii) the requirements of environmental laws and regulations.

Failure to recognize important ecological relationships and consequences is related, in part, to deficient knowledge about the Range environment. Information about the Range environment is inadequate because years of restricted access and the lack of comprehensive management for natural resources have precluded development of appropriate environmental survey and monitoring programs. As a result, the sensitivity with which the broader ecological implications of a site-specific project can be assessed is greatly reduced. Limited information about the Range environment also severely diminishes opportunities to accurately evaluate the cumulative effects of agency actions on natural and cultural resources through time and over geographical space. In contrast to a comprehensive, systematic approach to environmental assessment, the current practice has been to examine proposed actions, or even sequential phases of the same action, as environmentally isolated and independent events. This approach represents a basic misunderstanding of environmental processes and violates aspects of the National Environmental Policy Act, the Federal Land Policy and Management Act, the Endangered Species Act, Council on Environmental Quality regulations, and agency regulations based on those laws and others.

Resource Management Needs— A Future Perspective

With the exceptions of CPNWR and selected wildlife species in the non-Refuge portion of LAFR, natural resource management, including environmental protection, has been generally inadequate and ineffective. There has been too much reliance on the military reservation of the Range as a passive agent for environmental conservation, a benefit that is presently overestimated. Additionally, current manage-



ment practices are principally reactionary. Management by this approach is too fragmented, leaves many critical resources and events unattended, has no positive direction based on long-term goals, and offers no addressable locus of control or responsibility.

LAFR requires a systematic, planning approach for resource management that is guided by well-defined goals and that clearly delineates responsibilities within a decision-making framework to coordinate multiple agency management and use of the Range. Such an approach would provide important practical advantages. Management would be placed on a footing to anticipate resource and environmental problems, plan appropriate responses, and more successfully direct their outcome. The improved efficiency of such a system would permit examination of a broader range of resource issues and ecological relationships. Such examinations are not presently conducted. More appropriate and effective control of resource use and conservation would result. Reduced conflict with the nonresource management duties of the LAFR agencies would also be accomplished. Further, comprehensive management based on long-term goals would promote protection of resources that are currently undeveloped or unobtainable, but may be of future value.

LAFR is presently dedicated principally to military training and development purposes that exclude many land uses that would potentially conflict with those missions. This use pattern may be altered in the future, however, to permit a broader mix of military and nonmilitary uses. At some currently unforeseeable point, national defense needs could be such that the Range will no longer be needed for military purposes. The military tenure that precedes these scenarios should, therefore, not disrupt resource values needlessly, if those resources can be conserved without impairing the current military mission.

The following are specific requirements for effective resource management on LAFR: (i) designation of a single agency to serve as the central authority for coordinating overall management of the natural and cultural resources of the Range; (ii) implementation of a decision-making frame-

work that accounts for multiple agency involvement in resource issues, and supports a systematic, planning approach to resource management; and (iii) establishment of long-term goals to direct overall management of resources.

Procedures to satisfy the first two of these requirements are outlined later in this Executive Summary. Details of the analyses supporting these procedures are found in Chapter 2 of the NRMP. Also, included in this Summary are goals and recommendations, the third basic requirement, for the management of the broad spectrum of natural and cultural resources on the Range. Detailed resource information and analyses leading to the recommendations presented in this Summary can be found in the corresponding chapters of the NRMP.

Purpose of the Plan

The purpose of this Natural Resources Management Plan is to establish a system and goals for resource management on LAFR. The system provided by the Plan will rely on the cooperative efforts of the USAF, USN/USMC, USFWS, BLM, and AGFD, the signatories of the 1982 NRMCA. The Plan includes a framework for decision-making through which these agencies and other involved parties can identify and resolve current and future management issues facing the Range. Goals are also established as long-term directives for the management of natural and cultural resource.

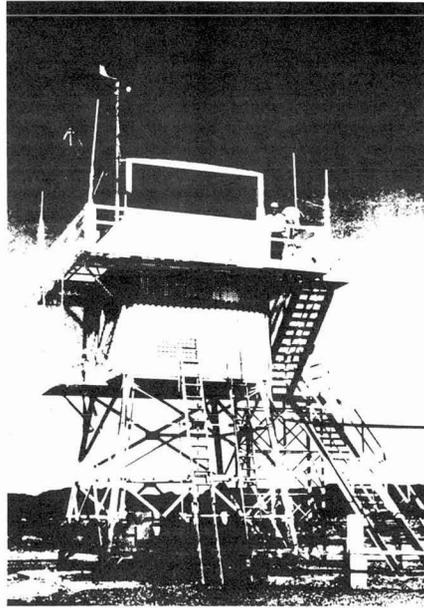
1.2 PLANNING PROCESS

Development of this NRMP was based on a planning process that included two parts: Phase I - Initial Planning Assessment (April 1983-1984), and Phase II - Management Plan Formulation (April 1984-August 1986) (Figure 1.1).

Phase I examined the full extent of resource planning needs for LAFR, and identified specific steps required to develop a comprehensive NRMP. This one-year initial assessment was necessary for the following reasons: LAFR is very large (4,163 square miles); the area's resources are complex; and there are many federal, state, and local agencies with responsibilities on, or interest in, the Range. Phase I consisted of five major tasks: (i) preliminary examination of the Range, its resources, and the present management setting; (ii) identification of current resource issues and determination of their relative significance; (iii) development of a descriptive outline or "blueprint" for the overall planning process; (iv) development of a data management system for selected resource data adaptable to computer mapping applications; and (v) compilation of the Phase I report.

Planning efforts in Phase II consisted of four major tasks: (i) finalization of management goals and planning objectives; (ii) collection and synthesis of data; (iii) formulation and evaluation of management strategies; and (iv) preparation of this NRMP.

In many respects, the planning process for LAFR has paralleled a general format that has been developed and suc-



cessfully implemented for a wide variety of public lands under federal and state jurisdictions. The key to the success of such planning operations has lain not only in the process format, but also in the sensitivity with which the process has been adapted to circumstances particular to the planning area. For LAFR, a planning philosophy cognizant of the relationships between military use of the Range, resource conservation and management, and nonmilitary agency missions had to be developed.

Planning Philosophy, Scope, and Time Horizon

Planning for LAFR required recognition of a set of circumstances defined by existing laws, agency missions, regulations, and policies that are collectively unique to the Range. Foremost was acknowledgement of (i) the status of the Range as a military reservation; and (ii) the prior designation of approximately one-third of those lands as the CPNWR. Military reservation of the Range places control of nearly all of the overlying airspace and the lands outside of CPNWR in the hands of the USAF and USN/USMC. Within the Refuge, all land uses (including military activities) must receive prior approval from the USFWS. Although it also has status as a military reservation, the principal land use legally designated for the Refuge is wildlife conservation. Because of safety and security considerations, all access to LAFR, including most of the CPNWR, is subject to military control and use schedules. Additionally, most multiple-uses

usually found on public lands (such as mining and agriculture) have been excluded from the Range due to incompatibility with military activities.

Pursuant to the planning purpose was the formulation of an overall land use and resource management perspective that struck a balance between military use, wildlife conservation, other agency uses and conservation requirements, and other limitations. That perspective proposes that:

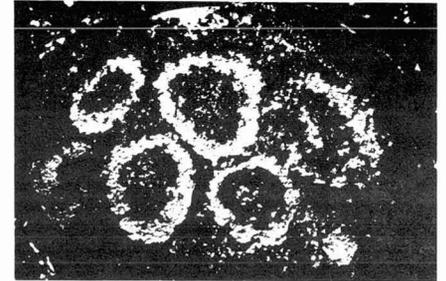
LAFR should be managed to the greatest extent possible, given current and projected uses by the military, as a natural resource reserve in which natural processes are generally allowed to prevail.

This perspective has been used as a basic planning philosophy for the development of this NRMP and provides an overall purpose for natural resource management on LAFR that has heretofore been lacking. Such a purpose is recommended to provide guidance for continuing land use planning on the non-Refuge portion of the Range. (Planners, managers, and users of the CPNWR have enjoyed the benefits of clearly defined resource purposes for the Refuge. The above perspective is recommended as the basic resource management policy for the remainder of the Range.) As such, this approach will help to conserve sensitive natural and cultural resources, and to preserve other resource values not presently obtainable due to restrictions imposed by military activities or other factors. This approach is also compatible with present military and other agency practices on the Range, within the Refuge, and complies with applicable environmental law.

The term "reserve" is used as a management concept and is meant to insure that natural values and processes are given full recognition in all land use plans. The concept is not intended to be restrictive for those resource management programs, such as wildlife, where a more active management program may be required. Rather, the term suggests that the Range should be reserved, again to the extent possible given the military purposes there, from activities that unduly disrupt natural processes.

The activities, management procedures, and interests of 35 agencies involved with LAFR have been carefully scrutinized within the scope of the planning process. Especially important have been the interests of the five NRMCA agencies. The purpose of these examinations has been to insure that the management procedures and goals recommended in the NRMP accurately reflect the needs of those agencies. A number of federal and state agencies (for example the USFWS and AGFD) already have established management programs for selected lands or resources on the Range. The recommendations within this NRMP are intended to complement rather than supplant those programs, by providing mechanisms for overall coordination of resource management efforts by individual agencies.

This NRMP applies to 2,664,423 federal acres, 84,262 state acres, and 2,675 private acres (state and private lands are



leased by the military) within LAFR. Land practices in areas adjacent to the Range boundary were also examined in order to identify encroachment pressures that may originate from perimeter areas and influence natural and cultural resources of LAFR. Recommendations for responding to such pressures were formulated.

The time horizon, or functional period, of this plan is 20 years. The plan will, however, require periodic updating to keep resource management in step with prevailing circumstances.

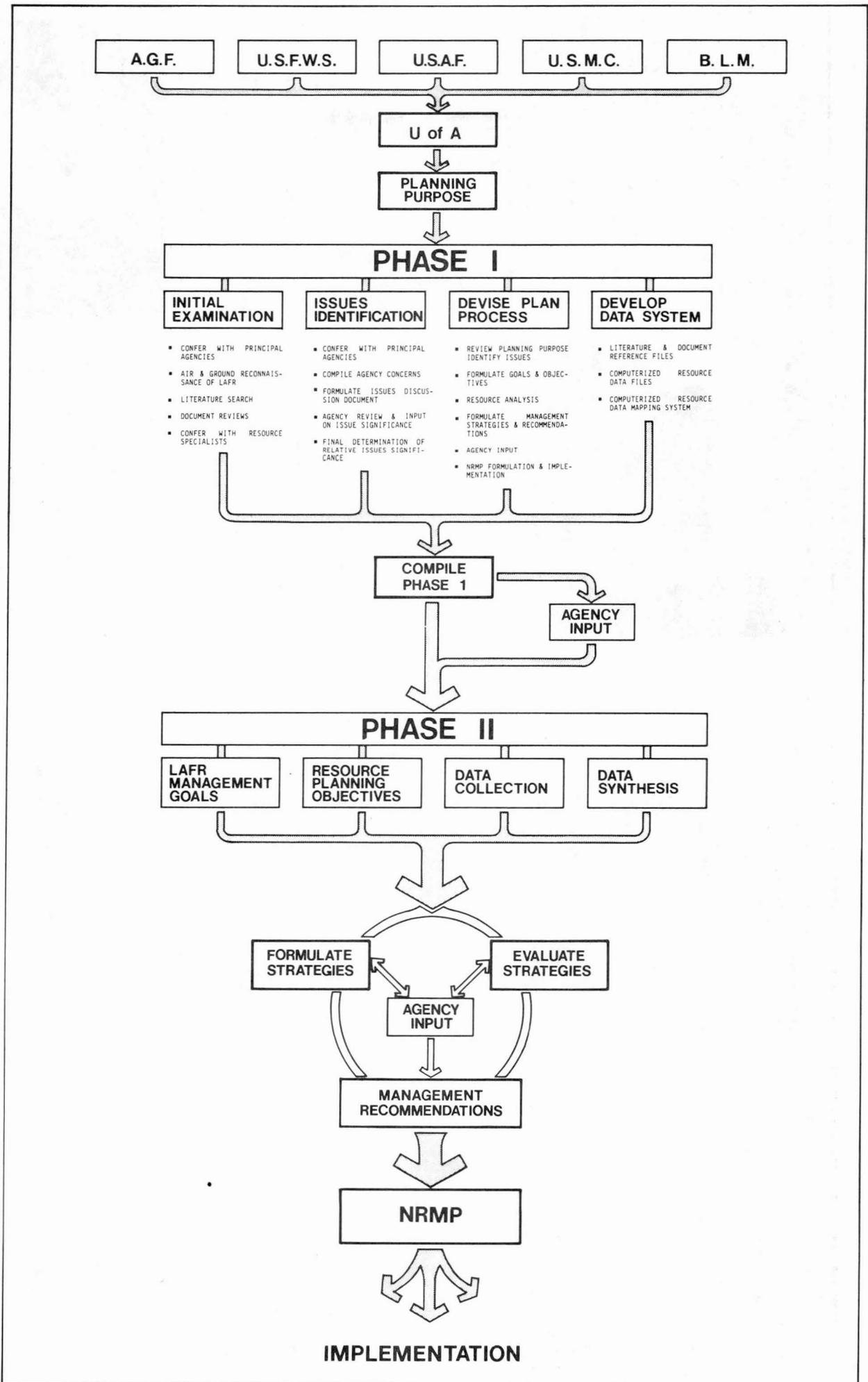
Management topics addressed within the plan include water, geology, soil, vegetation, and wildlife; atmospheric, visual, and cultural resources; road system development and use; military and nonmilitary agency use of the Range; recreation management; and perimeter land use and encroachment. Additionally, careful consideration was given to the legal status of LAFR lands and the administrative/management relationships among agencies involved with the Range. Most resource data and information were obtained from published documents and agency files. Some original field data were collected and analyzed for this NRMP. For example, Map 7.1 (vegetation of LAFR) was based on data collected by the planning team. Field verification of some published results also occurred. For example, previously excavated archaeological sites were re-examined to check for recent signs of disturbance.

Planning Authority and Compliance

This NRMP has been developed in accordance with applicable legal directives and other materials cited herein. In particular, this NRMP has been developed under the authority of the Natural Resources Management Cooperative Agreement and AFR 126-1. The following is a list of the pertinent laws and regulations:

- Air Force Regulations (AFR) 126-1—Conservation and Management of Natural Resources.
- AFR 215—Air Force Moral, Welfare, and Recreation Programs and Activities.
- AFR 215-20—Air Force Outdoor Recreation Program.
- AFR 19-4—Use and Control of Off-Road Vehicles.

Figure 1.1 Planning process for LAFR.
 Source: Natural Resources Management Plan for Luke Air Force Range, 1986. SRNR, University of Arizona and Luke Air Force Base.



- AFR 19-9—Interagency Intergovernmental Coordination of Land, Facility and Environmental Plans, Programs, and Projects.
- Air Force Manual (AFM) 136-5—Natural Resources, Outdoor Recreation, and Cultural Values.
- AFM 126-2—Natural Resources Land Management.
- AFM 126-4—Natural Resources Fish and Wildlife Management.
- Title 32 Code of Federal Regulations (C.F.R.) sec. 217.1 et seq.—Recreational Use of Off-Road Vehicles on DOD lands.
- 32 C.F.R. 213.1—DOD Cooperation with Civilian Law Enforcement Officials.
- 32 C.F.R. 232.1—Natural Resources, Fish and Wildlife Management.
- 50 C.F.R. sec. 25.11 et seq.—The National Wildlife Refuge System.
- Navy Manual NAVFAC MO-100.4—Outdoor Recreation.
- Navy Manual NAVFAC MO-100.1—Land Management.
- Navy Manual NAVFAC MO-100.3—Wildlife Management.
- Refuge Manual—U.S. Fish and Wildlife Service.
- Administrative Manual Part 5 sec. 2—U.S. Fish and Wildlife Service.
- Arizona Revised Statutes Title 17—Game and Fish Laws.
- Hunting Regulations—Arizona Game and Fish Commission, Fall 1985-Spring 1986.
- Luke Air Force Range, Natural Resources Management Cooperative Agreement, 17 August 1982.
- Draft Outdoor Recreation Amendment to the Luke Air Force Range Natural Resources Management Cooperative Agreement.
- Memorandum of Understanding between the Departments of the Air Force/Navy and the Fish and Wildlife Service, 1960.
- Memorandum of Understanding between the Department of the Air Force Department of the Navy, and U.S. Fish and Wildlife Service, 1975.
- Local Agreement Between the Commanding Officer 58th Tactical Fighter Training Wing, Luke AFB, AZ and the Refuge Manager CPNWR, Yuma, AZ, 1976.
- Memorandum of Understanding between the USAF, the USN/USMC, and the State of Arizona Game and Fish Commission, 21 January 1978.
- Cooperative Plan for the Development and Management of Fish and Wildlife Resources on Air Force Installations, 1978.

- Memorandum of Understanding between the DOI and DOD for the Conservation and Management of Fish and Wildlife Resources on Military Installations, 1982.
- Natural Areas Registration Letter of Understanding between Luke AFB and ASPB, 1982.
- Letter of Agreement between Commander, Twelfth Air Force and Commander, Third Fleet, 1982.

Benefits of the Plan

Implementation of this NRMP according to the principles and processes described will yield a number of benefits for the LAFR environment and the agencies involved with the Range:

- (i) Multi-agency management of the natural and cultural resources of LAFR will be coordinated in an ecologically sensitive and professionally effective manner.
- (ii) The USAF and USN/USMC will be able to more effectively execute their defense-related missions by identifying and addressing resource management issues before these become so complex that they significantly interfere with military operations.
- (iii) The USAF will be better prepared to carry out its custodial and legal duties with regard to the natural and cultural resources of LAFR.
- (iv) Civilian resource management agencies having LAFR responsibilities will be able to more efficiently and safely execute their own missions.
- (v) An improved atmosphere of understanding and cooperation will develop among the numerous federal, state, and local agencies having responsibilities for the Range.
- (vi) The Plan will be useful for orienting new agency personnel to the Range environment, its resources, and their management.
- (vii) Future challenges to, and questions about, resource management on LAFR can be placed in perspective by reference to the NRMP. Once officially adopted, the Plan will merit formal recognition by the presiding hearing officer or judge in any relevant legal proceeding.
- (viii) Public opinion about the intent of the NRMCA agencies to responsibly administer the lands and resources within Luke Air Force Range will improve. For example, existence of the Plan will indicate that the USAF takes its land stewardship role seriously.

1.3 PLANNING EVALUATIONS

Evaluations contributing to the development of this NRMP can be subdivided in two ways. First, there have been considerations of agency activities, jurisdictions, and responsibilities as they apply to LAFR and to the management of its natural and cultural resources. These analyses have led to recommendations for a new framework incorporating multi-



ple agency participation in the management of the resources of the Range. The second set of evaluations pertained directly to the management of the various resources of LAFR. Findings from these examinations were used to formulate recommendations for the management of specific resources (for example, water, mineral, and cultural resources). Presented below is an overview of the analyses that were conducted in support of the recommendations for a new administrative-management framework. That framework is presented in Section 1.4 of this Executive Summary. Details of its development appear in Chapter 2. Recommendations for resource management and a synopsis of the supporting analyses follow in Section 1.5 of this Summary.

Agency Jurisdictions and Activities

The approximately 35 federal, state and local agencies involved with LAFR represent a wide variety of jurisdictions and interests in land ownership and uses, public access, law enforcement, resource management, and military activities. Each agency has individual policies and managerial functions that, when applied in conjunction with other LAFR agencies, creates a jurisdictional and administrative environment that is highly complex. This complexity must be accounted for if resources on the Range are to be effectively managed. Below is a brief description of the jurisdictions and activities of the agencies with the most relevant involvement on the Range. Greater details on these agencies and others not identified here are presented in Chapters 2, 12, and 13 of the NRMP.

U.S. Air Force (Luke AFB) and U.S. Navy/ U.S. Marine Corps (MCAS, Yuma)

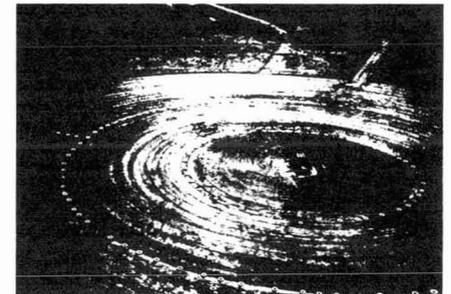
The Air Force has jurisdiction for the entire Range, but shares responsibility for military operations with the USN/USMC. The Air Force maintains exclusive control of operations in the Gila Bend Segment of the Range. The USN/USMC controls operations in nearly all of the Yuma Segment (Map 1.2). Two facilities, the ISST (ICBM Silo Super-hardening Technology) and MAV (Multiple Aim-Point Validation) sites, for development and testing of basing modes for ICBMs, are operated on LAFR by the Ballistic Missile Office of the USAF (see Chapter 12). The ISST site is located east of the Gila Mountains in the Yuma Segment.

The MAV site transects the Yuma-Gila Bend Segment boundary just east of the Mohawk Mountains (Map 1.2).

Within their respective segments, the USAF and USN/USMC have authority and responsibility to control all land access outside of the CPNWR. They also have the authority to close access to the Refuge when air-to-air gunnery, or other aerial activities pose an endangerment to persons on the ground. This authority has important implications for resource management, because agencies, or other parties, entering the Range for that purpose must comply with the access schedule permitted by the military. Access to most portions of the Gila Bend Segment including CPNWR, can be highly restrictive, at least during week days (Map 1.2). These limitations are necessary, due to the many air-to-ground gunnery and bombing and air-to-air gunnery ranges that the Air Force routinely uses in the segment. (No air-to-ground gunnery or bombing is presently permitted in the CPNWR). Access to most parts of the Yuma Segment is more readily available. The only live-fire targets are limited to the southwestern corner of the area.

The USAF and USN/USMC schedule all use of the restricted airspace overlying most of LAFR (Map 1.2). In general, military control and use of the airspace extends from the ground surface to 80,000 feet above mean sea level. Military aircraft operations are, however, restricted to 1,500 feet above ground level over CPNWR. Aircraft use for resource management purposes on the Range must be approved by the USAF or USN/USMC. As with ground access, military operations have priority over civilian (public or agency) requests to enter the restricted airspace over LAFR.

USAF and USN/USMC pilot training activities on LAFR are similar. Both agencies train fighter pilots for various air combat and ground attack roles. Combinations of "bull's-eye" targets to score pilot proficiency in bombing and strafing, mock airfield and other tactical targets to simulate ground attack missions, and air-to-air combat ranges are used in both the Air Force and USN/USMC training programs. The Air Force also uses the Range for live-fire training. Low yield practice bombs and rockets and inert cannon ammunition are used for most missions. Some high explosive ordnance is occasionally dropped at certain designated



locations in the Gila Bend Segment. The USN/USMC has minimal requirements for live-fire on LAFR and restricts those exercises to practice ordnance. Training with high yield ordnance is accomplished by USN/USMC pilots at another range in southern California. Instead, on LAFR, this agency uses a number of electronically scored, "no bomb drop" targets that simulate the trajectory of the intended ordnance.

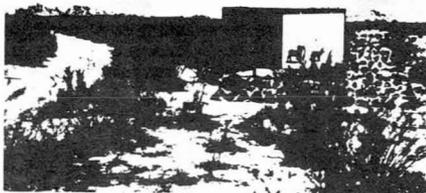
Routine users of the Gila Bend Segment of the Range include units from Luke, Williams, and Davis-Monthan AFBs (Arizona) and Arizona Air Army National Guard and Air Force Reserve Units. Other Air Force and Guard units from around the nation are also periodically assigned to LAFR. The Yuma Segment is used by Navy and Marine Corps pilots from MCAS, Yuma, and Miramar Naval Air Station and other air stations in California.

In addition to being a joint user and operator of LAFR, the USAF is also responsible for environmental protection and resource management on the Range. By agreement with the USN/USMC, this obligation includes both the Gila Bend and Yuma Segments. The Air Force is accountable for environmental impacts in CPNWR caused by military operations. But, resource management within the Refuge remains the responsibility of the USFWS. As noted previously, Air Force efforts for responsible land stewardship have included cooperative agreements with the USFWS, AGFD, BLM, and the Arizona State Parks. The USN/USMC have been directed to ensure that their operations on the Range comply with applicable environmental laws and regulations. All proposed actions by this agency, incorporating LAFR lands must receive prior approval from Luke AFB. Both the USAF and USN/USMC are also party to several cooperative agreements that promote natural resource management on the Range.

U.S. Fish and Wildlife Service (CPNWR)

The USFWS has jurisdiction for CPNWR and controls all access to that part of LAFR used by the public as well as military and nonmilitary agencies. Except in the case of emergencies related to lost aircraft, military personnel must obtain approval, under a Special Use Permit, from the Refuge manager before entering the Cabeza Prieta. All access to the eastern portion of the Refuge can be scheduled only during periods when the overlying air-to-air range is not being used for gunnery practice.

The USFWS is unique among the five signatory agencies of NRMCA in that this agency has near autonomy for resource management on about 31 percent of LAFR. This position provides the Service with an opportunity to plan and implement long-term, comprehensive strategies for managing Refuge resources. The Service also has the chance, through NRMCA, to influence the outcome of important decisions about land uses on the non-Refuge portions of the Range.



This is particularly important when proposed activities on lands adjacent to CPNWR might impact resources on the Refuge. These opportunities, which provide for consistency in management, are important for maintaining the natural integrity of the Refuge. Management consistency is critical, because many of the environmental processes within the Sonoran Desert occur over long time-spans. Management programs that cannot be scaled for similar time-spans often are ineffective.

In addition to its administrative duties for the Refuge, the USFWS advises the Air Force and other agencies on wildlife management matters pertaining to the rest of LAFR. In particular, the Service participates with the USAF, AGFD, and National Park Service (NPS) in recovery efforts for the endangered Sonoran pronghorn antelope.

Bureau of Land Management (Phoenix District)

The BLM (formerly the Public Land Office) can be viewed as the originating administrative agency for the non-Refuge lands comprising the Range. If the withdrawal of LAFR were discontinued, these lands would revert to the BLM. At present, the BLM continues to retain some management functions for the Range. Administration of withdrawal instruments, withdrawal renewal processes, mining and mineral leasing proposals, and livestock grazing proposals are among those functions. Because mining, mineral leasing, and livestock grazing are currently prohibited on LAFR, administration of these land uses can be considered as a vestigial responsibility of the BLM pending the potential renewal of these activities in the future. An additional function of the BLM could involve the Cadastral Survey Office of that agency. This office has the legal authority to survey disputed federal boundaries and would be employed should such an issue arise on the Range. The BLM, a signatory of NRMCA, also serves as a resource management advisor to the USAF. Finally, the BLM manages land adjacent to the LAFR boundary. The Yuma District office is responsible for most BLM lands in Yuma County; the Phoenix District office manages agency lands in Maricopa County and some in Yuma County.

U.S. Border Patrol (Yuma, Tucson, and Substation Offices)

The U.S. Border Patrol (USBP) enforces laws against the illegal entry into the United States along the 90-mile-long international boundary on LAFR's southern side. For this reason, the USBP conducts frequent aerial and ground patrols throughout extensive areas of the Range. The USBP is not involved in resource management on LAFR, but the necessity for this agency to drive off roads and to construct and maintain "drags" (wide, bladed roads extending for miles across valley plains used to detect the foot traffic of undocumented aliens) causes important environmental impacts. Many intercepts are also lifesaving efforts to rescue aliens who grossly underestimate the rigors of the LAFR terrain and heat. The immediacy of the intercept, by means of off-road driving, is often critical to the success of the lifesaving effort.

U.S. Customs Service (Lukeville and Yuma Offices)

Customs officials enforce laws against carrying contraband into the United States. Although the agency does not conduct patrols on LAFR, an occasional interception of a smuggling operation does occur there.

Arizona Game and Fish Department (Phoenix, Yuma, and Field Offices)

Wildlife on federal property in Arizona is considered to belong to the state. Accordingly, cooperative agreements have been established between the USAF, USN/USMC, and AGFD for wildlife management on the non-Refuge portions of LAFR. AGFD is also a signatory of NRMCA. The principal activities of this agency on the Range include bighorn sheep and other wildlife surveys, setting of hunting quotas, administration of legal hunts, game law enforcement, development and maintenance of wildlife waters, and wildlife research. This agency leads the Sonoran pronghorn antelope recovery team. On CPNWR, the chief duties of AGFD are co-administration, with the USFWS, of the annual bighorn sheep hunt (the only hunting permitted on the Refuge) and enforcement of state game laws. While AGFD has wildlife management jurisdiction on LAFR, it does not have authority for land or habitat management. Permission for such activities must be gained from the USAF or USFWS.

Arizona State Land Department (Phoenix Office)

The Arizona State Land Department (ASLD) is technically responsible for the management and development of all state lands and for generating revenues for the state school fund from these properties. There are 84,262 state acres in LAFR that are leased through condemnation by the USAF. This lease process closes these state lands to all forms of entry and development, other than that authorized by the Air Force, including mining and mineral leasing. The Air Force is responsible for resource management on these lease lands. ASLD remains interested in the future of state lands within

the Range for potential sale or trade to the Air Force or for civilian use should the military withdrawal be discontinued.

Arizona State Parks Board (Phoenix Office)

The ASPB administers the Arizona State Natural Areas Program. Three SNAs (previously noted) have been designated within LAFR with the concurrence of the USAF. The Board continues to support stewardship practices within these SNAs that protect the natural values for which they were designated. A fourth SNA, the Yuma Dunes, is proposed by the Board. Another SNA was previously proposed for the Sentinel Plain volcanic field but has not been established.

County Sheriff's Departments (Yuma, Phoenix, Tucson, and Substation Offices)

LAFR lies within Yuma, Maricopa, and Pima counties. Each county sheriff's department has jurisdiction for civilian law enforcement within its portion of the Range. These agencies do not patrol the Range, but do respond to requests from other LAFR agencies for law enforcement assistance, criminal investigations, and search and rescue operations.

Assessment of the Administrative-Management Problem

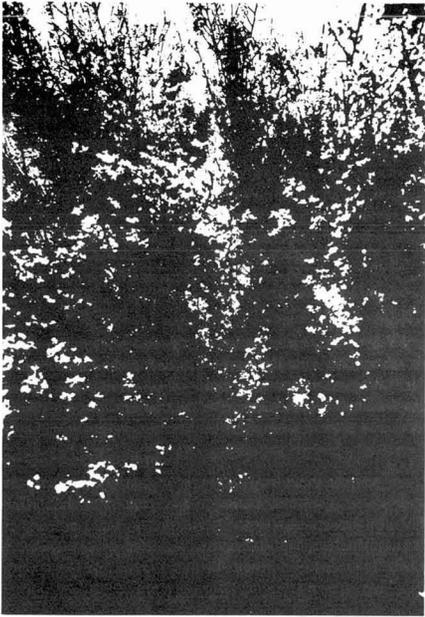
Establishment of a central management authority, development of a decision-making framework, and formulation of long-term management goals have been cited in this NRMP as prerequisites for initiating an effective system for the overall administration and management of LAFR's resources. Resource management goals have been developed within this NRMP and are presented in Section 1.5. Undetermined, however, are a central authority for management natural resources and a decision-making framework for implementing that management. The factors influencing these determinations are examined below.

Central Management Authority

The Air Force is the pivotal agency for coordinating overall management of natural and cultural resources on LAFR. This conclusion follows principally from USAF jurisdictions for the Range, which are broader than the authorities of other NRMCA members. Important Air Force jurisdictions include (i) administration of the entire military reservation and approval authority for most aspects of its operation; and (ii) control of land use decisions and authority to grant environmental clearances for all actions on non-Refuge lands.

USFWS responsibilities for CPNWR also represent multifaceted jurisdictions that apply to a sizable portion of LAFR. The considerable autonomy of the Refuge suggests that these lands will remain as an independently administered unit, within LAFR, in terms of land use and resource management.

The autonomy of the USFWS poses no problem for resource management on LAFR. Through its jurisdictions, the USAF could effectively coordinate land use and resource manage-



ment on non-Refuge lands to be compatible with the purposes and programs occurring on CPNWR.

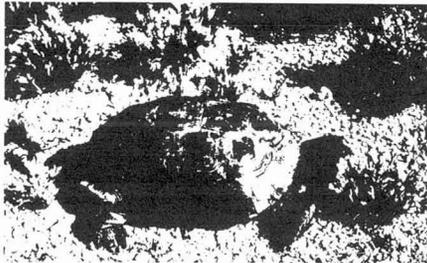
In contrast to the Air Force, the USN/USMC, AGFD, and BLM do not have the jurisdiction to coordinate comprehensive resource management on the Range. USN/USMC authorities for LAFR lands are limited principally to roles as point users/operators of the Western Section. As noted previously, land-based actions by this agency must be environmentally approved by the Air Force. AGFD has wildlife management authority on LAFR, but does not have jurisdictions for other land uses. And, as noted above, present BLM authority for LAFR lands is very limited.

Resource Management Expertise. Deficiencies in expertise presently limit the Air Force's ability to respond to applicable regulations and laws pertaining to resource management and environmental protection. Cooperative agreements with the USFWS and AGFD have helped to compensate for the lack of Air Force expertise on wildlife issues. The USAF remains ill-equipped, however, to adequately meet the planning and management needs for cultural, geologic, water, soil, vegetation, recreational, and other resources. The provisions of NRMCA help fill some of these needs by laying the groundwork for incorporation of additional assistance from the USFWS, AGFD, and BLM. This assistance is restricted, though, by jurisdictional, personnel, budgetary, and motivational constraints on the part

of these nonmilitary agencies to contribute to LAFR management. In spite of NRMCA, LAFR remains without adequate resource management.

Employment of resource professionals, as Air Force staff, is the best means of upgrading resource management on the Range and maintaining its continuity with the military mission, which by law is preeminent. Obviously, the Air Force will not be able to establish a management program on a par with that of the BLM or other land management agencies. The agency should, however, establish a special staff of natural resource professionals to administer the comprehensive management program outlined in the NRMP, and to coordinate the cooperative efforts of NRMCA agencies. This staff would not supplant the responsibilities of the other NRMCA agencies (the USFWS and AGFD in particular). Instead, the staff would serve to supplement their efforts by assuring that various agency actions are coordinated to be as noninterfering and, preferably, as complementary as possible. More details on the recommended composition and recommended functions of a resource management staff are presented in Section 1.4.

Resource Management Motivation. Agency motivations for investing personnel, funding, and materials in resources on LAFR vary considerably. Although the USAF and USN/USMC must comply with applicable environmental laws, these agencies do recognize that their privilege to operate military programs on the Range depends, in part, on responsible land stewardship. Presently, the resource programs of these agencies are limited to (i) compliance with NEPA and other environmental laws on some, but not all projects (frequent violations have occurred as undisturbed land areas have been incorporated into expanding military facilities, and nonmilitary projects, such as drag roads or wildlife water catchments have been authorized but not environmentally cleared; (ii) participation in cooperative agreements for wildlife and resource management; and (iii) cooperation, and some material and funding support (on the part of the USAF), for some wildlife projects. This level of investment by the USAF and USN/USMC in natural resource management has not been sufficient in protecting LAFR's resources, and has not been adequate in controlling environmentally damaging activities.



Implementation of this NRMP, assembly of a resource management staff at Luke AFB, and employment of resource specialists at MCAS, Yuma are the logical steps for strengthening the commitment of the USAF and USN/USMC in resource management. By increasing their capabilities in land stewardship through these actions, the USAF and USN/USMC will increase their management motivations. Positive benefits that, at a minimum, would accrue from such investments are listed below:

- (i) The USAF will have the basic expertise to realistically act as the lead administrative agency in the implementation of this NRMP.
- (ii) The USN/USMC will be able to participate more fully as a member of the Natural Resources Committee.
- (iii) With tangible commitments, in terms of personnel, time, and funds, to environmental stewardship, both military agencies will be able to argue more legitimately for continued or additional support for resource management programs.
- (iv) The resource personnel within each military agency will be able to help military and other agency planners minimize the resource impacts of various actions; thus, reducing environmental, public relations, and restoration costs while maximizing planning and project implementation efficiency.
- (v) Other agencies will invest in resource management and environmental protection measures more enthusiastically knowing, with some assurance, that the military is working affirmatively with them towards those purposes.

Point five, above, should be of particular importance to the USFWS and AGFD. If the military demonstrates stronger support of the interests of these agencies, they will most likely provide greater management assistance to the USAF in areas outside of their standard activities.

Resource Management Direction. Prior to this NRMP, a comprehensive set of management directives, specific to the Range, was not available for LAFR. Some specific policies regarding cooperative actions on resource inventories, environmental assessments, wildlife, and access are found in Section 1 of NRMCA. Additionally, each NRMCA agency has its own general resource management regulations.

The goals established by this NRMP provide the comprehensive perspective, issuing in NRMCA and individual agency directives, necessary to guide resource management in long- and short-term decision-making. Ideally, significant compatibility between long-term goals and short-term objectives will occur. There is, however, a high probability that many of the military and some of the nonmilitary projects will be contrary to at least some of the management goals and applicable environmental protection covenants. In these cases, some compromise may be deemed necessary, but should not be approved until less damaging alternatives have

been legitimately considered and methods of environmental mitigation have been identified. This consideration of alternative actions follows directly from NEPA (1969) and numerous federal regulations promulgated due to that Act.

The process of balancing the implications of proposed actions against management goals and potential environmental impacts is the means by which overall, long-term direction is integrated into more immediate resource uses. The actual balancing process, often requiring input from a number of agencies and other sources of expertise, is an essential result of the planning approach to management that is recommended for LAFR.

Decision-Making Framework

Important in the construction of an administrative-management framework for LAFR is the recognition of seven conditions directly related to its potential effectiveness. First, authority to implement decisions must be derived from the jurisdictions of individual agencies. Accordingly, the framework design reflects the complex, multiple agency jurisdictions and missions that apply to the Range.

Second, because most of CPNWR is part of LAFR, resource management on the Refuge is unquestionably part of overall Range management. The USFWS, however, has a significant amount of inherent autonomy for Refuge management. Hence, the framework should be viewed as a formal mechanism for coordinating Refuge and non-Refuge management.

Third, the lead administrator of the framework should be the USAF, a status appropriate to that agency's extensive jurisdiction over the Range. To fulfill its responsibility, the Air Force will need to assemble a balanced resource management staff to provide the necessary expertise to direct and coordinate overall management of Range resources.

Fourth, in the past, the federal environmental assessment process has not always been appropriately included in management decisions on LAFR. Such a review process will be directly incorporated into the decision-making framework for the Range, thus, minimizing the chance that this important and legally mandated procedure will be overlooked.

Fifth, the framework should incorporate a step-by-step process for interagency decision-making.

Sixth, goal-directed management should be fostered by the framework.

And seventh, the existing administrative structures of the individual NRMCA agencies should be incorporated into the framework to avoid proliferation to avoid proliferation of unnecessary bureaucratic levels.

1.4 RECOMMENDED ADMINISTRATIVE-MANAGEMENT FRAMEWORK

A nine-step framework for resource management on LAFR has been assembled based on the preceding assessments (Figure 1.2). Guidance and assistance are available to man-

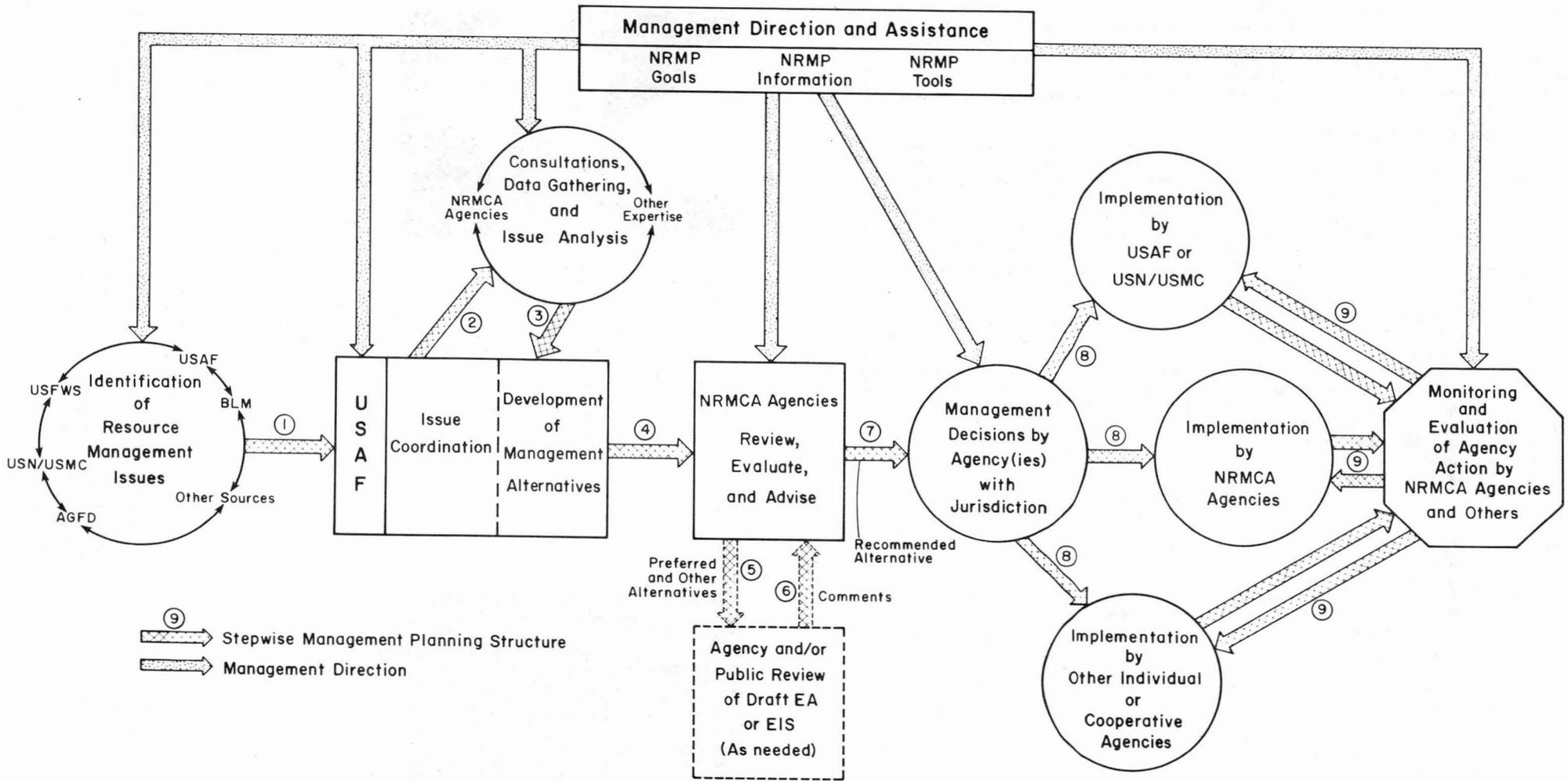


Figure 1.2 Administrative-management framework.

Source: Natural Resources Management Plan for Luke Air Force Range, 1986. SRNR, University of Arizona and Luke Air Force Base.

agement for all critical points in the decision-making structure through references to the goals, objectives, and resource data contained within this NRMP. The individual steps in the framework are discussed below. Following those discussions, specifications for the new resource management staff at Luke AFB are outlined.

Framework Steps

Step One—Issues Identification and Coordination

The proposed administrative-management framework is basically issue-driven. The decision-making process begins with the identification of resource issues pertinent to LAFB. Each issue is then conducted through the multiple-agency decision-making system, including consultation, evaluation, analysis, and resolution as required. Management issues are identified through interactions between the NRMCA agencies and with outside contacts. Although informal communication is often effective in such a process, the Air Force resource staff should take a strong lead in also establishing formal mechanisms for issues identification and coordination. The resource staff should basically serve as an issue clearinghouse. The clearinghouse function is intended to keep the Air Force and all other appropriate parties well advised of emerging issues and the progress of those issues in the framework process. Details of this function are presented in Chapter 2 of the NRMP.

Step Two—Issue Analysis

Examination of the scope, relevance, and implications of an issue for resource management is the second step in the decision-making process. Participants in this process include the NRMCA agencies and possibly other agencies, universities, or private consultants. Analyses would normally begin with consultations among the primary parties involved to "brainstorm" the scope of the issue and its implications for management. References to the NRMP goals and its information base will be important in accomplishing these tasks. Next would be formulation of a plan for further examination, if needed. Such a plan should specify management and analytical objectives, data gathering needs and methods, data analysis techniques, task assignments, and a timetable. The general goal of the above process is to provide the necessary information so that responsible parties may formulate reasonable management alternatives to the issue at hand.

The roles of individual NRMCA agencies could vary considerably during the analytical process, depending on the character of the issue and agency responsibilities. The Air Force resource management staff will have important general duties in addition to specific tasks assigned to them. Coordination of multiple agency functions will fall to the staff, as will the monitoring of analytical progress and adherence to timetables. Most importantly, the staff should insure that NRMP goals are carefully followed. The resource staff should be responsible for making certain that data gathered, organized, and evaluated are carefully and log-



ically recorded in the Range library system to serve as part of a continuing information base for future needs (see Chapter 17, NRMP). In particular, any information that could contribute to the ongoing assembly of information about archaeology, water, soil, vegetation, geology, wildlife, visitor use, or other resources, should be collected in a compatible format.

Step Three—Management Alternatives

Alternatives for resolving a management issue should be based on interagency consultations, results of other analyses, NRMP goals, and other guidelines. Formulation of at least two to three alternatives is expected, depending on the complexity of the problem. The no-action alternative is always to be considered. In all but the most simplified cases, or when a previously proven, reliable solution is clearly appropriate, a third alternative should be provided. A number of other alternatives may also be appropriate in complex situations. At this point in the decision-making process, management



alternatives are in the proposal stage and will receive later evaluation. Each alternative should, nevertheless, be as realistic as possible and should adhere to the NRMP goals for environmental protection.

As indicated by the framework, the USAF is the agency responsible for development of management alternatives. At times, this will clearly be the case as other agencies provide input to the resource staff, which will then formulate alternatives. For example, the staff may receive input on methods to mitigate the impacts of a new target range on natural and cultural resources. The staff would formulate alternatives for review in Step Four. Another agency could take a strong lead in formulating alternatives, if the proposed action lay within its expertise and jurisdiction. For example, AGFD might submit alternative approaches for aerial bighorn sheep surveys. The Air Force would then coordinate a review of the proposals.

Step Four—Agency Review

Interagency review and evaluation of management alternatives developed in Step Three begins in Step Four. The purpose of these evaluations is to provide advice on needed modifications for management alternatives, and to help in the selection, if possible, of a preferred alternative. Such assistance is advisory to the agency with the appropriate jurisdiction to implement the final management decision. It is hoped that some consensus will be achieved. Development of an interagency consensus is the desired outcome of these evaluations. Nevertheless, selection of a preferred alternative by the responsible agency will be necessary, if a public EIS review is planned (Step Five).

The resource staff is expected to coordinate the necessary reviews in Step Four. If the issue is not complex or controversial, a fairly informal review process among involved agencies may be possible. With agreement among those parties, and if EA or EIS preparation is unnecessary, the decision-making process could continue without Steps Five and Six.

Step Five—EA or Draft EIS Review

Preparation of an EA or EIS can follow directly from the preceding four steps. Guidelines and requirements for EA or EIS preparation and review are available in CEQ regulations and those of the federal agency responsible for the documents. EA and EIS review processes for resource management proposals are an optional component of the administrative-management framework (Figure 1.2, Step Five).

Step Six—EA or Draft EIS Comments

Agency and public comments on preferred and alternative management actions should be evaluated by the agency with decision-making jurisdiction, in consultation with the other NRMCA agencies. In this step, the relationship of the management alternatives to the NRMP goals should again be

carefully assessed. The product of this interagency evaluation should be a final recommendation, with a concise statement clearly defining the environmental benefits and impacts of the action. Also included should be proposed procedures for mitigating the negative consequences of the action, and recommendations for monitoring the effects of the action.

Step Seven—Management Decisions

Although the framework to this point has emphasized inter-agency cooperation, the final decision on how to resolve a resource issue has to be made by the agency or agencies with the appropriate jurisdiction. Ideally, the reviews and analyses preceding the decision will have generated a favorable, interagency consensus on its merit and a cooperative attitude that will extend into the implementation phase.

Step Eight—Decision Implementation

Resource management decisions will be implemented by one of three groupings of agencies; one of the NRMCA signatories; two or more outside agencies; or a mix of outside and NRMCA agencies. USAF or USFWS approvals of, or cooperation in, outside agency actions must precede any activity on Range or Refuge lands.

Step Nine—Monitoring and Evaluation

An important component of the administrative-management framework will be monitoring and evaluation of the environmental effects of an action. Participants in this process should include the NRMCA agencies, other agencies (for example, ASPB), and, possibly, special interest groups (for example, the Arizona Wilderness Coalition). Monitoring by outside agencies will probably be on an issue-by-issue basis. Similarly, special interest groups may perform watchdog functions for issues germane to their particular purpose.

Although the framework decision-making process is issue-driven, the monitoring routines of NRMCA agencies should not be confined to land areas or resources of current interest only. A broadly based resource monitoring program is needed to understand and prepare for present and future issues. Funding and personnel time sufficient for comprehensive monitoring is unlikely to be available, but a system using presently available data (from all sources) and agency field patrols could be designed to provide adequate background coverage. Two approaches for monitoring are presented in Chapter 2 of the NRMP.

Resource Management Staff

Employment of a professional resource staff within the USAF (four positions at LAFB), is critical to the operation of the administrative-management framework and, thus, to the successful implementation of this NRMP. Without the resource staff, the framework will not have the leadership necessary to coordinate resource management actions on LAFB. Also, the Air Force will not have the expertise re-

quired to participate as a full partner in NRMCA. As a corollary to the staff at Luke AFB, one or two complementary positions should be established at MCAS, Yuma, so that the USN/USMC may also participate fully in the NRMCA and this NRMP.

The duties of the Air Force resource staff and their counterparts at Yuma will be multiple. In addition to obligations associated with the administrative-management framework, the staff will be responsible for implementing this NRMP and fulfilling the military's environmental protection requirements.

The ability of resource personnel to complete their assignments will be dependent on their professional expertise. Consequently, their credentials must be on par with those held by professional land managers in the USFWS, BLM, or AGFD. The composition of the staff must also represent the special management needs of LAFR. Subsequent to the following review of management functions is an examination of the credentials that should be required for each position.

Management Functions

Eight categories of management functions have been identified for discussion purposes. In practice, these responsibilities will not be distinctly separated, but blend into one another to a large degree. The resource management staff at LAFB will perform major duties in all of these categories. Personnel stationed at Yuma will not have the overall management responsibilities of the Air Force staff, but will perform important corollary work. The eight categories are agency responsibilities, NRMP administration, decision-process coordination, decision-implementation coordination, monitoring, clearinghouse operation, in-the-field management, and education and training.

Agency Responsibility. One of the most important responsibilities for the resource staff will be to insure that the military agencies fulfill their environmental obligations. As previously noted, both the USAF and USN/USMC have been periodically deficient in meeting these obligations, largely because they have not had appropriately trained personnel. Once the staff is in place, they can use this NRMP as a basis from which to approach their respective agencies in environmental affairs.

NRMP Administration. The resource management staff at Luke AFB will be the principal administrative body for the NRMP. The Plan has been designed to direct the cooperative efforts of NRMCA agencies by establishing basic resource management goals and procedures. Implementation will require administration and leadership by the resource staff.

Coordinate Decision-making Process. Coordination of the process for interagency decision-making will be one of the specific administrative duties of the resource staff. This process and the step-by-step roles of the staff have been described above. Yuma personnel will take the strongest interest in the process as it pertains to the Yuma Segment.

Coordinate Implementation. Regardless of how a management decision is to be implemented, the resource staff will play a significant role in directing necessary cooperative efforts.

Monitoring. The resource staff should take the lead in developing an adequate system to monitor baseline environmental conditions on LAFR (see Section 2.4). The staff should also make sure that specific procedures are described in plans for new land uses or management actions that will insure detection and proper surveillance of any resulting impacts. To some degree, the absence of any systematic or consistent monitoring programs for LAFR has, in the past, prevented recognition of individually small but cumulatively significant resource impacts. The effectiveness of the new administrative-management framework will depend to a great degree on the ability to avoid this past mistake.

Resource Management Clearinghouse. The clearinghouse concept, as a tool for the identification of management issues, is described in Chapter 2 of the NRMP. The resource management staff will have the responsibility of managing the issues clearinghouse.

Field Management. With the implementation of this NRMP, the management involvement of the USAF and USN/USMC will increase significantly and will include more field work. Resource reconnaissance for planning purposes, road survey and siting, recreation management, archaeological clearances, environmental monitoring, and ventures in interagency cooperative management are examples of field work to be undertaken by the military. The resource staff will be responsible for coordinating and performing these functions.

Education and Training. Military agencies inherently experience high personnel turnover rates. As a result, persons having little or no familiarity with deserts often initiate and participate in Range-related activities that could have environmentally damaging consequences. The resource staff should play an important role in establishing and maintaining programs to inform or train military personnel as to procedures to protect the desert from unwarranted impacts.

Resource Management Staff Expertise

Challenges facing the resource staff will require expertise in a broad array of management and administrative fields. To function, the staff will, collectively, need skills in resource management and planning, interagency coordination, environmental and resource law, general administration, information and data management, various resource management specialties (for example, wildlife, public use, and archaeology), and environmental interpretation and education. Collectively, these types of professionals represent a level of expertise that might be found on the staff of a BLM or Forest Service district, with support from their upper administrative levels. Obviously, the military will not be in a position to assemble a staff with expertise equivalent to that of their counterparts in these federal land management agen-

cies. The comparison remains valid, however, as recognition of the complexity of the LAFR resource management situation.

Because the Air Force is responsible for the leadership role in this framework, personnel with resource planning, administration, and management abilities to serve as overall program directors and coordinators of actions conducted through the framework will be required. A secondary personnel need is in wildlife and cultural resource management. Wildlife are one of the most important and certainly among the most visible resources on the Range. A manager in this field is needed by the Air Force to coordinate with the USFWS and AGFD. A specialist in cultural resources would also fill a management niche that is missing for the entire Range (CPNWR included). Additionally, a number of other resource specialties should be acknowledged as having importance to the Range. Personnel specializing in land use encroachment, water and geologic resources, and outdoor recreation would all be important assets to the management staff.

As an important adjunct to the LAFB staff, personnel at MCAS, Yuma should be selected to augment overall resource management on LAFR and facilitate USN/USMC environmental obligations. Toward these ends, persons with broad backgrounds in resource planning and management should be hired.

Management Philosophy. All personnel selected for LAFR resource positions must have an understanding of the fragile nature and conservation requirements of the Southwestern desert. These individuals must also realize that LAFR is a unique area in which traditional management priorities and methods are often constrained by legal mandates and multiple agency jurisdictions. Military pilot training will continue to have the highest priority and resource conservation practices must respond to and, as much as possible, compensate for the resulting impacts. The aggressive manager whose approach may be intensive resource modification and development will be frustrated by conditions associated with LAFR because of the access restrictions imposed by military use and the fact that intensive manipulation is generally inappropriate in the fragile desert



environment. Most natural processes in the desert occur at a naturally slow pace and positive benefits can only be achieved by subtle, carefully planned action and great patience. Resource damage, on the other hand, is easily accomplished, and is often nearly impossible to correct.

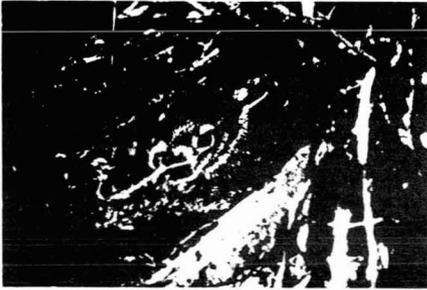
The most appropriate resource conservation policy on LAFR is one of preventing damage. Impacts are going to continue to occur within this area, and are generally going to exceed the natural capacity of the environment to compensate. Therefore, the best alternative for management is to fully understand these environmental limitations and give priority to conserving those areas and resources most critical to maintaining the natural productivity of the area. Such conservation will occur most effectively through cooperative planning with military and other users of the Range. Managers who understand and can effectively operate in such a situation will enjoy an opportunity to contribute significantly to land and resource conservation on LAFR.

Position Descriptions. The following are specific descriptions for positions at Luke AFB and MCAS, Yuma. These are civilian positions. The use of civilian professionals will establish expertise and consistency in resource management not available through transient military personnel.

Resource Management Director, Luke AFB. This individual is to be the director of the resource management staff at Luke AFB. A strong ability in integrated, resource planning and management is the most important criterion for selecting a candidate for this position. The individual should have a broad appreciation of military operations and wide experience in natural resources to provide an appropriate balance of attention to all management issues. Skills in administration, interagency relations, land use planning, public land and resource law, and information management will be important. The individual selected for this position must understand, in particular, the importance of the conservation management philosophy.

Assistant Resource Director/Planner, Luke AFB. The credentials of this individual should closely parallel and complement those of the director. This position is necessary to provide a second perspective, often critical in resource planning, and to cope with the work load that will face the staff. Skills in administration and information management could be emphasized in this position to augment the organizational abilities of the staff. A thorough understanding of NEPA processes will be very helpful.

Wildlife/Resource Manager, Luke AFB. The significance of wildlife as a resource issue on LAFR warrants placement of a specialist on the staff. Among other duties, this individual will act as a liaison with the USFWS and AGFD. This position will be pivotal in coordinating the cooperative and individual efforts of all agencies involved with wildlife. In addition to wildlife responsibilities, the individual would be expected to participate as a general resource manager. Therefore, a broad-based, natural resource background will be important.



Cultural Resource Manager, Luke AFB. A cultural resource manager is needed to provide planning and management expertise in an important area. This person should have a professional background in Southwestern archaeology. The cultural resource specialist will also participate in comprehensive management with other staff members.

Resource/Public Use Manager, Yuma. This position will be the primary resource management post at MCAS, Yuma. This individual should have a broad background in natural resources, in order to respond to a variety of planning and management issues. Because the Western Section under USMC jurisdiction is the most accessible public use sector of the Range (outside of CPNWR), assignment of a specialist in this area is appropriate. This person would be expected to work closely with the staff at Luke AFB on general

management issues and provide public use expertise to the Air Force when needed.

Assistant Resource/Public Use Manager, Yuma. This individual should have credentials that support the Resource/Public Use Manager. A second person is required at Yuma to address the magnitude of environmental planning, conservation, and public use challenges that the USAF and USN/USMC must jointly face in the Yuma Segment.

Contractual Services

Management issues are going to arise that pertain to surface or ground waters, geologic or vegetation resources, land use encroachment, environmental law, etc. These will often necessitate outside expertise, in addition to that available in NRMCA agencies. One method of acquiring such assistance may be through continuing, or periodic contracts with outside consultants. The consultants would work under the supervision of the resource staff, at Luke AFB, with appropriate input from the other NRMCA agencies. Ideally, a frequently needed consultant could be retained on a long-term basis to provide reliable, consistent services, as needed. A continuing contract would allow a productive rapport to develop between the consultant, with long-term knowledge of the issue, and the resource staff.

Interagency Cooperation

Cooperation among NRMCA agencies and others has permitted important exchanges of resource information and expertise. Such cooperation should be encouraged whenever



possible. Formal channels for this type of exchange have been provided by NRMCA. The effectiveness of this agreement will be enhanced under the leadership of the resource staff and through the use of the administrative-management framework supplied by this NRMP. Other formal or informal cooperative management arrangements should be promoted by the resource staff, where such agreements would be beneficial to LAFR.

1.5 RESOURCE MANAGEMENT SYNOPSES, GOALS, AND RECOMMENDATIONS

The role of the USAF, as the central authority for resource management, and the recommended decision-making framework for management have been reviewed in the preceding section. The following is a presentation of the resource management goals and recommendations for LAFR. The goals appearing here are in the same sequence as the chapters contained in the NRMP, the corresponding NRMP chapter is identified for each management topic area. Preceding each goal is a synopsis of the topic. Following each goal are recommendations for resolving the problems presented in the corresponding chapter.

Administrative-Management Framework (Chapter 2)

Development of an effective management system for LAFR's resources has been impaired by the complex agency jurisdictions and missions that apply to the area. Most importantly, until this NRMP, no central authority, goals, or decision-making process for resource management have been formulated for the Range. Fortunately, current land uses have, to some degree, supported resource conservation. Limited conservation has occurred, however, because potentially damaging land uses (such as, livestock grazing, mining, and agriculture) have been largely excluded by military activities within the Range. Conversely, military use has also resulted in some of the most disruptive environmental impacts. Individually, these impacts may appear relatively scattered and insignificant, but cumulatively they become significant, especially when coupled with damages from nonmilitary activities. The conditions of the land-use and conservation balance on LAFR are shifting as changes occur in the types and intensities of Range uses. Much more affirmative control of resource management is necessary, if environmental losses on LAFR are to be minimized or prevented. Further, the need for such control is legally mandated. The best approach for implementing an affirmative program of resource management for LAFR is the planning system outlined in this NRMP.

Presently, the USAF has no personnel trained in natural or cultural resource management. To rectify this situation, the Air Force has entered into cooperative agreements, including NRMCA, to gain the assistance of the USFWS, BLM, and AGFD in managing LAFR's resources. These agreements do not, however, constitute a formal management structure for the Range. Due to the lack of a formal, admin-



istrative-management framework, overall management of the natural and cultural resources of LAFR remains inadequately directed and coordinated.

A major component of this Plan is the development of an administrative-management framework for directing overall management of the lands and resources of the Range. The framework offered here provides a systematic planning approach to comprehensive resource management that incorporates the collective inputs of the NRMCA agencies and other informed sources. The USAF is placed in the pivotal role of providing leadership and coordination for framework functions. A professional resource staff, hired by the military will provide the Air Force and USN/USMC with the expertise to perform this vital leadership role.

Goal

Manage LAFR resources through an integrated management framework by which agencies can coordinate current and future resource issues and actions in ways that are compatible with natural and cultural resource goals.

Recommendations

- 2-1. Implement management goals outlined in this NRMP as the basis from which to plan and execute all natural and cultural resource management activities on LAFR.
- 2-2. Formally adopt the administrative-management framework proposed by this NRMP (Figure 1.2), as the systematic means of coordinating multiple and individual agency activities directed toward the conservation and management of natural and cultural resources on LAFR.
- 2-3. Establish a resource staff at Luke AFB and resource management personnel at MCAS Yuma, to serve as an administrative team for the implementation of this NRMP, and to provide continuing leadership and coordination for management framework functions.
- 2-4. Require that all ground-based activities on LAFR receive prior approval from the USFWS or USAF, to ascertain the compatibility of those activities with environmental conservation and agency missions. A proposed action could be denied or deferred for

modification on the basis of incompatibility with either of these conditions.

- 2-5. Use the decision-making process stated in Recommendation 2-2 to evaluate the environmental implications of actions proposed for the non-Refuge portion of LAFR, or actions that will affect both Refuge and non-Refuge resources.
- 2-6. Develop an issues clearinghouse, to be administered by the resource staff, that will provide all agencies involved in the decision-making process with up-to-date information on the progress of various management issues.
- 2-7. Develop a central reference system (under the administration of the resource management staff) for library materials and resource data bases to be used by all agencies and parties involved with LAFR.
- 2-8. Establish an appropriate monitoring system under the direction of the resource management staff to provide routine surveillance of selected resources and land areas, as a means of monitoring baseline trends.
- 2-9. Initiate a program directed by the resource management staff at Luke AFB and their colleagues at MCAS Yuma, to educate military and other appropriate personnel on the environmental consequences of various activities, the means of avoiding damage to natural and cultural resources, and the mitigation of unavoidable environmental impacts.

Land Status (Chapter 3)

Land status refers to the collective legislative and administrative designations applied to, or proposed for, lands within the boundaries of Luke Air Force Range. These categories are important, because they influence or directly determine land ownership, agency jurisdiction, expenditure of management funds, land use activities by LAFR agencies and the public, and basic land and resource management perspectives. Approximately, a dozen military and nonmilitary land withdrawals have been issued for various areas within the present boundaries of LAFR. Existing designations follow:

- Within the Range boundaries are the 822,000 acres of CPNWR (861,000 acres in total area) withdrawn in 1939 and 1975, and reserved for wildlife preservation.
- State lands leased by the military total 84,262 acres. In 1985, the state was paid \$255,788 for the use of those lands.
- There are 2,675 acres of scattered private lands throughout LAFR. Of this acreage, 2,025 acres are leased outright and 650 acres are leased under condemnation, a process which must be repeated every five years.

- At least 200 mining claims have been established; these were filed before the Range was withdrawn from mining and mineral entry.
- Prior to World War II, five mining districts were established by groups of miners, based on levels and types of mining activity.
- Mineral Districts are official land area classifications established by the USGS; there are four on the Range.
- Parts of three counties (Yuma, Pima, and Maricopa) cover the Range.
- The Arizona Game and Fish Commission has divided LAFR lands into four Wildlife Management Units.
- Three areas that contain endangered, rare, or peripheral species, or represent outstanding examples of a natural ecosystem, have been designated state natural areas—through a Letter of Understanding from the State Parks Board and the Air Force.
- Four research natural areas (RNA) have been designated by USFWS on the Refuge. An RNA is a land unit in which current natural conditions are maintained insofar as possible.

Proposed special designations are listed below:

- The creation of a Sonoran Desert National Park was proposed in 1965; it would have consisted of all lands in Organ Pipe Cactus NM. CPNWR and the proposed Tinajas Altas addition to CPNWR.
- Biosphere Reserve status has been proposed by UNESCO to cover the area proposed by the Sonoran Desert National Park. The objective of the program is to recognize and protect representative and unique ecological regions and major ecological subdivisions.
- Several areas within LAFR have been proposed by the public as Areas of Critical Mineral Potential (ACMP). ACMPs are areas of mineral potential recognized by the BLM.
- The creation of a Sentinel Plain State Natural Area was considered in the late 1970s. Since the early 1980s, there has been no action on the proposal.
- The addition of 79,000 acres of the Tinajas Altas Mountains to CPNWR is under active consideration.
- The creation of a Yuma Dunes State Natural Area, approximately 100,000 acres in size, is being discussed.
- The description of CPNWR as a Wilderness Area is under active consideration.

The above complex of existing and potential classifications of lands within the Range requires the LAFR resource staff to keep informed about changes in land designations, and to analyze any impact such changes in land status may have on

cultural and natural resources, as well as on the military mission.

Goal

Promote continuation of LAFR as a natural resource reserve through military withdrawal and appropriate land use designations.

Recommendations

- 3-1. Assure that all LAFR agencies gain a better understanding of the legal meanings and requirements of existing withdrawals affecting the Range, and communicate with each other regarding their responsibilities for the withdrawals.
- 3-2. Assure that the anticipated Congressional withdrawal for the Range appropriately reflects the unique land use, resource protection and management requirements of the Range.
- 3-3. Negotiate with the State Land Department, regarding the exchange of state lands within LAFR for federal lands outside the Range.
- 3-4. Investigate the possibility of purchasing private lands within LAFR.
- 3-5. Monitor proposed land designations within LAFR, for example, Wilderness, and comply with the legal and policy mandates associated with such designations.
- 3-6. Inform all LAFR agencies and the public of the location of areas protected by special designations, and how land-use activities are circumscribed by these designations.
- 3-7. Provide information about the purpose, location, and exact boundaries of specially designated state natural areas and federal research natural areas to all LAFR agencies and minimize activities in those locations.
- 3-8. Keep all personnel fully informed as to the location in which ground activities and development may or may not occur.
- 3-9. Verify the status and location of unpatented mining claims within the Range.
- 3-10. Communicate promptly to the public and other agencies, as necessary, new designations for land use, resource protection, safety, and security.
- 3-11. Verify the location of specific boundaries of research natural areas and state natural areas within the Range.

Geologic Resources (Chapter 4)

LAFR, located within the Basin and Range physiographic province, is characterized by a series of northwest-southeast trending mountain ranges separated by broad valleys, deeply filled with alluvium (transported erosional materials). These



traits are the product of several mountain building events separated and followed by the erosional forces of an extremely arid climate. Collectively, the geologic resources of the Range present varied ecological, aesthetic, and potential economic values. This rugged terrain also provides an important setting for military aircrew training. Geologic resources are essential to the ecology of LAFR, as they provide the basic physical materials that support the biological components of the environment. Altering the geologic base will result, at least locally, in severe environmental impacts.

Prior to withdrawal, a number of small and moderately sized mines and prospects were developed in the LAFR area. For 45 years LAFR has been closed to further mineral exploration and development because geological exploration and development activities are incompatible with military operations. Although the available information indicates that the economic feasibility for mineral development on LAFR is low in the foreseeable future, this conclusion is somewhat tentative. Considerable subsurface geophysical data remain to be analyzed. Approximately one-sixth of the Range must still be field-surveyed. Consequently, the reliability of current estimates of economic potentials remain in doubt; hence, contingencies to deal with the possibility of mineral development should be formulated.

LAFR could remain closed to mineral development into the future. In this case, management of the geologic resources



should focus on ecological and aesthetic values. Economic development will remain as an inactive, but possibly important future issue. Conversely, the Range could be opened to mineral development, if Congress alters the current withdrawal status and management agencies approve development proposals. Within this scenario, possible economic gains must be carefully weighed against adverse and often irreversible impacts to the environment and geologic resources, and possible interference with the military mission.

Goals

Minimize human-induced acceleration of geological processes and unnecessary damage to landforms and soils.

Should LAFR lands be opened to mineral and geothermal entry, manage mineral, oil and gas, and geothermal exploration and extraction, so as to be compatible with military missions and natural and cultural resource goals.

Recommendations

- 4-1. Keep LAFR closed to geological exploration and development because of the far-reaching impacts these activities would have on the natural and cultural resources of the Range.
- 4-2. Conduct a reconnaissance assessment of the geologic and mineral resources west of Longitude 114 degrees West (the El Centro quadrangle), in a manner similar to the recent USGS study of the Ajo and Lukeville quadrangles.
- 4-3. Adopt the following procedures relating to geological assessment and mapping of field-related activities, and any future geological exploration or development activities that might occur if the withdrawal status is modified to permit geological exploration and development.
 - (i) Geological exploration or development should not occur within CPNWR, state natural areas, federal research natural areas; or any other nondesignated environmentally sensitive area where wildlife, vegetation, or cultural resources might be adversely affected.
 - (ii) To the greatest extent possible, all field activities relating to geological exploration or development should be limited to established roadways. Any off-road field work must receive appropriate environmental clearance.
 - (iii) A detailed map and description of any proposed field work activities, including transportation routes, campsites for field crews, and occupation times should be provided by the contractor and approved by the LAFR resource management staff in consultation with other appropriate agencies.
- 4-4. Develop a systematic, readily available data base con-

taining all hydrologic, geologic, and geophysical studies conducted on LAFR. (identical to Recommendation 5-5, see Recommendation 2-7).

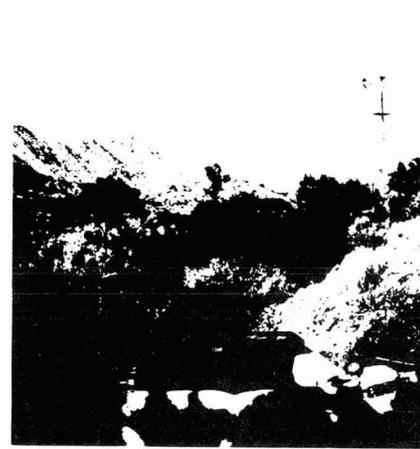
- 4-5. Consider special protection for that portion of the Sentinel Plain volcanic field within LAFR because of its unique geological features, and because the area has been previously proposed as a state natural area.

Water Resources (Chapter 5)

Because LAFR is located in one of the most arid regions of the world, the relatively sparse number of surface waters found on the Range are extremely important. Some wildlife are dependent on surface water for their survival. Further, some surface water locations may hold potential for archaeological study. Surface water sites may also be highly valued for recreation experiences and human survival. Most surface water catchments on LAFR were formed by geologic processes prior to the entrance of prehistoric humans on the Range. Over the past few decades, the USAF, AGFD and USFWS have reconstructed and actively managed most of the natural water catchments, and have built many artificial catchments.

The shallow ground water resources of LAFR have played an important role in surface water development. The earliest wells were probably dug in the mid-1800s. Travelers, ranchers, and possibly miners depended on these ground water developments for their survival. Today, the military installations and neighboring communities also rely on ground water. As full appropriation of Western surface waters occurs, ground water will become increasingly important as a source of untapped water. In addition to containing some shallow aquifers, LAFR's deep alluvial basins may also have potential for large-scale development. The extent of aquifers underlying LAFR is, however, unknown at present.

In light of the important role surface waters have played in wildlife management, and the important role ground water plays in the arid Southwest, three general management problems can be defined: (i) the need for continued protection of the quantity and quality of surface waters; (ii) the need for managers to investigate and prepare strategies for potential, large-scale, ground water development; and (iii) the need to protect ground water quality.



If the ground water resources are developed, there will be a need to develop management strategies to cope with several potential problems: (i) environmental impacts from ground water exploration and development activities; (ii) continuous decline of ground water tables that could adversely impact surface water resources and riparian vegetation, as well as possibly lead to land subsidence and fissures; and (iii) potential lawsuits if ground water development or degradation within LAFR adversely affects hydrologically connected ground water basins in perimeter areas. There is also a possibility that ground water development outside of the Range could impact the natural resources of LAFR.

A reconnaissance of the major ground water basins in the Range is needed to assess their potential for development. Surface waters need to be identified and mapped, development plans for military or other purposes must not jeopardize the quantity or quality of these waters. Research is also needed to resolve the controversy over the value of developing wildlife waters on the Range. More information is also needed to ascertain the legal mechanisms with which potential user groups could apply pressure for ground water development. Policies would then need to be developed to mitigate environmental impacts and disruption of agency missions, if large-scale ground water development were to occur. Every effort should be made to protect the quality of the ground water.

Goal

Manage LAFR water resources to preserve existing natural ecosystems, and accommodate agency needs within LAFR to the extent they do not jeopardize those ecosystems.

Recommendations

- 5-1. Prohibit ground water exploration or development or both on the CPNWR for off-site uses.

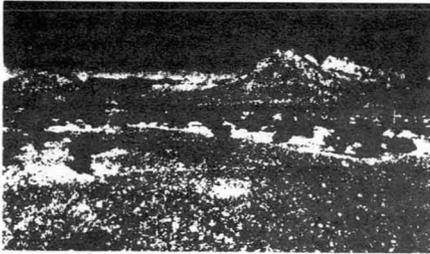
- 5-2. Prohibit ground water exploration and development in designated State Natural Areas, Federal Research Natural Areas and other environmentally sensitive areas where wildlife, vegetation or cultural resources might be adversely affected.
- 5-3. Conduct a reconnaissance assessment of the ground water resources in the Yuma Desert Basin, Lechugilla Desert Basin, Mohawk Valley Basin, San Cristobal Valley Basin, Crater-Sauceda Valley Basin, and in the Sauceda-Sand Tank Valley Basin.
- 5-4. Limit all field activities relating to ground water exploration and development to designated roadways to the greatest extent possible. Any off-road fieldwork requires an appropriate environmental clearance and should follow the prescribed fieldwork guidelines (see Recommendation 4-3).
- 5-5. Develop a systematic, readily available data base containing all hydrologic, geologic, and geophysical studies conducted on LAFR (identical to Recommendation 4-5, see Recommendation 2-7).
- 5-6. Register all wells within LAFR with the Arizona Department of Water Resources.
- 5-7. Keep informed of new federal and state water laws which might allow outside groups access to LAFR ground water.
- 5-8. Monitor the water table levels to determine how perimeter water use may be affecting water reserves on the Range.

Soil Resources (Chapter 6)

Desert soils, in general, and those found on LAFR in particular, are not suited for intensive human activity. They are easily disturbed, highly susceptible to erosion, and slow to recover after disturbance. Many soils have fragile desert pavements and other easily disrupted protective crusts. Scantly vegetated surfaces are susceptible to wind and water erosion. According to Soil Conservation Service (SCS) ratings, LAFR soils have varying suitability for uses, such as recreation, community development, water management, and agriculture. Unfortunately, in the absence of data from on-site surveys, only general evaluations of suitability can be made at this time. Such evaluation will have to be made on a site-by-site basis as potential projects are considered. For now, the best way to achieve the goal of minimizing human-induced impacts, and to maintain the stability and productivity of the Range's soils, is to carefully control all activities that disturb land surfaces.

Goal

Minimize human-induced acceleration of geologic processes and unnecessary damage to land forms and soils.



Recommendations

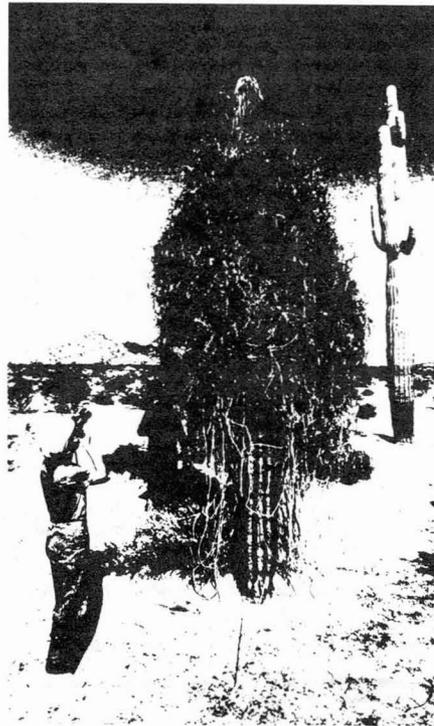
- 6-1. Restrict the operation of motorized vehicles and other heavy equipment to established roadways and other previously impacted areas to protect vegetation, desert pavements, and other protective covers of soils from disruption.
- 6-2. Assess, as part of site appraisals for the NEPA evaluation process (that must precede initiation of new land-based activities), the vulnerability of soils to disruption and subsequent wind and water erosion.
- 6-3. Update the soils map database with new information collected during site evaluations.
- 6-4. Using the following techniques, minimize soil disturbance and conserve soil resources where intensive use of a previously unimpacted site is required:
 - (i) gain access to the site by means of existing roadways;
 - (ii) use equipment that minimally disturbs soils (such as, rubber-tired vehicles rather than tracked vehicles);
 - (iii) confine vehicle use to the smallest area necessary to accomplish the task at hand; and
 - (iv) reclaim soils as necessary and revegetate impacted sites with local, native species after use has ceased.
- 6-5. Prohibit all land-based activities that disturb the vegetative covers of the Superstition and Rositas series, as they are especially vulnerable to wind erosion.

Vegetation Resources (Chapter 7)

LAFR lies near the northern edge of the Sonoran Desert, considered the richest of the North American deserts in terms of the number of life forms and variety and development of plant communities. Vegetation resources on LAFR are ecologically important in that they represent relatively undisturbed populations of native Sonoran Desert vegeta-

tion, contain rare and unusual plant species, provide essential food and cover for wildlife, and minimize the impact of erosional forces (human or natural) on LAFR lands. Limitations on public access have left large tracts of land in a relatively undisturbed, natural state, but military and other uses have had a heavy impact on the vegetation resources of the Range. Because of the scarcity of rainfall and the fragile nature of desert soils, vegetative recovery in disturbed areas can be extremely slow or nonexistent.

The impacts of various land uses could, over time, result in considerable loss of native vegetation, disrupt natural succession, and destroy wildlife habitat. Without the stabilizing effects of vegetation, erosion could become a significant management problem. With increasing use of the Range, especially construction and maintenance of new roads, relocation and addition of targets, installation of defensive missile systems, development of wildlife waters, and the use of heavy ORVs for ground-based training in air defense and combat, disruption of plant communities and loss of plant species will become more prevalent.



Preservation and protection of plant communities and species diversity will require cooperative management attention. Currently, there are no specific programs for vegetation management. Plant resource problems are addressed in terms of their significance to habitat management for wildlife. (The USFWS and AGFD are primarily responsible for wildlife management.) As the use of LAFR intensifies, the need for a concerted approach to vegetative resources management increases. Agencies need to assess the impacts their separate and joint activities may have on LAFR vegetation. These assessments should become an integral part of planning for all ground-based activities.

Goals

Insure the protection of plant communities and species diversity.

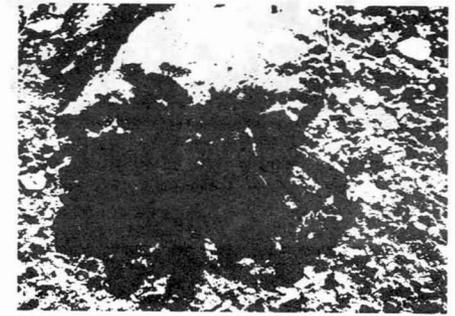
Insure attainment of the objectives of federal and state laws and regulations regarding threatened and endangered flora and fauna.

Recommendations

- 7-1. Give high priority to protecting vegetation from disturbances during any land-based activities.
- 7-2. Include a comprehensive vegetation survey as part of the required NEPA process prior to any development and intensive use of an area.
- 7-3. Utilize newly gathered botanical investigations to update the vegetation map developed for this Plan.
- 7-4. Develop a systematic database containing currently available botanical information, into which newly acquired data can be added in order to assemble a comprehensive survey of vegetation resources over time.
- 7-5. Adhere to the intent of the Arizona Native Plant Law, Endangered Species Act (ESA), and all other applicable laws and regulations to protect the vegetation resources of the Range.
- 7-6. Develop a Range-wide fire management plan similar to CPNWR's, that makes fire-suppression decisions on the basis of threat to human life, property, or endangered and threatened species. The plan should include participation by the USAF, USMC, BLM, and USFWS.

Wildlife Resources (Chapter 8)

Wildlife resources on LAFR are diverse, complex, and of critical importance to the health of the ecosystem. At least 62 species of mammals, over 200 species of birds, 5 species of amphibians, and 37 species of reptiles occur, at least occasionally, on the Range. Management of wildlife by the USFWS and AGFD has focused primarily on game species, especially desert bighorn sheep and the endangered Sonoran pronghorn antelope. Yet, game species represent only a



small fraction of the wildlife present on the Range; nongame species are far more numerous. Comprehensive wildlife inventories are needed to provide a better understanding of the diversity and complexity of the wildlife resources on the Range, so that the military can adequately consider wildlife in their land-use decisions.

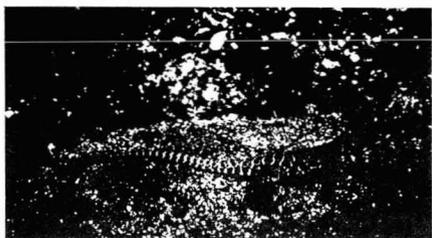
Maintenance of wildlife habitat is critical to the continued diversity and population strength of wildlife. A number of activities threaten Range habitats. Off-road vehicle travel and expanding military facilities destroy vegetation and disrupt soils which, in turn, affect wildlife. Occasional trespass grazing increases the competition for forage and also represents a potential source of disease transmission to wildlife. Among various forms of wildlife management on the Range are water hole development, hunting, and predator control. Water hole maintenance is a major management emphasis of AGFD and CPNWR for desert bighorn and Sonoran pronghorn. A vigorous water development campaign has resulted in over 66 managed wildlife waters within LAFR. The ultimate effect of such habitat manipulation on the LAFR ecosystem is still largely unknown. Hunting is a popular form of recreation on LAFR, but because of the access restrictions adequate supervision of this activity is difficult to achieve. The extent of illegal hunting activities is not at all well known. Predator control has been a controversial topic and has been used sometimes on non-Refuge lands as a wildlife management tool.

Goal

Insure the protection of wildlife habitats, species diversity, and viable populations.

Recommendations

- 8-1. Any implementation of predator control on LAFR should be preceded by thorough discussion among LAFR agencies, research specific to LAFR documenting predator-prey relationships, and a complete NEPA (National Environmental Policy Act) review.
- 8-2. Establish the taxonomic validity and distribution of the Yuma Puma (*Felis concolor browni*) before any addi-



tional harvest of mountain lions in the USMC sector of LAFR occurs in order to avoid possible violation of ESA (Endangered Species Act).

- 8-3. Couple all future water hole development projects with research programs designed to determine the impact of such development on targeted species as well as on other species that may be affected. Precede such developments with a complete NEPA review.
- 8-4. Comply with NEPA and ESA regulations for all wildlife projects.
- 8-5. Evaluate the cumulative impacts of land disturbances on wildlife habitat in order to establish criteria for protection of critical habitat when making land-use decisions.
- 8-6. Establish comprehensive wildlife inventories and monitoring programs of game and nongame species to provide information that should guide land-use decisions.
- 8-7. Establish an international research and recovery program with Mexico as outlined in the 1982 USFWS Recovery Plan for Sonoran Pronghorn antelope.
- 8-8. Eliminate all trespass grazing by livestock (cattle), goats, and feral animals (burros).
- 8-9. Develop a five-year wildlife management plan (in accordance with AFR 126-1, chapter 5, section B) to protect, conserve and manage wildlife resources on non-refuge sections of LAFR, with the assistance of the USFWS and AGFD.

Atmospheric and Visual Resources (Chapter 9)

Because the primary military mission on the Range is aircrew training, the favorable climate and air quality of southwestern Arizona (which provide year-round flying conditions) were key factors in the location of this aviation facility. Precipitation, which falls during well-defined summer and winter rainy seasons, is minimal, from about three inches annually in Yuma to nine inches in Ajo. Air temperatures are characterized by extreme heat in the summer months, with maximum daily means exceeding 100 degrees

Fahrenheit. Freezes occur only occasionally during the winter. Winds are mild, averaging only a few miles per hour.

Air pollution is a continuing problem on lands adjacent to the Range. The areas surrounding Yuma and Ajo do not meet federal standards for particulates due to fugitive dust. Until the Phelps Dodge Corporation closed the copper smelter in Ajo, that area frequently exceeded the standards for sulphur dioxide. Recorded air pollution in these areas suggests that some of the Range has been similarly affected. OPCNM and CPNWR have been designated as Class II airsheds. Because much of LAFR shares a common airshed with these areas, activities authorized there must generally not exceed the federal standards for Class II designation. Visual resources refer to the types of views that can be seen in any given area. Due to NEPA and FLPMA, these resources must be given equal consideration with others in decision-making. Military and nonmilitary activities and remnants of these activities can detract from the area's aesthetic appeal, as can air pollution originating on or off the Range.

Goals

Protect or enhance existing LAFR air quality.

Protect or enhance the integrity and diversity of LAFR's visual resources.

Recommendations

- 9-1. Monitor air quality trends as documented by perimeter air quality stations.
- 9-2. Control excessive fugitive dust generated on heavily traveled roads and at construction sites and activity areas.
- 9-3. Prevent further degradation of the visual resource by confining military uses of LAFR to existing disturbed and impacted land areas wherever possible.
- 9-4. Protect mountain vistas from visual intrusions.
- 9-5. Protect the visual quality from lands adjacent to El Camino del Diablo recreation corridor and highways (Interstate 8 and State Route 85).
- 9-6. Leave errant tow targets where they have fallen unless removal methods can be found that do not damage natural and cultural resources.

Cultural Resources (Chapter 10)

Human use of LAFR probably began between 11,000 and 12,000 years ago. Remains of these early hunting and gathering people consist largely of stone tools, cleared circular areas on the ground, trails, rock-pile shrines and rock alignments. During the last 1,500 years prehistoric Indian groups called the Patayan and Hohokam used the Range primarily for hunting and gathering purposes, as well as



crossing it on shell trading expeditions. Pottery made by these peoples is relatively common on the ground surface. Spanish explorers were the first Europeans to visit the Range when they crossed El Camino del Diablo (the Road of the Devil) in the mid-16th century. They encountered small bands of Indians who spoke a Piman language and were related to the modern-day Pima and Tohono O'odham (formerly called the Papago). In historic times, the Range has had three principal, nonmilitary uses: as a travel corridor, for mining, and for ranching. El Camino del Diablo was the major corridor used to connect California with northern Mexico, and later with Ajo and Tucson. Mining ventures were most successful on the western periphery of the Range and at Ajo. Most ranches were headquartered east of the Range, but a few were located within the Range boundaries.

Information of considerable cultural importance exists on the Range. Of prehistoric age are numerous trails, rock art sites, and short- and long-term campsites containing a wide variety of artifacts. Abandoned mines and ranches contain information of historic interest. Available information suggests that upper bajadas, and areas near primary washes are most likely to contain prehistoric cultural resources. Lower bajadas and mountain slopes are less likely locations. Cultural resources are suffering from a variety of impacts from both military and nonmilitary activities. The following recommendations are made to protect the cultural resources and bring their management into compliance with federal laws and regulations.

Goal

Protect the archaeological and historical resources of the Range and provide for continued study.

Recommendations

- 10-1. Provide for an archaeologist as part of the LAFR resources staff, as stipulated in the draft Air Force Regulations for Historic Preservation. (For details of the position see Chapter 2.)

- 10-2. Produce a cultural resource management plan applicable specifically to LAFR. Maintenance of such a plan, which the Air Force designates a historic preservation plan, is required by draft Air Force Regulations for Historic Preservation.
- 10-3. Coordinate management of cultural resources on non-refuge portions of LAFR with the cultural resource goals of OPCNM and CPNWR.
- 10-4. Develop a systematic and comprehensive inventory program, carefully designed to maximize useful information while minimizing cost.
- 10-5. Require a comprehensive archaeological investigation prior to development and use of all areas, as defined in Section 106 of the National Historic Preservation Act of 1966.
- 10-6. Provide special protection for archaeologically significant sites and surrounding areas that are being impacted by both the military and public. (See Appendix 10-B for a site tabulation.)
- 10-7. Minimize impact on cultural resources by locating ground-disturbing activities and new developments away from known archaeological sites, preferably in already impacted areas. Lower bajadas have been found to be the least culturally sensitive and should receive primary consideration in site planning.
- 10-8. Implement an education program for military and agency personnel and, if possible local civilian populations, that will promote increased sensitivity to historic preservation, as directed in draft Air Force Regulations for Historic Preservation.
- 10-9. Inform field personnel about the location of cultural



resources and appropriate avoidance procedures when land-disturbing activities take place in archaeologically sensitive areas, as directed in draft Air Force Regulations for Historic Preservation.

Road Network and Off-road Use (Chapter II)

The first roadways on LAFR appeared several centuries ago. The majority of the 2,000 to 2,500 miles of roads have been built, however, since World War II. More roads are being established every year in the absence of any comprehensive planning which considers the associated array of potential impacts on Range resources. Varying considerably in design, construction, and use, many of the roads are necessary for agency missions and safety needs. Nonetheless, roads exist that unnecessarily duplicate the functions and routes of other roads. Such duplication should be eliminated.

Off-road use has negative effects on the natural and cultural resources of LAFR. The Range is, therefore, closed to off-road use. Exceptions to the closure are subject to the requirements of NEPA and other laws and regulations. Despite the closure, unauthorized or improper off-road use does occur at various locations and resource impacts from this use continue to mount. The following recommendations are intended to promote policies of road and off-road management and use that demonstrate appropriate consideration of the natural and cultural resources of the Range.

Goals

Allow for use of LAFR consistent with natural and cultural resource goals and military missions.

Maintain a road system sufficient only to meet safety and agency management needs.

Recommendations

- 11-1. Plan all future road development on non-Refuge lands, as well as road maintenance, as per NEPA procedures, and comply with environmental and resource protection laws and regulations.
- 11-2. Establish the LAFR resources management staff, in consultation with other agencies, as the central plan-



ning and management authority for roads on non-Refuge portions of LAFR.

- 11-3. Reduce to an absolute minimum any new road development by all agencies.
- 11-4. Coordinate agency and public access needs closely in Refuge and non-Refuge portions of LAFR to avoid conflicts or replication in road development, use, and management.
- 11-5. Maintain a comprehensive inventory of road mileages, locations and classifications in order to facilitate management of an appropriate road system, building on the base map developed by the NRMP.
- 11-6. Identify and clearly post which roads are open and which are closed to public use, using a method similar to that of USFWS.
- 11-7. Close those roads that are unnecessary to meet clearly identified agency missions and safety needs, and allow the roadbeds to recover to their natural character, rehabilitating sensitive sites as needed.
- 11-8. Communicate road and vehicle use rules to all Range users.
- 11-9. Prohibit public and agency off-road use on all LAFR lands as per USAF and USFWS regulations except in designated activity areas and in emergency situations.
- 11-10. Authorize off-road use only after the requirements of NEPA and other environmental and resource protection laws and regulations are fully met.
- 11-11. Clearly communicate to the public and agencies that the Range is closed to off-road vehicle travel, and any all-terrain vehicles that are not street legal.
- 11-12. Use existing roads whenever possible to retrieve downed aircraft. The recovery should be conducted to provide maximum possible protection of vegetation, soils, and other natural and cultural resources.



Military Agencies (Chapter 12)

LAFR is used jointly by the U.S. Air Force, Army, Navy, and Marine Corps, and serves some pilots of allied nations. Since 1941, the military has expanded the size of the Range, increased the scope and complexity of training programs, and developed testing facilities for basing ICBMs. The Range is also a candidate for a permanent ICBM defensive weapons installation. Military withdrawal for the past 45 years has left parts of the Range among the last vestiges of well-protected Sonoran Desert. As military use pressures increase, due to a larger demand for training opportunities from other military installations, and the principal training thrust changes to accommodate permanent weapons installation, the quality of the resource may diminish. The following recommendations are designed to enhance careful planning and a coordinated, resource management program for LAFR and for continued uninterrupted use of the Range by the military.

Goal

Allow for use of LAFR consistent with natural and cultural resource goals and military mission.

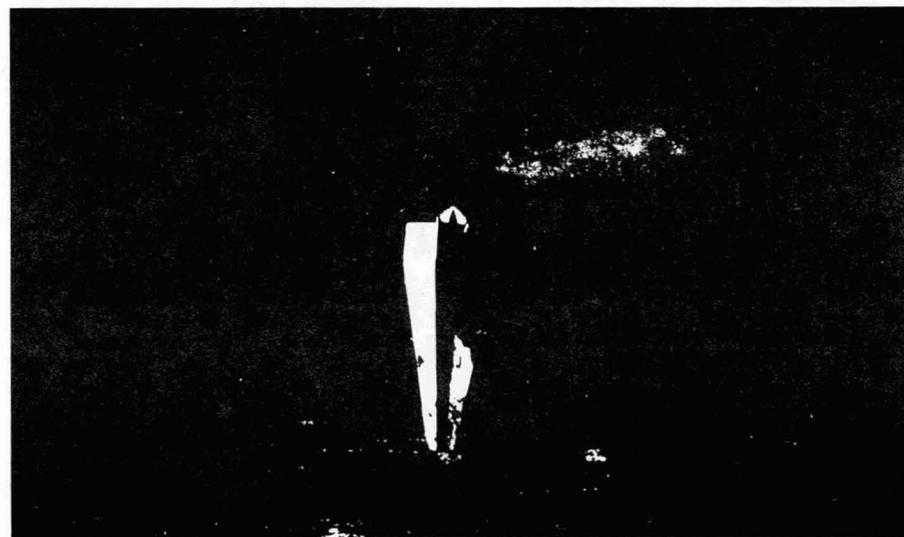
Recommendations

- 12-1. Coordinate resource management functions more efficiently with military operations, giving regular briefings and supporting documents (AFR 50-46 and Sta O 3710.6 EV) to nonmilitary LAFR agencies, to appraise them of current and future military operations on the Range.

- 12-2. Use the expertise of NRMCA agencies and the resource management staff to evaluate the consequences of current and proposed military training and development on the cultural and natural resources of LAFR.
- 12-3. Evaluate all modifications, new developments, proposals for weapons installations, and re-use of previously closed sites in accordance with the NEPA process and all applicable laws and regulations relating to the affected natural and cultural resources.
- 12-4. Restrict military activities in State Natural Areas to travel on designated roads only; other military maneuvers should be prohibited.
- 12-5. Add specific wording to all field orders that address training activities, target maintenance and repair, new construction, and data gathering directing field personnel to minimize impacts on the cultural and natural resources of the Range.

Nonmilitary Agencies (Chapter 13)

A combination of 35 federal, state, and local agencies have either direct or ancillary responsibilities on the Range. Most agencies have tangential jurisdiction and, therefore, are rarely involved in LAFR issues. Two signers of NRMCA, the USFWS and AGFD, have specific responsibilities for wildlife and have active management programs on the Range. Several agencies have law enforcement responsibilities on LAFR lands including the U.S. Border Patrol, U.S. Customs



Service, Arizona Department of Public Safety, and the county sheriff's departments. The Border Patrol is the most active on the Range.

Agency activity is often limited by military-imposed access restrictions, particularly in the Gila Bend Segment. The Yuma Segment is rarely closed to agency access east of the Gila Mountains. While cooperation is good on a "request" basis, limited interagency information exchange occurs. Because many of the resources of the Range are fragile and multiple agency use is frequent, communication between primary users of the Range is necessary to insure that the need and procedures to protect cultural and natural resources is understood. Although individual impacts on Range resources may be minimal, collective agency impacts can be significant. The complex nature of each agency, with individual missions and mandates, requires an integrated approach to successfully manage and protect the resources of LAFR, as well as facilitate agency needs.

Goals

Allow for use of LAFR consistent with natural and cultural resource goals and military missions.

Provide for continued access to LAFR by state and federal agencies to accomplish their respective missions.

Recommendations

- 13-1. Establish biannual Range users' meetings with representatives from Luke AFB, Gila Bend Auxiliary Field, BMO, MCAS Yuma, USFWS, AGFD, Drug Enforcement Agency, U.S. Border Patrol, U.S. Customs Service, National Park Service, and Arizona State Parks Board, to provide briefings on military training and current needs of each agency. Discuss in detail issues of concern to each agency, needed interagency cooperative efforts, resource protection procedures, and resource impacts caused by agency actions.
- 13-2. Provide all field personnel with agency contact lists for reporting observations of unlawful incidents, resource impacts, unusual wildlife or vegetation observations, cultural resource finds and/or disturbances. Document observations and send the reports to the resource staff at Luke AFB or the appropriate law enforcement agency.
- 13-3. Provide more flexible access periods to the Range for natural resource agencies in order that they may implement long-range and immediate management objectives.
- 13-4. Keep LAFR agencies updated on status, location, and boundaries of specially designated areas including State Natural Areas and Federal Research Natural Areas.
- 13-5. Provide information to all LAFR agencies about known federally designated endangered and threat-

ened species, and state special element species that inhabit the Range. The USFWS and AGFD have the primary responsibility for updating candidate and recognized species lists, and educating other LAFR agencies.

- 13-6. Provide information to all LAFR agencies of known and potential archaeological sites so that the agencies can minimize activities in those areas. (These locations are not for public dissemination.)
- 13-7. Request all agencies to monitor other agency and public activities on the Range and advise the resource management staff (with documentation) of the impact such activities may be having on the natural and cultural resources, particularly if the activities are unwarranted or within specially designated or protected areas.
- 13-8. Keep all LAFR agencies updated about federal and state regulations, laws, and acts that are written specifically to protect natural and cultural resources, and see that the requirements of such regulations, laws, and acts are properly followed.
- 13-9. Provide updated versions of USFWS manuals and plans and AGFD management policies and plans to the resource management staff at Luke AFB.
- 13-10. Acquire from the U.S. Border Patrol, U.S. Customs Service, county sheriff's, and Department of Public Safety operations manuals for the resource management staff; update manuals annually.

Outdoor Recreation Use and Management (Chapter 14)

LAFR serves as a local day-use and regional weekend recreation area. People hunt, picnic, camp, and drive to enjoy the area and its natural resources. Recreation is permitted by the Air Force as an incidental or secondary use. This use is subject to the overriding military missions for which the Range was established, as well as to safety, environmental, and resource management considerations. Primary responsibility for recreation resides with the Air Force on non-Refuge lands and with the USFWS for CPNWR. On the western section of the Range, the USMC administers public access on behalf of the USAF. AGFD is responsible for hunter compliance with state game laws and regulations; hunting is, however, limited by access restrictions.

A primary issue for outdoor recreation on the Range is safety. For more than 40 years, ordnance ranging in size from .50-caliber machine gun rounds to 2,000 pound, high-explosive bombs has been fired or dropped at numerous locations, many of which went unrecorded. There is some live ordnance on the ground surface and buried live ordnance may be widespread. Other safety considerations include extreme summer temperatures, lack of water, and hazardous mine shafts.



Another issue is security, because a number of classified defense training and testing projects take place on LAFR. For national security purposes, recreation access to certain areas must be periodically or permanently curtailed or prohibited.

Protection is needed for both the fragile environment of the Sonoran Desert, with its distinctive plant and animal species, and cultural resource sites containing evidence of both historic and prehistoric activity. As a responsible steward for lands under its control, the military is obligated to allow only that recreation use appropriate to the types and conditions of the resources found within the Range, and to wisely care for those resources for future generations. Air Force regulations require development of an outdoor recreation plan (subject to the overriding military mission for which the Range was established) to meet public demand. The following recommendations are made to foster outdoor recreation use of the Range in a way that supports the military missions and recognizes the natural resource and cultural goals set by this Plan.

Goal

Allow for use of LAFR consistent with natural and cultural resource goals and military missions.



Provide for continued public access and recreation to the extent compatible with agency missions, public safety, and natural and cultural resource protection.

Recommendations

- 14-1. Establish a professional position in natural resource recreation as part of the resource management staff.
- 14-2. Investigate the possibility of using volunteers for recreation support positions following the models of the U.S. Forest Service, and National Park Service.
- 14-3. Standardize requirements and documents employed in authorizing public access to the Range.
- 14-4. Utilizing various media, communicate Range access rules and procedures more effectively to the public.
- 14-5. Enforce consistently the rules of public access for the Eastern, Western, and Cabeza Prieta NWR Sections of the Range.
- 14-6. Update as necessary the resource classification system discussed in Section 14.3, and incorporate these classifications and related resource protection requirements whenever any new management or development actions are proposed.
- 14-7. Annually update the recreation land classification maps establishing point locations for the smaller Class IV (closed) areas represented by electronics installations and training facilities, as well as newly identified natural and cultural resource sites that may need to be closed for protection purposes.
- 14-8. Provide special protection, as required by federal and state law and USAF regulations, when managing for recreation or other land use in Class III areas. These areas include CPNWR, State Natural Areas, Federal Research Natural Areas, primary habitat of Sonoran Pronghorn, water holes, and cultural sites.
- 14-9. Develop and maintain better visitor use records that include statistics on user populations, visitor perceptions, and recreation use patterns.
- 14-10. Use traffic counters strategically placed and rotated among different Range access roads to show to what extent various roads are used to enter the Range.
- 14-11. Implement more fully the protection measures for public safety discussed in Section 14.10, including warning visitors of existing and potential resource and military hazards.
- 14-12. Clearly communicate to visitors the hazard of off-road travel in LAFR because of the presence of surface and buried live ordnance. Actively enforce the prohibition against off-road recreational travel.
- 14-13. Interpret to visitors the damage caused to soils, vegetation, cultural resources, and wildlife by off-road

travel as a means to enlist their cooperation in staying on designated roads.

- 14-14. Communicate to visitors the vehicular rules that apply to LAFR.
- 14-15. Monitor more closely hunting and trapping activities to determine accurate levels of participation, areas of use, and harvest levels.
- 14-16. Prohibit trapping in locations where military use and closures do not allow daily access by trappers.
- 14-17. Give consideration to implementation of a special permit and fee program for hunting and trapping as required by USAF regulations.
- 14-18. Put into effect a well-developed action plan for inter-agency involvement in search and rescue to cover incidents involving recreation visitors (see Section 14.10).
- 14-19. Appropriately manage the recreation aspects of the Range by adopting and implementing the Limits of Acceptable Change (LAC) system (see Section 14.11) and Recreation Opportunity Spectrum (ROS) (see Section 14.12).
- 14-20. Adopt formally, and communicate to the visiting public, rules of conduct as presented in Section 14.13 of the NRMP.
- 14-21. Review for consistency, accuracy, and completeness, and correct as necessary, Station Order 3600.4D (USMC) and associated documents.
- 14-22. Establish at Gila Bend AFAP and at MCAS Yuma a visitor contact center at which visitors may receive appropriate clearance briefings and documents.
- 14-23. Implement a well-organized and maintenance-conscious signing program; perimeter and interior signs are needed to notify visitors and agency personnel of the location of LAFR boundaries, rules of access, road closures, sensitive resource areas, safety considerations, and hazard locations.
- 14-24. Monitor fuelwood collection along recreation road corridors to insure that use does not seriously deplete important natural habitats.

Perimeter Land Use and Encroachment (Chapter 15)

Bordered by Mexico to the south, the Tohono O'odham Reservation and OPCNM to the east, and farms, ranches, and a growing metropolitan area to the north and west, LAFR is not isolated from surrounding influences. Although a 440-mile boundary with fences and signs separates LAFR from its neighbors, interactions take place that can result in negative impacts on the natural resources of the Range. Such



interactions are termed encroachment or perimeter pressures. Encroachment takes two forms—direct and/or indirect.

Direct pressures result from activities on the perimeter of the Range that directly impact the LAFR environment. Examples include pesticide drift from local farms, air quality deterioration from neighboring smelters, trespass grazing by cattle, and drawdown of ground water levels by pumping on agricultural and metropolitan developments. Indirect pressures impact LAFR's resources through intervening mechanisms. Most prevalent are those that cause the military to alter its pattern of operations on the Range, which, in turn, can impact the natural resources. Relocation of target sites in response to noise and safety problems with developing perimeter communities is an example of an indirect pressure.

Both direct and indirect pressures are likely to increase and pose additional problems over the 20-year span of this plan. Indirect pressures are, however, rapidly becoming the most critical. The loss of usable airspace in other parts of the nation is crowding the airspace over LAFR with more training missions. Consequently, increases in noise and safety conflicts with perimeter areas residents can be expected. This intensification of LAFR's training schedule is in conflict with the burgeoning urbanization of the Yuma area, including retirement and winter home development in areas adjacent to the Range, and the Tohono O'odham Tribe. The Tohono O'odham people are already hostile to continued use of the airspace over their reservation. These pressures could cause significant modification of military operations.

Protection of LAFR's resources from perimeter influences entails maintenance of military stewardship over currently withdrawn lands, and vigilance for perimeter activities that could conflict with the resource management goals established in this NRMP. The Air Force will need to function more as an interested landowner by monitoring the Range perimeter for potential pressures and influencing local and regional land use decisions that may otherwise interrupt its mission.

Goal

Promote mitigation of perimeter pressures that may jeopardize or impact LAFR resources.

Recommendations

- 15-1. Initiate and continue liaison contacts with the agencies and municipalities that manage perimeter lands to circumvent perimeter pressures (direct or indirect), before they become perimeter problems that may affect the natural resources and military mission of the Range.
- 15-2. Monitor the acreage and distribution of agricultural land use in perimeter areas and technological advances in agriculture that might increase agricultural demand for arid lands and potentially encroach on LAFR.
- 15-3. Monitor stocking rates on perimeter grazing allotments and maintain a list of names, addresses, and brands of permittees to be able to respond to trespass grazing.
- 15-4. Maintain or construct fences where trespass grazing is a problem.
- 15-5. Obtain a list of perimeter land owners to facilitate communication when necessary.
- 15-6. Work with the county agricultural extension agents to determine the extent and danger of pesticide drift into the Range and any associated water quality problems.
- 15-7. Recognize that any shift in flight patterns stemming from conflicts with the Tohono O'odham Indian Tribe could have an impact on the LAFR environment.
- 15-8. Monitor all geophysical and legal aspects to ground water management for any potential changes that may impact the natural resources on LAFR.
- 15-9. Monitor the Yuma City and County planning and zoning meetings to keep apprised of changes that may directly or indirectly affect the natural resources and the military mission of the Range.
- 15-10. Develop a media clipping file to monitor changes in use of perimeter lands and public perceptions of issues pertaining to LAFR.
- 15-11. Monitor changes and growth of Yuma and other communities along Interstate 8 and communities in Mexico adjacent to the Range to anticipate any perimeter pressures these populations may generate.
- 15-12. Expand existing community public relations programs to inform citizens about military and LAFR missions.

- 15-13. Initiate and maintain communication with SARH (Secretaria de Agricultura y Recursos Hidraulicos) and SEDUE (Secretaria de Desarrollo Urbano y Ecologia) in Mexico to monitor changes and trends in border region land use.

1.6 ADDITIONAL COMPONENTS OF THE NRMP

Chapters 16, 17, and 18 of the NRMP present materials that will be of assistance to LAFR's resource managers. Chapter 16 is a resource management directory having three key parts. First is a listing of agencies involved with the Range including frequently needed office addresses and telephone numbers. Second, the missions and associations of these same agencies with LAFR are identified. And third, a compendium of the resource issues addressed throughout the NRMP has been assembled. Issues are organized in a format that allows the user to identify an issue (for example, trespass grazing), briefly review its current status, and determine the relationships of various agencies to the issue. This system is designed as a quick reference for all agency personnel who must deal with LAFR in some capacity. Periodic review and maintenance of the directory will update its usefulness into the future.

Chapter 17 reviews the necessity and advantages of information management for resource management efficiency. The data and documents library and computer mapping system used for the NRMP development process are outlined, with recommendations for adapting these techniques for ongoing management.

Chapter 18 describes, in detail, the process used to develop the NRMP. Included are discussions and outlines of the various planning concepts that helped formulate the Plan. These techniques should be incorporated in the updating process discussed below.

1.7 UPDATING THE NRMP

Although the NRMP was developed for a 20-year period, the need for periodic updating of some portions of the Plan can be anticipated. To a large degree, the issue status-board and clearinghouse functions (outlined in Chapter 2, NRMP) will keep agencies well informed of current management concerns, directions, and programs without formal revision of the NRMP. Should a formal revision of the Plan be necessary, responsibility for that effort would fall to the resource staff at Luke AFB. The specific techniques required for revision have not been outlined here, but an issue-driven approach, as used in the preparation of this NRMP, would be appropriate. Depending on the scope of the needed revisions, the administrative-management framework described herein (Figure 1.2) should provide an appropriate format for the planning process. Planning process concepts outlined in Chapter 18 should be of assistance. The NRMP binder was selected to permit insertion of new or revised materials.

**APPENDIX III
MANAGEMENT GUIDANCE COMMON TO ALL ALTERNATIVES**

General Guidance

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

Protected Plants

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

Land Tenure

All land cases will be evaluated on a case-by-case basis. Communication site plans will be developed on all existing sites and will be prepared prior to any new site approval or development. Lands to be acquired by BLM primarily through exchanges should:

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

Cultural Resources

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

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

BLM in consultation with the Arizona State Historic Preservation Office (SHPO) has developed a Memorandum of Agreement (MOA) which permits an adequate Class II cultural inventory on BLM lands proposed for exchange with the state, instead of an intensive Class III inventory. If any historic or

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

Recreation Program

The recreation program will participate in environmental assessments and resource activity plans in order to address and mitigate impacts on recreation resources. Visual resource management, management of off-road vehicle (ORV) use, and other recreation resource management will continue as recreation programs.

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

- the need to promote user enjoyment and minimize use conflicts;
- the need to minimize damage to soil, watershed, vegetation, or other resource values;
- the need to minimize harassment of wildlife or significant degradation of wildlife habitats; and
- the need to promote user safety.

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

Wildlife Program

Wildlife objectives will be analyzed in environmental assessments or resource activity plans to ensure the consideration of wildlife needs and values and to mitigate any adverse impacts to wildlife habitat. BLM will

continue to place wildlife escape ramps in water troughs and construct or maintain new wildlife waters in coordination with state and other federal agencies according to the following specifications:

- Before installing facilities, BLM will conduct a site evaluation for state-protected animals and will develop mitigation to protect these species and their habitats. Such mitigation might include project relocation, redesign, or abandonment.
- BLM will initiate formal Section 7 consultation with the U.S. Fish and Wildlife Service on all actions that may affect federal listed threatened and endangered species or it's critical habitat as required by the Endangered Species Act of 1973 as amended.
- During construction of rangeland developments, vehicles will use existing roads and trails wherever possible for access to sites. Where feasible or where no roads exist, vehicles will travel cross-country to avoid the need for road building. Where new roads must be built, roadbeds will be no wider than needed for reliable access; BLM specifications will also be used to reduce erosion and gullying.
- During construction of all rangeland developments, surface resources will be disturbed as little as possible. After construction, disturbed surfaces will be restored to a natural condition as far as is practicable.
- Fences proposed in big game habitat will be designed to reduce adverse impacts to big game movement. Specifications in BLM Manual 1737 and in local BLM directives will be used. BLM will consult with the Arizona Game and Fish Department on the design and location of new fences.
- Where existing fences in big game habitat do not meet BLM specifications, they will be modified according to BLM Manual 1737 when they are scheduled for replacement or major maintenance.
- As a general practice, new roads will not be bladed for use in fence construction.
- BLM will initiate a cooperative Habitat Management Plan with Arizona Game and Fish Department to address critical wildlife habitat needs in the Lower Gila South Planning Area.

APPENDIX IV BGR ROAD CLASSIFICATION SYSTEM

The Air Force manual for roads presents a four-level classification scheme. The classification system is based on the design and the intended primary function of the road. Definitions for these different classes are paraphrased below. Two additional classes are also defined. These were developed to cover existing types of roads which are not in the Air Force manual.

The following classifications are presented to help standardize terminology for the BGR road network. This will reduce misunderstanding and confusion resulting from the wide variation in meanings of terms used locally and regionally. The first four road classes are employed by the American Association of State Highway and Transportation Officials (adopted by the USAF). The latter two classes have been devised for use by the military.

Primary. Primary roads include all installation (in this case BGR) highways serving as main distribution arteries for all traffic originating within and outside an installation and which provide access to, through, and between various functional areas.

Secondary. Secondary roads include all installation roads supplementing the primary highway system by providing access to, between, and within the various function areas.

Tertiary. Tertiary roads include all installation roads providing access from other roads to individual units or locations within the various functional areas.

Patrol. Patrol roads normally include all installation roads planned and designed for use in surveillance or in patrolling areas for security purposes. This definition has been expanded for use on the BGR to include roads constructed (or reconstructed) for Border Patrol "drag roads." Drag roads are periodically smoothed using a "drag," often constructed of interlinked tires, pulled behind a truck. The purpose of these drags is to reveal the foot traffic of persons illegally entering the country and as an aid in detecting and tracking these people.

Unimproved. Unimproved roads are dirt roads which are seldom or never maintained, but which are periodically traveled and easily followed. Most of these roads interconnect water sources, old mines and prospect holes, hunting and trapping areas, and former World War II and Korean War training sites.

Primitive Tracks. These are dirt roadways that are never maintained and have been rarely or never traveled in recent years. They are in various stages of revegetation and soil recovery. "Naturalization" of primitive tracks over many years has, in some cases, virtually obliterated portions of roadbeds and rendered the tracks difficult or impossible to follow. Some tracks interconnect locations like those described above for unimproved roads. Others may represent trails where random off-road travel has occurred one or more times.

APPENDIX V RULES OF CONDUCT

This section sets forth rules of conduct for the protection of public lands and resources, and for the protection and well-being of recreation visitors, once they have properly accessed the BGR. These rules are derived from USAF and BLM regulations. Subsequent to the following rules list are three subsections which expand on the issues of illegal collecting of military hardware, trespassing on military target equipment, and illegal collecting of cultural artifacts.

Sanitation

- (i) "Pack it in, Pack it out" policy is in effect. Visitors are to remove all trash and garbage that they generate, and dispose of their trash and garbage at home or in other appropriate locations.
- (ii) Extinguished campfires are to be sifted through for trash and garbage items that might remain. (Burning of trash and garbage is not recommended.)
- (iii) The dumping of sewage, petroleum products, or waste water (other than wash water) from any trailer, camper, or other vehicle is prohibited, as is dumping of any portable toilet.
- (iv) The disposal of any household, commercial, or industrial waste or refuse is prohibited.
- (v) Human waste and toilet tissue are to be disposed of by what has come to be known as the "cat-hole" method. Waste is to be deposited in a hole at least six inches deep and then covered with soil. Cat-holes must be at least 100 feet from roadways, campsites, and water holes.

Water Holes

- (vi) Pollution or contamination of water supplies, water holes, or related facilities is prohibited.
- (vii) No swimming, wading, or other entry is allowed in water holes.
- (viii) Removal of waters contained in water holes (whether water holes are natural, modified, or man-made) is prohibited, except in the case of an emergency.
- (ix) Camping within one-quarter mile of a water hole is prohibited by state law, because such camping will potentially interfere with wildlife access to water.

Vehicles and General Operating Rules

All vehicles and operators (except those exempted by the BLM or the installation commander) must be licensed for highway driving whether they are driving on- or off-road. Individuals must not operate a vehicle while under the influence of alcohol or drugs, or in a manner that is likely to unnecessarily damage or disturb land, wildlife, or vegetation resources. Driving or operating any vehicle with a willful or wanton disregard for the rights or safety of other persons, or without due care, or at a speed that is greater than posted, or is greater than reasonable and prudent under prevailing conditions, is prohibited.

Stopping or leaving a vehicle (except for emergencies), on any road in a manner that obstructs the movement of other vehicles is prohibited. Temporarily pulling off a roadway is to be done in the least environmentally damaging way practicable and, ideally, within a distance of a few feet of the roadway.

- (x) When operating a vehicle no person shall exceed posted speed limits or speeds unsafe for existing conditions.
- (xi) When operating a vehicle no person shall willfully endanger persons or property, or act in a reckless, careless, or negligent manner.
- (xii) Driving vehicles off established roadways is prohibited, except that vehicles associated with camping can be parked up to 50 feet off the designated roadway.

Disturbances

- (xiv) No person shall cause a disturbance or create a risk to other persons by engaging in activities which include, but are not limited to:
 - (a) Making unreasonable noise;
 - (b) Creating a hazard or nuisance;
 - (c) Refusing to leave the BGR or move to a different part thereof when directed to do so by authorized military or civilian personnel;
 - (d) Interfering with any military or civilian government employee, or volunteer, engaged in performance of official duties;
 - (e) Resisting arrest or issuance of a citation by authorized military or civilian personnel engaged in performance of official duties;
 - (f) Assaulting or committing a battery upon military or civilian personnel engaged in the performance of official duties;
 - (g) Knowingly giving any false or fraudulent report of an emergency situation or crime to any military or civilian personnel engaged in the performance of official duties.

Property and Resources

- (xv) No person shall willfully deface, disturb, remove, or destroy any personal property or structures.
- (xvi) No person shall willfully deface, disturb, remove, destroy, or climb on, over, or through any military property or structure.
- (xvii) Willfully defacing, disturbing, removing, or destroying any scientific, cultural, archaeological, or historic resource, natural object, or area is prohibited.
- (xviii) No person shall willfully deface, remove, or destroy plants or their parts, soil, rocks, or minerals, or cave resources; except that, unless otherwise prohibited or posted (as in state or research natural areas), collection of the following (in small amounts for noncommercial purposes) is permissible:
 - (a) Commonly available renewable resources such as flowers, berries, nuts, seeds, cones and leaves;
 - (b) Nonrenewable resources such as rocks and common mineral specimens;
 - (c) Fuelwood collection, outside Areas of Environmental Concern, for use in campfires. (Collection of wood for campfire use may need to be stopped in areas because of the rapid depletion of ironwood and mesquite.)

Length of Stay and Leaving Property

- (xix) No person shall stay within the BGR boundaries for longer than the period permitted at the time the Range Entry Pass is obtained from an authorized official.
- (xx) No person shall enter any portion of the BGR for which his or her entry has not been authorized.
- (xxi) If unexpected military training activities begin to take place in the general area where visitors are authorized to be, the visitors shall (a) expeditiously remove themselves to another authorized area where training is not occurring or (b) exit the BGR altogether. They are also to report such a situation to the agency office which originally authorized their entry.
- (xxii) Leaving personal property unattended for longer than 24 hours is prohibited unless otherwise authorized, and such property may be subject to disposition under the Federal Property and Administrative Services Act (83).

Supplementary Rules

(xxiii) Military commanders and BLM may establish and publish such supplementary rules as they deem necessary. These rules may provide for the protection of persons, property, land, and resources. No person shall violate such supplementary rules.

State and Local Laws

(xxiv) Except as otherwise provided by federal law or regulation, state and local laws and ordinances shall apply and be enforced by appropriate state and local authorities. This includes state and local laws and ordinances governing: operation and use of motor vehicles, hunting, use of firearms or other weapons, injury to persons or destruction of or damage to property, air and water pollution, littering, sanitation, use of fire, pets, native plant products, caves, and mines.

Collecting Military Hardware

These three subsections address issues of extreme importance in relation to recreation (and other nonmilitary uses) and which could have a very limiting effect concerning future recreation access and opportunities should the issues become more serious. The rules and laws referred to in these three subsections are applicable to all BGR lands.

The following list contains many, but not all, of the items which might be found on or under the ground surface by visitors, and which are illegal (and dangerous) to handle or take possession of, whether or not the items are actually transported outside the boundaries of the BGR: (projectiles of all kinds such as bullets and cannon dummy or real warheads, projectile (cartridge) cases in all calibers, missiles, rockets, drones, dart tow targets and cables, fuel drums, aircraft fuel tanks, exploded and unexploded practice bombs, flare casings and parachutes, parts of real or simulated targets such as tanks, trucks, jeeps, etc.).

Any military item, or any part thereof, found within the boundaries of the Range, no matter how long the item has been there or how deteriorated it may appear, is United States Government Property, and is firmly claimed as such. Therefore, all military materials (no matter how small or insignificant), by law, must be left strictly alone. Should a visitor violate this law, he or she could be subject to a fine of up to \$10,000 and/or imprisonment for up to 10 years.

Trespassing on Military Target Equipment

All tactical targets (e.g., real or simulated tanks, trains, trucks, etc.) and the ground upon which they rest are completely off-limits to all forms of nonmilitary use. Tactical targets may be viewed incidentally by visitors in vehicles during authorized time periods as they travel through the sites where the targets are located. The targets are not to be mounted, climbed, entered, or explored in any manner, but left completely alone. If this rule is violated, the offending visitors will be subject to prosecution for criminal trespass.

Collecting Cultural Artifacts

As with military property, some visitors have taken possession of items of cultural (historic or archaeological) value. These artifacts may be broadly defined as any material remains or signs of human life or activity capable of providing scientific or humanistic understandings of past human behavior, cultural adaptation, and related topics through scientific or scholarly techniques.

All artifacts found on the Range come under the purview of one or more of at least five federal laws. There are stiff criminal penalties for taking artifacts without a federal permit. The Air Force and BLM are committed to enforcing all laws and regulations pertaining to cultural resources. When a visitor encounters these resources, he or she must leave them completely as they are. Also, visitors should report artifact locations to the office of the agency authorizing their entry to the Range.

APPENDIX VI
BGR VISIT INFORMATION KIT
(RANGE PASS, OLD HARMLESS AGREEMENT AND EXPLOSIVE SAFETY AWARENESS HANDOUT)

INSTRUCTIONS

DEPARTMENT OF THE AIR FORCE
Headquarters 832D Combat Support Group (TAC)
Luke Air force Base, AZ 85309

Office of the Commander

Greetings

We are pleased to have you visit the Luke Air Force Range and hope your visit will be an enjoyable one. Your visit will take you into an area defined as "the best major reserve of unspoiled desert in the Southwest." A recent University of Arizona publication highlighted the fact that human history in this area dates back about 10,000 years and that at least 43 mammals, over 200 species of birds and a great number of desert reptiles, amphibians and invertebrates call this range home. While you are in the range, we ask you to make every effort to preserve what is, in fact, a National Resource.

To aid you in your visit, we have included an information kit which has enclosed: Instructions, range area maps, an Application for Range Entry, a Hold Harmless Agreement and an explosives awareness handout. Because we are sincerely interested in your safety, we cannot impress upon you enough the importance of reading and understanding the information included in the enclosed kit.

If you have any questions about the data contained in the enclosed information kit please contact the Luke Air Force Range Operations and Scheduling Office at (602)-856-7653/54/56.

Arley W. McRae, Colonel,
Commander

Readiness is our Profession

1. Review package contents. In addition to these instructions, the package should include area maps, an Application for Range Entry, a Hold Harmless Agreement, and an Explosive Safety Awareness handout.

2. Determine the area(s) you wish to visit. Review the included area maps. The Luke Air Force Range is divided into three main sections: eastern, western, and wildlife refuge. The eastern section is controlled by the United States Air Force. The western section is controlled by the United States Marine Corps and the Cabeza Prieta National Wildlife Refuge is controlled by the US Fish and Wildlife Service. The Air Force section is subdivided into areas A, B, C, D, 1, 2, 4, 3 /ETAC, NTAC, STAC and A/A. Areas A, B, and C are not normal target areas and are routinely available 24 hours a day, seven days a week. Areas D, 1, 2, 4, 3/ETAC, NTAC, STAC and A/A contain active munitions impact areas. These areas are normally available after the last scheduled military activity on Friday until sunset Sunday and on holidays until sunset. The western area is not subdivided and access is dependent on Marine air operations. The Cabeza Prieta National Wildlife Refuge is not subdivided and access is dependent on the purpose of the visit. Periodically, military air activities restrict access to the eastern half of the Refuge to weekends.

3. Complete the Application for Range Entry. NOTE: Unless separate and specific approval has been granted, all vehicular traffic is restricted to established roads. Use of a four-wheel drive vehicle is recommended. However, any vehicles designed primarily for off-road recreational activity (e.g. ATC's, dune buggies and dirt bikes) are specifically prohibited from the range.

4. Review the Hold Harmless Agreement. You and all members of your party will be required to sign the Hold Harmless Agreement when you obtain your Range Pass.

5. Review the Explosive Safety Awareness handout.

6. Coordinate your request as indicated below. You may phone the agencies to determine availability of the area. With the exception of the Cabeza Prieta National Wildlife Refuge, confirmation can not be given until the afternoon of the duty day prior to the request date. If you will be unable to pick-up your Range Pass on your desired day of travel, coordinate other arrangements. If you are traveling into more than one section make one application and send copies to the agencies controlling the sections you wish to visit. In addition, indicate at the bottom of the application the dates and times you will be traveling in each section. Do not assume approval. If you do not receive a reply, contact the appropriate agency.

Section	Agency	Address	Phone
Eastern Section	Luke Air Force Range Operations & Scheduling	832CSG/OTS Luke AFB, AZ	(602) 856-7653 /4/6
Western Section	Fleet Liaison Office	Fleet Liaison Off S-3 Dept Marine Corps Air Station Yuma, AZ 85364	726-3558
Cabeza Prieta	US Fish and Wildlife Service	US Fish and Wildlife Service P.O. Box 418 Ajo, AZ 85321	387-6483

7. Obtain Maps. The maps enclosed with this kit are designed only for informational use. The scale of these maps will not provide for safe or accurate land navigation. It is recommended that a map scale of 1:62,500 or a scale providing greater detail be used.

8. Obtain Range Pass.

a. Military (Eastern and Western) Section. On the day of the desired travel obtain a Range Pass unless other previous arrangements were made. Pick up the pass at the appropriate location listed below. If you are proceeding to more than one section, pick-up the pass at the agency responsible for the first section you intend to visit. When you pick up your Range Pass, determine the check out times and what check out procedures need to be completed. While on the range, keep the Range Pass with you.

Section	Pick Up Point
Eastern Section	832CSS Security Police Desk Bldg 300, Gila Bend AFAF
Western Section	Fleet Liaison Bldg 136 MCAS, Yuma

b. Cabeza Prieta National Wildlife Refuge. To obtain entry into the Cabeza Prieta, contact one of the offices listed below. They will coordinate your visit into that area and provide you with the necessary information, Military Hold Harmless Agreements and Permits.

Section	Pick up Point
Cabeza Prieta National Wildlife Refuge	Ajo Cabeza Prieta National Wildlife Refuge Ajo-Gila Bend Highway (AZ 85) North edge of the town of Ajo
	Yuma Kofa National Wildlife Refuge corner of Fourth and First Streets Yuma

9. Completion of travel. After completion of travel you must notify the appropriate agency that you are clear of the range. Until you accomplish this task, no military operations will be permitted in the area authorized on your pass. In addition, if you do not check out with the appropriate agency at or before the scheduled time, a search for your party may be initiated. If a search is conducted, you can be held liable for expenses incurred during the search.

10. Remember. The desert is only deadly to the foolish or those not properly prepared. Ensure adequate water and provisions are available.

-SAMPLE-
APPLICATION FOR RANGE ENTRY

I, JOHN Q. PUBLIC AND PARTY OF 1
REQUEST ENTRY INTO THE FOLLOWING AREAS OF
THE LUKE AIR FORCE RANGE COMPLEX

 A/A,-NTAC,-STAC

ENTRY IS REQUESTED FROM

6-OCT-84/0800 TO 7-OCT-84/1800
DATE/TIME DATE/TIME

FOR BIGHORN SHEEP HUNT SURVEY

STATE PURPOSE

John Q. Public
SIGNATURE OF VISITOR

-SAMPLE-

HOLD HARMLESS AGREEMENT - LUKE AIR FORCE
RANGE (LAFR) VISIT
(THIS FORM IS SUBJECT TO THE PRIVACY ACT OF
1974)

AUTHORITY: 10 USC 8012

PRINCIPAL PURPOSE: INDICATES CERTIFICATION BY AN INDIVIDUAL OR CORPORATION TO HOLD THE U.S. GOVERNMENT HARMLESS IN CONSIDERATION OF PERMISSION GRANTED BY THE U.S. AIR FORCE TO VISIT THE LAFR COMPLEX.

DISCLOSURE IS VOLUNTARY: FAILURE TO PROVIDE THIS INFORMATION WOULD RESULT IN AN INDIVIDUAL BEING DENIED ACCESS TO LAFR COMPLEX.

IN CONSIDERATION OF PERMISSION GRANTED BY THE UNITED STATES AIR FORCE ALLOWING TRAVEL ON PROPERTY CONTROLLED BY THE USAF/USMC/US FISH WILDLIFE SVC WHICH IS PART OF THE LUKE AIR FORCE RANGE, THE USER NAMED BELOW AGREES:

1. THE USER RELEASES FOREVER THE UNITED STATES, ITS AGENCIES, AND UNITED STATES PERSONNEL, FROM EVERY LIABILITY ARISING OUT OF, OR IN ANY WAY CONNECTED WITH, THE SAID STATES, ITS AGENCIES, AND UNITED STATES PERSONNEL BY AGENTS OR EMPLOYEES OF THE USER OR PERSONS CLAIMING THROUGH THEM OR BY THIRD PARTIES, AND WILL HOLD THE UNITED STATES, ITS AGENCIES, AND UNITED STATES PERSONNEL, HARMLESS AGAINST VERY SUCH CLAIM OR SUIT, INCLUDING DAMAGE TO PERSONS OR PROPERTY (REAL OR PERSONAL) BASED ON, ARISING OUT OF, OR IN ANY WAY CONNECTED WITH TRAVEL ON OR ACROSS SAID PROPERTY.

2. THE USER UNDERSTANDS, AND FULLY COMPREHENDS, ALL IMPLICATIONS OF THE REQUEST FOR TRAVEL ON OR ACROSS ACTIVE BOMBING/GUNNERY WEAPONS RANGES OF THE ARMED FORCES OF THE UNITED STATES, AND THAT SAID RANGES CONTAIN AN INHERENT DANGER OF FALLING MISSILES FROM GUNNERY, ROCKETRY, STRAFING, AND OTHER RELATED ACTIVITIES. THE USER FURTHER WARRANTS THE UNDERSTANDING OF IMPLICATIONS, AND FURTHER DANGER, OF UNEXPLODED LIVE ORDNANCE, WHICH CANNOT REASONABLY BE MARKED IN A MANNER TO WARN OF ITS PRESENCE OR POTENTIAL DANGER, AND THAT ANY ATTEMPTS TO TOUCH, PICK UP, CARRY AWAY OR OTHERWISE DISTURB SUCH ORDNANCE IS NOT ONLY DANGEROUS BUT SPECIFICALLY FORBIDDEN.

3. THE USER UNDERSTANDS THE MANDATORY REQUIREMENT TO OBTAIN A RANGE PASS AND COMPLY WITH CHECK-OUT PROCEDURES IMMEDIATELY PRIOR TO TRAVEL INTO, AND IMMEDIATELY AFTER COMPLETION OF TRAVEL OUT OF SAID PROPERTY, THIS REQUIREMENT IS CAUSED BY:

A. THE POSSIBILITY OF ORDNANCE-CARRYING AIRCRAFT BEING SCHEDULED, OR BEING ADDED TO THE SCHEDULE, FOR THE PERIOD JUST BEFORE OR JUST AFTER THE TIME (S) BEING REQUESTED BELOW.

B. THE POSSIBILITY OF A REQUIREMENT FOR EMERGENCY CONTACT WITH THE USER, OR A MEMBER OF THE USER'S PARTY.

C. THE POSSIBILITY THAT PERSONNEL WOULD BE DISPATCHED TO ATTEMPT TO LOCATED THE USER, IN THE EVENT THE USER'S AUTHORIZED ACCESS PERIOD HAS ELAPSED.

D. THE POSSIBILITY THAT FLIGHT MISSIONS BY ARMED FORCES AIRCRAFT COULD BE DELAYED OR CANCELLED IN THE EVENT THE USER HAS NOT ACCOMPLISHED THE REQUIRED POST-USE NOTIFICATION.

4. THE USER FURTHER UNDERSTANDS THE CONSEQUENCES OF FAILURE TO COMPLY WITH PROCEDURES OUTLINED ABOVE, TO INCLUDE:

A. POSSIBLE DENIAL OF ANY FURTHER APPLICATION FOR USE OF THE RANGE PROPERTY.

B. POSSIBLE PECUNIARY AND/OR JUDICIAL ACTION.

C. IN THE CASE OF MILITARY PERSONNEL, POSSIBLE UCMJ ACTION.

5. THE USER, BY HIS/HER SIGNATURE, WITNESSED BELOW, CERTIFIES HIS/HER SIGNATURE IS GIVEN WITHOUT COERCION OR MENTAL DURESS.

-SAMPLE-

John Q. Public
Signature

Name

1234 W. North ST.
Street Address

Phoenix, AZ 87654
City/State Zip Code

602-123-9876

EXPLOSIVE SAFETY AWARENESS

Welcome to the Luke Air Force Range. If this is your first visit, you are sure to encounter some very interesting scenery. If it is your one hundred and first visit, you are certain to encounter, or come very close to, some very interesting ordnance. The Luke Air Force Range has been used for gunnery and ordnance drop areas since World War I. There is still World War I ordnance on the ground that has escaped detection by the ordnance disposal teams. There is a good chance you may find some. **DO NOT DISTURB THEM, REPORT THEM.** The following items are listed for your safety, please observe them.

1. Munitions items are designed to maim and kill.
2. Even training weapons, although they bear the coloring and designation of "practice," often contain propelling, spotting, or bursting charges which when mishandled can cause injury or death.
3. Munitions cases endure severe weathering which causes corroding, rusting and changes in color coding. Therefore, appearance can be deceptive to the untrained individual.
4. The munitions you encounter on the range will not function randomly, therefore, if you do not disturb them they will not hurt you.

-
5. Munitions are scattered throughout the ranges. Some have functioned as designed. Some have not. It takes a trained technician to determine the weapon's condition. Do not take the risk of trying to figure out which is a dud and which is not.
 6. Fragments of munitions may contain explosives as well. They also are best left alone.
 7. Even though you may have been in the service, do not assume you are familiar with particular munitions. Weapons systems are continually undergoing design changes to improve their functional capability.
 8. Many items are electrically initiated, making them susceptible to static discharge from your body and RF inductive current from near by radio transmissions.
 9. For common sense reasons, it is wise not to drive over munitions items.
 10. If you have any questions concerning munitions, please ask when you obtain your Range Pass.

(This information appears on the
back of the RANGE PASS.)
EXPLOSIVE SAFETY AWARENESS

RANGE ENTRY PASS

NAME OF VISITOR _____ AND PARTY
OF _____ ARE AUTHORIZED TO ENTER INTO
LA FR RANGE AREA(S)

A B C D ETAC NTAC STAC 1 2 4 A/A
DARKEN AREAS NOT AUTHORIZED

FROM _____ TO _____
(DAY/MONTH/YEAR/TIME) (DAY/MONTH/
YEAR/TIME)

EXPIRATION TIME

SIGNATURE OF SECURITY
POLICE DESK SERGEANT

INITIALS OF COMMAND POST OIC (IF ANY
VISITING AREA OTHER THAN A, B, OR C

WARNING: EXPIRATION TIME IS THE TIME BY
WHICH THE VISITOR MUST BE CLEAR OF
RANGE AND HAVE CONTACTED SECURITY
POLICE.

Welcome to Luke Air Force Range. If this is your first visit you are sure to encounter some very interesting scenery. If it is your one hundred first visit, you are sure to encounter, or come very close to, some very interesting ordnance. The Luke Air Force Range has been used for gunnery and ordnance drop areas since World War II. There is still World War II ordnance on the ground that has escaped detection by the ordnance disposal teams. There is a good chance you may find some. **DO NOT DISTURB THEM. REPORT THEM.** The following items are listed for your safety. Please observe them.

1. Munitions items are designed to maim and kill.
2. Even training weapons, although they bear the coloring and designation of "practice", often contain propelling, spotting, or bursting charges which when mishandled can cause injury or death.
3. Munitions cases endure severe weathering which causes corroding, rusting and changes in color coding. Therefore, appearance can be deceptive to the untrained individual.
4. The munitions you encounter on the range will not function randomly. Therefore, if you do not disturb them, they will not hurt you.
5. Munitions are scattered throughout the ranges. Some have functioned as designed. Some have not. It takes a trained technician to determine the weapon's condition. Do not take the risk of trying to figure out which is a dud and which is not.
6. Fragments of munitions may contain explosives as well. They also are best left alone.
7. Even though you may have been in the service, do not assume you are familiar with particular munitions. Weapons systems continually are undergoing design changes to improve their functional capability.
8. Many items are electrically initiated, making them susceptible to static discharge from your body and RF inductive current from nearby radio transmissions.
9. For common sense reason, it is wise not to drive over munitions items.
10. If you have any questions concerning munitions, please ask when you obtain your Range Pass.

**APPENDIX VII
FAILURE TO COMPLY WITH RANGE CLEARING PROCEDURES**

DEPARTMENT OF THE AIR FORCE
832D COMBAT SUPPORT SQUADRON(TAC)
GILA BEND AF AUXILIARY FIELD, AZ

REPLY TO
ATTN OF: 832 CSS/CC

SUBJECT: Failure to Comply with Range Clearing Procedures

TO:

1. On 2 Nov 85 , you failed to properly clear off the Gila Bend AFAF Gunnery Range at the prescribed time of 1100 HRS. Your failure to clear the range resulted in the recall and dispatch of Security Police personnel for the purpose of locating you.
2. It is the responsibility of the Security Police Section to respond to an area if individuals have not cleared, due to the possibility of injury or of the individual being lost. However, the simple negligence to clear is a cost or waste of valuable manpower, material and time to both the taxpayer and the unit's effectiveness.
3. It is hoped that you realize the importance in clearing the range and that no further problems in this area will arise. If the problem should happen again, you may be denied any further access to any of the range areas.

CLAUDE A. RICH, JR., Lt Col, USAF
Commander

DEPARTMENT OF THE AIR FORCE
HEADQUARTERS 832D COMBAT SUPPORT GROUP
(TAC)
AIR FORCE BASE AZ 85309

REPLY TO
ATTN OF: 832 CSS/SP

1 OCT 1984

SUBJECT: Noncompliance of Hold Harmless Agreement

TO: All Sections

1. In order to solve the continuing problem of non-compliance with range entry Hold Harmless Agreements the following policy is in effect for all violations occurring within a one year time period.
 - a. For military and civilian personnel of Gila Bend AFAF and other military and civilian DOD personnel:

First report of noncompliance....Counseling by supervisor

Second report of noncompliance..Suspension from Ranges for 3 months

Third report of noncompliance....Suspension from Ranges for 1 year

Fourth report of noncompliance...Indefinite suspension

b. For all other personnel:

First report of noncompliance....Letter sent from Commander

Second report of noncompliance..Suspension from Ranges for 3 months

Third report of noncompliance....Suspension from Ranges for 1 year

Fourth report of noncompliance...Indefinite suspension.

2. This policy will be included in the next squadron supplement to LAFR Regulation 50-46. Any questions should be addressed to TSgt Ragan, ext 132.

CLAUDE A. RICH, JR., Lt Col, USAF
Commander