DRAFT

ORGAN MOUNTAINS COORDINATED RESOURCE MANAGEMENT PLAN

and ENVIRONMENTAL ASSESSMENT

U. S. DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
LAS CRUCES DISTRICT OFFICE
MIMBRES RESOURCE AREA
NEW MEXICO

SEPTEMBER 1988

BLM-NM-PT-88-020-4333

IN REPLY REFER TO:

1601 (036)

United States Department of the Interior

BUREAU OF LAND MANAGEMENT
LAS CRUCES DISTRICT OFFICE
1800 Marquess Street
Las Cruces, New Mexico 88005

October 10, 1988

Dear Reviewer:

Enclosed for your review and comment is the draft Organ Mountains Coordinated Resource Management Plan (CRMP) and Environmental Assessment (EA). The CRMP and its associated EA outline alternative management actions for the use and protection of public land in the Organ and Franklin Mountains of south-central New Mexico. The planned action and alternatives contained in this document represent specific recommendations that were provided by two Technical Review Teams (TRTs) in March and April of 1988. The TRTs were comprised of private individuals, representatives of special interest groups, other agency personnel, and BLM personnel.

Comments concerning the draft CRMP and EA will be considered in the preparation of the final plan and EA. Written comments should be received at the address below no later than 45 days from the date of this letter. Comments received after the review period will be considered in the decision process, even though they may be too late to be considered in the final plan and EA.

You will automatically receive a copy of the final plan and EA, unless you indicate otherwise. Your interest and comments are appreciated. Please provide specific comments wherever possible and address them to:

Tim Salt
Area Manager
Mimbres Resource Area
1800 Marquess
Las Cruces, NM 88005

We are not planning to hold any public meetings on the CRMP at this time. If there is sufficient interest or demand, a meeting or meetings may be arranged at a later date. If you have any questions please contact Scott Florence, Multi-Resource Staff Chief at 505-525-8228.

Sincerely,

Tim Salt
Area Manager

DRAFT ORGAN MOUNTAINS COORDINATED RESOURCE MANAGEMENT PLAN AND ENVIRONMENTAL ASSESSMENT

NM-036-88-33

Prepared By:

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September 1988

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SUMMARY

The Draft Organ Mountains Coordinated Resource Management Plan (CRMP) identifies and analyzes four alternatives for the management of over 50,000 acres of public land located in the Organ and Franklin Mountains in south-central New Mexico. The following section summarizes the key points of each alternative. Table S-1 summarizes the major impacts of each alternative for the major issues in the CRMP area.

ALTERNATIVE 1 - PROPOSED ACTION

Planned actions to manage threatened and endangered (T&E) or State-listed species include: inventories to determine distribution and occurrence of plant and animal species, designation of approximately 5,300 acres in 6 separate areas as Areas of Critical Environmental Concern (ACECs) for T&E plants and protective mineral withdrawals on approximately 350 acres for Sneed's pincushion cactus.

Planned actions to manage wildlife habitat include: fencing and development of 10 springs to protect key riparian areas, evaluation of habitat for potential reestablishment of desert bighorn sheep, installation of 10 wildlife water catchments, and use of fire as a natural force to maintain habitat diversity.

Planned actions to manage rangeland resources include: construction of 21 miles of pasture fence and installation of several new livestock waters, implementation of grazing systems to allow periodic rest or deferment of grazing within riparian and arroyo areas, and the treatment of up to 24,000 acres of poor condition rangeland to increase vegetation diversity, improve wildlife habitat, and improve soil and water conditions.

Planned actions to manage cultural resources include: archeological inventories of previously unsurveyed areas, test excavation of La Cueva rockshelter, partial restoration, stabilization and interpretation of the historic ruins at Dripping Springs, and nomination of the Dripping Springs and Minehouse Spring historic structures to the State and National Register of Historic Places.

Planned actions to manage recreation activities include: development of a Cooperative Management Agreement with the U.S. Army at Fort Bliss, acquisition of approximately 8,000 acres of State and private inholdings, installation of a water system at the Aguirre Spring Campground, development of a visitor center and interpretive facilities near La Cueva, construction of a 55-unit picnic area and campground near La Cueva, restriction of vehicle access to the Dripping Springs area, development and management of the area known as the Soledad rock garden and ecology site for educational and interpretive purposes, construction of approximately 40 miles of new hiking and horseback riding trails (including a trail between the Organ Mountains and Franklin Mountains State Park), development of a cooperative management agreement with local governments and private institutions to provide joint funding and personnel for operation and maintenance of facilities, development of a cooperative management agreement with Franklin Mountains State Park, and provision of additional law enforcement personnel.

ALTERNATIVE 2 - LEAST INTENSIVE

This alternative is the same as the Proposed Action except that there would be no overnight camping allowed within the area and there would be no water provided at the Aguirre Spring Campground. The westside road, from the Soledad Canyon road to Mossman Arroyo, would also be closed to vehicle use. There would be no brush control within the area, as well.

ALTERNATIVE 3 - MOST INTENSIVE

This alternative is the same as the Proposed Action except that the westside road, from the Soledad Canyon road to Mossman Arroyo, would be upgraded to an oiled or surfaced road. The road to Dripping Springs would also remain open to vehicle use.

ALTERNATIVE 4 - PRESENT MANAGEMENT

Under this alternative, management would continue under the guidance of existing management plans.

Planned actions to manage T&E species would involve only the Federally-listed Sneed's pincushion cactus--inventory of all populations on public land to determine total numbers and protective mineral withdrawals totalling approximately 350 acres.

There would be no planned actions specific to wildlife habitat management except on a case-by-case basis.

The only planned actions to manage rangeland resources would be the installation of several livestock waters and erosion control projects, all on the Baylor Canyon allotment. All other rangeland improvement projects would be done on a case-by-case basis.

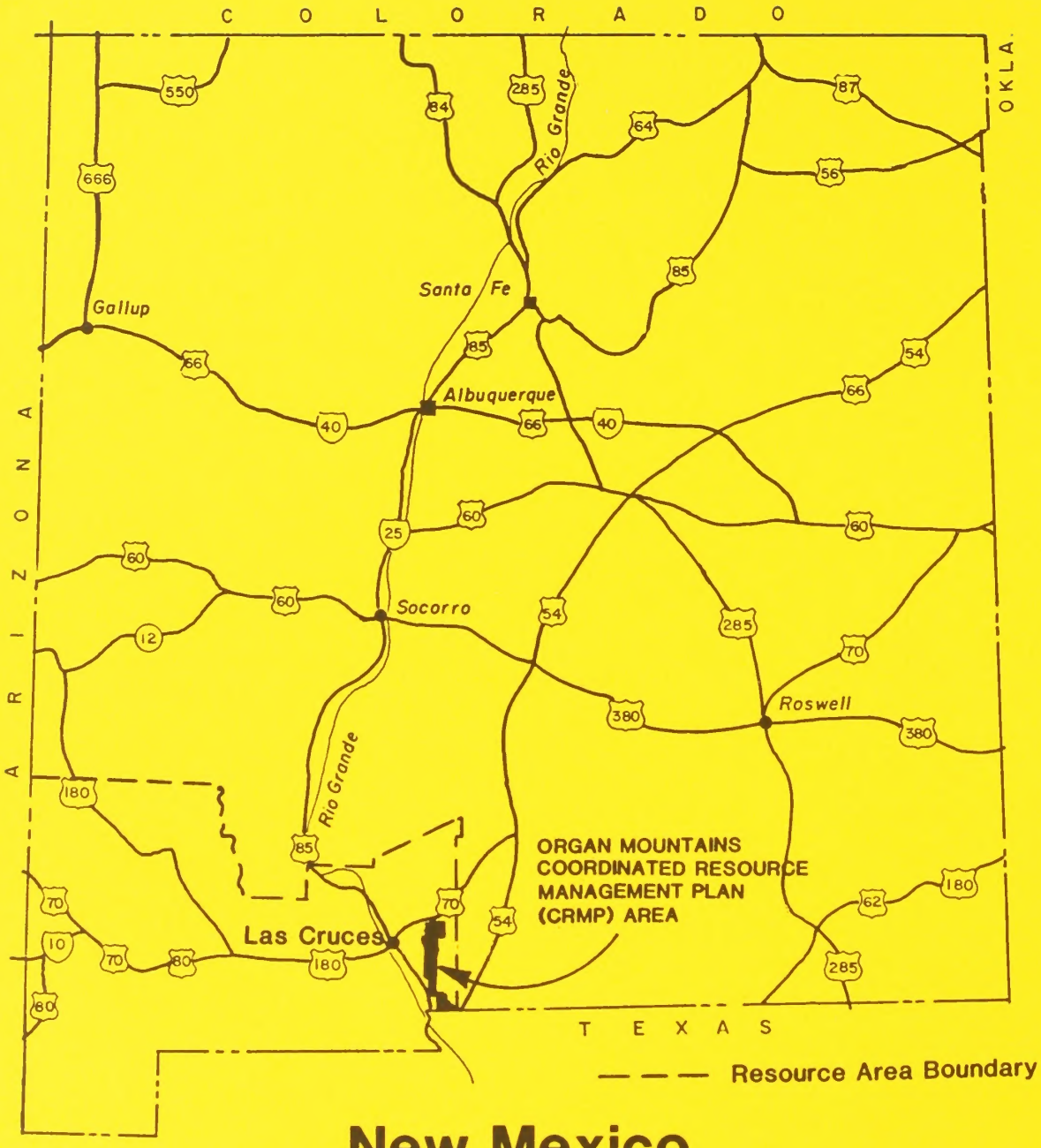
There would be no planned actions specific to cultural resources except on a case-by-case basis.

Planned actions to manage recreation activities include: development of a visitor center and interpretive facilities near Aguirre Spring, construction of approximately 2 miles of new hiking and horseback riding trails, development and management of the Soledad rock garden and ecology site, segregation of the remaining 6,017 acres within the existing Organ Mountains Scenic ACEC and an additional 2,753 acres of adjacent public land from all mineral entry, development of a cooperative management agreement with New Mexico State University (NMSU) to manage the NMSU land for the protection of visual resources, and acquisition of State and private inholdings.

TABLE S-1
SUMMARY OF ANTICIPATED IMPACTS

Alternative 1 Proposed Action	Alternative 2 Least Intensive	Alternative 3 Most Intensive	Alternative 4 Present Management
There would be fewer potential impacts to threatened and endangered (T&E) or State-listed species from mining and other surface disturbing activities.	Same as Alternative 1.	Same as Alternative 1.	There would be greater potential impacts to T&E or State-listed species from mining and other surface disturbing activities, except for Sneed's pincushion cactus.
Riparian and arroyo vegetation would be protected and enhanced.	Same as Alternative 1.	Same as Alternative 1 (except in vicinity of Dripping Springs where impacts to riparian and T&E species could be increased).	Existing impacts would continue to riparian and arroyo vegetation.
Endemic wildlife would be reestablished (bighorn sheep and turkeys).	Same as Alternative 1.	Same as Alternative 1.	Endemic wildlife species would not be reestablished.
Water would be reduced as a limiting factor for wildlife populations.	Same as Alternative 1.	Same as Alternative 1.	Water would continue to be a limiting factor for wildlife populations.
Vegetation diversity would be increased and soil/water and forage conditions would be improved on 24,000 acres.	Vegetation diversity and soil/water conditions would remain the same or further deteriorate.	Same as Alternative 1.	Vegetation diversity and soil/water and forage conditions would be improved but not as much as in Alternative 1.
Protection, stabilization and interpretation of cultural resources would be improved.	Same as Alternative 1.	Same as Alternative 1.	Cultural resources would be protected, but stabilization and interpretation would be less than under Alternative 1.
Recreation opportunities would be greatly improved. Visitor use would increase from 180,000 to 520,000 recreation visits per year. Camping and hiking use in particular would increase.	Recreation opportunities would increase but not as much as in Alternative 1. Visitor use would increase from 180,000 to 430,000 recreation visits per year.	Recreation opportunities would increase the most under this alternative. Visitor use would increase from 180,000 to 530,000 recreation visits per year	Recreation opportunities would increase the least under this alternative. Visitor use would increase from 180,000 to 340,000 recreation visits per year.
There would be fewer conflicts with adjacent private landowners and Fort Bliss as a result of trespass and vandalism.	Same as Alternative 1.	Same as Alternative 1.	Conflicts would be reduced but not to the same degree as in Alternative 1.
There would be 2 1/2 miles of existing off road vehicle (ORV) routes closed to vehicle use. 640 acres that are currently open to all vehicle use would become limited to designated routes.	There would be 9 1/2 miles of existing ORV routes closed to vehicle use. Other impacts would be the same as Alternative 1.	Same as Alternative 1, except the Dripping Springs road and powerline access road, above the visitor center, would remain open to vehicle use.	There would be no change in the present situation and no impact to ORV users.
Hiking use would be dispersed. Current impacts on existing trails would be decreased.	Same as Alternative 1.	Same as Alternative 1.	Hiking use of existing trails would continue to increase. Quality of recreation experience would decline. Resource damage would increase.
There would be approximately 30 acres of short-term (2-5 years) surface disturbance due to project construction activities.	There would be approximately 29 acres of short-term surface disturbance from project construction activities.	Same as Alternative 1.	There would be approximately 1 acre of short-term surface disturbance from currently planned project construction activities.
There would be approximately 85 acres of permanent vegetation loss due to project construction (parking areas, facilities, etc).	Same as Alternative 1.	There would be approximately 95 acres of permanent vegetation loss.	There would be approximately 48 acres of permanent vegetation loss.

ORGAN MOUNTAINS
COORDINATED RESOURCE MANAGEMENT PLAN



New Mexico

LOCATION MAP

MAP 1

ORGAN MOUNTAINS COORDINATED RESOURCE MANAGEMENT PLAN

INTRODUCTION

Purpose and Need

The Organ Mountains Coordinated Resource Management Plan (CRMP) is a comprehensive, multiple-use activity plan prepared utilizing the coordinated resource management planning concept. This plan is expected to guide all land use activities on over 50,000 acres of public land administered by the Bureau of Land Management (BLM) in the Organ and Franklin Mountains (see Map 1) for the next 15 to 20 years. It will address specific, on-the-ground management needs and actions for the following issues (in the context of other uses and activities in the area):

1. Threatened and Endangered (T&E) or State-listed species
2. Wildlife Habitat
3. Rangeland Resources
4. Cultural Resources
5. Recreation

The population of the Las Cruces/El Paso metropolitan area is currently estimated to be nearly 800,000 people. Future growth of the area is expected to continue at the rate of about 3.5 percent per year. The Organ and Franklin Mountains in south-central New Mexico attract a number of recreationists who seek a wide variety of recreational pursuits in a mountain setting. The majority of visitors to the area come from the adjacent urban areas. A number of visitors also come from out-of-state. As population growth continues, recreational use of the area is expected to increase. The expected population growth and increasing recreation pressures must be planned for and accommodated within the constraints of the resources and other uses involved.

The Organ Mountains provide a very spectacular scenic backdrop to the City of Las Cruces and the surrounding area. As such, they are an essential part of the quality of life in this area and their scenic beauty must be protected.

Technical Review Teams (TRTs) comprised of private individuals and other agency personnel were utilized to maximize early public involvement in the development of this plan. Consensus recommendations provided by the TRTs have formed the basic framework of the proposed action and alternatives contained in this draft plan and environmental assessment (EA).

Relationship to Other Plans

This section contains a summary of existing land use plans and activity plans which cover the area. Congress directed the BLM to prepare land use plans for public land in Section 202 of the Federal Land Policy and Management Act (FLPMA) of 1976. These "land use plans" make general resource allocations over large areas such as a county or a Resource Area covering several counties. Prior to FLPMA, BLM's land use plans were called Management Framework Plans (MFPs). The BLM's land use plans are now called Resource Management Plans (RMPs). The term CRMP should not be confused with the term RMP. The term CRMP is not unique to the BLM. It is a planning process that has been developed and adopted by many Federal, State, and local agencies and groups. A CRMP is an "activity plan," that covers a smaller, more specific area than a land use plan. An activity plan is project-specific and is written primarily to implement decisions that are contained in a land use plan.

The following summary of land use plans and activity plans indicates the confusing state of existing plans which cover the area and the need to prepare a single, comprehensive activity plan.

The Southern Rio Grande (SRG) MFP, the overall land use plan for the area, was prepared in 1982. In 1982, a Grazing Environmental Impact Statement (EIS) was also completed for the SRG planning area. The Las Cruces/Lordsburg MFP Amendment/EIS of 1984 addressed energy minerals (oil, gas, and geothermal) exploration and development, as well as chemical vegetation treatments within the area. The SRG MFP

Amendment of 1986 addressed specific land tenure adjustments within Dona Ana County. Acquisition of State and private inholdings within the Organ Mountains Recreation Lands (OMRLs) and Franklin Mountains was considered a high priority. The CRMP specifically addresses how these areas will be managed following acquisition. A summary of MFP decisions pertaining to the CRMP area is contained in Appendix 1. The proposed action is consistent with the SRG MFP and will implement decisions contained in that plan that have not yet been implemented.

The Final EIS for the New Mexico Statewide Wilderness Study was completed in 1988. The Final EIS recommends the designation of a 7,144-acre wilderness area in the Organ Mountains. Legislation may establish an 11,794-acre wilderness area (including property now owned by New Mexico State University that would be transferred to BLM by exchange) in the near future. Legislation may also establish a National Conservation Area (NCA) that would encompass the 59,000-acre CRMP area. The CRMP is intended to provide long-term management direction for the NCA and wilderness area should they be so designated by Congress.

The 27,167-acre OMRLs were designated in 1971. The OMRLs Plan was also prepared the same year. The plan was revised in 1975 and again in 1985. Unlike the CRMP, the OMRLs Plan was strictly a recreation activity plan and did not specifically plan for other uses, although it did restrict certain activities. Appendix 2 contains a specific accounting of projects and actions that are being dropped or carried forward in the CRMP from the existing recreation activity plans.

An Interpretive Plan was developed for the OMRLs in 1976. Valid aspects of that plan will also be carried forward and incorporated into the CRMP.

The 8,947-acre Organ Mountains Scenic ACEC was designated in 1984 to protect outstanding visual resources. The existing ACEC management plan will also be incorporated into the CRMP.

In 1987, a Habitat Management Plan (HMP) was prepared for the Sneed's pincushion cactus. The HMP basically included the Bishop's Cap and Franklin Mountains area. That plan will also be incorporated into the CRMP.

OBJECTIVES

All objectives and planned actions in this CRMP will collectively maintain the ecological integrity, as well as the quality scenic, wilderness, recreation, and natural values of this unique area.

Threatened and Endangered (T&E) or State-listed Species

1. Protect or enhance the habitat or populations of State-listed or candidate plants and animals so that these species do not become listed or further diminished.

2. Protect or enhance the habitat or populations of Federally-listed plants and animals to recover (de-list) these species. Specifically, the 1987 HMP for Sneed's pincushion cactus set a target of three secure populations totalling 10,000 individuals.

3. Protect sensitive or relict plant communities such as the high-elevation conifer forests.

Wildlife Habitat

1. Manage habitat to maintain or improve conditions for wildlife in a manner compatible with other uses. Specifically, maintain the quality of spring and cliff special habitat features.

2. Maintain habitat for potential reintroduction of historic wildlife species (desert bighorn sheep and turkeys).

3. Develop sources of food, cover, or water where these are limiting factors. Specifically, provide forage for up to eight deer per section.

Rangeland Resources

1. Improve soil, water, and vegetation conditions and increase vegetation diversity in areas where it is economically feasible and in a manner compatible with other uses. Specifically, change areas dominated by creosotebush and mesquite (60-100 percent)

to areas with a more desirable plant community composed of 20-40 percent shrubs, 30-40 percent grasses, and 30-40 percent forbs.

2. Improve livestock distribution where needed in a manner compatible with other uses.

Cultural Resources

1. Determine appropriate measures for protection, stabilization, data retrieval, and interpretation of pre-historic and historic sites in a manner compatible with other uses.

2. Provide opportunities for research to expand knowledge and understanding of past cultures.

Recreation

1. Minimize conflicts with adjacent private landowners and Fort Bliss.

2. Minimize conflicts between recreation user groups.

3. Minimize conflicts with other resources and uses.

4. Provide for visitor safety and interpretive needs.

5. Provide for quality developed recreation needs and demands in a manner compatible with other uses.

6. Provide for quality primitive and semi-primitive recreation needs and demands in a manner compatible with other uses.

CONSTRAINTS

This section contains constraints on planned actions listed in the following section.

1. Livestock grazing will continue in the area under the provisions of this plan.

2. Rights-of-way (ROWs) within the area are recognized as valid and existing authorizations. New facilities will be confined to existing corridors and ROWs (see Appendix 1).

3. Valid mining claims have prior and existing rights as provided by the mining laws. Surface disturbance on mining claims is regulated by surface management regulations (43 CFR 3802 and 3809).

4. Portions of the Organ Mountains Scenic ACEC were classified in 1967 for recreational purposes under the Classification and Multiple Use (C&MU) Act and have been segregated from all forms of mineral entry since 1970. The remainder of the ACEC is open to mineral leasing with a No Surface Occupancy (NSO) stipulation. Portions of the ACEC that overlap the Organ Mountains Wilderness Study Area (WSA) are open to mining subject to the Interim Management Policy (IMP) and Guidelines for Lands Under Wilderness Review. The remainder of the CRMP area is open to mineral leasing subject to special stipulations and to locatable and salable entry based on appropriate mitigating measures and special stipulations.

5. Public land will be managed for the protection and enhancement of State-listed and threatened or endangered species. All known or potential habitat will be evaluated (by field examination when necessary) prior to implementing actions which may affect them. Consultations in accordance with Section 7 of the Endangered Species Act (ESA) will be conducted if appropriate.

6. Before implementation of surface-disturbing projects, including rangeland developments and vegetation manipulations, cultural resources will be inventoried and evaluated and attempts will be made to avoid adverse impacts to National Register eligible sites. Consultation will be made with the New Mexico State Historic Preservation Officer (SHPO) to develop acceptable mitigation strategies, in accordance with Programmatic Memorandum of Agreement No. NMSO 168, dated October 19, 1982, between the BLM, the Advisory Council on Historic Preservation, and the SHPO.

7. All surface-disturbing actions must meet the following Visual Resource Management (VRM) criteria:

   a. Class I in the Organ Mountains Scenic ACEC.

b. Class II in the remainder of the mountainous areas.

c. Class III and IV in the Organ/Franklin corridor and lower elevation portions of the area.

8. Construction of new fences will meet BLM specifications to permit the movement of identified wildlife, in this case deer and bighorn sheep. Specifications for deer fence would be 4-strand barbed wire with a maximum height of 42 inches, bottom wire smooth and wire spacing from ground up (in inches) - 16, 6, 8, and 12. Specifications for bighorn sheep fence would be 3-strand barbed wire with the bottom strand smooth, maximum height of 39 inches and wire spacing from ground up (in inches) - 20, 15, and 4.

9. All surface-disturbing activities will be controlled, planned, and designed to minimize erosion.

10. Protection or enhancement of riparian areas will be given priority in plan implementation.

11. Check dams or other erosion control structures will be used, where practical, to decrease erosion resulting from management activities.

12. No new permanent roads will be constructed within the CRMP area.

13. The area is closed to plant collection and sale. Permits may be issued for plant collection for research purposes.

14. Management actions within the Organ Mountains WSA will continue subject to the Bureau's Interim Management Policy and the Organ Mountains WSA Interim Management Plan until such time as the area is designated as wilderness by Congress or released to multiple uses. Following designation as wilderness, a Wilderness Management Plan amendment would be prepared to the CRMP.

PLANNED ACTIONS

The planned actions listed below constitute Alternative 1 or the Proposed Action. The planned actions also incorporate all valid portions of existing activity plans. The Proposed Action and three alternatives (including Present Management) are analyzed in the EA section following the Draft Management Plan. Some planned actions are contingent upon acquisition of private property or subject to authorization by the U.S. Army at Fort Bliss before implementation, as noted.

Threatened and Endangered (T&E) or State-listed Species

1. Recognize six major areas of importance within the CRMP area (see Map 2A located in map pocket).

   a. Dripping Springs/Ice Canyon
   b. Fillmore Canyon
   c. Indian Hollow
   d. Bishop's Cap
   e. Franklin Mountains
   f. Achenbach Canyon

   All six areas will be considered for designation as ACECs through the Mimbres RMP, which is scheduled for completion in 1992. The Dripping Springs/Ice Canyon area is entirely on private land belonging to the A. B. Cox Estate. The Fillmore Canyon area is largely on Fort Bliss and the A. B. Cox Estate private land. Designation of these two areas is contingent upon acquisition of private property and military approval. The other areas are entirely or mostly on public land.

2. Conduct additional inventory as needed to determine occurrence and distribution of both plants and animals (see Appendix 3).

3. Establish designated trails to minimize human impacts within State-listed or T&E plant areas (route trails to the side or outside of riparian areas). See Map 2A.

4. Prohibit overnight camping in back-country areas within riparian zones.

5. Following acquisition of the A. B. Cox property, reestablish the drift fence below Dripping Springs to exclude livestock from upper Ice Canyon (see Appendix 3 and Map 2C).

6. On a case-by-case basis, control/eliminate exotic plant species (evaluate historic significance first in vicinity of mines and other historic locales).

7. At the time mining claims are recorded or prior to the time exploration and development work begins, on-site inspections should be conducted with the claimant to determine the presence or absence of State-listed, candidate, threatened or endangered species. When mining exploration notices are received, inform the miners of their liability under the ESA and attempt to help them locate exploration areas where they would not disturb T&E plant species or their habitat. U.S. Fish and Wildlife Service (USFWS) would be notified immediately of all notices near T&E plant populations and of the results of consultations with miners.

   In any cases where mining requires Plans of Operation or where construction activities may affect T&E plant populations, USFWS would be consulted immediately as required by Section 7 of the ESA.

8. Protect all formations of Fusselman Dolomite as potential habitat for Sneed's pincushion cactus with the following measures. Removal of salable minerals would not be allowed in this formation. Other surface disturbing activities would not be permitted or would be mitigated to protect the habitat as appropriate. These decisions would be formulated through the upcoming RMP. See Map 2A.

   Complete mineral withdrawals for Sneed's pincushion cactus on approximately 280 acres. After acquisition of private land, complete mineral withdrawals on approximately 75 acres. See Map 2A. These decisions would be formulated through the RMP.

9. Monitor for illegal collecting through routine patrols by law enforcement personnel and Resource Area Staff.

Wildlife Habitat

1. Fence or develop 10 springs and associated riparian areas and maintain water for livestock outside each exclosure by providing a trough. The fences would be constructed to allow for passage of deer. If bighorn sheep are reintroduced to the area, the exclosures would be modified to allow for passage of bighorns. (See Appendix 4 and Map 2A).

2. Evaluate habitat for the potential reestablishment of desert bighorn sheep and turkeys. Future establishment would be dependent upon the cooperation of the U.S. Army at Fort Bliss and the New Mexico Department of Game and Fish. Reintroductions would be made by direct release into suitable habitats to avoid impacts associated with paddock construction. Potential release areas include the Minehouse Spring and Pena Blanca areas. There would be no restriction on other uses because of desert bighorn sheep reintroductions in the Organ Mountains.

3. Install 10 umbrella-type wildlife water catchments for use by deer, small game, non-game and other wildlife species. The drinkers would be grated to prevent use by livestock (see Appendix 4 and Map 2A).

4. Determine the role of fire in the maintenance of conifer forest communities. Also determine the role of fire as a natural force within other plant communities in the area. Following these determinations, evaluate and identify areas within all habitat types where the use of prescribed fire would increase habitat diversity and forage production. These determinations would be made through the RMP and associated Environmental Impact Statement. This plan would be amended to include appropriate proposals after the RMP is completed. In the interim, actively suppress all fires within the high elevation conifer forest areas and elsewhere within the CRMP area. Fire suppression tactics would be based on least cost methods.

   Work with Fort Bliss to identify and protect the conifer forest areas within the military withdrawal.

5. On a case-by-case basis, control/eliminate exotic or feral species according to the existing cooperative agreement between BLM

and the New Mexico Department of Game and Fish.

Rangeland Resources

1. Implement grazing systems utilizing 21 miles of new pasture fence to defer or rest areas containing riparian areas or large arroyo systems during the growing season (rather than fence all riparian or arroyo areas). BLM would also support the construction of livestock fences by the Army along the Fort Bliss boundary, where practical. All fences would be constructed to allow for passage of deer and bighorn sheep where necessary. A description, by allotment, including the proposed number of pastures, seasons of use, livestock numbers and grazing system to be used is shown in Appendix 5A. Individual agreements would be developed on each allotment in order to implement these grazing systems after approval of the CRMP. See Appendix 5B and Map 2A for project locations.

2. Install 3 wells, 2 1/2 miles of pipeline, 9 troughs, and 2 10,000-gallon storage tanks to provide water in the new pastures created by construction of fences in No. 1 above (see Appendix 5B and Map 2A).

3. Initiate brush control on up to 24,000 acres. Initially, most areas would require chemical treatment (Spike 20p for creosotebush and Reclaim for mesquite). Erosion control structures (small check dams or gabion structures) would be placed in gullies and small arroyos within the area prior to treatment. These structures would collect enough soil and water to promote the establishment of perennial grasses and other vegetation which would serve as a seed source after the initial treatment. Large arroyos would be avoided in all treatments to protect and maintain the vegetation in these important areas. After the initial treatment, brush control areas would be maintained in the desired vegetation condition by management of grazing and maintenance by prescribed burning (if deemed necessary and desirable). Any proposed brush control would have a post-treatment livestock and vegetation management plan prepared in advance of the treatment. Livestock grazing capacity would remain the same within each allotment following treatment. The main purpose of these treatments, from a livestock management standpoint, would be to create sufficient available forage in the lowland pastures to allow deferred grazing in the mountain areas. See Appendix 5B and Map 2A.

4. Change the allotment category from "M" (or Maintain) to "I" (or Improve) on the San Augustine Ranch allotment. All other allotments are currently in the "I" category.

Cultural Resources

1. Conduct a Class III archeological survey of the A. B. Cox property (following acquisition), with first priority emphasis on intensive use areas, followed by a Determination of Eligibility (DOE) to the National Register.

2. Conduct a Class II archeological survey of the remainder of area.

3. Following acquisition of the A. B. Cox property, test excavate the cave site at La Cueva through a field school. See Appendix 6 and Maps 2A and 2C.

4. Following acquisition of the A. B. Cox property, and in consultation with the SHPO, implement site restoration and stabilization of the ruins at Dripping Springs. Only the hotel (the building against the cliff) and gazebo would be restored. Bands played within the original gazebo and this environment could be recreated by inviting NMSU sponsored string quartets to play on special occasions. In the interim, efforts would be focused on installing a new (tin) roof on the hotel to prevent further damage to the fabric roof inside. Other stabilization efforts would focus on the rock/adobe walls of the other structures to prevent further deterioration. The more recent wooden structures need to be stabilized and protected from further vandalism. Until the restoration/stabilization work is completed, visitors would be allowed on guided tours only. In conjunction with the restoration/ stabilization, a self-guided interpretive

walk-through would be developed along with guided tours (see Appendix 6 and Maps 2A and 2G).

5. Following acquisition or permission of the landowner, nominate Dripping Springs and the Minehouse Spring bunkhouse to the State and National Register of Historic Places (see Map 2A and 2G).

6. Following acquisition of the Price property, protect any remaining intact archeological deposits at the Pena Blanca rockshelter pending submission of appropriate research proposals that would generate new information (no further excavations are needed in the near future). Plastic sheeting would be placed over the shelter deposits and sterile fill (sand) would be placed in the rockshelter to a depth of 20 centimeters to discourage further digging.

7. At the time mining claims are recorded or prior to the time exploration and development work begins, on-site inspections should be conducted with the claimant to determine the presence or absence of cultural resources. If present, sites would be avoided or mitigated, whichever is appropriate.

Recreation

1. Develop a Cooperative Management Agreement (CMA) with the U.S. Army at Fort Bliss to establish a management boundary (there would be no relinquishment or change in the withdrawal). BLM would manage recreation uses and other activities on that portion of Fort Bliss up to the topographic crest south of Aguirre Spring and west of the crest above Dripping Springs and Fillmore Canyon (total of 3,680 acres). Recreation access would not be allowed on that portion of BLM-administered public land east of the topographic crest in the vicinity of Pena Blanca and Bishop's Cap. BLM would post and patrol the boundary within these areas as well as publish closure orders for the areas east of the topographic crest in the vicinity of Bishop's Cap and Pena Blanca (total of 960 acres). Before public use is allowed within the withdrawal area, an historical record search of unexploded ordnance should be conducted and, if necessary, a mine sweep. The CMA would also contain provisions for the BLM and Army to work together to protect scenic and natural values in the Organ Mountains and in the north end of the Franklin Mountains (see Map 2A).

2. Acquire all remaining State land in the CRMP area. Acquire the NMSU land near Aguirre Spring. Acquire the following mining claims where the owner is willing to sell or exchange (Modoc, Ruby, Stevenson-Bennett Mines). Acquire the following private inholdings in addition to the A. B. Cox property - the Paul Price parcels (near Pena Blanca and Bishop's Cap), parcels adjacent to the north end of Franklin Mountains State Park and the Cooper/Andereed, Inc. parcels (south of Soledad Canyon Road). If the Cooper/Andereed, Inc. and Price parcel(s) cannot be acquired, work with the landowner and the County to preserve easements and to provide parking areas as necessary to ensure continued access to public land. Acquire other private land around the outer edges of the area on north end as the opportunity arises (see Map 2B).

3. Install a water system to provide a year-long potable source of water at the Aguirre Spring Campground. Alternatives include: hauling water, piping from a catchment located above the campground, piping from Tellez Spring, or pumping from Garfield Well or a well located on White Sands Missile Range. The water distribution system (regardless of the alternative selected) would consist of a central storage tank located near the upper loop and seven spigots (three in the upper loop, three in the lower loop and one in the group area). Two wildlife drinkers would also be installed along any pipeline outside the campground. Installation of the water system would enable the BLM to charge use fees at the campground (approximately $5.00 per car). These use fees would be used in the operation and maintenance of the facility (see Appendix 7 and Maps 2A and 2D).

4. Install collection boxes at the District Office and campground for donations to be

used in the operation and maintenance of the Aguirre Spring Campground.

5. Provide for a permanent residence (administrative site) for the Aguirre Spring Campground host(s). The installation would consist of a mobile home and storage building (see Appendix 7 and Map 2A).

6. Fence the Aguirre Spring Campground to correspond with the existing 1/4-mile safety/no-shooting restriction (to exclude livestock and delineate the campground boundary). Two cattleguards and gates would also be installed where the fence crosses the access road. Two people passes would also have to be installed on the Pine Tree and Baylor Pass Trails. See Appendix 7 and Maps 2A and 2D.

7. Following acquisition of the A. B. Cox property, a visitor center complex would be developed utilizing the existing ranch house and outbuildings. This would be named the A. B. Cox Visitor Center. Vehicle parking would be located a short distance to the west of the visitor center to prevent unobstructed views down the canyon towards La Cueva and the Mesilla Valley. The visitor center would be fully handicapped accessible. A picnic area/day camp facility would be located between the parking area and visitor center. A 1 1/2-mile service road/foot trail would be maintained between the visitor center and a small parking area located below the Dripping Springs ruins (near the tack building below the stone fence). The service road/foot trail would be closed to vehicle use except for administrative purposes, guided tours, and for handicap/elderly person access to the upper parking area. Guided tours could also be conducted using horse drawn wagons. Access would be by foot only to the ruins (a 1/4-mile surfaced handicap accessible trail would be constructed). In addition to the main service road/foot trail from the visitor center to Dripping Springs, the powerline service road (which runs down the canyon due west of Dripping Springs) would be closed to vehicle use except for administrative use (including powerline maintenance). See Appendix 7 and Maps 2A, 2C, 2F, and 2G.

8. Interpretative themes at the visitor center and in the vicinity of La Cueva and Dripping Springs would include:

   - Wildlife, recreation, plants, wilderness, grazing, mining, geology, cultural resources, history, paleontology, Fort Bliss/private lands, safety, and general outdoor ethics.

   - Selected artifacts removed from the La Cueva site and Pena Blanca rockshelter would be interpreted and displayed at the visitor center.

   - The visitor center themes would cover the entire area (Organ and Franklin Mountains).

9. Construct a new 55-unit picnic area and campground near the existing facility at La Cueva. Initial development of this area would consist of a dry campground and picnic area located on public land. Units located in the arroyos would be limited to day use only to minimize wildlife and vegetation impacts as well as potential safety hazards due to flooding. Following acquisition of the A. B. Cox property, additional facility development would occur, including provision of water (see Appendix 7 and Maps 2A, 2C, and 2E).

10. Pit toilet(s) would be installed at the upper parking area below Dripping Springs. Construct in a style compatible with historic resources.

11. A shelter would be constructed for shade at a point midway between Dripping Springs and the visitor center. Construct in a style similar to historic rock buildings in the area.

12. Develop a Cooperative Agreement among BLM, Dona Ana County, the City of Las Cruces, The Nature Conservancy, and NMSU for the purpose of jointly administering the visitor center complex. The agreement would provide:

   - Resident caretaker(s)

   - Volunteers to provide visitor contact and interpretive services

- Paid personnel from other agencies involved

- Funding for facility development and maintenance

13. Fence the entire La Cueva/Cox Ranch picnic/campground/day-camp area, parking area, and visitor center complex to exclude livestock and delineate the boundaries of the area for safety/no-shooting and other restrictions (1/4-mile zone). The existing trough and corral located just west of the present ranchhouse would be relocated. See Appendix 7 and Maps 2A and 2C.

14. Expand the parking area at the Baylor Pass westside trailhead to accommodate additional horse trailer parking (see Appendix 7 and Map 2A).

15. Construct a 4-mile equestrian/foot trail from the lower portion of the Baylor Pass Trail to connect with the La Cueva area. Horse trailer parking facilities would be provided near La Cueva (see Appendix 7 and Maps 2A and 2C).

16. Following acquisition of the A. B. Cox property, construct a surfaced trail or walkway to allow visitors to view the rockshelter at La Cueva, including appropriate interpretation. The trail would loop around the rocks past the bedrock mortars. The trail would originate at the visitor center and picnic area/campground. Also interpret the Modoc Millsite ruins via an interpretive trail originating at La Cueva (see Appendix 7 and Maps 2A and 2C).

17. Following acquisition of the Price property, construct a surfaced loop interpretive trail (surfacing will prevent erosion) around Pena Blanca to take visitors past the rockshelters and mortars. The trail would originate and end at a designated parking area. Coordinate with Drs. Upham and Blake at NMSU. (See Appendix 7 and Maps 2A and 2H).

18. Manage the area known as Soledad rock garden and ecology site for scientific, educational, and interpretive purposes (tied in with the developments and cooperative agreement between BLM, city, county, etc. proposed for the Cox property). Because of the proximity to a developing residential area, the protection and management of this area would be a high priority. Facilities would include a designated parking area, trail system, and signing. Climbing activities would be specifically prohibited (see Appendix 7 and Maps 2A and 2H).

19. Following military approval (via development of a CMA with the Army), develop a 5-mile cross-mountain foot trail to connect the Pine Tree Trail with the La Cueva area through Fillmore Canyon. The trail would be routed to avoid the Fillmore Canyon riparian area (see Appendix 7 and Map 2A).

20. Construct a 28-mile north/south hiking/equestrian/bicycle trail from the Franklin Mountains (tie in with Franklin Mountain State Park) to La Cueva. The portion of the trail within the Organ/Franklin corridor would be located west of the slope breaks on the upper part of the mesa to avoid soils of high erosion susceptibility (see Appendix 7 and Map 2A).

21. Develop a CMA between BLM and Franklin Mountains State Park. The CMA should address joint signing, patrols, trail development, visitor management and reporting procedures.

22. Following acquisition of the A. B. Cox property, the Dripping Springs road would be paved to the visitor center (approximately 4 miles, including the parking areas and picnic area loops) to reduce dust levels and need for maintenance (see Appendix 7 and Maps 2A and 2C).

23. Except for the main (westside) road from Soledad Canyon south to Pena Blanca (and vehicle routes that branch off this road to specific locations or to rangeland improvements), other vehicle routes in the vicinity of Achenbach Canyon and Pena Blanca would be posted as closed to vehicle use/dead end. Specifically, these are the jeep trail on the ridge north of Achenbach Canyon and jeep trails on the north and south sides of Pena Blanca (see Map 2A).

24. Vehicle use would be limited to designated roads and trails within the CRMP area. This would be accomplished by the following actions. Delete the west half of Sections 22 and 27 (640 acres) from the Mossman Arroyo ORV "open" area (these portions of the open area are presently within the proposed NCA boundary). In the Organ/Franklin corridor (which is presently undesignated) ORV use would be limited to designated roads and trails. On recently acquired State land (which is presently undesignated), ORV use would be limited to designated roads and trails. In the Organ Mountains WSA (which is presently limited to existing roads and trails), ORV use would be limited to designated roads and trails. (See Map 2A).

25. Mining access roads, powerlines and other development in the vicinity of Bishop's Cap would be confined to the southern exposure.

26. Conduct or update a mine hazard inventory. On a case-by-case basis, determine appropriate measures for hazard abatement. Measures could include fencing, signing, grating, or filling in. Actions would be coordinated with the SHPO and New Mexico Department of Energy, Minerals, and Natural Resources and the New Mexico Bureau of Mines and Mineral Resources. Old ore dumps would be preserved and not used for backfill materials.

27. There are presently no known caves in the CRMP area that contain significant resource values and that require special management attention except for the rockshelters at La Cueva and Pena Blanca. Any newly discovered caves would be managed by developing cave inventories and cave management plan amendments (appendices) to the CRMP. These inventories and plan amendments would be prepared in cooperation with the National Speleological Society and the Mesilla Valley Grotto.

    Maintain the availability of the La Cueva rocks for continued cave rescue practice (following acquisition of the A. B. Cox property). The installation of additional permanent climbing devices such as pitons would be prohibited. Climbing above the entrance to the La Cueva rockshelter would also be prohibited.

28. All pets would be confined to leashes within designated campgrounds and on designated trails. Pets should be under the control of the owner at all times.

29. The maximum camping stay limit would be 7 consecutive days anywhere within the area. Cutting or gathering of firewood within designated camping areas would be prohibited. Quiet hours in designated campgrounds would be in effect between 10 p.m. and 6 a.m. The Aguirre Spring Campground would be closed to entry by means of a locked gate between these hours as would any new campground.

30. A delegated law enforcement Ranger would be provided to patrol the area.

31. Following acquisition of the A. B. Cox property and as facility development begins in that area, at least two additional full-time maintenance personnel would be provided as well as volunteer campground hosts and temporary personnel.

32. Develop a colored recreation map clearly depicting legal access and land status using numbered roads and trails that correspond to the map.

33. Use Carsonite markers to post critical public/private and public/military boundaries.

34. Place climbing safety signs at all trailheads. Minimize the number of all signs, where possible.

IMPLEMENTATION, FUNDING, AND MAINTENANCE

Habitat management actions outlined in this plan will be implemented under Sikes Act Authority with the New Mexico Department of Game and Fish (NMDGF). Appendices 3 through 8 contain descriptions of projects, priorities for implementation, units, and cost estimates as they relate to the planned actions. Costs shown are 1988 costs. All proposals are subject to funding availability and to further analysis on a project specific basis to determine feasibility and design criteria.

Funding for project proposals will come from a variety of sources. In some cases, funding will be provided through direct appropriation as a part of the Bureau's normal budget process. Funding from other sources such as contributions through the BLM's forthcoming Gift Catalog, Challenge Grants, and funding through other agencies or charitable organizations will be actively solicited and utilized for implementation and maintenance. The formation of a non-profit natural history organization devoted to assisting the Bureau in the implementation of the recreation, cultural, and interpretive aspects of this CRMP will be greatly encouraged and supported by the Bureau.

The NMDGF, sportsmen's groups, and other volunteers will also be relied on to provide assistance for implementation and maintenance.

MONITORING (EVALUATION AND REVISION)

This plan may be modified if data from monitoring or information from other sources indicates a need for change. Where applicable, the concept of Limits of Acceptable Change (LAC) will be used in monitoring to determine whether or not management actions are meeting the stated objectives. LAC standards or indicators, once established, signal unwanted changes in the environment or visitor's perceptions that will dictate the need for a change in management direction.

Modification or revision of the habitat management portion of this plan will be agreed upon by the BLM and the NMDGF. Appendix 9 contains monitoring strategies for the CRMP.

CHAPTER 1

INTRODUCTION

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INTRODUCTION

INTRODUCTION

This draft environmental assessment (EA) analyzes the impacts of four alternatives to determine which alternative best resolves the issues--based on the principles of multiple-use, sustained yield, and maintenance of environmental quality. Each alternative represents a different level of resource management for the area.

The goal of this EA is to analyze site-specific impacts of the alternatives which are presented and recommend any further mitigation which may be necessary.

Site-specific project EAs may be required as this plan is implemented.

The purpose and need of this plan and EA are fully described in the Introduction to the Management Plan.

CHAPTER 2

ALTERNATIVES INCLUDING THE PROPOSED ACTION

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ALTERNATIVES INCLUDING THE PROPOSED ACTION

Standard management practices directed by regulations and policy are applicable to all alternatives. Protection of soils, watershed, visual resources, air quality, and other resources is required by the Federal Land Policy and Management Act of 1976. Specific guidance for those measures are embodied in policy statements and regulations. In addition, compliance with specific legislation, such as the Endangered Species Act and the National Environmental Policy Act, is required.

ALTERNATIVE 1 - PROPOSED ACTION

The Proposed Action is described in the preceeding Management Plan section under Planned Actions.

ALTERNATIVE 2 - LEAST INTENSIVE

T&E or State-listed Species

Same as Alternative 1.

Wildlife Habitat

Same as Alternative 1.

Rangeland Resources

Same as Alternative 1 except there would be no brush control within the area.

Cultural Resources

Same as Alternative 1.

Recreation

Same as Alternative 1 except the following:

1. There would be no westside campground near La Cueva (day-use facility only). There would also be no overnight camping allowed at the Aguirre Spring Campground.

2. There would be no potable water provided at the Aguirre Spring Campground.

3. The westside road (jeep trail) between the Soledad Canyon road (County Road C078) and the Mossman Arroyo road (County Road B059) would be closed to all vehicle use.

ALTERNATIVE 3 - MOST INTENSIVE

T&E or State-listed Species

Same as Alternative 1.

Wildlife Habitat

Same as Alternative 1.

Rangeland Resources

Same as Alternative 1.

Cultural Resources

Same as Alternative 1.

Recreation

Same as Alternative 1 except for the following:

1. The westside road between the Soledad Canyon road and Mossman Arroyo road would be upgraded to an oiled or surfaced road (comparable to the present Baylor Canyon road) at a minimum.

2. The Dripping Springs road from the visitor center complex to the handicap parking area below Dripping Springs would be open to vehicle use. The powerline service road would remain open to vehicle use.

ALTERNATIVE 4 - PRESENT MANAGEMENT

Under this alternative, management would continue under the guidance of existing activity plans, MFP decisions, and Bureau policy as outlined in the following sections.

T&E or State-listed Species

Existing activity plan actions address only the Federally-listed Sneed's pincushion cactus.

1. Monitor for illegal collecting through routine patrols by law enforcement personnel and Resource Area staff.

2. Inventory all populations on public land to determine a total number of individuals.

3. Acquire State and private lands with Sneed's pincushion populations. This can be done through purchase or exchange. After acquisition, complete a mineral withdrawal on approximately 75 acres. See Map 3A.

4. When mining exploration notices are received, inform the miners of their liability under the ESA and attempt to help them locate exploration areas where they would not disturb Sneed's pincushion or its habitat. USFWS would be notified immediately of all notices near Sneed's populations and of the results of consultations with miners.

5. In any cases where mining requires Plans of Operation or where construction activities may affect Sneed's populations, USFWS would be notified immediately as required by Section 7 of the ESA.

6. Protect all formations of Fusselman dolomite as potential habitat with the following measures. Removal of salable minerals would not be allowed in this formation. Other surface-disturbing activities would not be permitted or would be mitigated to protect the habitat as appropriate. These decisions would be formulated through the upcoming Resource Management Plan (RMP). See Map 3A.

7. Complete mineral withdrawals on approximately 280 acres. See Map 3A. These withdrawals would be addressed in the upcoming RMP.

8. All fires in the Franklin Mountains would be considered full suppression situations. However, a resource advisor would be dispatched to all fires in the Franklins or Bishop's Cap areas to ensure the proper placement of fire control activities.

Wildlife Habitat

There would be no planned actions specific to wildlife habitat management except on a case-by-case basis.

Rangeland Resources

The only planned actions specific to rangeland resources would be 1 1/2 mile of pipeline, 3 troughs, and 9 erosion control structures (all on the Baylor Canyon allotment). Construction of other new fences, wells, pipelines, or chemical vegetation treatment would be done on a case-by-case basis consistent with the Southern Rio Grande MFP and Las Cruces/Lordsburg MFP Amendment.

Cultural Resources

There would be no planned actions specific to cultural resources except on a case-by-case basis.

Recreation

Recreation management would continue under the auspices of the 1975 and 1985 Recreation Plan revisions and the 1976 Interpretive Plan which outlined interpretive facility development.

1. The 1975 plan revision outlined the following facility developments (see Maps 3A and 3C for locations of projects that have not yet been implemented).

   - o Aguirre Spring Campground (completed)
   - o Visitor Center
   - o Sugarloaf Trail
   - o Aguirre Spring Access Road (completed)
   - o Baylor Pass Trailhead (completed)
   - o Baylor Peak Trail
   - o Baylor Pass Monument
   - o Westside Road Extension and Improvement (south of Soledad Canyon)
   - o Needle's Eye Picnic Site
   - o Soledad Ecology Garden

2. The 1976 Interpretive Plan addressed the following:

   - o Interpretive Center
   - o Bulletin boards at Aguirre Spring Campground (completed)
   - o San Augustine Wayside (completed)
   - o Soledad Ecology Garden

3. The 1985 Recreation Plan outlined the following (most of which was taken directly from the ACEC Management Plan):

   - o The Organ Mountains Scenic ACEC would be managed under the objectives of VRM Class

I as follows. Natural ecological changes and very limited management activity would be allowed. Any contrast created within the characteristic landscape must not attract attention.

- The visual impact created by the exposed gravel piles adjacent to the Stevenson-Bennett mine would be mitigated by removing the piles and revegetating the area.

- The remaining 6,017 acres of the ACEC would be segregated from all forms of appropriation under the public land laws including the mining and material sales laws, subject to valid existing rights. An additional 2,753 acres of Federal mineral estate on the north, east, and south boundaries of the ACEC would also be segregated from appropriation to enhance the management of the ACEC. Most of the existing C&MU segregation and the proposed segregation above are either within the present WSA boundary or the proposed wilderness boundary dependent on acquisition of the NMSU property. The implementation of the above withdrawals would be in conflict with the present MFP.

- The visual resources of the ACEC and the contiguous 2,753 acres of Federal mineral estate would be protected by a No Surface Occupancy (NSO) stipulation for oil and gas and geothermal leasing. This would be in conflict with the present MFP amendment which placed a NSO stipulation on the ACEC but not adjacent lands.

- No new ROW easements would be approved.

- A cooperative agreement would be sought with the Regents of New Mexico State University to ensure that management of the following lands would be under the objectives of VRM Class I: T. 22 S., R. 4 E., Sections 19, 29, 30 and Section 31, NE 1/4, E 1/2 SE 1/4.

- A cooperative agreement would be sought with the State of New Mexico to ensure that management of minerals under the following lands would be under the objectives of VRM Class I: T. 22 S., R. 3 E., Section 36, N 1/2 NE 1/4, SW 1/4 NE 1/4, W 1/2, W 1/2 SE 1/4.

- Acquire the A. B. Cox Ranch property and all State inholdings (see Map 3B).

CHAPTER 3

AFFECTED ENVIRONMENT

CHAPTER 3
AFFECTED ENVIRONMENT

Except for Climate and Topography, the following section is restricted to those elements of the environment likely to be impacted by the proposed action or alternatives.

CLIMATE

The planning area has an arid to semiarid continental climate with mild winters and hot summers. Average annual precipitation ranges from 8 to 16 inches at elevations below 6,000 feet and from 14 to 16 inches at higher elevations. Over half the yearly precipitation is received during July, August, and September when moist air masses move into the area from the Gulf of Mexico. Fall, winter, and spring are relatively dry seasons.

The average annual temperature of the planning area is about 60° F. Maximum temperatures average about 95° F in the summer and minimum temperatures average about 15° F in the winter.

Wind speeds average about 6 miles per hour. The spring months (March-May) are the windy season. Dry, gusty winds are predominantly from the west and may exceed 30 mph. The gusty winds, coupled with dry soils, occasionally cause severe afternoon dust storms.

TOPOGRAPHY

The planning area is within the Basin and Range physiographic province. Typical landforms include rugged and steep fault-block mountain ranges, broad basins, and gentle volcanic landforms. The prominent topographic features of the area are the Organ and Franklin Mountains that form a north-south trending chain with the Rio Grande Valley to the west and the Tularosa Basin to the east.

Elevations range from a low of 3,900 feet in the foothills of the Franklin Mountains to a high of 9,012 feet on Organ Needle. Most of the Organ Mountains have a slope greater than 50 percent.

SOILS

The soils of Dona Ana County were mapped during 1961-1975. Major soils of the CRMP area as described in the Soil Survey of Dona Ana County Area New Mexico (SCS 1980) are listed in order of predominance in Table 3-1.

GEOLOGY AND MINERALS

The Organ mining district has been one of the most important metal-producing areas in New Mexico. Most of the mines have been inactive since the late 1800s. There is significant potential for base and precious metals along the western flank of the Organs (including the pediment which is 2 to 3 miles west of the mountain crest) from Organ south to the Modoc mine.

According to Seager (1981), two conclusions can be reached concerning the future mineral potential of the Organ Mountains. The first is that all the major orebodies exposed at the surface have been found and further production of known deposits cannot occur under current economic conditions, except on a very small scale. The second conclusion is that nothing is known regarding the subsurface potential of the pediment south of Organ.

Much of the pediment south of Organ is cut on the Panther Seep Formation which is known for not being susceptible to mineralization in the Organs. This probably accounts for the lack of mineralization south of Organ (compared to the area north of Organ). However, where reactive rocks like the Lead Camp Limestone and the Hueco Limestone are exposed, such as at the Ruby and Modoc mines, mineral deposits have been found. The Lead Camp and the Hueco are assumed to occur in the subsurface beneath the Panther Seep Formation. Deposits of equal or greater value than those mined from the shallow workings in the Organs almost certainly lie hidden at deeper depths beneath the western pediment of the Organ Mountains (Seager 1981).

Fluorite occurs on the western flank of the Organ Mountains from the Ruby mine south to the Modoc mine area. Fluorite also occurs in the Bishop's Cap hills. Most of the fluorite deposits in the Bishop's Cap area occur where faults transect the Fusselman Dolomite. The Fusselman Dolomite in the Bishop's Cap area is of the high-magnesium

TABLE 3-1
SOILS OF THE CRMP AREA

Soil Type	Major Soil Series	Approximate Percent of CRMP Area
1. Rock outcrop and shallow to deep, moderately rolling to extremely steep, well-drained soils that formed in alluvium and colluvium on mountains. This is the primary soil type in the Organ, Dona Ana, Robledo, Uvas, and East Potrillo Mountains.	Rock Outcrop Torriorthents	45
2. Shallow to deep, undulating to moderately rolling, well-drained soils that formed in gravelly and very gravelly alluvium on fans, terraces, ridges, and piedmonts. These soils are primarily found along mountain footslopes, are calcareous, and commonly have a caliche layer below the surface. Much of the East Mesa includes these soils.	Nickel Upton	40
3. Deep, gently undulating to very steep, well-drained to excessively drained soils that formed in alluvium, gravelly alluvium, and alluvium modified by wind on fans and terraces. These are the primary soils on gravelly and sandy breaks and upper margins of the Rio Grande Valley. This soil type is severely dissected by arroyos and is a major contributor of sediment to the Rio Grande.	Caliza Bluepoint Yturbide	7
4. Deep, nearly level to undulating, well-drained to somewhat excessively drained soils that formed in alluvium, alluvium modified by wind, and eolian material on fans and mesas. These soils are common in mesquite sand dune areas primarily on the West Mesa and in the southern part of the County.	Pajarito Onite Wink	4
5. Deep, very gently sloping, well-drained soils that formed in alluvium and alluvium modified by wind on fans, piedmonts, and valley and basin floors. This soil type is commonly found northeast of Las Cruces in the Jornada Basin.	Berino Dona Ana	3
6. Deep, nearly level to gently undulating, well-drained soils that formed in alluvium on fans, basin floors, and floodplains. This productive soils type is commonly found in small playas and tobosa draw areas including the Isaack Lake and Mason Draws.	Mimbres Stellar	1

type and is a potential source of magnesium (Kottlowski 1957).

The northern portion of the Franklin Mountains has potential for high-calcium limestone, magnesium, lead, fluorite, and silver. Kottlowski (1962) reported the occurrence of high-calcium limestone from Pennsylvanian strata in the northern Franklins. The Fusselman Dolomite, on the east side of the Franklins, probably contains deposits of high-magnesium dolomite because the rock is chemically similar to the known deposits at Bishop's Cap (Kottlowski 1957). Dunham (1935) reported the occurrence of galena, silver, and fluorite about a mile north of Webb Gap. The mineralization occurs along the contact between the Fusselman Dolomite and the Canutillo Formation.

Other mineral commodities within the CRMP area include building stone, clay, gypsum, and geothermal resources. Some of the thin-bedded limestone formations in the Franklin Mountains and Bishop's Cap area are suitable for use as building or decorative stone. Clay, that may be of brick quality, occurs along the western base of the Franklins, in the vicinity of Webb Gap and North Anthony's Nose. Gypsum has been mined southwest of Anthony Gap about a quarter mile north of the New Mexico-Texas state line (Weber and Kottlowski 1959). Potential for geothermal resources exists along the east side of the Rio Grande Valley between Mesquite and Anthony. This area is the southern extension of the Las Cruces East Mesa Geothermal Field identified by Icerman and Lohse (1983).

VEGETATION

A thorough discussion of the vegetation resources, threatened and endangered plants, and information collected during the range surveys for Dona Ana County can be found in the Vegetation Section of the Draft Southern Rio Grande Planning Area (SRGPA) Grazing EIS (May 1981) and the Draft Southern Rio Grande Planning Area/ Environmental Impact Statement (SRGPA/EIS) (March 1986).

The Organ Mountains exhibit vegetal influences from the Chihuahuan Desert, Rocky Mountains, and Great Plains. The 4,000 foot elevational gradient of the mountains combine with extreme variation in topography and aspect to create a high diversity of plant habitats within the mountain range.

The upper portions of the mountains are dominated by Ponderosa pine, Gambel's oak, and other species typical of the Rocky Mountains. Middle elevations typically support pinyon/juniper/oak woodland with numerous shrubs such as sotol, Apacheplume, mountain mahogany, and acacia plus numerous grass species. The lower slopes of the mountains and desert are dominated by creosotebush and grama grasses with mesquite, sumacs, and desert willows in the arroyos.

In the arroyo areas where more water is available to the plant species, a diverse flora thrives consisting of oaks, hackberry, desert willow, Apacheplume, sumac, mesquite, and snakeweed.

The Organ Mountains contain numerous seeps and springs that support small riparian areas, which are rare on public land in southern New Mexico.

In Dona Ana County, the Southern Desert is the Major Land Resource Area (MLRA) described by the Soil Conservation Service (1979 and 1980). The range sites which occur on the land identified for the Organ Mountains CRMP area are: hills, gravelly loam, gravelly, sandy, deep sand, gravelly sand, and bottomland and draw.

The hills range site is characterized by rolling to steep hills and mountain footslopes. Slopes average from 15 to 50 percent while direction of slope is variable. The major vegetation subtypes on this range site are mixed desert shrub, mixed mountain shrub, sotol, creosotebush, mountain mahogany, midgrass, oak brush, and Ponderosa pine.

The gravelly loam range site occurs on nearly level to rolling piedmont slopes and alluvial fans. Slopes occasionally reach 30 percent but average less than 15 percent. The major vegetation subtypes on this range site are creosotebush, mixed desert shrub, sotol, snakeweed, mesquite, Mormon tea, and midgrass.

The gravelly range site occurs along the footslopes of desert mountains and side slopes of arroyos and water courses. The landscape is characterized by low hills, ridges, fans, and footslopes with 5 to 30 percent slope. Creosotebush is the dominant vegetation type.

The sandy range site usually occurs on level to gently or undulative piedmont slopes or plains.

Slopes range from 1 to 15 percent. The major vegetation subtypes on this range site are mesquite, creosotebush, shortgrass, snakeweed, and Mormon tea.

The deep sand range site occurs on level to gently sloping old eolian and alluvial deposits. Slopes range from 1 to 9 percent and average about 3 percent. Mesquite and broom dalea are the dominant vegetation subtypes on this range site.

The gravelly sand range site usually occurs in drained washes, as arroyo terraces, alluvial fans, or dissected piedmont slopes. Slopes range to 30 percent, but average less than 15 percent. The major vegetation subtypes on this range site are creosotebush, mixed desert shrub, and yucca.

The bottomland range site occurs principally on floodplains of intermittent streams and is commonly subject to frequent overflow or flooding (normally more often than once in 2 years). Slopes average less than 3 percent. Tarbush is the dominant vegetation subtype on this range site.

There are no vegetation sale areas within the CRMP area.

The Organ Mountains contain one of the highest concentrations of threatened and endangered (T&E) plant species found anywhere in the State of New Mexico. Many of these species occur on or adjacent to the A. B. Cox Ranch property. Table 3-2 lists the 24 T&E plant species which are known to occur in the CRMP area.

LIVESTOCK GRAZING

A thorough discussion of livestock grazing in Dona Ana County can be found in the Draft SRGPA/EIS (BLM 1986) and the Draft SRGPA Grazing EIS (BLM 1981).

There are seven allotments that would be affected by the actions proposed in the CRMP. These allotments are listed in Table 3-3.

There is one existing brush control treatment area within the Baylor Canyon allotment (see Map 2A). Creosotebush was treated on 1,280 acres in the fall of 1987. Spike 20p (Tebuthiuron) was used at 1/2 pound active ingredient/acre. Final results on the amount of creosotebush killed will not be available for 3 years, although the expected mortality rate is 80 percent. Livestock grazing would be kept off the treated area for the second and third growing seasons.

Monitoring studies, including percent utilization of key forage species, have been initiated on five allotments: Baylor Canyon (No. 5013), A. B. Cox (No. 5002), Paul Price (No. 5009), W. F. Blythe (No. 5001), and W. F. Blythe (No. 5004). These studies are being used to help determine if any adjustments in grazing use are needed on these allotments. Adjustments have been made on allotments 5001 and 5004 based on these studies.

CULTURAL RESOURCES

The Organ Mountains exhibit evidence of human occupation beginning in the Paleoindian period approximately 9500 B.C.-4000 B.C. This evidence consists primarily of isolated surface finds of projectile points representative of the Clovis, Folsom, and Plano cultural traditions. Campsites of these Paleoindian, nomadic big game hunters could occur within the CRMP area. Other evidence of prehistoric occupation of the area consists of numerous open campsites and rockshelters occupied by nomadic Archaic period cultures dating from approximately 7000 B.C.- A.D. 100. Pena Blanca and La Cueva rockshelters are examples of specific sites which contain Archaic period cultural remains within the Organ Mountains. The Pena Blanca site has produced the earliest cultivated corn in the United States (Upham et al 1988).

The greatest numbers of archeological sites within the area fall within the Jornada Mogollon cultural period, which dates from approximately A.D. 200 to A.D. 1400. The Mogollon engaged in intensive agriculture, manufactured ceramic artifacts, and lived in sedentary villages. Pena Blanca and La Cueva rockshelters also contain Mogollon occupational levels. Pithouse villages and rock/adobe masonry walled single or multiple-roomed surface structures occur within the general Organ Mountains region.

The arrival of the 1581 Chamuscado-Rodriquez Spanish exploration expedition heralds the beginning of the historic period around the Organ Mountains. The expedition followed the Rio

TABLE 3-2

THREATENED, ENDANGERED, AND STATE-LISTED PLANT SPECIES
POTENTIALLY OCCURRING ON PUBLIC LAND IN THE ORGAN MOUNTAINS CRMP AREA a/

Life Form b/	Scientific Name	Common Name (Family)	Status c/	Occurrences in the CRMP Area	Habitat
PF	Aletes filifolius	Threadleaf false carrot (Apiaceae)	SS	Found in the Organ Mountains on the Fort Bliss military reservation.	Occurs in rocky canyons and on cliffs between 5,500 and 7,500 feet with pinyon and juniper species; are apparently widespread.
PF	Castilleja organorum	Organ Mountain paintbrush (Scrophulariaceae)	SS	Found in Dripping Springs, Organ Mountains on private land.	Occurs on rocky sides of the Organ Mountains at altitudes of 7,000-8,000 feet.
C	Cereus greggii	Night-blooming cereus (Cactaceae)	FL/C	Found in Franklin Mountains and Organ Mountains.	Populations are widespread with a few individuals in each. Grows on gravelly range sites with bush muhly, Mormon tea, creosotebush, and range ratany; under or near creosotebush and mesquite bushes in rocky areas; common at lower elevations; granite soil (rhyolite) and deep light soils. Altitudes 3,000-5,000 feet.
AF	Cleome multicaulis	Slender Spiderflower (Capparaceae)	FL/C	May occur in the Mesilla Valley, Dona Ana County.	Occurs on alkaline sinks, old saline lake beds, and cienegas from 3,000 to 7,000 feet.
C	Coryphantha organesis	Organ Mountain pincushion cactus (Cactaceae)	SS	Found on the Needles, in Drilling Springs, and Fillmore Canyon, Organ Mountains on private land and the Fort Bliss military reservation.	Occurs on west-facing mountain slopes, rhyolite outcrops at 7,300 feet and above.
C	Coryphantha scheeri var. scheeri c.s. var. uncinata c.s. var. valida	Scheer's pincushion cactus (Cactaceae)	SS	Found on the mesas around Las Cruces, New Mexico.	Same for all subspecies; open, sandy mesas or flats 3,000-5,000 feet.
C	Coryphantha sneedii var. sneedii	Sneed's pincushion cactus (Cactaceae)	FL/E	Found in the Bishop's Cap and Franklin Mountains.	Occurs on limestone outcrops on south- and west-facing slopes with sotol, creosotebush, sumac, and Dalea between 4,000-6,000 feet.
C	Coryphantha villardii	Villard's pincushion cactus (Cactaceae)	SS	Found on the east side of the Franklin Mountains and the Fort Bliss military reservation.	Occurs on limestone outcrops at higher elevations from 5,000-7,000 feet.
C	Ferocactus wislizenii	Southwestern barrel cactus (Cactaceae)	SS	Found on the north, east and south mesas around Las Cruces, New Mexico.	Found on rocky, sandy, or gravelly slopes in deserts, grasslands or canyons from 3,000-5,000 feet.
BF	Macheranthera amplifolia	Organ Mountain aster (Asteraceae)	SS	Found in Fillmore Canyon, Organ Mountains on the Fort Bliss military reservation.	Mountainous regions. Rocky outcrops at 6,000-7,000 feet.
C	Mammillaria wrightii	Wright's fishhook cactus (Cactaceae)	SS	Found on east mesa and in the Organ Mountains.	Occurs on rocky or gravelly slopes and canyons from 3,000-7,000 feet.
PF	Oenothera organesis	Organ Mountain evening primrose (Onagraceae)	FL/C	Found in numerous canyons and on various peaks in the Organ Mountains mostly on the Fort Bliss military reservation and public land.	Occurs in wet areas forming dense mats and in steep rocky canyons from 6,000-7,000 feet.
C	Opuntia arenaria	Sand prickly pear (Cactaceae)	FL/C	Found in the Mesilla Valley on private land and near the Franklin Mountains.	Grows on dunes and interdune sandy areas in small (5-12 plants) patches with creosotebush and mesquite.
PF	Penstemon alamosensis	Alamo beard tongue (Scrophulariaceae)	FL/C	Found on the Black and San Andres Mountains on the White Sands military reservation.	Grows in crevices and ledges in limestone cliffs and along canyon bottoms.

TABLE 3-2 (Concluded)
THREATENED, ENDANGERED, AND STATE-LISTED PLANT SPECIES
POTENTIALLY OCCURRING ON PUBLIC LAND IN THE ORGAN MTN. CRMP AREA a/

Life Form b/	Scientific Name	Common Name (Family)	Status c/	Occurrences in the CRMP Area	Habitat
PF	Perityle cernua	Nodding cliff daisy (Asteraceae)	FL/C	Found in various canyons of the Organ Mountains and on the Fort Bliss military reservation.	Occurs in crevices and overhangs on northeast-facing vertical monzonite and granite cliff faces at elevations of 5,800 to 7,200 feet. Areas receive no sunlight or less than 2 hours per day.
PF	Perityle staurophylla	None (Asteraceae)	SS	Found in the San Andres Mountains and on the White Sands military reservation.	Found on east-facing limestone cliffs at 5,800 feet and in he pinyon-juniper zone.
S	Rosa stellata	Desert rose (Rosaceae)	FL/C	Found in Fillmore Canyon of the Organ Mountains and on the Fort Bliss military reservation.	Occurs on steep, north-facing, heavily shaded igneous cliffs between 5,000 and 7,000 feet.
PF	Salvia summa	Supreme sage (Lamiaceae)	SS	Found on Rattlesnake Ridge of the Organ Mountains and on the Fort Bliss military reservation.	Occurs at the base of limestone outcrops on ridges at 5,500 feet.
PF	Scrophularia laevis	Organ Mountain figwort (Scrophulariaceae)	SS	Found and collected on the Organ Needle and Organ Peak, Organ Mountains on public land and the Fort Bliss military reservation.	Found on the highest peak in the Organ Mountains and on a moist, shaded slope high on Organ Peak (7,200 feet).
S	Sicyos glaber	Smooth cucumber (Cucurbitaceae)	SS	Found in various locations on the west side of the Organ Mountains on the Fort Bliss military reservation and on public land.	Occurs in rocky soils on open slopes and in canyons on the west face of the Organ Mountains from 5,000 to 6,000 feet.
PF	Silene plankii	Plank catchfly (Caryophyllaceae)	SS	Found in the Organ Mountains and on both the White Sands and the Fort Bliss military reservations.	Found on vertical east- and west-facing heavily shaded igneous cliffs in canyons and in nitches receiving less than two hours sunlight per day between 5,800 and 8,000 feet.
PG	Stipa curvifolia	Curlleaf needlegrass (Poaceae)	SS	Found near Bishops Cap, Organ Mountains on the Fort Bliss military reservation, and Tortugas Mountain.	Found on north- and northeast-facing steep and limestone rim slopes at 4,500 feet.
PF	Talinum longipes	Long-stemmed talinum (Portulacaceae)	SS	Found on Tortugas Mountain, Dona Ana County.	Dry hills at low elevations.
PF	Tradescantia wrightii	Wright spiderlily (Commelinaceae)	SS	Found in the Franklin Mountains near Anthony Gap.	Occurs on ledges, moist canyon, streambanks, usually on limestone substrate from 3,500 to 5,000 feet.

Sources: Spellenburg, 1978; New Mexico Heritage Program, 1982.

Notes: a/To ensure complete coverage of all threatened, endangered, or sensitive plant species, consideration was given to all species on public land or within one mile of public land.

b/Life Form:
PG - Perennial Grass
AF - Annual Forb
BF - Biannual Forb
PF - Perennial Forb
S - Shrub
C - Cactus

c/Status:
FL/E - Federally Listed/Endangered
FL/C - Federally Listed Candidate (species designated as "candidate species" by the Fish and Wildlife Service)
SS - State Sensitive (species selected by the New Mexico Heritage Program as a special concern element)

TABLE 3-3
ALLOTMENTS WITHIN CRMP AREA

Allotment Name	Allotment Number	Grazing Preference (AUs) Within CRMP Area	Total Grazing Peference (AUs)	CRMP Acres	Total Acres
W. F. Blythe	5001	53	100	3,840	15,680
A. B. Cox Trust	5002	126	246	9,304	15,180
San Augustine Ranch	5003	100	100	4,897	4,897
W. F. Blythe (leased from Hall and King)	5004	41	36	6,400	8,663
Paul Price Estate	5009	135	168	18,600	32,024
S. A. Walter	5012	14	33	640	1,180
Baylor Canyon	5013	105	151	8,156	10,850

Grande along the western edge of the Organ Mountains. The Spanish route along the Rio Grande became the Camino Real, which became the major north/south trade route, and linked New Mexico with Mexico. The early Spanish explorers found local Janos, Jocomes, and Mansos Indian groups living in the area. Also various Apachean groups were a constant threat to the safety of European explorers and settlers. A Spanish garrison was established in 1843 and was the beginning of intensive settlement of the region. The southern boundary of New Mexico was established by the Treaty of Guadalupe Hidalgo in 1847 and the Gadsden Treaty of 1854 granted the Mesilla Valley to the United States. The famous Butterfield Trail ran from St. Louis to San Francisco (through the Mesilla Valley) from 1858-1861. Historic stage stations are located periodically along the Butterfield Trail. In 1851 Fort Fillmore was founded in the Mesilla Valley and in 1861 the fort fell to Confederate invasion. The retreating Union soldiers were captured by the Confederate troops near San Augustine Pass in the Organ Mountains. During the late 19th and 20th centuries, intensive settlement and mining booms occurred in the region. In the late 1800s, Van Patten's Mountain Camp resort was built in the Organ Mountains and these ruins still survive in a relatively good state of preservation (Wilson 1975).

A wide variety of archeological sites are known to occur within the CRMP area. Many of these sites have interpretive and research potential. Many additional archeological sites are likely to be located within the unsurveyed portions of the CRMP area. Cultural resources found within the study area include prehistoric campsites, such as lithic artifact scatters. These campsites often contain ceramic artifacts, groundstone artifacts, and hearth/activity areas. Small pueblo period village sites are also known to be located within the study area, and are usually situated nearby to major water sources such as permanent springs and large intermittent washes. Many of the rockshelters within the study area exhibit evidence of prehistoric and historic occupations. Post-contact historic sites and mining related historic sites also occur within the CRMP area. Several sites of major

interpretive and research importance are known to occur in the study area, and some of these are described in more detail below.

La Cueva is a large rockshelter situated on the proposed A. B. Cox Ranch land exchange property. The rockshelter was occupied extensively in the prehistoric and historic periods. A large trash midden is present outside of the shelter. La Cueva has been subjected to numerous amateur and professional excavations but unfortunately none of the results of these excavations have ever been published.

Pena Blanca Rockshelters consist of several small rockshelters along the west side of the Organ Mountains. These rockshelters were subjected to intensive test excavations by the New Mexico State University archeological field school from 1983 through 1986. These shelters have yielded the earliest eight-row corn in North America. The shelters exhibit prehistoric occupations from approximately 1225 B.C. through A.D. 1400 (Upham and Johnson 1988).

Modoc Millsite and Mine consists of the early 1900 remains of a lead mining and processing site. The ruins of this operation are situated in the vicinity of the A. B. Cox Ranch.

Van Patten's Mountain Resort (Dripping Springs) is a historic resort which opened in the late 1870s. The resort is located on the A. B. Cox Ranch exchange land and is now abandoned. The resort was one of the most prominent retreats in southern New Mexico (Wilson 1975).

Minehouse Spring Bunkhouse is a historic structure built in 1921 and located on the west side of the Organ Mountains. The stone structure is in excellent condition, and is believed eligible for the National Register of Historic Places (NRHP).

Stevenson's Silver Mine is located approximately 1 1/2 miles south of Organ, New Mexico on the west side of the Organ Mountains. The silver lode was discovered in 1849, and was the only silver mine worked in New Mexico prior to the Civil War. The 1860 census listed 179 persons living and working at Stevenson's silver mines. A large portion of the mine's total production occurred from 1908 and 1920. The site is abandoned and in ruins with only foundations remaining (Wilson 1975).

It is believed that a large scale Class II sample archeological survey of the CRMP study area would locate a number of important, and as yet undiscovered archeological and historical sites.

RECREATION

Recreational activities in the CRMP area include hiking, camping, picnicking, hunting, spelunking, rock climbing, rock collecting, horseback riding, and mountain bike riding. Visitor use in the area is approximately 150,000 recreation visits per year. The majority of this (approximately 130,000 recreation visits) is associated with day use at the Aguirre Spring Campground. The Organs provide the only developed recreation trails in a four-county area of south-central New Mexico and some of the best off-trail hiking in the southern part of New Mexico. Because of the limited availability of developed recreation facilities and trails, portions of the area are suffering from over-use. Resource damage to soil and vegetation is occurring on both trails and in the immediate area of the campground. Some riparian areas, such as in Fillmore Canyon and Indian Hollow, are being damaged or are in immediate danger of damage from trampling as a result of off-trail hiking use. A special deer hunt is held in the Organs when the population is favorable but has not been held since 1983. Quail hunting is excellent throughout the recreation lands, and dove hunting can be good. The Organs provide nationally significant technical rock climbing on quartz monzonite.

A 27,167-acre portion of the Organ Mountains was designated as the Organ Mountains Recreation Lands (OMRLs) in 1971. Vehicle use in the OMRLs is limited to designated roads and trails except for a 640-acre portion of the Mossman Arroyo Intensive Vehicle Open Use Area that overlaps into the southwest portion of the OMRLs. Vehicle use in a 7,680-acre portion of the Franklin Mountains is limited to designated roads and trails. The remainder of the area is undesignated for vehicle use.

Since 1972, the BLM has developed the 55-unit Aguirre Spring Campground with tables, shelters, toilets, a stable, trailheads, and a group and handicapped picnic area. The campground is located on NMSU land under a perpetual easement for recreational purposes and developments by the BLM. The Baylor Pass National Recreation Trail originates from the campground and crosses 1 mile

of NMSU land and 5 miles of public land en route to the Westside Trailhead on the Baylor Canyon Road. The Pine Tree National Recreation Trail also originates at the campground and consists of a 4 1/2 mile loop that is entirely on the NMSU land. Both trails are open to hiking while horseback riding is restricted to the Baylor Pass Trail. An annual footrace over the Baylor Pass Trail has been sponsored by the Mesilla Valley Track Club since 1971. The race has been allowed to continue during interim management as the Baylor Pass Trail crosses the Wilderness Study Area and the race is in conformance with the BLM's Interim Management Policy and Guidelines for Lands Under Wilderness Review (BLM 1979, revised 1983, 1988). The race is not in conformance with the BLM's Wilderness Management Policy (BLM 1981) and would require special language in the Wilderness/National Conservation Area (NCA) bill to continue. The race has approximately 300 participants annually.

The historic Van Patten Mountain Camp (Dripping Springs) offers opportunities for viewing historic structures while the entire area provides outstanding opportunities for hiking, rock climbing, hunting, nature study, rockhounding, and sightseeing. La Cueva rocks provide the only developed picnicking site on the west side of the Organs. The A. B. Cox family currently controls access to this area and charges $4.00 per car per day for access to the area for recreation.

WILDERNESS

A 7,283-acre portion of the Organ Mountains has been under study for wilderness suitability since 1980. A thorough description of the Organ Mountains Wilderness Study Area (WSA) can be found in Volume 4 of the New Mexico Statewide Wilderness Study: Wilderness Analysis Reports (BLM 1988). The WSA is highly natural with very few human intrusions. The WSA provides outstanding opportunities for solitude and primitive and unconfined types of recreation. Special features of the WSA include endangered plant habitat, scenic values, and special habitat features for wildlife. The WSA has been recommended as suitable for wilderness designation by the BLM State Director.

The New Mexico Congressional Delegation has been working for over a year to produce a New Mexico Statewide wilderness bill for BLM land. An 11,794-acre wilderness area is being considered that will include the Organ Mountains WSA, Scenic ACEC, NMSU land, and a portion of a BLM section acquired from the State of New Mexico in the State Land Exchange of 1986.

VISUAL RESOURCES

An 8,947-acre portion of the Organ Mountains has been designated as the Organ Mountains Scenic Area of Critical Environmental Concern (ACEC) to protect outstanding visual resources. This ACEC includes land within the WSA that is north of the most spectacular portion of the Organs. Much of the spectacular portion of the Organs for scenic quality lies on NMSU land and the Fort Bliss military withdrawal, from the Rabbit Ears on the north to the mouth of Long Canyon on the south. The entire western front of the Organs provides a spectacular scenic backdrop to Las Cruces and the Mesilla Valley. The ACEC is in Visual Resource Management (VRM) Class I, where no noticeable changes in visual resources are allowed. VRM Class I designation applies to designated Wilderness, Wild and Scenic Rivens, and visual ACECs.

The Organ Mountains WSA, the remainder of the Organs, and the Franklin Mountains are in VRM Class II, where any changes in basic visual elements should not be evident from key viewing areas. The area between Bishop's Cap and the Franklin Mountains is in VRM Class IV, where changes in basic visual elements may subordinate the original composition.

WILDLIFE

The Organ Mountains have an elevational gradient of over 4,000 feet that contains three major life zones and an extreme diversity of habitat types supporting approximately 250 species of birds, 70 species of mammals, and 60 species of reptiles and amphibians. The Organs may provide habitat for up to seven species of State-listed endangered birds.

Two State-listed mammals are known to occur in the Organ Mountains in recent times. The desert bighorn sheep (Ovis canadensis mexicana) may be extinct in the Organs and if they no longer exist there, they could be reintroduced to the area. The Organ Mountain race of the Colorado chipmunk

(Eutamias quadrivittatus) is found only in the Organ Mountains. Furthermore, some typical Chihuahuan desert species that are uncommon or of limited distribution in New Mexico are commonly found in the CRMP area, such as the Texas lyre snake.

The CRMP area contains potential habitat for the Federally-endangered Peregrine falcon (Falco peregrinus). A thorough inventory of the rugged cliffs in the area would determine whether or not these birds are present in the area as well as identify suitable habitat.

The Organ Mountains deer herd unit includes most of the CRMP area. Excellent small game and game bird populations also exist in the Organ and Franklin Mountains.

The cliffs in the Organ and Franklin Mountains plus the springs in the Organs are important special habitat features for wildlife including rock and cliff-dwelling species, raptors, and riparian species.

Desert arroyos, with their assemblage of tree and shrub vegetation, also provide important wildlife habitat due to their structural diversity. Although arroyo vegetation is not considered riparian (normally associated with running water), these areas provide travel corridors, and nesting, roosting, and feeding areas within an otherwise harsh, desert environment.

SOCIAL AND ECONOMIC CONDITIONS

The Organ and Franklin Mountains are highly valued by southern New Mexicans and West Texans for their aesthetic, recreation, and resource values. Because of the location of the mountains to population centers, many people would be affected by the decisions of the CRMP. The main population centers that would be affected by the CRMP are Las Cruces, New Mexico and El Paso, Texas. Descriptions of the counties where the cities are located, Dona Ana and El Paso respectively, are included to better encompass the entire affected area.

Dona Ana

Demography and Economy

Las Cruces is the largest city in Dona Ana County with a July 1, 1986 population of 54,090 (Bureau of Business and Economic Research 1987). In 1985 the population of Dona Ana County was 118,300 which was a 4.6 percent average annual growth rate since 1980 (Bureau of Business and Economic Research 1987). Table 3-4 shows population projections for Dona Ana County.

TABLE 3-4
DONA ANA COUNTY POPULATION PROJECTIONS

Year	Population	Percent Change
1985	121,100	
1990	144,000	16
1995	162,200	11
2000	179,900	9.8
2005	196,300	8.4

Source: Bureau of Business and Economic Research 1987

In 1986 Dona Ana County was number one in New Mexico for cash receipts on all farm commodities. Cattle and calves produced $15,512,000 in cash receipts in the County during 1986 which is 9 percent of all farm commodities in the County (New Mexico Agricultural Statistics Service 1987).

The most recent information on personal farm income in Dona Ana County is from 1984 with a total of $24,335,000. This was a 55 percent drop from the previous year, but a 3.5 percent increase from 1980. Nonfarm income in Dona Ana County was $892,909,000 in 1984 which was a 9 percent increase from the previous year (U.S. Department of Commerce 1987).

Recreation and tourism play a large role in New Mexico's economy and produce jobs and income through the services and retail trade sectors. The services sector is 14 percent of total non-agriculture employment in Dona Ana County. Employment under the services sector was approximately 5,700 for Dona Ana County in 1986, which was an increase of 9.6 percent from 1985. The retail sector is 17 percent of total non-agriculture employment in Dona Ana County. Employment under the retail trade sector was approximately 6,900 for the County in 1986, which was an increase of 4.5 percent from 1985 (Bureau of Business and Economic Research 1987).

Payments in Lieu of Taxes (PILT) for Federal land in Dona Ana County for Fiscal Year 1987 were $851,392 (New Mexico Department of Finance and Administration 1987).

The labor costs to manage BLM land in Dona Ana County were approximately $249,172 for Fiscal Year 87. This figure is an estimate of BLM labor costs per acre in the Mimbres Resource Area multiplied by the number of acres in the County.

El Paso

Demography and Economy

El Paso County borders Dona Ana and Otero Counties in New Mexico. The 1984 El Paso Metropolitan Statistical Area (MSA) population estimate was 526,500 persons which ranked as the 68th largest MSA in the nation. There has been a 9.7 percent increase in population since 1980 and an average annual increase of 2.42 percent (USDI, BLM 1986).

The population projections for El Paso County as estimated by the City of El Paso Department of Planning, Research, and Development are shown in Table 3-5. This table shows a range of population projections for each corresponding decade.

TABLE 3-5
EL PASO COUNTY POPULATION PROJECTIONS

Year	Population	Projections	
		Low	High
1980	479,899		
1990		600,000	610,000
2000		740,000	760,000
2010		930,000	950,000

Source: City of El Paso, Department of Planning, Research, and Development, Demography Section, n.d.

Attitudes and Values

A public scoping letter was sent out in February 1988 which yielded a wide range of concerns. Many letters expressed concern to limit land development in or near the OMRLs. Many people felt land development would threaten wildlife habitat, cultural resources, endangered plants and scenic quality. Other concerns were that some resource uses such as mining, grazing and off-road vehicles (ORVs) should be restricted on lands covered in the CRMP.

Many letters were in support of a wilderness designation in the OMRLs. Public comments were also in support of increased trails and picnic sites which would increase available recreation in the area such as hiking, camping, climbing, picnicking and horseback riding.

Other comments mentioned keeping new recreation sites to a minimum and not improving existing roads. Some people felt mountain bikes should not be listed as ORVs and should be allowed on trails. A few letters encouraged continued sand and gravel operations along with continued grazing. Some people feel more land should be acquired for the OMRLs.

CHAPTER 4

ENVIRONMENTAL CONSEQUENCES

CHAPTER 4
ENVIRONMENTAL CONSEQUENCES

INTRODUCTION

This chapter provides scientific and analytic evaluation of the alternatives, mitigating measures developed in response to identified issues, and any unavoidable adverse impacts which cannot be mitigated.

The impact analysis will concentrate on those resources described in Chapter 3 that will be subject to the most significant impacts. In some cases limitations on impact analysis occurred due to a lack of data; in such instances, knowledge of the area and professional judgment were used to identify potential impacts. Impacts are defined as the difference between conditions with the action and conditions which would prevail at the same time with the Present Management (No Action) Alternative.

This chapter is arranged by resource issue with the impact(s) of the proposed action and alternatives under each issue heading. All impacts of the proposed action and each alternative (including non-issue related) are documented in that section rather than document the impacts to wildlife, cultural resources, etc., in respective sections. For convenience, the proposed action or alternative is briefly summarized and restated at the beginning of each numbered paragraph so that the reader will not have to refer back to Chapter 2, unless desired. The format of this chapter is the same as Chapter 2, which will allow the reader to refer directly back to the proposed action or specific alternative.

ALTERNATIVE 1 - PROPOSED ACTION

Threatened and Endangered (T&E) or State-listed Species

1. The designation of Areas of Critical Environmental Concern (ACECs) for T&E plants would require mining claimants to file a plan of operation (POO) prior to conducting exploration or development activities within the ACECs. The POO must be approved by the BLM and will contain constraints on development activities as well as reclamation requirements. Through a POO, the BLM would ensure compliance with management objectives for the area.

There would be minor, adverse impacts to claimants because the filing of a POO would require more time and expense than filing a notice. The claimant would have to wait for the BLM to review and approve the plan. This could be time consuming if T&E species are present within the claimant's proposed area of operations as it may require Section 7 consultation with the U.S. Fish and Wildlife Service.

Recognizing these major areas of importance by considering them for ACEC designation would also highlight public and management interest in the special resource values of the entire area.

2. Conducting additional inventories for T&E wildlife or plant species would enable the BLM to better protect or enhance habitat for these species. Additional information on these species may eventually allow some of them to be de-listed or prevent the listing of candidate species.

3. Establishment of designated trails would help to route most hiking use away from sensitive areas such as riparian zones and T&E plant species associated with these areas (such as the Organ Mountain evening primrose). This would help to reduce impacts on these areas from trampling and compaction.

4. Prohibition of overnight camping within riparian zones would reduce the total amount of time spent in these areas. This would help to reduce impacts on these areas from trampling and compaction. Tree cutting and vegetation collection may also be reduced within these areas.

The prohibition against overnight camping in back-country riparian zones would protect existing wilderness values (riparian areas are considered special features).

Prohibiting camping in riparian areas may impact those members of the public who currently like to camp in those areas.

5. Reestablishment of the drift fence below Dripping Springs, to exclude livestock from Upper Ice Canyon, would give existing livestock trails a chance to revegetate. Since most of this is a steep and narrow canyon, there would be very little loss of available forage for livestock. Grazing use previously made on these lands would occur at the lower elevations. The benefits of protecting the Ice Canyon area would be stabilized plant habitat and protection of existing listed and candidate plant species that are susceptible to livestock grazing or trampling. By protecting the habitat, some species would be able to reseed and revegetate in areas that are currently disturbed.

6. The control of exotic plant species could have negative and positive impacts. Some exotic species have become "naturalized" and have not threatened native plant species by cross pollination or competition for habitat. Elimination of these species would reduce plant diversity. Other species may directly compete and possibly become established in ecological niches that are presently occupied by T&E candidate or State-listed species, if not eradicated.

7. Conducting on-site inspections with mining claimants prior to exploration activities would benefit the BLM and the mining claimant. It would be most beneficial if these inspections occurred early - preferably during the time the claimant is planning an exploration program. If the inspection occurs after the BLM receives the exploration plan, it is possible that the BLM would have to inform the claimant that the plan requires modification in order to protect T&E habitat. By communicating with the claimant as early as possible, the BLM and the claimant could avoid possible confrontations and the claimant could avoid having to spend extra time and money to alter an exploration plan.

8. Restrictions on surface disturbing activities in the Fusselman Dolomite formation would protect all potential habitat for Sneed's pincushion cactus within the CRMP area. Protective mineral withdrawals would protect all known populations.

The proposal to prohibit the removal of salable minerals from the Fusselman Dolomite would not adversely affect salable mineral development in the region. The Fusselman Dolomite does not normally contain material that is in high demand as a salable mineral commodity.

However, the proposed mineral withdrawals on approximately 160 acres containing the Fusselman Dolomite would eliminate the opportunity for exploration and development of fluorspar in the Bishop's Cap area. The Fusselman Dolomite contains known deposits of fluorspar in the Bishop's Cap area. If the mining of fluorspar becomes profitable again in the U.S., it is possible that mining companies would begin exploration and development programs in this area.

The Fusselman Dolomite in the Bishop's Cap hills and in the Franklin Mountains also has high potential for magnesium. However, the Fusselman would probably not attract the attention of magnesium producers because worldwide reserves of magnesium are enormous and future demand would probably be met from established mines and possibly from other sources (sea water).

9. By continuing patrols of the CRMP area, plant collection (mainly yucca and cacti) would be held to a minimum. Listed plant species would be provided increased protection.

Wildlife Habitat

1. The fencing of 10 springs would allow riparian habitat to recover from trampling and grazing by livestock. Habitat diversity would increase by the reestablishment of dense herbaceous and woody vegetation, including succulent broadleaf plants and riparian-type trees that are uncommon in the Organ Mountains. The Organ Mountain evening primrose would benefit from the protection and enhancement of riparian areas. Habitat for ground nesting species, riparian dependent species, and tree nesting species would increase. The provision of water in troughs outside the exclosures would ensure access to water for livestock.

There would be a slight short-term (2-3 years) disturbance to soil and vegetation from installation of fences (less than 1/4 of an acre total). Small areas around each new trough (approximately 1-2 acres) would be permanently impacted by increased livestock use.

There would be a very small loss of available forage for grazing associated with the fencing of these springs and associated riparian areas (less than 5 animal unit months [AUMs]).

The fencing of four springs within the WSA plus an additional spring outside of the WSA but within the Congressionally proposed wilderness area (plus provision for livestock water outside of the fences) would enhance wilderness values by improving habitat for endangered plants and natural riparian communities within small areas. The fence would create new developments within the WSA/proposed wilderness, but these impacts would be mitigated by the protection of the riparian areas.

Fencing of springs would create low-level visual impacts for approximately 1/4 mile from the fences. Beyond 1/4 mile, the fence would become indiscernable and the riparian vegetation would become dominant.

2. The reestablishment of desert bighorn sheep and turkeys would allow these animals to function as natural components of the ecosystem. Reestablishment of endemic wildlife species that have been historically extirpated would improve the natural functioning of the ecosystem including nutrient cycling and predator-prey relationships. Opportunities for viewing desert bighorn sheep and turkeys would be restored. Opportunities for research on these reintroduced species will be greatly enhanced because of the proximity to New Mexico State University (NMSU).

These animals would share food resources with other native and domestic animals and may compete during periods of limited forage resources such as in drought years.

Huntable populations of these species may eventually develop. Opportunities to guide sheep and turkey hunts would benefit hunting guides.

3. The installation of 10 umbrella-type water catchments would provide water sources for wildlife throughout the entire CRMP area on a yearlong basis. These water sources would benefit populations of any wildlife species for which water is currently a limiting factor. Most of the 250 species of birds, 70 species of mammals, and 60 species of reptiles and amphibians found in the Organ Mountains would use the available water sources. Big game species such as deer and bighorn sheep would benefit most from additional water as these species cannot retreat into moist underground burrows or crevices during hot dry periods like many smaller animals do.

There would be a very small short-term soil disturbance from installation of the catchments (less than 1/4 acre total). Visual impacts would be created within the immediate vicinities of the catchments.

The development of two wildlife water catchments within the WSA and three more within the proposed wilderness would provide water and improve habitat for the State-endangered desert bighorn sheep as well as other wildlife species. Improvement of wildlife populations would enhance wilderness values including opportunities for viewing wildlife under natural conditions and hunting.

4. The use of prescribed fire would greatly enhance diversity of wildlife habitat by creating variation in height and age structure of existing plant communities. Fire would create mosaics of vegetation and an increase in ecotonal areas (edge effect). It would also allow the establishment of lower or mid-successional stage communities that are generally more productive for wildlife than are climax communities.

Fire effects in Ponderosa pine or mountain shrub communities are fairly well understood (Wright and Bailey 1982). Fire plays a definite role in shaping and influencing Ponderosa pine and mountain shrub types. Plant species in these communities are adapted to fire and these are considered fire dependent communities. Frequent, low-intensity fires in Ponderosa pine communities maintain open, uneven aged stands and prevent closed "dog hair" thickets. Closed stands have little or no understory vegetation and are more susceptible to fire damage due to "laddering" of fuels which will carry a fire into the tree crowns.

In mountain shrub types, most shrubs are prolific crown or root sprouters and resprout vigorously after fire.

The role of fire in semi-desert grassland and desert shrub communities is not as well understood and appears to affect individual plant species differently (Wright and Bailey 1982). In semi-desert grassland and desert shrub communities, fire appears to be detrimental to black grama grasses. In good condition semi-desert grassland fire can be used to control creosotebush and mesquite invasion but is recommended only during wet weather cycles. Fire

has the greatest value to manage tobosa, sacaton, alkali sacaton, and mixed grama ranges.

Fire also appears detrimental to sotol and cactus species, so these species should be avoided during prescribed burning whenever possible. Fire would make certain plants susceptible to livestock grazing, particularly barrel and other cacti when the spines burn off.

Carefully planned and executed prescribed burning would not negatively affect the existing stands of pinyon pine, juniper, oak, or Ponderosa pine at higher elevations but would allow improved regrowth and ground cover of desirable grasses, forbs, and shrubs.

Wooden cultural features (historic corrals, cabins, ephemeral brush structures, etc.) are easily destroyed by fire if not adequately protected.

Prescribed fire would cause short-term impacts to visual resources, particularly while the fires are burning and smoke is visible from the city of Las Cruces. Many members of the public become highly concerned about fire in the mountains because they don't understand the high ecological value of fire for maintenance of native floral and faunal communities.

Suppression of all wildfires without a concurrent program of prescribed burning during the interim period (probably the next 5 to 10 years) means that fire would not play its natural role in most of the plant communities within the area. Every year that fire is excluded from the high elevation forest areas means an increased fuel buildup. When a fire does occur in these areas it would likely be more intense, kill more vegetation, possibly kill all seed reserves, cause more soil damage, and be harder to control.

Cultural resources may also be inadvertently damaged during fire suppression actions.

5. The control of feral and exotic wildlife species is necessary to allow perpetuation of proper habitat for native fauna and flora. Exotics that may eventually colonize the CRMP area include Barbary sheep (Ammotragus lervia) and Persian ibex (Capra aegagrus) in the mountains and oryx (Oryx gazella) in the desert piedmont and lower alluvial slopes. Control of Barbary sheep and Persian ibex would protect habitat for native wildlife and prevent competition between these exotics and big game such as deer and bighorn sheep. Control of oryx would prevent competition with domestic livestock.

Rangeland Resources

1. The implementation of grazing systems utilizing 21 miles of new fencing would provide increased livestock management flexibility within the grazing allotments. Mountain pastures would be grazed in the cool season and the lowlands would be grazed in the warm season. Mountain areas with their riparian and arroyo vegetation areas would not be grazed during most growing seasons. Boundary fences would help keep cattle off of Fort Bliss.

Fence construction would create a short-term impact, initially disturbing a total of about 20 acres, depending on the amount of brush cleared. If no vehicle traffic is allowed along the fence line, recovery of the disturbed areas should occur within 2 to 3 years.

The implementation of grazing systems to defer or rest pastures would allow vegetation to periodically recover from grazing. This would result in improved ground cover, improved soil stability, reduced runoff, more uniform soil temperatures, and improved forage conditions for wildlife and livestock. Riparian and arroyo vegetation, including rare plants, would be protected from cattle grazing during most growing seasons. This would allow reestablishment of riparian and arroyo cover, improved seed production, germination, and seedling establishment. Wildlife dependent on riparian and arroyo habitats would benefit from improved forage conditions and nesting, roosting, and escape cover. Organic matter accumulation would increase, providing more habitat for decomposers and improving the nutrient holding capacity of the soil and nutrient cycling within these riparian and arroyo communities.

2. The installation of 3 new wells, 2 1/2 miles of pipeline, 2 10,000-gallon storage tanks, and 9 troughs would create short-term impacts to soil and vegetation (total of approximately 1-2 acres). There would be small areas of vegetation around each trough that would be permanently impacted by increased livestock use. With proper

management these areas should not exceed a total 40 acres. These developments would also provide new water sources for many species of wildlife that are not dependent on escape cover immediately adjacent to water (such as doves and many songbirds).

3. Brush control on up to 24,000 acres using an environmentally and economically acceptable herbicide such as Spike 20p (Tebuthiuron) on creosotebush and Reclaim on mesquite is expected to kill between 50 and 80 percent of the target brush species. Spike 20p kills most brush species except cacti and yucca and has little effect on herbaceous species; Reclaim kills only the mesquite. Freeing up soil moisture would increase vegetation and ground cover and a more diverse plant community would result. With improved ground cover there would be less soil loss, increased water infiltration, improved soil stability, reduced runoff, and soil temperatures would be moderated.

Forage conditions would be improved for livestock and wildlife such as desert cottontails and scaled quail. Brush control would reduce habitat for certain species such as Gambel's quail.

Because the brush species are killed gradually over a 3-year period through defoliation (depending on the amount of precipitation received), and other species are slow to reestablish during this period, short-term visual impacts would be readily noticeable. Dependent on seed reestablishment, long-term visual impacts would be low.

Success of the brush control and the length of time between treatments is dependent on future management strategies. On any brush control area, livestock grazing will be deferred for the second and third growing season after treatment. Chemical treatments would improve the potential for the use of prescribed fire to ultimately maintain the desired plant community.

The use of Tebuthiuron (pelleted chemical brush control) would have no impact on cultural resources. The use of other chemicals being developed (such as Reclaim) may have undetermined effects on carbon dating samples taken from treated areas.

4. Changing the San Augustine Ranch allotment category from "M" to "I" would resolve through monitoring, conflicts between livestock grazing, wildlife, and recreation, eventually providing better livestock management capabilities and associated enhancement of habitat for plants and animals.

Cultural Resources

1. and 2. Archeological surveys of the area would expand the existing cultural data base and allow management activities to occur with fewer conflicts.

3. Test excavation would result in a negligible impact to soil and vegetation (less than 50 square feet). Excavation would damage site integrity, but would enhance the cultural data base and provide valuable information regarding the prehistory of the area.

4. Restoring portions of the Dripping Springs Resort and stabilizing the remaining portions would have several public benefits. The resort area is a good example of territorial style architecture. The resort is unique in that the original setting has not been modified significantly by later construction. There are few historic resort settings that are available for public visitation in the Southwest. The restoration of the single structure at the resort would allow visitors to experience some of the original character of the resort. Also, the restoration of the resort's gazebo would enhance visitor appreciation for the site. There would be great recreation benefit to the public and the City of Las Cruces by implementing the above stated actions and opening up the area to controlled public visitation.

The restoration may increase public use of the La Cueva area.

5. Nomination of the Dripping Springs Resort, the Sanatorium, and the Minehouse Spring Bunkhouse to the National Register of Historic Places (NRHP) would be a positive impact. Since the structure at Minehouse Spring is privately owned, the NRHP designation would make it eligible for certain low interest loan programs for restoration projects. If the Dripping Springs Resort and the Sanatorium should come under BLM administration, the conferring of the special status would allow for priority funding requests through the normal budget process. Also, the NRHP status could allow for planning

grants to the City of Las Cruces through the National Trust of Historic Preservation may also increase public knowledge of the areas, which may increase tourism.

6. The stabilization and preservation of intact cultural deposits at the Pena Blanca rockshelter would enhance future archeological research goals. The careful test excavation of these deposits could potentially answer important research questions on the prehistoric settlement and use of the Organ Mountains area. The Pena Blanca area rockshelters have already yielded important information on early cultigens in the region. It is believed that the preservation of the remaining intact deposits would allow for other important discoveries in the future.

7. The benefits to early consultation with mining claimants would be the same as T&E No. 10.

Recreation

General recreation use of the CRMP area is expected to nearly triple as a result of implementation of the proposed action. Recreation use is expected to gradually increase approximately 180,000 to 520,000 recreation visits per year. Recreation use will increase regardless of any action taken. An increase of approximately 180,000 recreation visits can be attributed directly to proposed facility development. The construction of a new campground, visitor center, 3 interpretive sites, and 40 miles of trail plus National recognition from NCA and NRHP designations coupled with growing populations and demands for outdoor recreation would increase recreation use of the CRMP area by 4 to 10 percent annually over the next 10 or more years. Specific impacts of proposed recreation developments are outlined below.

1. The proposal for development of a Cooperative Management Agreement (CMA) with the Army recognizes the importance of the Army's mission and the existence of the withdrawal for that mission. At the same time, it recognizes the growing demand and need for recreational use and protection of a small portion of this extremely unique and important area. It represents a very significant compromise over earlier proposals that called for relinquishment of a large portion of the withdrawal, including the Soledad Canyon area.

The Army has expressed concerns many times in the past that they do not wish to relinquish any portion of the Fort Bliss withdrawal. They have indicated that the Soledad Canyon area is extremely important to their training mission as an artillery range. They have more recently expressed concern about the need for an additional buffer zone in relation to new activities in Boulder Canyon and Oat Canyon east of Pena Blanca and Finley Canyon. They have also expressed concern that the possible existence of unexploded ordnance within the area poses significant threats to public safety as well as liability problems for the Army in allowing public use within the withdrawal.

The development of a CMA with the Army would allow the recreating public to have an easily identifiable, on-the-ground boundary between the area that is open to public recreation use and the military withdrawal that is closed to public use. The BLM and Fort Bliss would sign the ridgeline so that hikers and climbers would know where the boundary is and avoid crossing it and trespassing onto the closed area. Boundary patrols by Fort Bliss and BLM personnel would become possible and practical.

The CMA boundary would also benefit the Department of the Army by excluding public recreational uses on the east side of Pena Blanca. This area is within line-of-sight of the Dona Ana Range Camp and Multi-Purpose Range Complex. Exclusion of public use within this area would create an additional buffer for military operations and reduce a potential public safety hazard. No unique or significant recreation opportunities would be lost to the public while many outstandingly beautiful areas west and north of the main ridgelines would become legitimately available for hiking, climbing, and backpacking.

It is highly unlikely that the portions of the withdrawal proposed for public use are contaminated by unexploded ordnance. The provision for a historical record search of unexploded ordnance, plus a mine sweep if necessary, should eliminate all possible safety hazards within the areas west and north of the main ridgelines.

The CMA would also allow for joint inventory and protection of T&E species, cultural resources, scenic values, and other resource concerns within the CMA area.

2. Acquisition of the NMSU land; mining claims such as the Modoc, Ruby, and Stevenson-Bennett Mines; the Cooper/Andereed Inc., and other private parcels south of the Soledad Canyon Road; the Price parcels; the private land adjacent to the Franklin Mountains State Park; and other private land around the north end would facilitate recreation management of the entire CRMP area. Consolidation of public ownership would reduce or eliminate trespass on private land by public land users and concurrently reduce the need for boundary delineations to discourage trespass. Acquisition of private land would also prevent uses from occurring on this land that could detract from recreational opportunities or qualities on adjacent public land. Examples are: mining activities causing impacts to visual resources and opportunities for solitude or the prevention of recreation access to adjacent public land.

Potential haphazard recreation development on private land could also channel large numbers of users into environmentally sensitive areas such as the WSA, proposed ACECs, or the Fort Bliss withdrawal.

Acquisition of patented mining claims would enhance the scenic values from adjacent areas of the WSA/proposed wilderness. Undisturbed portions of these claims may be added to the proposed wilderness if exchanges are completed prior to passage of a Statewide wilderness bill.

Acquisition of private land within the CRMP area would also allow the BLM to manage visual resources on the land according to the established visual resource management (VRM) classes for those areas.

Acquisition of the private land within the grazing allotments would allow for increased control over livestock use. Grazing capacity would remain the same but the percent public land use and grazing fees paid to the Federal government would increase.

Significant cultural resources are present on the lands to be acquired. After acquisition, these resources would be protected by BLM policy and applicable laws pertaining to public land.

The acquisition of the Modoc, Ruby, and Stevenson-Bennett patented mining claims would be beneficial to the mining industry only if the BLM opens these areas to mineral entry after acquiring the lands. Base and precious metals and fluorite have been produced from these lands. Increasing mineral commodity prices or advances in mining technology could convince the mineral industry to target new exploration projects in these areas or to reopen the existing mines.

The acquisition of approximately 9,000 acres of private land would impact Payments in Lieu of Taxes (PILT) to the State by increasing it by approximately $6,750. Many people are in favor of acquiring land to block up ownership for better management and to ensure public access.

3. Installation of a water system at Aguirre Spring Campground would allow the BLM to charge entry fees at the campground that could go into an operation and maintenance fund for the campground. Visitor use would likely increase as recreationists seeking a campground with water available would visit more often and stay longer than they currently do. Some recreationists may be less likely to use the campground because of increased visitor numbers. The collection of fees would also deter some recreationists from using the campground. In a study done by Manning and Baker (1981) on a city park before and after institution of a fee, it showed that the "entrance fee did not reduce numbers of users, but it did change the type of use in a positive way. Visitors appreciated improvements made possible by fee generated revenue."

The quality of facility maintenance at the campground plus the quality of the recreational use at the campground would increase with the additional funding from fee collection.

Depending on the alternative selected for the transport of water to the campground, there would be soil and vegetation disturbance on approximately 1/2 to 1 acre from the installation of pipelines and the storage tank. Soil loss is expected to be negligible. There would be short-term visual impacts (3-5 years) until the disturbed areas become revegetated. Long-term visual impacts could occur if boulders have to be displaced along the pipeline route.

4. Installation of collection boxes at the Aguirre Spring Campground and the District Office

could increase funds for campground maintenance, allowing increased quality of recreational opportunities.

5. Provision of a permanent residence for the Aguirre Spring Campground hosts would allow for increased BLM presence at the campground plus improved comfort of the hosts. Increased presence would allow more constant resource protection, visitor contact, and visitor safety than is currently available.

The installation of a mobile home and storage building would cause a long-term impact to soils and vegetation on approximately 1/2 acre.

6. Fencing of the campground boundary would improve visitor safety by delineating the no-shooting area and improve recreation quality by keeping livestock and grazing influences out of the campground. Fencing would also decrease opportunities for harassment of livestock by visitors. Fencing of the campground would exclude livestock use on approximately 60 acres. There would be no reduction in grazing use as a result. There would be a short-term disturbance to soils and vegetation from fence construction (less than 1/2 acre). Because of the concentration of people inside the fenced area, long-term vegetation impacts would remain about the same.

7. Development of the A. B. Cox Visitor Center would allow public enjoyment of interpretive facilities that are currently unavailable in southwestern New Mexico. The visitor center would provide outstanding educational opportunities to the public and allow for better public understanding and appreciation of natural environmental components. Construction of the parking area would create up to 4 acres of soil disturbance and vegetation removal, reducing infiltration and increasing runoff onto adjacent areas.

Restriction of vehicle access to the Ice Canyon/Dripping Springs area would allow BLM control over recreation use of the area. Such control is necessary to minimize damage to vegetation that is currently caused by unrestricted visitor travel around Dripping Springs, and vandalism to the existing historic structures including the Van Patten Mountain Camp, Boyd houses, tuberculosis clinic site and tack buildings. The 1 mile Dripping Springs Trail would provide a short hike to all interested visitors.

Restriction of vehicle use on the powerline service road would be necessary to control vehicular access to Ice Canyon. Such a restriction would allow vehicle use by the electric company for line maintenance while preventing uncontrolled access to the historic structures near Dripping Springs and unnecessary soil disturbance and vegetation damage from vehicle use. The 1 mile Powerline Trail would provide a short side trip from the Dripping Springs Trail for interested visitors.

8. Development of interpretive displays at La Cueva, Dripping Springs, and particularly at the A. B. Cox ranch house would provide the public with opportunities for understanding and appreciation of wildlife, recreation, floral, wilderness, grazing, mining, geological, cultural, historical, and paleontological resources as well as military uses in the Organ and Franklin Mountains.

Curation of and display of selected artifacts from La Cueva and Pena Blanca would increase the number of people who can learn from these cultural resources as compared with museum curation. Public education could decrease damage to cultural resources in the area and elsewhere.

Through the interpretive center the public could be made aware of the time desert vegetation takes to grow and how fragile these life zones are. Public education could eventually decrease illegal plant collection and impacts to T&E species in the area and elsewhere.

9. Development of the 55-unit La Cueva picnic area and campground would double the developed site capacity in the Organ Mountains and provide a developed campground within 8 miles of Las Cruces. The La Cueva site would provide recreation opportunities during the entire year including cold and stormy winter weather when Aguirre Spring Campground is inhospitable or inaccessible. The children of Dona Ana County would benefit greatly from the increased opportunities for learning about and experiencing the natural resources of New Mexico and the Chihuahuan Desert. Development of this site would help to disperse some day use and overnight

camping from Aguirre Spring Campground. This would reduce overcrowding and resource damages that are presently occurring there.

The La Cueva picnic site and campground would disrupt the existing visual resources of the area and would generate noise levels that are currently absent from the area. Proper planning of site and trail placement would result in better protection of soil and vegetation than currently exists with haphazard placement of numerous vehicle trails and the four existing picnic tables.

The access roads or pavement and campsites would create a loss of vegetation (total 2-3 acres) and small areas of compacted barren soil that would reduce infiltration and increase runoff onto adjacent soil. Wildlife would avoid the campground during times of high use or noise levels, particularly mobile fauna like deer and birds.

Development of a new picnic area and campground may increase tourism in the area. Picnicking is expected to grow from its approximate 113,600 recreation visits per year currently to 340,000 recreation visits per year under this alternative. There are, however, people opposed to constructing new sites in the area.

10. Installation of pit toilets below Dripping Springs would improve visitor comfort and safety from disease while helping to maintain the existing visual resources of the area by preventing accumulations of toilet paper and excrement. Disturbance to soil and vegetation from toilet installation would be negligible (less than 500 square feet).

11. Construction of a shelter along the 1 mile Dripping Springs Trail would improve visitor comfort for recreationists travelling to or from the historic sites. The shelter would provide relief from intense summer heat, thunderstorms, snow, or wind. Disturbance to soil and vegetation from installation of the shelter would be negligible (less than 100 square feet).

12. The development of a Cooperative Agreement to provide resident caretakers and volunteers for visitor contact and interpretive services would help to increase administrative presence in the area and reduce vandalism and resource damage. Visitor safety would be improved, both through educational means and the availability of medical supplies, medically trained personnel, and communications equipment.

The contribution of funds from outside agencies would enable the public to enjoy facilities that would not be possible solely from BLM funding.

Increased personnel, such as caretakers, could reduce impacts to cultural resources and T&E species in the area.

BLM involvement with city and county governments and other groups may increase the exposure of the area which may bring in more tourists and more revenue to the local area.

13. Fencing of the campground and visitor center would exclude livestock use on approximately 350 acres. Other impacts would be the same as Recreation No. 5.

14. Expansion of the Baylor Pass Trailhead parking lot would provide equestrians with additional trailer parking while, facilitating turning and parking of trailers.

This area has already been used as a parking area so impacts to soil and vegetation would be negligible.

15. Construction of the 4 mile Minehouse Trail from Baylor Canyon to La Cueva would increase developed recreational hiking opportunities by 59 percent over the current trail mileage and 49 percent over the present management alternative. This trail would increase developed equestrian opportunities by 100 percent over the current trail mileage and present management alternative. Opportunities for viewing wildlife would be enhanced. The trail would create small areas of compacted soil and loss of vegetation (approximately 1 1/2 acres) and increase runoff onto adjacent soil.

Construction of this and other trails would be expected to increase hiking from 10,000 currently to 55,000 recreation visits per year. Construction of this and other trails would also reduce problems with over-use and resource damage presently occurring on existing trails. Some people are opposed to the construction of new trails in the area as they feel new trails would create significant impacts to wilderness values.

16. Construction of the 1 mile La Cueva Loop Trail would create a short interpretive walk suitable for people of all ages and conditions. The La Cueva Trail would provide excellent opportunities for interpreting prehistoric uses of the area and plant communities as influenced by aspect and topography. Construction of the trail would create small areas of pavement or other surfacing and a small loss of vegetation (less than 1/3 of an acre), increasing runoff onto adjacent soil.

Increased public education from this interpretive facility should decrease vandalism to cultural resources in the area.

17. Construction of the Pena Blanca interpretive trail and parking area would provide excellent opportunities for education of archeological laws and interpretation of prehistoric habitation of rockshelters. Construction of the trail and parking area would create small areas of pavement or other surfacing and a small loss of vegetation (less than 1 acre), increasing runoff onto adjacent soil.

18. Development of an interpretive trail and parking area at the Soledad Ecology Site would provide opportunities for outdoor education on rare plants, unique wildlife, geology, and topographic influences to school classes and the general public. Prohibition of climbing activities would not significantly affect climbing opportunities in the Organ Mountains. Construction of the trail and parking area will create small areas of compacted soil and a small loss of vegetation (less than 1 acre), increasing runoff onto adjacent soils.

The Soledad rock garden area is already a heavily used area. By signing and limiting off-the-trail access, vegetation resources would be given better protection than they currently receive.

19. Development of the 5 mile Fillmore Canyon Trail would increase developed hiking opportunities by 47 percent over the current trail mileage and 39 percent over the present Management Alternative. The Fillmore Canyon Trail would provide access to some of the best climbing areas, the highest elevation hiking on a developed trail, and the best views from any trail in the Organs. Since this trail would make it easier for visitors to access the high peaks, climbing-related accidents could increase. However the trail would facilitate access for search and rescue and fire management activities. Routing of the trail to avoid the Fillmore Canyon riparian area would help to reduce current impacts of uncontrolled use (trampling and compaction of vegetation). Construction of the trail would create small areas of compacted soil and loss of vegetation (approximately 2 acres), increasing runoff onto adjacent soil.

Approximately 4 miles of new foot and equestrian trail would be constructed within the WSA plus an additional 1 mile of foot trail within the proposed wilderness. The IMP and Wilderness Management Policy (WMP) allow for construction of new trails in WSAs or Wilderness Areas if they are the minimum necessary for public enjoyment of the area.

This trail would add to the expected increase in hiking to 40,000 recreation visits per year in 10 years. Some people are opposed to the construction of new trails in the wilderness area.

20. Construction of the 28 mile North-South Trail from La Cueva to the Franklin Mountains State Park would increase developed hiking opportunities by 371 percent over current trail mileage and 307 percent over the Present Management Alternative. This trail would increase developed equestrian trail use by 525 percent over current trail mileage and the Present Management Alternative. The North-South Trail would be the longest developed recreation trail in southern New Mexico or western Texas. The trail would provide excellent opportunities for hiking, running, horseback riding, backpacking, and mountain bike riding, particularly during the colder months when the higher mountain trails are too cold to receive much use. Construction of the trail would create long stretches (up to 2 miles) of compacted soils and loss of vegetation (up to 10 acres). Loss of vegetation in this area would be lower per unit area than in other areas since vegetation is relatively sparse (mostly creosotebush and mesquite). The candidate species Opuntia arenaria (sand prickly pear) potentially occurs in the Organ/Franklin corridor, but this species could be easily avoided during trail construction.

21. Joint signing, patrols, trail development, and visitor management of the Franklin Mountains by the BLM and Texas Division of Parks and

Wildlife would facilitate resource protection in the Franklins on both sides of the state line. Integrated management would help the public to understand differences in laws and regulations between the states, and to know which ones apply.

Development of this agreement would help to reduce potential impacts to cultural resources and T&E species in the area.

22. Paving of the Dripping Springs Road would provide the public with more comfortable, quicker, and safer access to La Cueva and the visitor's center than does the current dirt road. The road could be properly crowned and ditched to prevent soil erosion and flash flooding during heavy rains. Pavement would prevent dust clouds from impacting air quality and disturbing the visual resources of the Organs as viewed from Las Cruces.

There are people opposed to paving the road because of the increased traffic it would bring. Paving of the road would also temporarily increase employment in the County.

23. Closure of unnecessary, dead-end vehicle routes would help to prevent soil erosion from runoff along vehicle tracks, protecting associated vegetation and wildlife. Livestock would also be less likely to be harassed by ORV users in these areas. Closure of these routes would decrease opportunities for vehicle recreation such as hill climbing and trail riding on 2 1/2 miles of vehicle routes. Decreased vehicle access may also decrease potential impacts to cultural resources in these areas (theft, vandalism).

24. Vehicle use limitation on 640 acres of the Mossman Arroyo ORV area would reduce open vehicle use areas by 12 percent in Dona Ana County. Vehicle management within the NCA would be improved by elimination of 3 miles of unmarked boundary between the open and limited designation areas. The 640 acres are predominantly creosotebush covered mesa along the eastern edge of the Mossman Arroyo area and do not receive the same amount of vehicle use that occurs on the sandy river breaks west of the proposed NCA boundary. Vehicle restriction on the 640 acres would promote stabilization of soil and increase vegetation cover. Decreasing the size of the open area may also decrease potential impacts to cultural resources from erosion and direct breakage.

ORV users would be negatively impacted because of the reduced ORV "open" areas. This action would positively impact those people in favor of restricting ORV recreationists to existing roads.

Limiting vehicle use to designated roads and trails in currently undesignated areas would help protect resource values in these areas and would not preclude any present recreational opportunities.

25. Restriction of access roads and other mining-related development would protect important visual resources on the north slope of Bishop's Cap, which is presently mostly undisturbed. This would have little impact on mining activity since the important mineralized formations associated with the Fusselman Dolomite are almost entirely restricted to the southern exposure.

26. Initiation of a mine hazard inventory and associated safety measures would help ensure the health and well-being of public land users both by educating the public of the dangers associated with specific mines and excluding the public from dangerous situations. Coordination of protective measures with the SHPO, the New Mexico Department of Energy, Minerals, and Natural Resources; and the New Mexico Bureau of Mines would prevent damage to or alteration of historic mines or mines with high economic or ecological values. Closure of some mines would prevent access to mineral specimens in those mines, but preservation of old ore dumps would ensure the availability of mineral specimens that have already been removed from the ground.

Mining history is an important aspect of the area's historical development. Early mining records are often lacking or incomplete. Coordination with the SHPO and other agencies would ensure that historical resources are not inadvertently damaged or that valuable information is not lost.

27. Management of caves to control public access would help to ensure public safety by limiting use to competent spelunkers in accordance with acceptable carrying capacities. Cave management would emphasize the protection of fragile cave

resources such as cave formations, bats and other cave wildlife, cultural artifacts, and paleontological remains. Restriction of access would help to prevent damage to these resources while controlling graffiti and litter.

Maintenance of the cave and cliff rescue training opportunities at La Cueva would help to protect the safety of the general public by ensuring that search and rescue personnel have a place to learn and practice proper techniques. A prohibition against installation of additional permanent climbing devices such as pitons, nails, or chains would help to reduce the long-term accumulation of such objects in the rock and minimize visual impacts. Prohibition of climbing above the rockshelter entrance would provide for the safety of visitors to the rockshelter.

28. Confinement of pets to leashes within the developed recreation areas and trail system would help maintain safety of other recreationists, pets, and native fauna and flora. Unconfined pets could become lost or stolen, attack other recreationists or wildlife, or be attacked by wildlife such as coyotes or mountain lions. Domestic pets often attack animals such as porcupines or rattlesnakes that are not vicious but can lethally defend themselves.

29. The camping stay limit, firewood collection prohibition, quiet hours, and nighttime access closure would maintain the existing quality and quantity of overnight recreation opportunities by protecting the trees that help to make Aguirre Spring and La Cueva pleasant places to go. Opportunities for enjoying natural sights and sounds would be enhanced by reducing disturbance of wildlife and unnecessary noise caused by late night parties.

30. Regular patrols by the BLM law enforcement Ranger staff would help to protect property and safety of public land users, adjacent private landowners, BLM staff and volunteers, and others. Protection of cultural sites, T&E species, wildlife, livestock, livestock developments, signs, and structures would be greatly enhanced. Ranger presence would increase opportunities for public contacts, education, and emergency response which would improve the quality of recreation experiences in the CRMP area.

31. Additional personnel would be able to provide increased maintenance of facilities and improved visitor services such as education and interpretation. BLM acquisition of the A. B. Cox property and associated recreation development would at least double the current recreation use of the Organs. The increase would be as a result of a greater number of people camping, picnicking, and hiking. The increased facilities and increased use would require intensive maintenance work and a high level of BLM presence to prevent vandalism, theft, and general deterioration from normal recreation use. Improved maintentance and visitor services would enhance the quality of recreational experience in the area.

32. The development of a recreation map for the area would facilitate public access to the area and understanding of available resources, use limitations, travel routes, and private land locations. Conflicts between public land users and private landowners would be reduced.

33. The installation of signs such as carsonite markers along public/private and public/military boundaries would allow the public to recognize which land is available for recreation and which areas are not. Trespass onto private land and Fort Bliss and conflicts with private landowners and the military would be reduced. The signs would create a slight impact to visual resources as they would be noticeable to people who are near the land ownership boundaries. The signs would not be noticeable from a distance and would cause no permanent or long-term visual resource degradation.

34. Installation of climbing safety signs at all trailheads would improve visitor safety by educating recreationists about the dangers of the steep hills and cliffs in the Organ Mountains. Minimizing placement of all signs would help to minimize impacts to existing visual resources throughout the CRMP area.

ALTERNATIVE 2 - LEAST INTENSIVE

Threatened and Endangered (T&E) or State-listed Species

The impacts are the same as Alternative 1 (Proposed Action).

Wildlife Habitat

The impacts are the same as Alternative 1 (Proposed Action).

Rangeland Resources

The impacts are the same as Alternative 1 (Proposed Action) except for the following.

The benefits from brush control (increased vegetation diversity, improved soil and water conditions and increased forage for wildlife and livestock) would be foregone. The implementation of grazing systems to benefit riparian and arroyo vegetation may not be possible in all cases because there would be insufficient forage in the lowland areas to provide balanced pastures that would allow for deferred or rotational grazing systems. On the other hand, the few species of wildlife dependent on a shrub monoculture would continue to thrive. There would be no loss of non-target plant species.

Cultural Resources

The impacts are the same as Alternative 1 (Proposed Action).

Recreation

The impacts are the same as Alternative 1 (Proposed Action) except for the following.

1. Visitor use would increase under this Alternative from approximately 180,000 to 430,000 recreation visits per year.

2. Prohibition of overnight camping would decrease camping use from approximately 26,400 recreation visits per year to 0 visitor days per year. There would be no developed campsites on BLM land in Dona Ana County and no opportunity for developed camping in a wildland setting in close proximity to Las Cruces or El Paso.

Disturbance of nocturnal wildlife at Aguirre Spring and La Cueva would be reduced. Vandalism to facilities and tree cutting for firewood may be reduced. The threat of vandalism to cultural resources would be decreased. The threat of disturbance to vegetation and other resources would also be decreased.

Some people would be opposed to reduced camping opportunities.

3. If the water system is not installed at the Aguirre Spring Campground there would be no increase in picnicking or camping associated with water availability. The BLM would not gain the ability to collect fees at Aguirre Spring Campground. Water would not be provided for those who desire it.

There would be no surface disturbance to soil and vegetation associated with installation of the water system.

4. Approximately 7 miles of vehicle recreation trail (westside road) would be closed preventing vehicular access to approximately 9,000 acres of public land. Vehicular access to the Pena Blanca area would be available only from the Mossman Arroyo Road (Dona Ana County B059). Closure of the westside road would decrease potential theft and vandalism to cultural resources by decreasing public use. Opportunities for illegal plant collecting and potential impacts to T&E species would be decreased.

ALTERNATIVE 3 - MOST INTENSIVE

Threatened and Endangered (T&E) or State-listed Species

The impacts are the same as Alternative 1 (Proposed Action).

Wildlife Habitat

The impacts are the same as Alternative 1 (Proposed Action).

Rangeland Resources

The impacts are the same as Alternative 1 (Proposed Action).

Cultural Resources

The impacts are the same as Alternative 1 (Proposed Action)

Recreation

The impacts are the same as Alternative 1 (Proposed Action) except for the following.

1. Visitor use would increase under this alternative from approximately 180,000 to 530,000 recreation visits per year.

2. Upgrading the westside road between the Soledad Canyon Road and Mossman Arroyo would improve vehicular access to the west side of the Organs, and recreation use would increase correspondingly. The main uses of this area would be hiking, hunting, and horseback riding, but other uses would increase also. Vehicle mortality to wildlife would increase under this alternative, as would game harvest as more hunters would use the area.

Upgrading the westside road would result in surface disturbance and loss of vegetation on about 13 acres.

Upgrading this road would increase conflicts with livestock operations and adjacent private landowners (if the land could not be acquired).

Upgrading this road could increase potential impacts to cultural resources and T&E species as well as increase opportunities for illegal plant collection (easier access would allow more people in the area).

Many people are against road improvements because they feel increased traffic would negatively impact the area.

3. Allowing vehicular access above the visitor center would increase recreation-related littering, vandalism, and damage to vegetation and soils in the Dripping Spring area. The quality of interpretive development, site stabilization, and opportunities for solitude would be sacrificed. There would be 2 miles less hiking trail than there would be under the Proposed Action.

ALTERNATIVE 4 - PRESENT MANAGEMENT

Threatened and Endangered (T&E) or State-listed Species

The impacts are the same as Alternative 1 (Proposed Action) with respect to the Sneed's pincushion cactus. Protection or management of other species would occur on a case-by-case basis consistent with existing laws and policy. The benefits of ACEC designation and protection of riparian areas and arroyos would not be accomplished under this alternative. Management of T&E species would be more reactive than proactive.

Wildlife Habitat

Under implementation of Alternative 4, wildlife resources would not benefit from any of the planned actions detailed in the Proposed Action. No springs would be fenced to protect riparian habitat, no bighorn sheep or turkeys would be reestablished, no wildlife water catchments would be installed, and no prescribed fire would be used to increase habitat diversity, except on a case-by-case basis. Exotic or feral species might not be controlled or eliminated.

Rangeland Resources

Only the currently proposed livestock water developments and erosion control structures on the Baylor Canyon allotment would be installed. Other projects (including brush control) would be implemented on a case-by-case basis. The overall benefits to wildlife habitat, riparian, arroyo vegetation and vegetation resources in general may be mostly foregone under this alternative. Surface disturbance from projects would total about 1 acre or less under this alternative.

Cultural Resources

Under this alternative, the cultural data base would not be expanded (except on a case-by-case basis). There would likely be more conflicts with other management activities (the management of cultural resources would be more reactive than proactive). The historic ruins at Dripping Springs would continue to deteriorate and the interpretive benefits of the Proposed Action would be foregone.

Recreation

Impacts on recreation resources under implementation of the Present Management alternative would include development of additional picnic/campsites, 2 miles of trail, 13 miles of paved road, a visitor center, an interpretive site, and 8 scenic overlooks with viewfinder telescopes. Recreation use under this alternative is expected to increase from 180,000 to 340,000 recreation visits per year assuming a 4 percent increase per year in existing use. Impacts of specific actions are detailed below.

1. From the 1975 plan:

- Development of a visitor center would allow public enjoyment of interpretive facilities that are currently unavailable in southwestern New Mexico. The visitor center would provide outstanding educational opportunities to the public and allow for better public understanding and appreciation of natural environmental components. The proposed visitor center site is within the Organ Mountains WSA and Scenic ACEC and so would be subject to the IMP nonimpairment criteria and conformation to VRM Class I guidelines or be relocated outside of the WSA and ACEC. Up to 4 acres of surface disturbance would result from construction of the visitor center and parking area.

- Development of 1 1/4 mile trail from the Pine Tree Trail to Sugarloaf Peak would increase use of the Indian Hollow area and could potentially impact Federal candidate and listed plants in Indian Hollow. Climbers reaching the top of Sugarloaf Peak would be disappointed to find a trail and scenic overlook at the top of the mountain. About 1/3 of an acre of surface disturbance would result from trail construction.

- Many people are not in favor of new trails, particularly in the Sugarloaf Peak area.

- Construction of a monument at Baylor Pass would provide a lasting memorial to Captain Baylor, whose troops defeated Union forces in a Civil War battle. The monument would not be subject to the BLM's IMP nonimpairment criteria or VRM standards because it would be located on NMSU land outside the WSA and Scenic ACEC. A viewfinder telescope would also be installed.

- The extension and paving of the westside road south from the Dripping Springs Road to Mossman Arroyo (13 miles) would improve vehicular access to the west side of the Organs for numerous recreation uses including hiking, hunting, birding, and picnicking.

  About 25 acres of surface disturbance and loss of vegetation would result from upgrading of the westside road.

  Other impacts would be the same as Recreation No. 2 under Alternative 3.

- Development of a 50 unit campground below Needle's Eye between Achenback Canyon and Pena Blanca would provide excellent opportunities for low elevation picnicking and camping that would probably be used primarily in the fall through spring, when cooler temperatures at Aguirre Spring Campground reduce visitor levels. Total surface disturbance and loss of vegetation from access roads and campsites would be about 2 to 3 acres.

- Development of an ecology interpretive site at Soledad Ecology Site and Rock Garden would provide interpretive resources within a 20-minute drive of Las Cruces. Total surface disturbance from trails and parking area would be about 1 acre or less.

2. There would be no impacts to recreation resources from actions in the 1976 Interpretive Plan that were not discussed under No. 1 above.

3. From the 1985 plan:

- ACEC management would require a Plan of Operations to be filed for any mineral exploration or development activity within the WSA. Any other proposed activity within the ACEC must not affect basic form, line, color, or texture of the scenery.

- Removal of the gravel piles on the Stevenson-Bennett mine would improve visual resources within the ACEC and wilderness values within the WSA. The piles are currently being removed and the site would be reclaimed by the IMP reclamation deadline.

- Segregation of the ACEC and 2,753 adjacent Federal acres from all forms of appropriation would help to ensure that the natural resource values of the area would be maintained including scenery, wildlife habitat, vegetation, soil, and recreation opportunities. If the area is designated as wilderness, the protective mineral withdrawal would be unnecessary. There would be adverse impacts associated with the proposed mineral withdrawal in the Organ Mountain Scenic ACEC. The western side of

the Organs, including the pediment, has high potential for locatable minerals. Withdrawing this area from mineral entry would eliminate any opportunity for future extraction of base metals in one of the most mineralized areas in the region.

- An NSO stipulation for oil, gas, and geothermal leasing in the 2,753 Federal acres adjacent to the ACEC would help to ensure that any oil, gas, or geothermal resource development in the northern Organs does not affect the scenic quality of the mountains. There would be no adverse impacts associated with the NSO stipulation in areas adjacent to the ACEC because the Organ Mountains have low potential for oil, gas, and geothermal resources.

- The withholding of any new ROW easements would prevent deterioration of existing natural resources including scenery, wildlife habitat, vegetation, soils, and recreation resources and would increase the cost of new projects by necessitating routes around the ORML or across private land.

- Establishment of a cooperative agreement with the Regents of NMSU for VRM Class I management of the NMSU land in the Organs would ensure long-term maintenance of the scenic quality and recreation opportunities of the Organ Needles, the area around Aguirre Spring Campground, the Rabbit Ears, and Baylor Pass.

MITIGATING MEASURES

This section describes special measures not included under the description of the proposed action and alternatives that can be incorporated in the action to reduce adverse impacts or enhance the affected environment.

1. When appropriate, a Class III inventory of cultural resources will be conducted prior to prescribed burning. Any wooden cultural features will be identified and protected by construction of fireline around the structure. Where feasible, an engine or hand crew will be stationed for protection during the burn (Alternatives 1, 3, and 4).

2. A qualified resource advisor (Environmental Specialist) will be assigned to all wildfires in the area to ensure that resource concerns are considered in the development and implementation of suppression actions (all Alternatives).

3. Cave management plans for newly discovered caves will contain provisions to protect artifacts or cultural features from theft or damage (Alternatives 1, 2, and 3).

4. Areas with significant amounts of yucca, sotol, and cactus should be avoided when planning and conducting prescribed burns (Alternatives 1, 3, and 4).

5. Catchments and other developments will be located to use natural topographic and vegetation screening. All tanks and troughs will be painted (except for the collecting surface of umbrella catchments which peel and clog the drain hole) to match the surrounding rock or soil to minimize visual impacts (all Alternatives).

6. The use of vehicles to construct and maintain fences will be kept to the minimum necessary. The clearing of vegetation along fence lines will not be allowed except where absolutely necessary (all Alternatives).

7. In addition to avoiding large arroyos, vegetation treatments will contain buffer zones to provide for wildlife and other concerns. Treatments will be spaced far enough apart to avoid continuous large blocks at any one time. Treatments will follow contours and edges will be scalloped to avoid sharp line contrasts with non-treated areas (Alternatives 1, 3, and 4).

8. All disturbed areas, as a result of project development, will be reseeded with a mixture of native shrubs and grasses to speed up the revegetation process (all Alternatives).

UNAVOIDABLE ADVERSE IMPACTS

This section describes impacts that remain after mitigating measures are followed.

There would be a loss of mineral exploration and development opportunity on 350 acres that are withdrawn from mineral entry. Mining exploration and development would be somewhat constrained on 5,300 acres designated as an ACEC and elsewhere within the Fusselman Dolomite formation (all Alternatives).

There would be some loss of yucca, sotol and cactus from prescribed burning in areas where the density of these species is low (Alternatives 1, 3, and 4).

There would be some damage to soil and vegetation as a result of project construction. There would be some loss of trees and shrubs in the vicinity of campground areas from firewood cutting and gathering (all Alternatives).

There would be short-term visual impacts from chemical treatment of brush as defoliation occurs (Alternatives 1, 3, and 4).

SHORT-TERM USE VERSUS LONG-TERM PRODUCTIVITY

This section identifies the trade-offs between short-term use and long-term productivity of resources involved in the alternatives. For this analysis, "short-term" refers to the period of project implementation (within 5 to 10 years) and "long-term" refers to the period of 20 years or beyond in which the alternatives' adverse or beneficial impacts would still occur.

Initial construction of recreation projects and facilities would result in short-term impacts to soils and vegetation. Long-term benefits would include improved recreation opportunities, and reduced conflicts with private landowners, Fort Bliss, and other resources (Alternatives 1, 2, and 3).

Initial construction of wildlife and range projects (fences and water developments) would cause short-term impacts to soils and vegetation, but long-term benefits to vegetation, wildlife, and watershed values (Alternatives 1, 2, and 3).

Prescribed burning and chemical vegetation treatment would cause short-term impacts to visual resources, wildlife, soils and vegetation. Long-term beneficial impacts include increased vegetation diversity, increases in most wildlife species and improved soil/water conditions (Alternatives 1, 3, and 4).

IRREVERSIBLE OR IRRETRIEVABLE COMMITMENTS OF RESOURCES

Irreversible and irretrievable commitments of resources resulting from implementation of the alternatives are described below. The term "irreversible" refers to use that is incapable of being reversed. Once initiated, use would continue. The term "irretrievable" means once used, the resource would not be readily replaceable. These resources would be considered permanently lost and unavailable for other uses. Energy, labor and materials expended for projects is not considered to be irretrievable.

Any loss of individuals or communities of T&E or State-listed plants or animals would be considered irreversible and irretrievable (Alternatives 3 and 4).

Prehistoric and historic cultural resources are fragile and nonrenewable. Any loss, whether inadvertent through natural processes or planned (such as salvage excavation), constitutes an irretrievable commitment of the resource. Site excavation would, however, enhance the data base and knowledge of the area's prehistory (all Alternatives).

Breakage, illicit collecting, and disassociation of artifacts through erosion or trampling would constitute a loss in the present archeological data base which is not retrievable (all Alternatives).

Any loss of soil from construction activities or other surface-disturbing actions such as prescribed burning, trail use, etc., is considered irretrievable (all Alternatives).

CHAPTER 5

CONSULTATION AND COORDINATION

CHAPTER 5
CONSULTATION AND COORDINATION

PUBLIC PARTICIPATION

Public input for the preparation of this management plan is actually the culmination of a series of planning events dating back to the designation of the Organ Mountains Recreation Lands (OMRLs) in 1971. Planning for the area continued with the development of plans mentioned in the Introduction and most recently, with the completion of the Southern Rio Grande Plan Amendment in 1986.

On February 10, 1988, various groups, agencies, and individuals were contacted for the purpose of establishing Technical Review Teams (TRTs) to provide specific recommendations to the BLM for use in developing the plan.

On February 11, 1988, a newsletter was sent out to establish a mailing list and to inform interested individuals and organizations of the intent to prepare the management plan and environmental assessment, as well as to obtain input on the process. News releases were also sent to all local media. Over 40 comments were received as a result. A summary of these comments are:

- Need to consider needs of researchers and teachers.
- Hikers and backpackers should be represented on TRTs (two types of hikers - "billy goats" and trail walkers).
- Road above Cox Ranch to Dripping Springs should be closed to vehicles, trail to Long Canyon would be nice.
- Member of City Planning or Parks Department should be on TRT.
- CRMP should have long-range goals so plan does not have to be revised in 5 or 10 years.
- TRT members should represent all related groups (act as liaison) not just groups they are members of.
- There should be more trails and a summit campground for backpackers.
- Mountain bikes are not off-road vehicles (ORVs) and need representation.
- Keep wildlife corridor open to Franklin Mountains.
- Acquire land through exchange and use of Land and Water Conservation funds.
- Plan should address Fire Management on military land (how this affects or may affect resources off military land).
- Survey of Cox Ranch area needed for raptors and sensitive plants.

Prospective TRT members met at the Las Cruces District Office on March 1, 1988. The make-up and scheduling of TRTs, field trips, and meetings were decided on at that time.

On March 21, 1988, the Las Cruces District Advisory Council was briefed on the status of the CRMP, including tentative objectives and the make-up of the TRTs. This meeting was open to the general public.

The first TRT trip took place on March 22-24, 1988, and the second trip on April 12-13, 1988. Each TRT toured a specific portion of the area and on the last day prepared a report containing specific management recommendations for the trip area.

The members of these teams and the interest group or agency they represent are:

Steve Wondzell - Wilderness (TRT No. 1)
Jim Graham - Wilderness/Climbers (TRT No. 2)
Kelly Cranston - Spelunkers
Gary Webb - Sportsmen (TRT No. 1)
Dewey Davis - Sportsmen (TRT No. 2)
Karl Kizer - Climbers (TRT No. 1)
Bill Ramsey - ORVs (TRT No. 1)
Angela Pinkston - Equestrians (TRT No. 1)

Joan Beyer - Campers/Rockhounds/Hikers
Roger Skaggs - Wildlife (TRT No. 1)
John Sproul - Wildlife/Utilities (TRT No. 2)
Tom Wootten - Native Plants
Pat Beckett - Archeology (TRT No. 1)
Karl Laumbach - Archeology (TRT No. 2)
Sara Hopkins - Ranchers/Private Landowners
Ben Schaberg - Minerals
Bill Dunmire - The Nature Conservancy (TRT No. 1)
John Fowler - New Mexico State University (TRT No. 1)
Owen Lockwood - New Mexico State University (TRT No. 2)
Lt. Col. A. R. Laspada - U.S. Army, Fort Bliss
Thom Votaw - Las Cruces Museum of Natural History (TRT No. 2)
Mike Robertson - New Mexico Department of Game and Fish
John Hawley - New Mexico Bureau of Mines and Mineral Resources
Dan Riley - State Historic Preservation Office (TRT No. 1)
Fred Bitting - Franklin Mountain State Park (TRT No. 2)

On April 29, 1988 and July 20, 1988, newsletters were sent to the general mailing list to provide information on the progress and status of the planning effort.

PUBLIC REVIEW OF THE DRAFT

The following agencies and organizations were mailed a copy of the Draft Plan/EA (all individuals on the mailing list were also sent copies):

Congressional Delegation and New Mexico State Legislators

U.S. Senator Jeff Bingaman
U.S. Senator Pete Domenici
U.S. Congressman Manuel Lujan
U.S. Congressman Bill Richardson
U.S. Congressman Joe Skeen
State Representative, District 34
State Representative, District 35
State Representative, District 36
State Representative, District 37
State Representative, District 51
State Representative, District 52
State Representative, District 53
State Senator, District 35
State Senator, District 36
State Senator, District 37
State Senator, District 38
State Senator, District 39
State Senator, District 40

New Mexico State Agencies

Bureau of Mines and Mineral Resources
Department of Agriculture
Department of Finance and Administration
    Office of Cultural Affairs
        Historic Preservation Division
Energy, Minerals, and Natural Resources Department
    Forestry Division
    Energy Conservation and Management Division
    Mining and Minerals Division
    Parks and Recreation Division
    Department of Game and Fish
Health and Environment Department
    Environmental Improvement Division
Highway and Tranportation Department
Human Services Department
    Office of Indian Affairs
Land Office
    Commissioner's Office
State Engineer/Interstate Stream Commission
Taxation and Revenue Department

Federal Agencies

Department of Agriculture
    Agricultural Stabilization and Conservation Service
    Forest Service
    Soil Conservation Service
Department of Defense
    Department of the Army
        Corps of Engineers
        Fort Bliss
        McGregor Range
        White Sands Missile Range
Department of Justice
    Immigration and Naturalization Service
        Border Patrol
Department of the Interior
    Bureau of Mines
    Bureau of Reclamation
    Fish and Wildlife Service
    Geological Survey
    National Park Service
Department of Treasury
    Customs Service
Environmental Protection Agency
International Boundary and Water Commission

Local and Regional Governments and Agencies

Chamber of Commerce (T or C, El Paso)
City of Las Cruces
    Parks and Receation Department
    Planning Department
City of El Paso
    Planning Department
Dona Ana County Commissioners
Dona Ana County Extension Agent
Dona Ana County Planner
Dona Ana Road Department
Elephant Butte Irrigation District
El Paso County Commissioners
Mayors (Las Cruces, Anthony, Mesilla, Hatch)
New Mexico Border Commission
Texas Parks and Wildlife Department

Livestock Related Organizations

Dona Ana County Farm and Livestock Bureau
Las Cruces District Grazing Advisory Board
New Mexico Cattle Growers Association
New Mexico Farm and Livestock Bureau
Society for Range Management
Southwestern New Mexico Livestock Grazing Association

Conservation Organizations

Albuquerque Archeological Society
El Paso Archeological Society
Mesilla Valley Audubon Society
Mesilla Valley Grotto
National Wildlife Federation
New Mexico Archeological Society
New Mexico Natural History Institute
New Mexico Wildlife Federation
New Mexico Wildlife Society
Public Land Council
Sierra Club
    Albuquerque Group
    El Paso Regional Group
    Rio Grande Chapter
    Southwestern New Mexico Group
Texas Archeological Society
The Franklin Mountains Wilderness Coalition
The Nature Conservancy
Wildlife Management Institute
Wilderness Society
Dona Ana County Associated Sportsmen
New Mexico Native Plant Society

Other Organizations

Association of Mountain States
Burn Construction Company, Inc.
Certified Sand Co. Incorporated
El Paso Electric
El Paso Natural Gas
El Paso Water Utilities Public Service Board
Minerals Exploration Coalition
New Mexico Oil and Gas Association
Public Service Company of New Mexico
Valley Transit Mix

Other Groups

Dona Ana Rockhound Club
East Mesa Planning District
Economic Development Council
Gemcrafters and Explorers
Human Systems Research Inc.
Las Cruces District Advisory Council
Las Cruces Four Wheelers
Las Cruces School District
Moongate Water Co.
New Mexico Research Institute
Picacho Gun Club
Quivera Research Center
Wheelsport
Mesilla Valley Track Club
El Paso 4x4 Club
Southwest Mountaineers
Las Cruces Horsemen

Universities and Libraries

Alamogordo Public Library
Deming Public Library
New Mexico State Library
New Mexico State University Library
Range Improvement Task Force
Silver City Public Library
Thomas Branigan Memorial Library
University of New Mexico

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Pamela Smith, District Archeologist
Juan Padilla, District Realty Specialist
Joseph Torrez, District Geologist
Frank Hager, District Engineer
Bruce Call, District Soil Scientist
Dusty Voss, District Fire Management Specialist
Ed Williams, District Range Conservationist (Operations)
Melanie Florence, Botanist (Volunteer)

ILLUSTRATIONS

List of Maps

PROPOSED ACTION - ALTERNATIVE 1

MAP 2C

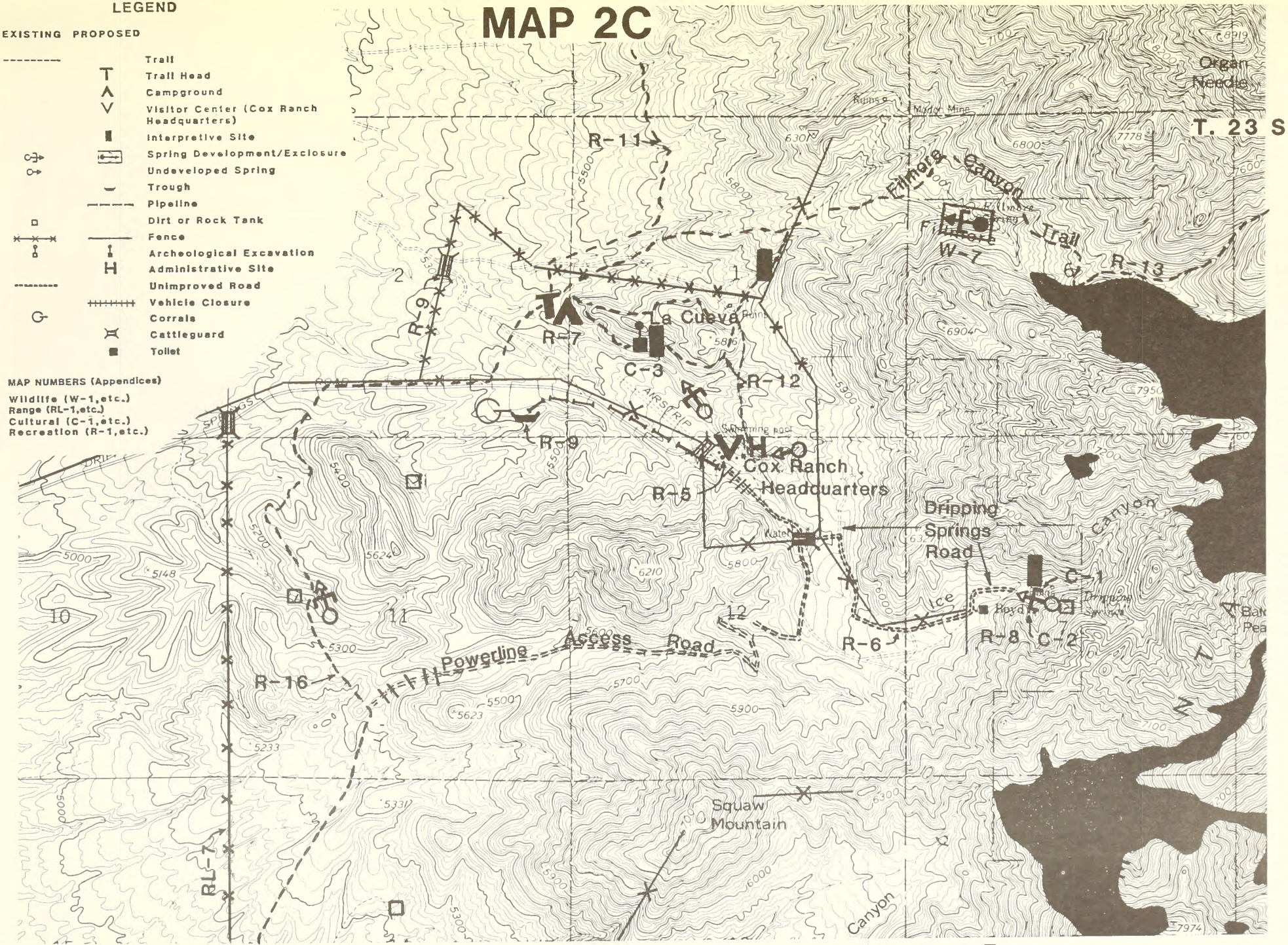
LEGEND

EXISTING PROPOSED

- Trail
- Trail Head
- Campground
- Visitor Center (Cox Ranch Headquarters)
- Interpretive Site
- Spring Development/Exclosure
- Undeveloped Spring
- Trough
- Pipeline
- Dirt or Rock Tank
- Fence
- Archeological Excavation
- Administrative Site
- Unimproved Road
- Vehicle Closure
- Corrals
- Cattleguard
- Toilet

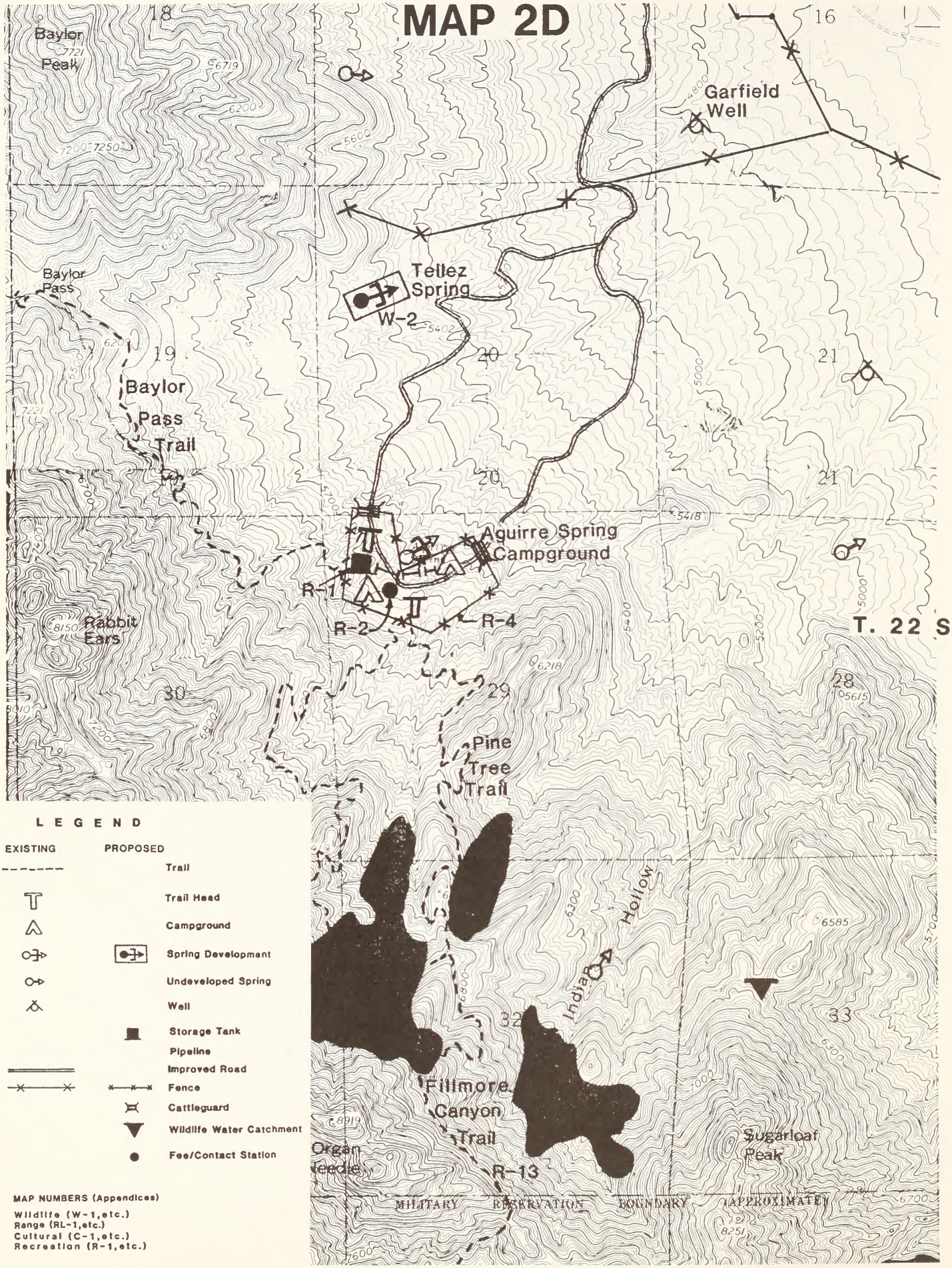
MAP NUMBERS (Appendices)

Wildlife (W-1,etc.)
Range (RL-1,etc.)
Cultural (C-1,etc.)
Recreation (R-1,etc.)



PROPOSED ACTION - ALTERNATIVE 1

MAP 2D

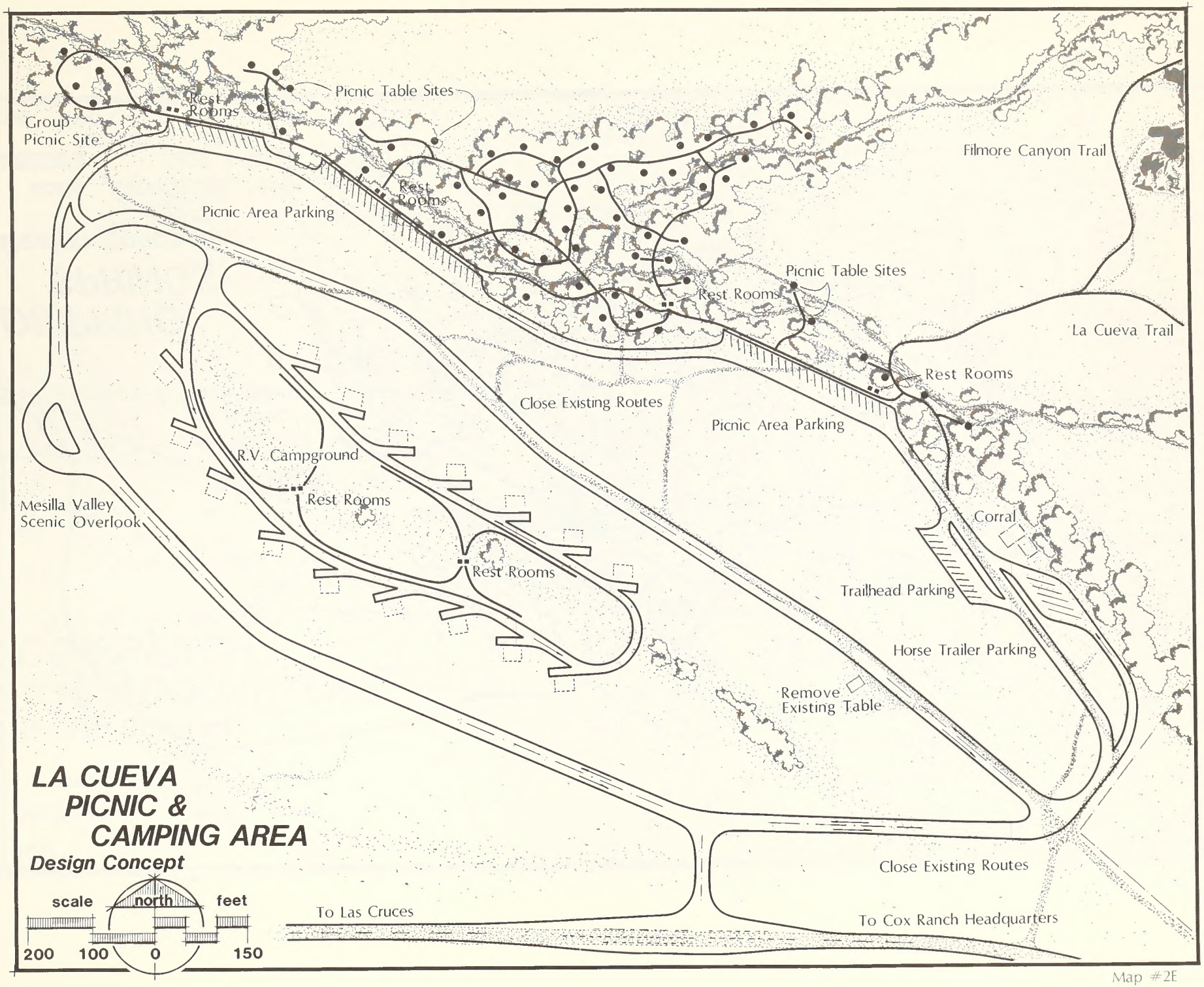


LEGEND

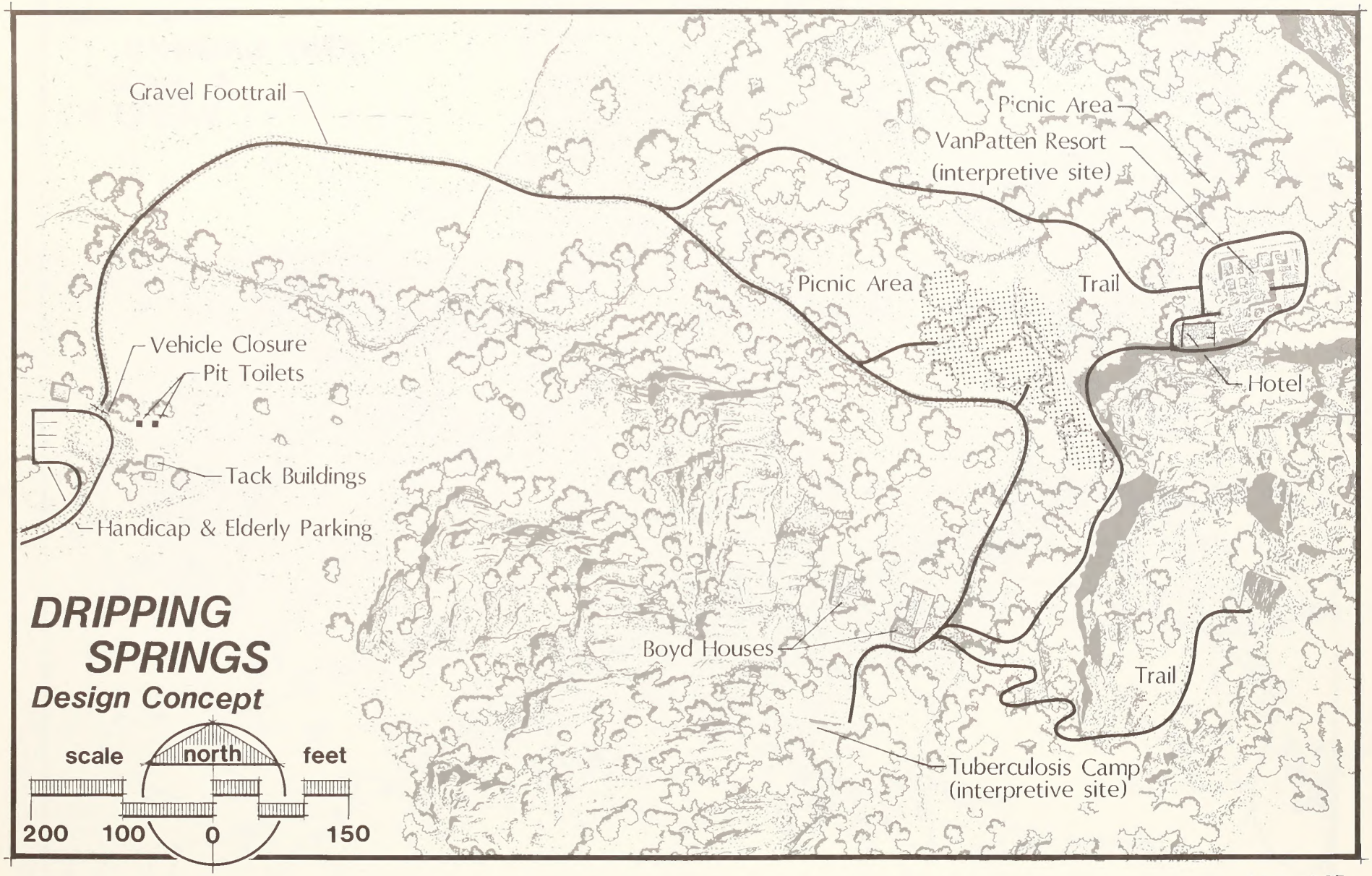
EXISTING	PROPOSED	
-------		Trail
T		Trail Head
		Campground
		Spring Development
		Undeveloped Spring
		Well
		Storage Tank
		Pipeline
		Improved Road
		Fence
		Cattleguard
		Wildlife Water Catchment
		Fee/Contact Station

MAP NUMBERS (Appendices)

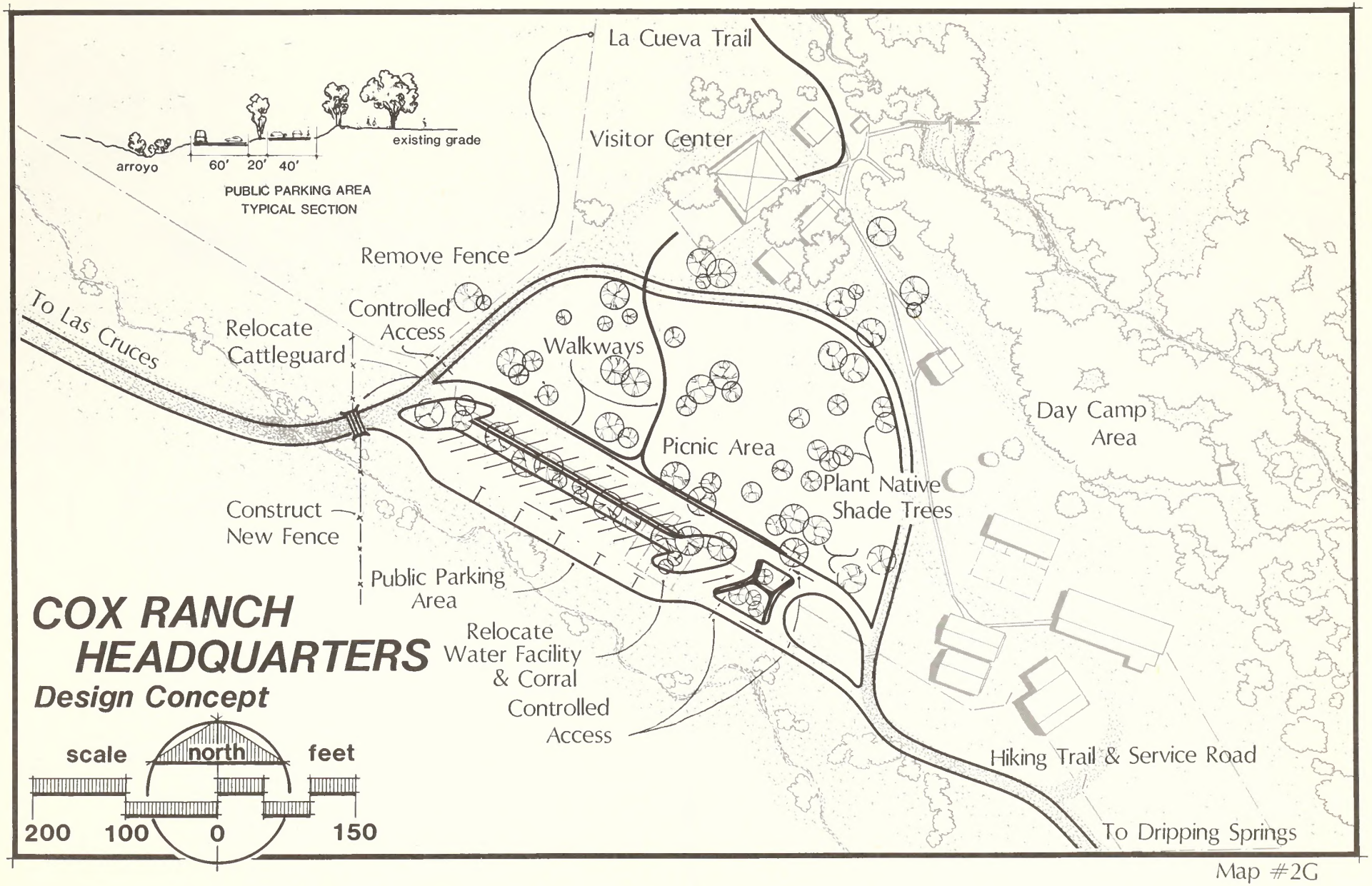
Wildlife (W-1,etc.)
Range (RL-1,etc.)
Cultural (C-1,etc.)
Recreation (R-1,etc.)


Group Picnic Site
Rest Rooms
Picnic Table Sites
Rest Rooms
Picnic Area Parking
Filmore Canyon Trail
Picnic Table Sites
Rest Rooms
La Cueva Trail
Rest Rooms
Close Existing Routes
Picnic Area Parking
R.V. Campground
Rest Rooms
Mesilla Valley Scenic Overlook
Corral
Rest Rooms
Trailhead Parking
Horse Trailer Parking
Remove Existing Table
LA CUEVA PICNIC & CAMPING AREA
Design Concept
scale
north
feet
200 100 0 150
To Las Cruces
Close Existing Routes
To Cox Ranch Headquarters

Map #2E


Gravel Foottrail
Picnic Area
VanPatten Resort
(interpretive site)
Picnic Area
Trail
Vehicle Closure
Pit Toilets
Hotel
Tack Buildings
Handicap & Elderly Parking
DRIPPING SPRINGS
Design Concept
scale
north
feet
200
100
0
150
Boyd Houses
Trail
Tuberculosis Camp
(interpretive site)

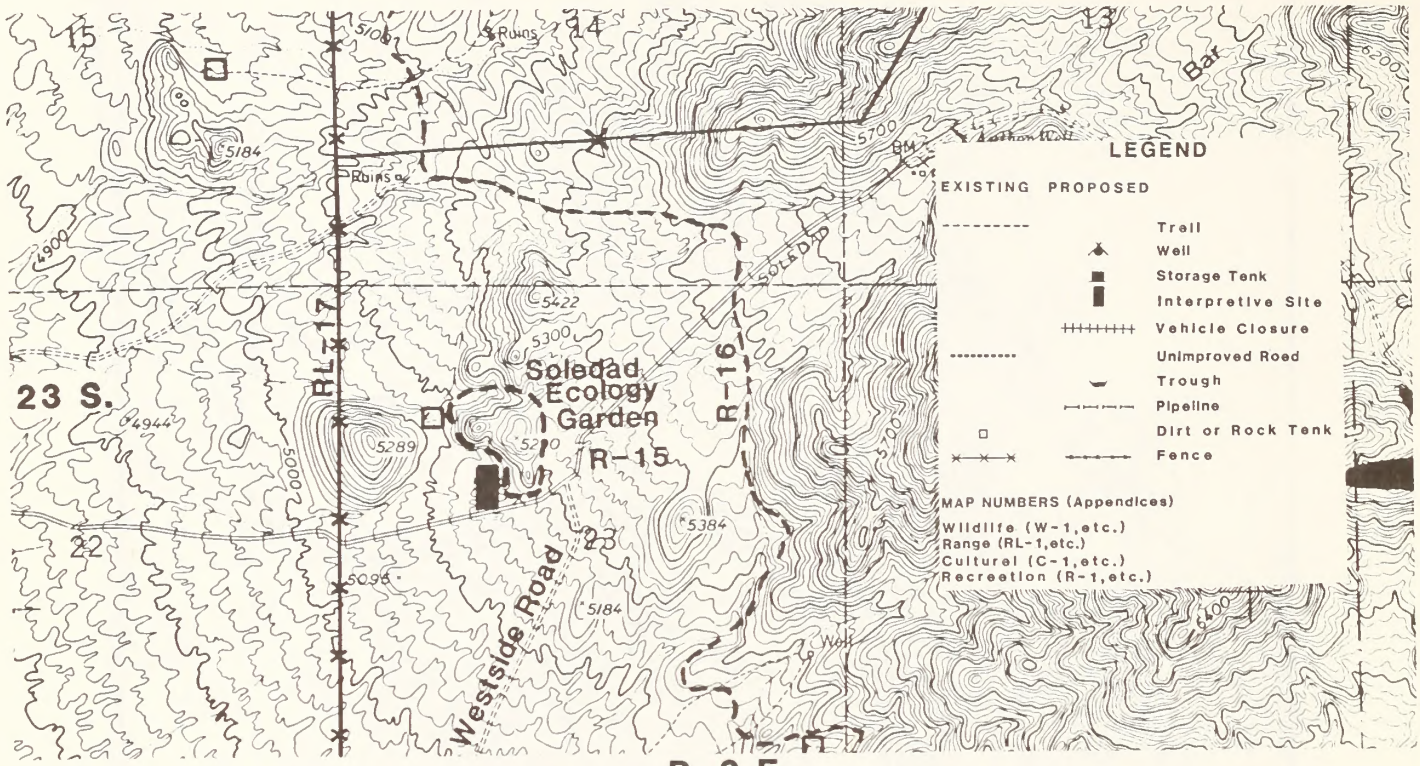
Map #2F

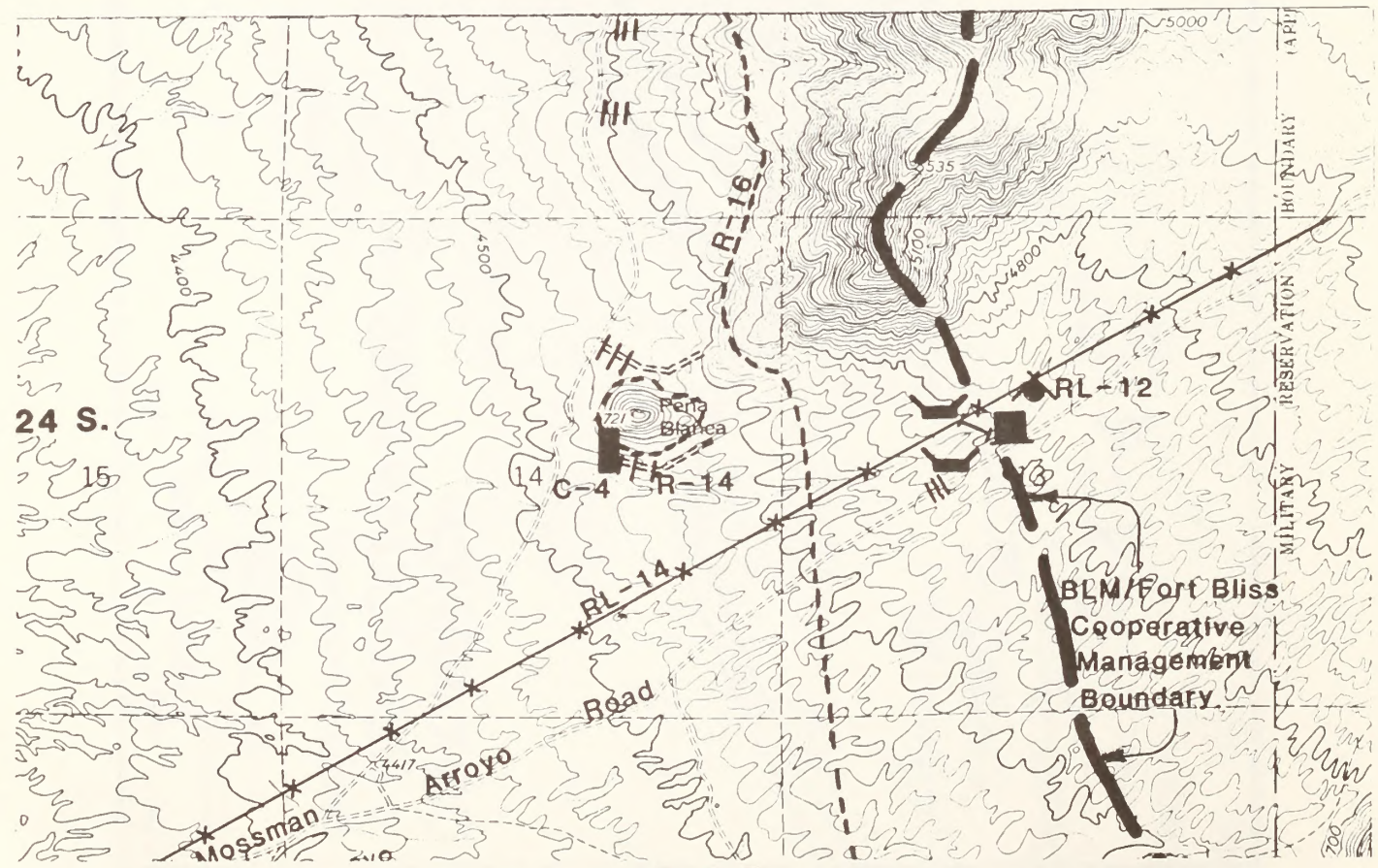

La Cueva Trail
Visitor Center
existing grade
arroyo
60'
20'
40'
PUBLIC PARKING AREA
TYPICAL SECTION
Remove Fence
To Las Cruces
Relocate
Cattleguard
Controlled
Access
Walkways
Picnic Area
Plant Native
Shade Trees
Day Camp
Area
Construct
New Fence
Public Parking
Area
COX RANCH
HEADQUARTERS
Design Concept
Relocate
Water Facility
& Corral
Controlled
Access
Hiking Trail & Service Road
To Dripping Springs
scale
north
feet
200
100
0
150

Map #2G

MAP 2H

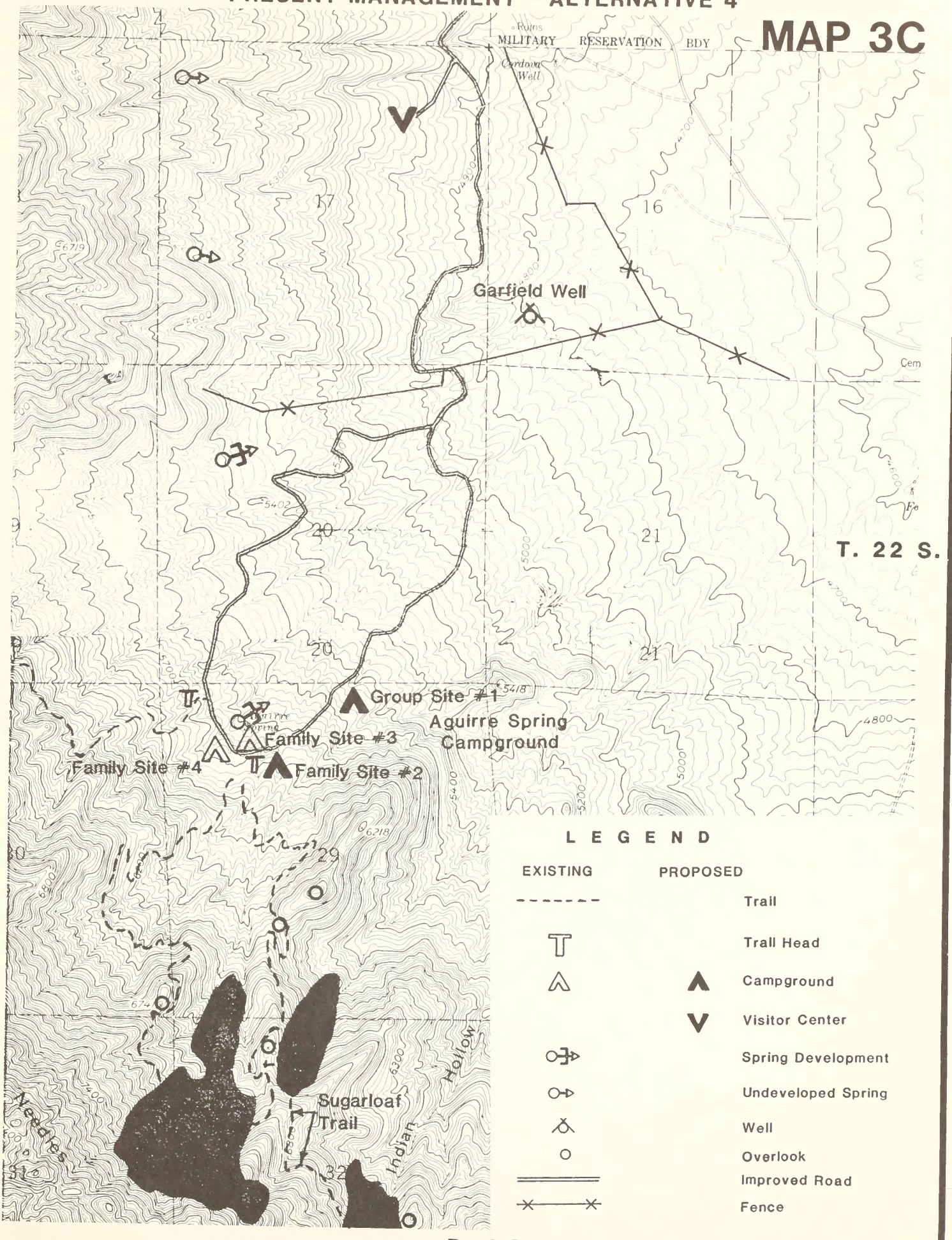
PROPOSED ACTION - ALTERNATIVE 1





PRESENT MANAGEMENT - ALTERNATIVE 4

MAP 3C



LEGEND

EXISTING	PROPOSED	
-------		Trail
T		Trail Head
⩓	▲	Campground
	▼	Visitor Center
		Spring Development
		Undeveloped Spring
		Well
		Overlook
═══		Improved Road
×——×		Fence

APPENDICES

APPENDIX 1

SUMMARY OF EXISTING LAND USE (MFP) DECISIONS

A. Lands.

The Southern Rio Grande (SRG) Management Framework Plan (MFP) (1982) designated two utility corridors across the proposed National Conservation Area (NCA), one north/south corridor that cuts across the proposed NCA near the southwest corner of Fort Bliss and continues down the westside of the Franklin Mountains. The other is an east/west corridor that cuts across the Franklin Mountains at Anthony Gap. The north/south corridor was designated for El Paso Electric and Chevron Products while the east/west corridor was designated for Southern Pacific Products and El Paso Electric.

B. Minerals.

Leasables - The Las Cruces/Lordsburg (LCL) MFP amendment (1984) designated the following areas Not Open to Leasing (NOL):

Baylor Recreation Area
Classification and Multiple Use (C&MU) Lands within Organ Mountains Scenic Area of Critical Environmental Concern (ACEC)
Organ Mountains Recreation Area (Aguirre Spring area)

The following areas were designated open to leasing subject to special stipulations:

Organ Mountains Wildlife (Raptor Nesting Area)
Organ Mountains Wilderness Study Area (WSA)
Organ Mountains Recreation Lands (OMRLs)
Lord's Ranch (Our Lady's Youth Center)
Franklin Mountains South

The following areas were designated open to leasing with No Surface Occupancy (NSO):

Needle's Eye Picnic Area
Organ Mountains Scenic ACEC

The remainder of the proposed NCA area, including the northern Franklin Mountains and the area between the Organs and Franklins is open to leasing with no special stipulations.

Locatables - The SRG MFP basically stated that all areas were open to exploration and development with the following exceptions:

1. Organ Mountains - exclude those areas inside mineral withdrawal (C&MU classification) pending withdrawal review. In the area overlapping the Organ Mountains Scenic ACEC, the Notice of Intent (NOI) or Plan of Operations (POO) will include mitigation measures to protect visual resources. In the area overlapping the Organ Mountain WSA, exploration and development will be conducted within the Interim Management Policy (IMP) Guidelines.

2. Mitigating measures should be used to protect Class II visual resources and Threatened and Endangered (T&E) plant species in the Bishop's Cap area.

3. In the Franklin Mountains, the NOI or POO will include measures to protect T&E plants.

4. Special permits for ORV use related to mineral activities are required in the Organ Mountains Recreation Lands, Organ Mountains WSA and Franklin Mountains.

Salables - Approximately one section in the vicinity of Bishop's Cap was identified for building stone sale and extraction. One to two sections in the Franklins were identified for sale and extraction of clay. Special stipulations are required in all Environmental Assessments (EAs) to protect T&E plants, visual resources (Class II and Class III areas), arroyo riparian, and other wildlife habitat areas.

Areas within the Organ Mountain WSA are excluded pending the outcome of the designation process. Special permits for off-road vehicle (ORV) use related to mineral activities are required in the Organ Mountains Recreation Lands and Franklin Mountains.

C. Rangeland Management.

The SRG MFP initially placed three allotments (A. B. Cox Estate, San Augustine Ranch, and S. A. Walter) in the "M" or Maintain category. The other five allotments within the proposed NCA boundary (W. F. Blythe - 5001 and 5004, Paul Price, Four-S, Inc., and Dale Hopkins) were placed in the "I" or Improve category. The A. B. Cox Estate Allotment was later changed to an "I" allotment. The Dale Hopkins and Four-S allotments were later combined into the Baylor Canyon Allotment.

D. Wildlife.

The Organ Mountains were designated as the highest priority of three areas in the SRG Planning Area for deer Habitat Management Plan (HMP) development. The MFP also specifically allocated forage for deer on an allotment basis. A total of 747 animal unit months (AUMs) were allocated to big game within the proposed NCA. The HMP has not been prepared.

E. Vegetation.

The entire area is closed to plant collection and sale.

F. Recreation.

OMRLS and Franklin Mountains - ORV use limited to designated roads and trails.

Organ Mountains WSA - ORV use limited to existing roads and trails.

The area between Bishop's Cap (south end of OMRLs) and Franklin Mountains is open.

Area around Bishop's Cap and Anthony Gap were designated as rock and mineral collection areas (seems to conflict with decision under minerals for sale of building stone at Bishop's Cap).

Organ Mountains Scenic ACEC designated in 1984 through Las Cruces/Lordsburg (LC/L) MFP Amendment (8,947 acres).

SRG MFP decision to provide bus and other vehicle parking and interpretive facilities at Soledad Ecology Garden north of Bishop's Cap (not done).

MFP decision to reintroduce desert bighorn sheep to Organ Mountains by 1986 (not done).

MFP decision to acquire State and private lands within OMRLs, later reaffirmed by SRG Plan Amendment (PA) (1986).

SRGPA extended acquisition into Franklin Mountains, retaining a corridor between the two ranges.

State land in OMRLs has been acquired, State land in Franklins and Organ/Franklin corridor will be acquired in Phase II (FY 88), Cox Exchange (private) in OMRLs to be completed in FY 88.

The SRGPA also tentatively recommended ACEC status for the Organ/Franklin corridor and Franklin Mountains pending a final RMP decision.

The MFP stated that visual resources would be maintained in VRM Class II, III, or IV (bulk of OMRLs and Franklin Mountains are in VRM Class II).

The Organ Mountains WSA was designated as a VRM Class II area.

APPENDIX A

SUMMARY OF RECREATION PLAN ACTIONS a/

Planned Actions	Dropped in 1974 Plan	Dropped in CRMP	Carried Forward in CRMP
1971 PLAN			
o Aguirre Spring Campground (Completed)			
o Aguirre Spring Access Road (Completed)			
o Baylor Pass Trailhead (Completed)			
o Visitor Center			X (Moved to west-side)
o Sugarloaf Trail		X	
o Indian Hollow Trail	X	X	
o Baylor Peak Trail		X	
o Baylor Pass Monument		X	
o Amphitheater	X	X	
o Westside Road Extension		X	
o Needle's Eye Picnic Site		X	
o Ocotillo Knolls Trail	X	X	
o Bishop's Cap Picnic Site	X	X	
o Soledad Ecology Garden			X
1985 PLAN			
o Manage Organ Mountains ACEC as a VRM Class I area.		X	
o Remove spoils piles and revegetate the area around the Stevenson-Bennett mine.		X	
o Segregate (withdraw) the remainder of the Organ Mountains ACEC plus additional adjacent areas from all forms of mineral entry.	X (will be segregated by wilderness designation subject to valid and existing rights)		
o Place a No Surface Occupancy (NSO) stipulation for oil, gas and geothermal leasing on the ACEC and adjacent areas.	X (the ACEC has already been protected by a NSO stipulation)		
o Implement a cooperative agreement with NMSU to manage the NMSU land under VRM Class I objectives.	X (land will be acquired)		
o Implement a cooperative agreement with the State for management of State land in T. 22 S., R. 3 E., Section 36 under VRM Class I objectives.	X (land has been acquired)		
o Relinquishment of 9,700 acres of the Fort Bliss withdrawal to BLM.	X (replaced by Cooperative Agreement)		

Note: a/The Baylor Pass and Pine Tree Trails had already been built and so were not considered in the 1971 plan.

APPENDIX 3

PLANNED THREATENED AND ENDANGERED SPECIES MANAGEMENT ACTIONS

Name	Priority	Project Type	Units	Cost
T&E Plants	1990+	Inventory	5,000 acres	$25,000
T&E Animals	1990+	Inventory	5,000 acres	$25,000
Dripping Springs Fence	1991	Reconstruction	1/4 mile	$ 1,500
			TOTAL	$51,500

Note: ACEC designation, protective mineral withdrawals, salable mineral restrictions and prescribed burning will be dererred until after completion of the Mimbres RMP in 1992.

APPENDIX 4

PLANNED WILDLIFE HABITAT IMPROVEMENT PROJECTS

Map No.	Name	Priority	Project Type	Units	Cost
W-1		1992	Spring Exclosure	1 acre	$ 1,000
W-2	Tellez Spring	1990	Spring Exclosure	1 acre	1,000
W-3	Mine House Spring	1990	Spring Exclosure	1 acre	1,000
W-4	Middle Spring	1991	Spring Exclosure	1 acre	1,000
W-5	LaPointe Spring	1992	Spring Exclosure	1 acre	1,000
W-6		1993	Spring Exclosure	1 acre	1,000
W-7	Fillmore Canyon	1991	Spring Exclosure	5 acres	5,000
W-8	Achenback Tank	1992	Spring Exclosure	1 acre	1,000
W-9		1993	Spring Exclosure	1 acre	1,000
W-10	Umbrella Catchment	1990	Wildlife Water Catchment	2,000 gallons	3,000
W-11	Umbrella Catchment	1990	Wildlife Water Catchment	2,000 gallons	3,000
W-12	Umbrella Catchment	1991	Wildlife Water Catchment	2,000 gallons	3,000
W-13	Umbrella Catchment	1991	Wildlife Water Catchment	2,000 gallons	3,000
W-14	Umbrella Catchment	1992	Wildlife Water Catchment	2,000 gallons	3,000
W-15	Umbrella Catchment	1992	Wildlife Water Catchment	2,000 gallons	3,000
W-16	Umbrella Catchment	1993	Wildlife Water Catchment	2,000 gallons	3,000
W-17	Umbrella Catchment	1993	Wildlife Water Catchment	2,000 gallons	3,000
W-18	Umbrella Catchment	1994	Wildlife Water Catchment	2,000 gallons	3,000
W-19	Umbrella Catchment	1994	Wildlife Water Catchment	2,000 gallons	3,000
W-20		1994	Spring Exclosure	1 acre	1,000
-	Bighorn Sheep/Turkey Habitat Evaluation	1990	Field Survey	2 reports	20,000
			TOTAL		$64,000

Note: Prescribed burning will be deferred until after competition of the Mimbres RMP in 1992.

APPENDIX 5A
PROPOSED GRAZING SYSTEMS IN THE CRMP AREA a/

Allotment Name and Number	Animal Units (AUs)	Number of Pastures	Number of Traps	Implementation Year
A. B. Cox Trust 5002	126	3	2	1996

Proposed Grazing System:

Rangeland improvement projects are scheduled for completion in 1993. The brush control scheduled for 1993, with 2 years of deferment after the year of application would make a grazing system implementation date of 1996. Of the three pastures, two are in the mountains and one in the lowlands. Both traps are in the mountains and could be combined to make one pasture. The military boundary also needs to be fenced.

Lack of permanent water in the mountain area is also a problem on this allotment. All permanent water is located in the lowland but there are several earthen reservoirs in the mountain region which would hold water usually during the growing season. Livestock would still use the mountain region during the fall and winter season for the reasons listed under the Baylor Canyon allotment.

San Augustine Ranch 5003	100	2	1	1990

Proposed Grazing System:

Since the San Augustine Ranch has existing workable rangeland improvements and there are no new projects proposed, a rest-rotation grazing system could be put into effect in 1990. Both pastures are mostly mountain areas with some lowlands included. The trap is all in the lowland area.

There are a few perennial springs in the mountain region but these have minimal flow during most of the year. Most of the permanent water is again in the lowland areas. Livestock would make better use of the mountain region during the dormant season. Because most of this ranch is in the mountain area, some grazing would take place in the mountains during the growing season. An additional fence may be needed in the larger south pasture to provide more flexibility in the grazing system.

Paul Price Estate 5009	135	3	0	1996

Proposed Grazing System:

Rangeland improvement projects are scheduled for completion in 1996. The brush control scheduled for 1993, with a 2 year deferment after the chemical is applied would make a grazing system implementation date of 1996. At the present time, the Price allotment has no interior allotment fences. The allotment will be fenced into three pastures with the mountains and lowlands in two pastures and an annual forb/mesquite dune as the third pasture. The first two pastures can be rotated so each gets a growing season of rest. The third pasture would be used in the spring and summer of each year when the annual forbs are present. If it becomes economically feasible, the mesquite area would be chemically treated at a later date. The military boundary also needs to be fenced on this allotment. With the three new wells proposed, this allotment would be well watered.

Baylor Canyon 5013	105	4	4	1993

Proposed Grazing System:

Rangeland improvement projects are scheduled for completion in 1991. With brush control scheduled in 1990 and 2 years deferment added to the year of application, a grazing system could be implemented in 1993. Of the four pastures, two are in the lowlands and two are in the mountains. The four traps could be combined to make two more pastures (two in the mountains and two in the lowlands).

One of the major problems is the lack of permanent water in the mountain areas. All water is located in the lowland areas. The only way to have livestock make use of the mountain areas would be to graze them during the dormant season (fall, winter) when cattle don't need to drink as often and could cover more area between waterings. The vegetation in the mountains would also be better suited to winter grazing as grama grasses retain their protein in the winter.

The S. A. Walter No. 5012, W. F. Blythe No. 5001, and the W. F. Blythe No. 5004 do not have enough AUs in the CRMP area to manage or would not have enough flexibility with livestock management due to the lack of proposed improvements, especially fences.

Note: a/ Section 8 consultation, coordination, and cooperation will be conducted with permittees and other interested parties before a grazing system is implemented.

APPENDIX 5B
PLANNED RANGELAND IMPROVEMENT PROJECTS

Map No.	Name	Priority a/	Project Type	Units	Cost
BAYLOR CANYON					
RL-1	West Side Road Fence	1991	4-Strand Wire Fence	2 gates 2 miles	$ 6,200 (RB)
RL-2	North Brush Control	1990	Spike 20P	960 acres	14,400 (BLM)
RL-3	North Trough	1988	Pipeline and Trough	1 trough 1/4 mile pipeline	1,350 (Sec 4)
RL-4	WSA Pipeline	1990	Pipeline and Trough	2 troughs 1 1/4 mile pipeline	5,550 (RB)
A. B. COX					
RL-5	Westside Fence	1991	4-Strand Wire Fence	3 gates 1 3/4 mile fence	5,550 (RB)
RL-6	North Well Extension	1990	Pipeline	1 trough 1/4 mile pipeline	1,350 (RB)
RL-7	Interior Fence	1993	4-Strand Wire Fence	5 gates 2 cattle-guards 5 mile fence	21,600 (RB)
RL-8	South Well Extension	1992	Pipeline & Trough	1 trough 1/2 mile pipeline	2,550 (RB)
RL-9	North Brush Control	1991	Spike 20P	1,920 acres	28,800 (BLM)
RL-10	South Brush Control	1993	Spike 20P	2,560 acres	38,400 (BLM)
PAUL PRICE ESTATE					
RL-11	North Well	1991	Drill & Case	1 well	10,000 (RB)
		1991/1992	Equip well	tower & rod	7,000 (RB)
RL-12	Middle Well	1992	Drill & Case	1 well	10,000 (RB)
		1992/1993	Equip well	tower & rod	7,000 (RB)
		1993	Pipeline & Trough	1/4 mile pipeline 1 trough	1,350 (RB)
RL-13	South Well	1993	Drill & Case	1 well	10,000 (RB)
		1993/1994	Equip well	tower &rod	7,000 (RB)
RL-14	North Fence	1993	4-Strand Wire Fence	1 cattle-guard 5 gates 6 1/2 miles fence	20,250 (RB)
RL-15	South Fence	1993	4-Strand Wire Fence	5 gates 5 1/2 miles	15,750 (RB)
RL-16	North Brush Control	1991	Spike 20P	3,200 acres	48,000 (BLM)
RL-17	Middle Brush Control	1993	Spike 20P	4,160 acres	62,400 (BLM)
RL-18	South Brush Control	1995	Reclaim	6,080 acres	b/ (BLM)
W. F. BLYTHE					
RL-19	West Brush Control	1994	Spike 20P	1,920 acres	28,800 (BLM)
RL-20	East Brush Control	1996	Spike 20P	2,560 acres	38,400 (BLM)
	Erosion Control Structures c/	Ongoing	3 Gabions/drainage & Installation	$650/structure	
				TOTAL	$391,700

Notes: RB - Rancher built (BLM supplied materials cooperative agreement).
Sec. 4 permit - All materials and labor provided by the permittee.
BLM - BLM construction, installation or treatment (usually under contract).

a/ A Benefit/Cost (B/C) analysis will be done on all projects proposed on each allotment. The B/C rating will determine project priority.

b/ The use of the chemical Reclaim is not cost-effective at the present time (approximately $45/acre compared to $15/acre for Spike 20p). It will not be used until such time as it is cost-effective to do so.

c/ Erosion control structures are being programmed in most of the small drainages in all the brush control areas.

APPENDIX 6
PLANNED CULTURAL RESOURCE MANAGEMENT ACTIONS

Map No.	Name	Priority	Project Type	Units	Cost
C-1	Van Patten's Mountain Camp	1992	Restore Resort Bldg.	750 sq. ft.	$ 37,000
		1993	Restore Gazebo	350 sq. ft.	22,500
		1994	Stabilize Outbuildings	3	21,000
		1991	Stabilize Ruins		18,500
		1991	Install Drainage/ Piping System		16,500
		1990	NRHP Nomination		1,500
		1992	Site Interpretation		5,000
C-2	Sanatorium	1993	Restore Dining Hall For Use As Group Picnic Shelter		10,000
		1992	Stabilize 2nd Living House For Storage Structure		10,000
		1990	NRHP Nomination		1,500
		1992	Site Interpretation		5,000
C-3	La Cueva Rockshelter	1991	Archeological Test Excavations, Artifact Analysis, Report Publication		30,000
		1992	Site Stabilization		10,000
		1993	Site Interpretation		5,000
C-4	Pena Blanca Rockshelters	1990	Site Stabilization		20,000
		1991	Site Interpretation		5,000
		1990+	Class II Inventory	5,000 acres	125,000
		1990+	Class III Inventory	500 acres	12,500
				TOTAL	$ 356,000

APPENDIX 7
PLANNED RECREATION DEVELOPMENT PROJECTS

Map No.	Name	Priority	Project Type	Units	Cost
R-1	Aguirre Spring Campground Water	1990	Water System	storage tank, distribution system	$ 61,000a/
R-2	Fee Station	1990			500
R-3	Aguirre Spring Campground Host Residence	1990	Mobile Home and Storage Building		12,000
R-4	Aguirre Spring Campground Fence	1990	4-Strand Barbed Wire Fence and two cattleguards	1 mile	14,000
R-5	A.B. Cox Visitor Center	1991/ 1992	Interpretive Center/Museum		100,000
R-6	Dripping Springs Trail	1991	Maintain Service Road/Hiking Trail	1 mile	1,000
R-6A	Dripping Springs Ruins Trail	1994	Surfaced Interpre tive Hiking/ Handicapped Trail (also includes Rockshelter at midway point on service road/hiking trail)	1/2 mile	6,500
R-7	La Cueva Campground	1992- 1993	Campground with parking, water, system, tables, vault toilets	60 sites	1,500,000
R-8	Dripping Springs Toilets	1991	Vault Toilets	2	5,000
R-9	La Cueva/Visitor Center Complex Fence	1992	4-Strand Barbed Wire Fence two cattleguards, relocated trough and corrals	1 1/2 miles	21,000
R-10	Baylor Pass Trailhead	1991	Expanded Parking Area for Horse Trailers	2 acres	1,000
R-11	Minehouse Trail	1993	Hiking/Equestrian Trail	5 miles	65,000
R-12	La Cueva Trail	1993	Surfaced Interpretative Hiking/ Handicapped Trail	1 mile	13,000
R-13	Fillmore Canyon Trail	1993 - 1994	Hiking Trail	5 miles	65,000
R-14	Pena Blanca Trail	1994	Surfaced Interpretive Hiking Trail and Parking Area	1/2 mile	6,500
R-15	Soledad Ecology Site	1991	Surfaced Interpretive Trail and Parking Area	1 mile	13,000
R-16	North/South Trail	1995 -	Hiking/Equestrian Trail	28 miles	303,000
R-17	Dripping Springs Road	1991	Road Paving	4 miles	648,000
R-18	Road Closures	1989	Road Closures	2 1/2 miles	500
				TOTAL	$2,836,000

Note: a/ Cost estimate is based on the least cost alternative contained in the Aguirre Spring water feasibility report which is hauling water by vehicular transport.

APPENDIX 8
ALTERNATIVE COST COMPARISON

	Alt 1	Alt 2	Alt 3	Alt 4
T&E Species	$ 51,500	$ 51,500	$ 51,500	$ -
Wildlife Habitat	64,000	64,000	64,000	-
Rangeland Resources	391,700	132,500	391,700	6,850
Cultural Resources	356,000	356,000	356,000	-
Recreation	2,831,000	2,770,000	3,803,000	2,098,000
TOTALS	$3,694,200	$3,374,000	$4,666,200	$2,104,850

APPENDIX 9
MONITORING STRATEGIES

Element	Component	Technique(s)	Units	Frequencies	BLM Workmonths
Livestock	Vegetation production, composition	Utilization studies trend photos, condition transects	Allotments Capacity	Biannually	.25 per Allotment
T&E Plants	Listed plant species, identify potential habitats	Soil surveys, plant frequency, vegetation surveys	Plant species and acres	Annually	.25 per species
	Sneed's pincushion	x & y coordinates along permanent transects marked by rebar stakes at 50 foot intervals	Individual plants, number heads per cluster	Annually (one population each year	.25
Vegetation (Brush Control) Areas	Vegetation production, Composition	Production transects	Acres	Biannually	.25 per treatment area
Riparian/Arroyo Habitat Management	Vegetal structure and composition	Photo plots, plant frequency	Stability, condition, trend	Annually	.5
Big Game Habitat	Mule deer population trends	Check stations, pellet group transects	Numbers, sex & age ratios	Annually by NMDGF and BLM	
	Desert Bighorn population trends (after reintroduction)	Aerial or ground census, radio telemetry	Animal numbers, sex and age ratios	Annually by NMDGF after release	
	Brouse condition and trend	Utilization transects according to the NM Interagency Browse Handbook	Percent use of production	Annually	1.0
Recreation Use	Campground Use	Fee station data, campsite contacts, visual monitoring of facility condition	Recreation visits, repair needs	Daily	1.0
	Road Use	Vehicle counts	Vehicle numbers	Monthly	.5
	Trail Use	Visual monitoring of trail condition and repair needs, plus safety hazards	Numbers of needed repairs and hazards	Monthly	1.5
Cultural Resources	Site damage due to weathering and eroision	Photo plots, direct observation	Site conditions, impacts	Annually	0.5
	Site damage due to human-caused impacts	Photo plots, direct observation	Site conditions, impacts	Annually	0.5

GLOSSARY

GLOSSARY

Abbreviations and Acronyms

ACEC	Area of Critical Environmental Concern
ACHP	Advisory Council on Historic Preservation
AMP	Allotment Management Plan
AUM	Animal Unit Month
BLM	Bureau of Land Management
C&MU	Classification and Multiple Use
CRMP	Cultural Resource Management Plan or Coordinated Resource Management Plan
EA	Environmental Assessment
EIS	Environmental Impact Statement
FLPMA	Federal Land Policy and Management Act
HMP	Habitat Management Plan
IMP	Interim Management Policy and Guidelines for Lands Under Wilderness Review
MFP	Management Framework Plan
MOU	Memorandum of Understanding
NMDGF	New Mexico Department of Game and Fish
NMSU	New Mexico State University
NRHP	National Register of Historic Places
NCA	National Conservation Area
OMRLs	Organ Mountains Recreation Lands
ORV	Off-Road Vehicle
RMP	Resource Management Plan
ROS	Recreation Opportunity Spectrum
T&E	Threatened and Endangered
SCS	Soil Conservation Service
SHPO	State Historic Preservation Officer
TRT	Technical Review Team
VRM	Visual Resource Management
WMP	Wilderness Management Policy
WSA	Wilderness Study Area

ACTIVITY PLAN: A detailed action plan for a particular resource or combination of resources prepared subsequent to the land use plan. The activity plan details how to accomplish the stated objectives of the land use plan for a particular area, allotment, etc., by the use of site-specific projects and analysis.

ALLOTMENT: An area of land where one or more operators graze their livestock. It contains public land and can include parcels of private or state-owned lands. The number of livestock and period of use are stipulated for each allotment. An allotment may consist of several pastures or be only one pasture.

ALLOTMENT MANAGEMENT PLAN (AMP): A livestock grazing management plan dealing with a specific unit of rangeland, and based on multiple-use resource management objectives. The AMP considers livestock grazing in relation to other uses of the range and in relation to renewable resources - watershed, vegetation, and wildlife. An AMP establishes the seasons of use, the number of livestock to be permitted on the range, the rangeland improvements needed, and the grazing system.

ALLUVIUM: Soil and associated materials deposited by flowing water.

ANIMAL UNIT: The equivalent of one mature (1,000 lb.) cow or five sheep based upon average daily forage consumption of 26 pounds dry matter per day.

ANIMAL UNIT MONTH: (1) The amount of feed or forage required by an animal unit for 1 month (i.e., 800 lbs/month). (2) Tenure of one animal unit for a period of 1 month.

ARCHEOLOGICAL RESOURCES: Sites, areas, structures, objects, or other evidence of prehistoric or historic human activities.

ARCHEOLOGICAL SITE: Geographic locale containing structures, artifacts, material remains, or other evidence of past human activity.

AREA OF CRITICAL ENVIRONMENTAL CONCERN: An Area of Critical Environmental Concern (ACEC) is an area within the public land where special management attention is required (when such areas are developed or used or where no development is required) to protect and prevent irreparable damage to important historic, cultural, or scenic values, fish and wildlife resources, or other natural systems or processes, or to protect life and property from natural hazards.

BEDROCK MORTAR: Exposed rock or stone which exhibits grinding depressions formed by the milling of acorns and other foodstuffs by Indians.

BROWSE: The tender shoots, twigs, and leaves of trees and shrubs often used as food by deer, livestock, and other animals; or to feed on or eat browse.

CAMP SITE: Area utilized for one or more tasks, which also shows evidence of occupation by the presence of housepits, midden deposits, or hearths.

CARRYING CAPACITY: The maximum stocking rate possible without damaging vegetation or related resources. Carrying capacity may vary from year-to-year on the same area due to fluctuating forage production caused primarily by differing amounts of precipitation.

CARSONITE POSTS: Brightly colored, lightweight, and durable posts manufactured by Carsonite International. They are a flexible composition of marble, glass fiber, and polymers.

CLASS I CULTURAL INVENTORY: An inventory of the existing literature and a profile of the current data base for cultural resources, frequently utilized to guide field inventories.

CLASS II CULTURAL INVENTORY: A sample-oriented field inventory which is representative of the range of cultural resources within a finite study area.

CLASS III CULTURAL INVENTORY: An intensive field inventory designed to locate and record, from surface and exposed profile, all cultural resources within a specified area.

COLLUVIUM: Soil and associated materials deposited by gravity.

CULTURAL RESOURCES: Fragile and nonrenewable elements of human culture including archeological remains (areas, structures, objects, or evidences of prehistoric or historic human activities) and socio-cultural values traditionally held by ethnic groups (sacred places, traditionally utilized naturally-occurring raw materials, etc.).

DATA RETRIEVAL: The planned professional recovery of archeological data to mitigate impacts or for research. Excavation, surface collection, and technical drawings are examples of data retrieval.

ENDANGERED SPECIES: Any species which is in danger of extinction throughout all or a significant portion of its range.

EOLIAN: Carried, arranged, or deposited by wind.

FORAGE: All browse and herbaceous foods that are available to grazing animals.

FORB: Non-woody herbaceous plants neither grass nor resembling grass.

GRAZING LEASE: A document authorizing use of the public land for the purpose of grazing livestock.

HABITAT: The natural environment of plant or animal.

HISTORIC: Refers to period wherein non-native cultural activities took place, based primarily upon European roots, having no origin in traditional Native American culture(s).

KIOSK: A small structure with one or more open sides used as an information booth.

LITHIC: A stone or rock that may be either abraded into the proper form for use as a tool or shaped by knocking pieces (flakes) off. A cluster of flakes is called a "lithic scatter."

MIDDEN: Dark-colored soil deposits formed from organic residues remaining from Indian campsites, frequently containing artifactual, faunal, and floral constituents of high scientific value.

MONITORING: Specific studies which evaluate the effectiveness of actions taken toward achieving management objectives.

NATIONAL REGISTER OF HISTORIC PLACES (NRHP): A register of districts, sites, buildings, structures, and objects significant in American history, architecture, archeology, and culture, established by the Historic Preservation Act of 1966 and maintained by the Secretary of the Interior.

NATIONAL REGISTER ELIGIBLE: Status conferred upon a cultural resource when it is deemed qualified for the NRHP, following formal documentation and consultation.

NATIONAL REGISTER POTENTIAL: Status of a cultural resource which is deemed qualified for the NRHP, prior to formal documentation and consultation; managed as if it were actually listed.

OFF-ROAD VEHICLE DESIGNATIONS: Executive Order 11644 requires that all public land be designated for appropriate levels of vehicle use in one of three possible categories: Open, Limited, or Closed.

Open - Vehicle use allowed anywhere in the area.

Limited - Vehicle use restricted in some way, such as limited to designated or existing routes.

Closed - Vehicle use not permitted.

PETROGLYPH: A figure, design, or indentation carved, abraded or pecked onto a rock.

PLANT COMMUNITY: A regional element of the vegetation characterized by the presence of certain dominant species. A vegetation type may consist of one to several communities.

PREHISTORIC: Refers to period wherein Native American cultural activities took place which were not yet influenced by contact with historic non-native culture(s).

PRESCRIBED BURNING: The application of fire to wildland fuels under such conditions of weather, fuels, and topography that specific objectives are accomplished safely.

PRIMITIVE RECREATION: Nonmotorized and nondeveloped types of outdoor recreational activities.

PUBLIC LAND: Land administered by the Bureau of Land Management.

QUARRY SITES: Places where minerals occur which were a source of raw material for prehistoric/historic peoples.

RANGELAND IMPROVEMENT: Any activity or program on or relating to rangelands which is designated to improve production of forage, change vegetation composition, control patterns of use, provide water, stabilize soil and water conditions, and provide habitat for livestock, wild free-roaming horses and burros, and wildlife. The term includes but is not limited to structures, treatment projects, and use of mechanical means to accomplish the desired result.

RECREATION OPPORTUNITY SPECTRUM: A system used to characterize recreation opportunities in terms of setting, activity, and experience.

RIGHT-OF-WAY GRANT: A right attached to the land for use by another party (i.e., utility lines, road, etc.).

RIPARIAN: Situated on or pertaining to the bank of a river, stream, or other body of water. Normally used to refer to the plants of all types that grow rooted in the water table of streams, ponds, and springs.

ROCK ART/CEREMONIAL SITES: Petroglyphs or pictographs, some of which were probably expressions of Native American ceremonial activities.

ROCKSHELTER: Naturally-formed recess in a rock formation which provided shelter to prehistoric occupants.

SEASON OF USE: That period of time, as designated in planning documents, within which livestock grazing can be authorized.

SENSITIVE PLANTS: Those plants which require management consideration under BLM policy.

SEGREGATION: Refers to the status of lands and what laws (mineral or land disposal) may be excluded from applying to the lands.

TEMPORARY CAMP: Area utilized seasonally or for short-term activity with evidence of occupation in addition to primary task(s). Usually smaller than "camp" sites, with less midden depth and extent, fewer tasks evident, with a less diverse natural resource base available.

THREATENED SPECIES: Any species which is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range.

TORRIORTHENTS: Soils that have recently formed in dry climates and have limited amounts and durations of water movement in the soil and biotic influence on the soil.

UMBRELLA CATCHMENT: A water catchment and storage device to catch and store rainfall for wildlife use.

VEGETATION TYPE: A grouping of similar vegetation based on structure, a product of the complex of climatic factors effective in a region.

VISITOR DAYS: Unit of measure for recreation use; 1 hour spent on public land by one recreationist.

VISUAL RESOURCE MANAGEMENT (VRM): The planning, design, and implementation of management objectives to provide acceptable levels of visual impacts for all BLM resource management activities. VRM classes are used to describe the degree of modification permitted in the basic elements of the landscape.

Class I - Natural ecological changes and very limited management activity are allowed. Any contrast within the characteristic landscape must not attract attention.

Class II - Changes in any of the basic elements (form, line, color, texture) caused by a management activity, should not be evident in the characteristic landscape. The contrast may be seen but must not attract attention.

Class III - Contrasts to any of the basic elements (form, line, color, texture) caused by a management activity may be evident and begin to attract attention but should remain subordinate to the existing landscape.

Class IV - Contrasts may attract attention and be a dominant feature of the landscape in terms of scale, but should repeat the form, line, color, and texture of the characteristic landscape.

WATERSHED: The area drained by a river or stream system.

WITHDRAWAL: A formalized action restricting specified lands from operation or disposal under specified laws, either mineral laws or land disposal laws, or both. Can also be used to transfer jurisdiction of lands to another Federal agency.

WOODLAND TYPE: Areas with at least a 10 percent canopy cover of woody plants, primarily oak and pine. Woodlands usually provide herbaceous forage in the understory for livestock grazing.

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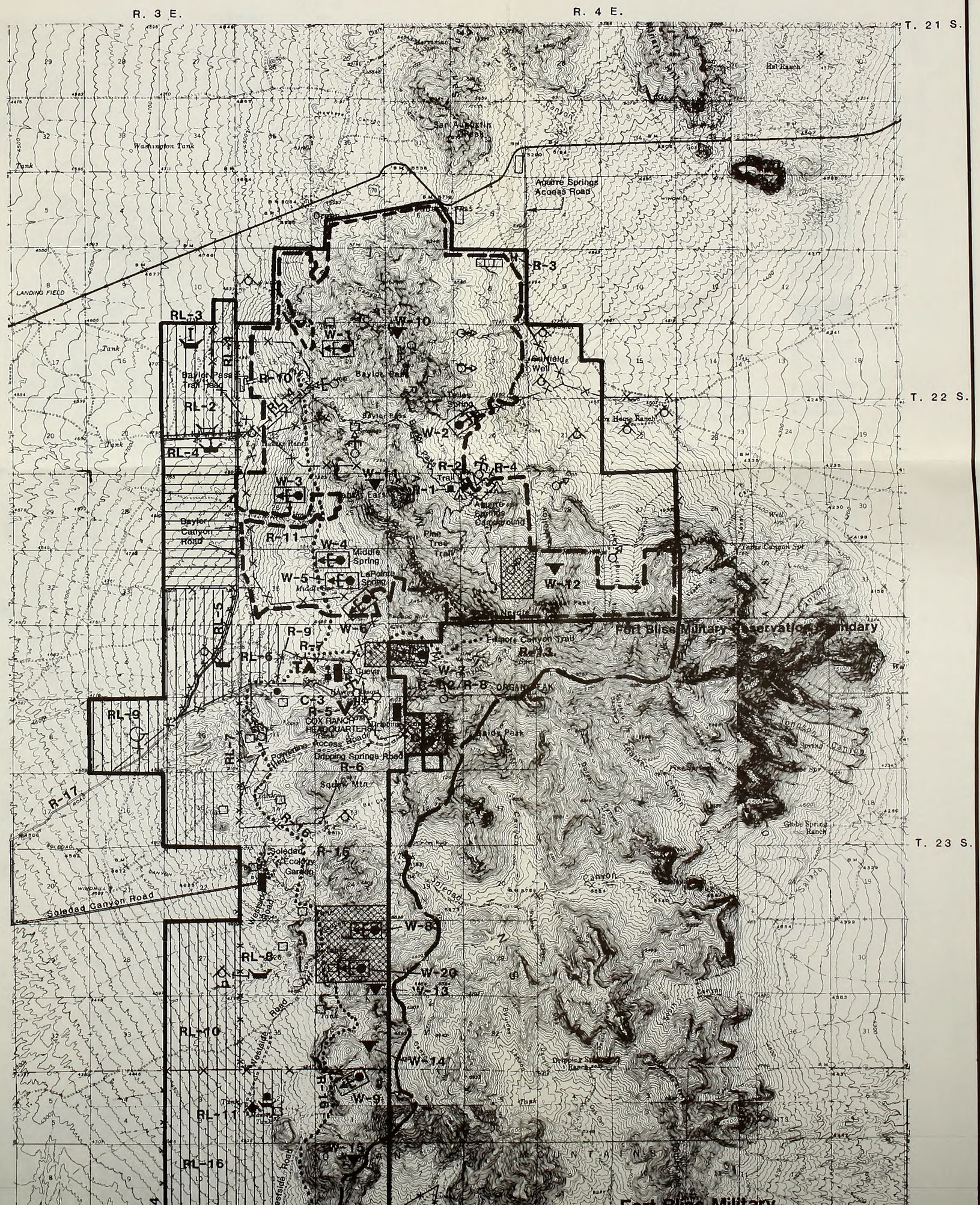
ORGAN MOUNTAINS
COORDINATED RESOURCE MANAGEMENT PLAN (CRMP)

L E G E N D

- Proposed Organ Mountains National Conservation Area Boundary (Coordinated Resource Management Plan Area)
- Proposed Organ Mountains Wilderness Area
- Proposed BLM/Fort Bliss Cooperative Management Agreement Boundary
- Proposed Area of Critical Environmental Concern (T & E plants)
- Proposed Protective Withdrawal
- Fusselman Dolomite Formation (Saleable Mineral Restrictions)

EXISTING	PROPOSED	
		Trail
	T	Trail Head
	▲	Campground
	▼	Visitor Center (Cox Ranch Headquarters)
	▮	Interpretive Site
	▼	Wildlife Water Catchment
		Spring Development/Exclosure
		Undeveloped Spring
		Well
		Trough
		Pipeline
		Dirt or Rock Tank
		Fence
		Archeological Excavation
	H	Administrative Site
		Improved Road
		Unimproved Road
		Vehicle Closure
		Corrals
		Brush Control Areas
		Storage Tank
	●	Fee/Contact Station

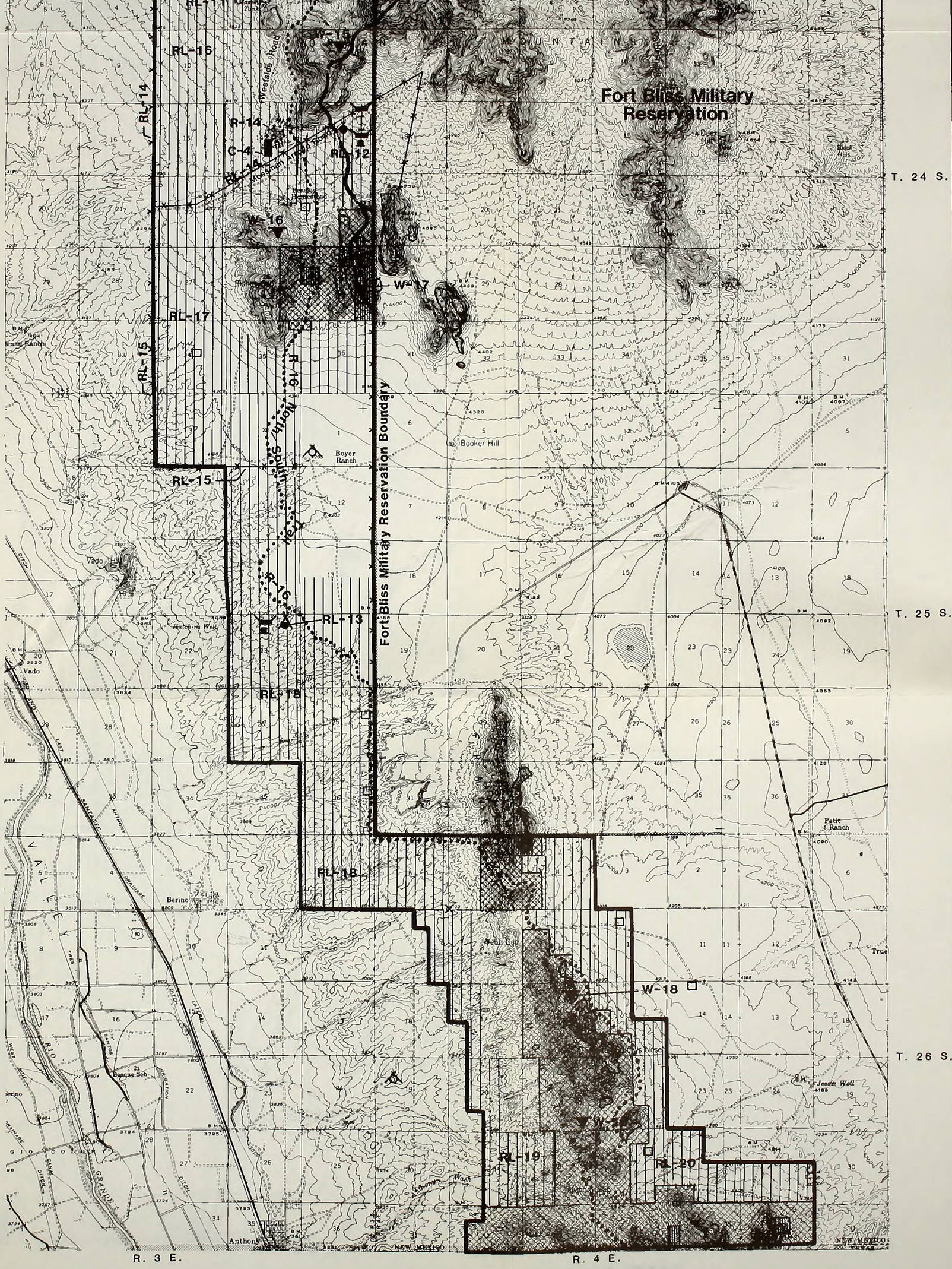


Storage Tank

Fee/Contact Station

MAP NUMBERS (Appendices)

Wildlife - W-1,etc.
Range - RL-1,etc.
Cultural - C-1,etc.
Recreation - R-1,etc.

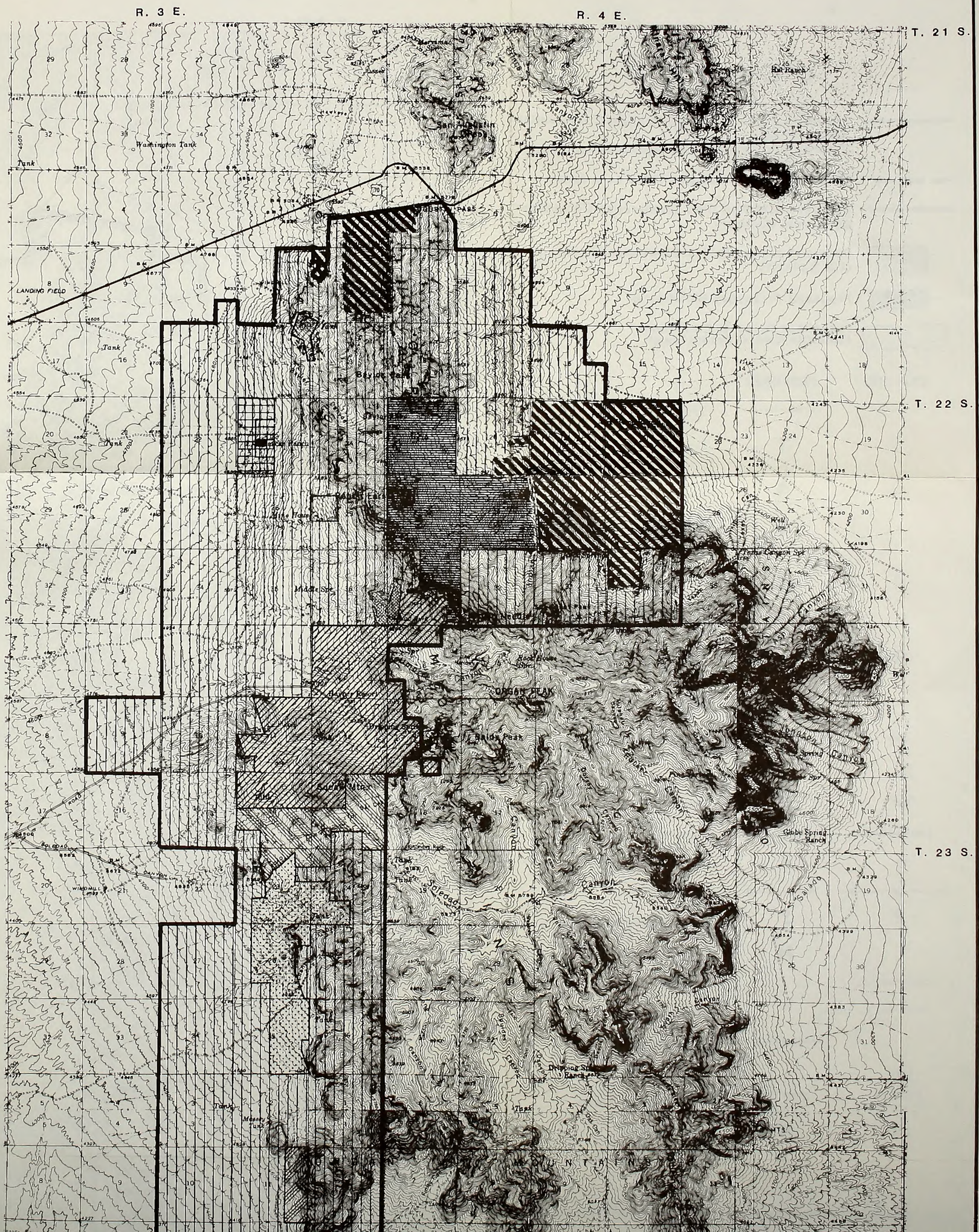


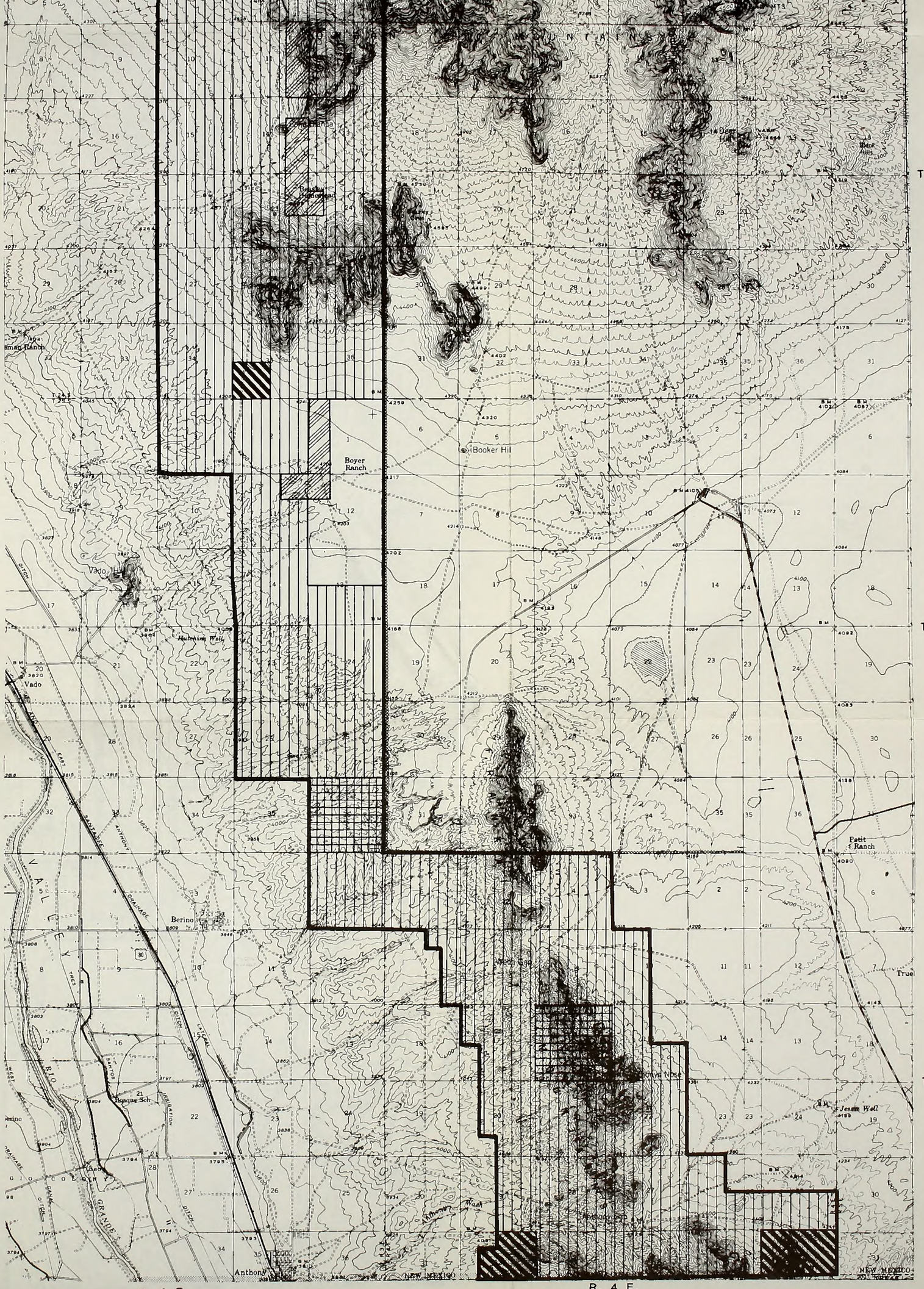
MAP 2A MANAGEMENT UNDER THE PROPOSED ACTION

ORGAN MOUNTAINS
COORDINATED RESOURCE MANAGEMENT PLAN (CRMP)

L E G E N D

- Retention Boundary (CRMP)
- Public Land (BLM)
- New Mexico State University Lands
- State Land For Acquisition
- Other State Land
- A.B. Cox Estate Exchange
- Other A.B. Cox Estate Land (Not For Acquisition)
- Cooper/Andereed Inc., and others
- Price
- Modoc Mine
- Ruby Mine
- Stephenson-Bennett Mine
- Other Private Land For Acquisition
- Other Private Land (Not For Acquisition)





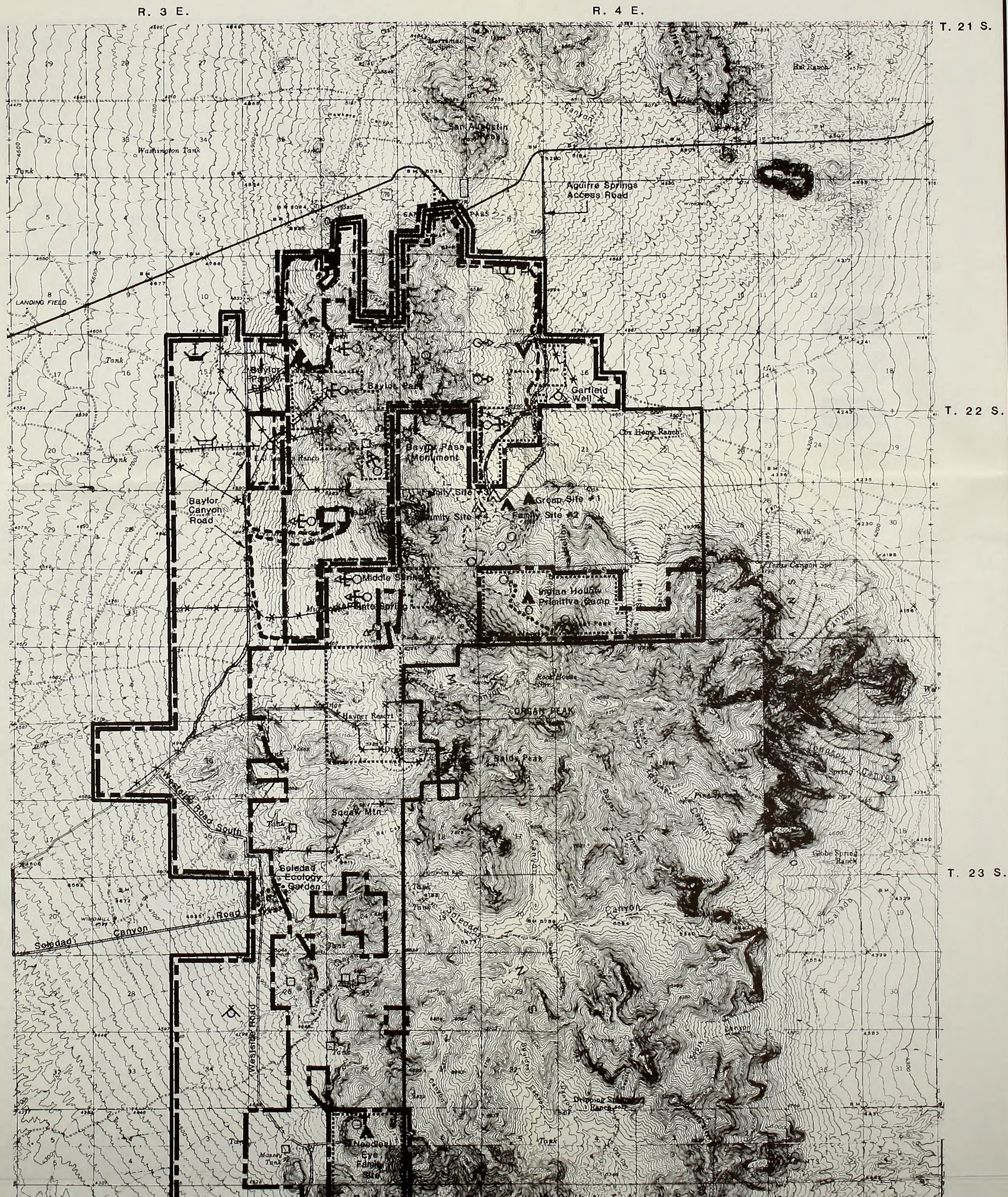
MAP 2B LAND TENURE ADJUSTMENTS UNDER THE PROPOSED ACTION

ORGAN MOUNTAINS
COORDINATED RESOURCE MANAGEMENT PLAN (CRMP)

L E G E N D

- Retention Boundary (CRMP)
- Organ Mountains Recreation Lands, Limited Vehicle Use Area
- Organ Mountains Wilderness Study Area
- Organ Mountains Scenic Area Of Critical Environmental Concern
- Classification and Multiple Use Segregated Lands
- Franklin Mountains Limited Vehicle Use Area
- Mossman Arroyo Open Vehicle Use Area
- Proposed Protective Withdrawals
- Fusselman Dolomite (Saleable Mineral Restrictions)

EXISTING	PROPOSED	
		Trail
T	T	Trail Head
	○	Scenic Overlook With Veiwfinder Telescopes
⛺	▲	Campground
	▼	Visitor Center
	▮	Interpretive Site
		Spring Development
		Undeveloped Spring
		Well
		Trough
		Pipeline
□	■	Dirt or Rock Tank
		Fence
	H	Administrative Site
		Improved Road
		Unimproved Road
	▮	Monument
		Corrals
		Brush Control Areas



T. 24 S.

T. 25 S.

T. 26 S.

R. 3 E.

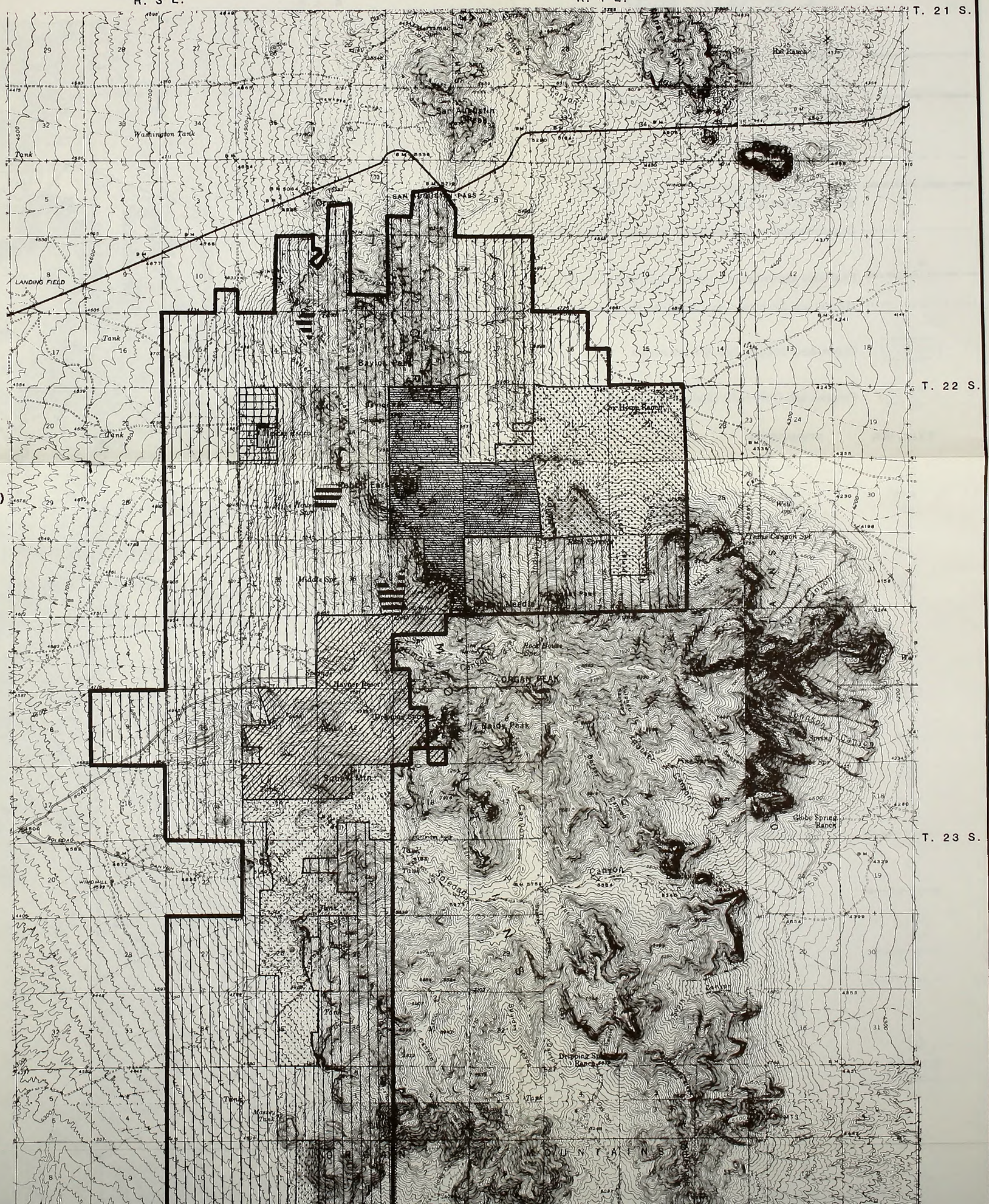
R. 4 E.

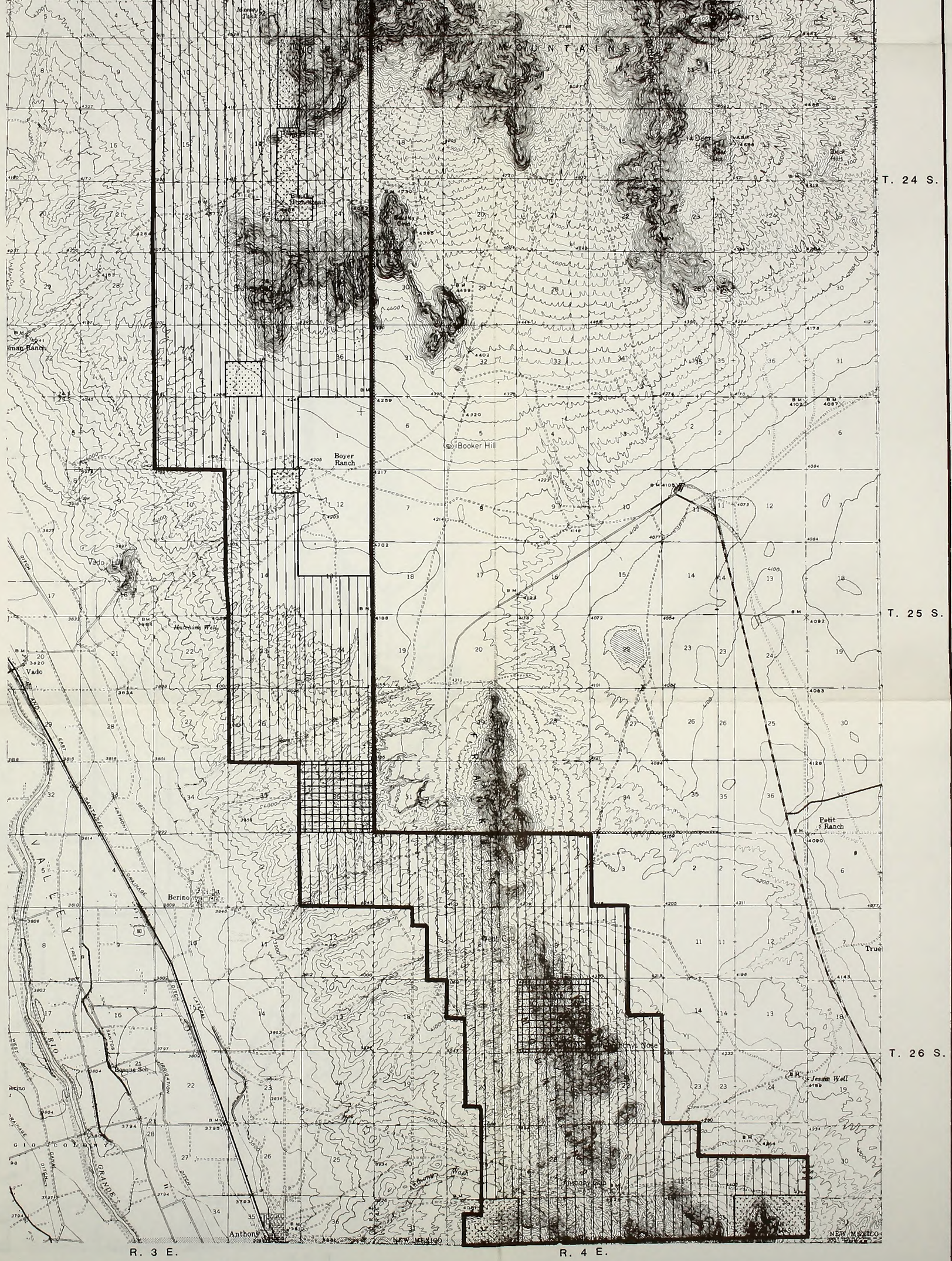
MAP 3A MANAGEMENT UNDER THE PRESENT MANAGEMENT ALTERNATIVE

ORGAN MOUNTAINS
COORDINATED RESOURCE MANAGEMENT PLAN (CRMP)

L E G E N D

- Retention Boundary (CRMP)
- Public Land (BLM)
- New Mexico State University Land
- State Land For Acquisition
- Other State Land (Not for Acquisition)
- A.B. Cox Estate Exchange
- Patented Mining Claims
- Other Private Land for Acquisition
- Other Private Land (Not for Acquisition)





MAP 3B LAND TENURE ADJUSTMENTS UNDER THE PRESENT MANAGEMENT ALTERNATIVE

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