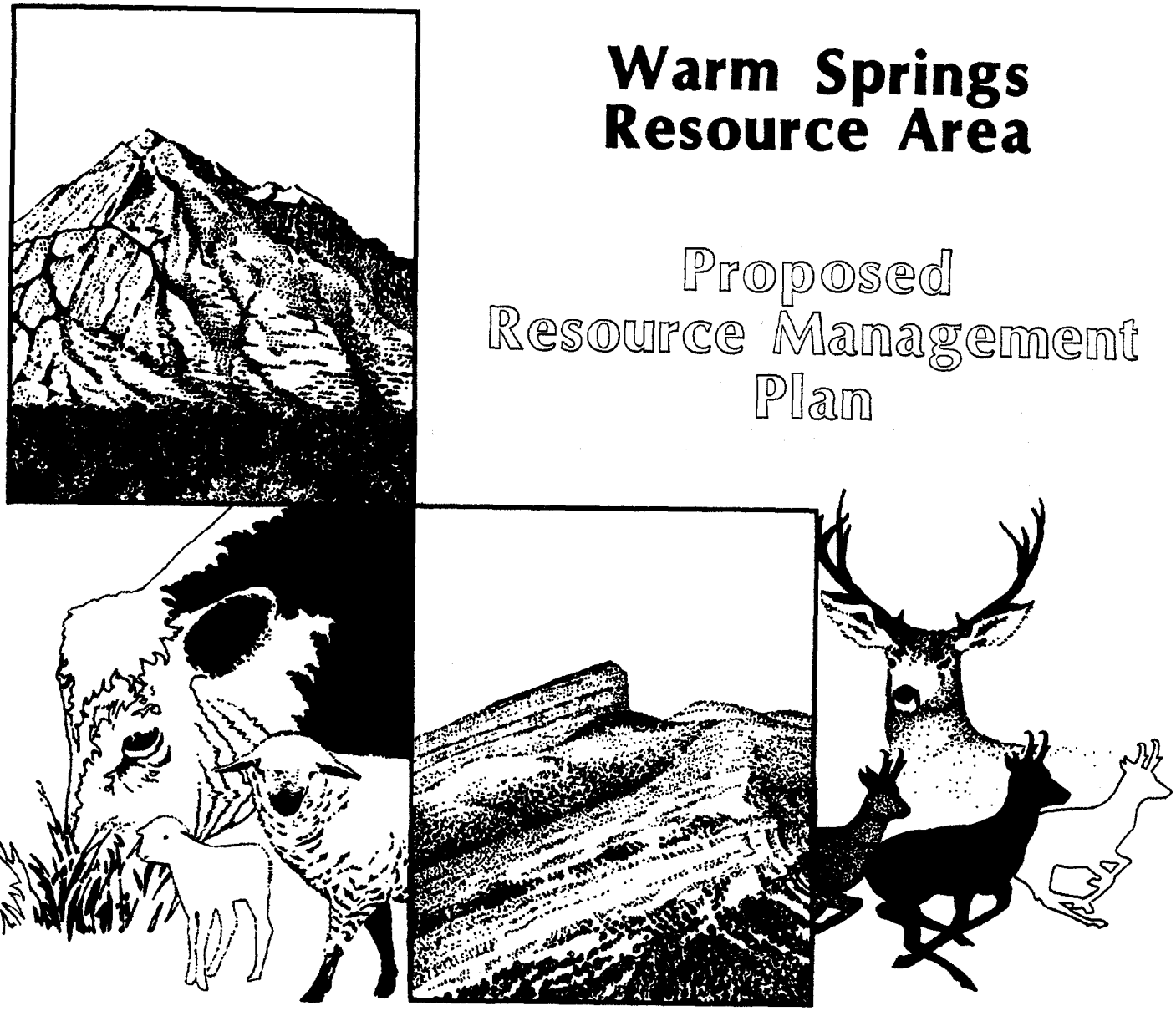
Warm Springs Resource Area

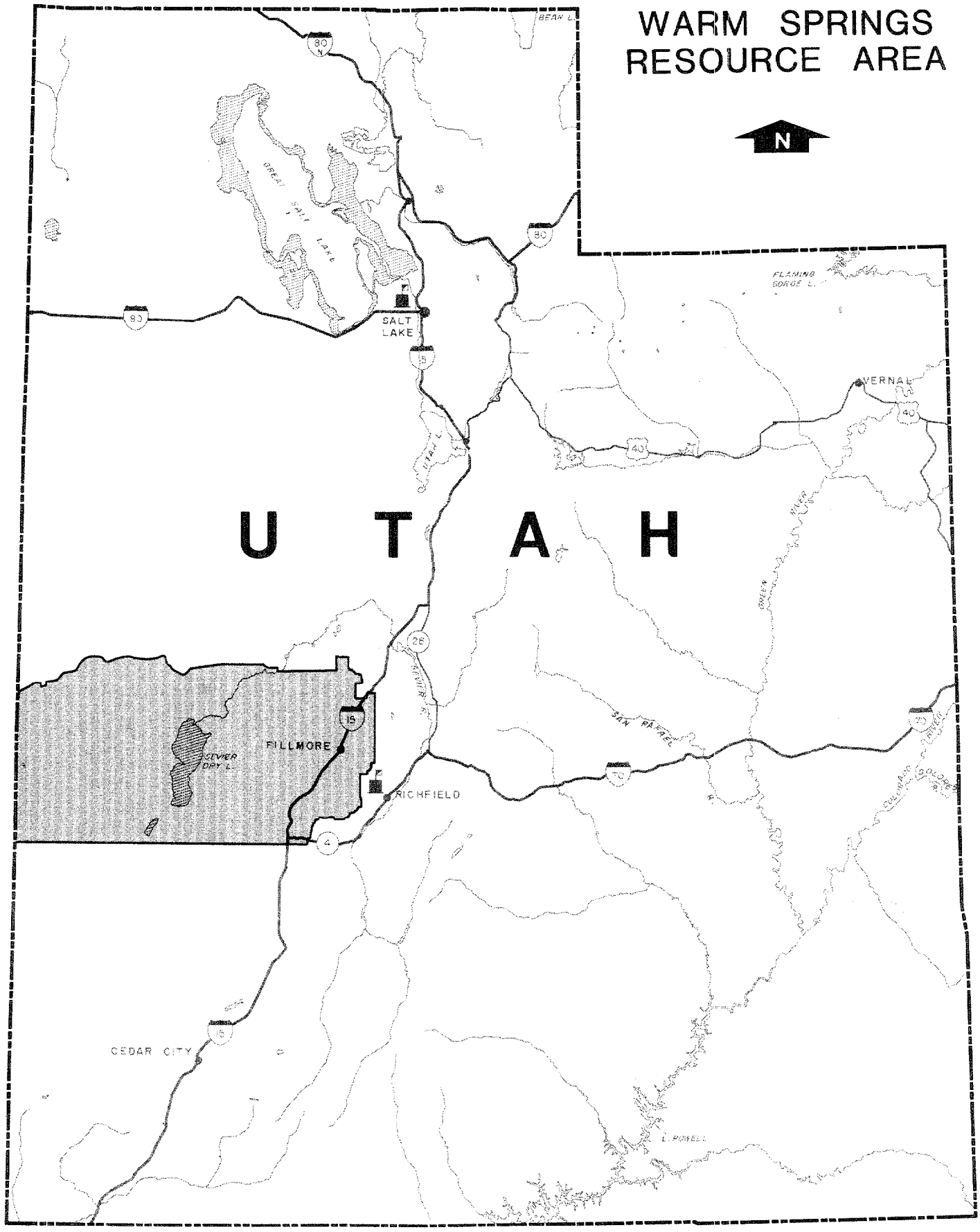
Proposed Resource Management Plan



Final Environmental Impact Statement

U.S. DEPARTMENT OF THE INTERIOR
March 3, 1849

U.S. DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT



On the Cover: Crystal Peak and Notch Peak are prominent West Desert Landmarks. The Warm Springs Resource Area provides habitat for mule deer and antelope and forage for livestock.

Cover illustration by John Nielson. Text illustrations by Rod Lister and Susan Lowe.

United States Department of the Interior

BUREAU OF LAND MANAGEMENT
RICHFIELD DISTRICT OFFICE
150 EAST 900 NORTH
RICHFIELD, UTAH 84701

IN REPLY
REFER TO:

Dear Reader:

Submitted for your review and comment is the proposed Resource Management Plan (RMP) and Final Environmental Impact Statement (EIS) for the Warm Springs Resource Area (WSRA), Millard County, Utah. The proposed plan was the preferred alternative in the Draft RMP/EIS published in April 1986. Information has been added to the description of the plan, and there have been minor changes, additions, or corrections. The basic content of the plan is, however, unchanged.

Any person who participated in the planning process and has an interest which may be adversely affected by approval of the proposed plan may protest approval. A protest may raise only those issues which were submitted for the record during the planning process. Protests must be in writing and filed with the Director at the following address: Director, Bureau of Land Management,18th and C Street, N.W.,Washington, D.C. 20240.

The protest must be filed within 30 days of the Environmental Protection Agency's Federal Register publication of the Notice of Availability of the Final EIS. A protest must contain:

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

Comments received will be considered in the decision-making process, which will follow the Governor's consistency review and the comment/protest period. Comments should be addressed to:

Mr. Wayne T. Kammerer
Bureau of Land Management
Richfield District Office
150 East 900 North
Richfield, Utah 84701

We appreciate your interest and invite your continued involvement in the management of your public lands.

Sincerely,

Donald L. Pendleton
District Manager

Warm Springs Resource Area

Proposed Resource Management Plan

Final Environmental Impact Statement

September 1986

Prepared By
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
RICHFIELD DISTRICT

Roland Robinson
State Director
Utah State Office

Abstract: This Proposed Resource Management Plan/Final Environmental Impact Statement (RMP/EIS) describes the proposed alternative for managing the public lands in the Warm Springs Resource Area in Millard County, Utah. The proposed plan, which was Alternative D in the Draft RMP/EIS, recommends grazing levels for livestock, wildlife, and wild horses and overall management prescriptions for multiple use management of all resources in the resource area. Designations proposed include: recreation, off-road vehicle, areas of critical environmental concern, special management areas, and fluid mineral leasing categories.

Comments/Protests: Publication of the Notice of Availability of this Final RMP/EIS commences a 30-day protest period. Any person who participated in the planning process and has an interest that may be adversely affected may request an administrative review by the Director (CFR 1610.5-2). Other individuals/agencies may submit comments for consideration in the decision-making process to the address below.

For further information contact:

Wayne T. Kammerer, Team Leader
Bureau of Land Management
150 East 900 North
Richfield, UT 84701
Telephone: (801) 896-8221
FTS 584-8011

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READERS GUIDE

Chapter 1 summarizes the purpose and need for this Proposed Resource Management Plan (RMP) and Final Environmental Impact Statement (EIS) for the Warm Springs Resource Area (WSRA), Millard County, Utah. For additional information on the planning process, planning issues, management concerns, and planning criteria, see Chapter 1 of the Draft RMP/EIS, which was published and distributed in April 1986.

The proposed RMP presented in Chapter 2 of this document is based on Alternative D and the "Management Common to All Alternatives" section presented in the Draft RMP/EIS. These descriptions have been expanded to include information required by Federal regulation and BLM policy. Resource or program goals and objectives, proposed actions (including need for subsequent detailed site-specific plans), support requirements, implementation sequences or priority, and follow-up monitoring and evaluation intervals and standards are included to determine the effectiveness of the decision, progress toward identified goals, and need for plan amendment or revision.

Corrections and some additions or changes have been added to Alternative D in this document. However, none of those changes significantly altered the concepts and actions presented in the Draft RMP/EIS. For the reader's convenience, changes are noted by an arrow (>) in the adjacent margin of this proposed plan.

The data contained in the Draft WSRA RMP/EIS are considered part of this document, and most are not reproduced in this document. Those additions or changes to the Draft RMP/EIS resulting from public comment, new information, or corrections are stated in Chapter 6 of this document, with reference to the affected page in the Draft RMP/EIS.

For the environmental consequences of the proposed RMP, see the analysis of Alternative D: —Preferred Alternative in Chapter 4 of the Draft RMP/EIS.

Together, the Draft RMP/EIS and this document constitute the full EIS documentation.

To facilitate reading and use of this document all maps are located at the conclusion of Chapter 2.

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LIST OF PREPARERS

EIS TEAM	TITLE	ASSIGNMENT	EDUCATION	YEARS OF PROFESSIONAL EXPERIENCE
Don Pendleton	District Manager	Supervision and Management	B.S. Wildlife	30
Mark Bailey	Area Manager	Supervision and Management, Wild Horses	B.S. Wildlife Management	23
Wayne Kammerer	Supervisory Environmental Specialist	Team Leader, Forestry	B.S., M.S.Forestry, EdM. Human Services	8
Alan Partridge	Environmental Specialist	Wild Horses	B.S. Botany	24
Craig Harmon	Archaeologist	Cultural Resources	M.A. Anthropology	12
Duane DePaepe	Environmental Specialist	Climate, Air Quality, Land Use Plans, Sociology, Fire Management	B.A., M.A. Geography	18
LaRell Chappell	Soil Scientist	Soils, Watershed	B.S. Agronomy	18
Gerald Muhlestein	Surface Protection Specialist	Minerals, Geology	B.S. Agronomy	26
William McNally	Economist	Economics	B.S. Range Conservation M.B.A. Business/ Economics	23
W. Craig MacKinnon	Range Conservationist	Range, Vegetation	B.S.Botany B.S. Range Management	11
Scott Spooner	Geologist	Minerals, Geology, Topography	B.S. Geology	4
David Young	Wildlife Biologist	Wildlife	A.S. General Science	6
John Augsburger	Wildlife Biologist	Wildlife	B.S., M.S. Wildlife Management	13
Stewart Jacobson	Outdoor Recreation Planner	Recreation, Visual Resources	B.L.A. Landscape Architecture and Environmental Planning	15
Thomas Terry	Realty Specialist	Lands	B.S. Soil Science	10
Shirley Taft	Editorial Assistant	Typing, Editing, Publication		15
Bert Hart	Public Information Specialist	Public Information and Participation	B.S. Range Management	14
Elaine Larsen	Editor	Editing	A.D. Business	9

MANAGEMENT SITUATION ANALYSIS INTERDISCIPLINARY TEAM

Assignment	Individual
Warm Springs Resource Area	
Area Manager/Team Leader	Mark Bailey
Forestry	Gerald Muhlestein
Lands	Thomas Terry
Minerals/Geology/Topography	Byard Kershaw
Range	Donald Burt
Recreation	Stewart Jacobson
Watershed	Camille Fullmer
Wildlife	John Augsburger
Wild Horses	Grant Hardy
Richfield District Office	
Planning Coordinator	Alan Partridge
Assistant Team Leader/Technical Coordinator	Wayne Kammerer
Climate/Air Quality/Sociology/Special Management Designations	Duane DePaepe
Cultural Resources	Craig Harmon
Fire Management	Mike Whalen
Economics	William McNally
Soils	LaRell Chappell
PAO	Bert Hart
Editing/Typing	Shirley Taft

WARM SPRINGS RESOURCE AREA PROPOSED RESOURCE MANAGEMENT PLAN/ FINAL ENVIRONMENTAL IMPACT STATEMENT

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LIST OF ABBREVIATIONS

ACEC: Area of Critical Environmental Concern

AMP: Allotment Management Plan

APHIS: Animal and Plant Health Inspection Service

AUM: animal unit month

BIA: Bureau of Indian Affairs

BLM: Bureau of Land Management

BRRA: Beaver River Resource Area

C: Custodial (Allotment Category)

CCC: Civilian Conservation Corps

CEQ: Council on Environmental Quality

CFR: Code of Federal Regulation

EA: Environmental Assessment

EIS: Environmental Impact Statement

EMT: emergency medical technician

EPA: Environmental Protection Agency

F: Fahrenheit

FS: Forest Service

FWS: Fish and Wildlife Service

FLPMA: Federal Land Policy and Management Act

gpm: gallons per minute

HMA: Herd Management Area

HMP: Habitat Management Plan

I: Improve (Allotment Category)

IMP: Interim Management Policy

IPP: Intermountain Power Project

KGRA: Known Geothermal Resource Area

KGS: Known Geologic Structure

LR: land report

M: Maintain (Allotment Category)

Mbf: thousand board feet

MFP: Management Framework Plan

MSA: Management Situation Analysis

m.s.l. mean sea level

NAAQS: National Ambient Air Quality Standards

NEPA: National Environmental Policy Act

NNL: National Natural Landmark

NORA: Notice of Realty Action

NPS: National Park Service

ONA: Outstanding Natural Area

ORV: off-road vehicles

P.L.: Public Law

PLO: Public Land Order

PRIA: Public Rangelands Improvement Act

PSD: Prevention of Significant Deterioration

RMP: Resource Management Plan

RNA: Research Natural Area

ROD: Record of Decision

R&PP: Recreation and Public Purpose Act

RPS: Rangeland Program Summary

SCS: Soil Conservation Service

SRMA: Special Recreation Management Area

Spp. species

T&E: threatened and endangered

UDWR: Utah Division of Wildlife Resources

USBR: United States Bureau of Reclamation

USDA: United States Department of Agriculture

USDC: United States Department of Commerce

USDI: United States Department of the Interior

USGS: United States Geological Survey

VRM: visual resource management

WO: Washington Office, BLM

WSA: Wilderness Study Area

WSRA: Warm Springs Resource Area

SUMMARY

INTRODUCTION

This Proposed Resource Management Plan (RMP) and Final Environmental Impact Statement (EIS) is being prepared to provide a framework of actions, goals and objectives for future public land management in the Warm Springs Resource Area (WSRA). The RMP process is used by Bureau of Land Management (BLM) managers to allocate resources and select appropriate uses for public (BLM) lands. The RMP establishes practices and systems to monitor and evaluate the status of resources and effectiveness of management.

The WSRA is located in the Richfield District and covers the southern two-thirds of Millard County in west-central Utah. Its eastern border is the forested Pavant Range. The resource area is characterized by broad arid valleys between several relatively small mountain ranges which rise steeply from the Great Basin valley floor. Most people live in the Pavant Valley near Fillmore where precipitation is higher and most farmlands are located.

Elevations range from 4,400 feet in Tule Valley to 9,650 feet on Notch Peak in the House Range Mountains. Average annual precipitation on public lands varies from 6 inches in Pine Valley to 16 inches at higher elevations in the Wah Wah and House Range mountains. Major vegetation types include sagebrush, saltbush, greasewood, winterfat, and other desert shrubs; pinyon-juniper; and grasslands. The large barren and sometimes inundated floor of Sevier Lake (27 miles long by up to 12 miles wide) lies in the center of the area. Wildlife species using the area include mule deer, antelope, elk, sage grouse, chukars, raptors, and several other small game and non-game species. Wild horses are also found in the area.

Land uses include livestock grazing, mining, electric power transmission, and oil, gas, and geothermal exploration. Recreational uses include hunting, camping, horseback riding, hiking, off-road vehicle (ORV) use, rockhounding, and sightseeing.

The WSRA office in Fillmore administers grazing on over 2 million acres of public lands. Of the total 3.1 million acres in the resource area, 71 percent are BLM, 11.5 percent private, 8.9 percent State, 8.5 percent National Forest, and less than 1 percent Paiute Indian (Kanosh Band) lands.

THE PLANNING PROCESS

The purpose of the WSRA RMP/EIS is to:

1. Update and revise the existing management framework plan (MFP). Preparation of the RMP, in accordance with BLM policy, is preferable to amendment of the MFP.

2. Complete a court-mandated grazing EIS for the WSRA. It is preferable to make the EIS part of this RMP rather than do each document.

The environmental consequences of four alternative RMPs were analyzed in the Draft RMP/EIS. That document was published in March 1986 and distributed for public review and comment. The comments and responses to those comments are included in Chapter 7 of this document.

After evaluation of public comments on the Draft RMP/EIS, the Area Manager selected the proposed plan, which was reviewed by the District Manager and approved by the State Director. The proposed plan is presented in Chapter 2 of this document. The proposed plan is based on Alternative D and the "Management Common to All Alternatives" section in the Draft RMP/EIS, with modifications and corrections resulting from public review and comment. Those changes are delineated by arrows in the margin of the description of the proposed plan. The notice of availability of this Proposed RMP and Final EIS (published in the *Federal Register* by the Environmental Protection Agency [EPA]) will be followed by a 30-day public comment and protest period. Thereafter, the final decision on the RMP will be made. The approved plan will be published in the Record of Decision and Rangeland Program Summary.

Implementation of the approved plan will follow final approval by the State Director. Thereafter, information will be gathered regarding progress toward the goals and objectives established in the RMP. Monitoring and evaluation will be conducted to indicate if the plan warrants amendment or revision. Standards for monitoring and evaluation include periodic review (at least every 5 years) of the RMP.

PUBLIC COMMENT

Twenty letters commenting on the Draft RMP/EIS were received: ten were from other Federal and State agencies, one from a business organization,

six from environmental or special interest groups, and three from individuals. Fifty-five comments from those letters are responded to in Chapter 7 of this document: 19 deal with wildlife; six with wild horses; five with minerals; five with recreation; four with soils, watershed, or water resources; and one with range management. The remaining comments address alternatives, cultural resources, threatened and endangered (T&E) species data, editorial, or other miscellaneous errors.

Three individuals attended an open house held in Fillmore on May 12, 1986 to discuss the Draft RMP/EIS: two represented environmental groups and one was a livestock permittee.

THE PROPOSED PLAN AND ENVIRONMENTAL CONSEQUENCES

Range Management

THE PROPOSED PLAN

The plan outlines a division of the forage base (defined as indicated capacity) to provide for the future needs of livestock, wildlife, and wild horses. Adjusting preference to indicated capacity on 24 allotments would, in the short term (2 years), require a reduction in livestock preference on some allotments. The total change in preference would be approximately 10 percent (from 149,009 animal unit months [AUMs] to 131,772 AUMs) depending on additional monitoring data results. Within 5 years of plan completion, total livestock AUMs could be reduced to 99,265 (a 33 percent reduction).

Management practices on 39 priority allotments would be intensified to improve overall forage conditions on nearly 1,310,000 acres (59 percent of the public land in the resource area). The management practices employed would include the development of activity plans (Allotment Management Plans [AMPs]) with prescribed grazing systems and the installation, construction, and facilitation of range improvements. Approximately five springs, four wells, 74 miles of pipeline, 44 miles of fence, 15 cattleguards, and 14,000 acres of rangeland seedings would be developed over a 20-year period. The long-term management goal, based on the success of these practices, would be to produce approximately 108,100 AUMs of forage for livestock.

ENVIRONMENTAL CONSEQUENCES

Vegetation Resources

No plant species (including threatened and endangered [T&E] and sensitive plants) or vegetation communities would be irretrievably lost under the proposed management levels.

Initially, 22 allotments would remain substantially overstocked and productivity could decline on these allotments. Proper stocking level adjustments would be initiated within 5 years. Following these adjustments, forage productivity would be expected to increase on all 63 allotments in the long term. On the ten allotments with existing AMPs and 39 allotments with proposed AMPs, productivity could average a 15-percent increase in the long term. Vegetation productivity would be substantially enhanced on three allotments (Black Point, East Antelope, and Twin Peaks) where approximately 14,000 acres of vegetation treatment are proposed.

The composition of key species would be expected to stabilize and/or increase in all 63 allotments in the long term. This would primarily result from stocking level adjustments within the first 10 years of plan implementation and the long-term scheduling and completion of up to 37 AMPs covering 39 allotments.

Vegetation composition would change from tree/brush species to key grass and forb species on the proposed 14,000 acres of vegetation treatment in three allotments.

The limited riparian communities in the WSRA would be protected and enhanced in the long term as activity plans (AMPs and Habitat Management Plans [HMPs]) were prepared and implemented.

Range Management

The initial livestock allocation would be 131,772 AUMs; further adjustments would be made (within 10 years) if monitoring indicated the need. The estimated allocation level at the end of 10 years would be approximately 99,265 AUMs. Overall, long-term available livestock forage would be 108,100 AUMs or approximately 20,367 AUMs above current average actual use.

Proposed initial grazing adjustments on 24 allotments (and other allotments as necessary within 5 years) would be required. There would be reductions on several of the smaller ranches. Some would remain the same and a few would receive increases. The required reductions, however, would not be expected to reduce the stability of existing livestock operations in Millard, Sanpete,

Utah, and Salt Lake counties, which are seasonally dependent on the WSRA for forage.

No major impacts to livestock operations would be expected in the long term.

Wildlife

PROPOSED PLAN

Several actions are proposed to benefit wildlife including:

1. Allocation of forage to reach objective numbers of pronghorn antelope (1,861 animals) and mule deer (95 yearlong and 2,464 winter).
2. Improvement of antelope critical black sagebrush habitat condition.
3. Improvement of the overall suitability of antelope habitat and development of additional water sources.
4. Maintenance of good condition mule deer critical winter range
5. Delineation of bald eagle essential winter habitat, designation of crucial raptor habitat and protection stipulations.
6. Designation of Pavant Butte as an Area of Critical Environmental Concern (ACEC) for possible reintroduction of the peregrine falcon.
7. Improvement of chukar partridge and sage grouse habitat (development of water sources and protection of strutting grounds).
8. Riparian area inventory and habitat management plan development and implementation for protection and enhancement.

ENVIRONMENTAL CONSEQUENCES

With this plan, antelope numbers would increase approximately 165 percent, while mule deer numbers could increase 75 percent in the winter and remain static yearlong. Elk would not be affected. Bighorn sheep could be transplanted into the resource area. Raptor and upland game numbers would increase. Riparian habitat would improve to the next higher condition class on Pruess Lake, Lake Creek, South Tule Spring, Crafts Lake, the Sevier River, and Meadow Creek. Peregrine falcons would be established on Pavant Butte. Sensitive and T&E species would be beneficially impacted.

Wild Horses

PROPOSED PLAN

Wild horses would be managed in three Herd Management Areas (HMAs) to maintain viable herds. Forage would be allocated to maintain a total population of 140 head (Conger Mountain, 60 head; King Top, 30 head; and Sulphur, 50 head). Better quality horses (from a standpoint of color, shape [conformation], and size) would be left on the range during removal operations. Studs of the desired type would be introduced from other HMAs to increase the diversity of the gene pool and produce wild horses that are easier to place by adoption. Wild horses in the Burbank HMA would be captured and adopted out or relocated to other HMAs.

ENVIRONMENTAL CONSEQUENCES

Maintaining wild horse numbers as described in the proposed plan would insure that adequate forage is available even during periods of drought. Releasing unrelated, colorful studs to the herds during capture operations would provide genetic diversity and improve the quality of the wild horses. Removal of the Burbank herd would eliminate trespass on private property and management conflicts with livestock and wildlife. This removal would not adversely affect the overall wild horse program.

Recreation

THE PROPOSED ACTION

Tabernacle Hill would be managed as a Special Recreation Management Area (SRMA) under the existing Recreation Management Plan. The Wah Wah Mountains would also be managed as a SRMA if not designated as wilderness.

Protective oil and gas leasing categories would be initiated to preserve recreation values at the Great Stone Face, Gunnison Massacre Site, Devil's Kitchen, Tabernacle Hill Petroglyphs, Sunstone Knoll, Painter Springs, Pruess Lake, and Meadow Creek.

Pavant Butte, Tabernacle Hill, Notch Peak, Crystal Peak, Fossil Mountain, and Wah Wah Mountains would receive special management designations to protect special ecological and recreational values.

Public land in the WSRA would be designated with the following ORV categories:

- Open: 2,142,518 acres.

- Limited to existing and/or designated roads and trails: 66,127 total acres—Tabernacle Hill (designated roads), 3,567 acres; critical deer winter range (existing or designated roads and trails), 7,765 acres; raptor nesting areas (seasonal March 1 to June 30), 50,485 acres; and sage grouse breeding and nesting (seasonal March 1 through July 31), 4,310 acres;
- Closed: 18,110 total acres—Pavant Butte, 2,500 acres; if not designated as wilderness by Congress, Notch Peak, 9,000 acres, Crystal Peak, 640 acres; and Wah Wah Mountains, 5,970 acres.

ENVIRONMENTAL CONSEQUENCES

Special management designations, SRMA status, mineral withdrawals, rights-of-way restrictions, oil and gas leasing Category 3, ORV closures or restrictions would provide protection for Pavant Butte, Tabernacle Hill, Notch Peak, Crystal Peak, Fossil Mountain, and the Wah Wah Mountains. Management designations would also alert management and users to the special values and improve public awareness of those values. Oil and gas leasing Category 3 designations on the Great Stone Face, Sunstone Knoll, Painter Spring, and Pruess Lake would provide protection from surface disturbance. Designating Tabernacle Hill and the Wah Wah Mountains as SRMAs would assist in obtaining recognition and funding to ensure their protection.

The majority (97 percent) of the resource area would be open to ORV use. Areas with limited designations would comprise only 2 percent of the resource area. This would allow ORVs to use almost all of the existing roads and trails. The raptor nesting areas, which comprise the majority of the ORV restricted use areas, would be closed seasonally.

Four areas, comprising less than 1 percent of the resource area, would be closed to ORVs. These closures would protect recreational and other resources from potential surface disturbance. Current ORV use in closed areas is currently limited by the terrain's steepness and ruggedness. Thus, no significant impact to ORV use would be expected.

Visual Resources

THE PROPOSED ACTION

Visual resources would be evaluated as a part of activity and project planning. Appropriate stipulations would be designed to protect visual resources and mitigate visual impacts, based on the affected area's visual resource management (VRM) class. Subsequent stipulations would be implemented, as needed.

Public lands within the WSRA would be designated in the following VRM classes: Class 1, 0 acres; Class 2, 28,484 acres; Class 3, 106,180 acres; Class 4, 2,092,091 acres; and Class 5, 0 acres; for a total of 2,226,755 acres.

ENVIRONMENTAL CONSEQUENCES

Visual resources would be evaluated as part of activity and project planning. Subsequent stipulations would be implemented to protect visual resources and mitigate visual impacts, based on the affected area's VRM class.

Impacts to visual resources would result from vegetation treatment projects. However, range improvement projects would reduce the potential for visual degradation caused by overgrazing and subsequent soil erosion.

Mineral withdrawals, oil and gas leasing Category 3, ORV restrictions and/or closures, and right-of-way avoidance areas implemented on recreation resources would protect the scenic values present. Limiting woodland product removal in riparian areas and implementing the Pruess Lake HMP would also help maintain the natural aesthetics of these areas. Limiting ORV use in critical winter deer ranges and raptor nesting areas would protect the visual qualities within these areas.

Cultural Resources

THE PROPOSED PLAN

Prior to construction or development, cultural resource clearances and mitigation on all projects involving surface-disturbing activities would be required, in accordance with law and policy. Special emphasis would be given to those sites listed on the National Register of Historic Places. Predictive cultural resource inventories would be implemented for regional planning purposes.

ENVIRONMENTAL CONSEQUENCES

No significant impacts to cultural resources would be expected from implementation of the proposed plan.

Lands

THE PROPOSED PLAN

Five tracts of land, totaling 239 acres, are proposed for disposal in accordance with criteria defined in Section 203 of the Federal Land Policy

and Management Act (FLPMA). Major existing rights-of-way would be designated right-of-way corridors. Right-of-way avoidance areas, totaling approximately 47,000 acres, would be designated. Currently, no access needs have been identified.

Six areas would receive special management designations. Five of the areas, totaling 21,677 acres, would be withdrawn from mineral activity.

Three State sections contiguous with proposed special management designation areas would be acquired by exchange, if possible.

ENVIRONMENTAL CONSEQUENCES

The five tracts proposed for sale have been inventoried for cultural resources and T&E species. These areas are not within Wilderness Study Areas (WSAs) or grazing allotments, are all adjacent to existing agricultural operations, and are not needed for any Federal land management program. Disposal would cause no significant environmental impacts.

Designation of right-of-way corridors and consolidation of future major rights-of-way in these corridors, whenever possible, would limit proliferation of rights-of-way on public lands. This would consolidate right-of-way surface disturbance and visual intrusions in designated areas and reduce such impacts in other undisturbed areas.

Withdrawals totaling 21,677 acres would be initiated as part of five special management designations. For the duration of the withdrawal, these lands would be removed from mineral exploration and development to protect the special resource values present. Acquisition of three State sections in these areas would facilitate management of adjacent BLM lands.

Minerals

THE PROPOSED PLAN

Oil, gas, and geothermal leasing categories for public lands in the resource area would be as follows: Category 1 (standard stipulations), 2,136,458 acres; Category 2 (special stipulations), 64,570 acres; Category 3 (no surface occupancy), 25,727 acres; and Category 4 (no leasing), 0 acres, for a total of 2,226,755 acres.

In Category 2 areas, 64,450 acres would have seasonal restrictions to protect crucial, critical, or important wildlife habitat. The remaining acreage would protect cultural or recreation sites. Category 3 areas would include special management designation or riparian areas.

With the exception of 21,677 acres in special management designation areas, which would be withdrawn from mineral entry, all public lands in the resource area would be open to mineral entry. Sale permits for mineral materials would be processed on a case-by-case basis, with appropriate mitigation and stipulations to protect other resources. All public lands, with the exception of up to 25,727 acres subject to special management designation and/or Category 3 fluid mineral leasing restrictions, would be open to mineral material disposal. Solid non-energy leasable mineral applications or development plans would contain protective stipulations similar to those for fluid mineral leasing categories.

ENVIRONMENTAL CONSEQUENCES

Due to the very low to speculative potential for oil and gas deposits in proposed Category 3 areas (1.1 percent of the resource area) and mostly seasonal limitations in Category 2 areas (2.9 percent of the resource area), minimal impact to oil and gas exploration and development would be expected. Ninety-six percent of the public lands would be open to leasing under standard (Category 1) stipulations.

No significant effect on locatable mineral exploration or development would be expected due to the low potential for mineral occurrence, except in the Notch Peak area. This area has a high potential for precious and base metal occurrence, and withdrawal from mineral entry (9,000 acres) would preclude exploration and development.

No significant impact on non-energy solid leasable prospecting or development was identified. Also, no impact on saleable mineral activity would be expected due to the abundance of materials throughout the resource area. Approximately 99 percent of the public lands would be available for mineral material disposal operations.

Watershed and Water Resources

THE PROPOSED PLAN

Livestock grazing season of use and stocking levels would be monitored and adjusted as necessary to protect watershed values on two allotments (Stott-Rowley and Ephraim-Meadow). Range sites would be monitored to insure that soil loss remains within acceptable limits. Proposed watershed protection measures include: vegetation treatments (14,000 acres), gully plugs (15 each), water bars (6-15 each), and channel erosion monitoring (14 each). Sampling 10 water sources (springs and wells) annually would continue.

Waters would continue to be appropriated (13 proposed for possible development).

ENVIRONMENTAL CONSEQUENCES

Forage overutilization by livestock on two allotments (Stott-Rowley and Ephraim-Meadow) could adversely impact watershed in the short term by increased runoff and sediment yield. Following the monitoring proposed, any necessary changes would be made to correct overgrazing problems in the long term. Proposed watershed protection measures would provide beneficial impacts to watershed. Little or no impact from ORV use is expected. No significant impact to water rights or uses of either surface or ground water would occur. A slight benefit to water resources could occur since 13 springs are proposed for appropriation and possible development as funding permits.

Soils

THE PROPOSED PLAN

Livestock grazing season of use, stocking levels, and necessary adjustments would be monitored to protect watershed values and the soil resource on two allotments (Stott-Rowley and Ephraim-Meadow). Range sites would be monitored to insure that soil loss remains within acceptable limits. Proposed watershed protection measures include: vegetation treatments (14,000 acres), gully plugs (15 each), water bars (6-15 each), and channel erosion monitoring (14 each).

ENVIRONMENTAL CONSEQUENCES

Forage overutilization by livestock on two allotments (Stott-Rowley and Ephraim-Meadow) could adversely impact soils in the short term by increasing erosion. Following proposed monitoring, necessary adjustments would correct any overgrazing problems in the long term. Increased vegetation cover resulting from proposed vegetation treatments (14,000 acres) would decrease erosion in the long term. Watershed protection measures proposed (refer to Watershed and Water Resources section), would likewise reduce erosion in the long term. Little or no impact from ORV use would be expected.

Forest Resources

PROPOSED PLAN

Timber and woodland resource areas on the Wah Wah Mountains (5,970 acres), Crystal Peak (640 acres), and Notch Peak (9,000 acres) would not be available for management or harvest of forest products. The remaining forest lands, 205,059 woodland acres in the resource area, would be managed to enhance other values and uses. Stipulations on permitted harvest activities would be implemented to protect other resources and values (i.e., wildlife, soils, water, scenery, etc.).

ENVIRONMENTAL CONSEQUENCES

No significant impacts to forest resources would be expected. In the foreseeable future, the supply of woodland products would be more than adequate to meet consumer demands.

Fire Management

THE PROPOSED PLAN

Full suppression of wild fires would continue on 2,015,555 acres of public land. A Fire Management Activity Plan would be developed that could identify up to 211,200 acres as suitable for limited suppression. Areas suitable for prescribed burns would also be identified.

ENVIRONMENTAL CONSEQUENCES

No significant adverse impacts would be expected from implementation of the plan.

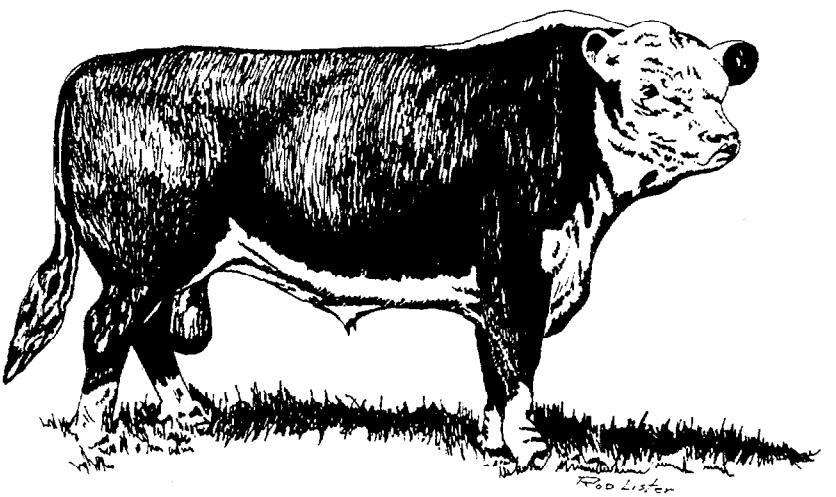
Economics

With the proposed plan, livestock operators' income would increase if full active preference levels were activated. These gains would promote stability within the ranching community but would not significantly affect the regional economy. In the long term, it is unlikely that this increased income would increase employment in the region, or cause new businesses to open or existing enterprises to expand. The increased operators' income could, however, help maintain jobs in the area. This could have a beneficial impact on ranchers who currently depend on BLM lands to supplement their operations.

As is the case with most of Utah, Millard County is richly endowed with an abundance of natural resources, including lime and lava rock. Present mineral development is limited to a limestone mine in the Crickett Mountains and lava rock at Ice Springs Crater which is mined by Fillmore Products. Numerous claims for gold in the Notch Peak area account for limited development work and sporadic production related employment. Mineral exploration has been sporadic within the resource area; hence, the regional impact on the local economy is limited. Mineral activity contributes only about 4 percent of the personal income to Millard County.

SUMMARY

Economic impacts from other proposed actions, including effects from added hunting opportunities, would likely be minor increases to the local and regional economy.



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CHAPTER 1

PURPOSE AND NEED

ORGANIZATION OF THE PROPOSED RESOURCE MANAGEMENT PLAN AND FINAL ENVIRONMENTAL IMPACT STATEMENT

This chapter will briefly review the purpose and need of the Proposed Resource Management Plan (RMP) for the Warm Springs Resource Area (WSRA), the planning issue and management concerns, and planning criteria. For more detailed discussions of these topics, see Chapter 1 of the Draft RMP/Environmental Impact Statement (EIS).

Chapter 2 of this document presents the proposed RMP for the WSRA. The proposed plan is based on the preferred alternative (Alternative D) identified in Chapter 2 of the Draft RMP/EIS. Chapter 2 of the Draft RMP/EIS also defined the alternative RMPs analyzed and alternatives considered but eliminated from further analysis. Those items are not repeated in this abbreviated Proposed RMP and Final EIS.

For a discussion of the affected environment and environmental consequences of the proposed plan and alternatives, the reader is also referred to the Draft RMP/EIS. Thus, Chapters 3 (Alternatives), 4 (Affected Environment), and 5 (Environmental Consequences) of this document are found in the Draft RMP/EIS and incorporated herein by reference. The only elements of those discussions contained in this document are: (1) Chapter 6, Additions and Corrections to the Draft RMP/EIS; and (2) Chapter 7, which reviews consultation, coordination, and public comment on the Draft RMP/EIS. Public comment, protest procedures, and the Governor's Consistency review of the proposed RMP are also briefly described. Thereafter comments and responses on the Draft WSRA RMP/EIS are presented.

In accordance with Bureau of Land Management (BLM) policy, prescribed by Federal Regulation 43 Code of Federal Regulations (CFR) 1601.0-b, RMPs must be prepared for each BLM-administrative subdivision or resource area. For the specified subdivision, the RMP establishes allowable uses, goals, objectives, and management actions intended for the area. It also identifies constraints and actions needed to achieve the land and resource management goals and objectives.

The planning process requires development of reasonable alternative management plans for the BLM land manager to chose from; preparation of a Draft EIS to analyze the environmental consequences of implementation of alternative plans; then, following public comment on the Draft, selection of a proposed RMP and publication of the Final EIS. This is the purpose of this RMP/EIS for the BLM's WSRA (see Figure 1-1). The plan selected and implemented as a result of this process will govern the management of all natural resources on the 2.2 million acres of public lands in the resource area (see Table 1-1). The plan will remain in effect until outdated. For analysis purposes, it was assumed the selected plan will be in effect for 20 years.

TABLE 1-1
Warm Springs Resource Area Acreages

		Acres	Percent of Total
Public/BLM Administered		2,226,755	71.0
Private		361,964	11.5
State of Utah		279,289	8.9
USFS Administered			
Fishlake N.F.	211,355		
Desert Experimental Range	55,625		
Total		266,980	8.5
Paiute Indians			
Kanosh Band		1,102	Less than 0.1
Total		3,136,090	100.0

PURPOSE AND NEED

The RMP provides a framework of goals and objectives for future public land management in the WSRA. It addresses all public land resources in the WSRA and updates information evaluated in 1972.

The RMP identifies allowable resource uses, levels of use or production to be maintained, and general management practices. It also identifies support actions and need for more detailed or specific plans.

The RMP must meet requirements of the Federal Land Policy and Management Act (FLPMA). FLPMA requires an interdisciplinary approach and public involvement in planning and decision making on multiple resource management of public lands.

The National Environmental Policy Act (NEPA) of 1969 requires preparation of an EIS on major Federal actions. Preparation and implementation of an RMP is, by definition, a major Federal action. Preparation of this RMP/EIS is in conformance with the CEQ NEPA regulations. Livestock grazing management alternatives analyzed herein are responsive to the court ruling on the 1973 suit filed against the BLM by the National Resources Defense Council et al.

Preparation of RMPs and their associated EISs is guided by BLM planning regulations found in Title 43 of the CFR, Subpart 1600 (43 CFR 1600) and CEQ regulations found in 40 CFR 1500.

THE PLANNING PROCESS

BLM's RMP planning process involves nine interrelated actions which integrate NEPA requirements for environmental analysis.

1. The first phase of the process, identification of issues, was conducted in 1983, with public involvement, to identify the major uses, conflicts, and concerns regarding public lands in the WSRA.

2. Next, planning criteria or guidelines were identified by the BLM interdisciplinary team. These were published and distributed for public review in July 1983.

3. BLM personnel then gathered and inventoried relevant resource data from 1983 to 1985 to facilitate decisions relative to the identified issue and concerns.

4. Next, the interdisciplinary team (see List of Preparers) prepared the Analysis of the Management Situation. That document, in two unpublished volumes, presents descriptions and analyses of each WSRA resource and program. It is the basic source document for information presented in both this document and the Draft RMP/EIS.

5. The interdisciplinary team then formulated alternative plans to resolve the planning issue and management concerns. The alternatives provided the BLM manager with a range of reasonable comprehensive plans for management of the public land resources.

6. The probable effects of implementing the alternative plans were then analyzed. The results of that analysis were presented in Chapter 4 of the Draft RMP/EIS.

7. Using all information and analysis developed up to that point in the planning process, the Area Manager then selected Alternative D as the preferred RMP alternative. His selection was reviewed by the Richfield District Manager and approved by the Utah State Director.

8. After distribution of the Draft RMP/EIS and evaluation of public comments, the Area Manager selected the proposed plan. It was reviewed by the District Manager and approved by the State Director. Publication of the Notice of Availability of the Proposed RMP and Final EIS by the Environmental Protection Agency (EPA) begins a 30-day public protest period and the final approval sequence.

9. Implementation of the approved plan follows final approval by the State Director. Thereafter, information is gathered regarding progress toward the goals and objectives established in the plan.

PLANNING ISSUE AND MANAGEMENT CONCERNS

In 1983 the WSRA interdisciplinary staff, with public participation, identified the major uses, conflicts, and concerns regarding public land management in the resource area. Through this process, one planning issue and several management concerns were identified.

The planning issue identified is range management: the allocation and management of public rangeland forage resources.

- How should available forage be allocated for use by domestic livestock, wildlife, and wild horses?
- How would these uses affect the vegetation resource?
- Should there be any changes in kind of livestock or season of use?
- What areas are suitable for land treatment?
- Should any allotments be modified (boundaries, consolidations, etc.)?
- What structural rangeland improvements should be constructed?

Management concerns focus on use conflicts, requirements, or conditions that cannot be resolved administratively but do not meet the criteria

for a planning issue. Management concerns were identified for each resource and activity or program in the WSRA. For a detailed list of those concerns, see Chapter 1 of the Draft RMP/EIS.

Wilderness

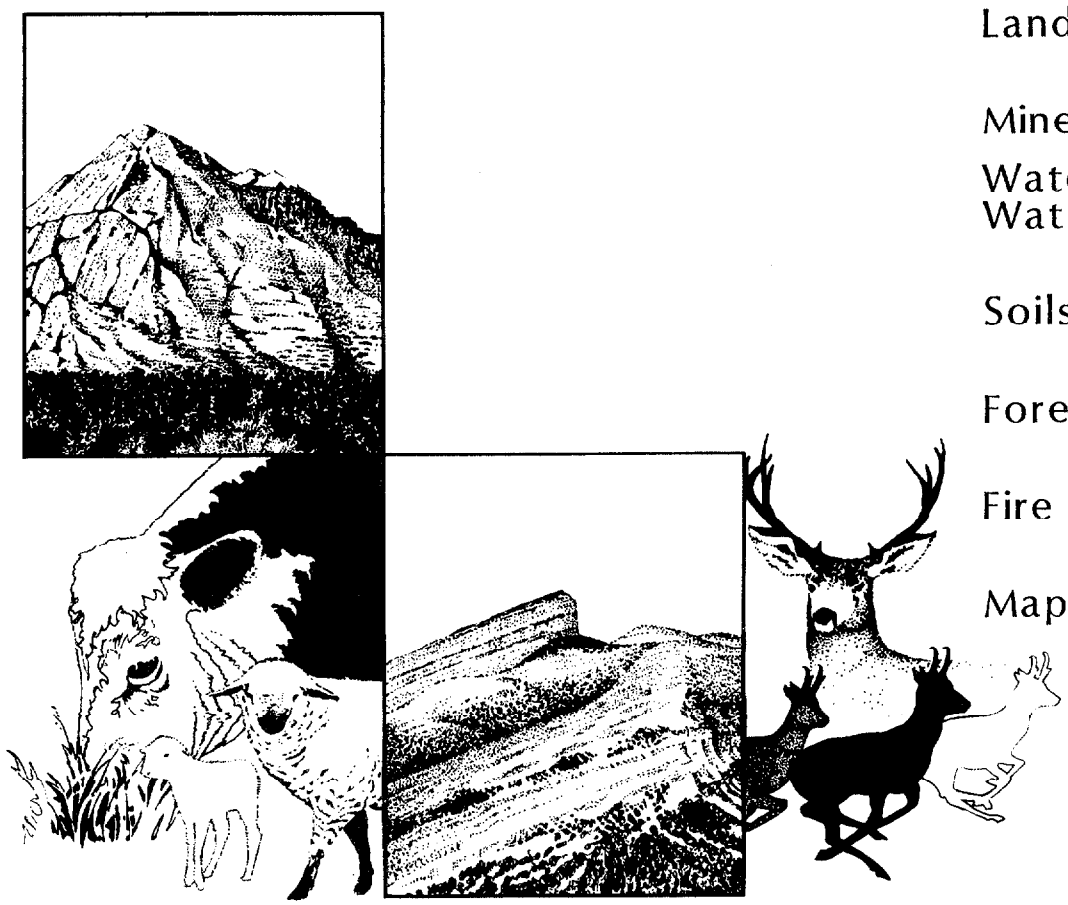
There are five wilderness study areas (WSAs) in the WSRA: Notch Peak (51,130 acres); Howell Peak (24,800 acres); King Top (84,770 acres); Conger Mountain (20,400 acres); and Wah Wah Mountains (42,140 acres). Wilderness designation has not been a part of this planning process. Designation of any of these WSAs by Congress would constitute an amendment to the WSRA RMP. For a description of the WSAs and analysis of the potential impacts from designation or nondesignation, see the Utah BLM Statewide Wilderness Draft EIS (U.S. Department of the Interior [USDI], BLM, 1986).

PLANNING CRITERIA

The second phase of the planning process was determination of pertinent planning criteria or guidelines for planning actions, resolution of conflicting uses, and other decision making. The planning criteria define appropriate standards or rules by which to judge decision making, analysis, and data collection during the remainder of the planning process. The criteria, developed by the interdisciplinary team, were published and distributed for public comment in July 1983. These criteria are based on legislation, BLM regulation and policy, and the local WSRA public participation process. The planning criteria developed for the WSRA RMP/EIS are enumerated in Chapter 1 of the Draft RMP/EIS.

Swainson Hawks

The Proposed Resource Management Plan for the **Warm Springs Resource Area**



CHAPTER 2

THE PROPOSED RESOURCE MANAGEMENT PLAN

INTRODUCTION AND REASON FOR SELECTION

This proposed Resource Management Plan (RMP) for the Warm Springs Resource Area (WSRA) presents the proposals for future resource management on over 2.2 million acres of public lands. The proposed plan was the preferred alternative (Alternative D) in the Draft RMP/Environmental Impact Statement (EIS). Here, it is presented with additional information required by federal regulation and BLM policy; management goals and objectives (by program), implementation priorities (if any), support requirements, and monitoring procedures and standards are also described.

Corrections and some additions or changes from Alternative D in the Draft RMP/EIS have been added. None of those changes significantly altered the concepts and actions presented in the Draft RMP/EIS. For the reader's convenience, changes are noted by an arrow (>) in the adjacent margin of this proposed plan.

The rationale for selection of Alternative D as the proposed RMP is as follows:

- It was judged that, of the alternatives considered, the proposed plan maximizes resource values for the public, based on the concept of multiple-use management.
- The actions proposed are in conformance with pertinent laws, regulations, and policy. Those actions will protect unique and sensitive resources or areas while allowing balanced and diverse resource uses.
- The proposed plan makes the most judicious use of the lands, considering the long-term needs of future generations for renewable and non-renewable resources.
- The proposed plan is the alternative which best fulfills BLM's statutory mission and responsibilities, giving consideration to environmental, technical, and economic factors.
- Based on comments received during the Draft RMP/EIS public review period and information developed earlier in the planning process, it was determined that the proposed plan provides the best combination of uses to achieve legislatively mandated management objectives. The plan considers pertinent and prescribed decision factors, including ecology, existing uses, and relative values of resources within the WSRA.

CONCEPT OF THE PLAN

The proposed RMP emphasizes the management and use of renewable resources on the majority of public lands in the WSRA. Multiple-use management would be provided to sustain a supply of renewable/natural resources for local, regional, and national needs. Management would be directed to facilitate economic growth locally and regionally.

Approximately 90,000 acres would receive special management or restrictive designations to protect unique and sensitive resources. The majority of the resource area, about 2,136,500 acres (96 percent), would be managed under standard BLM stipulations. Of the area under restrictive or protective management, approximately 65,000 acres would have seasonal limitations on activities. Unique or sensitive resources in six special management designation areas would be protected by such actions as Category 3 (no surface occupancy) oil, gas, and geothermal leasing stipulations, closure to vehicles, and/or withdrawal from mineral entry. Except in special designation areas, generally, there would not be significant change in management intensity or direction. The proposed plan outlines existing management practices or policies and changes from existing management that reflect revised policies and/or recognition of special values.

Subsequent to plan approval, plan maintenance would be performed on a regular basis. New data, minor changes, or refinements in analysis would be posted to keep the plan current. However, maintenance would not alter decisions or expand their scope.

The plan identifies the need for subsequent, more detailed site-specific (activity) plans. Those plans, developed on a priority basis subsequent to final plan approval, will outline the specific actions necessary to achieve goals and objectives for each resource.

Plan amendments would be used to allow proposals or actions not in conformance with the plan but warranting consideration before the plan

is revised. Amendment procedures would conform to provisions and requirements defined in BLM planning regulations and policies.

It is anticipated that the plan would remain in effect for 20 years. Revisions would occur when management determined that current maintenance and amendments were inadequate to adapt to changing circumstances, resource conditions, or policies. The proposed plan describes program monitoring activities, schedules, and standards to help define when amendments or revisions were required.

The decisions in the plan would apply to all 2.2 million acres of public lands currently in the resource area and any lands subsequently added to it. No decisions or recommendations regarding wilderness designation of any of the five wilderness study areas (WSAs) in the WSRA have been made in the proposed plan. Wilderness designation recommendations have been analyzed in the Utah BLM Statewide Wilderness Draft EIS (1986). Until Congress decides on designation or non-designation of the WSAs in the resource area, these areas will be managed in conformance with the BLM's Interim Management Policy (IMP). Designation of any of the five WSAs would constitute an amendment of the RMP. Areas designated would then be managed in accordance with the BLM Wilderness Management Policy and provisions of the implementing legislation.

Four of the proposed special management designation areas are within WSAs. Designation as wilderness by Congress could preclude actions proposed for these areas: mineral withdrawal and closure to ORVs of up to 15,610 acres; and Category 3 fluid mineral leasing and right-of-way avoidance area designation of up to 17,530 acres.

This proposed plan will not be implemented until it receives final approval after conclusion of the 30-day public comment and protest period. Final plan approval by the Utah State Director will occur thereafter and will be documented by publication of the Record of Decision (ROD) and Rangeland Program Summary (RPS). The approved plan may be the plan stated in this document or it may draw from alternative proposals presented and analyzed in the Draft RMP/EIS.

COSTS OF IMPLEMENTATION

The costs of implementing the proposed RMP would generally approximate the WSRA's current operating budget. There would, however, be some increased costs associated with implementation and management of the plan. Additional costs from more intensive management of some programs would occur in the following areas:

1. Administrative costs of special management designations, Allotment Management Plan (AMP) development, and on-the-ground management.
2. Design and construction of proposed range developments, including vegetation treatments.
3. Supervision of livestock use and monitoring and evaluation of proposals once they have been implemented.
4. Installation and maintenance of wildlife habitat improvements.

Administration costs for all programs are currently about $389,000 per year. As the proposed programs are implemented, these costs are anticipated to increase with inflation. Full implementation is anticipated in 20 years.

Range improvement project costs average $85,000 annually (in today's dollars) and would be expected to remain about the same. Annual project maintenance costs would amount to an estimated $2,100 for new developments in addition to maintenance for existing developments and improvements.

Thus, the total cost of implementation, in today's dollars, would be expected to be approximately $476,000.00 annually.

RANGE MANAGEMENT

Introduction

VEGETATION RESOURCES

Two major plant communities are dominant in the resource area: salt-desert shrub and sagebrush-grassland communities which comprise nearly 82 percent of the total vegetation cover in the area. A third major vegetation type is pinyon-juniper, often found on the rockier mountain sites. Although not extensive in distribution, the most important forage type on the desert winter ranges is the black sagebrush type. Black sagebrush is an important key winter species for both domestic sheep and antelope.

No Federally listed threatened or endangered (T&E) plant species have been identified in the WSRA. However, five plants are listed as sensitive (undergoing status review as endangered by the U.S. Fish and Wildlife Service [FWS]). These species are listed in Table 3-3 in Chapter 6 of this document.

Halogeton is the only poisonous plant in the resource area that poses a major threat to livestock. Sheep operators manage their livestock to minimize loss from these plants. An infestion of Scotch thistle *(Onapordum acanthium)*, a very competitive noxious weed, has recently been found. Efforts are being undertaken to control this weed species, which is established primarily in an area between Fillmore and Cove Fort, Utah.

RANGE MANAGEMENT

Presently, 96 permittees graze livestock on 63 allotments containing approximately 2,026,990 acres (92 percent) of public rangeland administered by the resource area. Far less than the 2,026,990 acres of public land are actually grazed by livestock due to waste areas (e.g., Sevier Lake and playas), rough inaccessible slopes, and limited water availability.

Of the 96 permittees, 53 have cattle permits, 41 have sheep permits, and two have dual use permits (sheep and cattle). Twenty-eight permittees use more than one allotment.

Although livestock operations fluctuate, on the average, nearly 8,000 cattle and over 73,000 sheep graze annually. Most grazing use occurs during the late fall, winter, and early spring months.

Maximum allowable livestock use in the resource area (total active preference) is 149,009 animal unit months (AUMs). Approximately two-thirds or 99,389 AUMs are allocated for sheep and one-third or 49,620 AUMs for cattle. Actual licensed use from 1980-1984 has averaged 87,833 AUMs or 59 percent of the total active preference on an annual basis.

Current inventory information, based on utilization and long-term trend studies, indicates approximately 101,156 AUMs of competitive forage are available for livestock, wild horses, and big game animals. Additional non-competitive forage is available to wildlife and wild horses. There is additional forage not presently used by livestock due to water limitations and topographic or annual weather restrictions.

Of the 63 allotments administered by the WSRA, 43 have one permittee and 20 have more than one operator. Thirty-one are cattle allotments, 27 are sheep allotments, and five are dual use (cattle and sheep) allotments (see Appendix 1).

Ten allotments are managed under existing AMPs (see Figure 2-1). The majority of these AMPs are fully implemented with prescribed grazing systems, pasture fences, water developments, and some rangeland seedings completed.

Numerous rangeland improvements are in the resource area. Thirty wells, 19 developed springs, nearly 117 miles of pipeline, and 92 reservoirs provide water for livestock, wild horses, and wildlife. Most opportunities for water development have been completed. Over 460 miles of allotment boundary and pasture fenceline have been installed. Approximately 21,700 acres of rangeland seedings have been established in several sagebrush and pinyon-juniper communities. Those vegetation treatments followed chaining, plowing, prescribed burning, or wild fire. Opportunities for vegetation treatments are limited to the eastern portion of the resource area.

Current estimates of rangeland condition and trend have been recorded on all 63 allotments administered by the WSRA. These estimates are reflected in tables 2-1 and 2-2.

TABLE 2-1
Range Condition[1]

	Acres	Percent
Excellent	100,371	5
Good	803,061	40
Fair	889,493	44
Poor	234,065	11
Total Federal Acres	[2]2,026,990	100

[1] Based on analysis of existing utilization and trend data and the professional observations and judgement of the WSRA range staff using the Condition Class Rating Guides described in Appendix 11.

[2] The total number of Federal acres in the 63 grazing allotments administered by the WSRA. Acreage of the four allotments administered by the Ely District, Nevada, are not included in this table.

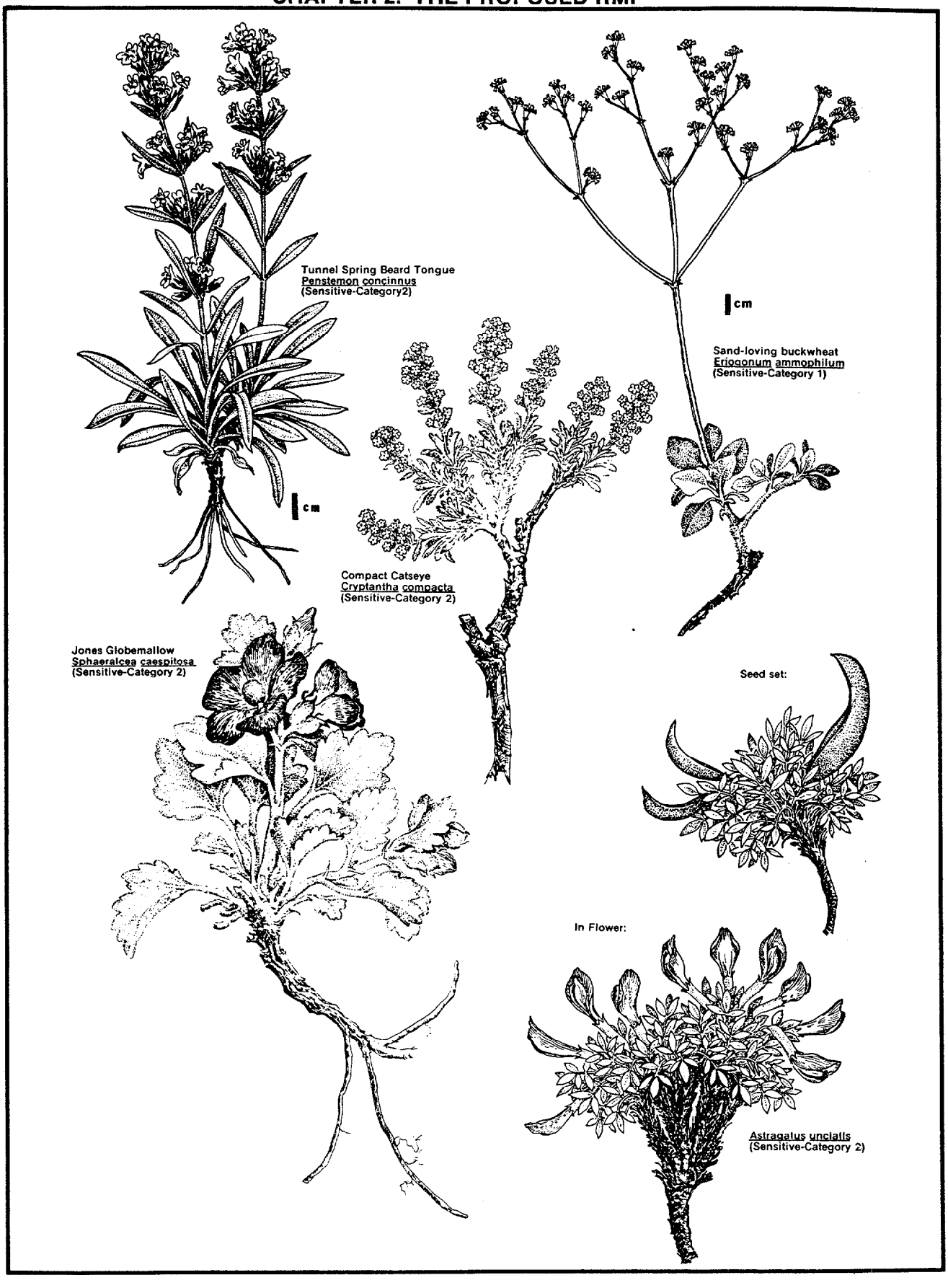

Tunnel Spring Beard Tongue
Penstemon concinnus
(Sensitive-Category2)
cm
Sand-loving buckwheat
Eriogonum ammophilum
(Sensitive-Category 1)
cm
Compact Catseye
Cryptantha compacta
(Sensitive-Category 2)
Jones Globemallow
Sphaeralcea caespitosa
(Sensitive-Category 2)
Seed set:
In Flower:
Astragalus unciallis
(Sensitive-Category 2)

TABLE 2-2
Range Trend

	Acres	Percent
Improving	575,858	28
Static	1,237,071	61
Declining	214,061	11
Total	2,026,990	100

[1] Includes estimates of observed trend on 52 allotments and apparent trend on 11 allotments, administered by the WSRA. Acreage of the four allotments administered by the Ely District, Nevada, are not included in this table.

Elements of the Plan

GOALS AND OBJECTIVES

Plan goals are to:

1. Provide a balanced allocation of forage resources for livestock, wild horses, and big game while ensuring the protection of rangeland values and providing a stable, renewable forage base. (Any necessary allocation adjustments would be accomplished within 5 years of Final RMP approval.)

2. Improve range condition, forage production, and management on 39 Category Improve (I) allotments identified for intensive management (see Figure 2-1 and Table 2-3).

3. Maintain or improve current resource conditions on the remaining 24 Category Maintain (M) and Custodial (C) allotments.

4. Achieve and maintain a forage production goal of approximately 108,100 AUMs for livestock in the long term (20 years).

TABLE 2-3
Warm Springs Resource Area
Allotment Categorization (M I C)

Allotments within the WSRA have been categorized in accordance with MIC criteria provided in the WO Instruction Memo 82-292 (Final Grazing Management Policy) based on the WSRA range staff's evaluation of the allotments.

Custodial (C) Category Criteria

- Present range condition is not a factor.
- Allotments have low resource production potential and are producing near their potential.
- Limited resource-use conflicts/controversy may exist.
- Opportunities for positive economic return on public investment do not exist or are constrained by tecnological or economic factors.
- Present management appears satisfactory or is the only logical practice under existing resource conditions.

Based on the above criteria, the following ten allotments have been placed in the *Custodial* category.

TABLE 2-3 (continued)

Allotment Name	Allotment Number	Public Land Acres
Anderson	5776	513
Beeston	5780	480
Black Rock Summer	5786	3,351
McClintock	5793	1,600
Section 31	5794	440
Stott	5795	160
T.O. Johnson	5760	160
Teeples	5798	920
Wallace	5791	900
White Bush	5770	80
Total		8,604

Improve (I) Category Criteria

- Present range condition is unsatisfactory.
- Allotments have moderate to high resource production potential and are producing at low to moderate levels.
- Serious resource-use cnflicts/controversy exists.
- Opportunities exist for positive economic return from public investments.
- Present management appears unsatisfactory.

Based on the above criteria, the following 39 allotments have been placed in the *Improve* category

Allotment Name	Allotment Number	Public Land Acres
Amasa	4300	4,782
Antelope Point	5777	2,895
Big Wash	5797	4,489
Black Point	5782	20,600
Black Rock Winter	5778	8,806
Blackham	4325	30,788
Breck's Knoll	4306	69,393
Church	5799	1,253
Coates	5781	19,229
Crickett	5779	90,205
Crystal Peak	4311	61,893
Deadman's Wash	4316	51,915
Death Canyon	4314	27,279
East Antelope	5796	16,404
Ephraim-Bagnall	6211	17,299
Ephraim-Meadow	5774	71,357
Fairview	6236	55,068
Holden Spring	5783	2,880
Holden Winter	5784	33,984
King	4324	48,035
Klondike	4322	32,700
Ledger Canyon	4321	17,811
Meadow Spring	5773	2,731
Mormon Gap	4397	46,606
North Canyon	4328	19,611
Notch Peak	4329	34,588
Painted Pot-Holes	4330	38,432
Painter Springs	4331	33,486
Pine Valley	4398	40,565
Seely	5787	46,208
Skull Rock	4334	50,023
Stateline	6238	33,045
Steamboat	4336	29,109

TABLE 2-3 (concluded)

Allotment Name	Allotment Number	Public Land Acres
Stott-Rowley	5789	15,145
Summit	5769	1,872
Twin Peaks	5785	179,869
Voorhees	6220	26,958
Wheeler	5790	17,522
Whiskey Creek	5792	5,001
Total		1,309,836

Maintain (M) Category Criteria

- Present range condition is satisfactory.
- Allotments have moderate or high resource production potential and are producing near their potential (or trend is moving in that direction).
- No serious resource-use conflicts/controversy exist.
- Opportunities may exist for positive economic return from public investments.
- Present management appears satisfactory.

Based on the above criteria, the following 14 allotments have been placed in the *Maintain* category

Allotment Name	Allotment Number	Public Land Acres
Blind Valley	4303	39,940
Boob Canyon	4304	3,025
Brown's Wash	4302	26,112
Buckskin	4307	21,898
Clay Springs	4312	37,026
Conger Springs	4313	70,425
Crows Nest	4305	25,358
Deseret	5775	270,117
Ferguson	4317	18,672
Garrison	4319	44,408
Granite	4320	48,801
Knoll Springs	4323	34,116
Skunk Springs	4338	37,061
South Tract	5788	4,591
Total		708,550

PROPOSED ACTIONS

Establishment of Grazing and Non-Grazing Areas

Grazing would continue to be administered on all 63 existing allotments. Areas presently unallotted for livestock use would remain unallotted. These areas include unsuitable ranges, Sevier Lake, and small, scattered land tracts where livestock grazing has not been an historic use.

Grazing Administration Practices

The proposed plan would be administered and managed using standard BLM operating procedures. Each livestock permittee would be issued temporary grazing authorizations or term permits through the BLM WSRA office. These would specify the allotment, proposed forage use, period of use, numbers and kinds of livestock.

Livestock grazing would be monitored and supervised by BLM throughout the year in cooperation with the permittees. Marking of livestock (preferred methods are ear tagging or dye marking) could be required to monitor livestock movement and proper stocking levels. Permittees would be required to request in writing any desired changes in use prior to the grazing period, since such changes could be inconsistent with management objectives. Grazing use outside the limits of the proposed plan and without prior authorization would be considered trespass. Should trespass occur, BLM would take action to ensure its elimination and collect payment for vegetation consumed and/or damage done. BLM would also make adjustments in the grazing management program during drought or other emergencies.

The actions described below and in the Plan Monitoring and Evaluation section would be used to adjust grazing use. Administrative adjustments in grazing use could be made to:

1. Authorize the movement of livestock from one pasture to another ahead of schedule if forage were lacking in the first pasture and available in the second.
2. Reduce livestock numbers temporarily if forage production were less than normal.
3. Increase livestock numbers on a temporary non-renewable basis if there were an abundance of available forage.
4. Adjust livestock use to limit utilization of key plant species to a predetermined level. Livestock use could be increased, decreased, or eliminated from an allotment to control utilization of key plant species. Rangeland condition, competition between big game and livestock, amount of available forage and water, and time of year would be considered in any decision to move livestock. Such adjustments would be designed to accomplish the grazing management objectives.

Initial Forage Allocation

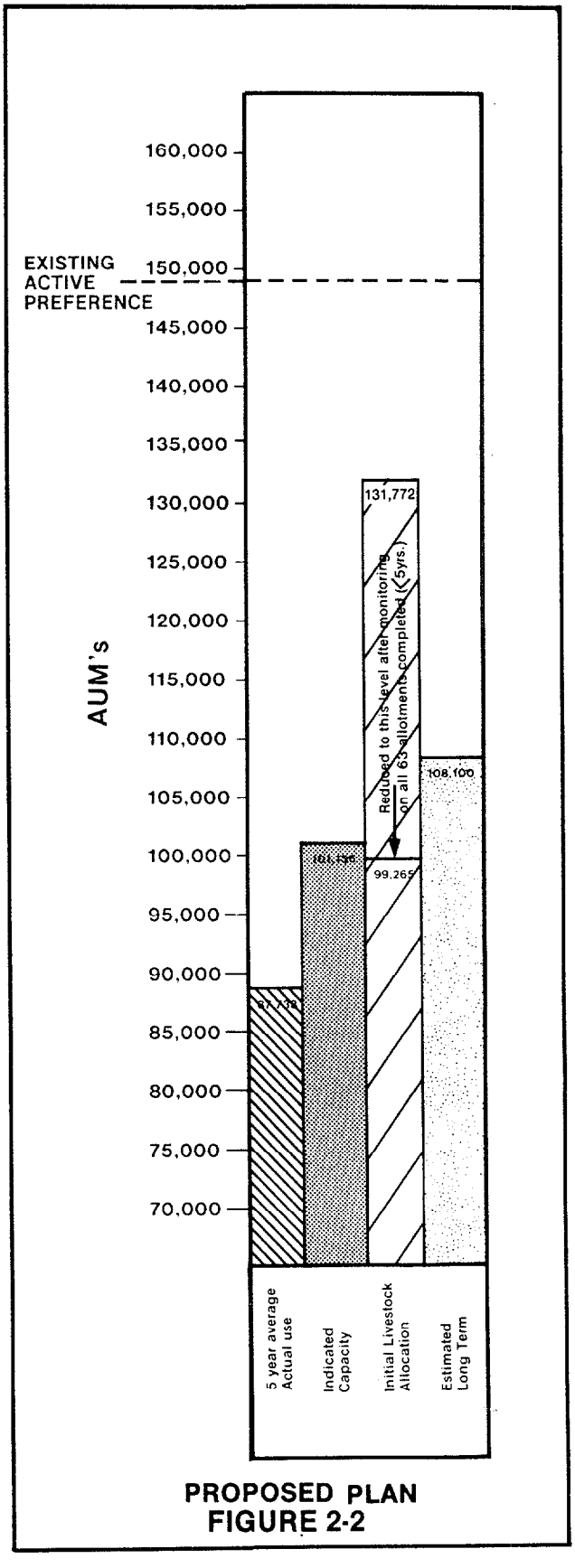
The management strategy would be to utilize key forage species at the proper use levels shown in Appendix 2, maintain good condition rangeland, and improve poor and fair condition rangeland. Forage allocations would be consistent with indicated grazing capacity based on at least 5 years of monitoring data and 2 years of trend studies.

Adjustments in livestock use would be initiated in 1987-1988 on up to 24 allotments currently having the required data. Adjustments, if necessary, would be made on the remaining 39 allotments within 10 years of plan completion as required data became available. The initial allocation of livestock forage for all allotments would be 131,772 AUMs in contrast to the existing preference of 149,009 AUMs (see Figure 2-2).

Forage resources would initially be allocated as follows:

1. To provide for objective big game numbers where feasible.
2. To provide for objective wild horse numbers.
3. To provide for livestock up to current preference.
4. To equitably distribute forage in excess of the above to all uses.

The 24 allotments with required data for adjustments are: Amasa, Black Point, Blackham, Blind Valley, Boob Canyon, Buckskin, Clay Springs, Deadman's Wash, Deseret, East Antelope, Ephraim-Meadow, Ferguson, Granite, Holden Spring, Holden Winter, King, Knoll Springs, Ledger Canyon, Meadow Spring, Mormon Gap, Skunk Springs, South Tract Summer, Stott-Rowley, and Twin Peaks. The proposed initial adjustments to these allotments are reflected in Appendix 1.



PROPOSED PLAN
FIGURE 2-2

Long-Term Forage Adjustments

All additional AUMs of forage resulting from successful management practices would be equitably distributed to all uses. (The distribution of these additional AUMs would be determined based on the suitability of the habitat for wildlife and wild horse use and the demand for livestock forage.) Any increase in livestock allocation would first go to restore suspended non-use in an allotment.

Change in Kind of Livestock/Season of Use

Requests for change in kind or season of livestock use would be considered and approved if feasible and if not in direct conflict with other resource uses. Additionally, an environmental analysis would be prepared to determine if the change would be consistent with the proposed range management objectives.

The watershed program has identified impacts to watershed conditions, potentially due to spring and summer use periods by cattle on the Stott-Rowley and Ephraim-Meadow allotments. These two allotments would be monitored to determine if adjustments to the season of use and/or to livestock use were needed. In the case of the Ephraim-Meadow Allotment, seasonal adjustments to the existing AMP could be made.

Allotment Categorization (M I C)

Allotments would be categorized in accordance with Table 2-3, based on present resource conditions and their potential for improvement. There would be 14 allotments placed in the M category, 39 allotments in the I category, and ten allotments in the C category. See Figure 2-1 for allotment locations.

Adjustments in the categorization of allotments would be made in accordance with BLM policy as management situations or allotment conditions changed. Such situations/changes could include successional forage condition changes as the result of wildfire or a new infestation of noxious weeds in an allotment.

Allotment Management Plans

The ten existing AMPs would continue to be updated, monitored, and evaluated as necessary (see Figure 2-1 for location of these allotments). Priority for development of new AMPs would be as follows: Breck's Knoll, Pine Valley, Deadman Wash, Mormon Gap, Antelope Point, Black Rock Winter, and East Antelope in Category I; and Black Rock Summer in Category C. One AMP would cover Antelope Point, Black Rock Winter, East Antelope, and Black Rock Summer allotments. Plans would be developed on these allotments and the remaining I Category allotments at a rate of approximately two plans per year. Appendix 1 shows the priority ranking for preparation and implementation of AMPs for all allotments.

Range Improvements

Structural Improvements

Range improvements deemed environmentally acceptable and with a favorable cost/benefit ratio would be installed as funds became available. Emphasis would be placed on improving livestock distribution to insure more uniform forage utilization patterns. Priority would be given to I and M category allotments with opportunity for improved livestock distribution. See Appendix 3 for proposed rangeland improvements by allotment.

Non-Structural Improvements

Along the eastern edge of the WSRA, approximately 14,000 acres of land suitable for vegetation treatments would be treated in three allotments: Black Point (1,000 acres), East Antelope (6,500 acres), and Twin Peaks (6,500 acres). Priority would go to allotments demonstrating greater need for improvement in livestock forage, wildlife habitat, and watershed condition. Treatment would increase available livestock forage by an estimated 1,633 AUMs.

Standard Design, Construction, and Operation Features)

All range improvements would be designed and constructed to minimize environmental impacts while maximizing functions and cost effectiveness. Prior to the installation of any range improvements, an environmental assessment (EA) would be prepared to analyze the alternatives for the development. In addition, a benefit/cost analysis of the various alternatives would be done. The EA and benefit/cost analysis would then be used to determine the final project design.

The following procedures would be followed for construction of all management facilities and vegetation manipulations:

1. New road or trail construction to project sites would not be built if existing roads and/or trails could be used.

2. All areas of proposed surface disturbance resulting from construction of range developments would be inventoried for archaeological resources and the presence of T&E

and sensitive plant species. All archaeological sites or T&E and sensitive plant populations identified by the inventory would be avoided or adequate mitigation taken. If cultural remains were encountered during construction, operation would be temporarily discontinued until BLM evaluated the discovery and determined the appropriate action.

3. Wildlife escape devices would be installed and maintained in all water troughs.

4. Areas where vegetation treatments occurred would be rested from livestock grazing for a period of two growing seasons to allow recovery and re-establishment of key forage species.

5. Only approved chemicals would be used for vegetation treatments and the control of noxious or poisonous plants. All chemical applications would comply with U.S. Department of the Interior (USDI) regulations and Utah pesticide laws.

6. Vegetation treatments on crucial wildlife ranges would be designed to provide appropriate mitigation measures, including adequate cover for wildlife.

Maintenance of Existing Range Improvements

Existing structural-type range improvement maintenance is the responsibility of the permittees. Fee collection for maintenance of water facilities (e.g., springs, pipelines, wells) would continue. Fees for maintenance would be determined annually by the Area Manager and the WSRA representatives to the Richfield District Grazing Advisory Board.

Non-structural range improvement maintenance is the responsibility of BLM. Existing seeding/chaining areas would be maintained as funds permitted, if these projects would facilitate management (e.g., livestock distribution, utilization, wildlife habitat enhancement, watershed protection, etc.).

Threatened, Endangered, and Sensitive Plant Species

Nine allotments have known populations of sensitive plant species: Blackham, Blind Valley, Brecks Knoll, Crystal Peak, Deseret, Fairview, Mormon Gap, Notch Peak, and Painted Potholes.

The Blind Valley and Deseret allotments currently have existing AMPs, and the other seven allotments are scheduled for AMP development and implementation.

As AMPs for these and other allotments were revised and new ones developed, site-specific objectives for protecting sensitive species would be included.

Additionally, monitoring (utilization studies) in key grazing areas would include identification of T&E or sensitive species habitats and would note any grazing utilization or other impact to these species.

Predator and Noxious Weed Control

Predator control would continue in accordance with the Richfield District Animal Damage Control Plan, reviewed annually with the Animal and Plant Health Inspection Service (APHIS).

Infestations of noxious weeds, with special attention to Scotch thistle, would be monitored annually. Where necessary, BLM would assist in coordinated efforts with affected local, State, or Federal agencies to develop control and eradication programs.

SUPPORT REQUIREMENTS

Clerical support would be needed during the development phase of AMPs and grazing agreements/decisions prior to implementation.

Where vegetation treatments, structural improvements, and accessory road construction are proposed, various types of support from BLM personnel would be needed. Division of Operations support would be needed for designing projects, construction and installation, contracting, and maintenance purposes. Coordination with the Wildlife and Recreation programs could be needed for big game and visual resource considerations. Assistance from the Soil, Air, and Water program could be required for soil evaluations and ground water and well site investigations. Archaeological and T&E and sensitive species clearances would be mandatory prior to any project installation.

Cadastral survey assistance would be needed where vegetation treatments or fencelines were proposed near State, private, or other Federal agency property lines or areas identified for wilderness or other special protective designation (i.e., Areas of Critical Environmental Concern [ACEC]). Additionally, where prescribed burns were proposed, fire operations and fire crews would be needed. When herbicide applications are planned for vegetation treatments or noxious weed control, the certified District herbicide applicator would be requested.

GENERAL IMPLEMENTATION SEQUENCE/ PRIORITY

The Richfield District Manager and WSRA Area Manager will issue the ROD/RPS following finalization of the approval process. This document will describe in detail the allotment management decisions and planned actions.

The priority for implementation of the grazing management program will follow the guidelines stated in the BLM Grazing Management Policy (IM 82-292).

Scheduling Grazing Allocation Adjustments

Forage adjustments would be initiated by agreement/decision on the 24 allotments with sufficient study data starting in FY 1987, following final plan approval and completion of the RPS. All agreements/decisions on these 24 allotments should be completed by the end of FY 1988. Agreements/decisions on the remaining 39 allotments would be initiated and completed within 10 years of final plan completion.

The cattle seasons of use on the Stott-Rowley and Ephraim-Meadow allotments would be studied and evaluated within 2 years of final plan approval. If necessary, changes in season of use or livestock allocations would be initiated.

Scheduling the Development and Implementation of Allotment Management Plans

AMPs would be developed at about a rate of two per year, following the order of priority listed in Appendix 1. BLM personnel, in cooperation with affected permittees, would develop or update AMPs on priority I category allotments to implement the grazing management program. If BLM personnel and permittees failed to reach an agreement, a grazing system protecting affected resources would be implemented by decision of the Area Manager. Permittees would, however, have the right to appeal any such decision.

Livestock grazing levels and recommended patterns of use would be specified in the individual AMPs, as would BLM's and the range users' responsibilities for developing and maintaining rangeland improvements and monitoring programs.

Range management objectives would be further refined and specifically matched to resource conditions during preparation of AMPs. Site-specific rangeland improvements would be evaluated and proposed at this stage of planning.

The overall objective would be to have 39 I category allotments with implemented AMPs within 20 years (contingent upon funding and manpower).

PLAN MONITORING AND EVALUATION

The priority I and M allotments outlined in the plan would be monitored to determine if management objectives were being met. Category C allotments would be monitored on a limited basis to insure that grazing uses and conditions remain satisfactory. Four primary studies basic to rangeland evaluation would be used: (1) actual grazing use; (2) vegetation utilization; (3) trend; and (4) climate analysis. These studies would be conducted according to BLM Technical References 4400-1 through 4400-4. Actual use, utilization, and climate data would continue to be gathered annually. Range trend would be evaluated every 3 to 6 years, depending on resource condition.

In addition, studies, including ecological range site condition, would be established to monitor priority riparian and aquatic habitat and key watershed areas.

Data from these studies would be evaluated to determine management effectiveness and to assist in making necessary adjustments. Evaluations would be made prior to implementation of each step of a phased forage adjustment to determine whether the total amount of adjustment should be modified (either increased or decreased) (43 CFR 4110.3-3(a)and (b)). Management would be modified if evaluations determined that specific allotment objectives were not being achieved. Administrative modifications could include changes in livestock patterns of use, livestock numbers, periods of use, rangeland improvements, or any combination of these.

MONITORING AND LICENSING OF INTERMINGLED STATE AND PRIVATE LANDS

Livestock use on intermingled State and private lands within allotment boundaries would be monitored and licensed under exchange of use or percentage of licensed use. All transfer applications would be thoroughly analyzed on the basis of all available range study data to insure the transfer would not result in overuse of the forage resource.

WILDLIFE

Introduction

The WSRA provides habitat for approximately 700 pronghorn antelope in two Utah Division of Wildlife Resource (UDWR) herd management units (Unit 2, West Desert and Unit 4, Southwest Desert), which contain 326,452 acres of critical yearlong habitat (Figure 2-3). Current antelope forage needs total 894 AUMs.

Portions of six mule deer herd units are within the WSRA: Units 53, 54, 55, 56, 62B, and 62C. All critical habitat on BLM lands (6,840 acres) lies within the winter ranges in the foothills of the Canyon and Pavant mountains within management units 53, 54, and 55 (Figure 2-4). Current population estimates are 95 yearlong residents in the West Desert and over 1,400 winter only residents for a total mule deer forage need of 962 AUMs.

Elk herds are establishing on the Pavant Plateau and the Needle Mountains (Figure 2-5). No population estimates or forage allowances are proposed until use areas and critical habitats have been determined.

Mountainous areas within the WSRA are historical habitat for desert bighorn sheep. Potential habitat will be evaluated for possible desert bighorn reintroduction.

The WSRA provides important year-round raptor habitat. Golden eagles, red-tailed hawks, prairie falcons, marsh harriers, and American kestrals are found in all seasons. In addition, ferruginous hawks are common nesters, and bald eagles and rough-legged hawks are common winter residents. Five crucial raptor habitat areas (78,500 acres) would be delineated for protection, particularly during the nesting season.

Upland game bird species using the WSRA are the chukar partridge, sage grouse, and ring-necked pheasant. The chukar is widely spread, but the other two species have limited distributions (Figure 2-6).

The only T&E species common to the WSRA are wintering bald eagles. Almost the entire resource area is used, although no essential habitat has been delineated. There is potential for reintroduction of the peregrine falcon to Pavant Butte, historical nesting habitat for this species.

Several sensitive animal species occur in the WSRA: golden eagles, ferruginous hawks, Swainson's hawks, white-faced ibis, western snowy plovers, long-billed curlews, and possibly the Clear Lake pocket gopher.

TABLE 2-4

Riparian Habitat Summary for WSRA

Name	Location	Allotment	Aquatic Condition	Riparian Condition	Size	Comment
Lake Creek	T22S R19W Sec. 29	Big Wash	Poor	Fair	0.25 mi.	High organic enrichment and sedimentation, high alkalinity.
Pruess Lake	T22S R19W Secs. 18, 19, 29	Clay Spring Big Wash Pruess Lake	Fair	Fair	2,500 ac.-ft.	Approximately 340 acres with 4.5 shoreline miles, high turbidity, and nutrient loading from upstream grazing, livestock grazing on shoreline limits riparian vigor.
Crafts Lake	T18S R 8W Sec. 7 T18S R 9W Secs. 12, 13	Deseret	Unknown	Unknown	190 acres	Lake is a desert playa that temporarily holds water.
Sevier Lake	R11W 20 S to R11W 23 S	Unallotted	Poor	Fair	92,000 acres	Lake is a desert playa that temporarily holds water.
Sevier River	T18S R 8W	Deseret	Poor	Poor	27.3 mi.	Usually lacks water.
Meadow Creek	T22S R 4W Sec. 18 S 1/2	Meadow Sp.	Unknown	Unknown	1 mi.	May be dewatred for irrigation.
South Tule Sp.[1]	T17S R15W Sec. 15 NE 1/4 NE 1/4	Skunk Springs	Fair, static trend	Fair	20 ac.	Potential least chub transplant site.
Painter Spring	T19S R14W Sec. 5	Painter Spring	Unknown	Unknown	160 ac.	Unique vegetation community.

[1] Forty-acre oil and gas category location: T. 17 S., R. 15 W., Sec. 15, S 1/2 NW 1/4 NE 1/4 and N 1/2 SW 1/4 NE 1/4.

Riparian habitat is limited and widely scattered in the WSRA (Figure 2-7). The largest riparian areas are Lake Creek and Pruess Lake, South Tule Spring, several locations near Notch Peak, the terminus of the Sevier River-Crafts Lake area (and adjacent flood areas), and lower Meadow Creek in the Pavant Range foothills (Table 2-4).

Elements of the Plan

GOALS AND OBJECTIVES

Wildlife management goals and objectives would be to: (1) protect, regulate use of, and develop habitat and waters on public lands to sustain or enhance wildlife populations; (2) monitor populations and status of sensitive and T&E species; (3) protect and enhance riparian habitat; and (4) achieve objective big game numbers.

Objective big game numbers were jointly agreed on by BLM and UDWR. Data used to set these objectives included prior stable populations (when available), potential of the forage resource, and other known resource conflicts and limiting factors (e.g., water).

PROPOSED ACTIONS

Forage Allocation

Habitat development and livestock grazing management would be undertaken to achieve objective numbers of big game. Populations would be: pronghorn antelope, 1,861; mule deer yearlong, 95; and mule deer winter, 2,464.

Pronghorn Antelope Habitat and Use

Management objectives for black sagebrush habitat (see Table 2-5) would be to improve habitat condition in poor to fair and fair to good condition through better distribution and management of grazing use.

TABLE 2-5
Black Sagebrush Habitat

Condition	Acreage	
	Present	Objective
Good	35,880	118,000
Fair	180,152	153,452
Poor	110,420	55,000

Twenty-six water sources (guzzlers, reservoirs, etc.) would be developed in habitat more than 2 miles from existing water sources as funds permitted. Monitoring to better define antelope habitat suitability requirements would be planned and initiated.

When requested by the livestock permittee, change in kind of livestock and/or season of use on critical antelope habitat would be evaluated. Based on this, a change in kind of livestock or season of use would be allowed if antelope habitat management objectives could be met and other resources would not be adversely affected.

Mule Deer Habitat and Use

Condition of critical deer winter range would be monitored and livestock managed to prevent degradation. Proper ratios between cover and forage area would be maintained. Conflicting use of critical deer winter ranges would be restricted. Management objectives would include utilization of all suitable winter range.

West Desert yearlong deer habitats would be inventoried and monitored and crucial habitat identified. Habitat development would be undertaken to establish and expand yearlong deer herds where feasible.

Elk Habitat and Use

Public land elk use in the WSRA would be documented when encountered. No forage allocation for elk would be made in this RMP.

Desert Bighorn Sheep Habitat and Reintroduction

Mountainous areas would be evaluated to determine suitability for bighorn sheep reintroduction. If suitable areas were found, analysis would determine conflicts with existing land uses, need for habitat developments, and potential for reintroduction.

Raptor Habitat and Use

Winter raptor populations would be monitored to delineate bald eagle critical winter habitat and needed protection stipulations. Raptor habitat use would be monitored and correlated with range condition and trend, kind of livestock and management, and prey availability. Crucial wintering habitat would be designated.

Raptor nesting populations would be monitored with emphasis on sensitive and T&E species. A 0.25-mile radius around all active and inactive nests would be designated as crucial nesting habitat. Five crucial raptor nesting areas would be designated. These areas would be classified as Category 2 for fluid mineral leasing, and ORV use would be limited to existing roads and trails to prevent significant disturbance to nesting raptors from March 1 through June 30.

Pavant Butte would be designated an ACEC (2,500 acres) to protect historic peregrine falcon nesting and reintroduction. In cooperation with UDWR, a peregrine falcon reintroduction plan would be developed.

Upland Game Bird Habitat and Use

Condition and potential of chukar and sage grouse habitat would be evaluated to determine areas where improvements are needed to increase populations and improve habitat and distribution. Up to 41 water sources would be developed for chukars.

Sage grouse strutting grounds would be inventoried to establish a 2-mile radius buffer zone around each active ground. Sagebrush manipulation would be prohibited within that zone and a seasonal ORV restriction would be implemented.

Riparian/Aquatic Habitat and Use

The Pruess Lake Habitat Management Plan (HMP) would be revised and incorporated into a HMP for all riparian areas. The management opportunities for each riparian area would be inventoried and evaluated. Measures (e.g., fencing, installation of spawning structures, revegetation, and modified livestock grazing) would be taken to improve the aquatic and riparian habitat conditions of Lake Creek, Pruess Lake, South Tule Spring, Crafts Lake, the Sevier River, Meadow Creek, and the other riparian areas.

Protective oil, gas, and geothermal leasing category restrictions would be placed on Meadow Creek, Pruess Lake, Painter Spring, the area around Clear Lake Waterfowl Management Area, and South Tule Spring (potential least chub aquatic habitat) to protect wildlife habitat and other values.

SUPPORT REQUIREMENTS

Most actions recommended in this plan would require the cooperation and/or support of other BLM programs or other agencies. Review of all proposed projects by the archaeologist, realty specialist, and geologist would be required as standard procedures.

Specific projects (water development, vegetation manipulation, fencing, etc.) would require more specific information: feasibility and design, engineering, water rights review, construction labor contracting, seed acquisition and application supervision, and inspection.

Monitoring studies would require cooperation from the range specialists, the U.S. Forest Service (FS), or UDWR. Riparian studies would require water quality and quantity measurements, macroinvertebrate analysis, and perhaps technical biological assessment or input from the FWS on T&E species.

Peregrine falcon reintroduction would require support from FWS, UDWR, the Peregrine Fund, and possibly financial support from non-government sources. Desert bighorn sheep reintroduction would require support from UDWR and probably the National Park Service (NPS), National Wildlife Refuges, or another state's department of wildlife management.

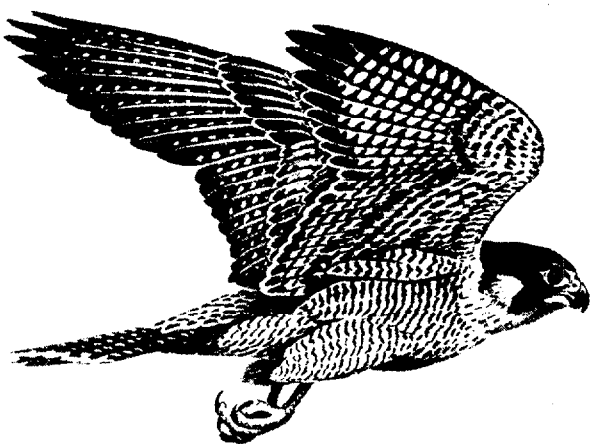
ORV designations;, oil, gas, and geothermal leasing actions, and mineral withdrawals would require support from the appropriate BLM specialist.

Implementation and Priorities

Implementation of wildlife projects would be dependent on funding. Twenty-six water sources for antelope have been identified for development and are prioritized (see Table 2-6 and Figure 2-3). In addition, 41 upland game (and other wildlife species, including mule deer and elk) watering deficient areas have been identified but not specifically prioritized. Unless specific HMPs identified higher priority areas, these 26 water sources would be developed before the other 41 areas deficient for water.

TABLE 2-6
Priority Areas for Pronghorn Water Development

1.	Brown's Wash Allotment - East Half
2.	Southeast Garrison/Clay Springs Allotment Boundary
3.	West of Knoll Hill-Brown's Wash/Buckskin Allotments (2)
4.	Southeast Deadman's Wash Allotment
5.	Deadman's Wash/Crows West Allotment Boundary
6.	Cowboy Pass - Deadman's Wash Allotment
7.	Eastern Stateline Allotment
8.	Northwest Fairview Allotment
9.	Center State Line Allotment
10	West Granite Allotment
11.	Southwest Crystal Peak Allotment
12.	Northwest Crystal Peak Allotment
13.	Western Painted Potholes Allotment
14.	Western Voorhees Allotment
15.	King Allotment Center
16.	Southwest Blackham Allotment
17.	West Center Painter Springs Allotment
18.	Northwest North Canyon Allotment
19.	Western Death Canyon Allotment
20.	Northwest Steamboat/Southwest Skull Rock Allotment Boundary
21.	Western Skull Rock Allotment
22.	Northwest Cricket Allotment
23.	West-Center Seely Allotment
24.	Western-North Cricket Allotment
25.	Black Rock/Cricket/Ephriam-Bagnall Allotment Boundary



Peregrine Falcon

Specific activity implementation schedules would be developed in five HMPs. Figure 2-7 shows the areas to be included in each HMP. These plans would cover all wildlife and riparian habitats in the WSRA. The order of priority for developing HMPs would be as follows:

1. Revision of West Desert HMP.
2. Riparian Areas HMP.
3. Twin Peaks/Foothill Tracts HMP.
4. Sevier Lake Desert HMP.
5. Black Rock Desert HMP.

The possibility of a desert bighorn sheep reintroduction would be addressed in the Sevier Lake Desert HMP. The peregrine falcon reintroduction plan would be a portion of the Black Rock Desert HMP, unless the reintroduction required an earlier schedule. If so, it would be written as an independent activity plan.

PLAN MONITORING AND EVALUATION

Wildlife projects proposed in this plan would be implemented and scheduled through HMPs or grazing AMPs. These site-specific plans would include a process to evaluate and monitor progress toward established goals. Therefore, the progress toward preparing HMPs as scheduled and the implementation of individual HMPs would be used to monitor progress in achieving the RMP wildlife objectives.

Critical antelope and mule deer habitats would be monitored through existing range/wildlife vegetation trend studies. The Management Situation Analysis (MSA) outlines the methods used to analyze condition and trend of this critical habitat. Joint range/wildlife trend studies would be conducted on 3-year cycles. If progress goals were not evident after the second cycle (6 years), the livestock grazing management plan would be reviewed and evaluated to define necessary changes needing to achieve wildlife habitat objectives. This process would be used to determine if vegetation manipulation was needed on critical mule deer winter range.

Pavant Butte
Proposed Area of Critical Environmental Concern

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WILD HORSES

Introduction

Three herd management areas (HMAs) (Conger Mountain, King Top, and Burbank Hills) are in the resource area (Figure 2-8). In addition, the northern portion of the Sulphur HMA, managed by the Cedar City District, is located in the southwest portion of the WSRA. These horses have been managed under provisions of a wild horse capture plan completed in 1977. Wild horses have been captured and removed periodically under provisions of this plan to maintain horse numbers at levels commensurate with available forage.

Elements of the Plan

GOALS AND OBJECTIVES

Wild horses have been, and will continue to be, managed in accordance with provisions of the Wild Horse and Burro Act of 1971 and subsequent legislation. HMAs will be completed within 5 years to provide detailed guidance for management of individual HMAs.

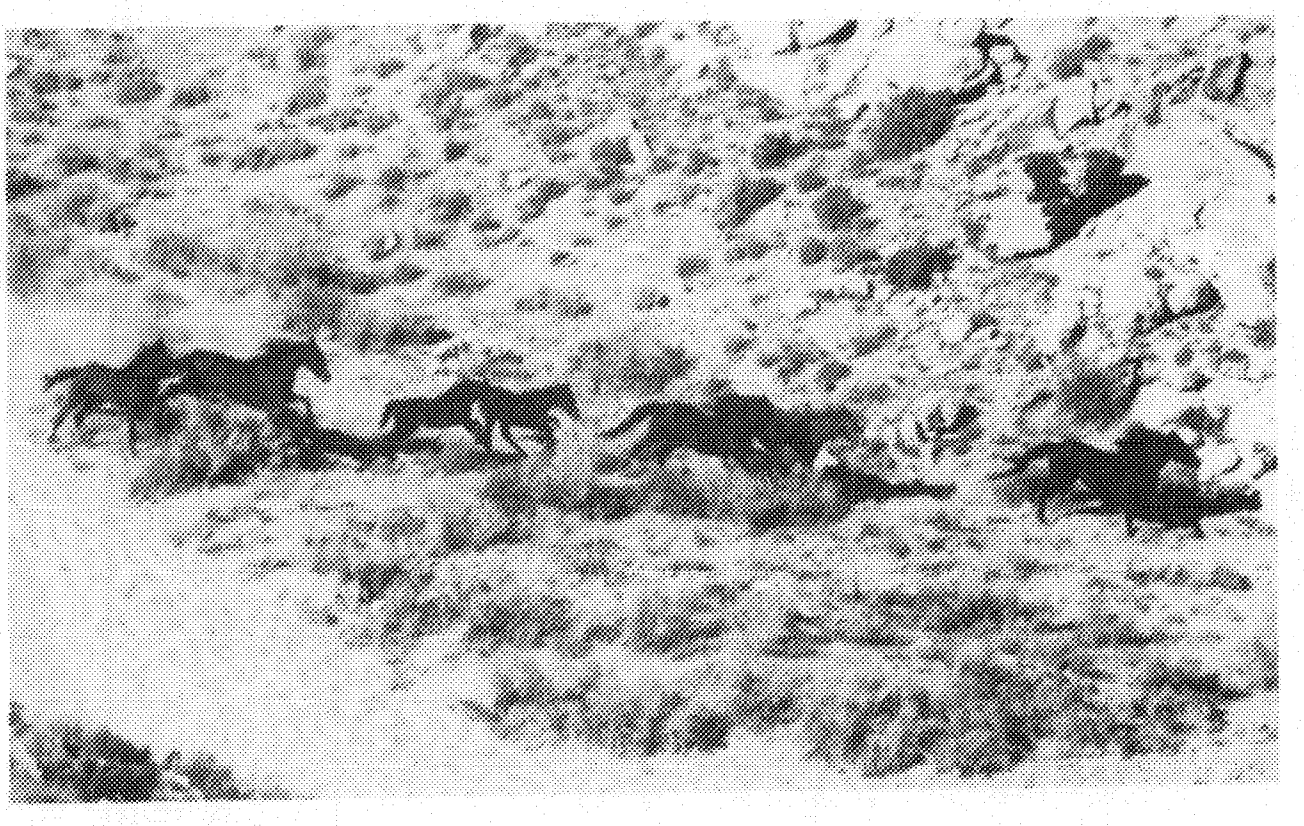
PROPOSED ACTIONS

Horse numbers in the Conger Mountain, King Top, and Sulphur HMAs would be maintained near the following allocation levels: Conger Mountain, 60 head (720 AUMs); King Top, 30 head (360 AUMs); and Sulphur, 50 head (600 AUMs). Horse numbers would be kept between 80 and 40 head in the Conger HMA, 40 and 20 head in the King Top HMA, and 75 and 35 head in the Sulphur HMA. This would require periodic removals about every 5 years. All wild horses in the Burbank Hills HMA would be captured and relocated to other HMAs or put up for public adoption.

Selective removal of wild horses would be initiated to achieve better breeding stock. Colorful studs with good form would be introduced from other HMAs to improve herd viability and make the wild horses more adoptable.

SUPPORT REQUIREMENTS

Coordination with the range and wildlife programs must occur to insure proper management of the horse herds and their habitat. Any proposed changes in class of livestock, introduction of game species, or development of structural



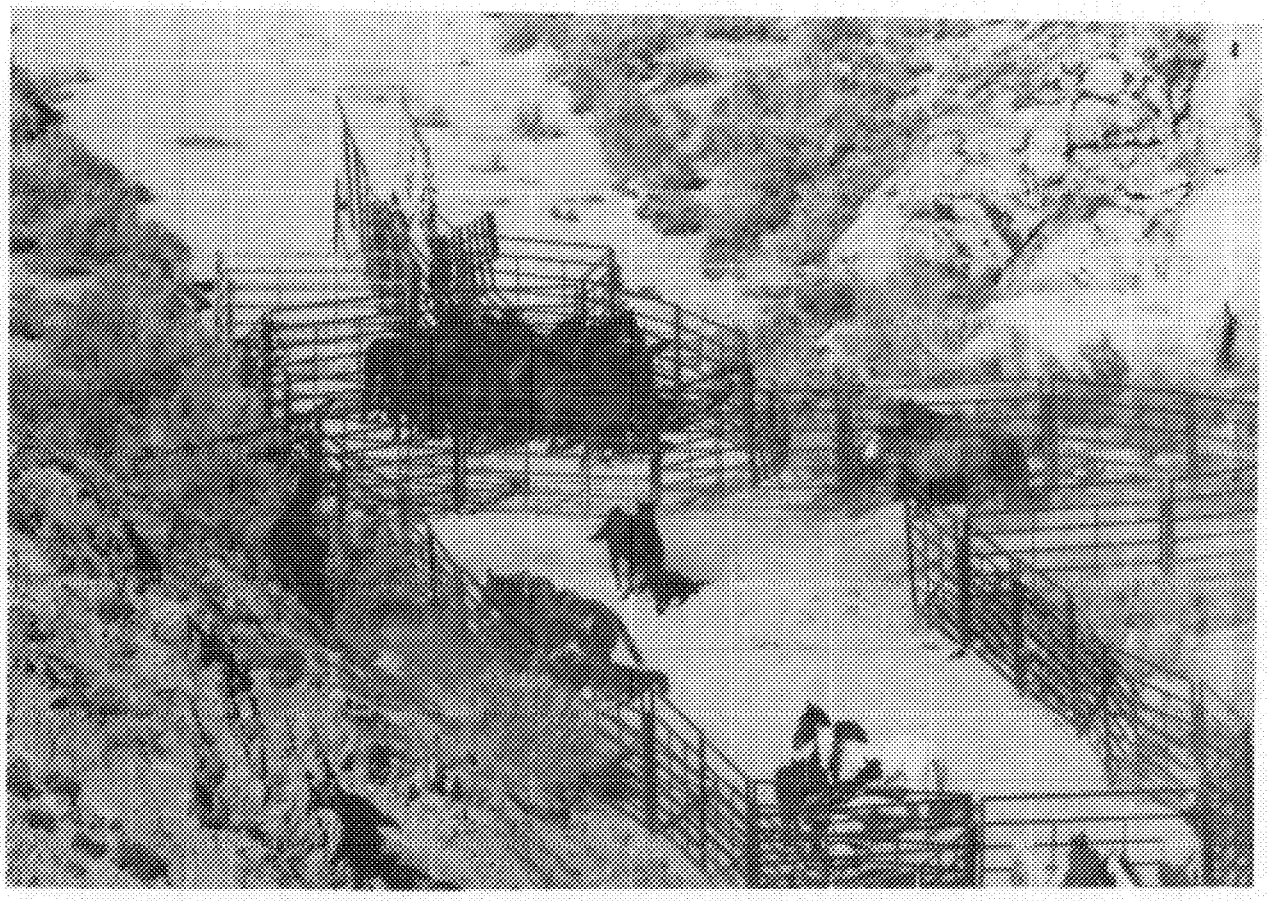
improvements would be coordinated to insure that the change would not adversely affect long-term viability of the wild horse herds.

GENERAL IMPLEMENTATION

Wild horse management would occur as described in this document upon approval of the WSRA RMP.

MONITORING AND EVALUATION

The status of the wild horses would be monitored on a regular basis. Populations would be determined on an annual basis by ground or aerial surveys, depending on availability of funds. Weekend surveillance patrols would be made annually during the spring foaling season to reduce harassment of wild horses during this critical period. Vegetation studies established in crucial wild horse areas in 1977 would continue to be read. Utilization of key forage plants used by wild horses would be determined each year. Trend plots established in these areas would be monitored at 6-year intervals to determine key forage plant trends. This data would be evaluated at periodic intervals to determine if objectives of this RMP and subsequent Herd Management Plans are being met.



RECREATION

Introduction

RECREATION FEATURES

The lava fields of the Black Rock Desert, Sevier Lake, old lake bed playas in Tule, Pine, and Wah Wah valleys, in combination with the rugged Wah Wah, King Top and House Range mountains, provide a wide variety of opportunities for dispersed recreation throughout the WSRA. Several recreation resources (i.e., fossil beds, mountain peaks, etc.) are of national significance. The majority of recreation users are local residents pursuing rock hounding, hunting, and/or sightseeing. The resource area offers deer, antelope, chukar, and limited sage grouse and ring-neck pheasant hunting. Isolation from major population centers, lack of recreation developments, and publicity have resulted in low recreation use.

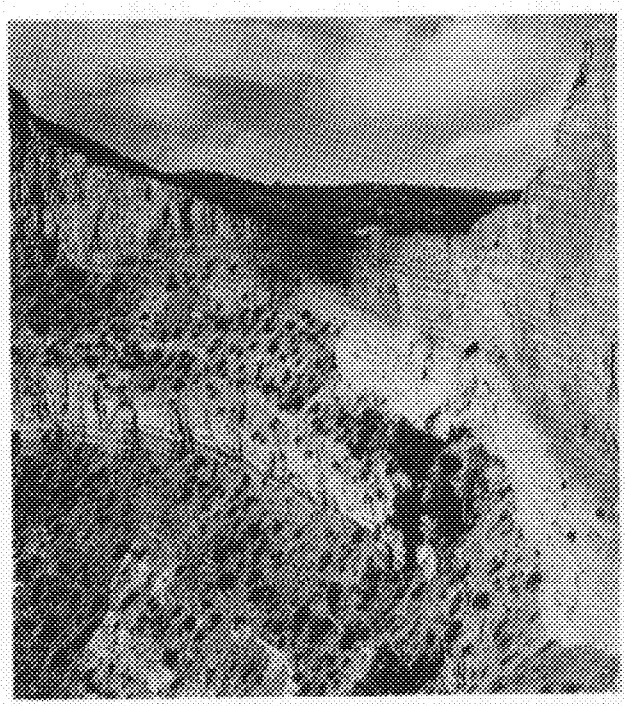
Five WSAs are within the resource area: Wah Wah Mountains, King Top, Notch Peak, Conger Mountain, and Howell Peak. These areas have been studied, and their wilderness values evaluated in the BLM Utah Statewide Wilderness Draft EIS (1986).

The Tabernacle Hill Lava Field is the only area currently designated as a Special Recreation Management Area (SRMA) within the WSRA. The volcanic features of the field have served as a focal point of interest for families, scout groups, school groups, and individuals for many years. A recreation management plan has been developed for the area. Mineral activity has resulted in disturbance of some unique features.

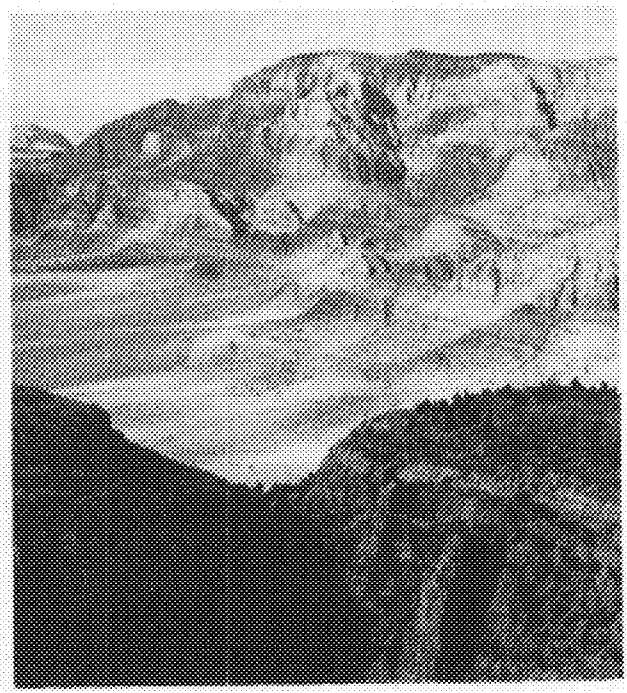
Several other areas within the WSRA contain unique recreation resources. They include Notch Peak, Fossil Mountain, Wah Wah Mountains, Crystal Peak, and Pavant Butte. The location of these areas, as well as Tabernacle Hill, is depicted on Figure 2-9. The following is a brief overview of these resources:

Notch Peak, the second highest peak in the House Range Mountains, is a West Desert landmark. The north face of the peak is a sheer 3,000-foot limestone cliff. Although current use is low, the peak and surrounding area provide an appealing resource base for backpacking, camping, day hiking, horseback riding, nature study, and many other recreation pursuits.

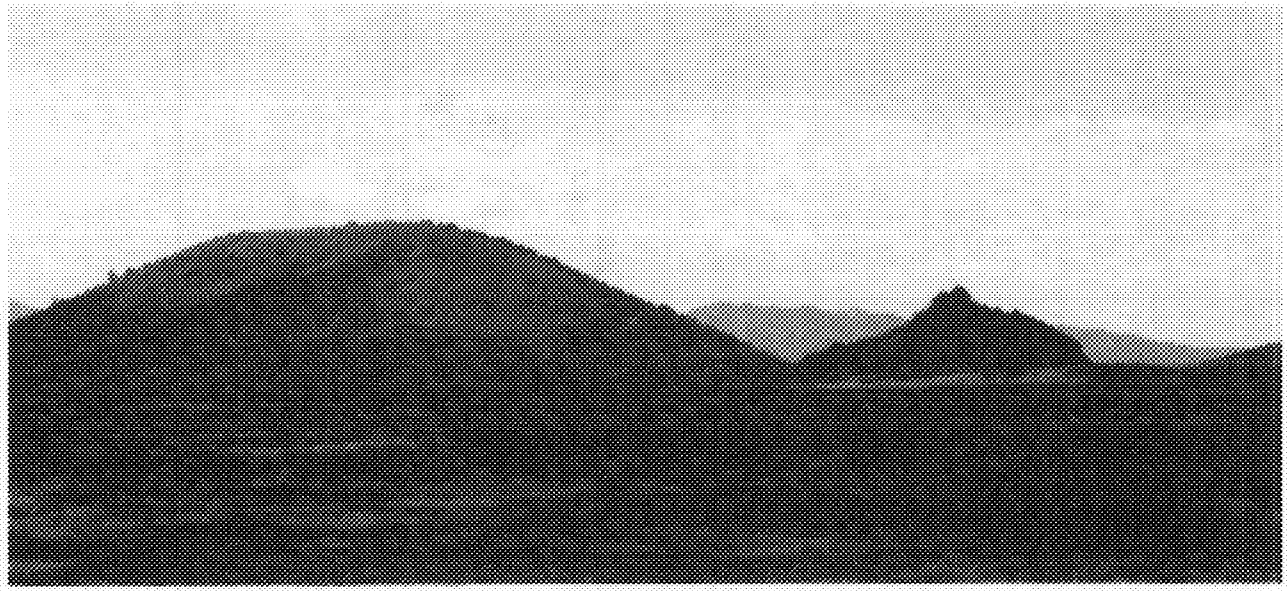
Fossil Mountain contains the most abundant and diverse assemblage of Lower Ordovician marine



Notch Peak
Proposed National Natural Landmark



Wah Wah Mountains
Proposed Research Natural Area



Tabernacle Hill
Proposed Area of Critical Environmental Concern

invertebrate fossils known anywhere in Utah with 13 fossil groups. Rare specimens and a greater variety of different specimens than anywhere in the western United States are found here. The area is a popular rockhounding area for university groups and amateur collectors.

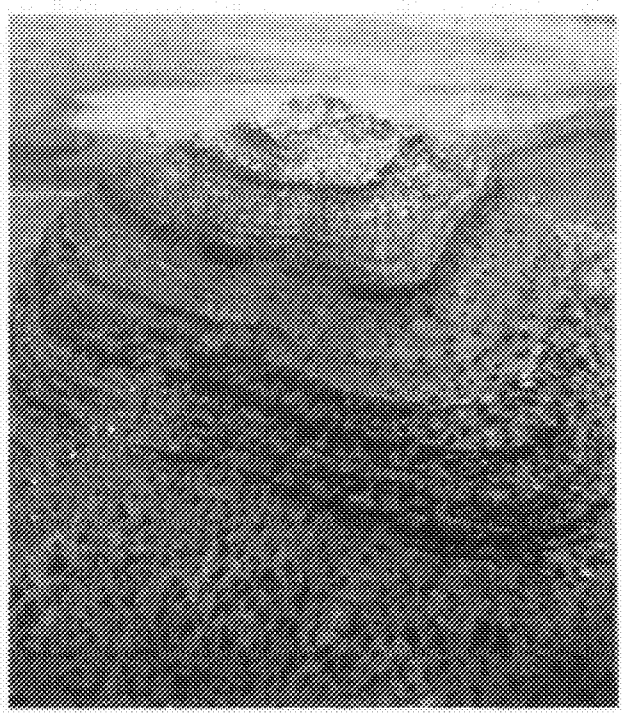
The pristine Wah Wah Mountains have a formidable west cliff face and upper plateau covered with old picturesque tree stands. The central portion of the range contains an important undisturbed biotic community representing a typical example of a desert mountain ecosystem.

Crystal Peak, at the north end of the Wah Wah Mountain range, is the thickest and most prominent example of tunnel spring tuff in western Utah. The peak is an area of exceptional scenic splendor and is a unique undisturbed geologic landmark.

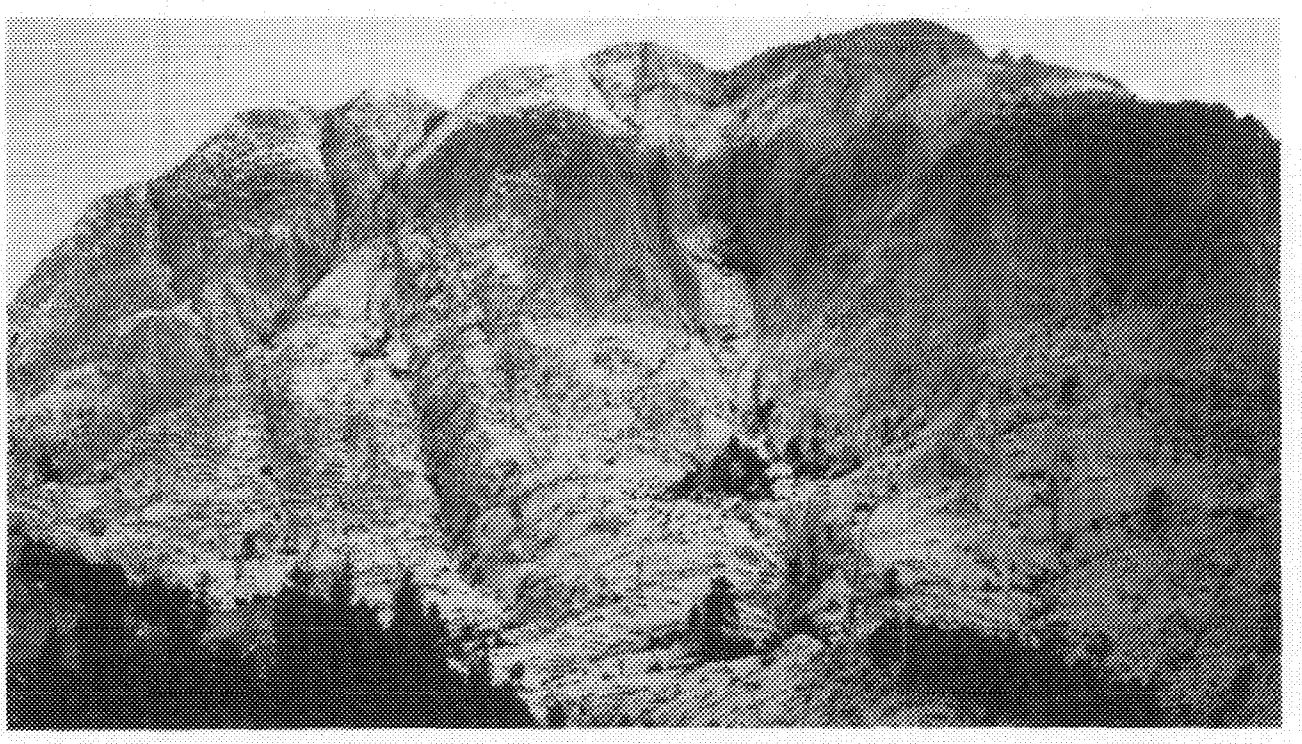
Pavant Butte is a unique volcanic cone comprised of volcanic ash and sand. It is the largest and most prominent crater of the Utah West Desert lava fields.

A lava flow near Deseret, Utah, contains a remnant of a conduit or vent approximately 32 feet high, which has eroded to a striking resemblance of a human face. The feature, known as the Great Stone Face, is a remarkable likeness to the published pictures of the Mormon Prophet Joseph Smith.

Other recreation resources and/or features within the WSRA are not managerially significant.



Fossil Mountain
Proposed Historic Site



Crystal Peak
Proposed Outstanding Natural Area

OFF-ROAD VEHICLE USE

Most off-road vehicle (ORV) activity within the WSRA is incidental to other recreational activities, such as hunting, rockhounding, and sightseeing. The area is a considerable distance from large population centers. A few motorcycle races, sponsored by a locally organized motorcycle club, have been held during the past few years. Races have been held in the vicinity of Notch Peak, Pavant Butte, Black Rock, and Dog Valley. The courses used for the races have not been used to any degree after the events. The races, averaging between 150 to 200 participants, resulted in very few resource conflicts.

Elements of the Plan

GOALS AND OBJECTIVES

Goals and objectives are to: (1) provide recreation opportunities under BLM's basic stewardship responsibilities for unstructured, extensive types of recreation uses; (2) to maximize the visitor's freedom of choice; (3) continue management of important recreational resources in Federal ownership to preserve those values and make them available for appropriate recreation enjoyment by the public; and (4) protect the cultural and historic values in the planning area from accidental or intentional destruction and give special protection to high value cultural and historic sites.

PROPOSED ACTION

General Actions

Special recreation use permits would continue to be processed. Recreation resources would be evaluated on an individual basis as part of project level planning. Such evaluation would consider the significance of the proposed project and the sensitivity of recreation resources in the affected area. Stipulations would be attached as appropriate to assure compatibility of projects with recreation management objectives. All identified significant historic, archaeological, and cultural sites would be protected.

Specific Actions

The major management decisions and/or actions within the recreation program would be:

- Designate the Wah Wah Mountains as a SRMA. Continue management of Tabernacle Hill as an SRMA and implement the recreation management plan for this area.
- Designate Tabernacle Hill as an ACEC.

- Nominate Notch Peak for designation as a National Natural Landmark if not designated as wilderness by Congress.
- Designate Crystal Peak as an Outstanding Natural Area (ONA) if not designated as wilderness by Congress.
- Designate Fossil Mountain as a historic site.
- Designate a portion (5,970 acres) of the Wah Wah Mountains as a Research Natural Area.
- Designate fluid mineral leasing categories as outlined under the Minerals section to preserve recreation values at the Great Stone Face, Gunnison Massacre Site, Devil's Kitchen, Tabernacle Hill Petroglyphs, Sunstone Knoll, Painter Spring, Pruess Lake, and Meadow Creek.
- Develop an ORV Management Plan and designate public lands into the ORV categories shown in Table 2-7 and Figure 2-10.

See the Lands section of this chapter for a complete description of management prescriptions for each special management designation area.

TABLE 2-7
WSRA Proposed ORV Categories

Category	Area	Acreage	Acreage
Open			2,142,519
Limited			
	Tabernacle Hill[1]	9,567	
	Central Deer Winter Range[1]	7,765	
	Raptor Nesting Habitat[1]	50,485	
	Sage Grouse Breeding/ Nesting[1]	4,310	
Total			66,127
Closed			
	Notch Peak[2]	5,000	
	Crystal Peak[2]	640	
	Fossil Butte	2,500	
	Wah Wah Mountains[3]	5,970	
Total			16,110

[1] Limited to existing and/or designated roads and trails.

[2] Seasonal -- March 1 to June 30.

[3] Seasonal -- March 1 to July 31.

[4] If not designated wilderness by Congress.

SUPPORT REQUIREMENTS

Lands and minerals support would be required for implementation of the Tabernacle Hill Recreation Management Plan and special management designations. Also, program coordination would be required with the wildlife and watershed programs in assessing the effects of the ORV limitations.

GENERAL IMPLEMENTATION SEQUENCE/ PRIORITY

Management of the Tabernacle Hill area would begin with the adoption of the plan. Development of recreation support facilities would be primarily contingent upon future funding.

Special designations would be initiated upon adoption of this RMP.

An ORV implementation plan would be completed by the end of FY 1988. Development of interpretive materials would be an on-going process, contingent on funding. Periodic updates would be required.

Plan Monitoring and Evaluation

Management plans for the SRMAs and special management designation areas, and the ORV plan would define monitoring standards and intervals for those areas and activities.

Program review at five year intervals would assess progress of plan accomplishments and need for modification.

VISUAL RESOURCES

Introduction

The WSRA contains a wide variety of scenery. The eastern portion, consisting primarily of the Black Rock Desert, the Cricket Mountains, and Sevier Lake, is characterized by broad open valleys interspersed with low rolling hills and moderately high mountains. The valley floors contain a mix of pinyon-juniper and sagebrush. Volcanic lava flows and buttes provide interesting variety within these areas. The mountain ranges contain a limited variety of vegetation, rock, and soil types. Water bodies are primarily limited to Meadow Creek, the Sevier River, and Sevier Lake. Although Sevier Lake is normally dry much of the year, the unusually high runoff the last few years has created a year-round water body which is strikingly blue when viewed from the southern end. The lake is the third largest water body in Utah, but has little vegetation around the periphery.

The central portion of the planning area contains the most striking scenery: rugged House Range and Wah Wah mountain ranges with towering peaks and steep escarpments. These mountains contain a wide variety of vegetation types from dark green pinyon-juniper to white aspen stands. The steep rock escarpments contain a wide variety of colors and forms. There is also some water evident in the small streams in the House Range Mountains. Interspersed between the mountains ranges are flat, barren lake bed playas which provide an interesting landscape.

The Ferguson Desert; Burbank Hills; Confusion, Needle, and Conger mountains; Pine and Snake valleys comprise the western portion of the planning area. This area contains saltbush-covered flat valley bottoms and rolling pinyon-juniper covered hills. With the exception of Pruess Lake and Lake Creek, there is no visible evidence of water. The House Range and Wah Wah mountains to the east and spectacular Snake Range Mountains to the west (in Nevada) dominate the landscape.

Previous WSRA planning efforts were done prior to BLM adoption of the VRM system and, therefore, did not define any VRM management classes. During the summer of 1985, BLM personnel, from the House Range and Warm Springs Resource Areas, conducted a visual resource inventory and analysis of the entire WSRA.

Portions of the Wah Wah Mountains (including Crystal Peak), Notch Peak, Tabernacle Hill, and Ice Springs Lava Flows were the resources found to have the highest (Class A) visual qualities. Pavant Butte, the foothills adjacent to the Fishlake National Forest, portions of the Wah Wah Mountains and Notch Peak, Confusion Mountains, and Antelope Mountains have moderate (Class B) visual qualities. The remaining flat valley bottoms and sparsely vegetated foothills and mountain ranges have low (Class C) visual qualities.

Based on scenic quality, visual sensitivity, and visual distance zones (see Glossary), all public lands were assigned VRM classes. There were no areas rated as VRM Class I. The Tabernacle Hill and Ice Springs Lava Flows, Pruess Lake, and portions of the Wah Wah and House Range mountains were rated Class II. Portions of the House Range, Wah Wah, and Confusion Mountain ranges, Pavant Butte, and the foothills adjoining the Pavant Mountain Range were rated Class III. The remainder of the WSRA, consisting of the Black Rock Desert; the Crickett, San Francisco, and Mineral mountains; the Confusion, Needle, and Conger ranges; Tule, Snake, Wah Wah, and Pine valleys; and Sevier Lake were rated Class IV. No areas were rated Class V. Figure 2-9 delineates the location of the various VRM classes.

Elements of the Plan

GOALS AND OBJECTIVES

Goals and objectives would be to: plan, modify, and implement resource management activities in a manner minimizing impacts to visual resources. Special emphasis would be applied during environmental assessment and project design to projects in the seen area (foreground visual zone) to meet VRM objectives.

PROPOSED ACTIONS

General Actions

Visual resources would be evaluated as part of activity and project planning. This evaluation would consider the visual sensitivity of the affected area. Appropriate stipulations would be attached as appropriate to protect visual resources and, if feasible, meet VRM objectives in affected areas. Visual resources in the WSRA would be managed in accordance with the BLM VRM Class Management Standards.

Specific Actions

VRM classes assigned within the WSRA would be as shown in Table 2-8.

TABLE 2-8
WSRA
Visual Resource Management (VRM)
Classes

VRM Class	Acreage
I	0
II	24,484
III	106,180
IV	2,092,091
V	0
Total	2,226,755

SUPPORT REQUIREMENTS

Support would be required from a Landscape Architect and/or Outdoor Recreation Planner to design BLM-initiated projects and mitigation for non-BLM projects. Since VRM affects virtually every BLM program, coordination is required from all programs which initiate surface-disturbing activities. Special emphasis on program coordination would be required from the range, wildlife, and watershed programs when significant acreages were proposed for land treatment. The lands and minerals programs would also coordinate with the design staff on non-BLM initiated projects (oil and gas geothermal development, location of gravel sales, rights-of-way, etc.) for appropriate mitigation measures.

IMPLEMENTATION AND EVALUATION

All VRM objectives would be effective upon approval of the RMP. Proposed projects would be evaluated to determine whether they are compatible with VRM class objectives. Measures would be taken (i.e., design modifications, relocation of structures, etc.) to mitigate adverse visual impacts. Importance of the approval of the project relative to the value of the affected visual resource would be analyzed before final approval and notice to proceed would be authorized.

Plan Monitoring and Evaluation

Evaluation of the effectiveness of mitigating measures would be accomplished following rehabilitation of project areas. Review of overall plan effectiveness would be conducted every five years following plan approval.

CULTURAL RESOURCES

Introduction

The WSRA contains a varied cultural resource base representing a sparse continuum of habitation from the prehistoric Paleo Indians of 12,000 years ago to the mining and CCC camps of the present century. Significant paleontological values are also present. The cultural resource program's goal is to protect these values from accidental or intentional damage and, if possible, enhance the value of the more significant sites.

Elements of the Plan

GOALS AND OBJECTIVES

The cultural resource program is, and would continue to be, designed to inventory, evaluate, plan, and manage cultural resources of lands administered by BLM and in areas of BLM responsibility. The objectives of the program are to:

1. Protect and preserve representative samples of the full array of cultural resources for the benefit of scientific and socio-cultural use by present and future generations.

2. Ensure that cultural resources are given full consideration in all land-use planning and management decisions.

3. Manage cultural resources so that scientific and socio-cultural values are not diminished, but rather maintained and enhanced.

4. Ensure that BLM's undertakings avoid inadvertent damage to cultural resources, both Federal and non-Federal.

PROPOSED ACTIONS

1. In accordance with law and policy, require cultural resource clearances and mitigation on all projects involving surface-disturbing activities prior to construction or development, with special emphasis going to those sites listed on the National Register of Historic Places.

2. Implement predictive cultural resource inventories for regional planning purposes.

SUPPORT REQUIREMENTS

The cultural resource program is essentially a support program of inventory and evaluation with little or no support requirements of its own. However, it is necessary to coordinate project activities carefully so that cultural resource inventories are timely and inventory results are considered in management decisions.

GENERAL IMPLEMENTATION SEQUENCE/ PRIORITY

The priority for inventory is a matter of law and policy: those inventories designed to identify and protect sites from damage due to BLM undertakings are a legal requirement. Inventories to gather predictive data are desirable and beneficial, but would have to be done on a time-available basis under the present system.

PLAN MONITORING AND EVALUATION

Monitoring and evaluation would be done at intervals to determine the effectiveness of cultural resource mitigation.

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LANDS

Introduction

The lands program is characterized primarily by the processing of several rights-of-way and permits each year. Periodically, work is also done on Desert Land Entries, exchanges, and withdrawals. Because of the lack of complexity in the land ownership pattern, there is not a sufficient workload for a full time Realty Specialist in the WSRA; therefore, the Realty Specialist position is shared between the WSRA and the House Range Resource Area (HRRA).

Elements of the Plan

GOALS AND OBJECTIVES

The objectives of the lands program are to provide more effective public land management and to improve land use, productivity, and utility. This includes accommodation of community expansion and economic development needs and authorization of legitimate uses of public lands by processing use authorizations (e.g., rights-of-way, leases, permits, and State land selections) in response to demonstrated public needs.

PROPOSED ACTIONS

Land Tenure Adjustments

Prior to any adjustment in land tenure on the 2,226,755 acres of public land in the WSRA, conformance with the land use plan would be determined. Procedures followed would be as defined in the BLM Manual and regulations, in accordance with the type of land tenure adjustment.

Generally, a land report/environmental assessment (LR/EA), which assesses the impacts the disposal action would have on public values and resources would be prepared. Values considered would include wildlife, T&E species, cultural resources, environmental quality, minerals, the interest of the grazing permittees, the adjacent landowners, and the local community. The LR/EA would address specific criteria for each type of land action.

When an LR/EA determined that a parcel was suitable for sale or exchange and would benefit the public, a Notice of Realty Action (NORA) would be published in the *Federal Register* and a local newspaper for 3 weeks. State and local government officials, appropriate Congressional committees and representatives, adjacent landowners, and interested parties would be notified by a direct mailing of the NORA.

The NORA would detail the proposed realty action including restrictions on any title, deed, or lease issued. The disposition of grazing rights, minerals, or surface use rights and the fair market value of the parcel of public land would be defined. The NORA would precede a public comment period of 45 days.

The only lands identified for disposal (see Figure 2-11) are the following tracts which are suitable for sale under one or more of the criteria defined in Section 203 of FLPMA:

- Tract 1—T. 23 S., R. 19 W., Sec. 17, S½SE¼, NE¼SE¼, SE¼NE¼; 160 acres.
- Tract 2—T. 19 S., R. 19 W., Sec. 35, NE¼NE¼; 40 acres.
- Tract 3—T. 22 S., R. 6 W., Sec. 3, Lots 9, 10, 11; 20.36 acres.
- Tract 4—T. 19 S., R. 4 W., Sec. 4, Lot 11; 12.05 acres.
- Tract 5—T. 18 S., R. 4 W., Sec. 33, lot 5; 6.79 acres.

All other public lands would be retained in Federal ownership. Disposal of any other public lands would require an amendment of the RMP.

Regulations do not allow land disposals or long-term rights-of-way in WSAs. If not designated, the areas would be returned to multiple-use management if not identified for other special management designation.

The FS Desert Experimental Range (55,625 acres) would remain withdrawn by Executive Order from all forms of appropriation under public land laws, including mining.

Public water reserves around each spring on public lands in the resource area have been or would be delineated on BLM records.

Right-Of-Way Corridors

FLPMA states: "Utilization of rights-of-way in common shall be required to the extent practical." The utilization of existing corridors, whether designated or not, would be standard procedure.

Rights-of-way would be processed on a case-by-case basis, generally in the order received. Existing major rights-of way would be designated as corridors (see Table 2-9). New rights-of-way would be restricted to these corridors wherever feasible. Special management designation areas and VRM Class II areas (approximately 47,000 acres total) would be right-of-way avoidance areas.

TABLE 2-9
Right-of-Way Corridor Specifications

Name	Width (ft)	Specifications	Terms[1]
Siguard to Nevada Transmission Line	1,500	Available for all utility uses	4, 7
IPP to Nevada Transmission Line	1,500	Available for all utility uses	4, 7
IPP to California 500-kV Transmission Line	1,500	Available for all utility uses	4, 7
U.S. Highway 50&6	2,000	Available for all uses	1, 2, 3, 5, 8
Interstate Highway 15	3,000	Available for all uses	5, 6, 8
State Highway 257 and Union Pacific Railroad	2,000	Available for all uses	1, 2, 3, 5, 8

[1] Terms

1. The road or highway within the right-of-way corridor shall be used to the maximum extent possible for construction and maintenance of new rights-of-way.
2. Roads that are needed for construction of a new right-of-way shall be temporary and fully rehabilitated.
3. All land disturbed by new rights-of-way except authorized new access roads shall be rehabilitated to as close to naural conditions as possible
4. Transmission line rights-of-way shall be adjacent to each other or as close as possible.
5. Buried telephone cable lines shall be close to existing roads and highways and generally within the road right-of-way.
6. New rights-of-way shall be limited to below the surface of the ground uses only.
7. Existing transmission line access roads shall be used, and only the roads to new tower sites shall be constructed for new rights-of-way.
8. All rights-of-way must comply with the applicable Visual Resource Management Class guidelines.

Existing major rights-of-way would be designated as corridors (see Table 2-9). New rights-of-way would be restricted to these corridors wherever feasible. Special management designation areas and VRM Class II areas (approximately 47,000 acres total) would be right-of-way avoidance areas.

Special Management Designations

Any areas identified through the land use planning process as needing special management designation, including ACECs, would be designated and managed in accordance with pertinent BLM policy, regulations, and legislation. Areas selected for special management designations are listed below:

- Pavant Butte: An inactive volcano, also known as Sugarloaf Mountain, would be designated an ACEC. It rises 1,000 feet above the surrounding desert floor to an elevation of 5,757 feet. It is the largest, most predominant crater in the Millard Volcanic Field.

  Pavant Butte is a historical peregrine falcon (an endangered species) eyrie. UDWR is planning to reintroduce the peregrine to Pavant Butte in an effort to prevent the possible extinction of this species. Pavant Butte has a recent geomorphic history displaying interrelated landform features that are outstanding for interpretation and study.

  Due to the scientific-educational values, its potential for peregrine falcon reintroduction and recreational potential, Pavant Butte meets the importance criterion (it has special worth, meaning, distinctiveness, or cause for concern). The threat of surface-disturbing activities, such as mining, could cause irreparable damage to the volcanic structures, thus Pavant Butte meets the ACEC relevance criteria (special management attention is required to protect and prevent irreparable damage).

  Thus, to preserve and protect the volcanic features and potential for peregrine falcon reintroduction, Pavant Butte would be designated an ACEC (2,500 acres). It would be withdrawn from mineral entry, placed in Category 3 for fluid mineral leasing, closed to vehicular traffic, retained in Federal ownership, and be a right-of-way avoidance area. State Section 32 would be acquired if possible.

- The Tabernacle Hill Lava Field: This is the only area currently designated as a SRMA within the WSRA. The lava field contains a unique concentration of unusual volcanic features, which include a tuff ring, caldera, spatter cones, a maze of lava tubes and pit craters, and a domed landform resembling the Mormon Tabernacle in Salt Lake City. The combination of geologic features present is probably unique in the Western U.S. Thus, the area meets the importance criteria for an ACEC. Mineral activity, primarily in the form of annual assessment work and construction of roads, pits,

trenches, and road blocks to keep the public out, has resulted in disturbance of some of the unique features. Thus, the area meets the relevance criteria for an ACEC. Therefore, to preserve and protect the recreation, scenic, and unique geologic features present, Tabernacle Hill would be designated an ACEC (3,567 acres). The present mineral withdrawal will continue. Category 3 for fluid mineral leasing would be continued. It would be a right-of-way avoidance area. Recreation facilities would be developed, ORV use limited to existing roads, State Section 16 acquired, and rockhounding and shooting prohibited.

- Notch Peak: If not designated as wilderness, 9,000 acres would be nominated for designation as a NNL, placed in Category 3 for fluid mineral leasing, withdrawn from mineral entry, closed to motor vehicles, and be a right-of-way avoidance area. Forest lands would remain unavailable for management of forest products. Management would be to protect the area's outstanding examples of ecologic and geologic features and other natural values for educational, recreational, and inspirational benefit. Plans for recreational support facilities would be developed.
- Crystal Peak: If not designated as wilderness by Congress, 640 acres would be designated an ONA. The area would be withdrawn from mineral entry, remain in Category 3 for fluid mineral leasing, closed to motor vehicles, and be a right-of-way avoidance area. Harvest of forest products would be prohibited. A management plan, interpretational materials, and, if necessary, facilities would be developed to insure preservation of the area's outstanding scenic splendor in its natural condition and to enhance its recreational values.
- Fossil Mountain: Would be designated a Historic Site (1,920 acres), remain in Category 3 for fluid mineral leasing, and a right-of-way avoidance area to protect the area's evidences of prehistoric lifeforms.
- Wah Wah Mountains: A Research Natural Area (RNA) (5,970 acres) would be designated. The area would be designated Category 3 for fluid mineral leasing, withdrawn from mineral entry, designated a right-of-way avoidance area, and closed to ORVs and the harvest of forest products. State Section 32 would be acquired. A management plan would be developed in coordination with Nature Conservancy to preserve the pristine area's integrity, biotic communities, bristlecone pine stands, and its scenic, geologic, recreational, and scientific values.

Acquisition

If possible, three State sections, located on the Wah Wah Mountains (T. 25 S., R. 15 W., Sec. 32), Tabernacle Hill (T. 22 S., R. 6 W., Sec. 16), and Pavant Butte (T. 19 S., R. 6 W., Sec. 32) would be acquired into Federal ownership by exchange with the State of Utah.

No major access needs have been identified.

SUPPORT REQUIREMENTS

The following support needs would be required to achieve management objectives outlined for the Lands program: clerical, land appraisals, mineral examinations, and site resource evaluations for affected resources.

Program coordination between the Lands program and other programs would be administered through the normal NEPA (EA) and LR process.

PLAN MONITORING AND EVALUATION

Formal monitoring reviews would be done at intervals not to exceed 5 years. These reviews would assess the progress of plan implementation and the need for amendment or revision.

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MINERALS

Introduction

During the past decade, oil, gas, and geothermal exploration activity has occurred in the WSRA. Recently (for over 2 years), however, no oil and gas activity has occurred, due in large part to the low price of oil and gas.

The WSRA demonstrates many favorable characteristics normally associated with geothermal resources, including post-Miocene volcanism and high heat flow. These favorable characteristics, along with the recent increased exploration and leasing, indicate the WSRA may have good potential for geothermal development. See Figure 2-12 for geothermal resource areas.

The potential generation and trapping of oil and gas in the WSRA have been affected by three distinct depositional/tectonic episodes: (1) Cordilleran Geosyncline, (2) Sevier thrusting, and (3) Basin and Range development. Generally, geosynclinal deposition and thrust faulting tend to enhance the oil and gas potential, while the block-faulting and associated igneous activity of the Basin and Range tend to decrease the potential.

The three categories for oil and gas potential within the WSRA are speculative, low, and very low (see Figure 2-13). The speculative category, while considered to have poor probability of deposits, is highest and is attributed to lands in the transition zone. These are the lands east of the leading edge of the Sevier Thrust. Lands covered by Tertiary basin fill are also assigned speculative because of the unknown potential of the thick sediment and of underlying Paleozoic rocks. Most ranges in the WSRA are considered low in potential due to the widespread Tertiary basalts and because pre-Cambrian and Cambrian rocks crop out on the surface. Very low potential is assigned to areas mapped as having igneous intrusions or thick volcanics in the subsurface.

Although numerous notices are filed in the resource area each year, little activity other than assessment work occurs on mining claims. One operator, Continental Lime, is producing marketable material on a continuing basis from mining claims in the resource area.

The playa lakes of the Basin and Range Province have been recognized as potential sources of potassium, phosphate, and sodium; however, no information is available concerning the possible presence of economically recoverable quantities of these minerals. One operator is conducting exploration activities under an approved exploration plan in connection with extended potassium prospecting permits in the Sevier Lake area.

Locatable minerals have not had a significant impact on the local economy. Several areas within the WSRA have mining claims present, but few show activity. The potential for locatable mineral deposits ranges from high to low (see Glossary) for various mineral commodities (see Figure 2-13 and Table 2-10).

Abundant sand, gravel, borrow, and light aggregate materials are present throughout the resource area.

A lime mine in the Crickett Mountains provides the only substantial mineral-related contribution to the WSRA economy. Mineral exploration has provided sporadic, short-term economic contributions.

Most of the WSRA (over 99 percent) is proposed open to mineral location, leasing, or mineral extraction through sale.

Elements of the Plan

GOALS AND OBJECTIVES

The goals of the mineral program would be to: (1) provide for discovery, development, and use of minerals on public land consistent with applicable laws and regulations; (2) require the least restrictive stipulations necessary to adequately protect other resources; and (3) continue to meet public demand for saleable and free-use mineral materials on a case-by-case basis.

PROPOSED ACTIONS

Oil and Gas

Cancelled, expired, or otherwise terminated oil and gas leases would be re-offered for lease if the status of the lease area did not prevent leasing. Since there are no Known Geologic Structures (KGS) in the resource area, leases would be offered through the simultaneous leasing program. With this program, a lottery is used to determine which applicant is successful in obtaining the lease. Appropriate environmental protection stipulations would be attached, as necessary, when the lease was issued. Applications for Permits to Drill (APDs) would be processed within the required time frames. Additional site-specific stipulations, as appropriate, would be added to the approved APDs. Notices of Intent to Conduct Geophysical Exploration Operations would be processed within the required time frames. Appropriate stipulations would be attached at the time of approval to protect other resource values.

TABLE 2-10

Mineral Resource Potential

	Acres	O&G	Locatable	Gethermal	Solid Leasable	Industrial Minerals[1]
Fossil Mountain	1,920	Low	Low	Low	Low	Mod.
Great Stone Face	160	Very low	Low	Low	Low	Low
Sunstone Knoll	130	Very Low	Low	Mod.	Low	Low
Millard City Landfill	10	Very Low	Low	Mod.	Low	Low
Painter Spring	160	Low	Low	Low	Low	Low
South Tule Spring	90	Low	Low	Low	Low	Low
Clear Lake Waterfowl Area	6,840	Very Low	Low	Mod.	Low	Low
Gunnison Massacre	40	Very Low	Low	Low	Low	Low
Devils Kitchen	40	Low	Low	Mod.	Low	Low
Wah Wah Mtns.[2]	5,970	Low	Low	Low	Low	High
The Cinders	5,017	Very Low		Low	Low	Low
Crystal Peak[2]	640	Low	Low	Low	Low	Low
Notch Peak[2]	9,000	Low	High	Low	Low	Low
Pruess Lake/Lake Creek	940	Spec.	Low	Low	Low	Low
Crucial deer winter range	9,200	Spec.		Low		
Pavant Butte[2]	2,500	Very low	Low	Low	Low	Low
Tabernacle Hill[2]	3,567	Very low	Low	Mod.	Low	Low
Crucial raptor nesting areas[3]	96,456					
Area 1		Low	Low	Mod.	Mod.	High
Area 2		Spec.	Low	Low	Low	Low
Area 3		Spec.	Low	Low	Low	Low
Area 4		Low	Low	Low	Low	Low
Area 5		Spec.	Low	Low	Low	Low

[1] Diatomaceous earth, Silica.

[2] Areas to be withdrawn from mineral entry.

[3] See Figure 2-5.

Fluid mineral leasing categories would be as shown on Table 2-11.

TABLE 2-11
Fluid Mineral Leasing Categories

Area	Acreage	Category
Wah Wah Mountains	5,970	3
Lake Creek	180	2
Notch Peak[1]	9,000	3
Pavant Butte	2,500	3
Tabernacle Hill	3,567	3
Crystal Peak[1]	640	3
Fossil Mountain[1]	1,920	3
Great Stone Face	160	3
Sunstone Knoll	130	3
Millard County Landfill	10	3
Painter Springs	160	3
Pruess Lake	760	3
South Tule Spring	90	3
Clear Lake Waterfowl	640	3
	6,200	2
Gunnison Bend Massacre	40	2
Devils Kitchen	40	2
Tabernacle Hill Petroglyphs	40	2
Critical Deer Winter Range[2]	7,765	2
Crucial Raptor Nesting Area	50,485	2
Category Totals	Acres	
Category 1 (Standard Stipulations)	2,136,458	
Category 2 (Special Stipulations)	64,570	
Category 3 (No Surface Occupancy)	25,727	
Category 4 (No Leasing)	0	
Total	2,226,755	

[1] If not designated as wilderness by Congress.

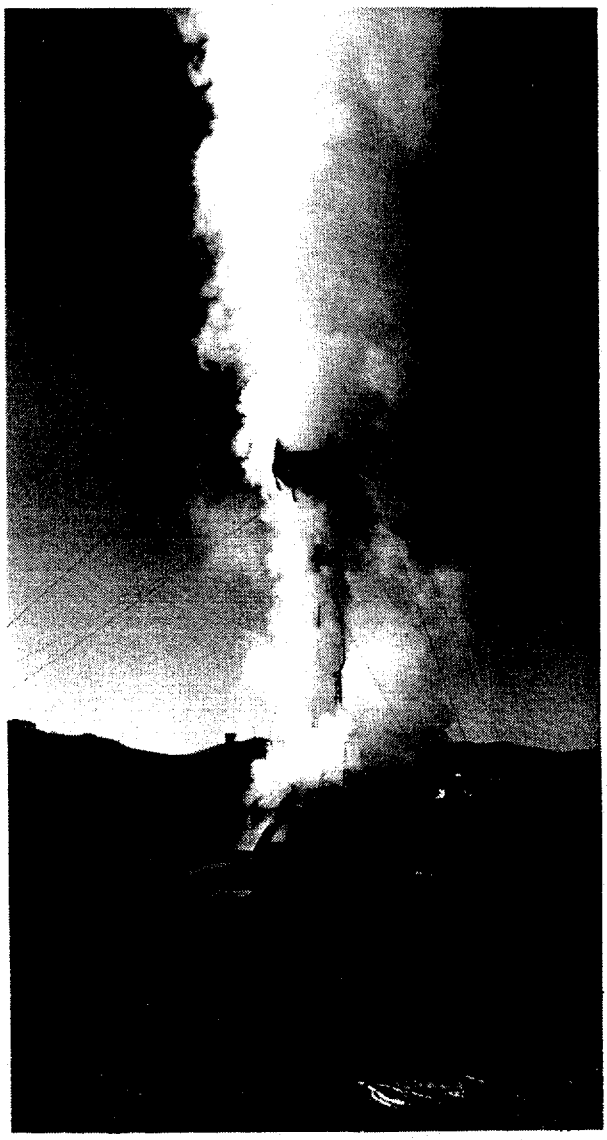
[2] Includes Meadow Creek Riparian

Geothermal

Existing geothermal leases that were cancelled, expired, or otherwise terminated would continue to be offered by competitive sealed bids. Appropriate environmental protection stipulations would be attached to the lease when issued. Geothermal Drilling Permits (GDPs) would be processed within the required time frames upon approval of Plans of Operations for geothermal exploration, development, and production. Appropriate environmental protection conditions of approval and stipulations would be applied to GDPs and Plans of Operations at the time of approval.

Locatable Minerals

Location of mining claims by claimants is a non-discretionary action on all public lands open to location. Locatable mineral activity is regulated under 43 CFR 3800. Subparts 3802 and 3809 of these regulations provide guidance to prevent unnecessary or undue degradation of public lands and provide interim wilderness protection.



Geothermal Exploration,
Sulphurdale Spring KGRA

Notices and Plans of Operations would be required for mining activities. Mitigating measures would be developed in cooperation with the claimants to protect other resource values (43 CFR 3809). Regulations do not require plans of operations or notices for casual-use (see Glossary) types of operations.

The following areas would be withdrawn from mineral entry: Pavant Butte, 2,500 acres and Tabernacle Hill, 3,567 acres; in the event the areas are not designated as wilderness by Congress, Crystal Peak, 640 acres; Notch Peak, 9,000 acres; and Wah Wah Mountains, 5,970 acres; for a total of 21,677 acres.

Saleable Minerals

Sales permits would be processed on a case-by-case basis, with appropriate mitigating measures and stipulations attached to protect other resource values. All public lands in the resource area would be open to mineral material disposal with the exception of up to 25,727 acres subject to special management designation, Category 3 fluid mineral leasing, and/or mineral withdrawal. Material disposals in those areas could be authorized if extraction would not interfere with protection of the special values present.

Solid Non-Energy Leasable Minerals

Prospecting permits would be processed and appropriate environmental protection stipulations attached. Leases would be issued and mining plans evaluated in order to define appropriate stipulations to protect other resource values.

Restrictions on non-energy solid leasable mineral activity would be consistent with fluid mineral leasing category restrictions and areas withdrawn from locatable mineral entry as identified above (90,297 acres total).

SUPPORT REQUIREMENTS

Detailed land surveys could be required to determine boundaries for such items as WSAs, land ownership, or claim boundaries as disputes arise.

Continued interdisciplinary support would be required from resource area personnel protection of sensitive resource values and to ensure on-the-ground implementation of stipulations and regulations.

IMPLEMENTATION

Energy and mineral activities on lands open for such activities would be administered on a case-by-case basis.

Plan Monitoring and Evaluation

All areas would be monitored for compliance of on-going operations and for unauthorized operations.

Fluid mineral leasing categories would be reviewed at 5-year intervals to determine if modification of designations were warranted.

WATERSHED AND WATER RESOURCES

Introduction

GENERAL DESCRIPTION

The WSRA is in the Great Basin Hydrological Region and contains portions of the Sevier Lake and Great Salt Lake sub-regions. The water source in the area is from precipitation in the form of rain and snow and surface-flowing water. Maximum precipitation occurs in late summer and early fall, with a secondary peak in the spring. Fifty allotments have been identified as containing major ground water recharge areas (see Table 2-12). Eleven perennial streams flow into the Sevier Lake sub-region from mountains to the east. These streams are diverted for irrigation on farm lands fronting the mountain range. The Sevier and Beaver rivers flow through the central portion of the sub-basin and, to a large extent, their flows are diverted for crop irrigation (Figure 2-7).

TABLE 2-12
Allotments Containing Major Ground Water Recharge Areas

Anderson	Granite
Antelope Point	High Rock
Black Rock Winter	Holden Winter
Black Rock Spring	Holden Spring
Black Point	King
Blackham	Klondike
Blind Valley	Lawson Cove
Boob Canyon	Ledger
Breck's Knoll	Meadow Spring
Brown's Wash	Mormon Gap
Buckskin	North Canyon
Clay Springs	Notch Peak
Crickett	Painted Potholes
Crystal Peak	Painter Spring
Crow's Nest	Pine Valley
Coates	Seely
Conger Spring	Skull Rock
Deadman's Wash	Skunk Spring
Death Canyon	State Line
Deseret	Streamboat
Ephraim-Bagnall	Stott-Rowley
Ephraim-Meadow	Twin Peaks
Fairview	Voorhees
Ferguson	Wallace
Garrison	Wheeler

Six perennial streams flow into the Great Salt Lake sub-region portion of the WSRA from mountains to the west. They are diverted for irrigation and are unavailable for use on public lands. Lake Creek flows into a 5,800 acre-foot irrigation reservoir called Pruess Lake which is located on public land (Figure 2-7). There are numerous intermittent streams, seeps, as well as 52 springs in both sub-regions. Ninety-two small reservoirs have been constructed to collect water for livestock use. The availability of water in reservoirs is highly variable, and reservoir life is generally short due to high rates of sedimentation. Because of the arid nature of the area, reservoirs are the only source of water in many locations. There are 19 developed springs in the resource area.

WATER QUALITY AND USE

Springs and wells on public lands in the WSRA have been developed for wildlife, wild horses, and livestock use. Water quality tests show that well water generally contains amounts of calcium bicarbonate or sodium sulfate, and spring water generally contains calcium bicarbonate. Some water is suitable for human use, and nearly all is suitable for livestock and wildlife. Ground water quality is generally good in areas of natural recharge. In areas of natural discharge (Tule and Sevier Lake Valley), ground waters are slightly saline (1,000-3,000 milligrams per liter of dissolved solids), and are generally suitable for only livestock use and should not be used by humans. Of the areas surveyed within the WSRA, there were no non-point source water pollution areas as identified under Section 208 of the Federal Water Pollution Control Act. Water uses include irrigation, livestock, wild horses, and wildlife. Lack of water is a major limiting factor for wildlife and livestock grazing in the West Desert.

WATER RIGHTS

The BLM is in the process of obtaining water rights. Certificates or Diligence Claims are being obtained for all water sources on, or originating on, public lands. Filings with the Utah State Division of Water Resources have been made on 141 water sources. Sixty-nine water sources (mostly reservoirs) have not yet had water filings prepared.

WATERSHED TREATMENT

Several land treatment practices are commonly used for watershed improvement. Chaining, burning, plowing, and seeding with selected plant species have resulted in better soil protection. Approximately 41,800 acres in the southeast part of the resource area are potentially suitable for vegetation treatments.

Elements of the Plan

GOALS AND OBJECTIVES

Goals and objectives would be to: (1) Improve watershed conditions on areas with significant erosion condition problems and other sensitive watershed areas (riparian areas); (2) avoid deterioration of or improve watershed condition of all other Federal land; (3) ensure an adequate supply of water for existing and proposed BLM management activities; (4) ensure production of quality water as required by State and Federal legislative acts and regulations for on-site and downstream users; and (5) coordinate with the proper local, State, and Federal authorities on water-related issues.

PROPOSED ACTIONS

Water quality and quantity would be managed to comply with State and Federal water quality standards. Proposed activities would be reviewed and mitigating measures developed to protect, prevent degradation and enhance water resources. Measures to keep soil loss within acceptable levels, implementation of low runoff programs on large-scale disturbances, and reclamation of all abandoned surface disturbances would be enforced. Exploration holes would be properly plugged to prevent ground water contamination. Established watershed studies would be monitored each year. Water rights for all public land water sources would be obtained and protected to ensure the continuation of water-dependent programs and to protect Federal investments. Additional water sources are developed whenever possible through cooperation with the FS and quit-claim deeds of oil and gas exploration wells.

Watershed monitoring would be conducted on channel erosion studies and water quality on water sources.

Drill pad sites would be reseeded, as would areas burned by range fires (if determined necessary by an emergency fire rehabilitation team). Livestock grazing would be suspended for two growing seasons on reseeded areas to aid in seeding establishment.

Site approval would be required for periodic cross-country motorcycle races and other sporting activities posing potential surface disturbance to watersheds.

Waters would be appropriated prior to project construction and appropriations prepared for State adjudication areas. Springs proposed for appropriation are Sawtooth, Trap, Amasa, Tunnel, James, Black, Rocky Knoll, Mud, Needle Point, Side, North Knoll, Unnamed, and Mud Lake.

An activity plan would be developed for installation of 15 gully plugs on six grazing allotments as follows: Amasa, 3; Black Point, 2; Clay Springs, 3; Meadow Spring, 1; South Tract, 2; and Twin Peaks, 4. Six to 15 water bars would be established on 2 miles of road in Amasa Allotment.

Seven new channel erosion studies would be established on the following allotments: Clay Springs, Conger Spring, Deadman, Deseret, Mormon Gap, North Canyon, and Notch Peak. All 14 channel erosion studies would be monitored each year. The livestock season of use on two allotments (Stott-Rowley and Ephraim-Meadow) would be monitored and adjustments made to season of use and/or livestock numbers, if necessary.

SUPPORT REQUIREMENTS

Clerical support would be required. Also, Division of Operations support would be necessary for design and construction of certain projects, for contracting on some projects, and for the periodic upkeep of all projects. Clearances for T&E species, mineral resources, and archaeological values would require the support of those respective resources. Hydrologic analysis and computer data input for analysis could be required. Ecological range site identification could be necessary.

PLAN MONITORING AND EVALUATION

Water quality monitoring and evaluation (10 samples annually), in cooperation with State health departments and the Utah Water Pollution Control Committee, would be conducted to determine consistency to State and BLM water quality standards.

Fourteen channel erosion studies would be monitored and evaluated annually to reveal any unanticipated and/or unpredictable increase in erosion. Watershed condition would be monitored to identify increased runoff, erosion, or ground water recharge area concerns. Vegetation treatments, gully plugs, water bars, or other watershed protection measures would be monitored to evaluate effectiveness.

SOILS

Introduction

GENERAL

Soils of the WSRA are those found in desert basins and generally parallel mountain ranges in the Great Basin portion of Western Utah. Soils generally consist of the following types: colluvium and residuum formed soils on ridges, mountainsides, and hillsides; playas and barren flats in closed basins; soils from alluvium and lacustrine sediments on alluvial fans, bajadas, lake terraces, and lake plains; remnant lava and basalt flows; and hummocky sand dunes.

Soils of the WSRA range from non-saline to very strongly saline and some are moderately to strongly alkali (sodic). Saline and/or alkali soils are found on the lower slopes of some alluvial fans and on lake terraces, lake plains, and playas throughout the resource area.

EROSION

High water flows during spring runoff and intense summer thunderstorms can be significant factors in soil movement. However, water-caused erosion in the WSRA is limited since annual precipitation is low and the average slope is between 3 and 10 percent (USDI, BLM, 1969a; USDI, BLM, 1969b). Wind is the primary erosion agent in the resource area. Considerable acreage is covered with loose soil or sparse vegetation, and this is susceptible to dust storms during intense summer winds. Erosion condition classes of the WSRA range from moderately erosive to stable soil.

Elements of the Plan

GOALS AND OBJECTIVES

Soil resource management objectives would continue to be maintenance of productivity and minimization of erosion.

PROPOSED ACTION

Soil surveys contain an inventory of soils in the resource area. From these data, evaluations would be made to define the potential and/or limitations of each soil type. Soil loss would be kept within acceptable limits. BLM and non-BLM initiated projects would be analyzed independently for impact on the soil resource. Such analysis would consider the susceptibility of the soil to erosion, potential for seeding success or reclamation, and compatibility of the project to engineering, physical, and chemical properties of the soil. Monitoring of channel erosion studies would continue.

Monitoring of grazing use would be emphasized on those allotments where degradation is identified, present ecological condition is declining, or poor watershed conditions exist. The result of this monitoring would be used to determine future grazing use.

A watershed plan would be prepared for the WSRA.

SUPPORT REQUIREMENTS

Clerical support would be required. Also, Division of Operations support would be necessary for design and construction of certain projects, for contracting on some projects, and for the periodic upkeep of all projects. Clearances for T&E species, mineral resources, and archaeological values would require the support of those respective resources. Specific areas could need a Third Order Soil Survey. Ecological range site identification would be required.

PLAN MONITORING AND EVALUATION

Monitoring and evaluation actions would occur in conjunction with those described under watershed and water resources. Monitoring activities related to soil include soil fertility and productivity, channel erosion studies, erosion control structures, and soil protective measures.

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FOREST RESOURCES

Introduction

In the WSRA, Notch Peak (290 acres) and Wah Wah Mountains (460 acres) have saw timber resources. Neither site is open for commercial harvest because of inaccessibility and steep slopes.

On BLM lands, approximately 220,000 acres of pinyon-juniper type vegetation (*Pinus monophylla, Pinus eludis*, and *Juniperous osteosperma*) occur in the WSRA. Stand densities and composition vary greatly due to soils, precipitation, elevation, and exposure. Generally, lower elevations and drier sites support a greater percent of juniper, with some of the drier sites having 100-percent juniper.

Table 2-13 summarizes the volumes of woodland resources found in these areas. Locations are depicted on Figure 2-14. The resources in the Crickett Mountains and to the west are predominantly stands of scattered juniper. Generally, the species composition and stand characteristics limit potential for sales and woodland product harvest in these areas.

No forest lands in the WSRA are suitable for full intensive or restricted management. Timber resource and woodland areas on the Wah Wah Mountains (5,970 acres), Crystal Peak (640 acres), and Notch Peak (9,000 acres) are lands not available for management or harvest of forest products to protect ecological, primitive recreation, and visual resource values. All other woodland areas in the WSRA (205,059 acres) are forest areas managed to enhance other resource values and uses.

Elements of the Plan

GOALS AND OBJECTIVES

Goals and objectives would be to:

- Facilitate maximum utilization of woodland resources while providing protection to other natural values and resources (wildlife habitat, riparian areas, soils, scenery, etc.).
- Meet demand for fuelwood, posts, Christmas trees, and pine nuts.

TABLE 2-13

WSRA Woodland Products

Area	Total Federal Acres Pinyon-Juniper	Total Federal Suitable Acres	Present Potential Production			
			Firewood Cords	Fence Posts	Pinenuts lbs/Year	Christmas Trees
Mountain Home	21,036	16,758	955,260	20,486	39,032	7,806
Burbank Hill	36,615	35,617	227,681	16,923	967	181
Conger Mtn.[1]	27,499	16,302	113,449	12,663	10,960	2,192
King Top[1]	17,260	9,973	32,995	3,309	21,912	2,039
Wah Wah Mtns.[1]	44,643	16,507	111,691	13,083	23,689	6,312
Sawtooth Mtn.[1]	34,925	12,094	39,777	6,614	51,002	1,019
Cove Fort	18,602	18,602	164,622	23,251	142	283
Cricket Mountain	7,520	3,549	15,037	1,902	2,908	581
Whiskey Creek	7,880	7,880	14,265	2,025	--	--
Pavant Butte	2,229	2,229	14,056	402	--	--
Meadow-Holden	1,710	1,710	20,430	3,105	1,545	1,545
Total	219,919	141,221	1,709,263	103,763	152,157	21,958

[1] Substantial portions of these areas are within WSAs.

PROPOSED ACTIONS

Current forest harvest and associated activities would be planned to minimize visual impacts and disruption to wildlife. Cutting areas, woodland sales, and vegetation treatments would be designed to meet VRM class management objectives and provide adequate cover for wildlife. Harvest activities could be restricted due to wet soil conditions to prevent soil compaction or rutting. Harvesting on slopes exceeding 45 percent would be restricted to minimize surface disturbance.

On public lands, no clearing would be done within a 100-foot buffer strip on each side of live streams. Selective partial harvest methods could be allowed within this strip. The actual width of the strip could vary, depending upon the aspects of specific sites (e.g., slope, soil condition, and understory vegetation).

On approximately 11,830 acres of crucial/critical wildlife ranges and riparian areas, only selective removal of woodland products would be allowed.

Harvest of forest products would be prohibited on Notch Peak (9,000 acres), the Wah Wah Mountains (5,970 acres), and Crystal Peak (640 acres).

Individual permits would be issued on demand for fuel wood, posts, Christmas trees, and pine nuts on that portion of the remaining 205,059 acres of pinyon-juniper suitable for harvest operations.

SUPPORT REQUIREMENT

Administrative support would be required to process permit applications and delineate woodland cutting areas.

Program coordination with the range, wildlife, and watershed programs would be required in establishing green wood cutting areas, salvage areas, types of harvest methods, and planned results of harvest and mitigation requirements for activity plans.

PLAN MONITORING AND EVALUATION

The forest resources plan elements would be reviewed at 5-year intervals to determine if (1) any measures to facilitate increased utilization of forest resources are warranted; (2) cutting practices are satisfactory or if additional mitigation measures (increased monitoring of cutting activities, etc.) are required to protect other resources; and (3) there are unanticipated on- or off-site impacts.

FIRE MANAGEMENT

Introduction

Current fire management practice is full suppression throughout the resource area in lieu of a Fire Management Activity Plan. Controlled prescribed fires are used on a case-by-case basis to convert vegetation types for the benefit of wildlife, livestock, and watershed.

Historically, the west half of the resource area has had very few fires; however, the east half experiences large fires annually. Frequently in July, August, and September, there are multiple fire occurrences. The largest fire in recent history occurred in July 1986 in the southeast corner of the resource area. That fire consumed 36,000 acres of sheep and cattle winter range. In 1984, the resource area experienced 15 fires, burning 5,274 acres.

Elements of the Plan

GOALS AND OBJECTIVES

Goals would be to reduce human and ecological losses, complement resource management objectives, and sustain productivity of biological systems through fire management.

PROPOSED ACTION

Full suppression would continue on 2,015,555 acres. Limited suppression on up to 211,200 acres and prescribed fire use would be defined in a Fire Management Activity Plan covering the entire resource area (Figure 2-15).

SUPPORT NEEDS AND PROGRAM COORDINATION

Support from all resource programs would be required in the development of prescribed fire plans. Program coordination with local fire departments, the State Fire Control Officer, and the FS in implementing full and limited fire suppression would be required. Prescribed burning would be in compliance with BLM Manual Section 7723, "Air Quality Maintenance Requirements."

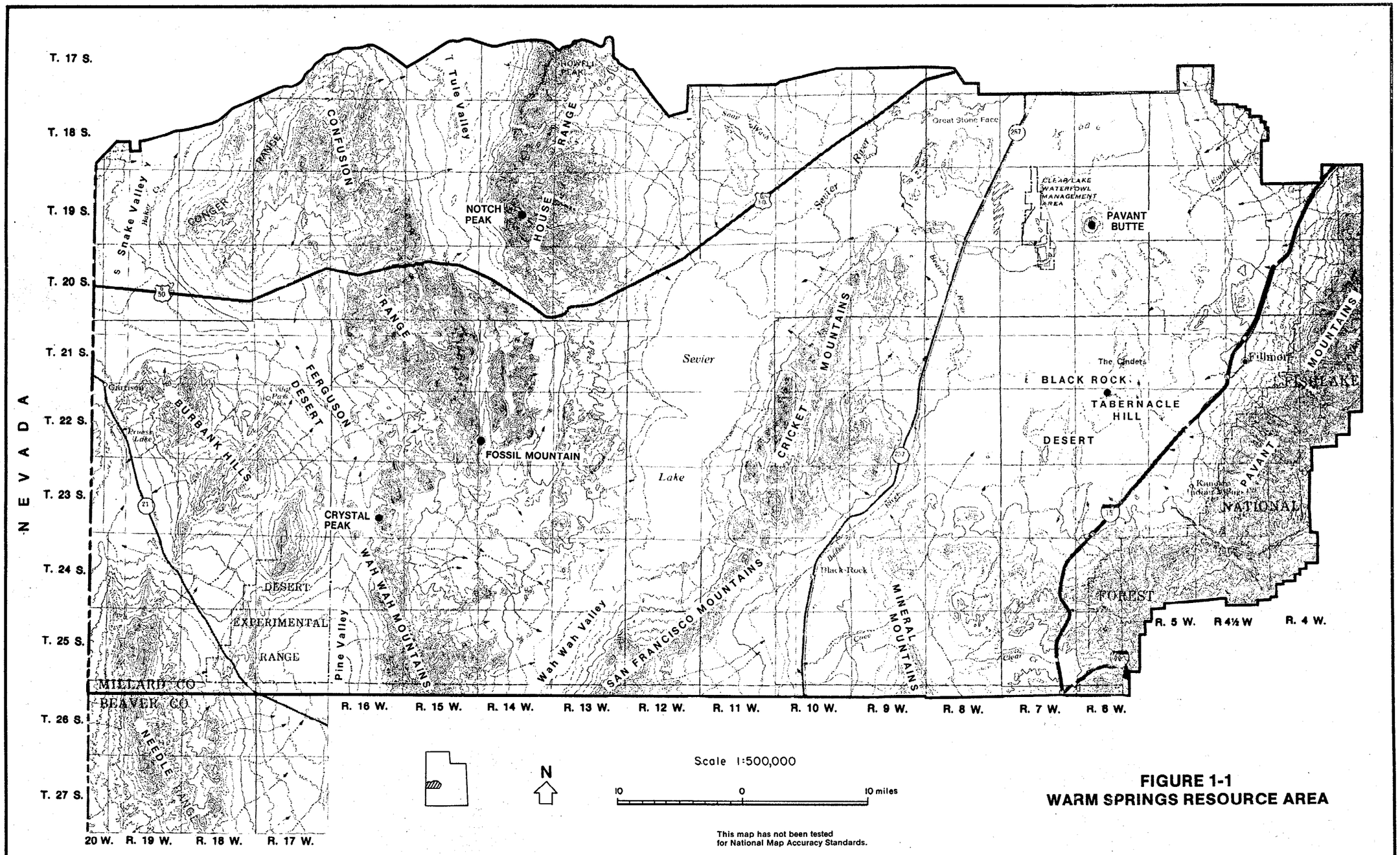

FIGURE 1-1
WARM SPRINGS RESOURCE AREA

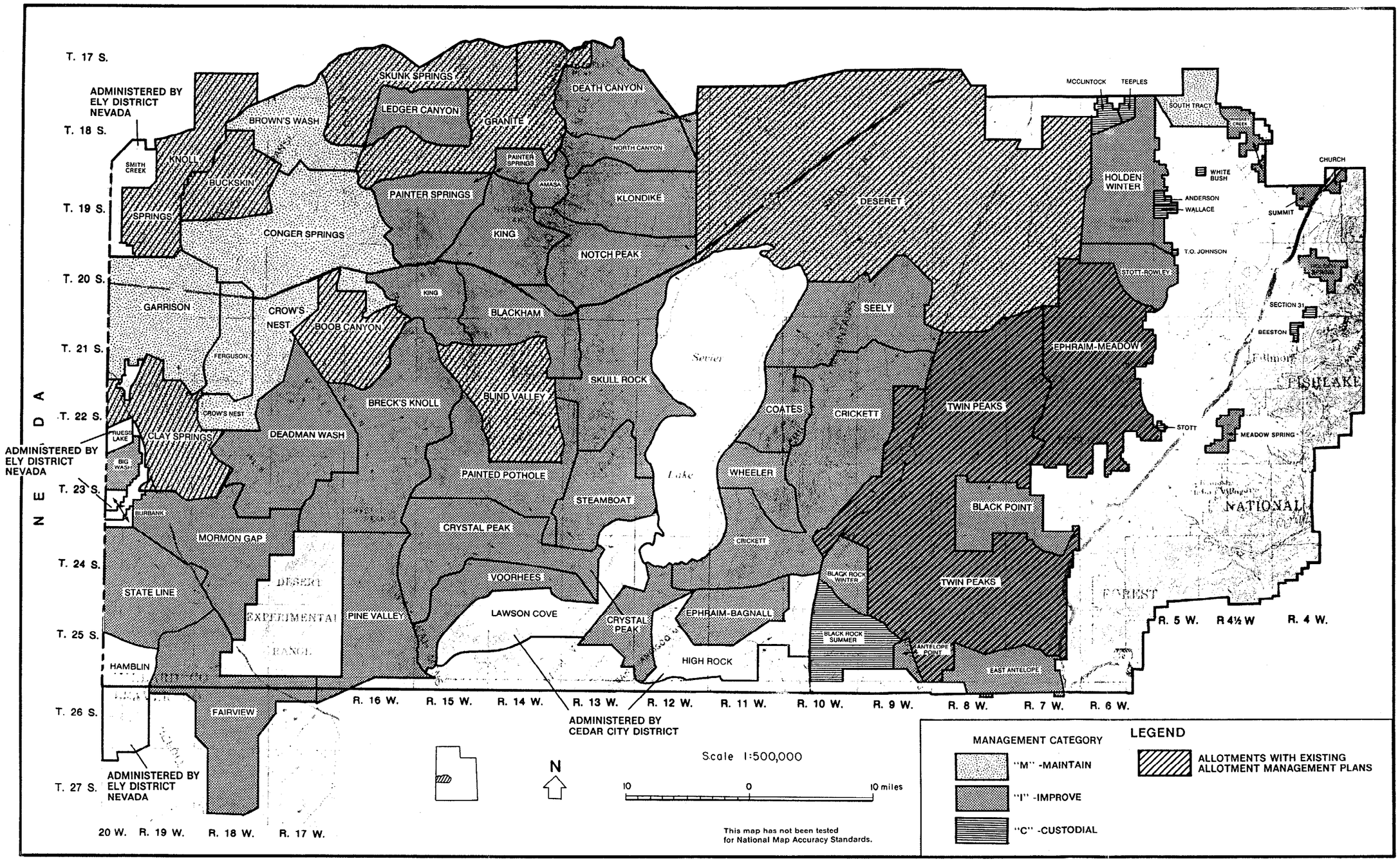

FIGURE 2-1
LIVESTOCK GRAZING ALLOTMENTS

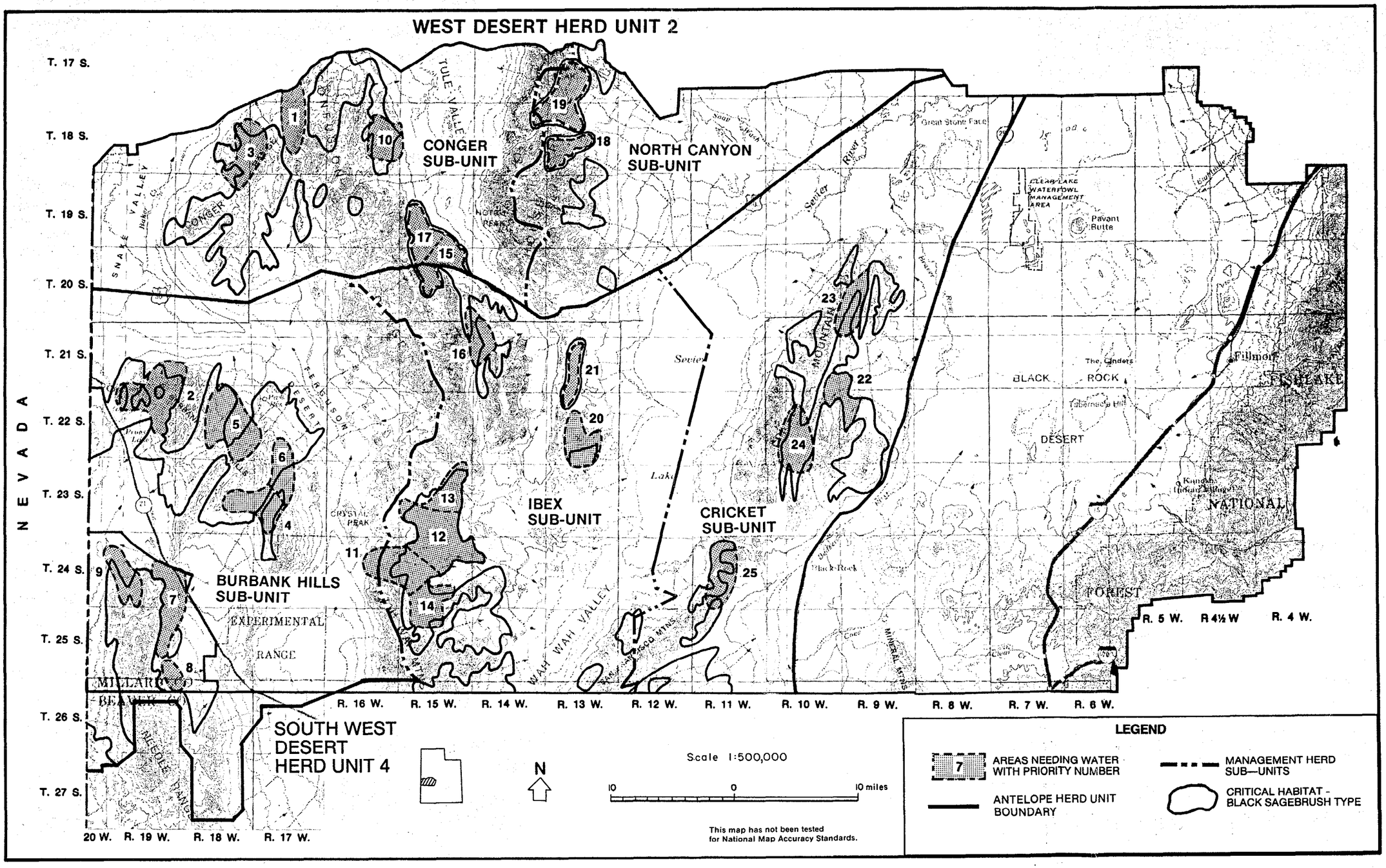

FIGURE 2-3
PRONGHORN ANTELOPE HERD UNITS AND PROPOSED AREAS FOR WATER DEVELOPMENT

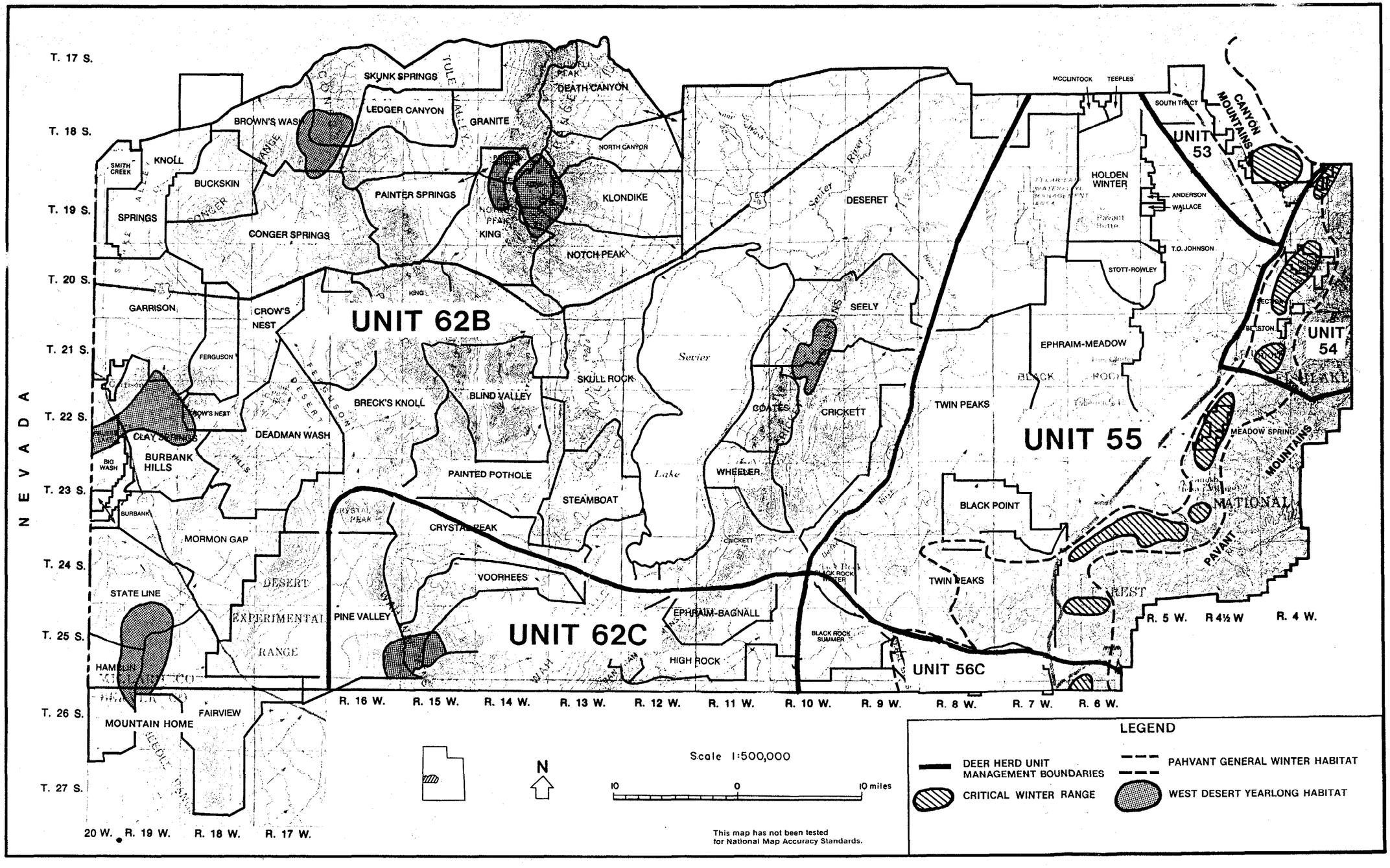

FIGURE 2-4

DEER HERD UNIT BOUNDARIES AND SIGNIFICANT DEER HABITAT

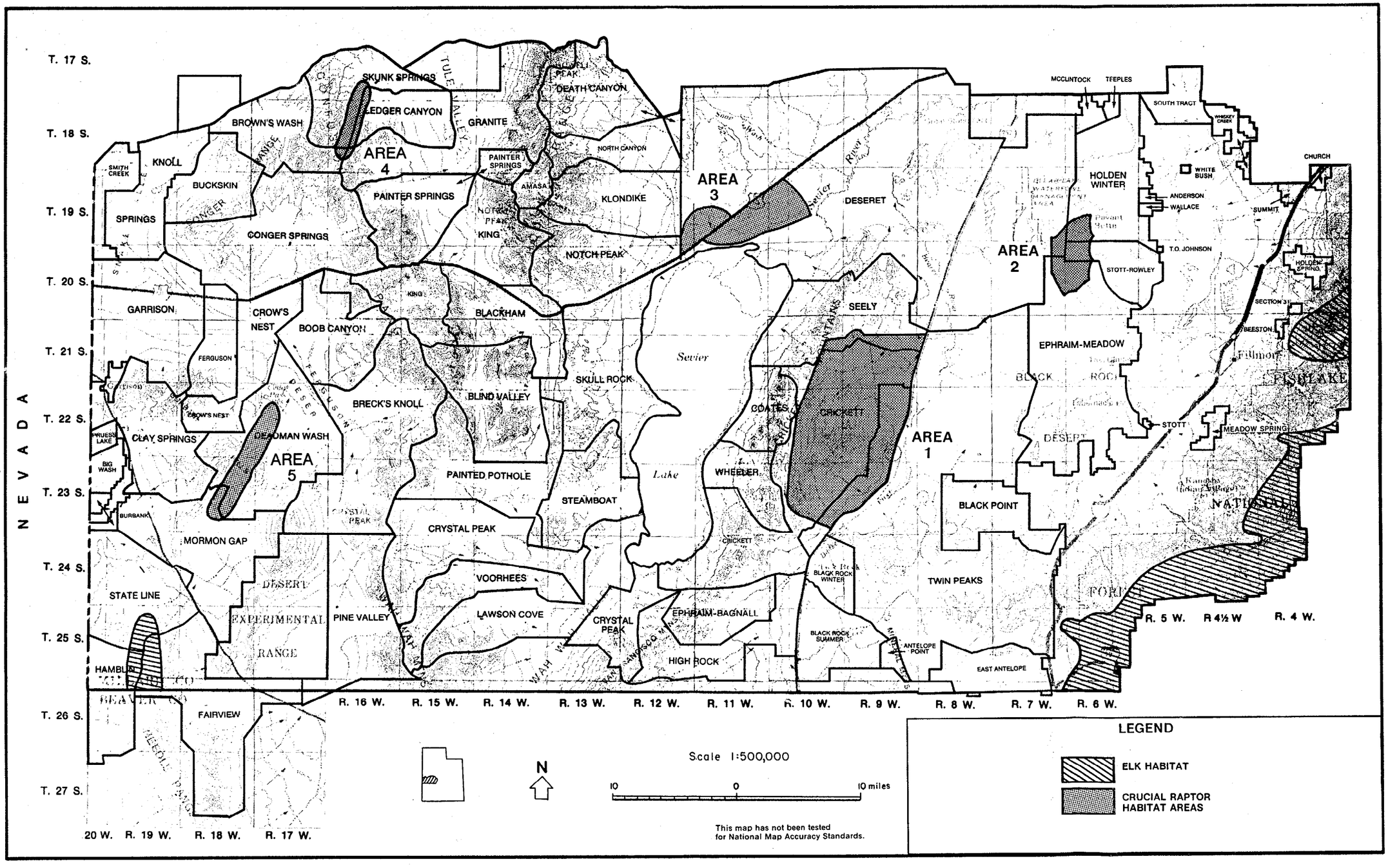

FIGURE 2-5
ELK HABITAT AND CRUCIAL RAPTOR HABITAT AREAS

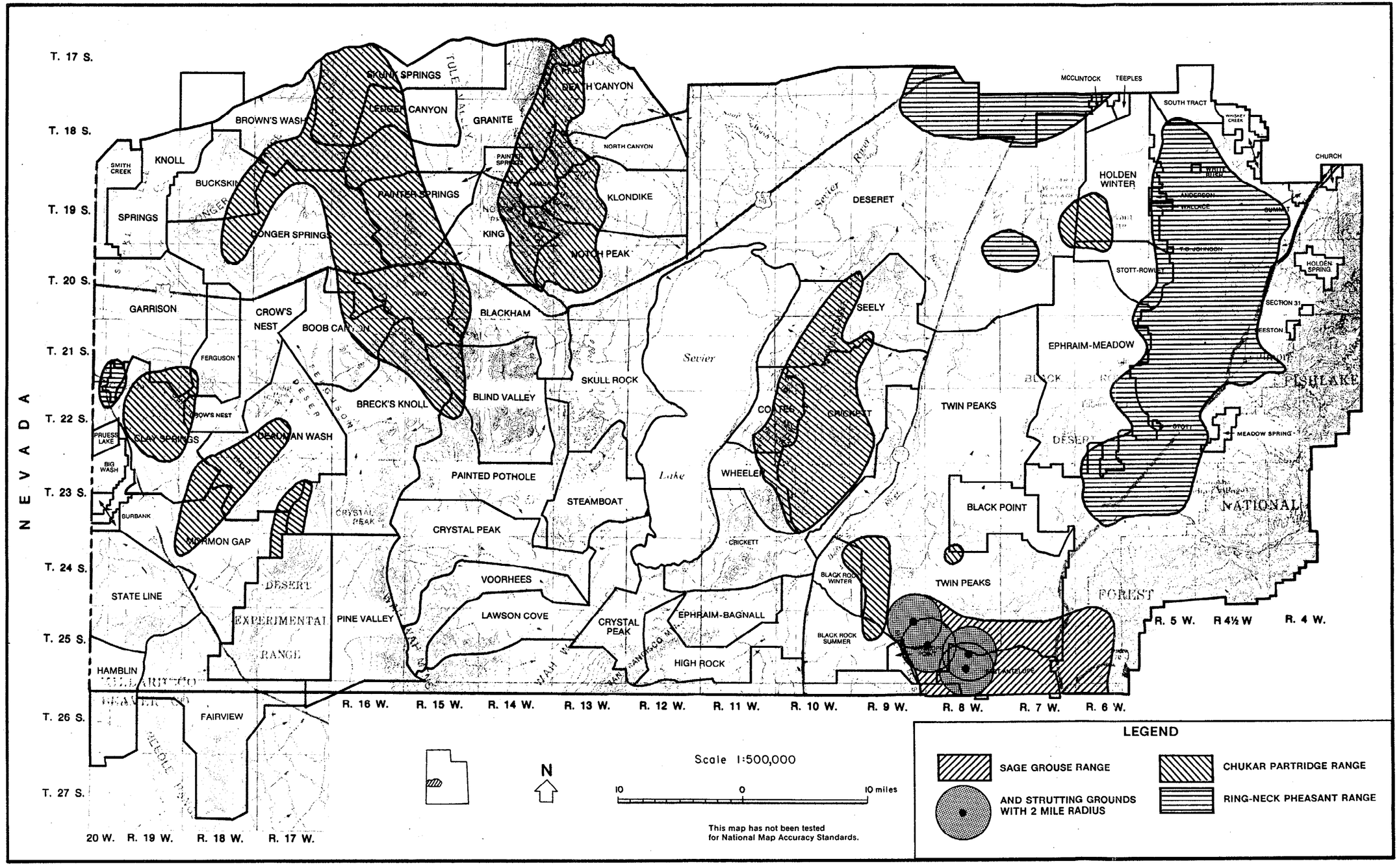

FIGURE 2-6
UPLAND GAME BIRD HABITAT

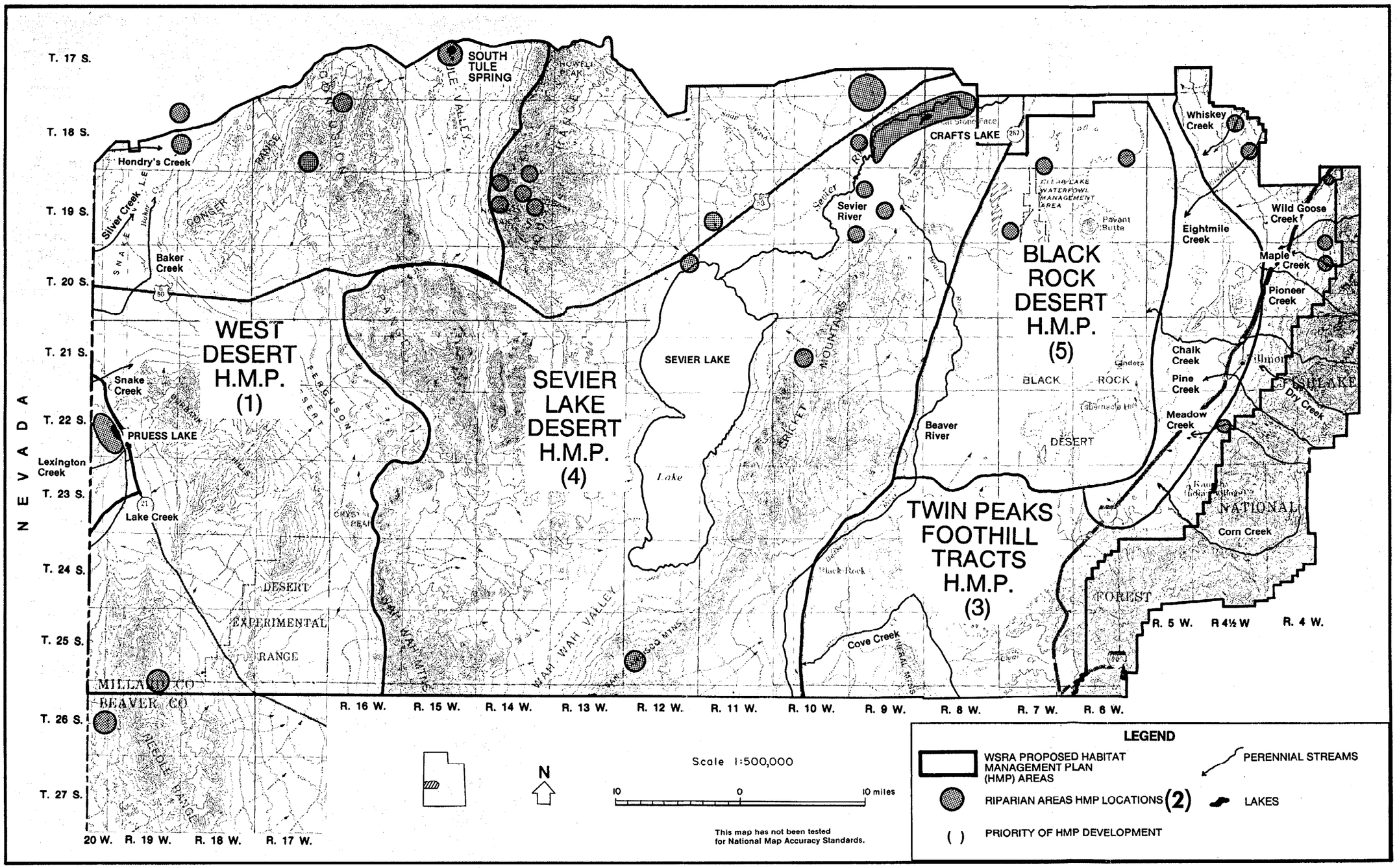

FIGURE 2-7

PROPOSED HABITAT MANAGEMENT PLANS (HMPs), PERENNIAL STREAMS, AND RIPARIAN AREAS

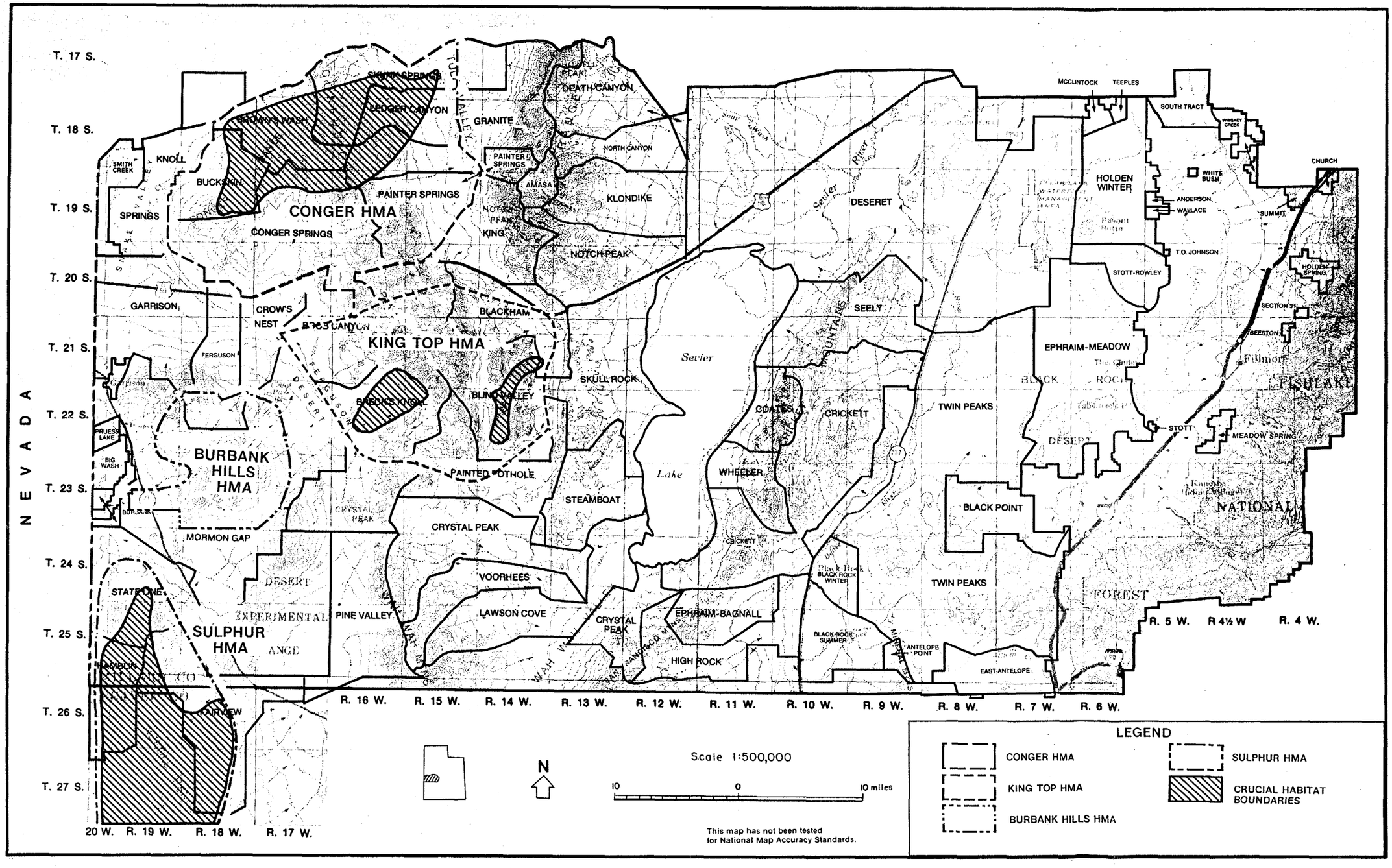

FIGURE 2-8
WILD HORSE HERD MANAGEMENT AREAS AND CRUCIAL HABITAT

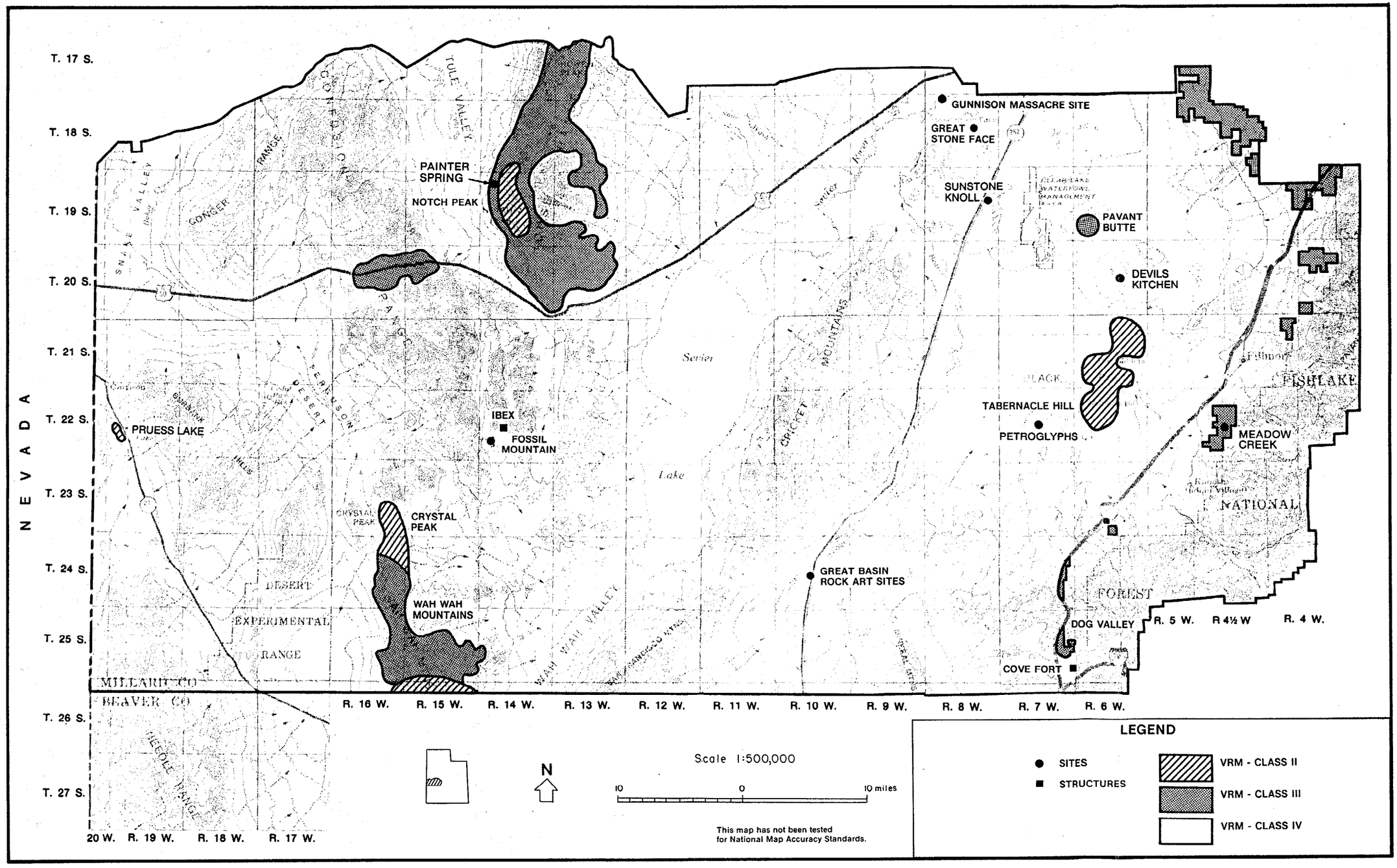

FIGURE 2-9
RECREATION AND HISTORIC SITES AND VISUAL RESOURCE MANAGEMENT (VRM) CLASSES

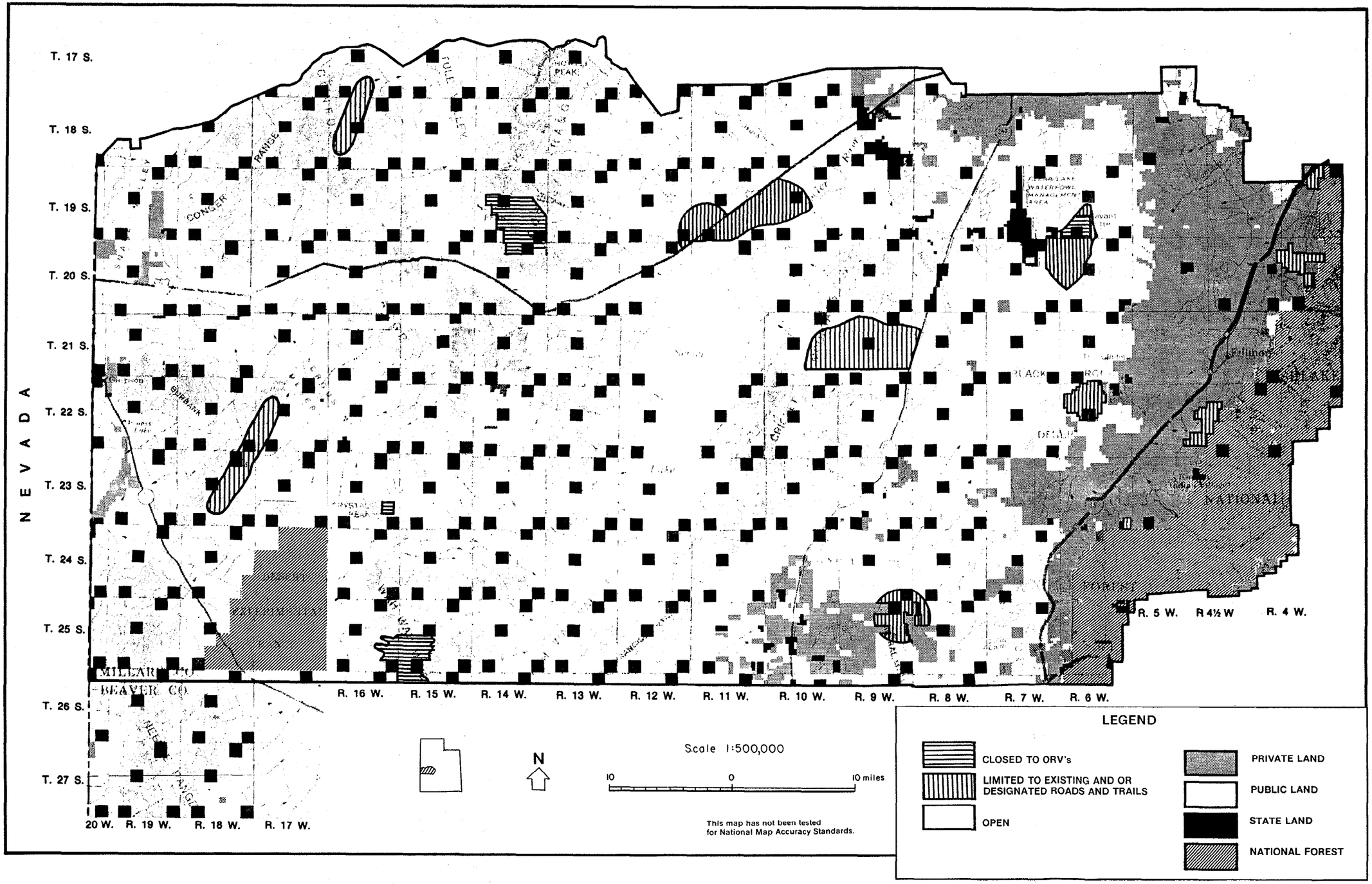

FIGURE 2-10
PROPOSED ORV CATEGORIES

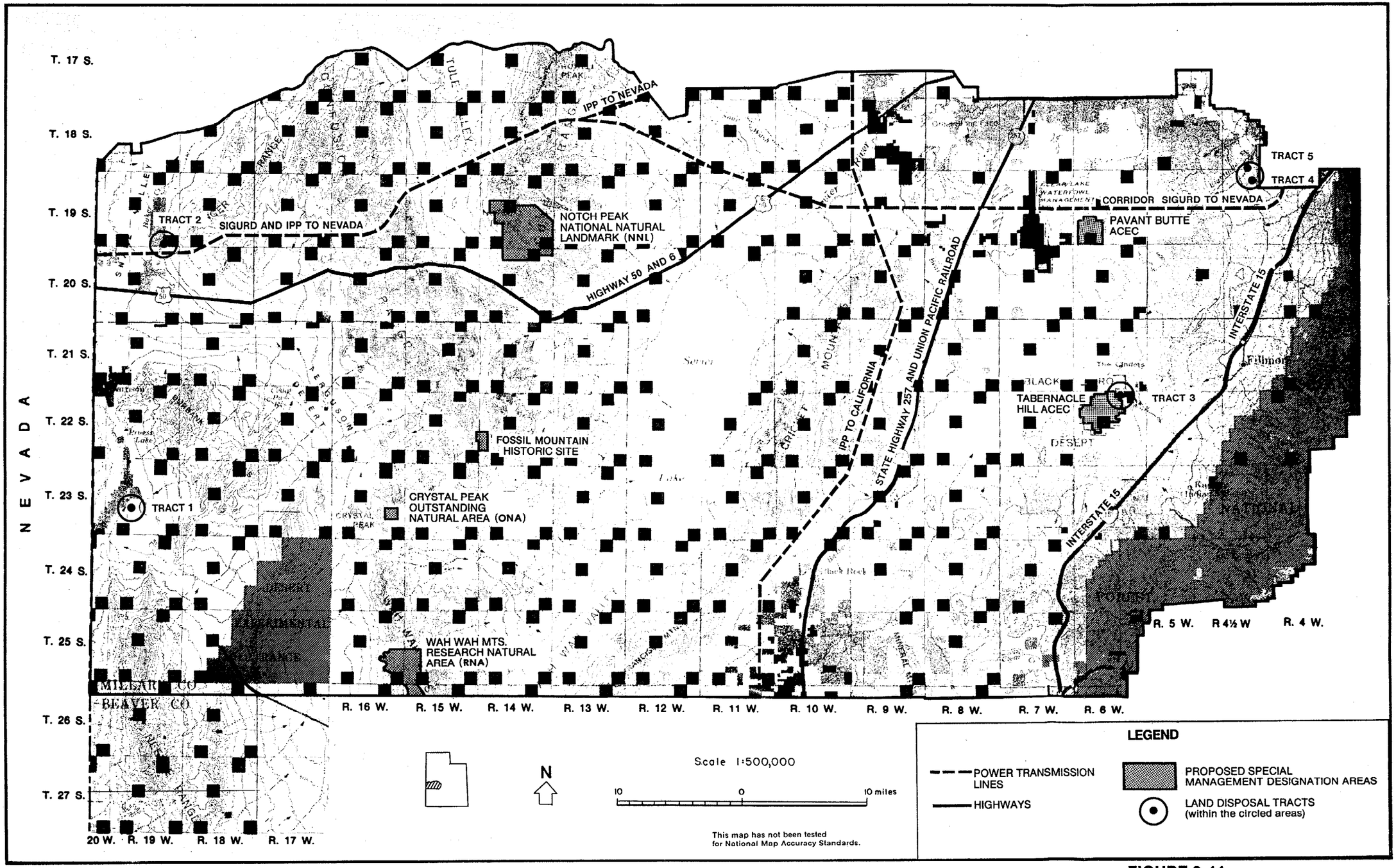

FIGURE 2-11

PROPOSED DESIGNATED RIGHT OF WAY CORRIDORS, LAND DISPOS TRACTS AND SPECIAL MANAGEMENT DESIGNATIONS

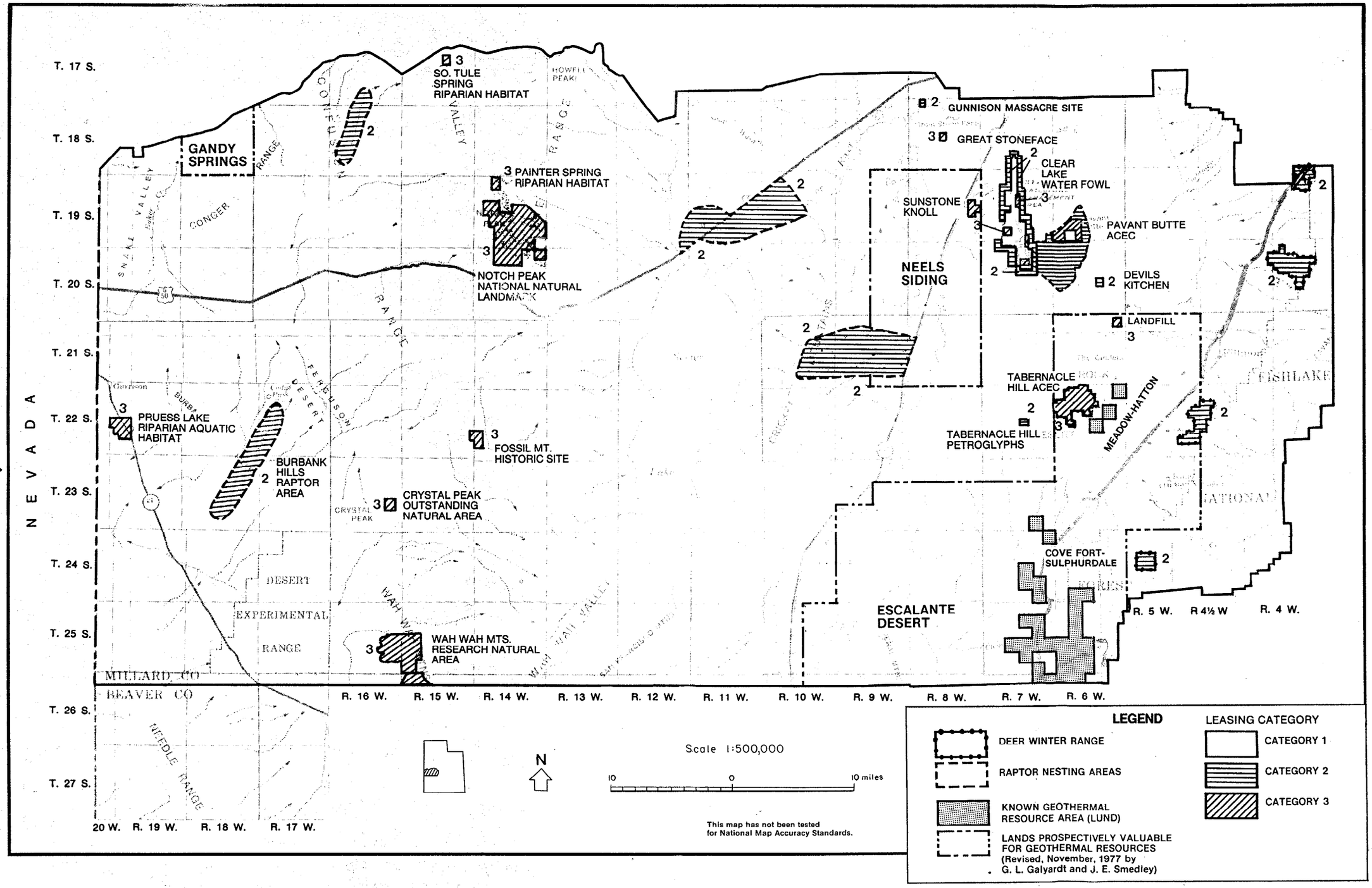

FIGURE 2 - 12
PROPOSED OIL, GAS AND GEOTHERMAL LEASING CATEGORIES

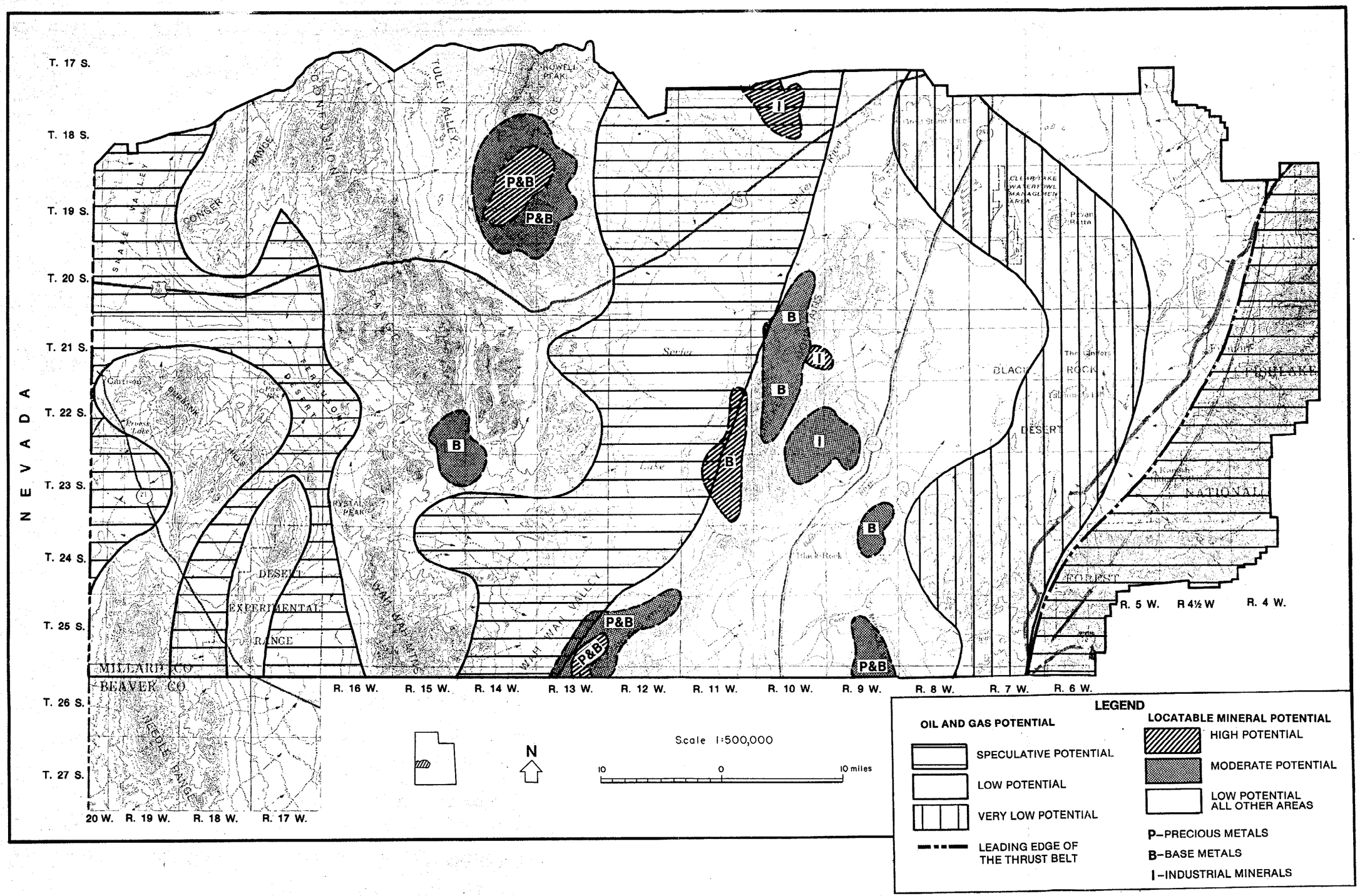

FIGURE 2-13
OIL AND GAS AND LOCATABLE MINERAL POTENTIAL

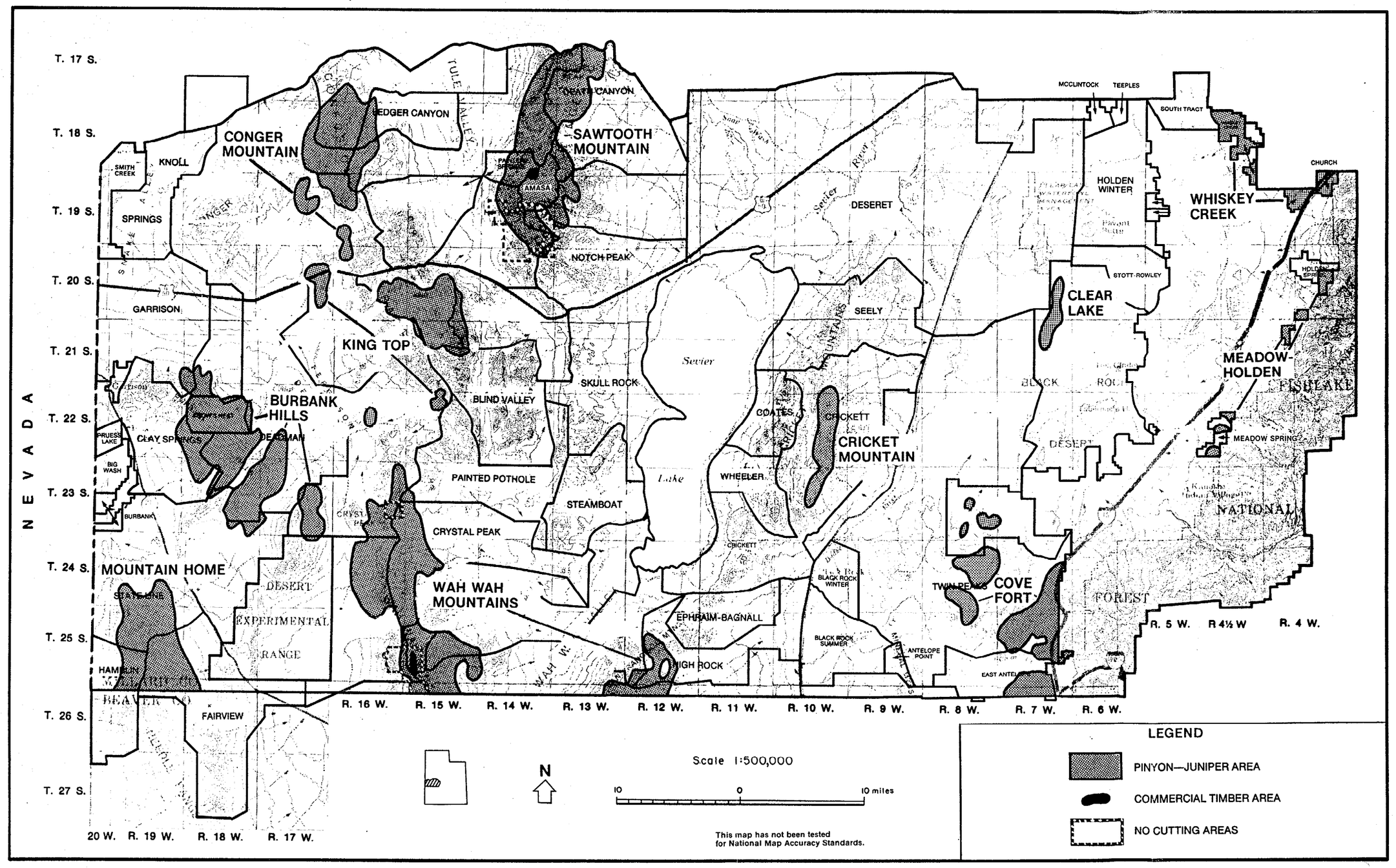

FIGURE 2 - 14
FOREST AND WOODLAND RESOURCES

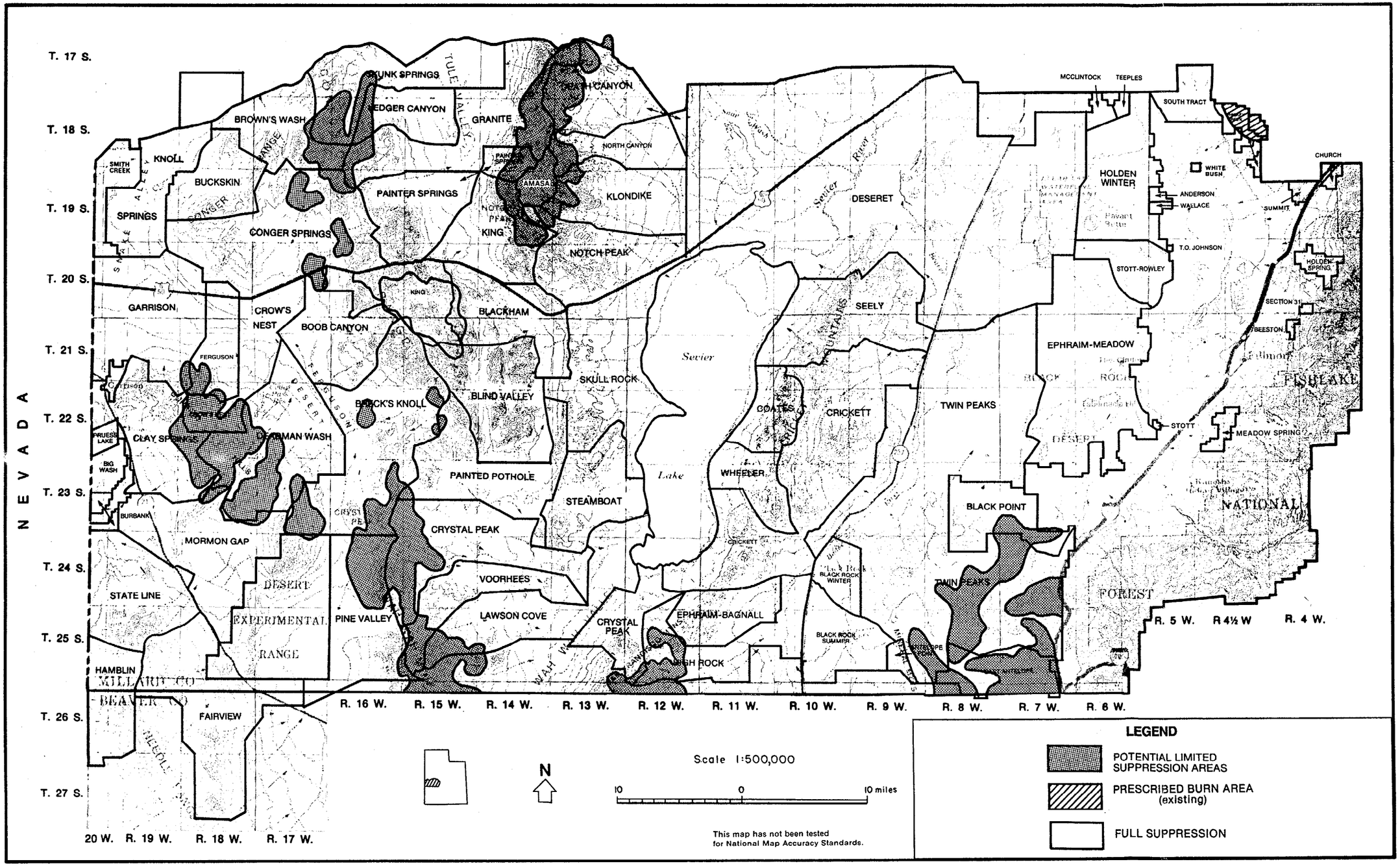

FIGURE 2-15
FIRE MANAGEMENT AREAS

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CHAPTER 3:
ALTERNATIVES

CHAPTER 4:
THE AFFECTED ENVIRONMENT

CHAPTER 5:
ENVIRONMENTAL CONSEQUENCES

For the above chapters, see the Draft Warm Springs Resource Area Resource Management Plan Environmental Impact Statement.

Those chapters describe alternatives to the proposed Resource Management Plan, the environment affected by the proposals, and the environmental consequences of the proposed plan and the alternatives analyzed.

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CHAPTER 6

ADDITIONS AND CORRECTIONS TO THE DRAFT RESOURCE MANAGEMENT PLAN/ ENVIRONMENTAL IMPACT STATEMENT

INTRODUCTION

This chapter contains additions and corrections to the Draft Resource Management Plan/Environmental Impact Statement (RMP/EIS) resulting from public and BLM review. It includes data and editorial corrections, additional description and analysis of energy and mineral resources, and addition of one crucial raptor nesting area (Burbank Hills) to the areas proposed for protection under the proposed RMP.

Corrections to the text and data are listed by page in the Draft RMP/EIS. Please enter these corrections (words or numbers, paragraphs, tables, etc.) in your copy of the Draft RMP/EIS. Information and analysis in that document are incorporated in this Proposed RMP/Final EIS by reference and together with this document, constitute the full EIS documentation.

The changes and additions in this chapter are printed to enable the reader to cut-out paragraphs and tables for insertion on the appropriate page in the Draft RMP/EIS. That is the reason the back of each page has been left blank.

The Burbank Hills crucial raptor area was identified subsequent to publication of the Draft RMP/EIS. It is proposed for Category 2 fluid mineral leasing (seasonal stipulation: March 1 to June 30) and limited off-road vehicle (ORV) designation (seasonal). This could possibly delay or inconvenience oil and gas exploration or development. The category is, however, the minimum that would provide adequate protection. The low and speculative potential for fluid mineral leasable deposits and historically limited activity in this area indicates impacts would probably be slight. No significant impact on ORV use would be expected due to the low present and projected use of the area. Therefore, the analysis of impacts from the proposed plan is not significantly different from Alternative D in the Draft RMP/EIS. A different area is involved; however, the total area proposed for Category 2 for crucial raptor nesting is considerably less than that proposed under Alternative B in the Draft RMP/EIS (50,485 acres versus 96,456 acres).

This Final EIS contains additional descriptions of energy and mineral resources and potentials in the Warm Spring Resource Area (WSRA). Also included is additional analyses of impacts of the alternatives on energy and mineral exploration and development. These descriptions and analyses are contained in the Summary, the Introduction to Minerals in Chapter 2, and in Chapter 6.

ADDITIONS AND CORRECTIONS TO THE DRAFT RMP/EIS

1. Pages 3 and 4. Insert new Summary Table 1.

2. Page 23, Table 1-2. See correction in Table 7-1 in Chapter 7 of this document.

3. Page 34. Under Implementation Schedule, delete the first two sentences of the second paragraph. (Note: This resulted from revision of BLM grazing policy.)

4. Page 37, Locatable Minerals, third paragraph. Insert new paragraph as follows:

Location of mining claims by claimants is a non-discretionary action on all public lands open to location. Locatable mineral activity is regulated under 43 CFR 3800. Subparts 3802 and 3809 of these regulations provide guidance to prevent unnecessary or undue degradation of public lands and provide interim wilderness protection. Notices and Plans of Operations are required for mining activities. Through involvement with the claimants, mitigating measures will be developed to protect other resource values. The 43 CFR 3809 regulations do not require that Plans of Operations or notices be submitted for casual-use types of operations.

5. Page 40, Table 2-2. Change Total Use (AUMs) column to read: antelope, 893; mule deer, 962.

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CHAPTER 6: ADDITIONS AND CORRECTIONS TO THE DRAFT RMP/EIS

SUMMARY TABLE 1

Alternative Comparision

Resource	Alternative A No Action	Alternative B Protection	Alternative C Production	Alternative D Preferred Alternative
VEGETATION				
Forage Allocation (AUMs)				
Livestock				
Initial Use	87,733	132,617	150,589	131,772
5-Year Adjustment	87,733	96,845	150,589	99,265
Long-term Allocation	100,919	110,500	Unknown	108,100
Big Game				
Antelope				
Total	893	3,823	230	2,381
Competitive with Livestock	276	653	66	797
Mule Deer				
Total	962	1,818	435	1,555
Competitive with Livestock	96	296	39	167
Elk				
Total	--	254	--	--
Competitive with Livestock	--	104	--	--
Bighorn Sheep				
Total	--	300	--	--
Competitive with Livestock	--	132	--	--
Wild Horses				
Total	2,992	3,487	840	1,680
Competitive with livestock	2,178	2,645	555	1,040
RANGE MANAGEMENT				
Allotments Monitored Annually (ea)	63	63	63	63
Change in Kind of Livestock	Case-by-case	Up to 31 allotments (from sheep to cattle)	Case-by-case	Case-by-case
Change in Season of Use	Case-by-case	Two allotments	Case-by-case	Same as Alt. A, except two allotments monitored
Range Improvements Structural (ea)	None	Spring Devel 5 Wells 4 Pipeline (mi) 73.5 Fence (mi) 44 Cattleguards 15	Same as Alt. B	Same as Alt. B
Nonstructural (ac) (veg. treatment)	None	27,600	41,800	14,000
Allotment Management Plans (ea)				
Revise/Update	10	10	10	10
Develop	None	39 I 5 M (3 AMPs/year)	39 I 5 M (5 AMPs/year)	39 I (2 AMPs/year)

SUMMARY TABLE 1 (continued)

Resource	Alternative A No Action	Alternative B Protection	Alternative C Production	Alternative D Preferred Alternative
WILDLIFE				
Populations (ea)				
Mule Deer				
Yearlong	95	245	41	95
Winter	1,408	2,464	650	2,464
Antelope	701	2,994	175	1,861
Elk	--	70	--	--
Bighorn Sheep	--	150	--	Possible introduction
Wildlife Improvements				
Fence (mi)	--	365	--	0.5
Water Developments (ea)	--	80	--	67
Water Control (water flow)	--	2	--	--
Special Management Designation Areas (#/ac)	--	1/2,500	--	1/2,500
WILD HORSES				
Populations (ea)				
Conger HMA	50	125	30	60
King HMA	30	75	20	30
Sulphur HMA	85	126	20	50
Burbank HMA	30	20	--	--
RECREATION				
Special Recreation Management Areas (SRMAs)				
SRMAs (ea)	1	2	2	1
Additional SRMAs if not wilderness	--	3	3	1
Special Management Designation Areas (#/ac)	--	5/26,080	--	5/21,097
ORV Designations				
Open (ac)	2,226,755	1,752,249	2,226,755	2,142,518
(percent)	100	79	100	96
Limited (ac)	--	400,686	--	66,127
(percent)	--	18		3
Closed (ac)	--	73,820	--	18,110
(percent)	--	3	--	1
Cultural Resources	Protected	Same as Alt. A	Same as Alt. A	Same as Alt. A
LANDS				
Land Tenure Adjustments	Disposal action requests would be considered if in compliance with the MFP.	Five tracts (239 ac) would be disposed of. All other lands would be retained in Federal ownership.	Same as Alt. B	Same as Alt. B

6. Page 41, Saleable Minerals. Insert new paragraph as follows:

The WSRA would continue to dispose of saleable minerals on a case-by-case basis. Free-use permits for areas presently occupied for this purpose would continue to be issued as needed. All public lands would be open to material disposal actions with mitigating measures and stipulations attached to protect other resource values.

7. Page 49, Forage Allocation, last sentence. Change mule deer yearlong to read 245 instead of 95.

8. Page 51, Table 2-8. Change Total Use (AUMs) column to read: Antelope, 230; Mule Deer, 435; and Use Competitive with Livestock (AUMs), Mule Deer, 39.

9. Page 53, Table 2-9. Change Total Use (AUMs) column to read: Antelope, 2,381; and Mule Deer, 1,555.

10. Page 54, Minerals, Oil, Gas and Geothermal Leasing. Insert the following paragraph:

Leasing categories proposed were arrived at based on the following considerations:

- Mandates for protection based on legislation, regulation, and/or BLM policy.
- Maintenance of pristine, unique and sensitive values in proposed special management designation areas.
- Area required for adequate protection of unique geologic, historic, and natural values.
- The minimum restrictions necessary to protect the identified values.
- The relative potential for occurrence in the respective locations.

11. Page 54, Table 2-10. Insert the corrected Table, which follows.

12. Page 56, Off-Road Vehicles. Delete the paragraph and insert Table 2-7, which follows.

13. Page 58, Table 2-11, Lands, Alternative D. Change the second sentence to read: "...with two exceptions...." After "designation" add: "and the Crystal Peak designation would change to an Outstanding Natural Area."

14. Pages 70-71, Table 3-3. Insert corrected table which follows.

15. Page 88, Raptors, second column, first paragraph. Delete and insert new paragraph as follows:

TABLE 2-10
Fluid Mineral Leasing Categories

Area	Acreage	Category
Wah Wah Mountains	5,970	3
Lake Creek	180	2
Notch Peak[1]	9,000	3
Pavant Butte	2,500	3
Tabernacle Hill	3,567	3
Crystal Peak[1]	640	3
Fossil Mountain[1]	1,920	3
Great Stone Face	160	3
Sunstone Knoll	130	3
Millard County Landfill	10	3
Painter Springs	160	3
Pruess Lake	760	3
South Tule Spring	90	3
Clear Lake Waterfowl	640	3
	6,200	2
Gunnison Bend Massacre	40	2
Devils Kitchen	40	2
Tabernacle Hill Petroglyphs	40	2
Critical Deer Winter Range[2]	7,765	2
Crucial Raptor Nesting Area	50,485	2
Category Totals	Acres	
Category 1 (Standard Stipulations)	2,136,458	
Category 2 (Special Stipulations)	64,570	
Category 3 (No Surface Occupancy)	25,727	
Category 4 (No Leasing)	0	
Total	2,226,755	

[1] If not designated as wilderness by Congress.

[2] Includes Meadow Creek Riparian

TABLE 2-7
WSRA Proposed ORV Categories

Category	Area	Acreage	Acreage
Open			2,142,518
Limited			
	Tabernacle Hill[1]	3,567	
	Critical Deer Winter Range[1]	7,765	
	Raptor Nesting Habitat[2]	50,485	
	Sage Grouse Breeding/ Nesting[3]	4,310	
Total			66,127
Closed			
	Notch Peak[4]	9,000	
	Crystal Peak[4]	640	
	Pavant Butte	2,500	
	Wah Wah Mountains[4]	5,970	
Total			18,110

[1] Limited to existing and/or designated roads and trails.

[2] Seasonal -- March 1 to June 30.

[3] Seasonal -- March 1 to July 31.

[4] If not designated wilderness by Congress.

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TABLE 3-3

Threatened, Endangered and Sensitive Plant Species WSRA

Species	Common Name	Status[1]	Habitat Description[2]
Known Populations in the WSRA:			
Astragalus uncialis	Current milk-vetch	BLM Sensitive FWS Category 2 Federal Register Sept. 85	Elevation 4,650 ft. Atriplex confertifolia in and near spill wash areas. Old lake shores, gravel. Millard County, Nye County (Nevada).
Cryptantha compacta	Compact catseye	BLM Sensitive FWS Category 2 Federal Register Sept. 85	Elevation 5,000 to 6,500 ft.: Sevy Dolomite Formation gravelly loam, open slopes, and and ridges, outcropping covered with shallow soil layer; desert shrub and grassland community. Millard County.
Eriogonum ammophilum	Sand-loving buckwheat	BLM Sensitive FWS Category 1 Federal Register Sept. 85	Elevation 5,270 ft. Quaternary Alluvium, sandy soil; mountain shrub community. Millard County.
Penstemon concinnus	Tunnel Spring beardtongue	BLM Sensitive FWS Category 2 Federal Register Sept. 85	Elevation 5,500 to 7,500 ft.; Sevy Dolomite formation, gravelly soil; p-j woodland. Beaver and Millard Counties.
Sphaeralcea caespitosa	Jones Globe mallow	BLM Sensitive FWS Category 2 Federal Register Sept. 85	Elevation 5,000 to 6,500 ft.; Sevy Dolomite, rocky calcareous soil, mixed shrub, p-j, and grass community. Beaver and Millard Counties.
Populations Likely to Occur in the WSRA (Not Verified):			
Cuscuta warneri	Warner's dodder	BLM Sensitive FWS Category 2 Federal Register Sept. 85	Elevation 4,700 ft. This species is dependent upon a host species (Phyla cuneifolia) that has been identified near Flowell, Utah. Millard County.
Frasera gypsicola		BLM Sensitive FWS Category 1 Federal Register Sept. 85	Habitat description unavailable
Trifolum andersonii var. friscanum	Frisco clover	BLM Sensitive FWS Category 1 Federal Register Sept. 85.	Habitat description unavailable.
Known Populations in Adjacent Resource Areas/Counties That May Occur in WSRA:			
Eriogonum soredium		BLM Sensitive FWS Category 2 Federal Register Sept. 27, 1985	Elevation 6,600 to 7,300 ft. Calcium carbonate deposits; sagebrush and juniper communities.
Lepidium ostleri	Ostler lepidium	BLM Sensitive FWS Category 2 Federal Register Sept. 27, 1985	Elevation 5,800 to 6,900 ft. Gravelly limestone slopes; pinyon-juniper and shadscale communities
Penstemon tidestromii	Tidestrom beardtongue	BLM Sensitive FWS Category 2 Federal Register Sept. 1985	Elevation 5,600 to 8,200 ft. variety of substates, desert shrub, snowberry, and juniper communities. Juab County.
New Species Not Yet Classified:			

A new plant species Primula domensis has recently been discovered in the San Francisco Mountains, south of the HRRA. As more data becomes available, it may be identified as a Candidate Review or Threatened or Endangered species in the near future.

[1] USDI, FWS, Sept. 27, 1985.

[2] Welsh and Thorne, 1979.

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Raptor nest locations are defined as crucial raptor habitat. In the WSRA, 156 nesting areas have been documented (Table 3-8). Some locations contain six or more nests, presumably used by the same nesting pair in different years. Based on a high density of raptor nests (especially golden eagle and ferruginous hawk), five crucial raptor habitat areas have been delineated. Table 3-9 summarizes use of the crucial raptor nesting areas. Total acres of each crucial raptor nesting habitat are as follows: Area 1, 45,800 acres; Area 2, 8,400 acres; Area 3, 15,400 acres; Area 4, 2,700 acres; and Area 5, 6,200 acres. No rating of nesting habitat condition has been done.

16. Page 89, Table 3-9. Insert new table which follows:

TABLE 3-9
Number of Nest by Species
Within Crucial Raptor Habitat Areas

Area/Raptor	Number of Nests
Area 1	
Golden Eagle	9
Prairie Falcon	12
Ferruginous Hawk	7
Red-Tailed Hawk	1
Area 2	
Golden Eagle	1
Ferruginous Hawk	4
Red-Tailed Hawk	9
Peregrine Falcon	1 (historical)
Long-Eared Owl	1
Area 3	
Ferruginous Hawk	13
Area 4	
Golden Eagle	3
Prairie Falcon	2
Red-Tailed Hawk	1
Area 5	
Golden Eagle	3
Prairie Falcon	4

17. Page 89, Wild Horses, last sentence. Change Figure 3-9 to read: Figure 3-10.

18. Page 93, Figure 3-10. Conger wild horse population, footnote "a" change "1980"to read: "1978." Footnote "b" change "1981" to read: "1980."

19. Page 94, Conger Mountain HMA, last paragraph. Change Figure 3-10 to read: Figure 3-9.

20. Page 94, King Top HMA, last sentence. Change Figure 3-10 to read: Figure 3-9.

21. Page 94, Burbank Hills HMA, third paragraph. Change Figure 3-10 to read Figure 3-9.

22. Page 95, Sulphur HMA, sixth paragraph. Change Figure 3-10 to read Figure 3-9.

23. Page 106, Table 3-11, under Periods column. Below Triassic, insert "Permian, 270 + 5."

24. Page 116, Locatable Minerals, third paragraph. Change "fluorine" to read: "fluorspar."

25. Page 137, Economics, second paragraph. Change the next to last sentence to read: "While data on major crimes was not available in Fillmore, enforcement activities are now provided by the Millard County Sheriff's Department."

26. Page 138, Economics, last paragraph. Change "1983" to read: "1984"; "61,872" to read: "53,729"; and "9,224" to read: "356." Change "(UDWR, 1984)" to read: "(UDWR, 1985)."

27. Page 164, Special Management Designations, Alternative D. Insert new paragraph:

Special management designations would be the same as under Alternative B, with two exceptions. First, the Tabernacle Hill ACEC would be reduced from 8,550 acres to 3,567 acres with the Cinders area eliminated from designation. This action would maintain 4,983 acres in traditional multiple use. Second, Crystal Peak would be designated an Outstanding Natural Area to protect its unique geologic, scenic, and recreational features.

28. Page 166, Alternative B, Locatable Minerals. Insert new paragraph:

The following areas, totaling 26,660 acres, would be withdrawn from mineral entry under Alternative B: Crystal Peak, 640 acres; Pavant Butte, 2,500 acres: Notch Peak, 9,000 acres; Tabernacle Hill and The Cinders, 8,550 acres; and Wah Wah Mountains, 5,970 acres. The remaining public lands (2,200,095 acres) would remain open to locatable mineral entry. The Crystal Peak, Pavant Butte, Tabernacle Hill, and The Cinders have low potential for locatable mineral deposits. Based on low potential for occurrence of mineral deposits in

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these areas, no significant impact on locatable mineral exploration or development would be expected. Gold occurs near Notch Peak; known deposits of tungsten also occur in the vicinity. That area has a high potential for locatable mineral deposits and withdrawal would preclude exploration or development.

29. Page 166, Alternative D, Leasable Minerals. Insert new paragraph:

Oil and gas leasing categories would be as shown in Table 2-8 and Figure 4-5. Less than 4 percent (90,297 acres) of the public lands would be subject to leasing Category 2 and 3 restrictions; the remaining 2,136,458 acres would be in Category 1.

30. Page 166, Alternative D, Locatable Minerals. Insert new second paragraph:

Except for Notch Peak, which has a high potential for locatable mineral deposits, the withdrawals would have no significant impact on locatable mineral exploration or development due to the low potential for occurrence of mineral deposits. Silica is found in the vicinity of Crystal Peak. There are no known locatable mineral deposits on the Wah Wah Mountains. Some mining claims are located in each of the above areas, except for the Wah Wah Mountains. Generally, claims show little evidence of on-going assessment work.

31. Page 185, Appendix 1. Insert new Appendix which follows.

32. Page 225, Appendix 4, Church Allotment, last column. Beside the number 1,000 add footnote "c" as follows: "Scheduled for implementation in fiscal year 1986."

33. Page 229, Appendix 6. Insert corrected appendix which follows.

34. Page 265, References Cited. Insert the following reference: Gifford, Gerald F. and Hawkins, Richard H. 1978. "Hydrologic Impact of Grazing on Infiltration: A Critical Review." *Water Resources Research.* Volume 14, No. 2. April 1978. pp. 305-313.

35. Page 267, References Cited. Insert the following reference: Welsh, Stanley L. 1976. "Final Report. Proposed Threatened, Endangered, Presumed Extinct, Possibly Extinct, or Extinct and Disjunct Relict Plants in the Cedar City and Richfield Districts, Utah." Brigham Young University, Research Division, Provo, Utah.

APPENDIX 1

Initial Livestock Use/Allocation and
Competitive Use by Allotment
(Acres)

Allotment	Livestock Preference	Indicated[a] Capacity	Alternative A: No Action Average Actual Use			Alternative B: Protection Livestock Preference and Competitive Use			Alternative C: Production Livestock Prefernece and Competitive Use			Alternative D: Preferred Alternatives Livestock Preference and Competitive Use		
			Livestock	Wildlife	Wild Horse	Livestock	Wildlife[b]	Wild Horse	Livestock	Wildlife	Wild Horse	Livestock	Wildlife	Wild Horse
AMASA	144	85	100	2	0	76	9	0	144	0	0	83	2	0
Anderson	25	25	12	0	0	25	0	0	25	0	0	25	0	0
Antelope Point	329	191	265	1	0	329	5	0	329	0	0	329	2	0
Beeston	10	11	10	1	0	10	9	0	10	0	0	10	1	0
Big Wash	285	277	158	3	0	285	2	0	285	1	0	285	4	0
BLACK POINT	1,798	1,598	1,798	0	0	1,591	7	0	1,798	0	0	1,597	1	0
Black Rock Summer	294	39	41	0	0	294	0	0	294	0	0	294	0	0
Black Rock Winter	996	851	788	0	0	996	0	0	996	0	0	996	0	0
BLACKHAM	2,163	1,961	1,918	3	0	1,941	20	0	2,163	1	0	1,937	24	0
BLIND VALLEY	2,100	2,155	1,997	3	80	2,100	32	72	2,100	1	19	2,100	15	29
BOOB CANYON	2,597	1,914	1,150	1	72	1,762	17	135	2,597	0	36	1,859	1	54
Breck's Knoll	5,752	4,494	3,937	1	420	5,752	35	585	5,752	0	156	5752	3	234
Brown's Wash	2,608	2,652	1,877	23	169	2,608	23	210	2,608	6	51	2,608	47	101
BUCKSKIN	2,264	2,423	1,012	17	96	2,264	14	120	2,264	4	29	2,264	33	58
Church	120	131	124	1	0	120	16	0	120	0	0	120	1	0
CLAY SPRINGS	2,640	2,126	1,419	4	36	2,079	28	19	2,640	1	0	2,122	4	0
Coates	1,690	1,088	1,039	3	0	1,690	12	0	1,690	0	0	1,690	10	0
Conger Spring	4,542	3,623	3,344	41	177	4,542	45	220	4,542	10	53	4,542	109	105
Crickett	8,294	4,326	5,097	7	0	8,294	60	0	8,294	1	0	8,294	30	0
Crow's Nest	1,222	1,652	1,405	2	48	1,222	16	29	1,222	0	0	1,222	3	0
Crystal Peak	4,835	2,180	2,407	7	0	4,835	50	0	4,835	1	0	4,835	24	0
DEADMAN'S WASH	4,026	4,554	3,823	28	60	4,026	37	120	4,548	6	0	4,497	57	0
Death Canyon	2,426	1,132	1,351	7	0	2,426	25	0	2,426	1	0	2,426	15	0
DESERET	8,043	6,172	4,488	1	0	6,148	41	0	8,043	0	0	6,172	0	0
EAST ANTELOPE	488	539	378	2	0	488	20	0	539	0	0	488	5	0
Ephraim-Bagnall	1,515	779	770	1	0	1,515	6	0	1,515	0	0	1,515	1	0
EPHRAIM-MEADOW	4,366	2,505	2,504	1	0	4,366	3	0	4,366	1	0	2,504	1	0
EPHRAIM-MEADOW SHEEP	1,818	1,376	1,613	0	0	1,375	0	0	1,818	0	0	1,375	0	0
Fairview	5,005	2,384	1,653	36	351	5,005	64	394	5,005	9	63	5,005	65	156
FERGUSON	800	901	496	2	0	894	7	0	901	0	0	900	1	0
Garrison	1,429	1,241	1,276	2	0	1,429	7	0	1,429	0	0	1,429	2	0
GRANITE	2,770	2,045	2,047	7	0	2,017	28	0	2,770	1	0	2,035	10	0
HOLDEN SPRING	262	208	217	7	0	167	41	0	262	2	0	201	7	0
HOLDEN WINTER	1,368	740	383	0	0	740	0	0	1,368	0	0	740	0	0
KING	2,927	1,116	1,261	11	56	1,032	36	48	2,927	3	13	1,073	24	19
Klondike	3,357	1,585	1,485	3	0	3,357	21	0	3,357	2	0	3,357	20	0
KNOLL SPRINGS	1,050	457	312	1	0	453	4	0	1,050	0	0	457	0	0
LEDGER CANYON	1,319	767	628	7	169	548	9	210	1,319	1	51	644	22	101
McClintock	11	11	5	0	0	11	0	0	11	0	0	11	0	0
MEADOW SPRING	126	42	26	10	0	0	44	0	126	6	0	32	10	0
MORMON GAP	2,965	3,877	2,519	27	96	3,785	20	72	3,871	6	0	3,822	55	0
North Canyon	1,441	1,201	1,360	3	0	1,441	10	0	1,441	1	0	1,441	12	0
Notch Peak	3,559	1,610	1,991	0	0	3,559	19	0	3,559	0	0	3,559	21	0
Painted Potholes	2,326	2,326	394	6	0	2,326	14	0	2,326	1	0	2,326	17	0
Painter Springs	2,833	1,303	1,421	8	0	2,833	26	0	2,833	3	0	2,833	22	0
Pine Valley	3,750	2,329	2224	1	0	3,750	26	0	3,750	0	0	3,750	1	0
Section 31	35	43	35	1	0	35	9	0	35	0	0	35	1	0
Seely	4,635	2,744	3,116	4	0	4,635	35	0	4,635	3	0	4,635	32	0
Skull Rock	4,138	1,958	1,428	3	0	4,138	24	0	4,138	1	0	4,138	29	0
SKUNK SPRINGS	1,540	1,517	1,170	20	193	1,264	18	240	1,540	6	571	1,369	33	115
SOUTH TRACT SUMMER	1,130	1,191	397	0	0	1,130	1	0	1,130	0	0	1,130	0	0
South Tract Winter	45	45	45	0	0	45	1	0	45	0	0	45	0	0
State Line	4,753	2,785	2,624	8	155	4753	54	171	4,753	1	27	4,753	25	68
Steamboat	2,040	632	591	3	0	2,040	12	0	2,040	1	0	2,040	12	0
Stott	5	5	3	0	0	5	0	0	5	0	0	5	0	0
STOTT-ROWLEY	727	264	342	0	0	264	0	0	727	0	0	264	0	0
Summit	184	184	184	1	0	184	5	0	184	0	0	184	1	0
T.O. Johnson	12	12	12	0	0	12	0	0	12	0	0	12	0	0
Teeples	5	5	3	0	0	5	0	0	5	0	0	5	0	0
TWIN PEAKS	19,661	12,311	10,930	36	0	12,190	76	0	19,661	21	0	12,190	120	0
Voorhees	3,076	955	893	4	0	3,076	22	0	3,076	1	0	3,076	16	0
Wallace	39	39	22	0	0	39	0	0	39	0	0	39	0	0
Wheeler	1,806	1,206	1,302	0	0	1,806	6	0	1,806	0	0	1,806	9	0
Whiskey Creek	469	248	92	1	0	469	14	0	469	0	0	469	3	0
White Bush	21	21	21	0	0	21	0	0	21	0	0	21	0	0
Total	149,009	101,156	87,733	372	2,178	132,617	1,215	2,645	150,589	103	555	131,722	963	1,040
Total Livestock and Competitive Use				90,300			136,477			151,248			135,638	

Note: Allotments with at least 5 years of utilization and two readings of trend completed are in capital letters..

[a]Indicated capacity is actual grazing use times proper utilization factor divided by observed utilization.

[b]Although total wildlife forage use would increase, competitive use would decrease due to change in kind of livestock on up to 31 (from sheep to cattle). That would decrease diet overlap with antelope substantially.

APPENDIX 6

Mule Deer Population and Forage Allocation

Allot. Number	Allotment Name	Alternative A: No Action — Current Numbers Yearlong	Total Forage Consumption (AUMs)	Diet Overlap With Livestock* Percent	Total AUM Range (AUMs)	Public Lands (AUMs)	Alternative B: Protection — Potential Numbers Yearlong	Total Forage Consumption (AUMs)	Diet Overlap With Livestock* Percent	Total AUM Range (AUMs)	Public Lands (AUMs)	Alternative C: Production — Alternative Numbers Yearlong	Total Forage Consumption (AUMs)	Diet Overlap With Livestock* Percent	Total AUM Range (AUMs)	Public Lands (AUMs)	Alternative D: Preferred Alternative — Objective Numbers Yearlong	Total Forage Consumption (AUMs)	Diet Overlap With Livestock* Percent	Total AUM Range (AUMs)	Public Lands (AUMs)
Deer Herd Unit 62B West Desert-Central																					
4300	Amasa	15 YL	27	8	2	2	30 YL	54	20	12	9	5 YL	9	8	0	0	15 YL	27	8	2	2
4302	Browns Wash	5 W	3	20	1	0	10 YL, 5 W	21	20	5	4	2 W	1	20	0	0	5 W	3	20	1	1
4303	Blind Valley	10 W	6	20	1	0	20 YL, 10 W	41	20	10	9	2 W	1	20	0	0	10 W	6	20	1	1
4304	Boob Canyon	0	0	8	0	0	5 YL	9	20	2	2	0	0	8	--	--	0	0	8	--	--
4305	Crows Nest	10 W	6	8	1	1	10 W	6	20	2	2	2 W	1	8	0	0	10 W	6	8	1	1
4306	Brecks Knoll	0	0	8	0	0	5 YL	9	20	2	2	0	0	8	--	--	0	0	8	--	--
4307	Buckskin	0	0	--	--	--	0	0	--	--	--	0	0	--	--	--	0	0	--	--	--
4312	Clay Springs	20 YL	35	8	3	3	30 YL, 20 W	53	20	12	10	5 YL	9	8	1	1	20 YL	35	8	3	2
4313	Conger Springs	10 YL	18	20	4	4	10 YL	18	20	4	4	5 YL	9	20	2	2	10 YL	18	20	4	3
4314	Death Canyon	10 W	6	20	1	1	5 YL, 10 W	15	20	4	4	2 W	1	20	0	0	10 W	6	20	1	1
4316	Deadman Wash	5 W	3	28	1	1	10 YL, 5 W	21	20	5	4	2 W	1	28	0	0	5 W	3	28	1	1
4317	Ferguson	0	0	--	--	1	0	0	--	--	--	0	0	--	--	--	0	0	--	--	--
4319	Garrison	5 W	3	8	1	1	5 W	3	20	1	1	2 W	1	8	0	0	5 W	3	8	1	1
4320	Granite	5 W	3	20	1	1	5 YL, 5 W	12	20	3	3	2 W	1	20	0	0	5 W	3	20	1	1
4321	Ledger	5 W	3	20	1	1	5 W	3	20	1	1	2 W	1	20	0	0	5 W	3	20	1	1
4322	Klondike	0	0	--	--	--	5 YL	9	20	2	2	0	0	--	--	--	0	0	--	--	--
4323	Knoll Springs	0	0	--	--	--	0	0	--	--	--	0	0	--	--	--	0	0	--	--	--
4324	King	15 W	8	20	2	2	10 YL, 15 W	26	20	6	6	2 W	1	20	0	0	15 W	8	20	2	2
4325	Blackham	0	0	--	--	--	0	0	--	--	--	0	0	--	--	--	0	0	--	--	--
4328	North Canyon	0	0	--	--	--	0	0	--	--	--	0	0	--	--	--	0	0	--	--	--
4329	Notch Peak	0	0	--	--	--	0	0	--	--	--	0	0	--	--	--	0	0	--	--	--
4330	Painted Potholes	0	0	--	--	--	0	0	--	--	--	0	0	--	--	--	0	0	--	--	--
4331	Painter Spring	5 YL	9	20	2	2	15 YL	27	20	6	5	5 YL	9	20	2	2	5 YL	9	20	2	2
4334	Skull Rock	0	0	--	--	--	0	0	--	--	--	0	0	--	--	--	0	0	--	--	--
4336	Steamboat	0	0	--	--	--	0	0	--	--	--	0	0	--	--	--	0	0	--	--	--
4338	Skunk Spring	20 W	11	28	3	2	20 W	11	20	3	3	3 W	2	28	1	1	20 W	11	28	3	2
4397	Mormon Gap	0	0	--	--	--	0	0	--	--	--	0	0	--	--	--	0	0	--	--	--
5775	Deseret	0	0	--	--	--	0	0	--	--	--	0	0	--	--	--	0	0	--	--	--
5779	Cricket	10 W	6	20	1	1	10 YL, 10 W	24	20	6	5	2 W	1	20	0	0	10 W	6	20	1	1
5781	Coates	5 W	3	20	1	1	5 W	3	20	1	1	2 W	1	20	0	0	5 W	3	20	1	1
5787	Seely	5 YL	9	20	2	2	15 YL	27	20	6	6	5 YL	9	20	2	2	5 YL	9	20	2	2
5790	Wheeler	0	0	--	--	--	0	0	--	--	--	0	0	--	--	--	0	0	--	--	--
	Smith Creek	0	0	--	--	--	0	0	--	--	--	0	0	--	--	--	0	0	--	--	--
	Unit Totals	55 YL 105 W	98 61 159		13 15 28	9 17 26	185 YL 105 W	326 61 387		58 35 93	77	25 YL 25 W	45 13 58		7 1 8	7 1 8	55 YL 105 W	98 61 159		13 15 28	11 14 25
Deer Herd Unit 62C West Desert-South																					
4311	Crystal Peak	5 W	3	20	1	1	5 YL, 5 W	12	20	3	3	2 W	1	20	0	0	5 W	3	20	1	1
4398	Pine Valley	0	0	--	--	--	5 YL	9	20	2	1	0	0	--	--	--	0	0	--	--	--
5797	Big Wash	0	0	--	--	--	0	0	--	--	--	0	0	--	--	--	0	0	--	--	--
6211	Ephraim-Bagnall	0	0	--	--	--	0	0	--	--	--	0	0	--	--	--	0	0	--	--	--
6220	Voorhees	5 W	3	20	1	1	5 W	3	20	1	1	2 W	1	20	0	0	5 W	3	20	1	1
6236	Fairview	20 YL	35	20	7	6	30 YL	53	20	12	11	5 YL	9	20	2	2	20 YL	35	20	7	6
6238	Stateline	15 W	8	20	2	2	15 W	8	20	2	2	4 W	2	20	0	0	15 W	8	20	2	2
	Pruess Lake	10 YL	18	--	--	--	10 YL	18	--	--	--	5 YL	9	--	--	--	10 YL	18	--	--	--
	Burbank	0	0	--	--	--	0	0	--	--	--	0	0	--	--	--	0	0	--	--	--
	Hamblin	5 W	3	--	--	--	5 W	3	--	--	--	2 W	1	--	--	--	5 W	3	--	--	--
	Unit Total	30 YL 30 W	53 17 70		7 4 11	6 4 10	50 YL 30 W	88 17 105		15 5 20	18	10 YL 10 W	18 5 23		2 0 2	2 0 2	30 YL 30 W	53 17 70		7 4 11	6 4 10
Deer Herd Unit 53 Oak Creek																					
5788	South Tract	15 W	8	4	1	0	30 W	17	4	3	2	6 W	3	4	0	0	30 W	17	4	1	0
5792	Whiskey Creek	50 W	28	4	1	1	150 W	84	4	14	14	21 W	12	4	0	0	150 W	84	4	3	3
	Summit	15 W	8	4	1	1	50 W	28	4	5	5	6 W	3	4	0	0	50 W	28	4	1	1
	Unit Total	80 W	44		3	2	230 W	129		22	21	33 W	18		0	0	230 W	129		5	4
Deer Herd Unit 54 Fillmore																					
5969	Church	25 W	14	4	1	1	50 W	28	4	5	5	8 W	4	4	0	0	50 W	28	4	1	1
5780	Beeston	10 W	6	4	1	1	25 W	14	4	3	3	3 W	2	4	0	0	25 W	14	4	1	1
5783	Holden Spring	300 W	169	4	7	7	328 W	184	4	30	30	100 W	56	4	2	2	328 W	184	4	7	7
5794	Section 31	15 W	8	4	1	1	30 W	17	4	3	3	5 W	3	4	0	0	30 W	17		1	1
	Unit Totals	350 W	197		10	10	433 W	243		41	41	116 W	65		2	2	433 W	243		10	10
Deer Herd Unit 55 Kanosh																					
5760	T.O. Johnson	0	0	--	--	--	0	0	--	--	--	0	0	--	--	--	0	0	--	--	--
5773	Meadow Spring	438 W	246	4	10	10	438 W	246	4	40	38	258 W	144	4	6	6	438 W	246	4	10	10
5775	Ephraim-Meadow	10 YL	18	8	1	1	10 YL	18	8	3	3	6 YL	11	8	1	1	10 YL	18	8	1	1
5776	Anderson	0	0	--	--	--	0	0	--	--	--	0	0	--	--	--	0	0	--	--	--
5778	Black Rock	0	0	--	--	--	0	0	--	--	--	0	0	--	--	--	0	0	--	--	--
5782	Black Point	0	0	--	--	--	30 W	17	8	8	7	0	0	--	--	--	30 W	17	8	1	1
5784	Holden Winter	0	0	--	--	--	0	0	--	--	--	0	0	--	--	--	0	0	--	--	--
5785	Twin Peak	300 W	169	24	41	34	900 W	506	20	81	66	177 W	99	24	24	19	900 W	506	24	121	98
5789	Stott-Rowley	0	0	--	--	--	0	0	--	--	--	0	0	--	--	--	0	0	--	--	--
5791	Wallace	0	0	--	--	--	0	0	--	--	--	0	0	--	--	--	0	0	--	--	--
5793	McClintock	0	0	--	--	--	0	0	--	--	--	0	0	--	--	--	0	0	--	--	--
5795	Stott	0	0	--	--	--	0	0	--	--	--	0	0	--	--	--	0	0	--	--	--
5798	Teeples	0	0	--	--	--	0	0	--	--	--	0	0	--	--	--	0	0	--	--	--
	Unit totals	10 YL 738 W	18 415 433		1 51 52	1 44 45	10 YL 1,368 W	18 769 787		3 124 127	3 111 114	6 YL 435 W	11 243 254		1 30 31	1 25 26	10 YL 1,368 W	18 769 787		1 132 133	1 109 110
Deer Herd Unit 56 Beaver																					
5777	Antelope Point	30 W	17	8	1	1	48 W	27	8	5	5	9 W	5	8	0	0	48 W	27	8	2	2
5796	East Antelope	75 W	42	4	2	2	250 W	140	4	23	20	22 W	12	4	0	0	250 W	140	4	6	5
	Unit Totals	105 W	59		3	3	298 W	167		28	25	31 W	17		0	0	298 W	167		8	7
Resource Area Totals		95 YL 1,408 W	169 793 962		21 86 107	16 80 96	245 YL 2,464 W	432 1,386 1,818		76 255 331	296	41 YL 650 W	74 361 435		10 33 43	10 29 39	95 YL 2,464 W	169 1,386 1,555		21 174 195	18 149 167

*Diet overlap of 20 percent, based on change of class of livestock and key forage species being black sagebrush, winterfat and Indian ricegrass.

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CHAPTER 7

CONSULTATION AND COORDINATION

CONSULTATION, COORDINATION, AND REVIEW OF THE DRAFT RESOURCE MANAGEMENT PLAN/ ENVIRONMENTAL IMPACT STATEMENT

The Draft Warm Springs Resource Area (WSRA) Resource Management Plan (RMP)/Environmental Impact Statement (EIS) was distributed to the public and filed with the Environmental Protection Agency (EPA) on April 11, 1986. That commenced a 90-day public comment period. A partial listing of the agencies and organizations receiving the Draft RMP/EIS is included in Chapter 5 of that document. Those same agencies will receive this Proposed RMP/Final EIS.

The availability of the RMP/EIS, schedule of the public open house held in Fillmore, Utah, on May 12, 1986, and the request for public comments was published by the Bureau of Land Management (BLM), Richfield District Manager, in the *Federal Register* on April 3, 1986. News releases were also prepared to alert local residents of the availability and public comment period of the Draft RMP/EIS and the schedule of the public open house. Three individuals attended the open house to discuss the Draft RMP/EIS and proposed actions. The deadline for submission of written comments was July 11, 1986. Twenty comment letters were received.

On April 17, 1986, a notice appeared in the *Federal Register* to announce Areas of Critical Environmental Concern (ACECs) proposed in the Draft RMP/EIS and commencement of a 60-day public comment period on these proposals. The deadline for submission of comments on the two proposed ACECs was June 16, 1986. No comments were received.

All comments on the Draft RMP/EIS received have been reviewed for consideration during preparation of this Proposed RMP/Final EIS. Those comments which presented new data, questioned facts and/or analysis, and raised questions or issues bearing on the Draft RMP/EIS are responded to at the end of this chapter. Letters that were general or indicated a preference for one or more of the alternatives were reviewed but not responded to. Those comments are also included.

INTERRELATIONSHIPS WITH OTHER AGENCIES

BLM-administered lands in the WSRA are interspersed with private and State-owned lands; U.S. Forest Service (FS) administered lands adjoin the east perimeter of the resource area, and the FS Desert Experimental Range is in the southwestern portion of the resource area. This land ownership pattern necessitates close coordination between land management agencies and private landowners to accomplish common goals and avoid resource use conflicts. Table 7-1 identifies interrelationships between BLM management programs and other agencies.

TABLE 7-1
Interrelationships of WSRA Resource Management Programs With Other Agencies

Agency	Jurisdiction/Relationship With BLM
FEDERAL AGENCIES	
Department of Agriculture	
Forest Service (FS)	Management of surface resources (except administration of mineral leases and mining claim recordation and adjudication) with portions of the Fishlake National Forest, which borders the WSRA on the east and northeast. BLM manages subsurface minerals. Whiskey Creek Allotment, a cooperative allotment, contains BLM land in two pastures. BLM licenses livestock grazing, conducts forage studies, and makes recommendations to the Fishlake Forest on management of public lands. The Fishlake National Forest administers livestock grazing on this allotment.
Soil Conservation Service (SCS)	Research, testing, evaluation, and interpretation of the soils environment. BLM administers use of areas studied.
Animal, Plant, and Health Inspection Service	BLM authorizes predator, noxious weed, and insect control on planning area allotments. Actual control programs are administered by the APHIS.
Environmental Protection Agency (EPA)	Provides environmental policy and guidance through CEQ. Oversees EIS process. BLM administers lands which may contain mine tailings or other hazardous wastes. BLM prepares EISs to conform with EPA/Council on Environmental Quality (CEQ) guidelines.
Department of the Interior	
Bureau of Indian Affairs (BIA)	Coordination of use of lands in the southeast corner of the WSRA.
Bureau of Reclamation (BOR)	Planning for flood control structures and powersites withdrawals on public lands. BLM administers other uses of BOR withdrawals.

TABLE 7—1 (concluded)

Agency	Jurisdiction/Relationship With BLM
Fish and Wildlife Service (FWS)	Section 7 consultation regarding threatened and endangered species. BLM administers land uses to protect these species. FWS would issue a biological opinion if impacts are identified to endangered species involved in the action.
Geological Survey (GS)	Research, testing, evaluation, and interpretation of the geologic environment (including hydrology). BLM administers use of lands and streams studied.
Bureau of Land Management (BLM)	
House Range Resource Area: Cedar City District, Bear River Resource Area; Ely District, Nevada, Schell Resource Area.	These resource areas administer grazing use in some areas of the WSRA and conversely the WSRA administers grazing in allotments that extend into those resource areas.
National Park Service (NPS)	For information purposes, the NPS administers areas immediately west of the resource area (Lehman Caves National Monument), as well as areas 70 miles to the east and south.
STATE OF UTAH	
Department of Community and Economic Development	
Division of State History	State Historic Preservation Officer makes determinations regarding cultural significance. BLM administers cultural resources on public lands.
Department of Natural Resources	
Division of Lands and Forestry	Administers State resources. BLM often administers access to State Lands.
Division of Oil, Gas, and Mining	Oil, gas, and mining on public lands are subject to State, as well as Federal regulations. BLM has primary jurisdiction of Federal mineral resources.
Division of Water Rights	Administers water rights (right to use water). BLM manages water resources on public lands.
Division of Wildlife Resources (UDWR)	Administers wildlife resources and hunting of wildlife. BLM manages the habitat used by the animals.
LOCAL GOVERNMENTS	
Paiute Indian Tribe	Indian tribal councils administers Indian allocated lands.
Six County Association of Government	The organization includes Millard County representatives and promotes development, tourism, commerce, and economic growth in the member counties.
Millard County	County has a master plan which includes zoning for the county. County maintains county roads. Sheriff has law enforcement responsibilities. BLM administers public lands within the zoned area; contacts sheriff when needed.
Cities of Fillmore and Delta	The cities have jurisdiction over municipal facilities, and many residents use public lands for their livelihood for recreation.

PUBLIC COMMENTS ON THE DRAFT RMP/EIS

Those individuals that attended the open house in Fillmore to discuss the Draft RMP/EIS on May 12, 1986 were: Steve Gillmore, Gary MacFarlane, and Peter Hovingh.

Written comments were received from the following agencies and individuals (in the order of receipt).

1. U.S. Department of the Interior, Fish and Wildlife Service, Ecological Services, Salt Lake City, Utah
2. U.S. Department of the Interior, Office of Surface Mining, Denver, Colorado
3. State of Utah, Division of State History, Salt Lake City, Utah
4. U.S. Department of the Interior, Fish and Wildlife Service, Endangered Species Office, Salt Lake City, Utah
5. Humane Society of Utah, Salt Lake City, Utah
6. U.S. Department of the Interior, Bureau of Reclamation, Upper Colorado Region, Salt Lake City, Utah
7. Utah Nature Study Society, Salt Lake City, Utah
8. Rocky Mountain Oil and Gas Association, Inc., Denver, Colorado
9. The Nature Conservancy, Wellsville, Utah
10. Salt Lake Grotto, National Speleological Society, Salt Lake City, Utah
11. U.S. Environmental Protection Agency, Region VIII, Denver, Colorado
12. Nicolas Van Pelt, Logan, Utah
13. Utah Wildlife Federation, Salt Lake City, Utah
14. State of Utah, Department of Health, Salt Lake City, Utah
15. Utah Wildlife Leadership Council (Steven Johnson), Salt Lake City, Utah
16. Lance McCold, Knoxville, Tennessee
17. Vern Wilson, Payson, Utah
18. State of Utah, Salt Lake City, Utah
19. U.S. Department of the Interior, Bureau of Indian Affairs, Southern Paiute Field Station, Cedar City, Utah
20. U.S. Department of the Interior, National Park Service, Denver, Colorado

Those letters and responses to specific comments are reproduced later in this chapter.

COMMENTS ON THE PROPOSED RESOURCE MANAGEMENT PLAN AND FINAL ENVIRONMENTAL IMPACT STATEMENT

Public Comment and Protest

There will be a 30-day protest and public comment period on this Proposed RMP/Final EIS. The *Federal Register* Notice and EPA's Notice of Availability for this document will begin the protest/comment period and final approval sequence. Public comments received during the comment period will be considered by BLM managers prior to a final decision on the RMP. Also during that period, persons who participated in the planning process and have an interest which, is, or may be, adversely affected by the proposed RMP may protest approval. Such action should be addressed to the Director of the BLM. Procedures are prescribed in 43 CFR 1610.5-2. Protests may only raise issues which were submitted for the record during the planning process (see Chapter 1 of the Draft RMP/EIS).

Governor's Consistency Review

By BLM policy and regulation, the Governor of the State of Utah is granted 60 days to review the proposed RMP for consistency with State and local plans, policies, and programs. During that period, he may identify any inconsistencies and provide recommendations in writing to the BLM, Utah State Director (see 43 CFR 1610.3-2(e)).

Comment Letter 1

United States Department of the Interior

FISH AND WILDLIFE SERVICE
ECOLOGICAL SERVICES
2060 ADMINISTRATION BUILDING
1745 WEST 1700 SOUTH
SALT LAKE CITY, UTAH 84104-5110

IN REPLY REFER TO:

(ES)

April 4, 1986

To: Bureau of Land Management, Richfield District Office
Richfield, Utah
Attn: Wayne T. Kammerer

From: Field Supervisor, Ecological Services
Fish and Wildlife Srevice, Salt Lake City, Utah

Subject: Warm Spring Resource Area (WSRA), Millard County, Utah.

We thank you for the opportunity to review and comment upon your proposed activities. However, because recent budget constraints have limited our funding and personnel we are unable to address all of the requests for comments we receive. We regret that we cannot respond because we are very interested in the actions proposed by you and believe that we could provide valuable suggestions for your consideration.

If you or other any interested agency or individual determines our response is imperative to the process, inform us and we will make every effort to expeditiously deal with your needs.

Comment Letter 2

United States Department of the Interior
OFFICE OF SURFACE MINING
Reclamation and Enforcement
BROOKS TOWERS
1020 15TH STREET
DENVER, COLORADO 80202

21 APR 1986

MEMORANDUM

TO: Mr. Wayne T. Kammerer
Richfield District Office

FROM: Mel Shilling, Chief
Mining Analysis Division

SUBJECT: Draft Resource Management Plan (RMP) and Environmental Impact Statement (EIS) for the Warm Spring Resource Area (WSRA), Millard County, Utah

We have reviewed the draft RMP-EIS for the WSRA and have no suggestions for improvement.

Thank you for the opportunity to participate in the review of the document.

Comment Letter 3

NORMAN H. BANGERTER
GOVERNOR

STATE OF UTAH
DEPARTMENT OF COMMUNITY AND
ECONOMIC DEVELOPMENT

Division of
State History
(UTAH STATE HISTORICAL SOCIETY)

MELVIN T. SMITH DIRECTOR
300 RIO GRANDE
SALT LAKE CITY, UTAH 84101-1182
TELEPHONE 801 / 533-5755

April 28, 1986

Mr. Wayne T. Kammerer
Bureau of Land Management
Richfield District Office
150 East 900 North
Richfield, Utah 84701

RE: 1792.15 WS – Warm Springs Resource Area, Draft Resource Management Plan and Environmental Impact Statement

In Reply Please Refer to Case No. 1190

Dear Mr. Kammerer:

The staff of the Utah Preservation Office has reviewed the Draft RMP/EIS for the Warm Springs Resource Area. We have the following questions regarding statements made on pages 104 and 139 concerning cultural resources.

3.1 | 1. How do the different alternatives affect the 8 sites currently listed on the National Register of Historic Places?

3.2 | 2. What alternatives would produce the most ground disturbing activities?

With the exception of these two comments, the Utah Preservation Office has no additional questions or comments on this draft RMP/EIS.

Since no formal consultation request concerning eligibility, effect or mitigation as outlined by 36 CFR 800 was indicated by you, this letter represents a response for information concerning location of cultural resources. If you have any questions or concerns, please contact me at 533-7039.

Sincerely,

Charles M. Shepherd
Architectural Conservator
Office of the State Historic
Preservation Officer

CMS:jrc:1190/2887V

Response Letter 3

3.1 The standard design, construction, and operating features for range improvement projects are found on Page 35 of the Draft Resource Management Plan/Environmental Impact Statement (RMP/EIS). Item Number 2 specifically deals with cultural resources and states that all identified sites will be avoided or mitigated. The Resources Not Impacted section (Page 139 of the Draft RMP/EIS) states that cultural resources will not be affected under any of the alternatives. However, the potential for inadvertent damage always exists.

3.2 The potential for ground-disturbing activities is the greatest under Alternative C, the production alternative. However, with the implementation of the standard construction, design, and operating features found on Page 35 of the Draft RMP/EIS, no sites should be affected.

Comment Letter 4

United States Department of the Interior
FISH AND WILDLIFE SERVICE
ENDANGERED SPECIES OFFICE
2078 ADMINISTRATION BLDG.
1745 WEST 1700 SOUTH
SALT LAKE CITY, UTAH 84104

IN REPLY REFER TO

May 13, 1986

MEMORANDUM

TO: District Manager, Richfield District, Bureau of Land Management, Richfield, Utah

FROM: Field Supervisor, Endangered Species Office, U.S. Fish and Wildlife Service, Salt Lake City, Utah

SUBJECT: Draft Resource Management Plan for the Warm Springs Resource Area

This responds to your request for comments on the subject resource management plan received in this office on April 15, 1986. We are providing the following comments.

4.1 Page 23: The Fish and Wildlife Service predator control program (ADC) has been transferred to the Animal Plant and Health Inspection Service in the Department of Agriculture.

Page 71: The Townsendia sp. found on the Arapian shale is T. Jonesii var. lutea. Townsendia aprica is found east of the Wasatch Plateau in extreme eastern Sevier and Emery countys.

Page 38: We concur with your determination that the proposed action, as outlined, would have "no effect" on federally listed species. This conclusion is based on the fact that site specific evaluations would be conducted prior to any proposed activity. If a "may effect" determination is made on any specific project, the Bureau of Land Management would initiate Section 7 consultation with the Fish and Wildlife Service.

Page 38: A biological opinion, 6-5-86-F-017, has been provided to your office for the reintroduction of peregrine falcons on Pavant Butte, Millard County, Utah.

We appreciate the efforts you are making to conserve endangered species.

Robert D. Russell

Response Letter 4

4.1 The Table on Page 23 of the Draft RMP/EIS has been corrected. This corrected Table is found in Chapter 6 of this document.

The reference to Townsendia sp. found in Table 3-3, Page 71 of the Draft RMP/EIS has been deleted. See Chapter 6 of this document.

If a "may affect" determination were made on any specific project, Section 7 consultation with your agency would be initiated.

Comment Letter 5

THE HUMANE SOCIETY OF UTAH

4613 South 4000 West
P.O. Box 20222
Salt Lake City, Utah 84120
Phone 968-3548

May 29, 1986

Mr. Wayne T. Kammerer
Bureau of Land Management
Richfield District Office
150 East 900 North
Richfield, Utah 84701

Dear Mr. Kammerer,

Thank you for the opportunity to review the Draft Resource Management Plan and Environmental Impact Statement for the Warm Springs Resource Area. In general the Society agrees with the Bureau's decision of Alternative D (Preferred Alternative).

5.1 The Society is, however, concerned that wild horses are being selected against in favor of livestock when allocating forage. In almost every case, wildlife numbers would increase under alternatives B & D; and livestock AUMs would increase in B, C & D. The wild horses, on the other hand, will loose AUMs alloted in the case of the preferred alternative.

5.2 The Society is further concerned over the proposal to completely remove the entire herd from the Burbank HMA in alternatives C & D. Once these animals are removed, there will be no chance for further herd development in this area. We would also like to know what is meant on page 56, colume 1, para 1, by "The Burbank herd (30 wild horses) would be captured, removed for the HMA, and relocated". (Underlining by H.S.U.). What would be involved in the "relocation" plan for these animals?

5.3 Another concern is that of planning the introduction of "studs of the desired type" (See page 154, colume 2, para 3). Where will these animals come from? It would appear that the "wild horses" are being manipulated with the specific intent to raise adoptable horses, rather than retain the traits inherent in the existing herds. If these traits are not pleasant to the public, that is unfortunate, however, our understanding was that "wild and free-roaming horses" were to be managed at the minimum interference level, not the maximum level of selective breeding and trait shaping. The Society agrees that it would be desirable to leave wild horses "of adoptable quality" during removal operations, but questions the practice of introducing foreign animals to existing herds.

DEDICATED TO THE ELIMINATION OF FEAR, PAIN AND SUFFERING OF ALL ANIMALS
Gifts and Bequests to the Society are deductible for income and estate tax purposes.

Comment Letter 5

5.4 In Appendix 7, page 231, Burbank HMA, Total Forage Use, we question the accuracy of the addition to arrive at the figure of "240" from the given AUMs. We also question why the Total Forage Use AUMs on this page for the Burbank HMA differ from the Total Forage Use AUMs on page 232 for the same HMA and same number of animals.

Thank you again for allowing H.S.U. an opportunity to review this document and offer our input.

Sincerely,

John Paul Fox
Chief Investigator

Response Letter 5

5.1 Forage allocation to various animal species is a complex procedure. Wildlife and wild horses complicate the issue because their movement and forage use is difficult to control. These species habitually return to secluded use areas for forage, even though those areas may be overused. Generally, in the Warm Springs Resource Area (WSRA), wild horses use steep, rugged, tree-covered areas not preferred by livestock. They range from these areas only for water and forage if none is available in their preferred area. Proposed allocations are based on the forage production potential in preferred wild horse use areas.

5.2 The Draft RMP/EIS points out that the Burbank Herd Management Area (HMA) does not have good wild horse habitat, because the only water available during the summer is on private property, 5 to 7 miles from the remainder of the HMA. When captured, the horses in this HMA could be relocated in other HMAs or put up for adoption.

5.3 The introduction of horses of a desirable type means that suitable wild horse studs captured in one HMA could be released in other HMAs. This would expand the gene pool of all HMAs. A side benefit would be future generations of horses of an adoptable quality. See Page 153 of the Draft RMP/EIS for a discussion of inbreeding problems.

5.4 The total was correct, but the number of animal unit months (AUMs) for Crows Nest should have been 48 and Clay Springs 36 (see Appendix 1 of the Draft RMP/EIS). Therefore, the total of 240 AUMs was accurate.

Comment Letter 6

United States Department of the Interior

BUREAU OF RECLAMATION
UPPER COLORADO REGIONAL OFFICE
P.O. BOX 11568
SALT LAKE CITY, UTAH 84147

IN REPLY REFER TO: UPO-150/UC-151
120.1

MAY 28 1986

Memorandum

To: Mr. Wayne T. Kammerer, Bureau of Land Management, Richfield District Office, 150 East 900 North, Richfield, Utah 84701

From: Acting Regional Director
Bureau of Reclamation

Subject: Review of Draft Management Plan for the Warm Springs Resource Area, Utah

We have reviewed the subject document and have concluded that implementation of any of the proposed alternatives would have no apparent impact on any existing or proposed Reclamation project. The area of impact in the West Desert is outside the scope of current Reclamation activities in the Upper Colorado Region.

cc: Regional Environmental Officer
Department of the Interior
Denver Federal Center
P.O. Box 25007
Denver, Colorado 80225

721 Second Avenue
Salt Lake City
Utah 84103

June 19, 1986

Mr Wayne T. Kammerer, Team Leader
Richfield District Office
Bureau of Land Management
150 East 900 North
Richfield, Utah 84701

Dear Mr Kammerer:

Enclosed are some comments on the Warm Springs Draft Environmental Impact
7.1 State. Also enclosed are the comments of Intermountain Water Alliance as addressed to the House Range Resource Management Area. These comments are enclosed for the following reasons:

1) From reading the two documents, it was not clear whether or not South Tule Spring was in the Warm Springs Resource Area
7.2 2) The Draft EIS was lacking in the description of the affects of Lake Bonneville
3) Archeological dates did not agree with some of the literature.

Thus in management of South Tule Spring we ask for a consistent policy of management with South Tule Spring being classified as a Research Natural Area.

Also included but need not be incorporated within the EIS are two reference dealing with Lake Bonneville and with early man in the Bonneville Basin for your information.

Thanks for the opportunite for commenting on this Warm Springs Draft Environmental Impact Statement.

Sincerely,

Peter Hovingh, Chairman
Issues Committee
Utah Nature Study Society

Comment Letter 7

WARM SPRINGS RESOURCE MANAGEMENT AREA SPECIFIC COMMENTS:

7.3 It seems that South Tule Spring (Figure 3-3), Ibex (Figure 3-12) and Fossil Mountain (Figure 1-1) are mislocated on the maps.

7.4 Management of Painter Spring. Painter Spring arises out of granitic substrate. At the mouth of the canyon is a small flat area that is very popular for camping. The spring area itself contains two mollusks (Cincinnatia and Catinella), an orchid Epipactis gigantea, the red and yellow columbine, and a water strider from the family Veliidae (in the University of Utah collections). The nearest similar habitat occurs in the Deep Creek mountains and other locations in the Snake Range on the west and the Wasatch Mountains on the east. The snails are found in the springs on Swasey Mountain. Veliidae water strider has been only recorded in the Bonneville Basin near Kennecott tailings in Salt Lake County. The localized habitat at Painter Spring suggests a unique biological community- unique for its isolation. To assist in its preservation, Painter Springs should be included in the wilderness classification or be designated as an ACEC.

The road to Painter Spring is narrow after the first "stream" crossing. The recreationists tend to occupy the entire flat section at the mouths of the two joining canyons. Over Memorial Day weekend three parties went into the Painter Spring "campsite" only to find it was already occupied. It seems that the road for recreational use be blocked at the first "stream crossing" and that parking be established at that area. Perhaps even camping could be established at the trail head parking lot and close the area at the mouths of the two canyons to camping.

Recommendations: 1)designate the Painter Spring canyons as ACEC. 2) Route the trail around Painter Springs in the Painter Spring canyon. 3) Close off the present campsite. 4) Establish a turn around and campsite at the lowest dry stream crossing. 5)Withdraw the area from mineral entry, oil and gas leasing, and ORV use. 6) Study the area and similar areas in the Deep Creek and Stansbury Mountains and other areas to assess the biological uniqueness of the region.

7.5 Management of Notch Peak roadless area. The BLM has recognized that Notch Peak is a unique feature in the Bonneville Basin by classifying the area as National Landmark. Although we recognize the area and Notch Peak as a landmark, would not classification of Notch Peak as either Outstanding Natural Area or ACEC be equally justifiable in view of potentially unique flora and fauna of the region? It would be useful in the case of Notch Peak for the BLM to discuss the three alternatives (National Landmark, OUtstanding Natural Area, or ACEC) and determine the benefits and disadvantages of each classification.

7.6 Management of Wah Wah Range. We strongly support the BLM in its classification of some acreage of the Wah Wah and Research Natural Area. Areas that have as their highest "use" a biological phenomena should be managed as such. How will the BLM control recreation (backcountry) in the Wah Wah Range to protect these natural communities?

Comment Letter 7

INTERMOUNTAIN WATER ALLIANC

168 West 500 North
Salt Lake City
Utah 84103

801-531-7330

721 Second Avenue
Salt Lake City
Utah 84103

June 7, 1986

Resource Area Manager
House Range Resource Management Area
Bureau of Land Management
Fillmore, Utah

Dear Sir:

Enclosed are the recommendations of Intermountain Water Alliance on the management of the unique springs in the House Range Resource Area. Please include this statement in your planning process for the House Range RMP. Also included in with the statement are two resource papers concerning the dating of the pluvial events and the archeological data. These papers were referenced in our statement but you may wish to see the actual work.

Our basic recommendations include:

1) Designation of South Tule Springs and North Willow Springs in Tule Valley and Gandy Salt Marsh as Research Natural Areas
2) Fencing of the above springs as first priority
3) Place these springs in oil and gas category of #4
4) Withdraw these springs from mineral entry
5) Provide funding for the study of the management of these springs and for baseline data

6) Fence off a portion of the springs-wetlands for habitat for the Swasey spring pocket gopher.

The rationale for the above recommendations are included and attached to this letter.

We appreciate your recommendations for the protection of the riparian habitat and desert springs. Our recommendations take into account that biological research is perhaps the most single important use of the South Tule, North Willow and Gandy Salt Marsh springs and that livestock is the chief competitor of such use. We do encourage the BLM to work together with the livestock permittees to bring other supplies of water to the range.

Thank you very much and it has been a pleasure working with you for these many years.

Sincerely,

Peter Hovingh

COMMENTS FOR THE DRAFT ENVIRONMENTAL IMPACT STATEMENTS

The biggest deficiencies in the Draft Resource Management Plans were the lack of the description of the role Lake Bonneville had on the aquatic systems of the areas under discussion. To begin the story of Lake Bonneville one learns that prior to 32000 years ago the region may have been a saline basin. The Stansbury level (4500 feet) was reached some 22,000 years ago. This level occurs in the House Range Resource Management Area in the Fish Springs Flat and the region south of Callao. Another shoreline occurred as the lake began to flow into Tule Valley over Sand Pass- perhaps about 19,500 years ago. This shoreline is about 36 feet below the Provo shoreline. The lake continued to rise to the Bonneville level at 5092 feet (17,000 years ago). A major drop occurred some 15,000 to 16,000 years ago and the lake subsequently rose again to the Bonneville threshold of 5092 feet. Some 15,000 years ago the threshold gave way and the lake rapidly dropped to the next threshold at the Provo level (4737 feet). This level was maintained until about 14,000 years ago. Subsequently the lake rapidly dried to 4137 feet in 2500 years (some 11,500 years ago) (1,2)

While the lake was at the Provo level, Tule Valley became a body of water that was more saline than the ocean as indicated by the oolitic sands. This is the only occurrance of oolitic sands at the Provo level in the entire Bonneville Basin. During this time one can imagine that Tule Valley became an evaporizing basin with the Bonneville Lake providing the fresh water for concentration. With the saline nature of Tule Valley during this time, the mollusks and fish were probably exterminated from the valley.

1) Donald R. Currey and Charles G. Oviatt. 1985. Durations, Average Rates and Probably Causes of Lake Bonneville Expansions, Stillstands, and Contractions During the Last Deep-Lake Cycle, 32,000 to 10,000 years ago. In "Problems of and Prospects for Predicting Great Salt Lake Levels", ed. Paul A. Kay and Henry F. Diaz. Center for Public Affairs and Administration, University of Utah. 309 pp.

2) Donald R. Currey, Genevieve Atwood, and Don R. Mabey, 1984. Major Levels of Great Salt Lake and Lake Bonneville. Map 73. Utah Geological and Mineral Survey.

Comment Letter 7

From the perspective of the House Range and Warm Springs Resource Areas, the influence of Lake Bonneville on the regions aquatic systems stopped some 11,000 years ago. Although as many as five wet cycles occurred in the last 11,000 years, the highest elevations was that of the Gilbert shoreline of 4250 feet and at this level, the water was saline. Thus, the aquatic systems of Snake Valley, Tule Valley and Sevier Basin were isolated from each other and from the northern Bonneville Basin influence for 11,000 years. The various levels of Lake Bonneville has had subsequent influence on the terrestrial plant life with each valley and each lake level having the potential of different genetic variety of shadscale and other members of the Atriplex genera. This influence may affect both the productivity of the land with respect to wildlife and livestock grazing and with respect of ground cover and instant destruction by insects or climatic variations due to the genetic uniformity of the species in each valley (3).

From the archeological record, the earliest documented man in the Bonneville Basin occurred some 12,000 years ago. There is not any evidence that man saw Lake Bonneville. The Paleo-Indian/Big Game Hunters occurred during the 12,000 to 9,000 years ago, early Archaic from 8500 to 5500 years ago, Middle Archaic from 5500 to 3500 years ago and Lake Archaic from 3500 to 2000 years ago. The Sevier/Fremont culture lasted from 1600 to 650 years ago. As noted by the obsidian chips and arrow hears, the marshes of Tule Valley, Snake Valley, Fish Springs and Sevier River must have always been important for early many. The dates quoted here are in conflict with those in the Draft Management Plan.(4).

3)H.C. Stutz and S.C. Sanderson, 1983. Evolutionary Studies of Atriplex: Chromosome Races of A. Confertifolia (shadscale). Amer. J. Bot. 70: 1536-1547.

4) David B. Madsen, 1982. Get it where the gettin's good: A variable model of Great Basin Subsistence and Settlement based on data from the eastern Great Basin. In "Man and the Environment in the Great Basin", ed. David B. Madsen and James F. O'Connell. Society for American Archaeology. 242 pp.

MANAGEMENT OF WATER RESOURCES

Within Warm Springs and House Range Resource Areas, every water resource should be treated as if relict populations of plants and animals occur within the system and that these plants and animals may have been isolated for 11,000 years. From the scientific perspective, the question arises 1) whether there are species now living in these systems that may not occur anywhere else in the world and 2) whether any genetic differentiation has occurred among the isolated populations during this 11,000 years. Water resources that have not obviously been manipulated (no exotic mollusks, crayfish, frogs, or fish; no agricultural diversions) should be examined closely and managed as Research Natural Areas since their greatest value is for research purposes.

Under these criteria, the Gandy Salt Marsh Springs, South Tule Springs North Willow (in Tule Valley), and the south portion of the Coyote Springs complex (in Tule Valley) should be protected from any recreation, withdrawn from livestock use and manipulation, withdrawn from agricultural diversions, withdrawn from mineral entry, placed in Oil and Gas leasing category of #4, and fenced. Although Leland Harris Springs Complex and the Twin Springs-Bishop Footes Reservoir both provide large wetlands diversity, the ownership pattern of these springs may prevent the appropriate protection. The Twin Springs complex furthermore is full of exotic species as carp, bass and bullfrogs.

RATIONALE FOR PROTECTION OF SPRINGS

1) The occurrance of relict populations of vertebrates. Gandy Salt Marsh and Leland Harris springs contain native fishes, the dominant of which appears to be the Least Chub, but also Utah Chub and speckled dace. The Least Chub was once distributed throughout the Bonneville Basin. The Western Spotted Frog is also found in abundance in the South Tule, North Willow, and Coyote Springs in Tule Valley and in abundance in the Gandy Salt Marsh Springs (and a single observation in Leland Harris spring). Although the Western Spotted Frog is also found in the Deep Creek drainage, extinction of the species may have occurred in Twin Springs, and along the Wasatch Front (Salt Lake, Utah, Summit, and Wasatch Counties).

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2) Management. Gandy Salt Marsh springs and the Tule Valley springs appear to be on BLM lands and hence the management of the springs is under one land manager. South Tule Springs and North Willow Springs are the least accessible in Tule Valley and hence the least likely to have water applications and exotic species introduced. Gandy Salt Marsh Springs borders the saline ponds and hence could be readily fenced to protect both the springs, the associated wetlands and the adjacent saline shores.

3). Current management. Each year it seems that the livestock operator deposits salt blocks in the "watershed" of the springs and at the same time burns off the previous years bulrushes. This management practice should be under the control of the wildlife or the land managers. Be fencing these North Willow, South Tule, south Coyote springs, and Gandy Salt Marsh Springs, water development from other springs could assist the livestock operator. There are plenty of water sources in Snake Valley and the operator may even be encouraged to truck the water to new water troughs. The present grazing of livestock in the Tule Valley springs-wetlands is actually DAMAGING to the wetlands in that the cattle continue to break trough the fragile top soil and create a funnel through which the water re-enters the subsurface aquifers. This results in the lost of additional wetlands.

4) Although the Western Spotted Frog and the Least Chub occur together in the Gandy Salt Marsh springs, the introduction of Least Chub into the Tule Valley springs that are presently fishless may have unknown effects of the native species. South Tule and Willow Springs should be exempt from future considerations of the transplant. Since Tule Valley springs have evolved under fishless conditions, the aquatic populations may be very different from the adjacent Snake Valley populations. A population transplant of Least Chub could occur in the North Tule Springs complex after the physical (not chemical) removal of the exotic fish. Coyote Springs could also be considered as a transplant location.

5). A study of the genetic differentiation of the Western Spotted Frogs in South Tule, North Tule, North Willow and Coyote Springs in Tule Valley and Gandy Salt Marsh and Deep Creek in Snake Valleys should be undertaken. Control specimens from the Wasatch Front, Reese River in Nevada and some locations in Idaho should be used.

6) The BLM should encourage the dating of the mollusks in Tule Valley. At this time one finds shells of Lymnaeidae, Physidae, and Helisoma in the saline flats east of Coyote Springs. This same assemblage appears in the distil end of Twin Springs complex in Snake Valley. Two other species appear in the Shadscale area of Tule Valley. The radiodating of the mollusk may provide clues to when Tule Valley became saline and also to clues to fresh water sources which aided the Western Spotted Frog's entrance to the valley after the saline lake desiccated. Any backhoe work in Tule Valley should be preceeded with a notification and funding for the radio-carbon dating. Presently the Department of Geography at the University of Utah is doing this type of work.

7) Desert springs are becoming a rare natural resource. With the introduction of bullfrogs, bass, and carp into the Twin Springs/Bishop Footes Reservoir complex and the possible introduction of Leopard Frogs, these springs have been heavily impacted by the exotic species. Further, agricultural diversions and manipulations have reduced their naturalness. In 1968 the Western Spotted Frog was collected from Bishop Footes Reservoir. Some nine hours of efforts and failed to relocate this species. Leopard Frogs are very common throughout the springs-complex and may well have displaced the Western Spotted Frog. The large Planorb snail Helisoma is found in abundance in the periphery of the springs-wetlands and has not been found in some 73 other springs-wetlands in Tule, Snake, Spring (Nevada) or Steptoe (Nevada) valleys.

8) With the extensive distribution of Leopard Frogs in central Snake Valley and with their finding in the southernmost springs of Gandy Salt Marsh, monitoring of the Leopard Frogs in the Gandy Salt Marsh is imperative in view of the fact that these frogs are known to displace the Western Spotted Frogs.

9) Although in the case of Helisoma, Western Spotted Frog, Least Chub and Utah Chub were widely distributed in the Bonneville Basin, it has become apparent that these species and perhaps many more species have been exterminated from much of their former ranges in the eastern Bonneville Basin. Thus it is important to preserve by fencing and the appropriate withdrawals

Comment Letter 7

the few natural springs in which these native species survive. Close monitoring of the springs is encouraged. High priority should be given to classification of these springs as Natural Research Areas.

MANIPULATIONS. Fencing of Gandy Salt Marsh springs in Snake Valley, South Tule springs and North Willow Springs in Tule Valley should have high priority in the fencing of the springs-wetlands. The BLM is to be complemented for recognize the importance of fencing the wetlands and springs. Fences should be built such that investigators can enter the wetlands without extraordinary contortions and perhaps should be designed to allow antelope to enter. At this time sheep are not a problem- just cattle and perhaps motorized recreationists.

The lands should be withdrawn from mineral entry. Recently a large portion of North Tule Springs was staked and claimed for a mill site. Mineral entry withdrawals would have prevented this type of claim. Likewise water should not be utilized for large scale usage as oil drilling.

After reading both the House Range and Warm Springs management plans, it is uncertain who manages the South Tule Springs complex. In the House Range plan, it appears as the Tule Valley (or Tule Springs grazing allotment. In the Warm Springs plan it appears in the Skunk Springs grazing allotment. If there is uncertainty over the allotment and the Resource Management Area, it seems from the spring-wetlands management choices that South Tule springs should be managed by the Resource Area manager that manages North Willow, North Tule, Coyote, and even the Gandy Salt Marsh springs. This recommendation is only to bring about a consistent pattern and view point of management.

The presence of the Clear Lake Pocket Gopher (Warm Springs) and the Swasey spring pocket gopher (House Range) suggests that some region near the habitable springs be fenced to provide maximum forage for the pocket gophers. Again these species may be relict populations from pluvial times.

Response Letter 7

7.1 South Tule Spring is located in the WSRA (see Figure 2-7). A Habitat Management Plan (HMP) would be developed that would include all riparian areas in South Tule Valley and ensure management consistency for all the springs.

7.2 Thank you for the papers on "Man and Environment in the Great Basin" and "Predicting Great Salt Lake Levels." While significant in the pre-history of the WSRA, the effects of Lake Bonneville were not identified during the scoping process as an issue or management concern. Nor did the analysis presented in the Draft RMP/EIS reveal impacts from the proposed plan that required descriptions of those effects. Therefore, descriptions of these effects were not included in the Draft RMP/EIS.

We agree that some archaeological literature reflects dates other than those shown in the Draft RMP/EIS. While there is some disagreement on the estimated dates, the time periods referred represent a combination of reasonable assumption and speculation based on observation and prior knowledge of the area.

Also, refer to Comment Response 7.1.

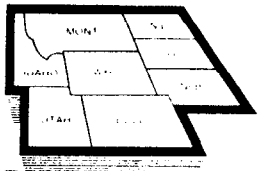
7.3 Thank you for your comment. The maps have been corrected; see Figures 2-7 and 2-9 of this document.

7.4 Painter Spring was not identified as a potential Area of Critical Environmental Concern (ACEC). The Painter Spring would be inventoried as part of the riparian habitat inventory for the WSRA. A HMP would then be prepared and implemented to safeguard the special values you referenced. A no surface occupancy fluid minerals lease category would be in effect and closure to off-road vehicles (ORVs) would be considered during development of the HMP. Your participation in development of that HMP would be welcome.

7.5 Various special management designations for Notch Peak were analyzed in the WSRA Management Situation Analysis (MSA) document prepared as part of this planning effort. The MSA identified those designations for which Notch Peak qualifies: National Natural Landmark (NNL) and Outstanding Natural Area (ONA). That analysis concluded that the values present would be best protected and recognized if the area were designated a NNL.

7.6 A management plan would be prepared for the Wah Wah Research Natural Area (RNA) that would address the extent to which back-country recreation use would be allowed. It would also outline the means of controlling or limiting such use in order to protect the resource values within the RNA.

Alice I. Frell
Lands Director



Rocky Mountain
Oil & Gas Association, Inc.

345 PETROLEUM BUILDING • DENVER, COLORADO 80202
303/534-8261

July 2, 1986

Mr. Wayne T. Kammerer
Team Leader
Bureau of Land Management
150 East 900 North
Richfield, UT 84701

Dear Mr. Kammerer:

On behalf of the Rocky Mountain Oil and Gas Association (RMOGA), I would like to offer the following comments on the Warm Springs Draft Resource Management Plan (RMP) and Environmental Impact Statement (EIS). RMOGA is a trade association which represents hundreds of members who account for more than 90% of the oil and gas exploration, production and transportation activities in the Rocky Mountain West. Because so much of the land in these states is owned by the federal government, our members have a vital interest in how the Bureau manages its lands, particularly with respect to mineral resource activities.

8.1 RMOGA has several concerns with the DEIS and Proposed Action. First, on Page 17, the BLM's Management Concerns regarding energy and minerals are portrayed in terms of applying the proper oil and gas leasing categories on public lands and whether existing withdrawals are adequate or necessary. On Page 21, the Planning Criteria address elements such as public demand for minerals; effects on other public land users, resource values, and adjacent private, state and federal lands; potential rehabilitation of disturbed lands; and the ability of the BLM to enforce appropriate mitigation measures. While we realize that the BLM must consider the possible effects of oil and gas activities on other resources, it is imperative that the BLM also consider the effects other uses may have on the availability of lands for exploration and production of oil and gas. Nowhere in the Management Concerns or Planning Criteria is it evident that the BLM considered tradeoffs when determining what stipulations or leasing categories should be applied in the Warm Springs Resource Area.

Comment Letter 8

July 2, 1986

Mr. Wayne T. Kammerer
Team Leader
Bureau of Land Management

8.2 We further understand that it is necessary to determine the land's potential for rehabilitation. On the other hand, the BLM must also consider which resources and resource uses are most critical. It is entirely possible that in some areas mineral resource values should take precedence over other resource uses. However, we believe that these decisions can only be made through a site-specific tradeoff analysis. Evidence of such a tradeoff analysis should be documented in the Draft EIS. When such information is not included in the planning documents released for public scrutiny, it is virtually impossible to thoroughly evaluate the Proposed Action, thereby making it difficult to comment in an adequate fashion.

8.3 In our opinion, the Draft EIS for the Warm Springs Resource Area is deficient because it does not utilize the Draft Fluid Mineral Leasing Guidelines as provided in the Supplemental Resource Planning Guidance, a Bureau planning requirement. These Guidelines require the BLM to assess the energy potential of the Resource Area in order to determine what tradeoffs are essential. This information should be displayed in a matrix which identifies the potential of the Resource Area and its relation to access restrictions. Since the Draft EIS has failed to discuss the mineral potential of the Resource Area, it is apparent that decisions were made regarding designation of special management areas without the benefit of comprehensive geologic data.

8.4 We recognize that on Page 166 the BLM indicates that those areas subject to Leasing Category 3 would principally fall within mountainous areas with low to speculative potential for recoverable reserves. However, there is no geological discussion to support this statement. Just because the Resource Area has no Known Geologic Structures (KGSs) is not an indication that there are no areas with significant potential for oil and gas. Nowhere in the DEIS is there an examination of the energy potential existing in the Resource Area. It is our contention that this lack of documentation constitutes a significant failing of the planning process for the Warm Springs Resource Area. Energy and mineral resources should be an integral part of the planning process. In order to make equitable decisions, energy resource potential must be considered when making decisions which would constrain access for energy exploration and development activities.

8.5 In conclusion, we believe that the Draft Plan and Draft EIS are deficient in their consideration of energy resources and the access needed for exploration and development activities. It is probable that this failing is due to the omission of energy resources and needs as planning issues during the RMP process. The BLM Planning Regulations require an indepth analysis of planning issues. However, the level of analysis required for management concerns is not as comprehensive. Therefore, we recommend that the BLM strengthen its

Comment Letter 8

July 2, 1986

Mr. Wayne T. Kammerer
Team Leader
Bureau of Land Management

page three

8.5 (cont.) discussion on energy resources in the final EIS. It is essential that the public understand all the elements considered in the decision-making process. For example, we would like to know the rationale behind the decisions to modify the acreage involved in the various leasing categories. While some of these changes are beneficial to oil and gas, others would place more acreage in restrictive categories. This information would provide the energy industry with the essential basis for evaluating the Plan.

RMOGA appreciates this opportunity to comment. Please feel free to contact me should you have any questions regarding our comments.

Sincerely,

Alice I. Frell

Alice I. Frell
Public Lands Director

AIF:cw

Response Letter 8

8.1 The mineral resource potential was omitted in the Draft RMP/EIS. The oil and gas potential is shown in Figure 2-13 and Table 2-10 in Chapter 2.

The BLM considered trade-offs when determining what stipulations or leasing categories should be applied in the WSRA. This resulted in elimination of Category 4 areas and a decrease in Category 3 areas. An increase in Category 2, seasonal stipulations, was deemed necessary to protect wildlife habitat in accordance with legal mandates, regulations, and BLM policy. That analysis is presented in the MSA. Also, see the Minerals section in the Summary and the Introduction to Minerals in Chapter 2 of this document.

8.2 Site-specific mineral proposals will be evaluated on a case-by--case basis. The entire resource area would be open to leasing. Only 1.1 percent of the area would be subjected to the more restrictive Category 3, no surface occupancy, stipulation. All of the existing Category 4 designations would be eliminated. (Trade-off analysis was done in the MSA but not presented in the Draft RMP/EIS.) Category 2 and 3 stipulations were applied only where necessary to protect wildlife habitat, unique surface or recreational features, RNAs, ONAs, and ACECs in the resource area. There were no leasing category designations proposed, based on the land's potential for rehabilitation. Also, see Table 2-10 in Chapter 2 in this document.

8.3 See Table 2-10 in Chapter 2 of this document for an evaluation of energy and mineral potential in areas proposed for protective restrictions. This evaluation was based on information contained in the MSA.

The use of Draft guidelines is not required by BLM regulation or planning policy. Draft guidance is subject to change and revision. In addition, that guidance was received subsequent to completion of the Draft RMP/EIS while it was undergoing review prior to printing. For these reasons, the Draft Fluid Minerals Leasing Supplemental Program Guidance was not utilized in the Draft RMP/EIS or in this document.

8.4 See the Introduction to the Minerals section and Table 2-10 in Chapter 2 of this document.

8.5 The rationale used to modify the acreage involved in the various leasing categories was not discussed in the Draft RMP/EIS. The increase in Category 2 acreage was required to protect wildlife crucial, critical, and riparian habitat. Also, see the Summary, Minerals section, Introduction to Minerals section in Chapter 2, and Chapter 6 of this document.

The Nature Conservancy

Utah Public Lands Protection Planning
2225 South Highway 89-91
Wellsville, Utah 84339
(801) 752-4154

July 7, 1986

Mr. Wayne T. Kammerer
USDI Bureau of Land Management
Richfield District Office
150 East 900 North
Richfield, UT 84701

Dear Mr. Kammerer:

Thank you for this opportunity to comment on the Draft Resource Management Plan and Environmental Impact Statement (RMP/EIS) for the Wara Springs Resource Area (WSRA). Overall I found this document to be very readable and well-written. I appreciate this chance to be involved in the planning that will guide the future direction of the Resource Area.

As a preface to my comments, let me explain briefly what The Nature Conservancy does. The Conservancy is a non-profit conservation organization dedicated to maintaining natural biological diversity. This means that we identify and seek protection for examples of the full array of ecosystems and species in the natural world. We focus our resources on those parts or "elements" of the natural world that are the most scarce: rare plant and animal species, rare communities, and undisturbed examples of common communities.

Conservancy scientists have summarized the best information available on the locations of Utah's rare species and communities. Based on this information, one of my responsibilities is to work with the Bureau of Land Management (BLM) to assure the maintenance of certain rare species and natural areas on public lands in Utah. One of the most important means of doing this is as a participant in the RMP process, because decisions that affect rare species and natural areas will be made through that process.

Therefore, my comments in the remainder of this letter will deal specifically with the Conservancy's two main topics of interest with regard to the WSRA Resource Management Plan: 1) Endangered, Threatened and Sensitive plant and animal species, and 2) protection of certain areas that have natural and scientific values.

(p. 2)

National Office, 1800 North Kent Street, Arlington, Virginia 22209

Comment Letter 9

Endangered, Threatened and Sensitive Species

My comments concerning Endangered, Threatened and Sensitive species in the WSRA are divided into three major subtopics: 1) identity and locations, 2) policy, and 3) treatment by Alternative.

Identity and Locations

The draft RMP/EIS contains a good discussion of the Sensitive plant species in and potentially in the WSRA. The illustrations of five Sensitive plants known to occur in the area (page 64), and information summaries for plant species in Table 3-3 (pages 70-71), are well done. There are several changes or additions that I would like to suggest, however.

9.1 It was brought to my attention recently that the yellow-flowered Townsendia on the Arapien shale west of the Wasatch-Fishlake Plateaus is T. jonesii var. lutea, and not the Threatened T. aprica (page 71). To date the latter is known only from the east side of these highlands in the vicinity of Fremont Junction, a considerable distance from the WSRA.

9.2 Our data show that known populations of two Sensitive plant species occur in the San Francisco Mountains just outside the southern boundary of the WSRA: Eriogonum soredium and Lepidium ostleri. I would recommend that these be added to Table 3-3 on page 71, under the heading of "Known Populations in Adjacent Resource Areas/Counties That May Occur in WSRA". [Habitat descriptions are from "Utah's Rare Plants Revisited" by Welsh and Chatterley, Great Basin Naturalist 45:173-236 (April 1985)].

Species	Common Name	Status	Habitat Description
Eriogonum soredium		BLM Sensitive FWS Category 2 Federal Register Sept. 27, 1985	Elevation 6600 to 7300 feet. Calcium carbonate deposits; sagebrush and juniper communities.
Lepidium ostleri	Ostler lepidium	BLM Sensitive FWS Category 2 Federal Register Sept. 27, 1985	Elevation 5800 to 6900 feet. Gravelly limestone slopes; pinon-juniper and shadscale communities.

9.3 A new species of primrose, Primula domensis Kass & Welsh (Great Basin Naturalist 45:548-550), was recently discovered in the House Range near Notch Peak. This species is too new to be categorized by the U.S. Fish and Wildlife Service. However, I would urge you to consider it as a Sensitive species until its rarity can be confirmed or denied by additional surveys.

(p. 3)

The draft RMP/EIS lists two Endangered and eight Sensitive animal species in or potentially in the WSRA (page 89). The Conservancy considers all of these except the golden eagle to be animals whose total numbers, distribution, or population trends raise concern for their long term survival in Utah.

Policy

I believe it is important that the RMP/EIS make specific mention of BLM policy that requires protection of Endangered, Threatened and Sensitive plants and animals. I found just such a statement under the heading of Management Common to All Alternatives, on page 38:

"No activities jeopardizing the continued existence of T & E and sensitive plant and animal species will be permitted on public lands in the WSRA."

Given this policy of rare-species maintenance, I then assessed how each of the four alternatives provide for protection of the Endangered, Threatened and Sensitive plants and animals in the WSRA.

Treatment by Alternative

There are two specific references to Sensitive plant species in Chapter 4 (Environmental Consequences) of the draft RMP/EIS. The first, on page 147, states that no Sensitive (or any other) plant species would be irretrievably lost under the proposed levels of management for each alternative. The second statement, on page 177, says that no impact to T & E or Sensitive plant species has been identified, and that no species would be irretrievably lost, under any of the alternatives.

9.4 In talking with several District and Area staff members, it appears that this projected lack of impact to Sensitive plants is not based on the results of specific studies. There is a great need for inventory and monitoring of the effects of resource uses on the populations of Sensitive plants in the WSRA. It is important to know the effects of resource use on rare plants so that management actions can be adjusted accordingly.

Of all resource uses, grazing would probably have the greatest effect on Sensitive plant species in the WSRA. Effects of grazing on rare plants are not necessarily negative. There are instances where grazing can assist survival of rare plants by reducing competition from vigorous, common native species. There are also instances where grazing is very harmful, especially if the species of concern is highly palatable. It would therefore be appropriate to consider Sensitive-plant maintenance in AMP's for allotments where such species occur. To the best of our knowledge, these allotments are as follows:

Comment Letter 9

9.4 (cont.)

Allotment	Sensitive Species	Category	AMP
Blackhaa	Eriogonum ammophilum	I	-
Blind Valley	Eriogonum ammophilum	M	Existing
Breck's Knoll	Eriogonum ammophilum	I	-
Crystal Peak	Cryptantha compacta	I	-
Deseret	Astragalus uncialis	M	Existing
Fairview	Cryptantha compacta, Penstemon concinnus	I	-
Mormon Gap	Penstemon concinnus, Sphaeralcea caespitosa	I	-
Notch Peak	Primula domensis	I	-
Painted Potholes	Eriogonum ammophilum	I	-

New AMP's for all Category "I" allotments, and updates (as needed) of existing AMP's, are provided for under Alternatives B (page 145), C (page 146) and D (page 147). There are some differences between these Alternatives in terms of scheduling and priorities for AMP's. I would urge that Sensitive species maintenance be included as an objective in AMP's prepared or revised for the above allotments, plus any others that are found to contain Sensitive plants.

Once Sensitive-plant maintenance is included in certain AMP's, it will be necessary to ensure that management is meeting this objective. Inventory and monitoring will be needed to check for such compliance.

Monitoring of wildlife habitat, including T & E and Sensitive animal habitat, is called for in the draft RMP (page 38). Similar effort should be given to Sensitive plant species, based on the fact that the policy statement on page 38 of the draft RMP (and quoted on page 3 of this letter) gives equal weight to plants and animals.

Monitoring of Sensitive plant species, with special emphasis on effects of grazing, could be incorporated into the Monitoring Program outlined on page 34 of the draft RMP. Studies should be established to monitor Sensitive species populations in addition to riparian/aquatic habitat and key watershed areas. If these studies show that Sensitive species maintenance is not being achieved (an AMP objective), then management would need to be modified.

There are some differences among alternatives regarding protection of the Endangered and Sensitive animal species in the WSRA. These are best summarized on pages 152-153 and 178 of the draft RMP. A brief synopsis of these effects, along with recommendations, is as follows.

Under Alternative C, all Endangered and Sensitive species could be adversely affected. This would not meet the protective mandates of fed-

eral law and BLM policy as stated on page 38 of the draft RMP, and therefore Alternative C should not be implemented. No significant impact is anticipated to Sensitive or Endangered animals under Alternative A. While apparently not in violation of protective policies, Alternative A provides for no improvement or enhancement of rare animal species; we recommend against its implementation on these grounds. Alternative B or D would be most beneficial to the Endangered and Sensitive animals in the WSRA. We endorse Alternative D as a compromise among many resource uses that is projected to have a positive impact on rare species.

The Nature Conservancy is very concerned with the maintenance of rare plants and animals in the WSRA. Beyond my written comments in this part of the letter, the Conservancy is also willing to work actively with the Warm Springs Resource Area toward the goal of rare species conservation. Such cooperative work could include information-sharing and actual field assistance -- as you require and as our resources allow.

Natural Areas

The Conservancy's interest in protection of natural areas centers primarily on those sites with biotic themes. We are most interested in the proposed Wah Wah Mountain Research Natural Area (RNA). Pavant Butte also has values for enhancement of rare animal species. Although the other areas proposed for special designation have obvious geological, paleontological, historical, recreational and scenic values, my comments will not focus on them.

I strongly endorse the decision to designate the Wah Wah Mountain RNA as provided in the preferred Alternative. It is to your credit that you recognize and seek to protect the values of this area. It contains little-disturbed montane ecosystems typical of the eastern Great Basin -- features that are represented poorly or not at all in existing natural areas. The area has good potential for scientific research, especially ecology of pinon-juniper woodlands and dendrochronological applications of the bristlecone pine. To my knowledge, in the past year the BLM has received at least two letters of support for the Wah Wah Mountain RNA from interested scientists: Perry Plummer (USDA Forest Service-retired), and Dr. Ronald Lanner (Utah State University).

The draft RMP also does an excellent job of providing comprehensive protection in addition to the RNA title. Such protection includes mineral withdrawal (if not designated as wilderness by Congress), oil and gas leasing Category 3, ORV closure, no harvest of forest or woodland products, right-of-way avoidance area, and State-section acquisition. These measures are very important in order to maintain the integrity of the site for long-term scientific research.

(p. 6)

9.5 Existing grazing use does not appear to conflict with the RNA values of the Wah Wah Mountain site. Winter grazing season and rugged topography limit the grazing impacts. I would recommend that future management of the Pine Valley and Voorhees allotments continue to minimize whatever grazing impacts there might be in this area.

9.6 My only concern with how the draft RMP treats the proposed Wah Wah Mountain RNA has to do with recreation. The description on page 101 emphasizes the excellent recreation opportunities in the Wah Wah Range. The problem is that too much recreational use can adversely affect the values that RNA designation recognizes and protects. Especially vulnerable are the old bristlecone pines that grow along the cliff rims. These locations are sure to attract recreational use because of the spectacular vistas.

Though recreational use cannot be excluded, it would be unwise to encourage recreational use of the RNA tract proper; the Wah Wah Range has many equally good recreational opportunities outside of the RNA. The site-specific RNA management plan can provide for monitoring of recreational use, and can also implement restrictions if increased recreation starts to damage the site's natural and scientific values.

As mentioned several places in the draft RMP, The Nature Conservancy is willing to assist in developing or reviewing the management plan for the Wah Wah Mountain RNA after it is designated.

ACEC designation for Pavant Butte, in Alternatives B and D, has merit from several biotic standpoints. Designation would protect historic peregrine falcon nesting habitat. It would provide for reintroduction of this Endangered species. ACEC status would also help to limit adverse impacts to reproduction of ground-nesting ferruginous hawks, a Sensitive species. The Conservancy supports ACEC designation on these grounds.

* * *

Overall, Alternative D is a good compromise that we support as a Resource Management Plan, with just four additional recommendations:

1. Recognize that two Sensitive plant species, Eriogonum soredium and Lepidium ostleri, occur close to the WSRA boundary. These species should be on the WSRA watch-list when dealing with project clearances.

2. Treat the newly-described Primula domensis as a Sensitive species until further surveys can confirm or deny its rare status.

3. Monitor the effects of resource use, particularly grazing, on the Sensitive plants in the WSRA.

(p. 7)

Comment Letter 9

Mr. Wayne T. Kammerer
July 7, 1986
p. 7

4. Include Sensitive plant maintenance as an objective when preparing or revising AMP's on appropriate allotments.

In conclusion, thank you for considering these comments in developing the Warm Springs Resource Management Plan. I have appreciated the interest and support that I received when visiting the Area Office in Fillmore, and when talking with Area staff on other occasions. I look forward to building a good working relationship between The Nature Conservancy and the Warm Springs Resource Area.

Sincerely yours,

Joel S. Tuhy

Joel S. Tuhy
Utah Public Lands Coordinator

Response Letter 9

9.1 Because of the unlikelihood of Townsendia aprica occurring in the WSRA, it has been eliminated from the listing as an endangered plant that may occur in the resource area. The revised Table 3-3, Threatened, Endangered, and Sensitive Plant Species is displayed in Chapter 6 of this document.

9.2 These two plant species have been added to the revised Table 3-3 in Chapter 6 of this document.

9.3 Thank you for your information. Primula domensis has been added to Table 3-3 in Chapter 6 as a "New Species Not Yet Classified."

9.4 Very little study or information concerning present impacts to sensitive species is available. The indications that there would be no impact to sensitive plant species apply only to the proposed management actions for each alternative.

The BLM evaluates impacts to threatened and endangered (T&E) and sensitive species based on professional observations. When a project or development is proposed, Section 7 consultation with the U.S. Fish and Wildlife Service (FWS) and mitigation measures are initiated if a "may affect" determination is made.

There are no formal monitoring studies in the WSRA concerning impacts to T&E and sensitive plant species from the various resource uses. The BLM recognizes the need for the study of specific impacts, especially in regard to livestock grazing.

An inventory of the WSRA for T&E and sensitive species has been conducted by Welsh (1976).

There are opportunities for including T&E and sensitive plants under an inventory/monitoring program (see Chapter 2, Range Management section of this document. As Allotment Management Plans (AMPs) are developed on the 39 priority allotments, provisions and mitigation for T&E and sensitive species would be implemented where populations are known to exist. The existing populations of sensitive species in the nine allotments listed are, or would be covered, by an AMP. Additionally, as these and other allotments are monitored for grazing use adjustments, the key grazing study areas would be determined, and the presence of T&E and sensitive plant populations would be noted. Since monitoring studies include the evaluation of grazing use on key forage species, the use or impact (if any) will be recorded where T&E and sensitive species are present.

9.5 As you indicated, the two environmental limitations of topography and winter conditions generally preclude any major forage use by livestock in the Wah Wah Mountains. Both of these allotments have a high priority for the development/implementation of AMPs (Pine Valley second priority and Voorhees eleventh, respectively).

9.6 The description on Page 101 of the Draft RMP/EIS regarding the Wah Wah Mountains gives a brief overview of the unique recreation resource values present in the range. The potential for recreation activities is based on these resources. The RNA management plan would address recreation and other use parameters to ensure that the site's natural, educational, and scientific values would be preserved. Refer to Comment Response 7.6.

Comment Letter 10

SALT LAKE GROTTO

Chapter of the
NATIONAL SPELEOLOGICAL SOCIETY

4230 Sovereign Way
Salt Lake City, UT 84124
July 8, 1986

Mr. Wayne T. Kammerer
Bureau of Land Management
Richfield District Office
150 East 900 North
Richfield, UT 84701

Dear Mr. Kammerer

The members of the Salt Lake Grotto, National Speleological Society, have reviewed the Draft Environmental Impact Statement for the Warm Springs Resource Area and submit the following comments.

We support your designation of the Tabernacle Hill area as an Area of Critical Environmental Concern as proposed under Alternative D (page 54). Members of our group have long used this area, exploring and mapping the lava tubes. In recent years we have been harrassed, intimidated and denied access to the area by a mining claim holder even through he acknowledges his claims are non-patented. We are very interested in a resolution of this situation.

For the Salt Lake Grotto,

Dale J. Green

Dale J. Green
Chairman

Comment Letter 11

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION VIII
ONE DENVER PLACE — 999 18TH STREET — SUITE 1300
DENVER, COLORADO 80202-2413

JUL 07 1986

Ref: 8PM-EA

Mr. Wayne T. Kammerer
Bureau of Land Management
Richfield District Office
150 East 900 North
Richfield, Utah 84701

RE: Warm Springs Resource Area Draft
Resource Management Plan/
Environmental Impact Statement

Dear Mr. Kammerer:

Under the authority of the National Environmental Policy Act and Section 309 of the Clean Air Act the U.S. Environmental Protection Agency has completed its review of the Draft Resource Management Plan/Environmental Impact Statement for the Warm Springs Resource Area, Millard County, Utah. We

11.1 have two suggestions for improvement of the draft plan/EIS. The discussion of alternatives analyzed but eliminated should be expanded to include the reasoning behind the conclusion that elimination of grazing is not reasonable under the NEPA guidelines. Secondly, we request further discussion concerning

11.2 the effects of forage allocations on watersheds. It is concluded that forage allocations at grazing capacity would result in no significant watershed impacts (page 172, Alternative D). Is this true in the case of an allotment which is in an unstable watershed? The Resource Management Plan should reflect the forage allocation reductions necessary to improve watershed stability and grazing capacity.

The EPA has rated this Draft Resource Management Plan/EIS as LO (lack of objections). During our review we did not identify any potential environmental impacts requiring substantive changes in the preferred alternatives. If we can be of further assistance in the review of this plan please contact Dave Ruiter of my staff (FTS 564-1702).

Sincerely,

Dale Vodehnal

Dale Vodehnal, Chief
Environmental Assessment Branch

Response Letter 11

11.1 In January of 1986, Federal District Court Judge James M. Burns ruled in favor of the Federal government in an action filed by the Natural Resource Defense Council (NRDC) that challenged the validity of the Reno RMP/EIS. In his decision, Judge Burns addressed the concern that a No Grazing Alternative was not considered in the Reno plan. In this decision, he stated that the concern lacked merit. For better or for worse, production of forage for livestock use was an important priority in the overall resource picture of the area. Second, the mandate of Congress in PRIA was that livestock use was to continue as an important use of public lands; they should be managed to maximize productivity for livestock and other specified uses. Third, NEPA does not require examination of alternatives that are speculative, contrary to law, or economically catastrophic. He deemed that a No Grazing Alternative was not manifestly "reasonable" and that the court could not require its inclusion in the EIS based on the NEPA law.

Because of the importance of livestock grazing in the WSRA and the reasons presented in the Judge's decision, the No Grazing Alternative was not analyzed in the Draft RMP/EIS.

11.2 There is much literature on the effects of grazing on vegetation cover, infiltration rates, runoff, erosion, etc. Because of the complexities involved (e.g., soil genesis, slope, vegetation, climate, type and number of animals grazed, time of year grazed, distance from water and salt, history, etc.), general statements on effects to a watershed or extrapolation of data to another area are not always accurate. It is generally agreed that vegetation is the most important watershed management variable (Colman as cited in Smeins, 1975). Grazing intensity must be determined through use of utilization and plant physiological data of key plant species on a site. It cannot be determined through simple addition and subtraction of animal numbers (Gifford and Hawkins, 1978). Indicated capacity is the BLM's best estimate of available competitive forage. The RMP/EIS does show indicated capacity and changes necessary to reach indicated capacity (see Figure 2-2 and Appendix 1 of this document).

Comment Letter 12

c/o Dept. of Range Science
Utah State Univ.
Logan, UT 84322 - 5230

July 8, 1986

Mr. Wayne Kammerer
Richfield District Office
USDI Bureau of Land Management
150 E. 900 N.
Richfield, UT 84701

Dear Mr. Kammerer:

I understand that Richfield BLM, through an RMP for one of the West Desert resource areas, is considering the designation of several special areas. One of these, suggested by The Nature Conservancy, is a scientific natural area for a portion of the Wah Wah Mountains northwest of Milford. I very much support the administrative designation of noteworthy, relatively small areas of public land such as this.

Although I have not personally visited the proposed research natural area, I have read the report the Conservancy's representative wrote and I am quite familiar with the kinds of desert-mountain terrain and vegetation represented atop the Wah Wahs. Therefore, I feel confident in saying that an RNA here would be a valuable and easily justified addition to Utah's system of scientific reserves, both because it is so typical and it harbors remnant bristlecone pine of probable research interest.

There are many points in favor of the proposal. The lack of conflict with existing uses and with extraction of potential commodity resources is one very important one, and the total lack of locatable-mineral claims is rather remarkable. Another point is that the area is entirely public land, with a small (and, not too far in the future, quite feasible) addition of state land that could round out a distinct unit. Even if the Wah Wahs are not eventually classified as wilderness, an RNA here would very likely capture and protect the full natural diversity of the range, yet would involve far less land.

The proposed RNA is quite close to the long-established Desert Experimental Range, which is a Biosphere Reserve and has its "own" natural area. It would be quite fitting to designate a new RNA that takes in a sample of the higher elevations of the region. Researchers using the Wah Wahs could easily be based at the DER.

'(page 2)

Comment Letter 12

Mr. Wayne Kammerer
July 8, 1986
p. 2

My primary research interests are in the ecology and management of pinyon-juniper and other arid, wooded ecosystems. Places such as the Wah Wahs are potential study sites, which should be "banked" in anticipation of future needs. However, I think that tree-ring specialists will be before long supplying an appraisal of the paleoclimatic value of the bristlecone. The Wah Wahs are especially well-situated to fill a gap in the regional "network" of bristlecone stands from which tree-ring chronologies have been obtained, even if the trees here turn out to be comparatively young.

I hope that Richfield BLM will expedite designation of a Research Natural Area encompassing a portion of the Wah Wah Mountains. I think that members of Utah's research community are ready to assist with publicizing and protecting the area in the future.

Thank you for your consideration.

Sincerely,

Nicholas Van Pelt

Nicholas Van Pelt
(graduate student,
Range Ecology,
Utah State University)

Comment Letter 13

UTAH WILDLIFE FEDERATION
POST OFFICE BOX 15636
SALT LAKE CITY, UTAH 84115

JULY 9, 1986

SALT LAKE C TY, UT JUL 10 1986 USFS FIA

MR. WAYNE T. KAMMERER
BUREAU OF LAND MANAGEMENT
RICHFIELD DISTRICT OFFICE
150 EAST 900 NORTH
RICHFIELD, UTAH 84701

DEAR MR. KAMMERER:

THE UTAH WILDLIFE FEDERATION IS RESPONDING TO THE DRAFT WARM SPRINGS RESOURCE AREA RESOURCE MANAGEMENT PLAN. WE THANK YOU FOR THE OPPORTUNITY TO COMMENT ON THE WARM SPRINGS RESOURCE AREA INTENDED MANAGEMENT DIRECTION.

EVEN THOUGH ALTERNATIVE "D" REFLECTS SOME POSITIVE WILDLIFE BENEFIT, ALTERNATIVE "D", IN IT'S CURRENT CONTEXT, SHOULD BE MODIFIED AS INDICATED BELOW:

13.1 A. DESERT BIG HORN SHEEP (DBHS) AND ELK: ALTERNATIVE D'S OBJECTIVE IS TO INCREASE ANTELOPE AND MULE DEER POPULATIONS, BUT DOES NOT REFLECT IN THE SUMMARY (PAGE 3) MANAGEMENT INTENTIONS TO SUPPORT DBHS OR ELK. THIS REFLECTS A BLM POSITION OF DISCOURAGING THE EXPANSION OF THESE TWO SPECIES WITHIN THE RESOURCE AREA. IT APPEARS THAT THE RESOURCE AREA'S PRIMARY OBJECTIVE IS TO STRONGLY SUPPORT LIVESTOCK LEVELS AT THE INSISTANCE OF WELL DEFINED WILDLIFE POPULATION RESTRICTION AND, AS INDICATED, EXCLUSION OF CERTAIN SPECIES.

ALTERNATIVE D (PAGE 55) SPECIFIED DBHS REINTRODUCTION AREAS WOULD BE EVALUATED. MOUNTAINOUS AREAS SUCH AS THE WAH WAH, SAN FRANCISCO, CONFUSION AND CRICKET MOUNTAINS SHOULD MEET DBHS HABITAT REQUIREMENTS AND SHOULD NOW BE CONSIDERED REINTRODUCTION HABITAT. PAGE 101 IDENTIFIED UTAH DIVISION OF WILDLIFE RESOURCES INTENTION TO REESTABLISH DBHS IN THE WEST DESERT. UDWR DESIRED REINTRODUCTION, PLUS ALTERNATIVE B IDENTIFICATION OF POTENTIAL FOR THE RESOURCE AREA TO SUPPORT 150 DBHS (TABLE 2-11, PAGE 58) SHOULD JUSTIFY INCORPORATION OF A RESIDENT DBHS POPULATION. THIS SOUND MANAGEMENT OBJECTIVE SHOULD BE INCLUDED AS THE PREFERRED ALTERNATIVE IN THE FINAL. THIS MAY MEAN ELIMINATION OR CHANGE IN LIVESTOCK USE. FAILURE TO ALLOW THE DBHS TO REOCCUPY HISTORICAL HABITAT WOULD SIGNAL THE PUBLIC THAT THE DBHS HAS NO PLACE IN THE LIVESTOCK DOMINATED WEST DESERT ENVIRONMENT.

13.2 ADOPTION OF THE "NO ACTION" ELK MANAGEMENT PHILOSOPHY IGNORES SUPPORT NECESSARY TO GUARANTEE CONTINUED GROWTH OF ELK HERDS ON THE PAVANT PLATEAU AND NEEDLE MOUNTAINS (PAGE 49 AND 76). "NO ACTION" SELECTION APPARENTLY MEANS BLM HAS APPARENTLY ADOPTED A POSITION TO DISCOURAGE ELK EXPANSION. THIS DOES NOT CORRESPOND WITH ALTERNATIVE D STATEMENT (PAGE 150) THAT ALTERNATIVE D IS THE MOST FAVORABLE ALTERNATIVE FOR THE EXPANSION OF THE RA'S ELK POPULATION. BY NOT PROVIDING UPFRONT AUM'S TO SUPPORT THIS POSITION, THE RA APPEARS TO DOWN-PLAY THE ELK AS AN IMPORTANT BENEFACTOR IN OVERALL RANGE MANAGEMENT. ADOPTION OF ALTERNATIVE B IS JUSTIFIABLE RECOGNITION OF THE ELK AS A LEGITIMATE BENEFACTOR OF MULTIPLE

USE MANAGEMENT.

13.3 B. ANTELOPE: ANTELOPE MANAGEMENT AIMED AT EXPANDING THE CURRENT ANTELOPE POPULATION IS COMPLIMENTARY. ALTERNATIVE D REFLECTS A SUBSTANTIAL INCREASE IN POPULATION ABOVE THE CURRENT ESTIMATED 700 ANIMALS ROAMING THE RA. HOWEVER, THE PREFERRED ALTERNATIVE OBJECTIVE OF APPROXIMATELY 2,100 ANTELOPE MAY NOT BE ADEQUATE TO MEET FUTURE RECREATION NEEDS OF THE STATE. ON THE 39 ALLOTMENTS IDENTIFIED AS HAVING ANTELOPE MANAGEMENT POTENTIAL, THERE ARE OVER 28 THOUSAND AVERAGE ACTIVE USE AUM'S UTILIZED BY CATTLE AND NEARLY 58 THOUSAND AUM'S UTILIZED BY SHEEP. BASED ON THE LARGE NUMBER OF AUM'S ALLOCATED TO LIVESTOCK, IT APPEARS THAT BLM HAS PLACED A HIGHLY RESTRICTIVE FACTOR ON ANTELOPE POPULATIONS IN ORDER TO MEET LIVESTOCK GRAZING NEEDS. HOW DOES BLM'S ANTELOPE POPULATION GOAL COMPARE TO UDWR OBJECTIVES?

ALTERNATIVE B ANTELOPE STOCKING LEVEL OF 3,823 AUM'S TO SUPPORT 2,994 ANTELOPE (APPENDIX 5, PAGE 227) APPEARS TO BE REASONABLE AND SHOULD BE THE DESIRED DIRECTION OF THE RMP DURING THIS PLANNING PERIOD. EVEN THEN, ALTERNATIVE B MAY ONLY BE A MINIMUM SUSTAINABLE ANTELOPE POPULATION AND NOT REFLECT ANTELOPE HABITAT POTENTIAL. TABLE 2-11 IDENTIFIED ANTELOPE POPULATION POTENTIAL IS BASED ON IMPROVING HABITAT. LIVESTOCK IS CLEARLY THE RESTRICTIVE ELEMENT RESTRAINING ANTELOPE HERD EXPANSION AND NOT ANTELOPE HABITAT AVAILABILITY. ANTELOPE POPULATION LEVEL ON PUBLIC LANDS SHOULD BE ALLOWED TO EXPAND TO MEET THE RECREATION OPPORTUNITY SPECTRUM. CURRENTLY IN UTAH, THIS IS NOT THE CASE.

13.4 C. MULE DEER: ALTERNATIVE D MANAGEMENT OBJECTIVE FOR MULE DEER APPEARS TO BE REASONABLE. HOW DO OBJECTIVES COMPARE WITH UDWR OBJECTIVES? THE UNLEASED 6-MILE TRACT WHICH CONTAINS 240 ACRES OF CRITICAL WINTER HABITAT (PAGE 76) SHOULD REMAIN UNLEASED AND, IF NECESSARY, BE FENCED TO ALLOW ONLY NECESSARY HIGH RESTRICTIVE LIVESTOCK GRAZING TO MAINTAIN DEER BROWSE AS SPECIFIED IN ALTERNATIVE B (PAGE 49).

FIGURE 3-6 (PAGE 83) IDENTIFIED WEST DESERT YEARLONG MULE DEER HABITAT WITH NO IDENTIFICATION OF CRITICAL WINTER RANGE. THERE IS REASON TO SUSPECT A DEER HERD THAT SUMMERS AROUND SHEEPROCK MOUNTAIN (UDWR UNIT 13) WITHIN THE HOUSE RANGE RA, MIGRATES TO THE EAST SIDE OF HOWELL PEAK (UDWR UNIT 62B). HAS A STUDY BEEN CONDUCTED TO DETERMINE THE EXTENT OF THIS TRADITIONAL MIGRATION AND WINTER AREA? IF SO, WHY WAS THE HOWELL PEAK AREA NOT INDICATED AS CRITICAL WINTER RANGE FOR THE SHEEPROCK MOUNTAIN MULE DEER HERD?

13.5 D. RAPTORS: ADOPTION OF ALTERNATIVE B AS THE PREFERRED ALTERNATIVE SEEMS TO BE A REASONABLE APPROACH TO RAPTOR MANAGEMENT FOR IDENTIFIED CRUCIAL RAPTOR NESTING AREAS; HOWEVER, THE 9.25 MILE RADIUS FOR THE PROTECTION OF ACTIVE NESTING SITES SHOULD BE EXPANDED TO INCLUDE THE TOTAL RA. THIS RAPTOR NESTING PROTECTION EXPANSION RECOMMENDATION IS ESPECIALLY CRITICAL AT A TIME WHEN IT APPEARS A SUBSTANTIAL NUMBER OF SUSPECTED RAPTOR HABITAT AND NESTING AREAS ARE NOT INCLUDED IN THE CRUCIAL RAPTOR NESTING AREA DESIGNATION. FOR EXAMPLE, WAH WAH MOUNTAINS, SOUTHERN PORTION OF THE CONFUSION RANGE, AND HOUSE RANGE WERE EXCLUDED. PROTECTION OF ALL NESTING AREAS IS EXTREMELY IMPORTANT UNTIL SUCH TIME AS IT IS DETERMINED RAPTOR POPULATIONS ARE NOT IN DECLINE. THE DECLINE OF RAPTOR POPULATIONS WAS THE TOPIC OF A RECENT WESTERN RAPTOR MANAGEMENT SYMPOSIUM. OF SPECIAL CONCERN AT THE SYMPOSIUM WAS THE UNEXPLAINABLE DECLINE IN SWAINSEN'S AND FERRUGINOUS HAWK POPULATIONS.

13.6 ON PAGE 88, THE SWAINSON'S HAWK WAS IDENTIFIED AS A TRANSIT. IN UTAH BIRDS, GUIDE CHECK-LIST AND OCCURRENCE CHARTS, THE SWAINSON'S IS LISTED AS A COMMON

Comment Letter 13

13.6 (cont.) SUMMER RESIDENT RESIDING IN UTAH FROM MARCH 22 THROUGH NOVEMBER 10. IT IS REASONABLE TO SPECULATE THAT NESTING SITES FOR THIS SPECIES EXIST WITHIN THE RA. IT APPEARS THAT A GREATER EMPHYSIS IS NEEDED TO DETERMINE THE EXTENT OF THE SWAINSON'S NESTING WITHIN THE RA, RATHER THAN DRAFT RMP IDENTIFICATION AS TRANSIT. THIS IMPLIES NO NESTING OCCURS. NESTING SITES HAVE BEEN OBSERVED IN THE FILLMORE AREA.

13.7 E.BALD EAGLE: PAGE 49 IDENTIFIED NO BALD EAGLE CRITICAL HABITAT HAD BEEN DETERMINED. BECAUSE BALD EAGLE WINTER CONCENTRATIONS HAVE NOT BEEN IDENTIFIED, NO RANGE TREATMENTS SHOULD BE INITIATED UNTIL THE EFFECT SUCH TREATMENT WOULD HAVE ON BALD EAGLES PREY SPECIES IS FULLY DETERMINED. TREATMENTS THAT EXPAND THE MONCULTURE ENVIRONMENT BEYOND WHAT NOW EXISTS ON A LARGE PORTION OF THE WEST DESERT SHOULD NOT BE ALLOWED. THIS COULD HAVE A DRASTIC EFFECT ON THE BALD EAGLE AND COULD POSSIBLY BE ONE OF THE CONTRIBUTING FACTORS LEADING TO THE SUSPECTED DECLINE OF OTHER RAPTORS. WINTER SITES SHOULD BE RESTRICTED FROM LAND USE DURING PERIODS OF BALD EAGLE OCCUPANCY. ISN'T PREUSS LAKE A BALD EAGLE WINTER CONCENTRATION AREA? IF SO, WHY WASN'T PREUSS LAKE IDENTIFIED AS A BALD EAGLE CRITICAL WINTER AREA? CATAGORY 2 OIL AND GAS LEASING SHOULD SPECIFY SPECIFICALLY "NO OCCUPANCY" DURING HIGH WINTER BALD EAGLE CONCENTRATION PERIODS.

13.8 F. RIPARIAN AND WETLANDS: PAGE 38 INDICATES THE RIPARIAN AND WETLAND AREA MANAGEMENT DIRECTION. ALTERNATIVE D DOES NOT ADOPT THE STRINGENT REQUIREMENTS NECESSARY TO CURB RIPARIAN AND WETLAND ABUSE, ESPECIALLY RELATED TO LIVESTOCK GRAZING. ALTERNATIVE B CATEGORY 3 OIL AND GAS AND GEOTHERMAL LEASING STIPULATIONS, ORV CLOSURE REQUIREMENTS, THE SUSPENSION OF SPRING AND SUMMER GRAZING, PLUS AN ALTERNATE YEAR WINTER GRAZING PROGRAM, AROUND LAKE CREEK, PRUESS LAKE AND ON THE SEVIER RIVER IN AREAS WHERE POTENTIAL PERMANENT RIPARIAN HABITAT EXISTS SHOULD BE INCULDED UNDER THE PREFERRED ALTERNATIVE. THE IMPORTANCE OF RIPARIAN HABITAT CAN NOT BE OVER EMPHYSIZED, MAKING THESE ADDITIONAL MANAGEMENT ADJUSTMENTS ESSENTIAL. RIPARIAN ZONES AND WETLAND HABITAT REPRESENT THE MOST THREATENED HABITAT ON BLM LANDS AND FAILURE OF THE RA TO IMPLEMENT THE MOST STRINGENT MEASURES TO PRESERVE THE LAST VESTAGES OF THIS HABITAT WOULD REFLECT BLM'S CONTINUED NEGLECT AND TOTAL DISREGARD FOR THESE AREAS. ADOPTION OF ALTERNATIVE B, PLUS ALTERNATE YEAR WINTER GRAZING TO THE PREFERRED ALTERNATIVE WOULD ONLY BE A BEGINNING TO RIPARIAN ZONE AND WETLAND HABITAT PRESERVATION AND REHABILITATION.

LIVESTOCK GRAZING HAS AND WILL CONTINUE TO HAVE THE MOST DETRIMENTAL IMPACT UNLESS STEPS ADDRESSED ARE IMPLEMENTED. THE ACCEPTANCE OF FAIR TO POOR HABITAT CONDITIONS TO SATISFY LIVESTOCK INTERESTS SHOULD BE CONSIDERED AN UNACCEPTABLE MANAGEMENT DIRECTION.

13.9 THE UTAH WILDLIFE FEDERATION WOULD LIKE MORE INFORMATION REGARDING DESIGNATION OF PAVANT BUTTE ACEC, TABERNACLE HILL AND CINDER VOLCANIC FIELD ACEC, NOTCH PEAK AS A NATIONAL NATURAL LANDMARK, FOSSIL MOUNTAIN AS A HISTORIC SITE AND WAH WAH MOUNTAIN RESEARCH NATURAL AREA.

IN CONCLUSION, NO INCREASE ADJUSTMENT IN LIVESTOCK AUM'S SHOULD BE ALLOWED OR JUSTIFIED UNLESS WILDLIFE POPULATIONS ARE WITHIN UTAH DIVISION OF WILDLIFE RESOURCES PROJECTED LEVELS, PUBLIC DEMANDS AND NOT IN A STATE OF DECLINE OR IN A STATE OF POPULATION GROWTH STAGNATION.

Comment Letter 13

MR. WAYNE T. KAMMERER
JULY 9, 1986
PAGE -4-

THANKS AGAIN FOR THE OPPORTUNITY TO RESPOND. PLEASE FORWARD COPY OF FINAL WARM SPRINGS RMP WHEN AVAILABLE.

CORDIALLY,

UTAH WILDLIFE FEDERATION

RANDY T. NIELSEN, CHAIRMAN
PUBLIC LANDS COMMITTEE

PREPARED BY L. CORDELL PETERSON, PUBLIC LANDS COMMITTEE

CC: JAKE GARN, ORRIN HATCH, JAMES HANSON, DAVID MONSON, HOWARD NIELSEN

Response Letter 13

13.1 The mountains of the West Desert have most of attributes necessary for good desert bighorn sheep habitat; however, these mountains have almost no natural water sources. Without an intensive water development program, a transplant of desert bighorn sheep could fail. Because these animals are valuable and difficult to obtain, habitat conditions must be fully suitable before a transplant can be made. A detailed inventory of potential habitat is needed to determine limiting factors and habitat improvements. The numbers used in Alternative B are based on an estimated carrying capacity, assume extensive installation of water developments (see Appendix 9 of the Draft RMP/EIS), and would require correction of other habitat limitations prior to release of any bighorn sheep. The potential for desert bighorn sheep reintroduction will be addressed in the Sevier Lake HMP.

The proposed plan, in conformance with legislated BLM management mandates, is a balanced, multiple-use plan. It was prepared in accordance with Federal regulations (see Chapter 1, Purpose and Need section of the Draft RMP/EIS). Under this plan, resident population numbers of antelope would increase 165 percent and winter mule deer by 75 percent. Management goals would be to improve habitat conditions (see Chapter 2, Wildlife, Goals and Objectives in this document).

13.2 The elk herd on the Pavant Plateau has not been making substantial use of BLM lands, which are almost entirely outside its habitat (see Figure 2-5). An increase in the herd would not, therefore, be limited by any actions proposed in this plan.

Alternative D is the most favorable to elk in the Needle Mountains. There is almost no forage competition between elk and livestock under current conditions or in the proposed actions. The elk herd will continue to expand in the WSRA if the the habitat is suitable for their needs. When UDWR develops an elk herd management plan for this herd, defines areas of use, and forage needs, BLM will be able to make suitable forage allocations.

13.3 The objective antelope numbers and estimated habitat carrying capacities were developed by UDWR in coordination with the BLM. Vegetation carrying capacities were developed from studies conducted at the Desert Experimental Range. These were the basis for the potential and most of the objective population estimates. Extensive water developments (26) would be needed to meet the objective population. The higher potential numbers were based on the assumption that large acreages of marginal habitat, mostly shadscale, would support greater populations without other desirable vegetation types.

In summary, the populations presented in the proposed plan are UDWR objective populations. Also, see Chapter 2, Wildlife, Goals and Objectives, and Comment Response 11.1.

13.4 Objective mule deer populations were developed jointly with UDWR, based on the best available information.

Specific management opportunities for the 6-mile tract, including transfer to UDWR, will be considered again when an HMP is developed addressing specific actions on the Pavant foothill critical winter ranges. Fencing will be reconsidered at that time.

Critical winter ranges are designated by UDWR, not BLM. UDWR has not designated any within the West Desert portion of the WSRA.

13.5 All raptor nests can be protected through stipulations on activities detrimental to raptor nesting success. In the Draft RMP/EIS, special designations were proposed for areas where ground nesters are especially vulnerable. Those areas are expanded in the Proposed RMP/Final EIS to include the Burbank Hills canyon area, where substantial nesting occurs and terrain allows potential for disturbance (see Figure 2-5). The BLM monitoring plan for nesting raptors will continue to expand our knowledge of nesting habitats. If other crucial raptor nesting concentration areas are located in the future, additional areas can be designated by RMP amendments.

13.6 The identification of "transit" is based on information currently available to BLM. The BLM suspects Swainson's hawk nests may occur in the WSRA, although none have been documented. We would appreciate receiving any data on Swainson's hawk nest sites on public land in the WSRA. This data would be included in planning updates, and used to insure that any action initiated on public lands would not jeopardize any raptor or its habitat.

13.7 There is no Federally designated critical habitat for bald eagles in the WSRA. Range treatment projects (e.g., chaining and reseeding and prescribed burning) could positively benefit bald eagle prey species such as black-tailed jackrabbits. They would benefit from these areas being reseeded with a variety of browse species (e.g., cliffrose, burnett, and bitterbrush) and cool season grasses and forbs. Prior to any range treatments, impacts to bald eagles would be assessed. Five years of the Mid-winter Bald Eagle Survey and other surveys have not identified any bald eagle concentration areas in the WSRA. Pruess Lake has not been identified as a bald eagle winter concentration area. We would appreciate any information you have on wintering populations.

We plan to delineate essential bald eagle winter habitat and have been monitoring winter use for several years for that purpose. However, at this time, use appears highly dispersed without concentrations occurring. If the BLM identified high concentration areas in the future, oil and gas leasing categories could be changed through plan amendment.

Response Letter 13

13.8 As stated in Table 2-11, Page 58 of the Draft RMP/EIS, the objective for riparian habitat under Alternative D is to improve the habitat condition. This is the same as Alternative B. Measures such as fencing and revegetating to improve riparian habitat would be identified in the riparian area HMP (see Figure 2-7). Improvements to this habitat that are developed following inventory (see Chapter 2, Wildlife section of this document) would not be limited to these measures alone; changes in season of use and/or rest rotation to improve riparian habitat condition could also be considered in the HMP.

13.9 See Chapter 2, Lands, Special Management Designations, and the Glossary of this document. Following approval, implementation of the plan would include development of management plans for each special management designation area. Those plans would follow the guidelines established in the RMP.

Comment Letter 14

STATE OF UTAH
DEPARTMENT OF HEALTH

NORMAN H. BANGERTER, GOVERNOR

SUZANNE DANDOY, M.D., M.P.H., EXECUTIVE DIRECTOR

July 10, 1986

Mr. Donald L. Pendleton, District Manager
Attn: Mr. Wayne T. Kammerer
Bureau of Land Management
Richfield District Office
150 East 900 North
Richfield, Utah 84701

JUL 10 1986

RE: Draft Resource Management Plan and Environmental Impact Statement for the Warm Springs Resource Area, Millard County, Utah

Dear Mr. Pendleton:

Thank you for sending us a review copy of the above referenced Management Plan and EIS. You have prepared a thorough and interesting document. Your treatment of watershed and water quality values were, of course, of most interest to us.

Since the mission of our agency is to encourage the yield of the highest quality of water possible from each watershed area, after considering the capabilities of the watershed and the needs of the people, we have classified the following Warm Springs Resources Management Area streams as shown on pages 20 and 22 of Part II of our Regulations (Attached).

Our agency has a regular water quality sampling and monitoring program. That program enables us to determine if the quality of the water at different sampling sites is achieving the standards for which they have been classified. Because of limited monitoring resources, we have no stream sampling sites in your Warm Springs Resource Management Area. We
14.1 | therefore assume that the quality of the water in the designated streams is meeting water quality standards unless otherwise informed.

If you have any such water quality monitoring program for the streams, springs, or other water sources in the Warm Springs Resources Management Area and would be willing to have them entered into our computer storage and retreival system (STORET) please let us know. Our specific comments regarding you WSRA EIS are enclosed separately.

Sincerely,

Calvin K. Sudweeks, Director
Bureau of Water Pollution Control

RBM/jm
2780

KENNETH L. ALKEMA, DIRECTOR • DIVISION OF ENVIRONMENTAL HEALTH

3180 STATE OFFICE BUILDING • P.O. BOX 45500 • SALT LAKE CITY, UTAH 84145-0500 • (801) 533-6121
AN EQUAL OPPORTUNITY EMPLOYER

Specific comments by Utah State Bureau of Water Pollution Control on USDI BLM Draft " Warm Springs Resource Area, Resource Management Plan, Environmental Impact Statement."

Four Alternatives were analyzed:

(A) No Action- Continuation of Existing Management (and levels of resource uses);

(B) Protection- Preservation of Natural Resource Values;

(C) Production- Increased Consumptive Use and Commodity Production;

(D) Preferred Alternative (a composite of the above alternatives).

Your conclusion on page 162 states that: "Livestock overutilization of forage on portions of two allotments under Alternative A and 32 allotments under Alternative C would adversely affect watershed and water quality over the long term." "No long-term overutilization would be expected under alternatives B or D. Proposed watershed protection measures (vegetation treatments, gully plugs, water bars, erosion monitoring, etc.) would provide beneficial impacts to watersheds." "The alternative most beneficial to watershed values would be Alternative B, followed by D, A, and C."

On page 172 it is stated that: Alternative C, which permits livestock grazing at active preference levels, "would cause overutilization of forage on portions of 32 allotments in the long term (see Vegetation section). Increased runoff and sediment yield on the portions of these allotments where severe overutilization occurred would impact water quality in local streams, drainage ways, and reservoirs, as described under Alternative A. Twenty-nine of these allotments shown on Table 4-1 contain major aquifer recharge areas; Knoll Springs, Whiskey Creek and Ephraim - Meadow do not. Overutilization could decrease recharge to the aquifers and lessen the ability of the watershed to function as a recharge area in the 29 allotments."

We therefore concur with your preferred alternative which is a "mix" of B and C. We strongly recommend adequate monitoring of the resource to assure that "carrying capacities" are not exceeded.

ADDENDUM:

14.2 | What is meant by: recogization on p. 112 - column 2, line 2-misspelled? Should "wind-driving" be "wind-driven" p. 112 column 2 line 18?

2780

Response Letter 14

14.1 BLM does not sample any streams in the resource area. However, if a water quality problem is discovered or reported (as has occurred), this information is relayed to your agency. Annually, the BLM takes samples from ten wells and springs within the resource area. The goal is to sample all wells and springs on a rotating basis. These data are available for your use.

14.2 You are correct. The words should be "recognition" and "wind driven."

Comment Letter 15

UTAH WILDLIFE LEADERSHIP COUNCIL

July 9, 1986

Mr. Wayne T. Kammerer
BLM - Richfield District Office
150 East 900 North
Richfield, Utah 84701

Dear Mr. Kammerer:

The Utah Wildlife Leadership Council wishes to comment on the Warm Springs RMP & EIS.

This coalition presently has the following groups responding jointly to this plan:

Utah Sportsman's Alliance, Utah Bowmen's Association, Utah Coalition of Muzzleloaders, Mountain Men of The Wasatch, Rocky Mountain Fur Company, Utah Shooting Sports Council (local NRA affiliate), Utah Predator Callers Association, Utah Hunters Federation

The alternative that has the most potential for increasing wildlife and recreation opportunities would be alternative "B", followed by alternative "D". Alternative D, as a mixed value alternative, should have more wildlife related values to keep up with the demands being placed on these resources.

15.1 We are tired of the many consumptive users like archers, muzzleloaders and rifle hunters, having to fight each other for their small portion of the resource, when the real problems are the BLM's policies that do not allow wildlife numbers to meet the demands , even though it is continuously shown that these uses bring more economic benefits per AUM used than livestock use of those same AUM's . No upward adjustment of AUM's for livestock should be allowed; in fact, it is time for drastic reductions in order to meet public demands for more wildlife. Utah DWR projections of wildlife numbers should be the minimum standards for this BLM plan.

The preferred alternative, alternative D, does too little to protect wildlife values such as riparian zones, springs and seeps, included. These areas need protection, not only from livestock, but also wild horses, where they are a factor. There should be more attention to making these areas habitable for all wildlife dependant upon this fragile environment.

There should be more attention given to allowing expansion of species like the sage grouse and chuckar. also, raptors are dependant upon prey species like rabbits and mice that are dependant upon habitat that is being adverseley affected by overgrazing, these raptors include the bald eagle and various owls and hawks. The federal government gives these species special protection, why does the BLM allow practices that are detrimental to these species? This should be more thoroughly addressed.

Comment Letter 15

Mr. Wayne T. Kammerer
July 9, 1986
Page 2

15.2 This plan should clearly address the problem of lack of adequate numbers of antelope, elk and desert big horn sheep. We concur with management objectives of our game agency, the Utah DWR, and we support any transplants they have for any species, especially Desert Big Horn Sheep and elk.

Elk numbers need to drastically increase, particularly on the Pavant Plateau and the Needle Mountains.

Thank you.

Steven Johnson 317 C STREET SLC UT 84103

Steven Johnson
For The Utah Wildlife Leadership Council

Response Letter 15

15.1 *UDWR objective populations are proposed in this plan. We worked* closely with UDWR in development of the proposed plan and elements of the plan reflect their management objectives. Those objectives are based on habitat potential with improvement and development of 26 new water sources.

Except for Pruess Lake, riparian areas within the WSRA have not been adequately inventoried to make specific management proposals. Our proposed plan is to inventory all riparian areas and to develop and implement an HMP specifically for riparian areas. This HMP would address specific values and potentials for each riparian area and would propose needed management to protect and enhance those values. Specific actions considered would include fencing to exclude livestock use, methods of grazing use that would enhance the riparian condition, and other necessary protective or enhancing actions.

Habitat development for chukar and sage grouse would be dependent on funding for wildlife projects. Under current funding limitations, most available development funds would go toward pronghorn antelope, mule deer, or T&E species projects. Upland game bird management, under current funding, would be primarily for protection purposes.

Under this proposed plan, any current overgrazing would be corrected through livestock use adjustments. Therefore, the prey base for raptors would improve through the actions proposed in this plan.

15.2 The plan allows for an increase of pronghorn antelope from 701 to 1,861, a 165-percent increase. That objective would be reached if future BLM funding allowed sufficient water developments (26) and vegetation responds to improved management.

The elk herd on the Pavant Plateau has not been making substantial use of BLM lands. An increase in that herd would not be limited by any actions proposed in this Final RMP/EIS.

The Needle Range elk herd is expanding its range onto BLM lands within the WSRA. UDWR objectives for this herd have not been finalized and, therefore, are not addressed in the plan. Proposed management would allow, not prevent, expansion of this herd. Use areas and forage use will be monitored and recommendations formulated for future management.

*Pages 55 and 88 of the Draft RMP/EIS summarize our plans regard*ing desert bighorn sheep. At present, the lack of dependable water in otherwise suitable desert bighorn sheep habitat would severely jeopardize any attempts for reintroduction.

8552 Baron Dr
Knoxville TN 37923
July 6, 1986

Mr Wayne T. Hammaren
Bureau of Land Management
Richfield District Office
150 East 900 North
Richfield, Utah 84701

Dear Sir,

I have reviewed the draft Warm Springs Resource Area Resource Management Plan and Environmental Impact Statement. It is clear that you and the Interdisciplinary Team have put a considerable amount of work into the RMP/EIS. I appreciate your efforts. I have two types of comments, my preference on how the Warm Springs Resource Area be managed and suggestions for improving the RMP/EIS.

I prefer that the overly heavy emphasis puts on livestock grazing be reconsidered. I live in Tennessee so my concerns will naturally be considered in a different light than those of people who live in the ~~RMP~~ WSRA. It is understandable to treat my concerns with less weight than those of local people, but I would remind you that BLM lands are held in trust for all Americans not just those with the good fortune to live nearby. The RMP should give stronger consideration to wildlife.

16.1 The EIS is deficient in that it does not consider an adequate range of alternatives. One alternative which should have been included is no livestock grazing with elimination of feral (wild) horses While this alternative

16.1 (cont.) is extremely unlikely to be chosen as the preferred alternative it would serve a useful purpose. By examining the response of the vegetation, wildlife and riparian areas to elimination of ~~these~~ livestock and horse grazing, the full impacts of the other alternatives would become more clear.

Another alternative which should be included would be "Maximize production of wildlife and sensitive species." This alternative would be similar to the above alternative suggested above in that wildlife and sensitive species would benefit but this alternative would allow grazing by livestock and/or horses when they didn't significantly reduce (say no more than 10% reduction) wildlife and sensitive species. Including these alternatives would clearly show the true magnitude of the environmental impact of the preferred alternative on the WSRA. I believe the ~~NEPA~~ law requires consideration of a range of alternatives which will show the environmental effects of the proposed action.

16.2 The RMP is too vague. The expected results of the alternatives are summarized in Summary Table 1 and Table 2-11. However the RMP does not spell out the management in sufficient detail to assure that actual effects will be any different than the no action alternative.

16.3 A serious management plan would have definite goals and definitive actions to achieve those goals. For instance Table 2-11 ~~says~~ & Appendix S says the number of antelope would increase from about 700 animals now to over 1800. If this increase

Comment Letter 16

16.3 (cont.) does not materialize, what actions will be taken to achieve the desired number of antelope. The RMP should spell out in concise terms what the management objectives are and what actions will be taken to assure accomplishment of those objectives. As it stands, this RMP is extremely weak.

Thank you for considering my concerns.

Sincerely,

Lance McCall

Lance McCall

Response Letter 16

16.1 As shown on Page 3 of the Summary, described in Chapter 2, and depicted in Appendix 1 of the Draft RMP/EIS, initial forage allocations for livestock range from a low of 87,733 AUMs in Alternative A to a high of 150,589 AUMs in Alternative C. This represents a reasonable and adequate array of forage allocation levels to meet both the criteria outlined in NEPA and the BLM planning regulations/guidelines. Eliminating livestock use from public lands in the WSRA is not a viable or reasonable alternative nor is it required for analysis purposes (see Comment Response 11.1). Additionally, the BLM is mandated under the Wild Free-Roaming Horse and Burro Act of 1971 to manage and ensure the protection of wild (ferral) horses on public rangelands.

Maximizing wildlife production was proposed and evaluated under Alternative B. Many of those proposals were incorporated in the Proposed RMP. The protection of sensitive plant and animal species, in accordance with applicable legislation, regulations, and policies, is proposed for all alternatives.

16.2 The WSRA's Proposed RMP focuses on the specific resource problems, concerns, and needs identified during the public scoping process. As shown in Summary Table 1 of the Draft RMP/EIS, each resource discipline has outlined various levels of production, protection, and improvement opportunities within the capabilities of that resource. Specific levels of forage production/use for all major grazing animals are addressed, as are range, wildlife habitat, and watershed improvement opportunities. Various oil and gas and ORV use restrictions are identified, as well as areas for special management designation, fire suppression, and increasing management intensity on grazing allotments.

The specific management resource goals or objectives have been further defined in the proposed plan (see Chapter 2 of this document).

The RPS and subsequent activity plans will further define allotment-specific actions.

16.3 The proposed plan outlines in more detail the definitive goals/objectives for each resource (see Chapter 2 of this document).

HMPs would be developed with site-specific habitat improvements (see Figure 2-3). These improvements would allow the antelope numbers to increase from current to objective numbers. These numbers were developed jointly by UDWR and BLM.

It is BLM's responsibility to manage and ensure habitat for all big game species found on public lands. Control of population numbers is the responsibility of UDWR. Yearly populations will vary due to weather, forage, water availability, and hunt success. This RMP outlines general goals and objectives. Specific planned actions to achieve these goals would be further formulated in the HMPs.

Payson, Ut.
10 July, 1986

Mr. Wayne T. Kammon
B.L.M.
Richfield, Ut.
150 East 900 North 84701

Dear Sir:

In response to the H.B.R.A. and the Warm Springs B.A.E.I.S. statement I submit the following statement.

According to your records I have 4906 Aums on the Rosaibed Allotment in which I have used 4239 - I feel that by my decision in acreage that my Carrying Capacity be maintained at that number and intend to use the difference of 667 Aums in either sheep or cattle when my sons become available as partners in my livestock operation.

17.1 In regards to the Seely Allotment there is an anticipated Reduction of 13%. I have studied the actual use and the new seedlings as well as plant growth in our actual use survey and find no reason for the reduction using actual use data and on the ground observation

17.1 (cont.) It is my opinion that no change be made on either the Seely or Rosebed Allotments.

In regards to the Boulter Allotment there should be some ground and spraying work done but the Aums remain the same.

Inasmuch as the Sheep and Shearing Allotments are Community Allotments this letter will serve as a reason for further planning.

Sincerely yours,
Vern Dickson

P.S. Thank you for sending me the dept statements

Response Letter 17

17.1 The Seely Allotment currently has an active grazing preference (maximum allowable use) of 4,635 AUMs. Average actual use (from 1980-85) has averaged 3,116 AUMs. The initial indicated capacity, based on 3 years of monitoring studies, is 2,744 AUMs, approximately 33 percent below preference and 12 percent below average actual use.

Additional monitoring will be required before making an allocation adjustment. The Seely Allotment is scheduled for 2 more years of data collection before adjustments are proposed. You and other permittees will be kept informed of monitoring results informally by the WSRA Area Manager and formally by the Rangeland Program Summary and periodic updates, following approval and implementation of the RMP.

Comment Letter 18

NORMAN H. BANGERTER
GOVERNOR

STATE OF UTAH
OFFICE OF THE GOVERNOR
SALT LAKE CITY
84114

July 11, 1986

Mr. Wayne T. Kammerer
Bureau of Land Management
Richfield District Office
150 East 900 North
Richfield, Utah 84701

Dear Mr. Kammerer:

The Resource Development Coordinating Committee has completed its review of the Draft Warm Springs Resource Area Resource Management Plan and Environmental Impact Statement. The Committee found the document to be very readable and descriptive of the planning process and associated requirements. Also of special note was the focus on special resource designations such as ACECs and RNAs. The State is supportive of BLM's efforts to identify and manage resources of unique value.

Based on the information in the Plan, the State's preference is for implementation of Alternative D which represents a balance of resource uses and is identified as the preferred alternative by BLM. Specific comments and recommendations regarding the Plan are attached. I hope you find the information useful in the development of your final plan.

Sincerely,

Norman H. Bangerter
Governor

NHB/ras

COMMENTS OF THE STATE OF UTAH ON THE
DRAFT WARM SPRINGS RESOURCE AREA RESOURCE MANAGEMENT PLAN
AND ENVIRONMENTAL IMPACT STATEMENT

I. Summary Comments

18.1 Page 4, Table 1, Recreation: The SRMAs figures for Alternative C and D are reversed. Page 164 indicates that 6 areas would receive special management designations under Alternative B, Table 1 states 5 would receive designation. The inconsistency needs to be corrected.

18.2 Page 3, Table 1, Forage Allocation, Wild Horses: Under Alternative D, wild horses are allocated a total of 1,680 AUMs. The text on page 56 states that "total forage allocation to wild horses would be 1,040 AUMs..." The inconsistency needs to be corrected.

II. Chapter II Comments

18.3 Page 40, Table 2-2: Table 2-2 does not list adequate AUMs for antelope. It was jointly agreed by the Utah Division of Wildlife Resources (DWR) and BLM WSRA personnel that there are currently 701 antelope in the resource area. That many antelope year long will require 895 AUMs.

Page 43, Table 2-4: The total use AUMs in Table 2-4 for antelope do not agree with those listed in Appendix 5 under Alternative B, respectively 3,318 vs. 3,823.

Page 43, Rights-of-Way Corridors: The State supports the designation of corridors as an excellent pre-planning tool to assist developers in locating facilities away from areas of concern to areas where development is most appropriate and efficient. Designation of corridors in the Warm Springs Resource Area will also assist in bringing to fruition a statewide utility corridor map that coordinates similar efforts on Forest Service and other BLM lands.

18.4 Page 50, Recreation Management: Under Alternative B, Tabernacle Hill, Pavant Butte, Fossil Mountain, Notch Peak and the Wah Wah Mountains would be managed as SRMAs. Page 48 identifies other special designation such as ACEC, National Natural Landmark and Historic site that would also apply to these areas. How do these designations differ from SRMAs? Are multiple designations necessary? The same comment applies to Chapter 3 in the the discussions of Recreation Management Areas on page 96 and Special Designations on page 112.

18.5 Page 53, Table 2-9: The total use AUMs in Table 2-9 do not agree with those listed in Appendix 5 under Alternative D, respectively 2,106 vs. 2,381.

Page 54, Special Management Designation: The State supports designation of each of the special management areas identified. The State also commends the BLM for its efforts to identify critical areas and to recommend these areas for special management in order to accommodate the needs of the recreating public while at the same time making provisions to protect vulnerable resources. Each area proposed for designation has special characteristics and

Comment Letter 18

has demonstrated an attraction factor that will continue to draw both residents and visitors to the area. With the area's close proximity to the major population centers in the state, it is critical that such areas remain available, accessible, and in an ecologically healthy condition.

Page 55, Pronghorn Habitat and Use: The State supports actions to improve antelope habitat that will allow for increases in antelope numbers from 701 currently to 1,861 in the future.

18.6 Page 55, Riparian/ Aquatic Habitat and Use: According to the text on page 55, actions to protect riparian areas under Alternative D differ from those provided under Alternative B. In Chapter 3, however, the discussion under riparian habitat (page 151) indicates that management actions are the same for both alternatives. If Alternatives B and D do provide for the same protective measures, that should be more clearly stated in Chapter II.

Given the importance of wetlands and riparian habitat, the State supports the strongest measures identified under Alternative B for implementation and urges expedition of the work. Additionally, because of the extreme xeric condition of the resource area, small springs and seeps are vitally important to wildlife. A deficiency in the RMP is the inattention given to these important resources. Springs and seeps should be identified and protected from degradation, especially by wild horses.

III. Chapter III Comments

18.7 Page 69, Grazing Permits and Licensing, Third Sentence: The word "that" should read "than."

18.8 Page 76, Elk: The DWR plans to increase the elk herd east of I-15 near Kanosh and Fillmore. Through an agreement with the Beaver Resource Area, elk have been transplanted on Indian Peak. Some of these animals are using the Hamblin and Stateline allotments which lie within the Warm Springs Resource Area.

18.9 Page 89, Wild Horses, Paragraph 2: Figure 3-10 delineates the wild horse HMA boundaries and not Figure 3-9 as stated.

Page 94, Paragraph 3, Line 1: Figure 3-9 shows wild horse herd population changes and not Figure 3-10 as stated. Comment also applies for page 94, paragraphs 6 and 9 and page 95, paragraph 7.

18.10 Page 96, Recreation Management Areas: The description of the various special resource areas is a helpful addition to the document. Inclusion of additional areas in the discussion, such as Gunnison Bend, Devil's Kitchen, Tabernacle Hill Petroglyphs, Sunstone Knoll, Painter Springs, Pruess Lake and Meadow Creek, is recommended.

18.11 Page 146, Paragraph 1: These ranges could also become unusable to antelope over the long term because of the loss of key forage browse species.

Comment Letter 18

Page Three
Wayne T. Kammerer

18.12 Page 146, Forage Allocations: The statement is made that under Alternative D, "initial livestock forage allocation would be 133,634 AUMs." Appendix 1 indicates that livestock preference is 149,009 AUMs. Apparently adjustments have already been made--prior to monitoring. Inclusion of some discussion of these adjustments would be useful. Comment also applies to Table 2-11.

Response Letter 18

18.1 The Special Recreation Management Area (SRMA) figures for alternatives C and D are correct on Table 1, Page 4 of the Draft RMP/EIS. Tabernacle Hill, Pavant Butte, Fossil Mountain, Notch Peak, and the Wah Wah Mountains would be managed as SRMAs in Alternative C (see Page 53 of the Draft RMP/EIS). Tabernacle Hill and the Wah Wah Mountains would be managed as SRMAs in Alternative D (see Page 54 of the Draft RMP/EIS). As noted on Page 5, Table 1, Lands section, six special management designation areas are proposed under Alternative B. Five of the special management designations (Page 4, Summary Table 1, of the Draft RMP/EIS) are recreation-oriented. The sixth, Pavant Butte, would receive a special management designation for wildlife resources as noted under the Wildlife section of that same page.

18.2 The two numbers explain different situations: First, 1,680 AUMs are derived from multiplying 140 head of horses by 12 months. This is the total forage requirement. Second, 1,040 AUMs was taken from Appendix 7, Table 4 of the Draft RMP/EIS, which defines the amount of wild horse AUMs that would be used competitively with livestock and big game. The 1,040-AUM total includes 264 AUMs from the Hamblin Allotment in the Cedar City District.

18.3 Your comments are correct; tables 2-2 and 2-4 were in error. Chapter 6 of this document includes the corrected figures.

18.4 In Chapter 3 of the Draft RMP/EIS, the Special Designations section under Lands outlines various areas potentially suitable for special designations. Special designations identify unique resource values and subsequently assist in obtaining protection under withdrawals, ORV restrictions, etc. A SRMA is a BLM designation used to identify and manage significant recreation resources. SRMA designations with subsequent identification of recreation resource values and management needs are used to establish BLM recreation funding priorities. Both designations may be necessary to provide adequate resource protection, funding, and recognition.

18.5 Your comment is correct; Table 2-9 was in error. See Chapter 6 of this document for the corrected version.

18.6 The summary of environmental consequences for riparian habitat presented in the Draft RMP/EIS was not entirely accurate. Although the description fits both alternatives, it overlooks the differences between them.

Protective measures for riparian areas appeared deficient in the plan due to the lack of inventory of the resource. Our proposal is to inventory all riparian areas and develop and implement an HMP specifically for riparian areas throughout the WSRA. That HMP would address specific values and potentials for each riparian area and propose needed management for protection and enhancement of those values. Management options are not limited by this RMP/EIS, and such actions as fencing, special management, and restrictive stipulations may still be considered when developing the HMP.

Response Letter 18

18.7 This correction has been made. See Chapter 6 of this document.

18.8 The elk herd on the Pavant Plateau has not been making any substantial use of BLM lands. An increase in this herd should not be limited by the proposed plan.

The Needle Range elk herd is expanding its range onto BLM lands within the WSRA. Because UDWR management objectives for this herd have not been finalized, the herd is not addressed in the plan. Elk use within the WSRA is being monitored, and specific management plans will be formulated when patterns and levels of use are determined.

18.9 Corrections have been made in Chapter 6 of this document.

18.10 These resources were not managerially significant or were discussed in other resource sections where the primary value or action is applicable.

Sunstone Knoll and Devils Kitchen are described under the Lands, Special Designations section, pages 112 and 115, respectively, of the Draft RMP/EIS.

Tabernacle Hill Petroglyphs occur in two locations (sites) on part of the Tabernacle Hill Lava Field discussed under Recreation (Page 96), Cultural Resources (Page 106), and Lands, Special Designations (Page 112). Both sites have several petroglyphs. Painter Spring is a highly scenic canyon riparian area with a spring and unique vegetation communities. It is adjacent to the Notch Peak area discussed under Recreation (pages 96 and 101) (see Figure 2-9 in this document).

From a recreation standpoint, Pruess Lake and Meadow Creek are not managerially significant. They are, however, discussed under the Wildlife-Riparian Habitat section (Page 89 of the Draft RMP/EIS).

Gunnison Bend is located on the Sevier River where the Gunnison Massacre occurred. The Gunnison Massacre Site is described under the Cultural Resources, History section (Page 105 of the Draft RMP/EIS).

18.11 Your comment is correct; on page 149 of the Draft RMP/EIS, the summary of environmental consequences of Alternative C indicates pronghorn antelope numbers would be greatly reduced and critical habitat could be degraded under the heavy domestic sheep grazing.

18.12 Adjustments to the existing grazing preference (149,009 AUMs) have not yet been made. The initial allocation of 133,634 AUMs for livestock depicted in Table 2-11 and Appendix 1 of the Draft RMP/EIS is the proposed initial allocation for livestock under Alternative D: Preferred Alternative. This allocation level has been corrected to 131,772 AUMs (see Appendix 1 and Chapter 6 of this document). As described on Page 53 of the Draft RMP/EIS, adjustments to new allocation levels would be initiated in 1987-1988.

Comment Letter 19

United States Department of the Interior
BUREAU OF INDIAN AFFAIRS
SOUTHERN PAIUTE FIELD STATION
P.O. Box 986
Cedar City, Utah 84720
(801) 586-1121

IN REPLY REFER TO:
Natural Resources

July 9, 1986

Mr. Wayne T. Krammer
Bureau of Land Management
Richfield District Office
150 East 900 North
Richfield, UT 84701

Dear Mr. Krammer:

I have found the draft of "Resource Management Plan Environmental Impact Statement for the House Range Resource Area and the Warm Springs Resource Area" very informative and well written.

Since my interest lies primarily towards soils and land resources, I'd like to dwell on soils information as presented in the report. Since soils are also the biggest single resource, and is the most permenent of any land resource, I feel they should be spelled out in more detail. It is also realized, that references are made to the published or soon to be published soil surveys.

19.1 I especially like the chart of pages 109 and 123 of the Warm Springs Resource Area. Only a few soils are identified in the series level and is geared mostly towards other Soil Scientist. I am one that feels we should expand the information into the more usable terms and should be open to the public. More public exposure of soil surveys are needed so they to can share in land resource information such as soils. The Soil Conservation Service (SCS) and other cooperating agencies have spent a great deal of money each year to provide soil surveys, which is by far the best measure of land resources - in fact the U.S. Soil Taxonomy is the best in the world, only to hide it or not get public exposure after they are done.

For those professionals in other fields, if they have been exposed or know Soil Taxonomy, thats great. Others, such as laymens should be interested in soils and other natural resources.

Comment Letter 19

I'd like to see the major soil series used and followed through with some detailed information as far as classification, yields by soil type. land use treatment for some specific soils rather than general statements. Land treatment is mentioned, but what is the soil resource being treated.

Erosion control could be identified to some specific soils as examples and several examples used to each locality or soil resource, I would like to see perhaps ten pages devoted to soils or soil survey information.

I think that since plant and wildlife species are spelled out in detail, including the scientific names, that soils should have an equal share.

I am providing some attachments which I have found helpful in getting technical soil information out to the public, feel free to use it. I am also available to work with other Soil Scientist, at least on a limited scale in exposing soil survey information if you would care to pursue this further.

Sincerely,

Martin C. Urka
Natural Resource Specialist

Concurred by:
S/ Clyde Cornelius Sr.
Acting Field Representative

Response Letter 19

19.1 During the planning process, soil data were analyzed in detail. This information is available on map overlays at the WSRA office and in the MSA. Analysis included the determination of areas suitable for vegetation treatments (Figure 3-4 of the Draft RMP/EIS). Soil surveys will be conducted regularly to update information for management of public lands, as described on Page 28 of the Draft RMP/EIS.

NEPA regulations require limitations on the length of EIS discussions. Therefore, a goal of the Soils section in the Draft RMP/EIS was to abridge the volume of available soils data as much as possible, yet still give general information on the types of soils in the resource area. BLM agrees that more public exposure to soil surveys is needed.

Comment Letter 20

United States Department of the Interior
NATIONAL PARK SERVICE
ROCKY MOUNTAIN REGIONAL OFFICE
655 Parfet Street
P.O. Box 25287
Denver, Colorado 80225

IN REPLY REFER TO:

L7619 (RMR-PP)

JUL 11 1986

Memorandum

To: District Manager, Bureau of Land Management, Richfield District Office, Richfield, Utah

From: Associate Regional Director, Planning and Resource Preservation, Rocky Mountain Region

Subject: Draft Resource Management Plan/Environmental Impact Statement, Warm Springs Resource Area, Millard County, Utah (DES-86/0014)

We reviewed the draft Resource Management Plan (RMP) and Environmental Impact Statement (EIS) for the Warm Springs Resource Area (WSRA). In general, we found the document to be well organized and supportive of the preferred alternative, (Alternative D) a composite multiple-use approach.

No areas administered by the National Park Service (NPS) would be affected by implementation of any of the alternatives outlined in the draft RMP/EIS. Likewise, no National Natural Landmarks (existing or proposed), no proposed Wild and Scenic Rivers, or other programs overseen by the NPS would be impacted by any of the alternatives.

We expect that other Agency comments will center on what appear to be excellent approaches to wildlife management in the WSRA. Especially noteworthy are the efforts to maintain genetic diversity in the herd management areas for wild horses, and the raptor programs such as the bald eagle surveys and the peregrine falcon reintroductions on Pavant Butte.

Recreational uses of the WSRA are given full consideration. The preferred alternative appears to offer a full range of visitor use opportunities while providing for adequate resource protection. We support the limitations on off-road vehicle (ORV) use, as presented in the preferred alternative, and encourage the WSRA not to open the entire unit to ORV use (e.g., as proposed in Alternative C).

20.1 We would like to see a more detailed consideration of paleontological resources. Some locations, such as Fossil Mountain, are given protection in the preferred alternative, but there is a lack of specific detail on the resources present. Tables 3-11; Geologic Time Scale, omits the Permian Period.

In summary, we believe that this draft RMP/EIS provides the public with a clear picture of the projected management of the WSRA. We look forward to receipt of the final document.

Richard A. Strait

Response Letter 20

20.1 The discussion of paleontology found on pages 106-111 of the Draft RMP/EIS is commensurate with the level of impact expected on that resource (none). No significant impacts on paleontological values from implementing the actions proposed in the RMP were identified. Also, as explained on pages 16-18 of the Draft RMP/EIS, paleontology was not identified as a planning issue or management concern during the public participation process. Therefore, it received less emphasis in the description of the affected environment than those items which were so identified.

Omitting the Permian Period (270 + 5 million years ago) from the geologic time scale on Page 106 of the Draft RMP/EIS was an oversight. Thank you for pointing that out.

APPENDIX 1

PROPOSED PLAN ALLOTMENT SUMMARY

MANAGEMENT CATEGORY	PRIORITY FOR AMP	GRAZING ALLOTMENT	TOTAL FEDERAL ACRES	Present Range Condition (Percent of Acres)				Present Range Trend (Percent of Acres)			Livestock					Competitive Forage Use (AUMs)		
				EXCELLENT	GOOD	FAIR	POOR	IMPROVING	STATIC	DECLINING	KIND[1]	SEASON	ACTIVE PREFERENCE (AUMs)	AVERAGE[2] ACTUAL USE (AUMs)	TOTAL[3] INDICATED CAPAITY (AUMs)	BIG GAME[4]	WILD HORSES	INITIAL LIVESTOCK ALLOCATION (AUMs)
I	7	*Amasa*	4,782	0	10	40	50	10	70	20	C	5/16 - 9/30	**144**	100	85	2	0	**83**
C	42	Anderson	513	0	52	40	8	0	100	0	C	5/1 - 10/31	**25**	12	25	0	0	**25**
I	5	Antelope Point	2,895	0	0	100	0	88	0	12	C	10/1 - 4/30	**329**	265	191	2	0	**329**
C	41	Beeston	480	0	0	100	0	0	100	0	C	5/16 - 6/25	**10**	10	11	1	0	**10**
I	33	Big Wash	4,489	0	95	0	5	25	75	0	S	11/1 - 5/31	**285**	158	277	4	0	**285**
I	8	*Black Point*	20,600	0	36	45	19	80	20	0	C	11/1 - 5/6	**1,798**	1,798	1,598	1	0	**1,597**
C	5	Black Rock Summer	3,351	0	30	50	20	0	100	0	C	4/1 - 9/30	**294**	41	39	0	0	**294**
I	5	Black Rock Winter	8,806	15	35	35	15	80	20	0	C	10/1 - 3/31	**996**	788	851	0	0	**996**
I	17	*Blackham*	30,788	5	60	25	10	40	60	0	S	11/1 - 4/30	**2,163**	1,918	1,961	24	0	**1,937**
M	56	*Blind Valley*	39,940	20	50	30	0	70	30	0	S	11/1 - 4/30	**2,100**	1,997	2,155	15	29	**2,100**
M	53	*Boob Canyon*	30,025	15	45	30	10	0	30	70	C	11/1 - 5/31	**2,597**	1,150	1,914	1	54	**1,859**
I	1	Brecks Knoll	69,393	20	40	35	5	0	100	0	C	11/1 - 5/15	**5,752**	3,937	4,494	3	234	**5,752**
M	36	Browns Wash	26,112	15	60	15	10	0	100	0	S	11/1 - 3/31	**2,608**	1,877	2,652	47	101	**2,608**
M	57	*Buckskin*	21,898	25	75	0	0	60	40	0	S	11/16 - 4/30	**2,264**	1,012	2,423	33	58	**2,264**
I	9	Church	1,253	0	21	69	10	0	100	0	C	5/1 - 8/31	**120**	124	131	1	0	**120**
M	52	*Clay Springs*	37,026	20	38	35	7	30	70	0	C	11/1 - 4/30	**2,640**	1,419	2,126	4	0	**2,122**
I	21	Coates	19,229	0	0	90	10	0	50	50	S	11/1 - 4/30	**1,690**	1,039	1,088	10	0	**1,690**
M	35	Conger Spring	70,425	5	79	15	1	0	100	0	S	11/1 - 4/30	**4,542**	3,344	3,623	109	105	**4,542**
I	20	Crickett	90,205	0	10	75	15	65	35	0	S	10/15 - 4/30	**8,294**	5,097	4,326	30	0	**8,294**

APPENDIX 1

PROPOSED PLAN ALLOTMENT SUMMARY

MANAGEMENT CATEGORY	PRIORITY FOR AMP	GRAZING ALLOTMENT	TOTAL FEDERAL ACRES	Present Range Condition (Percent of Acres)				Present Range Trend (Percent of Acres)			Livestock					Competitive Forage Use (AUMs)		
				EXCELLENT	GOOD	FAIR	POOR	IMPROVING	STATIC	DECLINING	KIND[1]	SEASON	ACTIVE PREFERENCE (AUMs)	AVERAGE[2] ACTUAL USE (AUMs)	TOTAL[3] INDICATED CAPAITY (AUMs)	BIG GAME[4]	WILD HORSES	INITIAL LIVESTOCK ALLOCATION (AUMs)
M	37	Crows Nest	25,358	30	50	15	5	38	62	0	C	11/1 - 5/31	**1,222**	1,405	1,652	3	0	**1,222**
I	25	Crystal Peak	61,893	5	57	30	8	0	80	20	S	10/16 - 4/30	**4,835**	2,407	2,180	24	0	**4,835**
I	3	*Deadmans Wash*	51,915	15	30	45	10	20	80	0	C S	11/1 - 4/30 11/1 - 4/30	**4,026**	3,823	4,554	57	0	**4,497**
I	14	Death Canyon	27,279	0	50	45	5	0	100	0	S	11/1 - 4/30	**2,426**	1,351	1,132	15	0	**2,426**
M	55	*Deseret*	270,117	5	60	30	5	50	45	5	C	5/1 - 11/30	**8,043**	4,488	6,172	0	0	**6,172**
I	5	*East Antelope*	16,404	0	13	49	38	5	65	30	C	6/16 - 10/15	**488**	378	539	5	0	**488**
I	10	Ephraim-Bagnall	17,299	0	30	60	10	0	100	0	S	10/16 - 4/30	**1,515**	770	779	1	0	**1,515**
I	48	*Ephraim-Meadow*[5]	60,996	0	0	40	60	0	25	75	C S	5/16 - 9/23 10/21 - 4/5	**4,366**	2,504	2,505	1	0	**2,504**
I	48	*Ephraim-Meadow Sheep*	10,361	0	0	25	75	0	0	100	S	10/21 - 4/5	**1,818**	1,613	1,376	0	0	**1,375**
I	29	Fairview	55,068	15	50	30	5	40	60	0	S	10/16 - 4/30	**5,005**	1,653	2,384	65	156	**5,005**
M	34	*Ferguson*	18,672	10	70	20	0	70	30	0	C	11/1 - 4/30	**800**	496	901	1	0	**900**
M	58	Garrison	44,408	0	40	60	0	40	60	0	C	11/16 - 6/15	**1,429**	1,276	1,241	2	0	**1,429**
M	51	*Granite*	48,801	0	50	45	5	0	70	30	S	11/16 - 4/15	**2,770**	2,047	2,045	10	0	**2,035**
I	30	*Holden Spring*	2,880	0	27	73	0	0	100	0	C	5/16 - 6/15	**262**	217	208	7	0	**201**
I	32	*Holden Winter*	33,984	0	30	65	5	75	25	0	C	10/1 - 12/31	**1,368**	383	740	0	0	**740**
I	16	*King*	48,035	0	20	65	15	10	60	30	S	11/1 - 4/30	**2,927**	1,261	1,116	24	19	**1,073**
I	15	Klondike	32,700	0	50	45	5	0	100	0	S	11/1 - 4/15	**3,357**	1,485	1,585	20	0	**3,357**
M	50	*Knoll Springs*	34,116	5	35	45	15	67	33	0	C	5/1 - 10/31	**1,050**	312	457	0	0	**457**

APPENDIX 1

PROPOSED PLAN ALLOTMENT SUMMARY

MANAGEMENT CATEGORY	PRIORITY FOR AMP	GRAZING ALLOTMENT	TOTAL FEDERAL ACRES	Present Range Condition (Percent of Acres)				Present Range Trend (Percent of Acres)			Livestock				Competitive Forage Use (AUMs)		
				EXCELLENT	GOOD	FAIR	POOR	IMPROVING	STATIC	DECLINING	KIND[1]	SEASON	ACTIVE PREFERENCE (AUMs)	AVERAGE[2] ACTUAL USE (AUMs)	TOTAL[3] INDICATED CAPAITY (AUMs)	BIG GAME[4]	WILD HORSES	INITIAL LIVESTOCK ALLOCATION (AUMs)
I	26	*Ledger Canyon*	17,811	0	50	45	5	0	100	0	S	11/16 - 4/15	**1,319**	628	767	22	101	**644**
C	45	McClintock	1,600	0	0	68	32	0	100	0	C	10/1 - 10/31	**11**	5	11	0	0	**11**
I	31	*Meadow Springs*	2,731	0	10	30	60	30	70	0	C	5/16 - 5/31	**126**	26	42	10	0	**32**
I	4	*Mormon Gap*	46,606	15	40	30	15	50	50	0	C S	9/16 - 5/20 11/1 - 4/30	**2,965**	2,519	3,877	55	0	**3,822**
I	13	North Canyon	19,611	0	30	60	10	0	100	0	S	12/1 - 3/31	**1,441**	1,360	1,201	12	0	**1,441**
I	12	Notch Peak	34,588	0	20	70	10	0	100	0	S	11/21 - 4/20	**3,559**	1,991	1,610	21	0	**3,559**
I	24	Painted Potholes	38,432	0	20	65	15	0	30	70	S	11/1 - 4/30	**2,326**	394	2,326	17	0	**2,326**
I	18	Painter Springs	33,486	0	60	35	5	0	100	0	S	11/1 - 4/15	**2,833**	1,421	1,303	22	0	**2,833**
I	2	Pine Valley	40,565	0	60	30	10	0	100	0	C	11/1 - 5/16	**3,750**	2,224	2,329	1	0	**3,750**
C	44	Section 31	440	0	0	100	0	0	100	0	C	5/16 - 6/15	**35**	35	43	1	0	**35**
I	19	Seely	46,208	0	10	80	10	0	70	30	S	10/16 - 4/15	**4,635**	3,116	2,744	32	0	**4,635**
I	27	Skull Rock	50,023	0	25	60	15	60	40	0	S	11/1 - 4/30	**4,138**	1,428	1,958	29	0	**4,138**
M	54	*Skunk Springs*	37,061	0	30	40	30	50	25	25	C S	5/16 - 10/15 11/9 - 4/15	**1,540**	1,170	1,517	33	115	**1,369**
M	38	*South Tract Summer*	2,298	0	92	8	0	0	100	0	C	5/1 - 9/30	**1,130**	397	1,191	0	0	**1,130**
M	38	South Tract Winter	2,293	0	0	100	0	0	100	0	C	12/1 - 1/31	**45**	45	45	0	0	**45**
I	28	State Line	33,045	0	50	40	10	40	60	0	S	11/1 - 4/30	**4,753**	2,624	2,785	25	68	**4,753**
I	23	Steamboat	29,109	0	0	70	30	0	100	0	S	11/1 - 4/30	**2,040**	591	632	12	0	**2,040**
C	43	Stott	160	0	0	100	0	0	100	0	C	10/1 - 2/15	**5**	3	5	0	0	**5**

APPENDIX 1

PROPOSED PLAN ALLOTMENT SUMMARY

				Present Range Condition (Percent of Acres)				Present Range Trend (Percent of Acres)			Livestock					Competitive Forage Use (AUMs)		
MANAGEMENT CATEGORY	PRIORITY FOR AMP	GRAZING ALLOTMENT	TOTAL FEDERAL ACRES	EXCELLENT	GOOD	FAIR	POOR	IMPROVING	STATIC	DECLINING	KIND[1]	SEASON	ACTIVE PREFERENCE (AUMs)	AVERAGE[2] ACTUAL USE (AUMs)	TOTAL[3] INDICATED CAPAITY (AUMs)	BIG GAME[4]	WILD HORSES	INITIAL LIVESTOCK ALLOCATION (AUMs)
I	6	*Stott-Rowley*[5]	15,145	0	10	50	40	0	80	20	C	5/1 - 10/15	**727**	342	264	0	0	**264**
I	59	Summit	1,872	0	100	0	0	66	34	0	C	5/1 - 9/20	**184**	184	184	1	0	**184**
C	40	T.O. Johnson	160	0	0	100	0	0	100	0	C	5/1 - 8/31	**12**	12	12	0	0	**12**
C	46	Teeples	920	0	0	100	0	0	100	0	C	10/1 - 10/31	**5**	3	5	0	0	**5**
I	49	*Twin Peaks*	179,869	0	29	58	13	39	56	5	C S	10/1 - 6/15 10/1 - 6/15	**19,661**	10,930	12,311	120	0	**12,190**
I	11	Voorhees	26,958	0	50	45	5	0	100	0	S	12/1 - 4/15	**3,076**	893	955	16	0	**3,076**
C	39	Wallace	900	0	53	47	0	0	100	0	C	5/1 - 10/15	**39**	22	39	0	0	**39**
I	22	Wheeler	17,522	0	10	70	20	0	70	30	S	11/16 - 4/30	**1,806**	1,302	1,206	9	0	**1,806**
I	60	Whiskey Creek	5,001	0	82	18	0	100	0	0	C	5/1 - 9/20	**469**	92	248	3	0	**469**
C	47	White Bush	80	0	50	50	0	0	100	0	C	4/1 - 9/30	**21**	21	21	0	0	**21**
		TOTAL	2,026,990										**149,009**	87,733	101,156	963	1,040	**131,772**

NOTE: Allotments with at least 5 years of utilization data and two readings of trend completed are in italic letters. These allotments are scheduled for livestock allocation adjustments in FY 87/88.

[1] Kind of Livestock: C - Cattle, S - Sheep

[2] Average Actual Use - Based on Actual Use Recordes from 1980-85.

[3] Total Indicated Capacity - Represents the estimated amount of competitive forage available to livestock, wild horses and big game animals. This estimation is derived by taking the actual grazing use times proper utilization factor divided by observed utilization (monitoring estimate).

[4] Big Game Use by Mule Deer and/or Antelope.

[5] Ephriam-Meadow and Stott-Rowley Allotments - The cattle season of use on these allotments will be monitored and adjusted as necessary.

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APPENDIX 2

Warm Springs Resource Area
Vegetation Studies

Allotment Name	Utilization					Trend				
	Number of Studies	Year Initiated	Number of Years Read	Proper[a] Utilization Factor	Average[b] Annual Utilization	Number of Studies	Year(s) Initiated	Number of[c] Times Read	Last Read	Trend[d] by Plot(s)
Amasa	2	1980	5	0.49	0.58	2	1980	2	1984	1 IM; AT 1 ST
Anderson	1	1983	1	0.49	0.49	--	--	--	--	--
Antelope Point	3	1982	4	0.50	0.70	3	1967	4	1984	1 ST; 1 IM; 1 DE
Beeston	1	1983	2	0.41	0.41	3	1984	1	1984	AT 1 ST
Big Wash	3	1980	5	0.45	0.26	2	1983	1	1983	AT 2 ST
Black Point	7	1980	5	0.49	0.55	8	1971	8	1984	3 ST; 4 IM; 1 DE
Black Rock Summer	4	1983	3	0.45	0.47	1	1968	3	1983	1 DE
Black Rock Winter	6	1983	3	0.54	0.50	2	1968	3	1983	2 IM
Blackham	11	1967	5	0.49	0.48	5	1967	7	1985	1 ST; 1 DE; 3 IM
Blind Valley	5	1969	5	0.52	0.50	4	1969	8	1985	1 ST; 3 IM
Boob Canyon	9	1974	5	0.63	0.40	7	1974	6	1985	3 ST; 2 IM; 2 DE
Breck's Knoll	15	1983	3	0.47	0.45	9	1983	1	1983	AT 7 ST; 2 IM
Brown's Wash	7	1983	3	0.53	0.41	3	1983	1	1983	AT 3 ST
Buckskin	8	1970	5	0.52	0.24	4	1970	6	1985	3 ST; 1 IM
Church	4	1983	2	0.44	0.42	2	1984	1	1984	AT 2 ST
Clay Springs	10	1974	5	0.57	0.39	4	1974	6	1985	1 ST; 2 DE; 1 IM
Coates	5	1983	3	0.49	0.47	2	1971	3	1985	1 IM; 1 DE
Conger Spring	13	1983	3	0.49	0.48	5	1983	1	1983	AT 2 ST; 3 IM
Crickett	10	1983	3	0.49	0.58	7	1971	3	1985	3 IM; 4 ST
Crow's Nest	8	1981	5	0.49	0.43	6	1983	1	1983	AT 1 IM; 5 ST
Crystal Peak	8	1983	5	0.49	0.54	5	1983	1	1983	AT 4 ST; 1 DE
Deadman's Wash	9	1981	5	0.49	0.42	4	1982	2	1985	4 ST
Death Canyon	5	1983	3	0.49	0.59	3	1984	1	1984	AT 2 ST; 1 IM
Deseret	26	1971	5	0.59	0.43	13	1971	4	1984	6 IM; 7 ST
East Antelope	8	1981	5	0.54	0.38	3	1981	2	1984	2 IM; 1 DE
Ephraim Bagnall	6	1983	3	0.53	0.53	3	1983	1	1983	AT 3 ST
Ephraim Meadow Sheep	5	1967	5	0.52	0.61	3	1967	5	1984	3 DE
Ephraim Meadow Cattle	11	1967	5	--	--	6	1967	6	1984	4 ST; 1 DE; 1 IM
Ephraim Meadow Winter	5	1980	4	0.49	0.49	--	--	--	--	--
Fairview	8	1983	3	0.49	0.51	4	1983	1	1983	AT 1 ST; 3 IM
Ferguson	3	1967	5	0.49	0.27	3	1967	8	1983	1 IM; 1 DE; AT 1 IM
Garrison	7	1979	5	0.64	0.66	4	1983	1	1983	AT 1 DE; 2 IM; 1 ST
Granite	8	1969	5	0.53	0.53	4	1969	6	1985	1 ST; 3 DE
Holden Spring	3	1968	5	0.38	0.41	3	1968	5	1985	1 ST; 2 DE
Holden Winter	4	1967	5	0.60	0.31	3	1967	5	1984	1 ST; 3 IM
King	9	1967	5	0.49	0.58	4	1967	7	1985	3 DE; 1 IM
Klondike	7	1983	3	0.51	0.48	3	1984	1	1984	AT 3 ST
Knoll Springs	5	1974	5	0.57	0.39	3	1974	5	1984	3 IM
Ledger Canyon	5	1969	5	0.50	0.51	2	1969	5	1984	AT 2 ST
McClintock	1	1984	1	0.60	0.60	--	--	--	--	--
Meadow Spring	3	1971	5	0.25	0.21	2	1971	3	1984	1 ST; 1 DE
Mormon Gap	16	1980	5	0.56	0.38	6	1980	2	1984	2 ST; 1 IM; 3 DE
North Canyon	6	1983	3	0.51	0.58	2	1984	1	1984	AT 2 ST
Notch Peak	7	1983	3	0.49	0.61	2	1984	1	1984	AT 2 ST
Painted Potholes	9	1983	3	0.49	--	3	1983	1	1983	AT 2 ST; 1 IM
Painter Springs	6	1983	3	0.51	0.56	4	1983	1	1983	AT 3 ST; 1 DE
Pine Valley	11	1981	5	0.47	0.45	4	1983	1	1983	AT 4 ST
Section 31	1	1984	1	0.38	0.32	--	--	--	--	--
Seely	8	1983	3	0.51	0.58	3	1971	3	1985	1 ST; 1 IM; 1 DE
Skull Rock	5	1983	3	0.49	0.36	4	1983	1	1983	AT 4 ST
Skunk Springs	10	1970	5	0.50	0.29	4	1970	6	1985	2 ST; 2 IM
South Tract (Summer)	5	1970	5	0.58	0.50	3	1970	2	1984	1 ST; 1 IM; 1 DE
South Tract (Winter)	--	--	--	0.70	0.70	--	--	--	--	--
State Line	8	1983	3	0.49	0.49	3	1983	1	1983	AT 2 ST; 1 IM
Steamboat	6	1983	3	0.49	0.46	3	1983	1	1983	AT 3 ST
Stott	--	--	--	0.60	0.60	--	--	--	--	--
Stott-Rowley	4	1967	5	0.48	0.62	3	1967	6	1985	2 DE; 1 IM
Summit	--	--	--	0.56	0.56	--	--	--	--	--
T.O.Johnson	1	1984	2	0.44	0.44	--	--	--	--	--
Teeples	0	--	0	0.60	0.60	--	--	--	--	--
Twin Peaks Spring	5	1975	5	0.37	0.27	3	1976	3	1984	1 ST; 2 DE
Twin Peaks Winter	24	1970	5	0.53	0.49	18	1970	5	1984	6 ST; 3 DE; 9 IM
Voorhees	6	1983	3	0.49	0.46	3	1969	3	1983	1 ST; 1 IM; 1 DE
Wallace	1	--	0	0.48	0.48	--	--	--	--	--
Wheeler	4	1983	3	0.49	0.53	3	1971	3	1985	1 ST; 1 DE; 1 IM
Whiskey Creek	5	1983	2	0.56	0.21	2	1983	1	1983	AT 2 IM
White Bush	--	--	--	0.44	0.44	--	--	--	--	--

[a]Proper utilization factors were determined using the criteria outlined in Appendix 10 of the Draft RMP/EIS.

[b]Average annual utilization is average of annual estimated utilization for all key species in key grazing areas of an allotment. It is determined using the methods described in the BLM Monitoring Handbook (TR-4400-3).

[c]Trend plots are now read on the average of every 3 years.

[d]AT = Apparent observed trend on studies read only once. IM = improving; ST = static; and DE = declining.

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APPENDIX 3

Existing and Proposed Range Improvements

Allotment Name	Number	Structural[a]												Non-Structural[b]	
		Spring Development		Pipelines (Mi.)		Wells		Reservoirs		Fences (Mi.)		Cattleguards		Vegetation Treatments	
		Existing	Proposed	Existing	Proposed	Existing	Proposed	Existing	Proposed	Existing	Proposed	Existing	Proposed	Existing	Proposed
Anderson															
Amasa	4300		2		3.0								1		
Antelope Point	5777									0.5		2			
Beeston	5780									2.5				200	
Big Wash	5797														
Black Point	5782									3.0					
Black Rock Summer	5786					1				25.5		4		2,350	1,000
Black Rock Winter	5778				3.0	1				12.0					
Blackham Canyon	4325					1		2							
Blind Valley	4303					1		3							
Boob Canyon	4304				2.0			2		20.0		3			
Brecks Knoll	4306							4		10.0		2			
Browns Wash	4302	1													
Buckskin	4307							1		8.0		1			
Church	5799			1.0											
Clay Spring	4312			2.5	2.5			1		5.5			1	839	
Coats	5781							3					3		
Conger Spring	4313	3				1									
Crickett	5779					1		6		9.5					
Crows Nest	4305				2.5	2		1		15.0		2			
Crystal Peak	4311							2		7.0					
Deadman Wash	4316						1	1		5.5	15.0				
Death Canyon	4314							1					2		
Deseret	5775	2		66.0	15.5	3		20		51.0		10	2		
East Antelope	5796									20.0		3		1,658	6,500
Ephraim Bagnall	6211							2							
Ephraim Meadow Sheep	5774					1									
Ephraim Meadow	5774			2.0		4	1	1		50.0		5			
Fairview	6236	1	2		8.0			1							
Ferguson	4317					1		3		10.0	4.0		1		
Garrison	4319					2				28.5					
Granite	4320														
Holden Spring	5783	1		5.0	1.0					5.5		3		2,600	
Holden Winter	5784	1				3				12.5					
King	4324							2							
Klondike	4322				5.0										
Knoll Springs	4323	2				2		3		14.5					
Ledger Canyon	4321														
McClintock	5793														
Meadow Spring	5773														
Mormon Gap	4397			5.0	6.0	1		3		25.5		3		1,770	
North Canyon	4328				3.0					2.0		1			
Notch Peak	4329							1							
Painted Potholes	4330							1							
Painter Springs	4331	1		3.0											
Pine Valley	4398				15.0			2		10.0	15.0	2	3		
Section 31	5794														
Seely	5787	2		3.0				2		9.0					
Skull Rock	4334							5							
Skunk Spring	4338	2													
South Tract Summer	5788			12.0				1		10.0		4		2,500	
South Tract Winter	5788														
State Line	6238	1						1							
Steamboat	4336					1		2							
Stott	5795														
Stott-Rowley	5789					2				9.0		2			
Summit	5769													1,172	
T O Johnson	5760														
Teeples	5798														
Twin Peaks	5785	1		12.0	5.0	1	2	12		75.0	10.0	10	2	4,241	5,500
Voorhees	6220					1		1							
Wallace	5791														
Wheeler	5790							2							
Whiskey Creek	5792	1	1	5.0	2.0					5.5		3		4,327	
White Bush	5770													40	
Totals		19	5	116.5	73.3	30	4	92	--	462	44	60	15	21,697	14,000

[a]Proposed structural improvements

[b]proposed vegetation treatments (prescribed burning, chaining, and/or seeding) for Alternative D. Other suitable areas could be treated, based on priority of need, favorable benefit/cost ratio, and availability of funding.

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GLOSSARY

ACRE-FOOT. The volume (as of irrigation water) that would cover 1 acre to a depth of 1 foot (43,560 cubic feet or 325,900 gallons).

ACTIVE PREFERENCE. The total number of animal unit months (AUMs) AUMs of forage that a permittee can license for livestock use in one allotment.

ACTUAL USE. The use made of forage in an area by livestock, big game, and/or wild horses. Usually expressed in animal unit months per year.

AIR QUALITY. A measure of the health-related and visual characteristics of the air, often derived from quantitative measurements of the concentrations of specific injurious or contaminating substances.

AIR QUALITY CLASS I AND II AREAS. Regions where maintenance of existing good air quality is of high priority. Class I areas are those that have the most stringent degree of protection from future degradation of air quality, such as National Parks. Class II areas permit moderate deterioration of existing air quality, such as lands administered by the Bureau of Land Management (BLM).

ALKALI SOIL (SODIC). A soil which has such a high degree of alkalinity (pH 8.5 or higher) or percentage of exchangeable sodium (15 percent or more of the total exchangeable bases), or both, that the growth of most crop plants is severely restricted.

ALLOTMENT. An area of land designated and managed for grazing of livestock of one or more qualified grazing permittees. Use is limited to prescribed numbers and kinds of livestock for prescribed period(s) of each year.

ALLOTMENT MANAGEMENT PLAN (AMP). A written program of livestock grazing management which applies to operations on public land. An AMP specifies management goals and required support measures. It is prepared in consultation, cooperation, and coordination with the permittee(s), lessee(s), or other involved affected interests.

ALTERNATIVE. One of at least two proposed means of accomplishing planning objectives.

ANALYSIS. The examination of existing and/or recommended management needs and their relationships to discover and display the outputs, benefits, effects, and consequences of initiating a proposed action.

ANIMAL UNIT MONTH (AUM). The amount of forage required to sustain the equivalent of 1 cow or its equivalent for 1 month: 1 wild horse for 1 month; 5.1 sheep for 1 month; 8.9 deer for 1 month (winter season), 5.8 deer for 1 month (summer season); 9.6 antelope for 1 month; 5.5 bighorn sheep for 1 month; 2.2 burros for 1 month; 1.2 elk for 1 month (winter season) or 2.1 elk for 1 month (yearlong) (usually 800 lbs. of usable air-dried forage).

AQUATIC. Living or growing in or on the water.

ARCHAEOLOGY. The scientific study of the material remains of extinct peoples and past cultures.

AREA OF CRITICAL ENVIRONMENTAL CONCERN (ACEC). An area of public lands where special management attention 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/provide safety from natural hazards.

BASIC VISUAL ELEMENTS. The elements which determine how the character of a landscape is perceived. *Form:* The shape of objects such as landforms or patterns in the landscape. *Line:* Perceivable linear changes in contrast resulting from abrupt differences in form, color, or texture. *Color:* The reflected light of different wave lengths that enables the eye to differentiate otherwise identical objects. *Texture:* The visual results of variation in the surface of an object.

BLOCK FAULTING. A type of normal faulting in which the crust is tilted or tipped and divided into structural or fault blocks of different elevations and orientations. It is the process by which block mountains are formed.

CASUAL USE. Activities ordinarily resulting in only negligible disturbance of the Federal lands and resources. For example, activities are generally considered "casual use" if they do not involve the use of mechanized earth-moving equipment or explosives or do not involve the use of motorized vehicles in areas designated as closed to off-road vehicles.

CHAINING. The process of modifying vegetation by pulling an anchor chain between two crawler tractors, thus reducing tall-growing, brittle vegetation and enhancing grasses, forbs, and sprouting shrubs.

CLASTIC. Of, belonging to, or being a rock (as a conglomerate or a sandstone) made of fragments of pre-existing rocks.

COMMERCIAL FOREST LANDS. Forested lands that produce at least 20 cubic feet of wood volume per acre per year.

COMPETITIVE FORAGE. Plant species that are grazed (preferred) by more than one species of herbivore.

CONFORMATION. Arrangement of parts, manner of formation or structure.

CRITICAL WILDLIFE HABITAT. That portion of wildlife habitat essential to the survival and perpetuation of a certain species in an area.

CROWN CLOSURE OR DENSITY. When viewed from above, the percent of the ground that is covered by the crowns of trees.

CULTURAL RESOURCES. Those resources of historical, archaeological, and paleontological significance.

DESIGNATED RIGHT-OF-WAY CORRIDOR. A parcel of land, linear or aerial, identified through the land use planning process or by other management decision as being a preferred location for existing and future rights-of-way and suitable to accommodate rights-of-way that are similar or compatible.

EMISSION. Pollutants released to the atmosphere from any combustion process. Sometimes used synonymously with effluent, but is more applicable to atmospheric discharges.

ENDANGERED SPECIES. Any animal or plant species in danger of extinction throughout all a significant portion of its range.

ENDEMIC. A species restricted to a given geographical location and which is native to that locale.

ENVIRONMENT. All that surrounds an organism and interacts with it.

ENVIRONMENTAL ANALYSIS. A systematic process for consideration of environmental factors in land management actions.

EPHEMERAL STREAM. A stream or reach of a stream that flows briefly only in direct response to rain or snowmelt in the immediate locality and whose channel is at all times above the water table.

ERODIBILITY. Susceptibility of a soil to erosion by water or wind. Relative terms are none, slight, moderate, and high.

EROSION CONDITION CLASSES. There are five classes: stable, slight, moderate, critical, and severe. Soil surface factors (SSFs) are used to determine the erosion condition class.

EXCHANGE-OF-USE. An agreement made with a permittee having ownership or control of non-federal land interspersed and grazed in conjunction with surrounding Federal range. This agreement specifies the carrying capacity and gives BLM control of the non-federal land for grazing purposes.

EXCLOSURE. An area fenced to exclude animals.

EXTENSIVE RECREATION MANAGEMENT AREA. Areas where significant recreation opportunities and problems are limited and explicit recreation management is not required. Standard BLM management actions are adequate in these areas.

FIRE MANAGEMENT PLAN. An activity plan developed to support and accomplish resource management objectives and applicable land-use decisions authorized in BLM Resource Management Plans. Establishes basic direction for the fire management program, identifies priorities for execution, and determines levels of fire resources (personnel, engines, aircraft, and facilities), including an economic analysis.

FIXED COST. A cost which does not necessarily increase or decrease as the total volume of production increases or decreases (e.g., taxes on real property).

FLUID MINERALS. Fluid minerals consist of gas and oil, as defined in 43 CFR 3000.0-5, and geothermal, as defined in 43 CFR 3200.0-5.

FORAGE. Vegetation of all forms available and of a type used for animal consumption.

FORB. A broad-leafed herbaceous plant.

FOREST PRODUCTS. Woodland and timber products, such as posts, poles, firewood, and sawlogs.

FULL FIRE SUPPRESSION. The full suppression of wildfires with whatever combination of manpower, equipment, and judgment is required.

GENE POOL. The total diversity of genetic potential of an animal species.

GRAZING PERMIT. An authorization that allows grazing on public lands. Permits specify class of livestock on a designated area during specified seasons each year. Permits are of two types: preference (10 year) and temporary non-renewable (1 year).

GRAZING PERMIT VALUE. BLM-allocated AUMs may be transferred from one operator to another. The dollar value given by one operator (buyer) to induce a present permit holder (seller) to transfer his permit is known as the "permit value" of an AUM. This "permit value" may have a significant bearing on the rancher's capital value.

GRAZING PREFERENCE. The total number (active and suspended non-use) of AUMs for live-

stock on public land apportioned and attached to base property owned or controlled by a permittee.

GRAZING SYSTEM. A prescribed method of grazing a range allotment having two or more pastures or management units to provide periodic rest for each unit.

HABITAT. A specific set of physical conditions in geographic area(s) that surround a single species, a group of species, or a large community. In wildlife management, the major components of habitat are food, water, cover, and living space.

HABITAT MANAGEMENT PLAN (HMP). A plan for a geographic area of public lands that identifies wildlife habitat management actions to be implemented to achieve specific objectives.

HERBIVORE. Animals that browse or graze upon plants.

HISTORIC AND CULTURAL SITES (43 CFR 2071.1). Sites of major historical or cultural significance, either national, regional, or local. These are usually small tracts of lands containing significant evidence of American history, such as battlegrounds, mining camps, cemeteries, pioneer trails, and trading posts; or lands that contain significant evidence of prehistoric life such as pictographs, petroglyphs, burial grounds, prehistoric structures, middens, fossils, paleontological remains, and any other evidences of prehistoric life forms.

HYDROCARBONS. A general term for organic compounds that contain only carbon and hydrogen in the molecule.

IMPOUNDMENT. A structure usually made of earth to hold runoff water.

IMPROVED WATER SOURCE. Water sources (springs, wells) that have facilities, such as water boxes, pipelines, troughs, pumps, etc., installed to increase water quality, quantity, and availability.

INBREEDING. The mating of closely related individuals.

INDICATED CAPACITY. Estimated total competitive forage (in AUMs) available in an allotment. The estimate is based on range monitoring studies and proper use factors (pufs), expressed as a percent of total production/growth of forage plants for an allotment. The estimate is based on the calculation: actual grazing use (in AUMs) multiplied by the puf and divided by observed herbivore utilization of key forage species (percent utilization of current year's growth).

INTERIM MANAGEMENT POLICY (IMP). An interim measure governing lands under wilderness review. This policy protects Wilderness Study Areas from impairment of their suitability as wilderness.

INTERMITTENT STREAM. A stream that flows part of the time, usually after a rainstorm, during wet weather, or only part of the year.

KIND OR CLASS OF LIVESTOCK. Kind: The species of domestic livestock—cattle and sheep. Class: The age class (i.e., yearling or cows) of a species of livestock.

KNOWN GEOLOGIC STRUCTURES (KGS). A geologic structure (defined or undefined) in which an accumulation of oil or gas has been discovered by drilling and determined to be productive. The boundary limits include all acreage presumed to be productive. The effective date of a KGS is the date the BLM comprehensively determines the existence of a KGS. This determination occurs after all necessary information (e.g., mechanical logs, electric logs, well histories, well completions) have been correlated and a final geological report completed.

LAND USE PLAN. A plan that reflects an analysis of activity systems and a carefully studied estimate of future land requirements for expansion, growth control, and revitalization or renewal. The plan shows how development in the area should proceed in the future to insure the best possible physical environment for living, the most economic and environmentally sensitive use of land, and the proper balance in use from a cost-revenue point of view. The land use plan embodies a proposal as to how land should be used in the future, recognizing local objectives and generally accepted principles of health, safety, convenience, economy, and general living amenities.

LEASABLE MINERALS. Refer to Mineral Administrative Classifications.

LEASING CATEGORIES. The system used by the BLM to issue Federal fluid mineral leases with certain stipulations that may modify the standard lease terms and limit activities on a lease area. Category 1 leases are issued with standard lease terms. Leases within Category 2 areas are issued with the standard lease terms and appropriate special stipulations needed to protect sensitive resource values. Category 3 leases are issued with no right of surface occupancy and any recovery methods must not disturb the surface. Category 4 closes lands to leasing.

LIMITED FIRE SUPPRESSION. This is a wildfire suppression action that recognizes that fire in certain areas is: (1) extremely difficult to suppress (hazardous to fire-fighting personnel or suppression operation including aircraft); or (2) the resource value threatened does not warrant the expense associated with a full suppression action.

LIVESTOCK PERMITTEE. A person or organization legally permitted to graze livestock on public lands.

LOCATABLE MINERALS. Refer to Mineral Administrative Classifications.

LOCATABLE MINERAL POTENTIAL. Potential for the presence (occurrence) of a concentration of one or more energy and/or mineral resources. It does not imply potential for development and/or extraction of the mineral resources nor does it imply that the potential concentration is, or may be, economicably extractable. Levels of potential area are described as follows:

Low—The geologic environment and the inferred geologic processes indicate low potential for accumulation of mineral resources.

Moderate—The geologic environment, the inferred geologic processes, and the reported mineral occurrences or valid geochemical/geophysical anomaly indicate moderate potential for accumulation of mineral resources.

High—The geological environment, the inferred geologic processes, the reported mineral occurrences, and/or valid geochemical/geophysical anomaly, and the known mines or deposits indicate high potential for accomulation of mineral resources. "Known mines and deposits" do not have to be within the area being classified, but have to be within the same type of geologic environment. No areas in the WSRA were assigned the level of No Potential due to the relatively favorable geologic environment.

M I C SELECTIVE MANAGEMENT POLICY. Direction under which all grazing allotments are categorized for management purposes into three groups. The overall objectives are: M—maintain the current resource conditions; I—improve the current resource conditions; and C—custodially manage the existing resource values.

MANAGEMENT CONCERNS. Concerns that do not meet the criteria for a planning issue but cannot be resolved administratively. Management concerns result from professional judgment and familiarity with conditions in a resource area and may be further defined by inventory and analysis. Examples might include a fragile watershed or a need to establish special designation.

MANAGEMENT FRAMEWORK PLAN (MFP). A land use plan for public lands administered by BLM that provides a set of goals, objectives, and constraints for a specific planning unit or area; a guide to the development of detailed plans for the management of each resource. This form of plan is now being replaced with Resource Management Plans.

MINERAL ADMINISTRATIVE CLASSIFICATION (BLM). The mineral classification system used by BLM to distinguish which set of laws, regulations, and policies govern the administration of various mineral commodities on Federal land. Leasable mineral resources, as defined in the 1920 Mineral Leasing Act as amended and the Geothermal Steam Act, include commodities such as oil, gas, tar sand, oil shale, geothermal, potassium, sodium, carbon dioxide, and, in some cases, sulfur. Locatable minerals, as defined in the 1872 Mining Law as amended, include commodities such as uranium, gold, silver, copper, and vanadium. Saleable resources, as defined in the Material Sales Act as amended, include common varieties of sand, gravel, and building stone.

MULTIPLE USE. Management of public lands and their various resource values so that they are used in the combination that will best meet the present and future needs of the American people. Relative values of the resources are considered, not necessarily the combination of uses that will give the greatest potential economic return or the greatest unit output.

NATIONAL NATURAL LANDMARKS (36 CFR 62.5). National natural landmark designation recognizes areas that best represent the ecological and geological character of the United States. If an area is determined significant to a particular natural region, it is considered nationally significant because it is a distinct and representative illustration of the nation's natural heritage. The area must contain one or more excellent examples of the ecological and geological features identified in the natural region classification system. Other secondary criteria are viability, condition, inherent diversity, education and research values.

NATIVE RANGE. Those rangelands that support natural vegetation as opposed to reseeded ranges which usually contain introduced vegetation.

NATURALNESS. An area which "generally appears to have been affected primarily by the forces of nature, with the imprint of man's work substantially unnoticeable." (Section 2[c], *Wilderness Act*).

NITROGEN OXIDES. Nitrogen compounds produced by combustion, particularly when there is an excess of air or when combustion temperatures are very high.

NONCOMMERCIAL FOREST LANDS. Lands that produce less than 20 cubic feet of forest products per year.

NON-COMPETITIVE FORAGE. Forage used by deer, elk, wild horses, or antelope and which is not used by livestock.

OCULAR RECONNAISSANCE SURVEY. A forage survey method that inventories vegetation by estimating total forage density, percent composition by species, and total usable forage in a given range type to determine the carrying capacity for livestock and wildlife.

OFF-ROAD VEHICLE (ORV). Any motorized vehicle designed for or capable of cross-country travel over lands, water, sand, snow, ice, marsh, swampland, or other terrain.

OUTSTANDING NATURAL AREA (ONA) (43 CFR 2071.1). Areas of outstanding scenic splendor, natural wonder, or scientific importance that merit special attention and care in management to insure preservation in their natural condition. These usually are relatively undisturbed, representative of rare botanical, geological, or zoological characteristics of principal interest for scientific and research purposes.

PARTICULATE MATTER. Any material, except water in a chemically uncombined form, that is or has been airborne and exists as a liquid or a solid at standard temperature and pressure conditions. Minute particles of coal dust, fly ash, smoke, or other solid material suspended in the atmosphere.

PERCENT FEDERAL RANGE. AUMs on public lands compared to AUMs on private and State lands.

PERCENT UTILIZATION. Grazing use of current growth, usually expressed as a percent of weight removed and most often related to key plant species.

PERMANENT IMPROVEMENT. A man-made structural or nonstructural improvement that will remain at a particular location for more than one field season, as differentiated from temporary structures. Includes such items as toilet buildings, trails, cabins, signs, fences, vegetation treatment areas, shelters, and fire grills.

PERMIT. Vegetation or Mineral Material Negotiated Cash Sale Contract (Form 5450-5) authorizing cutting, gathering, excavation, and removal of the specified material from a specified public land site or area.

PLANNING AREA. One or more planning units for which Management Framework Plans are prepared.

PLANNING ISSUE. (Bureau Manual 1616.1). Multiple-use conflicts which usually are long term and cannot be resolved by only administrative action. A planning issue must have two or more of the following characteristics: (1) concern expressed by public land users, State or local government, or another Federal agency; (2) existing or potential serious deterioration of public lands or resources; (3) possible significant impacts on and sometimes off public lands; (4) proposed uses that may not be in the best public interest or that may be in serious conflict with other uses. In addition, a planning issue must be mappable, decisions which could resolve it must be discretionary, it must not require resolution before planning is completed, and there must be alternative means of resolution. Resource management programs are not, by themselves, planning issues.

PLANNING UNIT. A geographic unit within a BLM district. It includes related lands, resources, and use pressure problems that are considered together for resource inventory and planning.

PLANT COMPOSITION. The mixture of plants found in a vegetation type or study area usually expressed in percents as related to all other plants.

PLANT VIGOR. The relative well being and health of a plant as reflected by its ability to manufacture sufficient food for growth and maintenance.

PRESCRIBED FIRE. Controlled application of fire to natural fuels under conditions of weather, fuel moisture, and soil moisture that will allow confinement of the fire to a predetermined area and, at the same time, will produce the intensity of heat and rate of spread required to accomplish certain planned benefits to one or more objectives to wildlife, livestock, and watershed values. The overall objective is to employ fire scientifically to realize maximum net benefits at minimum environmental damage and acceptable cost.

PRIOR STABLE LEVELS. A calculated number derived from deer population dynamics data from the average of 10 or more years when deer populations were stable and at or near the carrying capacity of the range of a given deer herd unit.

PROPER USE. A degree and time of grazing use which, if continued, will either maintain or improve the vegetation condition consistent with conservation or other natural resources.

PROPER USE FACTOR. An index, expressed as a percent of current year growth, that wil allow maintenance of forage species.

PUBLIC LANDS. Any lands or interest in lands outside of Alaska owned by the United States and administered by the Secretary of the Interior through the BLM, except lands located on the Outer Continental Shelf and lands held for the benefit of Indians.

PUBLIC PARTICIPATION. The process of attaining citizen input into each planning document development stage. It is required as a major input into the BLM's planning system.

RANGE CONDITION. The present state of vegetation of a range site in relation to the climax (natural potential) plant community for that site. Condition is expressed as excellent, good, fair, or poor.

RANGE FORAGE CONDITION. A condition rating based on the amount of forage (lbs/acre) currently produced on an allotment usable by livestock in relation to its potential forage production (lbs/acre).

RANGE IMPROVEMENTS (STRUCTURAL AND NONSTRUCTURAL). Any activity or program on or relating to rangelands designed to improve forage production, change vegetation composition, control patterns of use, provide water, stabilize soil and water conditions, and enhance habitat for livestock, wildlife, and wild horses and burros. Rangeland improvements include nonstructural (land treatments, e.g., chaining, seeding, burning, etc.) and structural (stockwater developments, fences, and trails).

RANGE SITE. A distinctive kind of rangeland that differs from other kinds of rangeland in its potential to produce native plants.

RANGELAND. Land dominated by vegetation that is useful for grazing and browsing by animals. "Range" and "rangeland" are used interchangeably.

RANGELAND MONITORING PROGRAM. A program designed to measure changes in plant composition, ground cover, animal populations, and climatic conditions on the public rangeland. Vegetation studies are used to monitor changes in rangeland condition and determine the reason for any changes that are occurring. The vegetation studies consist of actual use, utilization, trend, and climatic conditions.

RANGELAND SURVEY/STUDIES. An inventory of the rangeland resources including production of plant materials, plant composition, rangeland use, physical features, and natural conditions, such as water, barriers, etc., for the purpose of estimating ecological conditions, trends in condition, estimated proper stocking rates, etc. These studies are useful in management planning.

RAPTORS. Birds of prey, such as the eagle, falcon, hawk, owl, or vulture.

REGION. May be any geographic area larger than a planning area (Social-Economic Profile Area, sub-State, State, Multi-State, or National), appropriate for comparative area analysis and for which information is available. Regions may be different for different resources or subject matter analysis.

RELATIVE HUMIDITY. The relative measure of water vapor content in the atmosphere.

RELICT VEGETATION. A remnant or fragment of a flora that remains from a former period when it was more widely distributed.

RESEARCH NATURAL AREAS (43 CFR 8223). This is an area that is established and maintained for the primary purpose of research and education because the land has one or more of the following characteristics: (1) A typical representation of a common plant or animal association; (2) an unusual plant of animal association; (3) a threatened or endangered plant or animal species; (4) a typical representation of common geologic, soil, or water features; or (5) outstanding or unusual geologic, soil, or water features.

RESOURCE AREA. A manageable geographic subdivision of a BLM District consisting of one or more planning areas.

RESOURCES. All of the products and physical values produced or contained within public lands. They include the values known as natural resources (i.e., timber, coal, oil, etc.).

RIGHT-OF-WAY AVOIDANCE AREAS. Areas where rights-of-way may be granted only when no feasible alternative route or designated right-of-way corridor is available. If a right-of-way must be granted within these areas, special terms and conditions would apply to protect the special resources present..

RIPARIAN HABITAT. A native environment growing near streams, reservoirs, ponds, etc. that provides food, cover, water, and living space (permanent or intermittent). It is usually unique or limited in arid regions and is, th efore, of great importance to a wide variety of \ life.

RIPARIAN VEGETATION. Plants adapted to moist growing conditions along streams, waterways, ponds, etc.

SALINE-ALKALI SOIL. A soil containing sufficient exchangeable sodium to interfere with the growth of most crop plants and containing appreciable quantities of soluble salts. The exchangeable-sodium-percentage is greater than 15, and the electrical conductivity of the saturation extract is greater than 4 mmhos per centimeter (at 25 degrees C). The pH reading of the saturated soil is usually less than 8.5.

SALINE SOIL. A nonalkali soil containing soluble salts in such quantities that they interfere with the growth of most crop plants. The electrical conductivity of the saturation extract is greater than 4 mmhos per centimeter (at 25 degrees C), and the exchangeable-sodium-percentage is less than 15. The pH reading of the saturated soil is usually less than 8.5. *Slightly Saline:* Less than 4 mmhos above 3 inches and 4-16 mmhos below 8 inches. *Moderately Saline:* 4-16 mmhos above 20 inches and more than 16 mmhos below 20 inches. *Strongly Saline:* More than 16 mmhos in surface and throughout the soil profile.

SEDIMENT YIELD. The amount of mineral or organic soil material that is in suspension, is being transported, or has been moved from its site of origin by running water.

SENSITIVE SPECIES. Species not yet officially listed but that are undergoing status review for listing on the Fish and Wildlife Service official threatened and endangered list; species whose populations are small and widely dispersed or restricted to a few localities; and species whose numbers are declining so rapidly that official listing may be necessary.

SOIL ASSOCIATION. A group of defined and named soil units occurring together in individual and characteristic patterns over a geographic region.

SOIL CLASSIFICATION. The systematic arrangement of soils into classes of one or more categories or levels of classification for a specific objective. Broad groupings are made on the basis of general characteristics and subdivisions are made on the basis of more detailed differences in specific properties.

SOIL SURFACE FACTOR (SSF). A numerical expression of surface erosion activity caused by wind and water as reflected by soil movement, surface litter, erosion pavement, pedastalling, rills, flow patterns, and gullies. Values may vary from 0 for no erosion to 100 for severe erosion conditions.

SOIL-VEGETATION INVENTORY. A uniform, systematic method for inventory of soil and vegetation resources and collecting data for use in planning and environmental assessments.

SPECIAL RECREATION MANAGEMENT AREAS. Recreation management areas that receive emphasis and priority in BLM's recreation planning and management efforts. The recreation resources in these areas require explicit management to provide specified recreation setting, activity, and experience opportunities. Recreation management objectives will provide explicit guidance with respect to the existing opportunities and problems in these areas. Recreation Management Plans will subsequently be prepared for special recreation management areas using RMP objectives for guidance.

STATE LANDS. Lands controlled or administered by the State of Utah.

STOCKING RATE. The degree to which an allotment is stocked with livestock and big game, usually expressed in AUMs.

STOCK WATERING POND. A water impoundment made by constructing a dam or by excavating a dugout or both to provide water for livestock and/or wildlife.

SULFUR OXIDES. A pungent toxic gas yielded by the combustion of fossil fuels.

TAXA. Any taxonomic unit, as an order, genus, variety, etc.

THREATENED SPECIES. Any animal or plant species likely to become endangered within the foreseeable future throughout all of a significant portion of its range.

TOTAL DISSOLVED SOLIDS (TDS). The total quantity (milligrams per liter) of dissolved materials in water.

TRADITIONAL USE. Use (e.g., wood cutting, ORV) of an area that has occurred before 1976.

TREND IN RANGE CONDITION. An interpretation of the direction of change in range condition. These determinations may relate to ecological site or forage conditions. Also, vegetation trend that is improving (upward) not changing (static) and declining (downward).

UNIT RESOURCE ANALYSIS (URA). A compilation of physical resource data and an analysis of the current use, production, condition, and trend of the resource and the potentials and opportunities within a planning unit or area, including a profile of ecological values.

VARIABLE COSTS. A cost which increases or decreases as the total volume of production increases or decreases (e.g., cost of cattle feed).

VEGETATION. Plants in general or the sum total of the plant life above and below ground in an area.

VEGETATION TREATMENT. Changing the characteristics of an established vegetation type to improve rangeland forage or wildlife habitat resources. Treatments are designed for specific areas and differ according to the area's suitability and potential. The most common land treatment methods alter the vegetation by chaining, spraying with herbicides, burning, and plowing, followed by seeding with well adapted desirable plant species.

VEGETATION UTILIZATION. The portion of the current year's forage production consumed or destroyed by grazing animals. May refer either to a single species or to the vegetation resource as a whole, usually expressed in percent.

VISIBILITY. The greatest distance in a given direction where it is possible to see and identify with the unaided eye a prominent dark object against the sky at the horizon.

VISITOR DAY. Twelve visitor hours which may be aggregated by one of more persons in single or multiple visits.

VISITOR USE. Visitor use of a resource for inspiration, stimulation, solitude, relaxation, education, pleasure, or satisfaction.

VISUAL RESOURCE MANAGEMENT (VRM) Classes. Management classes are determined on the basis of overall scenic quality. distance from travel routes, and sensitivity to change. *Class I*: Provides primarily for natural ecological changes only. It is applied to wilderness areas, some natural areas, and similar situations where management activities are to be restricted. *Class II*: Changes in the basic elements caused by a management activity may be evident in the characteristic landscape, but the changes should remain subordinate to the visual strength of the existing character. *Class III*: Changes in the basic elements caused by a management activity may be evident in the characteristic landscape, but the changes should remain subordinate to the visual strength of the existing character. *Class IV*: Changes may subordinate the original composition and character but must reflect what could be a natural occurrence within the characteristic landscape. *Class V*: Change is needed. This class applies to areas where the naturalistic character has been disturbed to a point where rehabilitation is needed to bring it back into character with the surrounding landscape.

WETLANDS. Lands including swamps, marshes, bogs, and similar areas, such as wet meadows, river overflows, mud flats, and natural ponds.

WICKIUP. A small brush hut used by the later nomadic Indians in the area (i.e., Paiute-Shoshone).

WILDERNESS. An area where the earth and its community of life are untrammeled by man, where man himself is a visitor who does not remain. An area of undeveloped Federal land retaining its primeval character and influence without permanent improvements or human habitations.

WILDERNESS AREA. An area officially designated as wilderness by Congress. Wilderness areas will be managed to preserve wilderness characteristics and shall be devoted to the public purposes of recreation, scenic, scientific, educational, conservation, and historical use.

WILDERNESS STUDY AREA. Areas under study for possible inclusion as a Wilderness Area in the National Wilderness Preservation System (NWPS).

WILDFIRE. A free-burning fire requiring a suppression response.

WOODLAND. Forest lands stocked with other than timber species (i.e., pinyon, juniper, mountain mahogany, etc.). Uses of the woodland products are generally limited to firewood, posts, and harvest of fruit (pinyon pine nuts).

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☆U.S. GOVERNMENT PRINTING OFFICE:1986—676-606 / 40007

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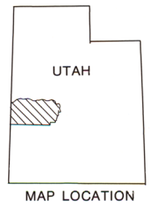
* ALLOTMENTS WITH EXISTING ALLOTMENT MANAGEMENT PLANS

WARM SPRINGS RESOURCE AREA

LIVESTOCK GRAZING ALLOTMENTS

MAP 1



MAP LOCATION

- PUBLIC LAND (BLM)
- FEDERAL LAND, OTHER AGENCIES
- STATE LAND
- PRIVATE LAND
- PAIUTE INDIAN LAND
- LIVESTOCK GRAZING ALLOTMENT BOUNDARY
- FOREST SERVICE BOUNDARY
- RESOURCE AREA BOUNDARY

4 3 2 1 0 4 8 12
Scale in miles

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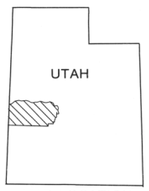
MAP DOES NOT MEET NATIONAL MAP ACCURACY STANDARDS

MULE DEER AND ANTELOPE HABITAT

MAP 2



MAP LOCATION

- CRITICAL MULE DEER WINTER RANGE
- CRITICAL ANTELOPE HABITAT
- AREAS FOR ANTELOPE WATER DEVELOPMENT AND PRIORITY NUMBER
- LIVESTOCK GRAZING ALLOTMENT BOUNDARY
- FOREST SERVICE BOUNDARY
- RESOURCE AREA BOUNDARY

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Scale in miles

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* ALLOTMENTS WITH EXISTING ALLOTMENT MANAGEMENT PLANS

MAP DOES NOT MEET NATIONAL MAP ACCURACY STANDARDS

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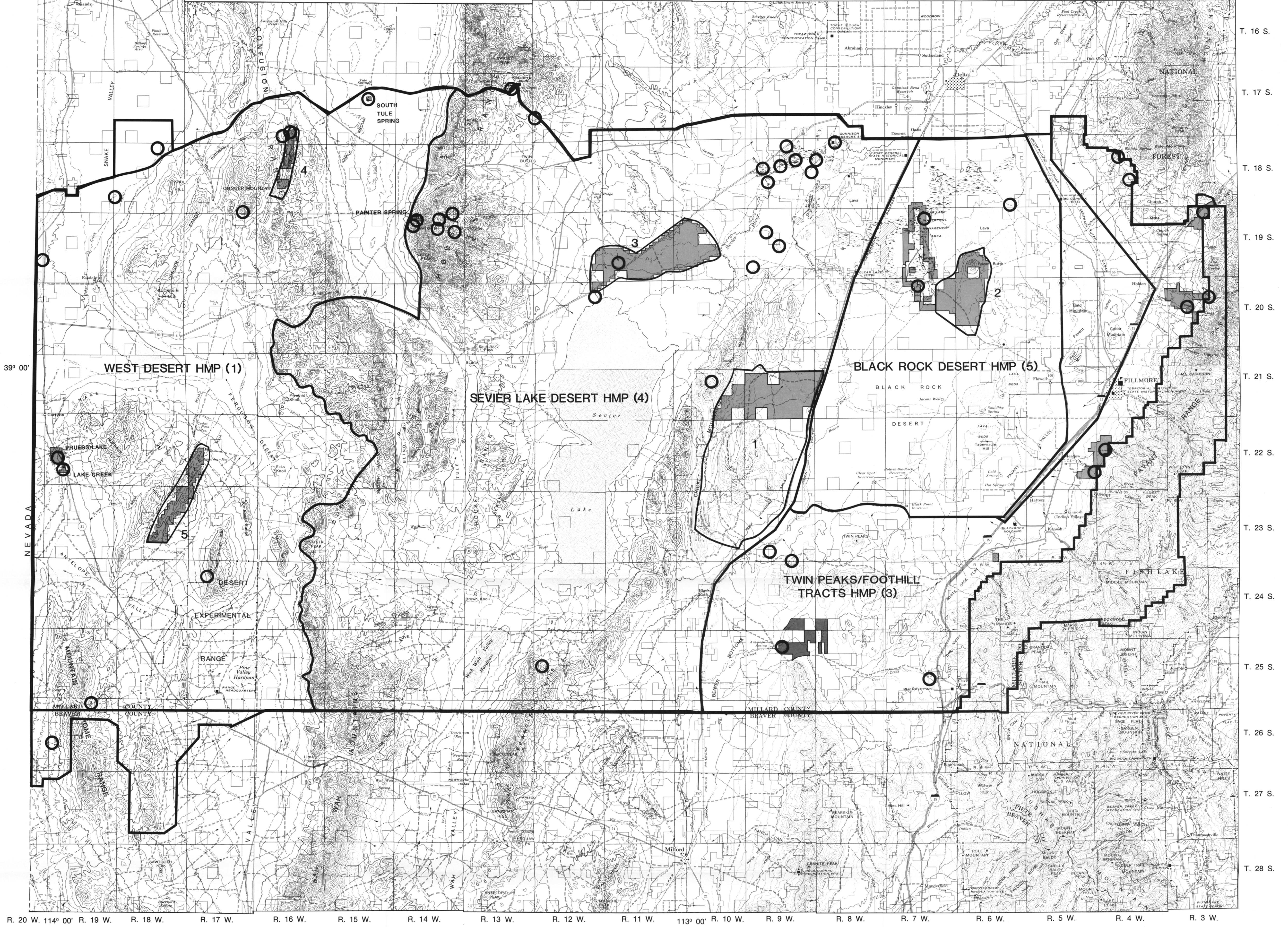

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WEST DESERT HMP (1)
SEVIER LAKE DESERT HMP (4)
BLACK ROCK DESERT HMP (5)
TWIN PEAKS/FOOTHILL
TRACTS HMP (3)
SOUTH TULE SPRING
PAINTER SPRING
PRUESS LAKE
LAKE CREEK
NEVADA
FILLMORE
Delta
Milford
MILLARD COUNTY
BEAVER COUNTY
1
2
3
4
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R. 10 W.
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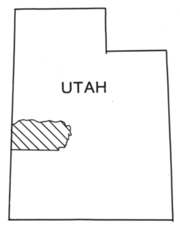
R. 8 W.
R. 7 W.
R. 6 W.
R. 5 W.
R. 4 W.
R. 3 W.

WILDLIFE HABITAT MANAGEMENT PLANS (HMPs) AND SPECIAL MANAGEMENT AREAS

MAP DOES NOT MEET NATIONAL MAP ACCURACY STANDARDS



MAP LOCATION

MAP 3

- HMP AREAS AND PRIORITY (#)
- RIPARIAN AREAS HMP LOCATIONS (PRIORITY (2))
- OIL, GAS, GEOTHERMAL, AND ORV RESTRICTIONS
- ORV SEASONAL RESTRICTION ONLY
- CRUCIAL RAPTOR NESTING AREA AND NUMBER
- RESOURCE AREA BOUNDARY

4 3 2 1 0 4 8 12

Scale in miles

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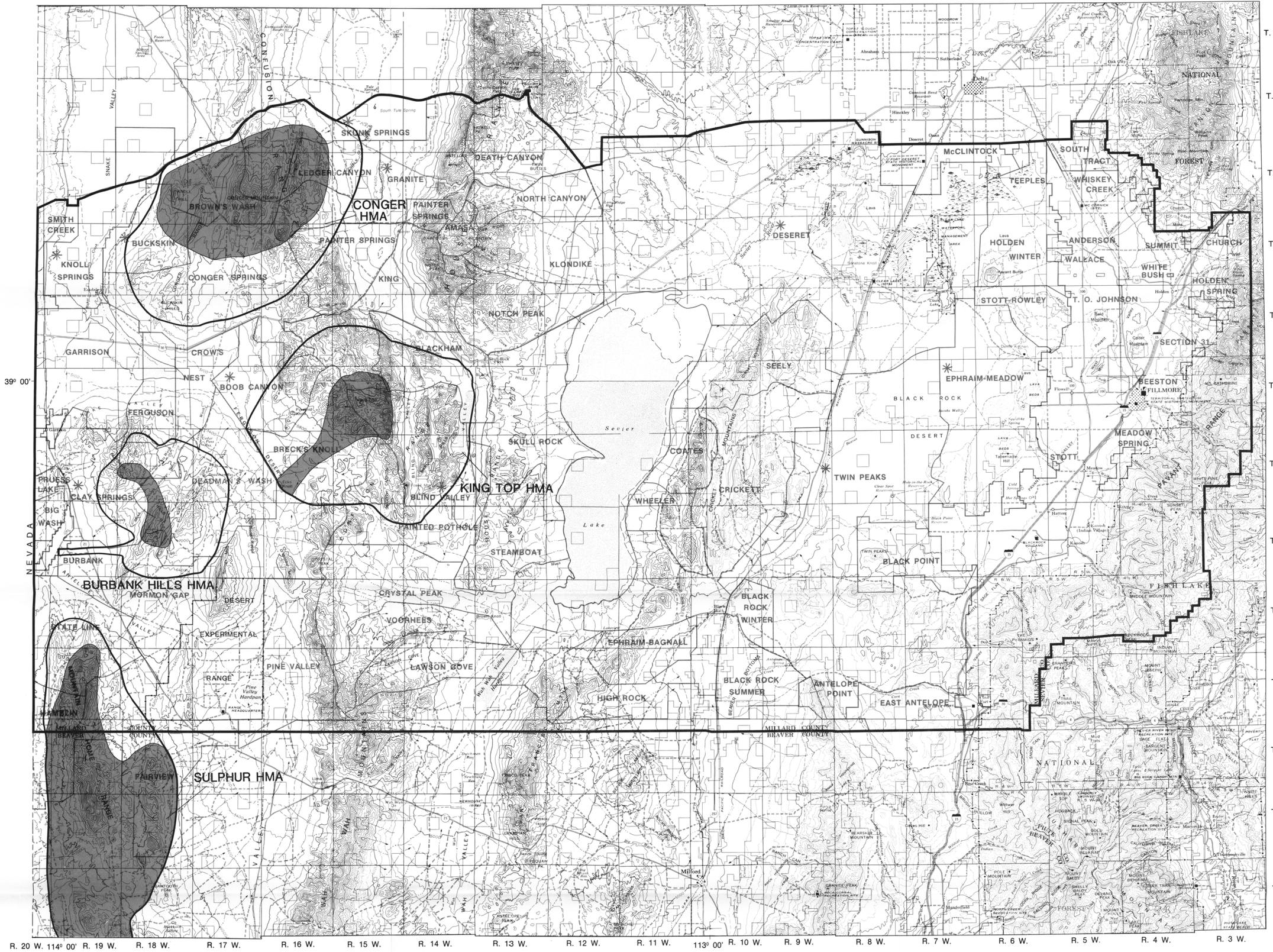

*ALLOTMENTS WITH EXISTING ALLOTMENT MANAGEMENT PLANS

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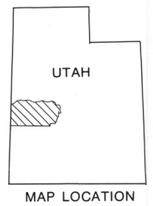

MAP LOCATION

WILD HORSE HERD MANAGEMENT AREAS (HMAs) AND CRUCIAL HABITAT

MAP 4

HMA BOUNDARY

CRUCIAL HABITAT

LIVESTOCK GRAZING ALLOTMENT BOUNDARY

FOREST SERVICE BOUNDARY

RESOURCE AREA BOUNDARY

4 3 2 1 0 4 8 12

Scale in miles

N

SPECIAL RECREATION SITES AND DESIGNATIONS

MAP DOES NOT MEET NATIONAL MAP ACCURACY STANDARDS

GUNNISON MASSACRE SITE

GREAT STONE FACE

PAINTER SPRING

NOTCH PEAK (NNL/ACEC)

SUNSTONE KNOLL

PAVANT BUTTE (ACEC)

DEVILS KITCHEN

TABERNACLE HILL PETROGLYPHS

TABERNACLE HILL (SRMA/ACEC)

PRUESS LAKE

FOSSIL MOUNTAIN (HS/ACEC)

CRYSTAL PEAK (ONA/ACEC)

WAH WAH MOUNTAINS (SRMA/RNA/ACEC)

T. 16 S.
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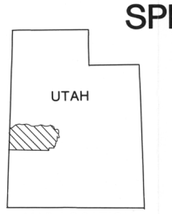
SPECIAL MANAGEMENT DESIGNATION AREAS

- (NNL) NATIONAL NATURAL LANDMARK
- (ONA) OUTSTANDING NATURAL AREA
- (HS) HISTORIC SITE
- (RNA) RESEARCH NATURAL AREA
- (SRMA) SPECIAL RECREATION MANAGEMENT AREA
- (ACEC) AREA OF CRITICAL ENVIRONMENTAL CONCERN



MAP LOCATION

MAP 5

OFF ROAD VEHICLE (ORV) DESIGNATIONS

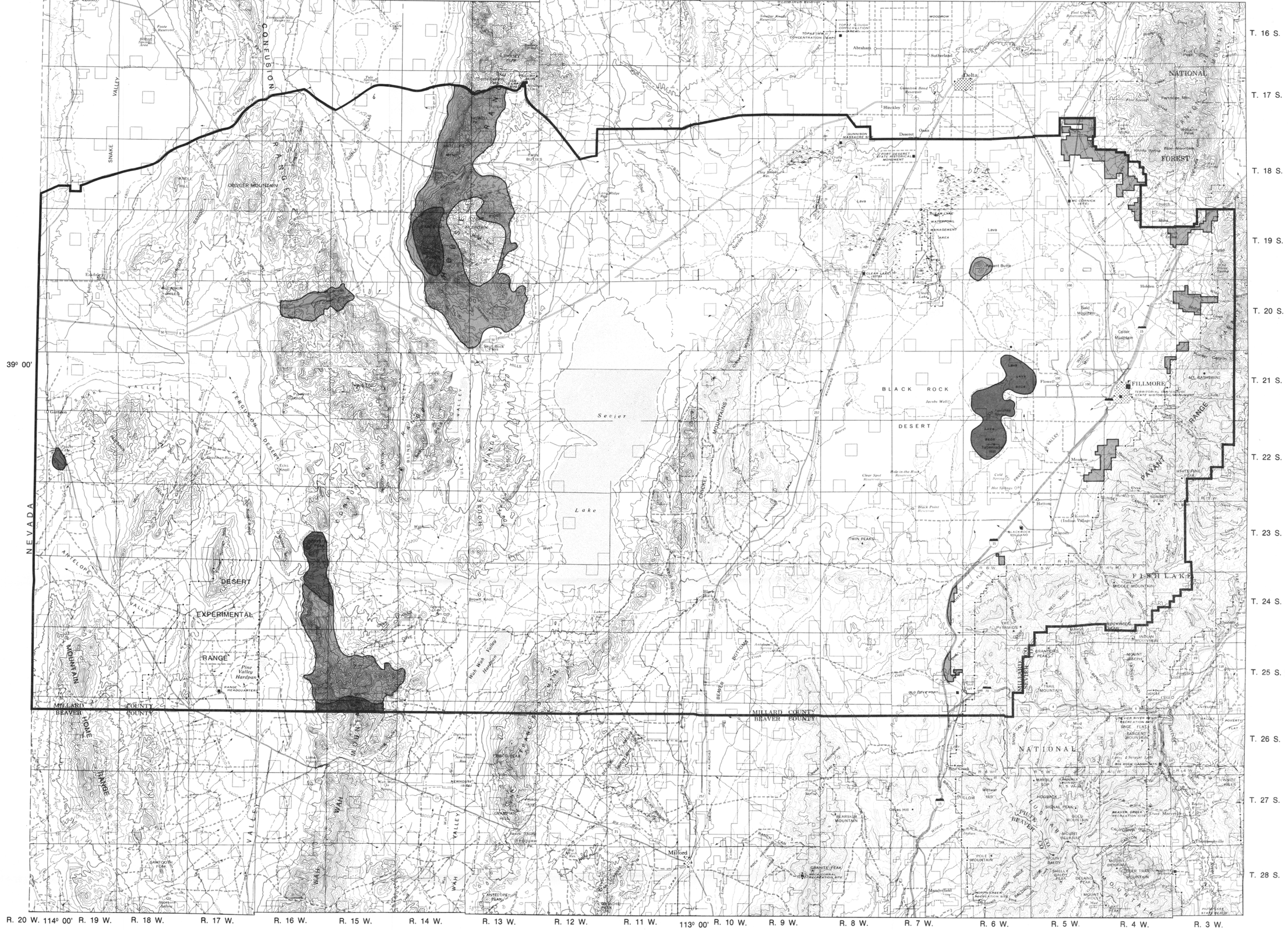
- CLOSED TO ORVs
- LIMITED TO EXISTING AND/OR DESIGNATED ROADS AND TRAILS SEASONALLY
- OPEN

4 3 2 1 0 4 8 12

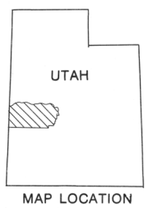
Scale in miles

N

RESOURCE AREA BOUNDARY



VISUAL RESOURCE MANAGEMENT



MAP LOCATION

MAP 6

VISUAL RESOURCE MANAGEMENT CLASSES

- VRM – CLASS II
- VRM – CLASS III
- VRM – CLASS IV

4 3 2 1 0 4 8 12

Scale in miles

N

RESOURCE AREA BOUNDARY

TRACT 1

TRACT 2

TRACT 3

TRACT 4

TRACT 5

NOTCH PEAK NATIONAL NATURAL LANDMARK NOMINATION /ACEC 1

CRYSTAL PEAK OUTSTANDING NATURAL AREA /ACEC 1

FOSSIL MT. HISTORIC SITE /ACEC

WAH WAH MTS RESEARCH NATURAL AREA /ACEC

PAVANT BUTTE ACEC

TABERNACLE HILL ACEC

SIGUARD TO NEVADA TRANSMISSION LINE

IPP TO NEVADA

IPP TO CALIFORNIA

U.S. HIGHWAY 50 & 6

STATE HIGHWAY 257

UNION PACIFIC RAILROAD

INTERSTATE HIGHWAY 15

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[1] IF THE AREA IS NOT DESIGNATED WILDERNESS BY CONGRESS

MAP DOES NOT MEET NATIONAL MAP ACCURACY STANDARDS

LAND DISPOSAL TRACTS

DESIGNATED RIGHT-OF-WAY CORRIDORS

RIGHT-OF-WAY AVOIDANCE AREAS
- SPECIAL DESIGNATION AREAS
- VRM CLASS II AREAS

UTAH
MAP LOCATION

MAP 7

LANDS

- PUBLIC LAND (BLM)
- FEDERAL LAND, OTHER AGENCIES
- STATE LAND
- PRIVATE LAND
- PAIUTE INDIAN LAND

RESOURCE AREA BOUNDARY

4 3 2 1 0 4 8 12
Scale in miles

N

GANDY SPRINGS

SOUTH TULE SPRING

PAINTER SPRING

NOTCH PEAK NATIONAL NATURAL LANDMARK/ACEC

GREAT STONE FACE

SUNSTONE KNOLL

PAVANT BUTTE ACEC

NEELS SIDING

DEVILS KITCHEN

FILLMORE

TABERNACLE HILL ACEC

TABERNACLE HILL PETROGLYPHS

MEADOW-HATTON KGRA

PAVANT RANGE

PRUESS LAKE

LAKE CREEK

FOSSIL MT. HISTORIC SITE /ACEC

CRYSTAL PEAK OUTSTANDING NATURAL AREA /ACEC

ESCALANTE DESERT

COVE FORT-SULPHURDALE KGRA

WAH WAH MTS. RESEARCH NATURAL AREA [1]

Milford

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MINERALS

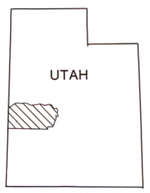
MAP DOES NOT MEET NATIONAL MAP ACCURACY STANDARDS

LOCATABLE MINERALS

THE FOLLOWING AREAS WILL BE RECOMMENDED FOR WITHDRAWAL FROM MINERAL ENTRY:

PAVANT BUTTE	2,500 acres
TABERNACLE HILL	3,567 acres
CRYSTAL PEAK [1]	640 acres
NOTCH PEAK [1]	9,000 acres
WAH WAH MOUNTAINS [1]	5,970 acres
TOTAL	21,677 acres

[1] IN THE EVENT THE AREAS ARE NOT DESIGNATED AS WILDERNESS BY CONGRESS



MAP LOCATION

MAP 8

FLUID MINERAL LEASING CATEGORIES

- CATEGORY 3
- CATEGORY 2
- CATEGORY 1

GEOTHERMAL LAND CLASSIFICATIONS

- KNOWN GEOTHERMAL RESOURCE AREA (KGRA)
- LANDS PROSPECTIVELY VALUABLE FOR GEOTHERMAL RESOURCES

4 3 2 1 0 4 8 12

Scale in miles

N

RESOURCE AREA BOUNDARY