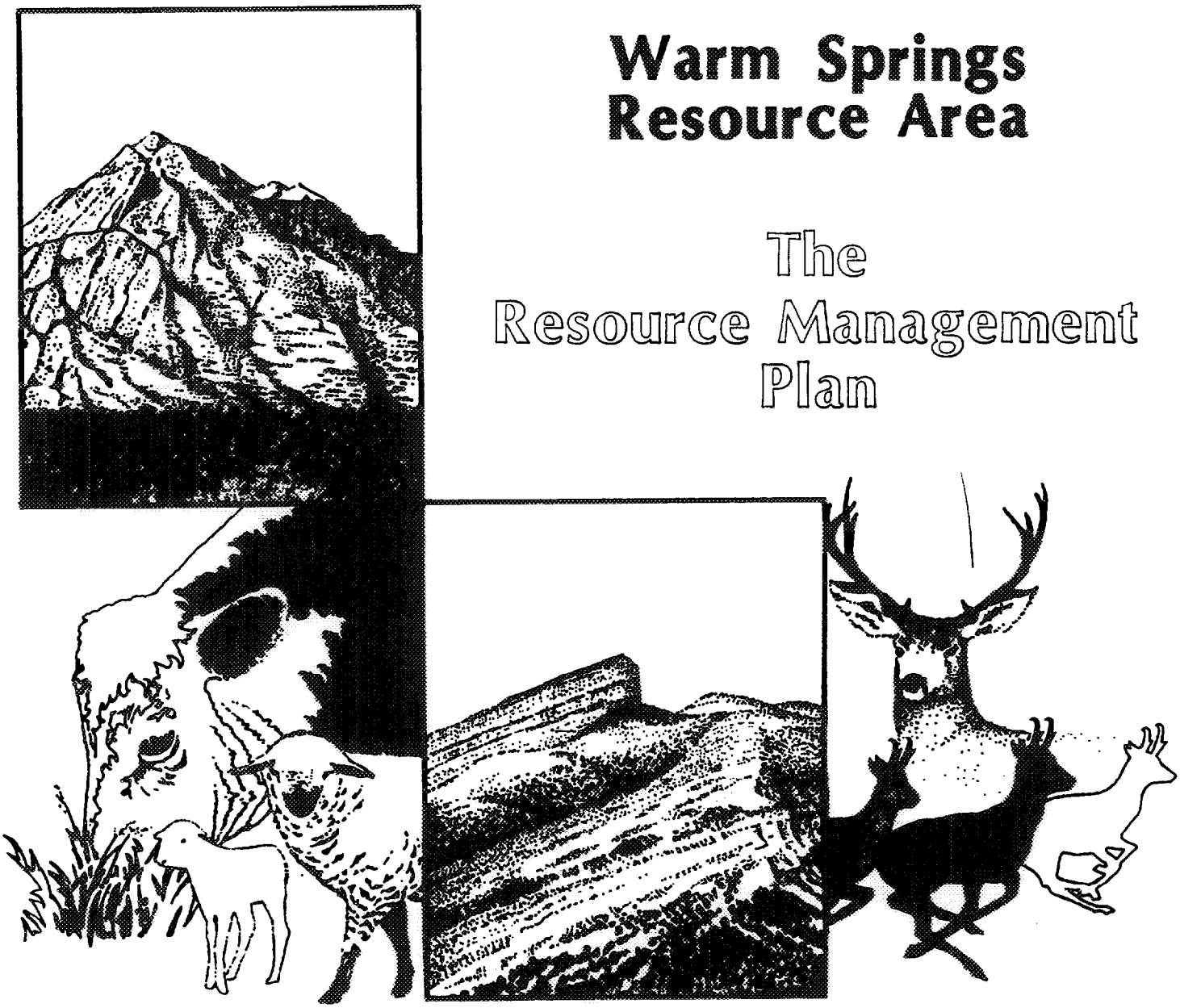
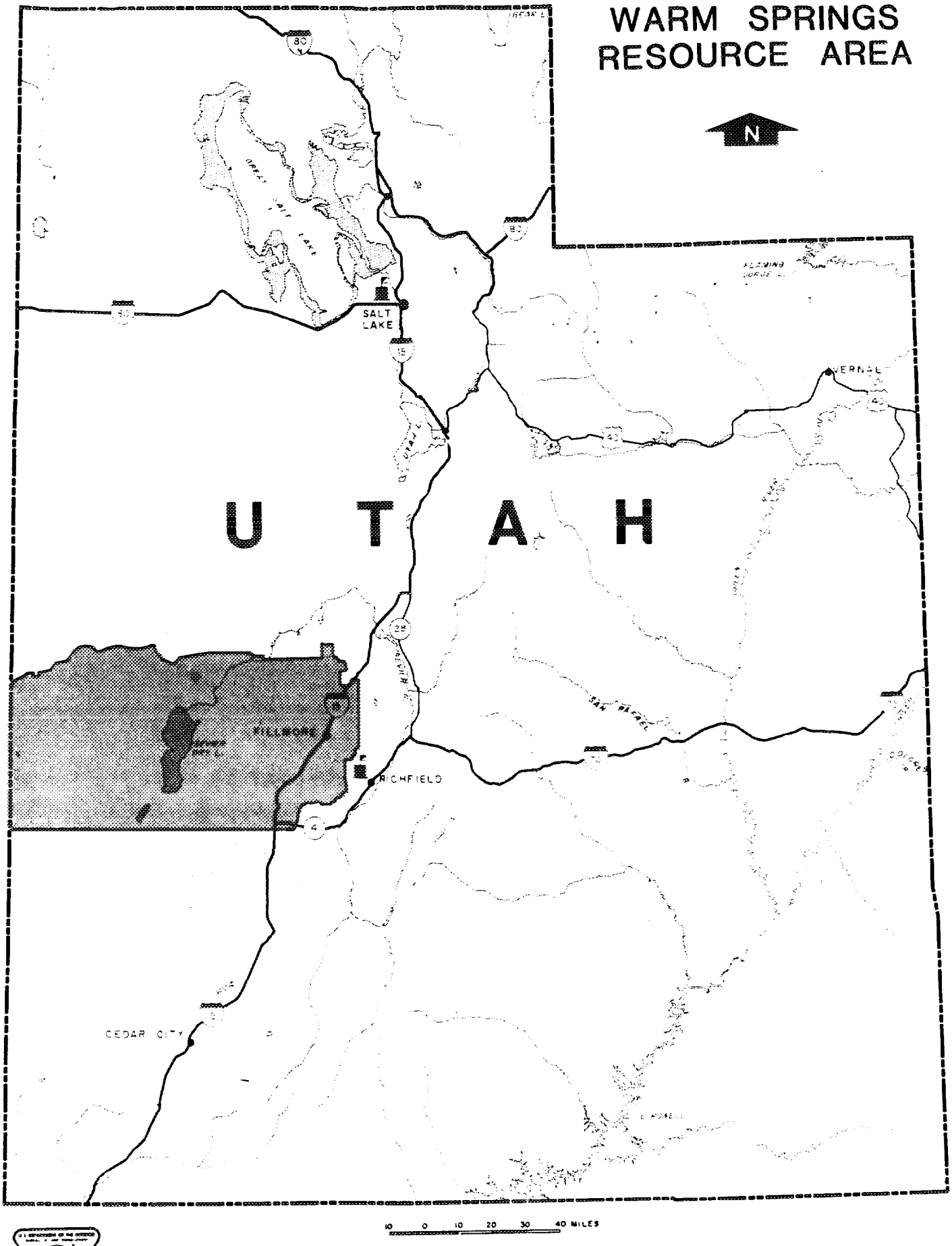
Warm Springs Resource Area

The Resource Management Plan



Record of Decision Rangeland Program Summary



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.

Illustrations by John Nielson, Rod Lister, and Susan Lowe.

Warm Springs Resource Area

The Resource Management Plan

Record of Decision Rangeland Program Summary

April 1987

RICHFIELD DISTRICT
BUREAU OF LAND MANAGEMENT
DEPARTMENT OF THE INTERIOR

Adoption of the Warm Springs Resource Area Resource Management Plan as provided herein is recommended.

Mark E. Bailey 20 Mar 87 — Donald L. Pendleton 3/23/87

Mark Bailey — Date
Area Manager
Warm Springs Resource Area

Donald Pendleton — Date
District Manager
Richfield District

Adoption of the Warm Springs Resource Area Resource Management Plan as provided herein is approved.

Roland Robison 3/30/87

Roland Robison — Date
Utah State Director

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READERS GUIDE

Chapter 1 briefly describes the Resource Area, the evolution of the Resource Management Plan (RMP) selected through the planning process, and the alternative plans analyzed in the *Draft RMP/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 RMP in Chapter 2 presents the decisions for future management of public land resources in the WSRA. It is based on Alternative D, the Preferred Alternative, and the "Management Common to All Alternatives" section presented in the *Draft RMP/EIS*. These discussions were expanded to include information required by Federal regulation and Bureau of Land Management (BLM) policy and presented as the proposed RMP in the *Final EIS*. 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 in the Record of Decision (ROD) to determine the effectiveness of the decisions, progress toward identified goals, and need for plan amendment or revision.

Chapter 2 also defines the considerations and rationale for selection of the RMP. It summarizes implementation and monitoring actions that will be taken to insure decisions are carried out as specified in the RMP/Rangeland Program Summary (RPS).

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

To facilitate reading and use of this document, all maps are located inside the back cover.

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LIST OF ABBREVIATIONS

ACEC: Area of Critical Environmental Concerns

AMP: Allotment Management Plan

AUM: Animal Unit Month

BIA: Bureau of Indian Affairs

BLM: Bureau of Land Management

BRRA: Beaver River Resource Area

C: Custodial

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

FLPMA: Federal Land Policy and Management Act

FS: Forest Service

FWS: Fish and Wildlife Service

FY: Fiscal Year

gpm: Gallons Per Minute

HMA: Herd Management Area

HMP: Habitat Management Plan

HS: Historic Site

I: Improve

IM: Instruction Memo

IMP: Interim Management Policy

IPP: Intermountain Power Project

KGRA: Known Geothermal Resource Area

KGS: Known Geologic Structure

LR: Land Report

M: Maintain

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

ONA: Outstanding Natural Area

ORV: Off-Road Vehicles

P.L.: Public Law

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 Purposes 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

USDA: United States Department of Agriculture

USDC: United States Department of Commerce

USDI: United States Department of the Interior

VRM: Visual Resource Management

WO: Washington Office

WSA: Wilderness Study Area

WSRA: Warm Springs Resource Area

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WARM SPRINGS
RESOURCE AREA RESOURCE MANAGEMENT PLAN
RECORD OF DECISION/RANGELAND PROGRAM SUMMARY

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CHAPTER 1
INTRODUCTION

ORGANIZATION OF THE RESOURCE MANAGEMENT PLAN/RECORD OF DECISION

This Resource Management Plan (RMP)/Record of Decision (ROD) provides a framework of actions, goals, and objectives for future public land management in the Bureau of Land Management (BLM) Warm Springs Resource Area (WSRA). This RMP establishes practices and systems to monitor and evaluate the status of resources and the effectiveness of management.

Chapter 2 presents the RMP decisions for the WSRA. The Range Management section constitutes the Rangeland Program Summary (RPS) for the WSRA. The RMP is based on the preferred alternative (Alternative D) identified in Chapter 2 of the *Draft RMP/Environmental Impact Statement (EIS)* and the proposed RMP in the *Final EIS*.

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 meets 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 RESOURCE AREA

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 (see Table 1-1).

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

THE PLANNING PROCESS

The WSRA RMP:

1. Updates and revises the previous Management Framework Plan (MFP). Preparation of the RMP, in accordance with BLM policy, was judged preferable to amendment of the MFP.

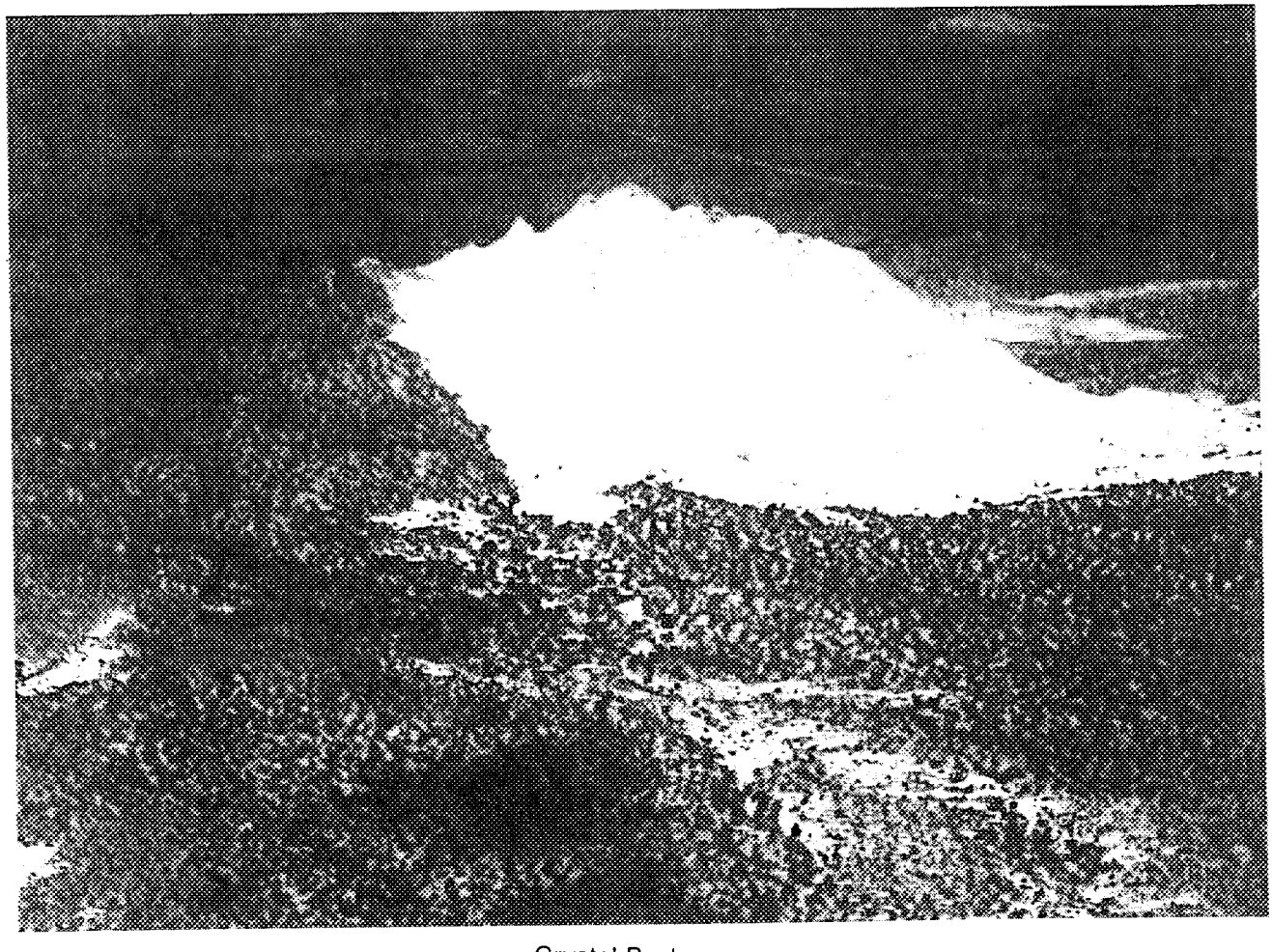
2. Completes a court-mandated grazing EIS for the WSRA. It was judged preferable to make the EIS part of this RMP rather than do a separate document.

The environmental consequences of four alternative management plans were analyzed in the *Draft RMP/EIS*. That document was published in April 1986 and distributed for public review and comment. The proposed RMP was then selected and presented in the *Proposed RMP/Final EIS* which was published in September 1986.

The notice of availability of the *Proposed RMP/Final EIS* (published in the *Federal Register* by the Environmental Protection Agency [EPA]) was followed by a 30-day public comment and protest period. There was one letter of comment on the *Proposed RMP/Final EIS*. No protests were filed with the Director. The approved plan is published in this ROD/RPS.

Following implementation, resource information will be gathered to assess progress toward the goals and objectives established in the RMP. Standards for monitoring and evaluation include periodic review (at least every 5 years) to determine if amendment or revision of the RMP is necessary.

For a detailed discussion of the affected environment and environmental consequences of the proposed plan and alternatives, the reader is referred to the *Draft RMP/EIS*.



Crystal Peak

EVOLUTION OF THE RMP

The WSRA RMP planning process involved the following nine interrelated actions. These actions integrated National Environmental Policy Act (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. Through this process one planning issue and several management concerns were identified. The planning issue identified was range management: the allocation and management of public rangeland forage resources. Management concerns were identified for each resource and activity or program 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 for the identified issue and concerns.

4. Next, the interdisciplinary team (see List of Preparers) prepared the Management Situation Analysis (MSA). 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* in April 1985 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/Final EIS* by the EPA in September 1985 began a 30-day public protest period (no protests were filed) and the final approval sequence.

9. Implementation of this approved plan will follow publication of this ROD/RPS. Thereafter, information will be gathered regarding progress toward the goals and objectives established in the plan.

Any person adversely affected by a specific action being proposed for implementation by some portion of the RMP may appeal such action pursuant to 43 Code of Federal Regulations (CFR) 4.400 at the time the action is proposed for implementation.

RMP ALTERNATIVES CONSIDERED

The analysis of the management situation and all other previously developed information formed the basis for formulating alternatives. In accordance with applicable laws, regulations, and policies, the alternatives ranged from favoring resource protection, commodity production, or continuing the current direction and intensity of management (No Action).

The four alternatives formulated are discussed and analyzed in the *Draft RMP/EIS*. These alternatives are briefly described below.

Alternative A: No Action—Continuation of Present Management

Objective: Continue current direction and level of management intensity and levels of resource uses.

Alternative B: Protection—Preservation of Natural Resource Values

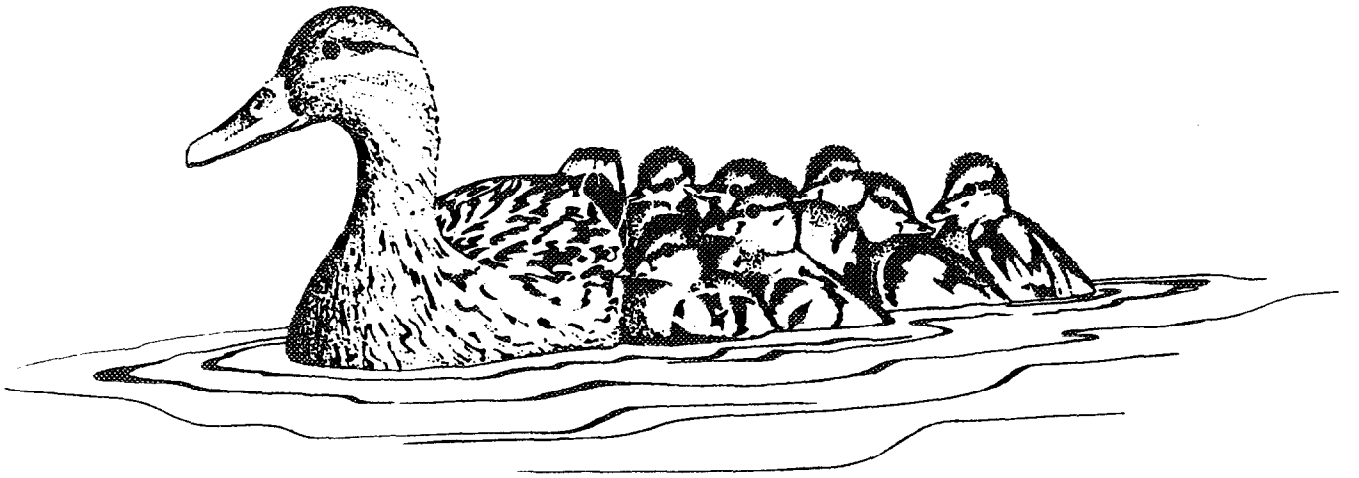
Objective: Protect and enhance the natural values of the WSRA. Trade-offs favor wildlife habitat, watershed, scenic values, and undeveloped/dispersed recreation. Commodity/consumptive uses (livestock grazing, mineral development, motorized recreation, etc.) would be restricted if there were a significant risk of diminishing natural resource values.

Alternative C: Production—Increased Consumptive Use and Commodity Production

Objective: Increase use of public land resources within the WSRA. Encourage and facilitate increased livestock use, energy and mineral production, etc. Trade-offs favor consumptive uses (livestock grazing, energy and mineral production, ORV use) over wildlife habitat protection/production, scenic and ecological values, and non-motorized/non-developed recreation.

Alternative D: Preferred Alternative—A Composite of the Other Alternatives

Objective: Provide variety and balanced use of the WSRA's resources. Where possible, increase or improve resources for consumptive use (e.g., forage for livestock grazing), nonconsumptive use (e.g., recreational sightseeing, hiking, etc.), or natural resource use (e.g., wildlife and wild horse habitats). Use and development of energy and mineral resources, rights-of-way, and permit policies would be encouraged while protection of other natural values would be insured. Objectives would be to balance utilization and protection of the various resources. Alternative D was identified as the environmentally preferred alternative by the interdisciplinary team and was selected for approval as the WSRA RMP by the BLM Utah State Director.



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

CHAPTER 2

THE RESOURCE MANAGEMENT PLAN

INTRODUCTION AND REASON FOR SELECTION

This Resource Management Plan (RMP) for the Warm Springs Resource Area (WSRA) presents the decisions for future resource management on over 2.2 million acres of public lands. The plan was the proposed RMP (Alternative D) in the *Proposed RMP/Final Environmental Impact Statement (EIS)*. Here, it is presented with management goals and objectives, implementation priorities, support requirements, and monitoring procedures and standards for each program.

The rationale for selection of the RMP follows:

- Of the alternatives considered, the selected plan was judged as best maximizing resource values for the public, based on the concept of multiple-use management.
- The planned actions are in conformance with pertinent laws, regulations, and policy. These actions will protect unique and sensitive resources or areas while allowing balanced and diverse resource uses.
- The plan makes the most judicious use of the lands, considering the long-term needs of future generations for renewable and non-renewable resources.
- The plan best fulfills the Bureau of Land Management's (BLM) statutory mission and responsibilities, giving consideration to environmental, technical, and economic factors.
- Based on comments received during public review and information developed earlier in the planning process, the 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. All practical means to avoid or minimize environmental harm from the selected alternative have been adopted in the decisions.

No protests on the *Proposed RMP/Final EIS* were filed, and the Governor's consistency review did not identify any conflicts of the proposed RMP with State or local plans, programs, or policies. The selected RMP is, therefore, virtually identical to the proposed RMP. The only changes are those resulting from minor corrections, additions for clarification, and incorporation of some of the 1986 rangeland monitoring study data. (Appendix 1 shows the revised total indicated grazing capacity.)

CONCEPT OF THE PLAN

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

Approximately 90,000 acres will 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), will be managed under standard BLM stipulations. Of the area under restrictive or protective management, approximately 65,000 acres will have seasonal limitations on activities. Unique or sensitive resources in six special management designation areas will 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, there will generally not be significant changes in management intensity or direction.

Following implementation, plan maintenance will be performed on a regular basis. New data, minor changes, or refinements in analysis will be posted to keep the plan current. Maintenance will not, however, 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, will outline the

specific actions necessary to achieve goals and objectives for each resource.

Plan amendments will be used to allow proposals or actions not in conformance with the plan. Amendment procedures will conform to provisions and requirements defined in BLM planning regulations and policies.

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

The decisions in the plan apply to all 2.2 million acres of public lands currently in the resource area and any lands subsequently added to it.

Wilderness

No decisions or recommendations regarding wilderness designation of any of the five Wilderness Study Areas (WSAs) in the WSRA have been made in the plan. Wilderness designation recommendations have been analyzed in the *Utah BLM Statewide Wilderness Draft EIS* (1986a). Until Congress decides on designation or nondesignation 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 will constitute an amendment to the RMP. Areas designated will then be managed in accordance with the BLM's Wilderness Management Policy and provisions of the implementing legislation.

Four of the proposed special management designation areas are within WSAs. Wilderness designation by Congress could preclude actions planned for these areas: mineral withdrawal and closure to off-road vehicles (ORVs) on up to 15,610 acres; a special management designation of two areas; and Category 3 fluid mineral leasing and right-of-way avoidance area designations on up to 17,530 acres.

SPECIAL DESIGNATIONS

The RMP contains decisions on special designation and management of six areas. Early in the planning process, each of the areas was evaluated for designation as an Area of Critical Environmental Concern (ACEC) in accordance with BLM planning guidance. Two of these areas, Tabernacle Hill and Pavant Butte, were determined to meet the planning guidance criteria and were proposed for designation in the *Draft EIS* and *Proposed RMP/Final EIS*. The decision is to designate both areas as ACECs.

The other four areas were proposed for other designations in the *Draft* and *Final EISs*. The decisions on their designations are as follows: Wah Wah Mountains are designated a Research Natural Area (RNA); Fossil Mountain is designated an Historic Site; and, if not designated by Congress as wilderness, Crystal Peak will be designated an Outstanding Natural Area (ONA) and Notch Peak will be nominated for designation as a National Natural Landmark (NNL). Descriptions of these areas, their respective designations, and management prescriptions are presented in the Lands section of this chapter.

Since publication of the *Proposed RMP/Final EIS* in September 1986, BLM has issued new planning guidance regarding natural areas and ACECs (BLM Manual 1623.3). That November 1986 policy guidance directs that any natural areas identified during planning be also designated as ACECs.

Therefore, in response to that policy, notice has been placed in the *Federal Register* of BLM's proposal to also designate as ACECs the Wah Wah Mountains RNA, Fossil Mountain Historic Site, and, if they are not designated as wilderness, The Crystal Peak ONA and Notch Peak NNL nomination. If there are no protests filed during the subsequent 60-day public comment and protest period, these four areas will also be designated as ACECs. Only the dual ACEC designation is subject to protest. Any protest of the dual ACEC designation proposal should be filed with the Director in accordance with 43 Code of Federal Regulations (CFR) 1610.5-2.

It is pointed out that the other elements of these four dual designations (RNA, ONA, etc.) were effected upon approval of this RMP. Those designations and corresponding management presciptions were previously discussed in the *Proposed RMP/Final EIS*. The 30-day public protest period on those proposals expired on November 10, 1986. Those actions, therefore, are not subject to protest, nor are any of the other decisions presented in this ROD/Rangeland Program Summary (RPS).

The text and maps in this document reflect the proposal to provide dual ACEC designations to Wah Wah Mountains RNA, Fossil Mountain Historic Site, Crystal Peak ONA, and Notch Peak NNL (nomination).

PLAN IMPLEMENTATION

Management Review

Within 90 days of plan approval, the Resource Area and District staffs will conduct and present to the State Director a management review. That review will identify any on-going operations and activities that require adjustment to conform to the RMP. If any activities require adjustment, a schedule and action plan for making necessary use or other management adjustments to licenses, permits, contracts, etc., will be included. Existing activity plans will also be reviewed to insure conformance with the RMP.

Conformance Determinations

The bases for determining the conformance of proposed actions are the decisions, terms, stated conditions, associated prescriptions, and plan elements specified in the RMP. A proposed action is nonconforming if it changes resource uses, levels, or areas of production or use approved in the plan. Likewise, actions that would change management constraints, authorized practices, resource conditions, goals or objectives, or the time to meet those objectives would be nonconforming.

If a proposed action is found to be nonconforming, it may be disallowed. However, if it warrants further consideration, a plan amendment (in accordance with the National Environmental Policy Act [NEPA] and other applicable guidelines) may be initiated.

Following implementation, plan maintenance will be required to keep the plan current. New information will be posted, analysis refined, and minor changes or corrections made on a timely basis. Maintenance will not, however, expand the level or scope of resource uses; change restrictions; or alter decisions, conditions, or terms defined in the RMP.

MONITORING

Monitoring standards and intervals for resource programs are defined in the discussion of each respective program. The purposes of monitoring and evaluation are to:

- Define success of decisions or need for modification.
- Identify unanticipated effects.
- Determine if estimated effects of management actions are accurate.
- Track plan implementation (progress in implementing the decisions and development of activity plans).

The initial intervals for monitoring are 5 years or less. Those intervals may be later reduced or increased, depending on the need or effects identified.

Monitoring will also determine when revision of the plan is necessary. When plan maintenance or amendment is inadequate to keep the RMP current with changing policies, resource conditions, or circumstances, a new RMP will be prepared.

COSTS OF IMPLEMENTATION

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

1. Administrative costs of special management designations, Allotment Management Plans (AMP), Habitat Management Plans (HMP), other activity plan 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 decisions 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 will be expected to remain about the same. Annual project maintenance costs are estimated at $2,100 for new developments, in addition to maintenance for existing developments and improvements. Additional costs associated with more intensive management are expected to approximate $25,000 per year.

Thus, the total cost of implementation, in today's dollars, is estimated at approximately $500,000.00 annually.

ORGANIZATION OF THE PLAN

The RMP is organized by resource/program in the order shown on the Chapter 2 cover page. Bleeding tabs are provided to assist in locating each program/resource. Each discussion is preceded by a brief description of that resource/ program in the WSRA. The elements of the plan are then presented: goals and objectives, proposed actions, support requirements, implementation priorities, and plan monitoring and evaluation. To allow space for recording plan maintenance notes and monitoring entries, the elements of the plan are presented in a single column on each page.

Range Management

RANGE MANAGEMENT/ RANGELAND PROGRAM SUMMARY

Introduction

The following discussion presents the RMP ROD for the range management program in the WSRA. It also constitutes the RPS. In accordance with BLM Washington Office (WO) Instruction Memorandum (IM) No. 86-462 and other planning guidance, rangeland management objectives and actions necessary to achieve those objectives are identified. The priorities for monitoring and management action are also defined by allotment.

Actions taken and accomplishments made toward achieving RMP objectives will be communicated to the public and users through RPS updates. The first RPS update will be prepared and distributed 2 to 4 years following plan approval. A second update will be distributed in FY 1993, the sixth year of implementation, following decision or agreement on livestock forage allocations on all allotments.

VEGETATION RESOURCES

Two major plant communities are dominant in the resource area. Salt-desert shrub and sagebrush-grassland communities comprise nearly 82 percent of the total vegetation cover in the area. A third major vegetation type is pinyon-juniper, normally found on rockier mountain sites. Although not extensive in distribution, the most important forage type on the desert winter ranges is black sagebrush (*Artemesia nova*). Black sagebrush is a 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. Five plant species are, however, listed as sensitive (undergoing status review as endangered by the U.S. Fish and Wildlife Service [FWS]). These species are listed in Table 2-1.

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 infestation of Scotch thistle (*Onapordum acanthium*), a very competitive noxious weed, has recently been found in Millard County. Efforts are being undertaken to control this weed species, which is established primarily in an area between Fillmore and Cove Fort.

RANGE MANAGEMENT

Presently, 96 permittees graze livestock on 63 allotments (see Map 1) containing approximately 2,056,830 acres (92 percent) of public rangeland administered by the resource area. Far less than the 2,056,830 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 in the resource area 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 (99,389 AUMs) are allocated for sheep and one-third (49,620 AUMs) for cattle. Annual actual licensed use averaged 87,733 AUMs or 59 percent of the total active preference from 1980-1984.

Current inventory information, based on utilization and long-term trend studies, indicates approximately 104,281 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.

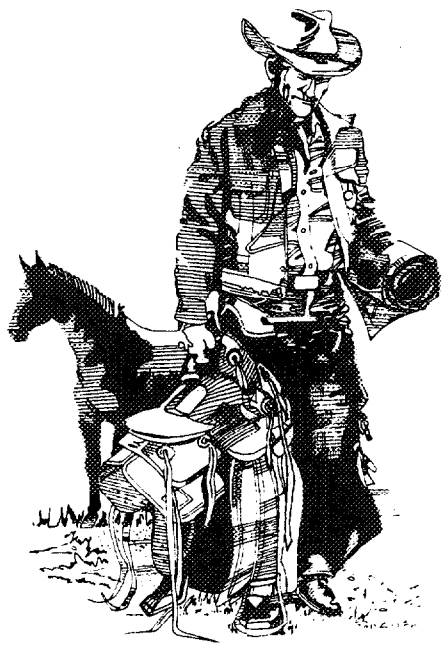


TABLE 2-1

Threatened, Endangered and Sensitive Plant Species

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.

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 Map 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 have been made 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 33,900 acres of rangeland seedings have been accomplished in sagebrush and pinyon-juniper communities. Those treatments followed chaining, plowing, prescribed burning, or wildfire. Opportunities for vegetation treatments are limited to the eastern portion of the resource area where soil and climate conditions are favorable for seedling establishment.

Current estimates of rangeland condition and trend have been recorded on all 63 allotments administered by the WSRA. These estimates are summarized in tables 2-2 and 2-3.

TABLE 2-2
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

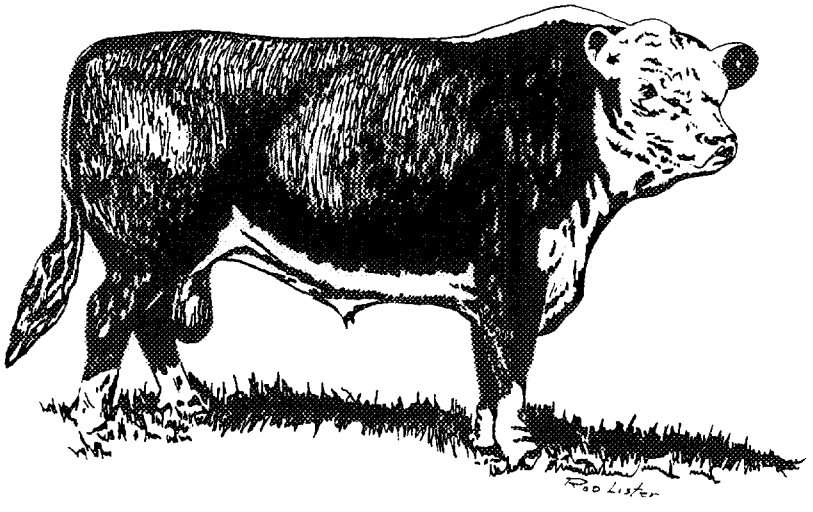
[1] Based on analysis of existing utilization and trend data and the professional observations and judgement of the WSRA range staff using the Condition Class Rating Guides described in Appendix 11 of the Draft RMP/EIS.

[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.

TABLE 2-3
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 will be initiated within 5 years of RMP approval.)

2. Improve range condition, forage production, and management on 39 Category Improve (I) allotments identified for intensive management (see Table 2-4).

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).

PLANNED ACTIONS

Establishment of Grazing and Non-Grazing Areas

Livestock grazing will continue to be administered on all 63 existing allotments. Areas presently unallotted for livestock use will 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 RMP will be administered and managed using standard BLM operating procedures. Each livestock permittee will be issued temporary grazing authorizations or term permits through the BLM WSRA office. These will specify the allotment, proposed forage use, period of use, numbers and kinds of livestock.

Livestock grazing will 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) may be required to monitor livestock movement and proper stocking levels. Permittees will be required to request in writing any desired changes in use prior to the grazing period, since such changes may be inconsistent with management objectives. Grazing use outside the limits of the proposed plan and without prior authorization will be considered trespass. Should trespass occur, BLM will take action to insure its elimination and collect payment for vegetation consumed and/or damage done. BLM will also make adjustments in the

Plan Maintenance, Monitoring and Review Notes

TABLE 2-4
Allotment Categorization (MIC)

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.

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
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 investment.
- 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

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.

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

grazing management program during drought or other emergencies.

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

1. Authorize the movement of livestock from one pasture to another ahead of schedule if forage is lacking in the first pasture and available in the second.

2. Reduce livestock numbers temporarily if forage production is less than normal.

3. Increase livestock numbers on a temporary non-renewable basis if there is an abundance of available forage.

4. Adjust livestock use to limit utilization of key plant species to a predetermined level. Livestock use may 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 will be considered in any decision to move livestock. Such adjustments will be designed to accomplish the grazing management objectives.

5. Requests for change in kind or season of livestock use will be considered and approved if feasible and not in direct conflict with other resource uses. Additionally, an environmental analysis will 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 will be monitored to determine if adjustments to the season of use and/or to the level of livestock use is needed. In the case of the Ephraim-Meadow Allotment, seasonal adjustments to the existing AMP may be made.

Initial Forage Allocation

The management strategy will 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 will be consistent with indicated grazing capacity. The required data for those estimates will be based on at least 5 years of monitoring data and 2 years of trend studies.

Plan Maintenance, Monitoring and Review Notes

Adjustments in livestock use will be initiated in 1987-1988 on up to 24 allotments having the required data (see Appendix 1). As the required monitoring data become available on the remaining 39 allotments, any necessary decisions adjusting livestock use will be issued or agreements made. Decisions or agreements on all 63 allotments will be initiated within 5 years and adjustments completed within 10 years of RMP approval. If no adjustment is required, documentation will be entered in the allotment grazing file. The initial allocation of livestock forage for all allotments will be approximately 133,400 AUMs in contrast to the existing preference of 149,009 AUMs.

Forage resources will initially be allocated as follows:

1. To provide for objective big game numbers.
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 indicated adjustments to these allotments are reflected in Appendix 1.

Long-Term Forage Adjustments

All additional AUMs of forage resulting from successful management practices will be equitably distributed to all uses, in accordance with the above identified priorities. The distribution of these additional AUMs will 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 will first go to restore suspended non-use in an allotment.

Allotment Categorization

Allotments have been categorized in accordance with Table 2-4, based on present resource conditions and their potential for improvement. There are 14 allotments placed in the M category, 39 allotments in the I category, and ten allotments in the C category.

Plan Maintenance, Monitoring and Review Notes

Adjustments in the allotment categorization will be made in accordance with BLM policy as management situations or allotment conditions change. 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 will continue to be updated, monitored, and evaluated as necessary (see Map 1 for location of these allotments). Priority for development of new AMPs are as follows: Breck's Knoll, Pine Valley, Deadman's Wash, Mormon Gap, Antelope Point, Black Rock Winter, and East Antelope in Category I; and Black Rock Summer in Category C. One AMP will cover Antelope Point, Black Rock Winter, East Antelope, and Black Rock Summer allotments. Plans will 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 having a favorable cost/benefit ratio will be implemented as funds become available. Emphasis will be placed on improving livestock distribution to insure more uniform forage utilization patterns. Priority (the same as AMP development) will be given to I and M category allotments with opportunity for improved livestock distribution. See Appendix 3 for rangeland improvements by allotment.

Non-Structural Improvements

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

Standard Design, Construction, and Operation Features)

All range improvements will be designed and constructed to minimize environmental impacts while maximizing functions and cost effectiveness. Prior to the installation of any range improvements, an environmental review will be com-

Plan Maintenance, Monitoring and Review Notes

pleted and, if necessary, an Environmental Assessment (EA) will be prepared to analyze the alternatives for the development. In addition, a benefit/cost analysis will be done to determine feasibility of the project.

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

1. No new roads or trails to project sites will be built if existing roads or trails can be used.

2. All areas of proposed surface disturbance from construction of range developments will 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 will be avoided or adequate mitigation taken. If cultural remains are encountered during construction, operations will be temporarily discontinued until BLM evaluates the discovery and determines the appropriate action.

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

4. Areas where vegetation treatments occur will 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 will be used for vegetation treatments and the control of noxious or poisonous plants. All chemical applications will comply with U.S. Department of the Interior (USDI) regulations and Utah pesticide laws.

6. Vegetation treatments on crucial wildlife ranges will 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) will continue. Fees for maintenance will 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 will be maintained as funds permit, if these projects will facilitate management (e.g., livestock distribution, utilization, wildlife habitat enhancement, watershed protection, etc.).

Plan Maintenance, Monitoring and Review Notes

Threatened, Endangered, and Sensitive Plant Species

Nine allotments have known populations of sensitive plant species: Blackham, Blind Valley, Breck's 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 are revised and new ones developed, site-specific objectives for protecting sensitive species will be included.

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

Predator and Noxious Weed Control

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

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

SUPPORT REQUIREMENTS

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

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

Cadastral survey assistance will be needed where vegetation treatments or fencelines will be constructed near State, private, or other Federal agency property lines or areas identified for wilderness or other special protective designation (e.g., ACECs). Additionally, where prescribed burns are proposed, fire operations and fire crews

Plan Maintenance, Monitoring and Review Notes

will be needed. When herbicide applications are planned for vegetation treatments or noxious weed control, a certified District herbicide applicator will be used.

Development of range improvement facilities and grazing management systems will be subject to funding and personnel availability. During the consultation period, permittees/lessees will be asked for contributive funding (labor or materials) for range developments. Where other benefiting resources, such as wildlife, would be involved, project cost sharing will be explored with participating agencies, such as the Utah Division of Wildlife Resources (UDWR).

IMPLEMENTATION SEQUENCE/PRIORITY

The priority for implementation of the grazing management program will follow the guidelines stated in the BLM Grazing Management Policy (IM 82-292). Priority for management actions will be given to allotments with severe resource conflicts and significant potential for resource improvement.

Scheduling Grazing Allocation Adjustments

Forage adjustments will be initiated by agreement/decision on the 24 allotments with sufficient study data starting in Fiscal Year (FY) 1987. Agreements/decisions on these 24 allotments should be initiated by the end of FY 1988. Agreements/decisions on the remaining 39 allotments will be initiated within 5 years, and any adjustments completed within 10 years of plan approval.

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

Development and Implementation of Allotment Management Plans

AMPs will 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, will 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 will be implemented by decision of the Area Manager. Permittees will, however, have the right to appeal decisions.

Plan Maintenance, Monitoring and Review Notes

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

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

The objective will be to have 39 I category allotments with implemented AMPs within 20 years.

PLAN MONITORING AND EVALUATION

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

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

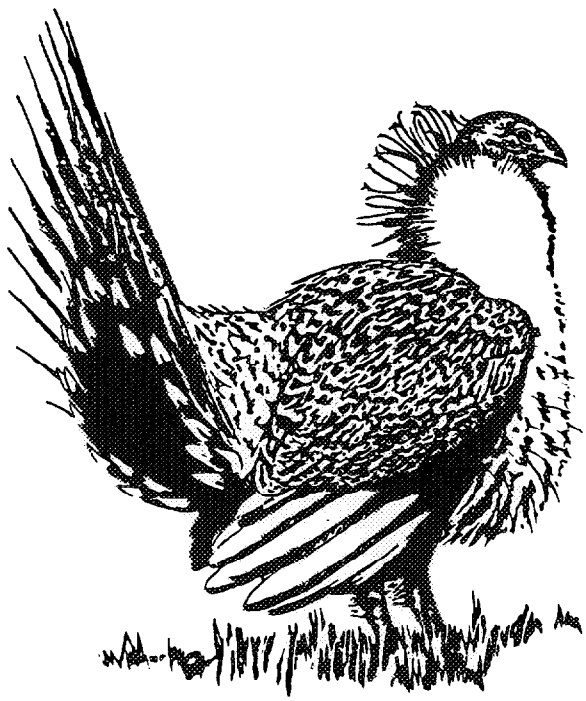
Data from these studies will be evaluated to determine management effectiveness and to assist in making necessary adjustments. Evaluations will be made prior to implementation of each step of a phased forage adjustment to determine whether the total amount of adjustment should be modified (either increased or decreased) (43 CFR 4110.3-3(a) and (b)). Management will be modified if evaluations determined that specific allotment objectives were not being achieved. Administrative modifications could include changes in livestock utilization patterns, 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 will be monitored and licensed under exchange of use or percentage of licensed use. All transfer applications will be thoroughly analyzed using all available range study data to insure the transfer will not result in forage overuse.

Plan Maintenance, Monitoring and Review Notes

Wildlife

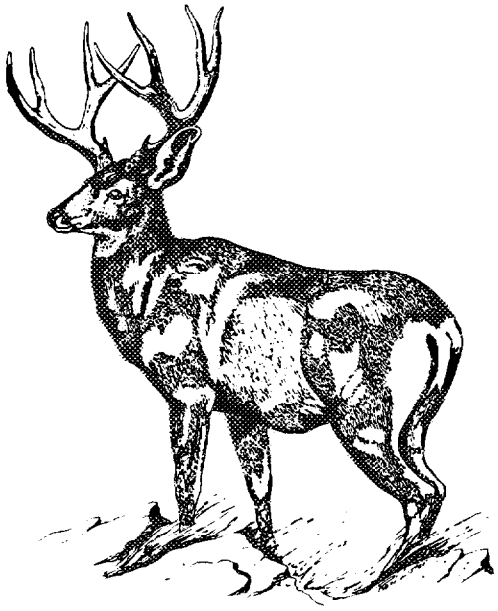


WILDLIFE

Introduction

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

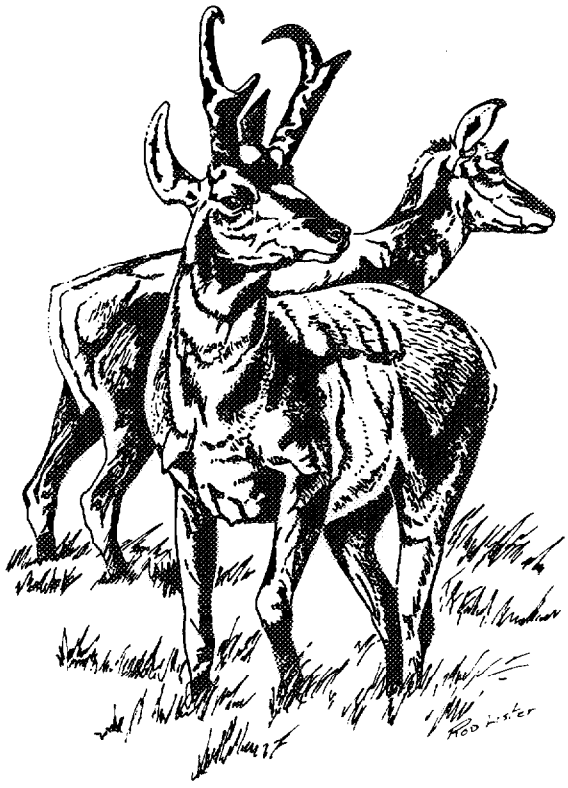
Portions of six mule deer herd units (53, 54, 55, 56, 62B, and 62C) are within the WSRA. All critical habitat on BLM lands (6,840 acres) lies within the winter ranges in the foothills of the Canyon and Pavant ranges within management units 53, 54, and 55. Current population estimates are 95 yearlong 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 Range and the Mountain Home Range (Map 2). No population estimates or forage allocations 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 yearlong. 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) are 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.

The only T&E species common to the WSRA are wintering bald eagles which use almost the entire resource area. No essential habitat for this species has been identified in this plan. There is potential for reintroduction of the peregrine falcon to Pavant Butte, an historical nesting habitat.

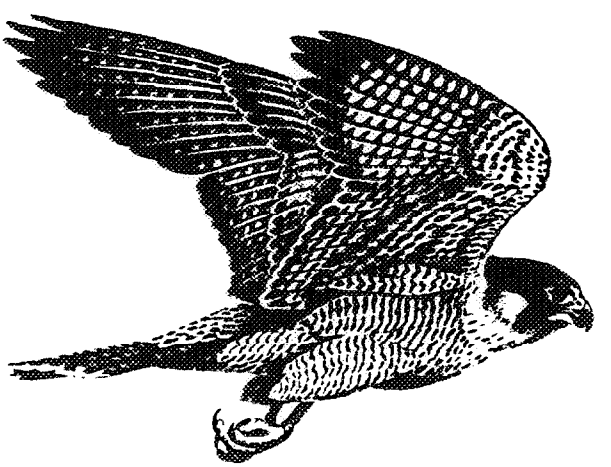
Several sensitive animal species occur in the WSRA: golden eagles, ferruginous hawks, Swainson's hawks, white-faced ibis, western snowy plovers, long-billed curlews, and possibly the Clear Lake pocket gopher.

Riparian habitat is limited and widely scattered in the WSRA (See Map 3). 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 2-5).

TABLE 2-5
Riparian Habitat Summary

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	T20S R11W to T24S R12W	Unallotted	Poor	Fair	92,000 acres	Lake is a desert playa that temporarily holds water.
Sevier River	T18S R8W to T20S R10W	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 dewatered for irrigation.
South Tule Sp.[1]	T17S R15W Sec. 15 NE 1/4 NE 1/4	Skunk Springs	Fair, static trend	Fair	20 ac.	
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.



Peregrine Falcon

Elements of the Plan

GOALS AND OBJECTIVES

Wildlife management goals and objectives will 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).

PLANNED ACTIONS

Forage Allocation

Habitat development and livestock grazing management will be undertaken to achieve objective big game numbers: pronghorn antelope, 1,861; mule deer yearlong, 95; and mule deer winter, 2,464. See Appendix 1 for allocation by allotment.

Pronghorn Antelope Habitat and Use

Management objectives for black sagebrush habitat (see Table 2-6) will be to improve habitat condition from poor to fair and fair to good condition through better distribution and management of grazing use.

TABLE 2-6
Black Sagebrush Habitat

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

As funds permit, twenty-six water sources (guzzlers, reservoirs, etc.) will be developed in habitat more than 2 miles from existing water sources (see Map 2). Monitoring to better define antelope habitat suitability will be planned and initiated.

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

Plan Maintenance, Monitoring and Review Notes

Mule Deer Habitat and Use

Condition of critical deer winter range will be monitored and livestock managed to prevent degradation. Proper ratios between cover and forage area will be maintained. Conflicting uses (e.g., ORVs, mineral exploration, etc.) of critical deer winter ranges will be restricted. Management objectives include improving distribution to all suitable winter range.

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

Elk Habitat and Use

Elk use of the public lands within the WSRA will be documented when encountered. No forage allocation has been made for elk.

Desert Bighorn Sheep Habitat and Reintroduction

Mountainous areas will be evaluated to determine suitability for bighorn sheep reintroduction. If suitable areas are found, an analysis will be done to determine any conflicts with existing land uses, need for habitat developments, and potential for reintroduction.

Raptor Habitat and Use

Winter raptor populations will be monitored to delineate crucial winter habitat and needed protection stipulations. Raptor habitat use will be monitored and correlated with range condition and trend, kind of livestock and management, and prey availability.

Raptor nesting populations will be monitored. A 0.25-mile radius around all active and inactive nests is designated as crucial nesting habitat. Five raptor nesting areas, shown on Map 3, are designated crucial habitat. These areas are classified as Category 2 for fluid mineral leasing, and ORV use is limited to existing roads and trails to prevent significant disturbance to nesting raptors from March 1 through June 30.

Upland Game Bird Habitat and Use

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

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

Plan Maintenance, Monitoring and Review Notes

Threatened, Endangered, and Sensitive Species Habitat and Use

Wintering bald eagle populations will be monitored to delineate essential or critical winter habitat and to develop necessary protective stipulations.

Golden eagle, ferruginous hawk, and Swainson's hawk populations will be monitored to determine crucial habitat.

Other sensitive species (white-faced ibis, long-billed curlew, western snowy plover, and Clear Lake pocket gopher) will be monitored to determine presence and habitat preferences.

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

Riparian/Aquatic Habitat and Use

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

Protective oil, gas, and geothermal leasing category restrictions have been placed on Meadow Creek, Pruess Lake, Painter Spring, the area around Clear Lake Waterfowl Management Area, and South Tule Spring to protect wildlife habitat and other values.

SUPPORT REQUIREMENTS

Most actions in this plan will 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 will be required as standard procedures.

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

Monitoring studies will require cooperation from the range specialists, the U.S. Forest Service (FS), or UDWR. Riparian studies will require water

Plan Maintenance, Monitoring and Review Notes

quality and quantity measurements, macro-invertebrate 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 will also require support from the appropriate BLM specialist.

Implementation and Priorities

Implementation of wildlife projects will be dependent on funding. Twenty-six water sources for antelope have been identified for development and are prioritized (see Table 2-7). In addition, 41 upland game (and other wildlife species) watering deficient areas have been identified but not prioritized. Unless specific HMPs identify higher priority areas, the 26 antelope water sources will be developed before the other 41 areas deficient for water (see Table 2-8).

TABLE 2-7
Priority Areas for Antelope 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

Plan Maintenance, Monitoring and Review Notes

TABLE 2-8
Wildlife Habitat Improvements Planned

Allotment Name	Allotment Number	Water Developments [1]		Vegetation Manipulation [2]	Fencing [3]
		Antelope	Upland Game	(Acres)	(Miles)
Blackham Canyon	4326	1	0	0	0
Blind Valley	4303	0	3	0	0
Breck's Knoll	4306	0	1	0	0
Brown's Wash	4302	2	1	0	0
Buckskin	4307	1	0	0	0
Clay Springs	4312	1	0	0	0
Coats	5781	0	1	0	0
Conger Spring	4313	0	3	0	0
Crickett	5779	2	3	0	0
Crow's Nest	4305	1	0	0	0
Crystal Peak	4311	2	2	0	0
Deadman's Wash	4315	2	0	0	0
Death Canyon	4314	1	0	0	0
Ephriam Bagnall	5211	1	1	0	0
Fairview	6236	1	1	0	0
Ferguson	4317	0	1	0	0
Granite	4320	1	4	0	0
Holden Spring	5783	0	0	1,700	0
King	4324	1	6	0	0
Klondike	4322	0	2	0	0
Ledger Canyon	4321	0	1	0	0
Meadow Spring	5773	0	0	1,600	0
Mormon Gap	4397	0	1	0	0
North Canyon	4328	1	0	0	0
Notch Peak	4329	0	1	0	0
Painted Potholes	4330	1	0	0	0
Painter Springs	4331	1	2	0	0
Pine Valley	4398	0	2	0	0
Seely	5787	1	1	0	0
Skull Rock	4334	1	1	0	0
Stateline	6238	2	1	0	0
Steamboat	4336	1	1	0	0
Voorhees	6220	1	1	0	0
Lake Creek	Unallotted	0	0	0	.5
Total		26	41	3,300	.5

[1] Antelope water developments (see Map 2) have priority as shown in Table 2-7.

[2] Maintenance of existing treatments.

[3] Additional fencing requirements may be identified during development of HMPs.

Specific activity implementation schedules will be developed in five HMPs. Map 3 shows the areas to be included in each HMP. These plans will cover all wildlife and riparian habitats in the WSRA. The order of priority and schedule for developing HMPs follows:

Within 5 years:

1. Revision of West Desert HMP.
2. Riparian Areas HMP.
3. Twin Peaks/Foothill Tracts HMP.

Within 10 years:

4. Sevier Lake Desert HMP.
5. Black Rock Desert HMP.

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

PLAN MONITORING AND EVALUATION

Wildlife projects proposed in this plan will be implemented and scheduled through HMPs or grazing AMPs. These site-specific plans will 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 will be used to monitor progress in achieving the RMP wildlife objectives.

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

T&E and sensitive species habitats in the WSRA will be identified and evaluated to determine if they are essential or critical to the species survival. Suitable designations will be made in cooperation with the FWS and the UDWR.

Plan Maintenance, Monitoring and Review Notes

Wild Horses

WILD HORSES

Introduction

There are three herd management areas (HMAs) (Conger Mountain, King Top, and Burbank Hills) located in the resource area (see Map 4). In addition, the northern portion of the Sulphur HMA, managed by the Cedar City District, is located in the southwest portion of the WSRA. Wild horses in the WSRA are 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 will continue to be managed in accordance with provisions of the Wild Horse and Burro Act of 1971 and subsequent legislation. Herd Management Plans will be completed to provide detailed guidance for management of individual HMAs.

PLANNED ACTIONS

Horse numbers in the Conger Mountain, King Top, and Sulphur HMAs will be maintained near the following allocation levels (See Appendix 1): Conger Mountain, 60 head (720 AUMs); King Top, 30 head (360 AUMs); and Sulphur, 50 head (600 AUMs). Horse numbers will 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 will require periodic removals about every 5 years. All wild horses in the Burbank Hills HMA will be captured and relocated to other HMAs or put up for public adoption.

Selective removal of wild horses will be used to achieve better breeding stock. Colorful studs with good conformation will 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 will be coordinated to insure that the change will not adversely affect long-term viability of the wild horse herds.

Plan Maintenance, Monitoring and Review Notes

IMPLEMENTATION AND PRIORITIES

Wild horses will be removed from the Burbank Hills HMA in FY 1987. Priority for HMA development will be: Sulphur HMA, Conger HMA, then King Top HMA. These plans will be completed within 5 years.

PLAN MONITORING AND EVALUATION

The status of the wild horses will be monitored on a regular basis. Populations will be determined on an annual basis by ground or aerial surveys, depending on availability of funds. Weekend surveillance patrols will 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 will continue to be read. Utilization of key forage plants used by wild horses will be determined each year. Trend plots established in these areas will be monitored at 6-year intervals to determine key forage plant trends. This data will be evaluated at periodic intervals to determine if objectives of this RMP and subsequent herd management plans are being met.

Plan Maintenance, Monitoring and Review Notes

Recreation

RECREATION

Introduction

RECREATION FEATURES

Recreational features include the lava fields of the Black Rock Desert; Sevier Lake; old lake bed playas in Tule, Pine, and Wah Wah valleys; and the rugged Wah Wah, King Top and House Range mountains. These features 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 rockhounding, 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.

There are five WSAs 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 are evaluated in the *BLM Utah Statewide Wilderness Draft EIS* (1986).

The Tabernacle Hill Lava Field is the only area within the WSRA designated as a Special Recreation Management Area (SRMA) in previous planning. 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 and Tabernacle Hill are depicted on Map 5. 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 assemblege of Lower Ordovician marine invertebrate fossils known anywhere in Utah with

Fossil Mountain Historic Site/ACEC

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 picturesque old 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 Mountains, 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, sand, and unique igneous rock formations. 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 basalt flow 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 include Sunstone Knoll, Pruess Lake, Painter Spring, wild horse herds, and the UDWR Clear Lake Waterfowl Management Area.

OFF-ROAD VEHICLE USE

Most 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 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 of the WSRA recreation program are to: (1) provide recreation opportunities under BLM's basic stewardship responsibilities for unstructured, extensive types of recreation uses; (2) maximize visitor 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 from accidental or intentional destruction and give special protection to high value cultural and historic sites.

PLANNED ACTIONS

General Actions

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

Specific Actions

The major management decisions and/or actions within the recreation program are, in order of priority for future management actions:

- Tabernacle Hill is designated an ACEC and will continue to be managed as a SRMA. The recreation management plan for this area will be implemented as appropriate funding is provided.

Plan Maintenance, Monitoring and Review Notes

- The Wah Wah Mountains are designated a SRMA.
- A portion (5,970 acres) of the Wah Wah Mountains is designated a RNA/ACEC.
- Fossil Mountain is designated an historic site/ACEC.
- If not designated as wilderness by Congress, Notch Peak will be nominated for designation as a NNL and designated an ACEC.

Regarding the dual ACEC designations of the Wah Wah Mountains, Fossil Mountain, Crystal Peak, and Notch Peak, please note the Special Designations discussion in the Introduction to the RMP.

- Fluid mineral leasing category designations are as outlined in 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.
- An ORV Management Plan will be developed. Public land ORV category designations are as shown in Table 2-9 and Map 5.

TABLE 2-9
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[1]	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.

Plan Maintenance, Monitoring and Review Notes

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

SUPPORT REQUIREMENTS

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

GENERAL IMPLEMENTATION SEQUENCE/ PRIORITY

Management of the Tabernacle Hill ACEC/SRMA, in accordance with the SRMA plan, will begin with the adoption of the RMP. Development of recreation support facilities will be primarily contingent upon future funding.

With the exception of Crystal Peak and Notch Peak, special designations are effected upon approval of this RMP.

An ORV implementation plan will be completed within 5 years. Development of interpretive materials will be an on-going process, contingent on funding. Periodic ORV plan updates will be required.

Management Plans for the Wah Wah Mountains RNA/ACEC/SRMA and Fossil Mountain Historic Site/ACEC will be completed in the priority listed above for Specific Actions. Nomination of Notch Peak as a NNL/ACEC and designation of Crystal Peak as an ONA/ACEC will be postponed pending Congressional decisions on wilderness designation of those areas.

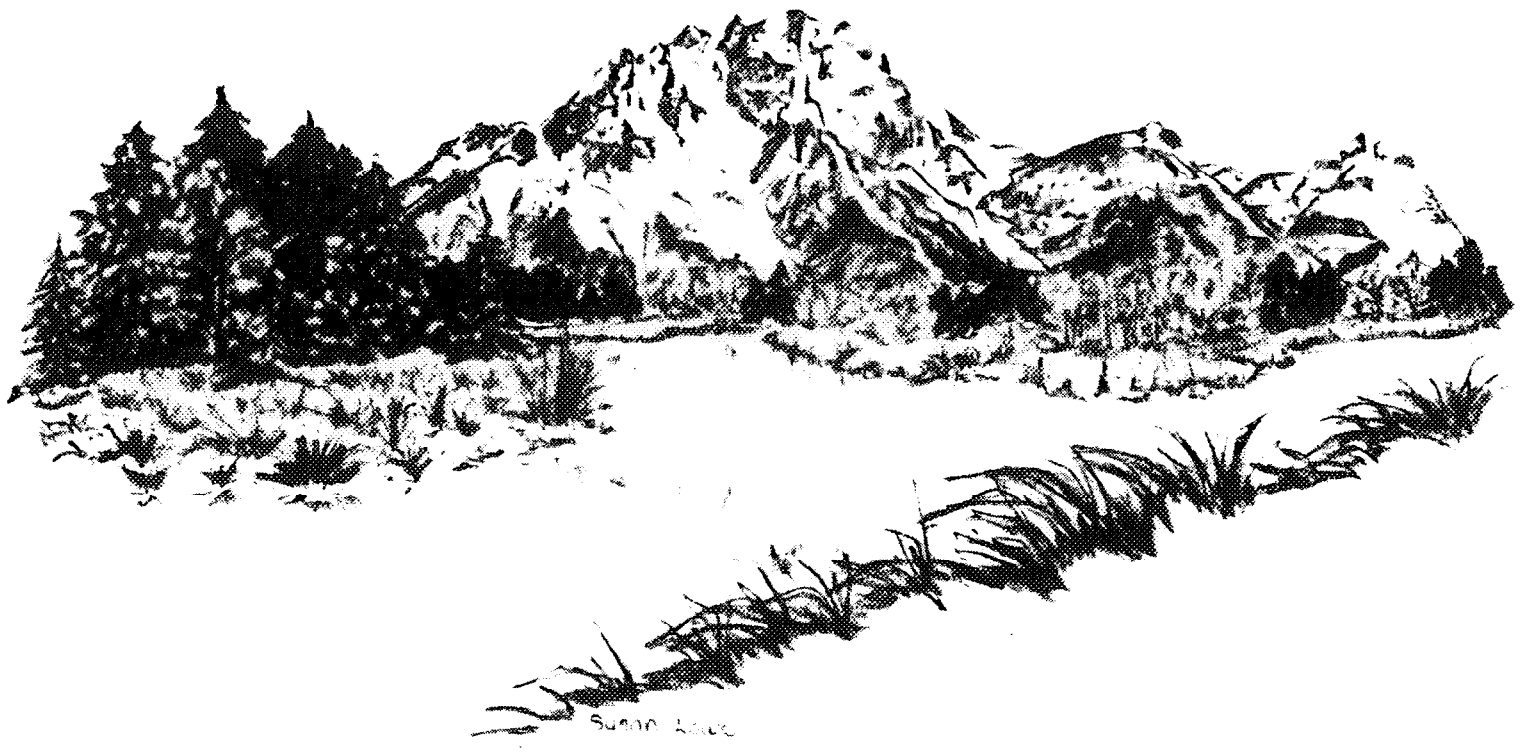
Plan Monitoring and Evaluation

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

Program review at 5-year intervals will assess progress of plan accomplishments and need for modification.

Plan Maintenance, Monitoring and Review Notes

Visual Resources



VISUAL RESOURCES

Introduction

Public lands in the WSRA contain 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.

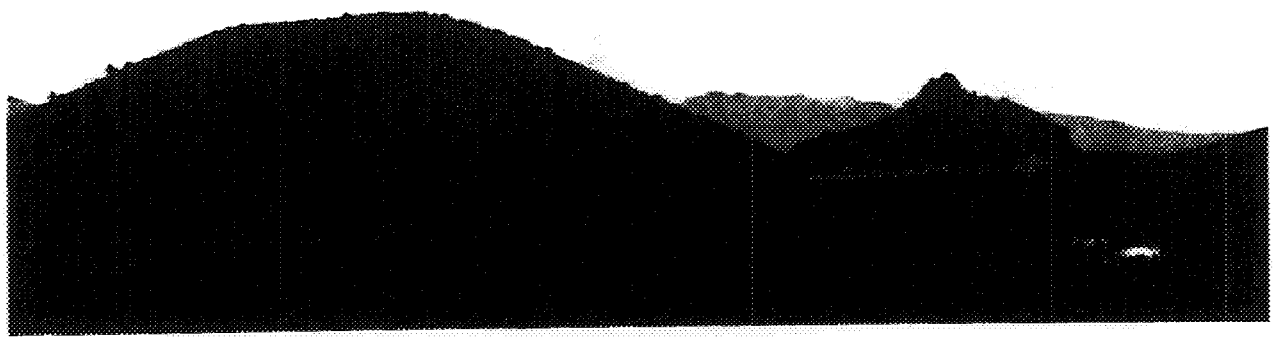
The central portion of the resource area contains the most striking scenery. The rugged House Range and Wah Wah mountain ranges present towering peaks and steep escarpments and contain a wide variety of vegetation types ranging from dark green pinyon-juniper to white-barked aspen stands. The steep rock 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 mountain ranges are flat, barren lake bed playas which provide an interesting landscape.

The Ferguson Desert; Burbank Hills; Confusion, Mountain Home, and Conger mountains; and Pine and Snake valleys comprise the western portion of the resource 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 live 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 visual resource management (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 Mountain 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 Cricket, 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. Map 6 delineates locations of the various VRM classes.



Tabernacle Hill ACEC/SRMA

Elements of the Plan

GOALS AND OBJECTIVES

Goals and objectives are to plan, modify, and implement resource management activities in a manner minimizing impacts to visual resources. To meet VRM objectives, special emphasis will be applied during environmental assessment and project design on projects to be located in view areas (foreground visual zone).

PLANNED ACTIONS

General Actions

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

Specific Actions

VRM classes within the WSRA are as shown in Table 2-10.

SUPPORT REQUIREMENTS

Support will 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 will be required from the range, wildlife, and watershed programs when significant acreages are proposed for land treatment. The Lands and Minerals programs will also coordinate with the design staff on non-BLM initiated projects (oil and gas and geothermal development, location of gravel sales, rights-of-way, etc.) for appropriate mitigation measures.

IMPLEMENTATION AND EVALUATION

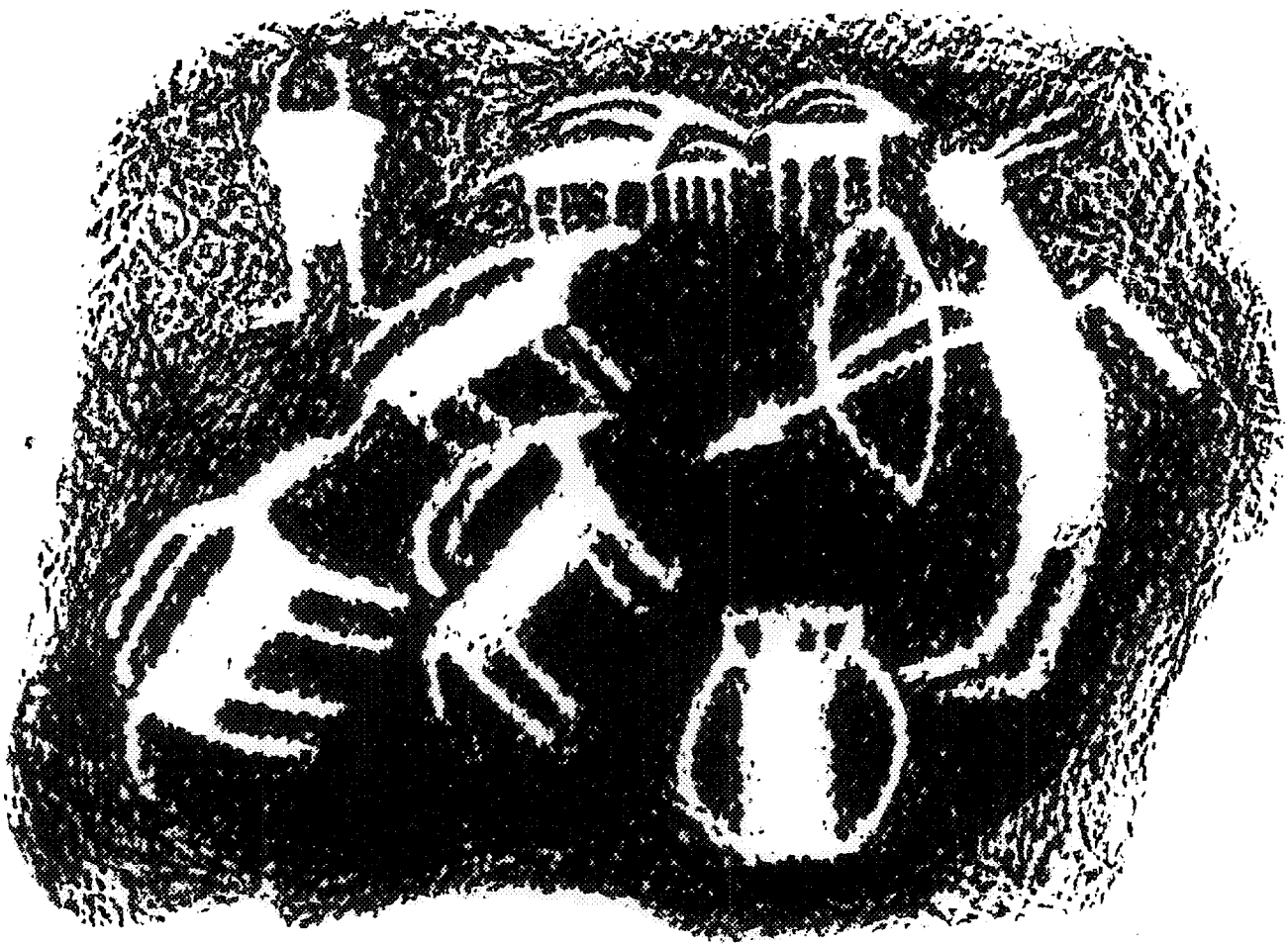
All VRM objectives will be effective upon approval of the RMP. Proposed projects will be evaluated to determine whether they are compatible with VRM class objectives. Measures will be taken (i.e., design modifications, relocation of structures, etc.) to mitigate adverse visual impacts. Project approval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

TABLE 2-10
VRM Classes

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

Plan Maintenance, Monitoring and Review Notes

Cultural Resources



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 Civil Conservation Corps (CCC) camps of the present century. Sites within the WSRA having significant cultural resource values include the following:

- Only foundations remain from an old CCC camp located near Painter Spring.
- Cove Fort, a rectangular fortress of rock and mortar, was built in the 1860s by Brigham Young to provide defense of a stage stop and nearby settlement from the Paiute Indians.
- The Devils Kitchen Petroglyphs, southwest of Pavant Butte, are a series of panels of Fremont rock art.
- Fossil Mountain in the southern Confusion Range contains abundant and diverse deposits of Lower Ordovician marine invertebrate fossils. Thirteen fossil groups and rare specimens can be found here.
- At the Gunnison Massacre Site a bronze plaque on a basalt boulder marks the site of a battle between the Paiute Indians and a small survey party led by Captain Gunnison.
- Ibex, an old mining town, is located about 1 mile east of Fossil Mountain. Little remains of the structures.
- Tabernacle Hill petroglyphs, about 5 miles west of Tabernacle crater, are also a series of Fremont rock art panels.

The cultural resource program's goal is to protect these and other cultural resource 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 designed to inventory, evaluate, plan, and manage cultural resources on 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. Insure 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. Insure that BLM's undertakings avoid inadvertent damage to cultural resources, both Federal and non-Federal.

PLANNED ACTIONS

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

Plan Maintenance, Monitoring and Review Notes

Register of Historic Places. Predictive cultural resource inventories will also be implemented 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

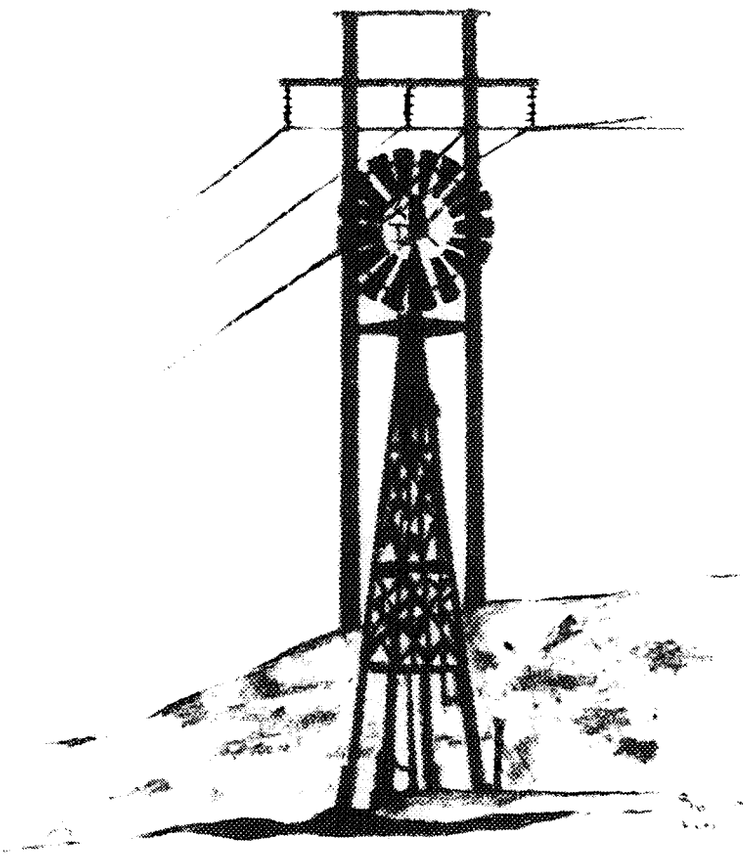
The priority for inventory is a matter of law and policy: those inventories designed to identify and protect sites from damage due to BLM undertakings are a legal requirement. Inventories to gather predictive data are desirable and beneficial, but will have to be done on a time-available basis under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

PLAN MONITORING AND EVALUATION

Monitoring and evaluation will be done at 5-year intervals to determine the effectiveness of cultural resource mitigation.

Plan Maintenance, Monitoring and Review Notes

Lands



LANDS

Plan Maintenance, Monitoring and Review Notes

Introduction

The Lands program is characterized primarily by the processing of several right-of-way applications and temporary land use permits each year. Periodically, work is also done on Desert Land Entries, exchanges, and withdrawals.

Elements of the Plan

GOALS AND OBJECTIVES

The objectives of the Lands program are to:

1. Provide more effective public land management and to improve land use, productivity, and utility.
2. Accommodate community expansion and economic development needs.
3. Authorize legitimate uses of public lands.

These are accomplished by processing use authorizations (e.g., rights-of-way, leases, permits, and State land selections) in response to demonstrated public needs.

PLANNED 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 will be determined. Procedures followed will 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 will be prepared. Values considered will include wildlife, T&E species, wilderness, cultural resources, environmental quality, minerals, the interest of the grazing permittees, the adjacent landowners, and the local community. The LR/EA will address specific criteria for each type of land action.

When an LR/EA determines that a parcel is suitable for sale or exchange and would benefit the public, a Notice of Realty Action (NORA) will 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 will be notified by a direct mailing of the NORA.

The NORA will 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 will be defined. The NORA will precede a public comment period of 45 days.

Lands identified for disposal (see Map 7) are the following tracts which are suitable for sale under the Federal Land Policy and Management Act (FLPMA), Section 203 criteria (i.e., difficult and uneconomic to manage because of location).

- Tract 1—T. 23 S., R. 19 W., Sec. 17, S½SE¼, NE½SE¼, 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 will be retained in Federal ownership. Disposal of any other public lands will require amendment of the RMP.

Regulations do not allow land disposals or long-term rights-of-way in WSAs. If the WSAs are not designated as wilderness, they will be returned to multiple-use management unless identified for other special management designation.

The FS Desert Experimental Range (55,625 acres) will 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 will 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, will be standard procedure.

Rights-of-way will be processed on a case-by-case basis, generally in the order received. Existing major rights-of way are designated as corridors (see Table 2-11 and Map 7). New rights-of-way will be restricted to these corridors wherever feasible. Special management designation areas and VRM Class II areas (approximately 47,000 acres total) are right-of-way avoidance areas (see Map 7).

Plan Maintenance, Monitoring and Review Notes

TABLE 2-11
Right-of-Way Corridor Specifications

Name	Width (ft)	Specifications	Terms[1]
Sigurd to Nevada a 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.

Special Management Designations

Areas identified through the land use planning process as needing special management designation, including ACECs, are designated and will be managed in accordance with pertinent BLM policy, regulations, and legislation. Areas selected for special management designations are listed below along with their respective management prescriptions. Many of the management actions described are not the responsibility of the Lands program. The nominating program(s) has lead responsibility for accomplishment of management actions.

- Pavant Butte: An inactive volcano, also known as Sugarloaf Mountain, is 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.

Plan Maintenance, Monitoring and Review Notes

Pavant Butte is an 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: Pavant Butte, therefore, 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 is designated an ACEC (2,500 acres). It will be recommended for withdrawal from mineral entry, placed in Category 3 for fluid mineral leasing, closed to vehicular traffic, retained in Federal ownership, and designated a right-of-way avoidance area. State Section 32 will be acquired if possible.

- The Tabernacle Hill Lava Field: This area was previously a designated SRMA. 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 is designated an ACEC (3,567 acres). The existing mineral withdrawal will expire this year. Application for a new withdrawal has been submitted to the

Plan Maintenance, Monitoring and Review Notes

Secretary of the Interior. Category 3 for fluid mineral leasing will be continued, and the area is designated a right-of-way avoidance area. Recreation facilities will 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 will be nominated for designation as a NNL/ACEC, placed in Category 3 for fluid mineral leasing, recommended for withdrawal from mineral entry, closed to motor vehicles, and designated a right-of-way avoidance area. Forest lands will remain unavailable for management of forest products. Management objectives will 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 will be developed.
- Crystal Peak: If not designated as wilderness by Congress, 640 acres will be designated an ONA/ACEC. The area will be recommended for withdrawal from mineral entry, remain in Category 3 for fluid mineral leasing, be closed to motor vehicles, and be designated a right-of-way avoidance area. Harvest of forest products will be prohibited. A management plan, interpretational materials, and, if necessary, facilities will be developed to insure preservation of the area's outstanding scenic splendor and to enhance its recreational values.
- Fossil Mountain: The mountain is designated an Historic Site/ACEC (1,920 acres), placed in Category 3 for fluid mineral leasing, and designated as a right-of-way avoidance area to protect the area's evidences of prehistoric life forms.
- Wah Wah Mountains: The high mountain area bordering the south boundary of the resource area is designated a RNA/ACEC (5,970 acres). The area is placed in Category 3 for fluid mineral leasing and designated a right-of-way avoidance area. It will be recommended for withdrawal from mineral entry, closed to ORVs, and harvest of forest products will be prohibited. State Section 32 will be acquired. A management plan will be developed in coordination with The Nature Conservancy to preserve the pristine area's integrity, biotic communities, bristlecone pine stands, and its scenic, geologic, recreational, and scientific values.

Plan Maintenance, Monitoring and Review Notes

Regarding the dual ACEC designation of Notch Peak NNL (nomination), Crystal Peak ONA, Fossil Mountain Historic Site, and Wah Wah Mountains RNA, see the Special Designations discussion in the Introduction to the RMP.

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) will be acquired from the State of Utah by exchange.

No major access needs have been identified.

SUPPORT REQUIREMENTS

The following support will 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 will be administered through the normal NEPA (EA) and LR process.

IMPLEMENTATION

The ACEC designations of Pavant Butte and Tabernacle Hill are effective upon plan approval. Mineral withdrawal of Pavant Butte will be initiated by 1990. The existing withdrawal of Tabernacle Hill will continue. Acquisition of the specified State sections contiguous with the ACECs will be initiated within 5 years.

The RNA designation of the Wah Wah Mountains and Historic Site designation of Fossil Mountain are effective upon plan approval. ACEC designation of these areas will be effected upon conclusion of the 60-day public comment/protest period.

Nomination of Notch Peak for designation as a NNL/ACEC, designation of Crystal Peak as a ONA/ACEC, and mineral withdrawal action on both areas will be withheld pending decision by Congress on wilderness designation.

Right-of-way designations are effective upon plan approval.

Action on acquisition of State Section 32 (T. 22 S., R. 15 W.) contiguous with the Wah Wah Mountains RNA will be withheld pending Congressional action on wilderness designation. Disposal of the five tracts by sale under the provisions of Section 203 of FLPMA will be initiated within 5 years.

PLAN MONITORING AND EVALUATION

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

Plan Maintenance, Monitoring and Review Notes

Minerals

MINERALS

Introduction

During the past decade, oil, gas, and geothermal exploration activity has occurred in the WSRA. Recently (for over 3 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 characteristics, along with the recent increased exploration and leasing, indicate the WSRA may have good potential for geothermal development. See Map 8 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 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. 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, which borders the Pavant Range foothills. Lands covered by Tertiary basin fill are also considered speculative because of the unknown potential of the thick sediment and underlying Paleozoic rocks. Most ranges in the WSRA are considered low in potential due to the widespread Tertiary basalts and the pre-Cambrian and Cambrian rocks that 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. The Continental Lime Mine is producing marketable material on a continuing basis from mining claims in the Cricket Mountains. This mine provides the only substantial mineral-related contribution to the WSRA economy. Other sporadic, short-term economic contributions are provided by mineral exploration.

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 (Table 2-12).

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

Geothermal Exploration
Cove Fort Sulphurdale KGRA

TABLE 2-12
Mineral Resource Potential

	Acres	O&G	Locatable	Geothermal	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 Map 3

Elements of the Plan

GOALS AND OBJECTIVES

The goals of the mineral program are 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.

PLANNED ACTIONS

Oil and Gas

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

Fluid mineral leasing categories are as shown on Table 2-13 and Map 8.

Geothermal

Existing geothermal leases that are cancelled, expired, or otherwise terminated will continue to be offered by competitive sealed bids. Appropriate environmental protection stipulations will be attached to the lease when issued. Geothermal Drilling Permits (GDPs) will 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 will be applied to GDPs and Plans of Operations at the time of approval.

Locatable Minerals

Location of mining claims by claimants is a nondiscretionary 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

Plan Maintenance, Monitoring and Review Notes

TABLE 2-13
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

and provide interim wilderness protection. Notices and Plans of Operations will be required for mining activities. Mitigation measures will 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 except in ACECs.

To protect unique natural and recreational values, the following areas will be recommended for withdrawal 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

Sale permits will 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 are open to mineral material disposal with the exception of up to 25,727 acres designated special management areas, Category 3 fluid mineral

Plan Maintenance, Monitoring and Review Notes

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 will be processed and appropriate environmental protection stipulations attached. Leases will 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 will be consistent with fluid mineral leasing category restrictions and areas withdrawn from locatable mineral entry as identified in Table 2-13 and the previous Locatable Minerals section (90,297 acres total).

SUPPORT REQUIREMENTS

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

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

IMPLEMENTATION

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

Fluid mineral leasing category designations are effective upon plan approval. Plats will be corrected to reflect the RMP designations in this FY (1987). Applications for mineral withdrawal of the areas specified above are Lands program actions. Support will be provided as needed to accomplish those actions.

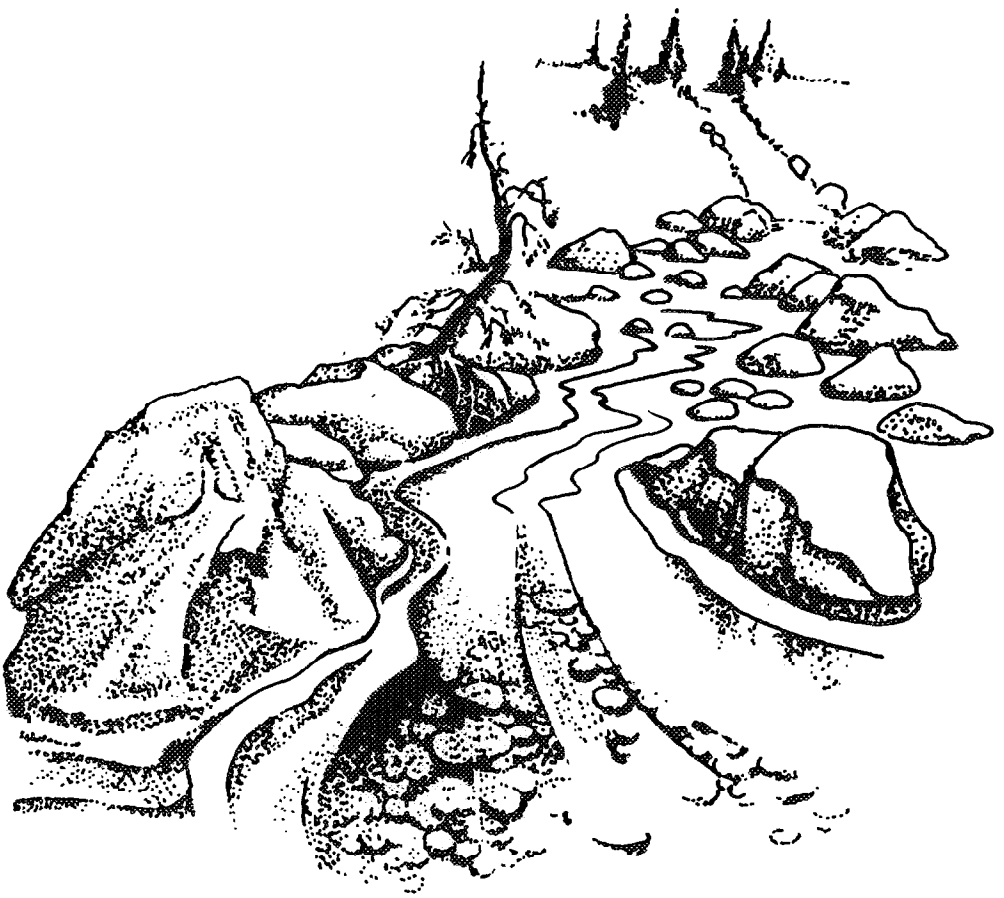
PLAN MONITORING AND EVALUATION

All areas will be monitored for compliance of ongoing operations and for unauthorized operations.

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

Plan Maintenance, Monitoring and Review Notes

Watershed & Water Resources



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. In the area, water sources involve underground aquifers, precipitation in the form of rain and snow, and surface-flowing water. Maximum precipitation usually 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 2-14). 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.

TABLE 2-14
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. 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 water source 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 is generally (classified as containing amounts of) calcium bicarbonate or sodium sulfate, and spring water is generally classified as 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 valleys), ground waters are slightly saline (1,000-3,000 milligrams per liter of dissolved solids), and are generally suitable for only livestock use. 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, wildlife, and support of riparian-aquatic habitat. 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 will 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) insure an adequate supply of water for existing and proposed BLM management activities; (4) insure 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.

PLANNED ACTIONS

Water quality and quantity will be managed to comply with State and Federal water quality standards. Proposed activities will 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 will be enforced. Exploration holes will be properly plugged to prevent ground water contamination. Established watershed studies will be monitored each year. Water rights for all public land water sources will be obtained and protected to insure the continuation of water-dependent programs and to protect Federal investments. Additional water sources will be developed whenever possible through cooperation with the FS and quit-claim deeds of oil and gas exploration wells.

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

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

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

Waters will be appropriated prior to project construction and appropriations prepared for State adjudication areas. Springs planned for appropriation are Sawtooth, Trap, Amasa, Tunnel,

Plan Maintenance, Monitoring and Review Notes

James, Black, Rocky Knoll, Mud, Needle Point, Side, North Knoll, Mud Lake, and several unnamed springs.

An activity plan will be developed for construction of 15 gully check dams 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 will be established on 2 miles of road in the Amasa Allotment.

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

SUPPORT REQUIREMENTS

Clerical support will be required. Also, Division of Operations support will be necessary for design and construction of certain projects, for contracting on some projects, and for the periodic maintenance of all projects. Clearances for T&E species, mineral resources, and archaeological values will 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.

IMPLEMENTATION

Project proposals and permit applications will be evaluated as required to define mitigation and prevent degradation of water resources. Appropriation of the springs specified will be accomplished by FY 1990. The activity plan for gully check dam and water bar construction in the six allotments specified will be developed in FY 1992. The seven channel erosion studies will be established in FY 1992.

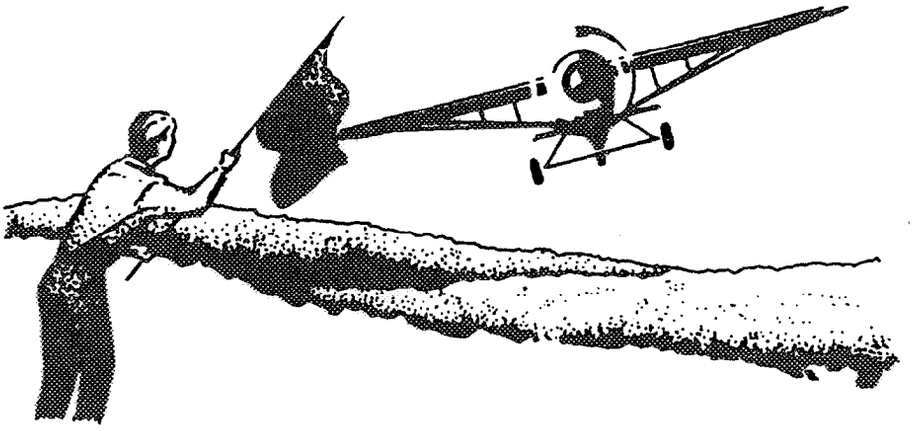
PLAN MONITORING AND EVALUATION

Water quality monitoring and evaluation (10 samples annually) will be conducted to determine water quality content for evaluation of suitability for human, livestock, and wildlife use in accordance with EPA, State, and BLM water quality standards.

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

Plan Maintenance, Monitoring and Review Notes

Soils



SOILS

Introduction

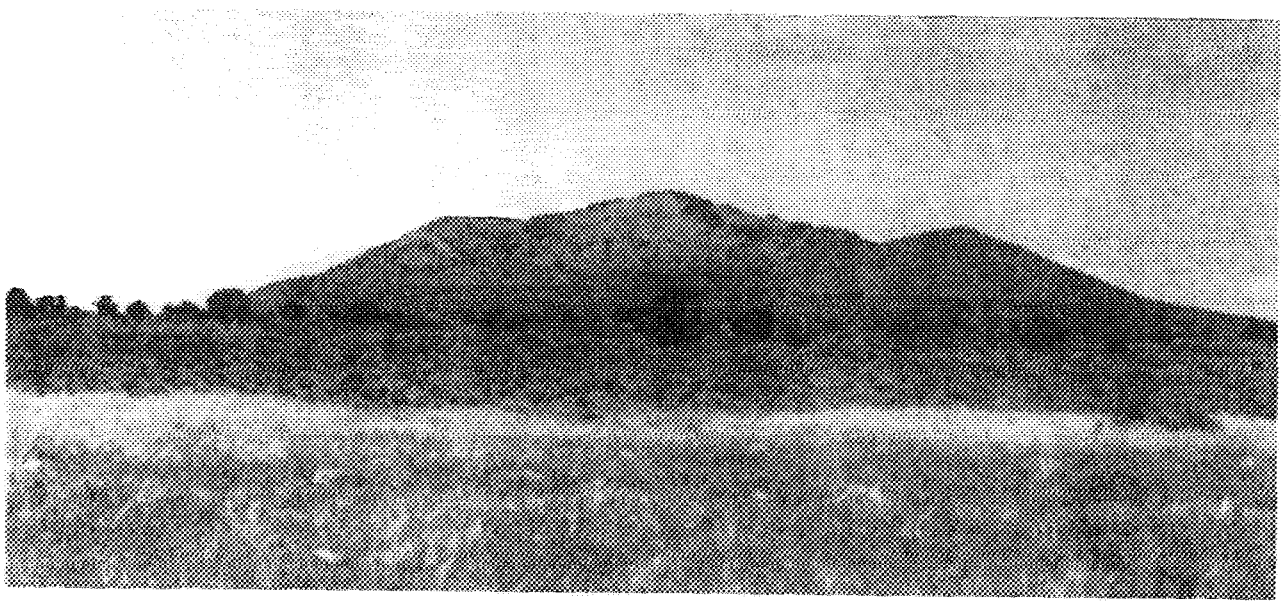
GENERAL

Principle characteristics of the WSRA are 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.

The soils 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. 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.



Pavant Butte ACEC

Elements of the Plan

GOALS AND OBJECTIVES

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

PLANNED ACTIONS

Soil surveys contain an inventory of soils in the resource area. From these data, evaluations will be made to define the potential and/or limitations of each soil type. BLM and non-BLM initiated projects will be analyzed independently for impact

Plan Maintenance, Monitoring and Review Notes

on the soil resource. Such analysis will 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 will continue. The objective will be to keep soil loss within acceptable limits (see the WSRA MSA).

Monitoring of grazing use will be emphasized on those allotments where poor watershed conditions exist. This monitoring study will be used to manage future grazing use.

Watershed Management Plans will be prepared on areas requiring specific erosion control activity.

SUPPORT REQUIREMENTS

Clerical support will be required. Also, Division of Operations support will be necessary for design and construction of certain projects, contracting on some projects, and periodic upkeep of all watershed projects. Clearances for T&E species, mineral resources, and archaeological values will require the support of personnel in those programs. Specific areas may need a Third Order Soil Survey along with ecological range site identification. Any required additional Third Order Soil Surveys may require contracts with the Soil Conservation Service (SCS) or other qualified contractors.

IMPLEMENTATION

Third Order Soil Surveys will be accomplished by BLM as necessary, depending on project proposals. Evaluation of existing survey data will constitute part of the environmental analysis prior to project approval.

PLAN MONITORING AND EVALUATION

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

Plan Maintenance, Monitoring and Review Notes

Forest Resources

FOREST RESOURCES

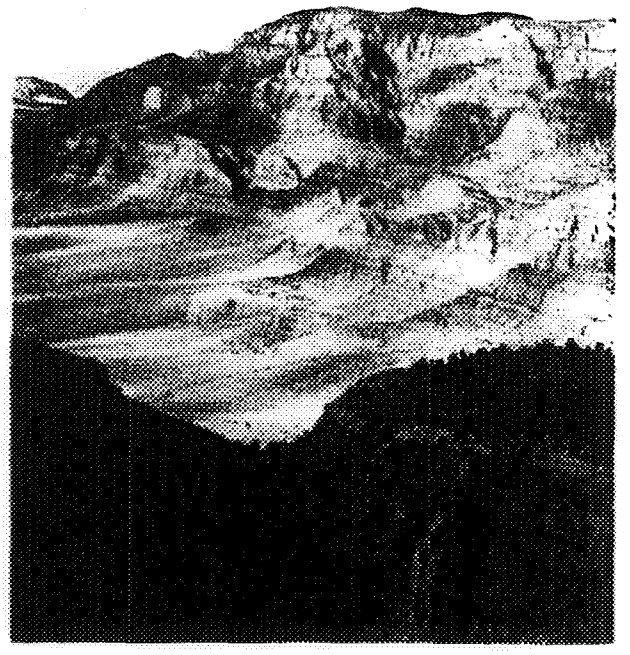
Introduction

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, there are approximately 220,000 acres of pinyon-juniper type vegetation (*Pinus monophylla, Pinus eludis*, and *Juniperous osteosperma*). 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 2-15 summarizes the volumes of woodland resources found in these areas. Resources in the Cricket 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. Except for 15,610 acres in special management designation areas, all other woodland areas in the WSRA (205,059 acres) are forest areas managed to enhance other resource values and uses.



Wah Wah Mountains

TABLE 2-15

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.

Elements of the Plan

GOALS AND OBJECTIVES

Goals and objectives are to:

1 Facilitate maximum utilization of woodland resources while providing protection to other natural values and resources (wildlife habitat, riparian areas, soils, scenery, etc.).

2. Meet demand for fuelwood, posts, Christmas trees, and pine nuts.

3. Determine if cutting practices are satisfactory or if additional mitigation measures (increased monitoring of cutting activities, etc.) are required to protect other resources.

4. Determine if there are unanticipated on- or off-site woodland harvest impacts.

PLANNED ACTIONS

Current forest harvest and associated activities will be planned to minimize visual impacts and disruption to wildlife. Cutting areas, woodland sales, and vegetation treatments will be designed to meet VRM class management objectives, if possible, 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 will be restricted to minimize surface disturbance.

No clearing will 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 on 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 will be allowed.

Harvest of forest products will be prohibited on Notch Peak (9,000 acres), the Wah Wah Mountains (5,970 acres), and Crystal Peak (640 acres). These areas are not available for management of forest products to protect ecological, primitive recreation, visual, and other resource values.

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

Plan Maintenance, Monitoring and Review Notes

SUPPORT REQUIREMENTS

Administrative support will be required to process permit applications and delineate woodland cutting areas. Archaeological clearances may also be required.

Program coordination with the range, wildlife, and watershed programs will 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.

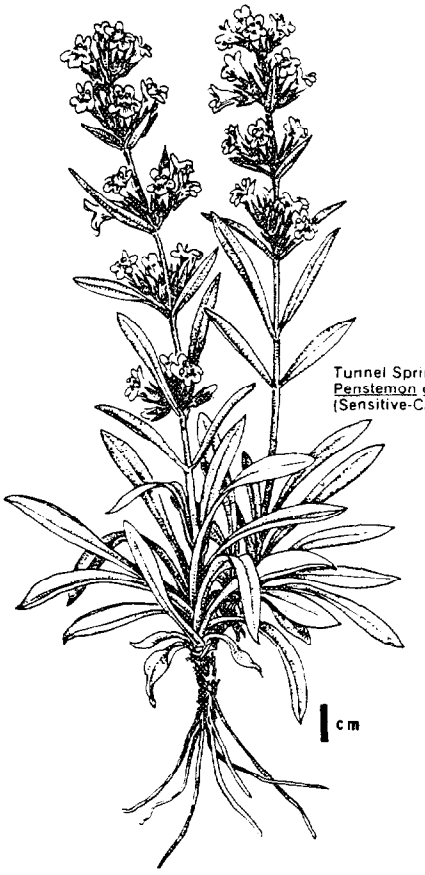
IMPLEMENTATION

Planned forest and woodland management classifications and management protections are effective upon approval of the RMP.

PLAN MONITORING AND EVALUATION

The forest resources plan elements will 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 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.

Plan Maintenance, Monitoring and Review Notes



Tunnel Spring Beard Tongue
Penstemon concinnus
(Sensitive-Category2)

Fire Management

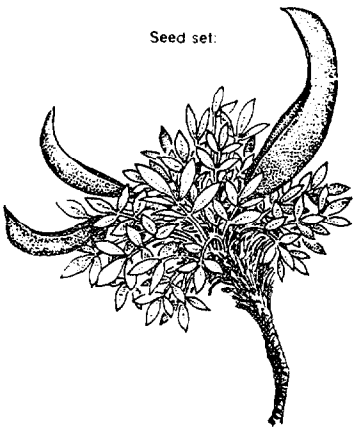
FIRE MANAGEMENT

Introduction

Historically, fire management practice has been full suppression throughout the resource area. Controlled prescribed fires have been 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; the east half, however, normally 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.

Astragalus uncialis
(Sensitive-Category 2)



Elements of the Plan

GOALS AND OBJECTIVES

Goals will be to: (1) reduce human and ecological losses; (2) complement resource management objectives; and (3) sustain productivity of biological systems through fire management.

PLANNED ACTIONS

Full suppression will continue on up to 2,015,555 acres. Limited suppression on up to 211,200 acres of pinyon-juniper and possibly other areas and prescribed fire use will be defined in a Fire Management Activity Plan covering the entire resource area. The plan will also address fire attack strategies throughout the Resource Area, with special attention to high potential, high risk areas.

Prescribed fire may be used in selected areas to convert vegetation types or meet other management objectives.

Following wildfire in normal wildfire areas, rehabilitation (chaining and seeding, drilling seed, etc.) will be conducted in accordance with the

Plan Maintenance, Monitoring and Review Notes

Richfield District Normal Year Fire Rehabilitation Plan (to be completed in FY 1987). Rehabilitation in other wildfire areas will be assessed and accomplished in accordance with emergency fire rehabilitation plans which will be developed as required.

SUPPORT NEEDS AND PROGRAM COORDINATION

Preparation of the Fire Management Plan will require the support of a fire management planning professional. Support from all resource programs will be required in the development of the management and prescribed fire plans. Program coordination with local fire departments, the State Fire Control Officer, and the FS in implementing full and limited fire suppression will be required. Prescribed burning will be in compliance with BLM Manual Section 7723, "Air Quality Maintenance Requirements."

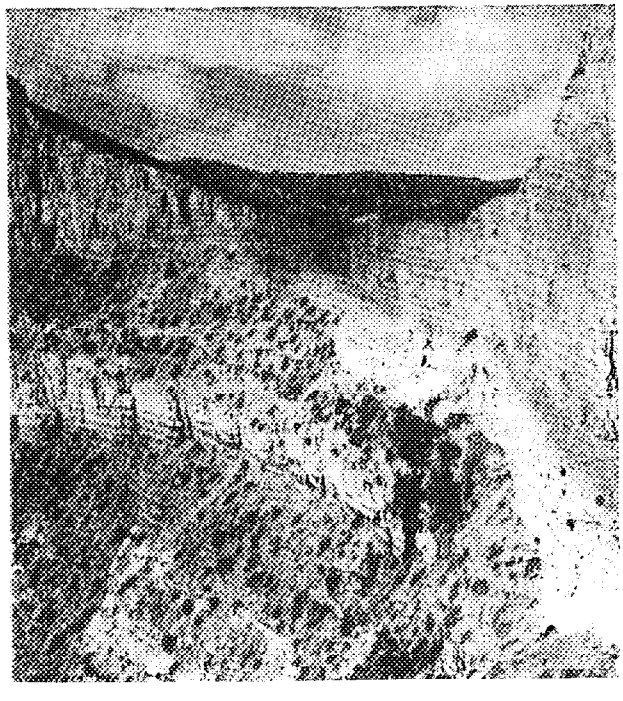
IMPLEMENTATION

The Fire Management Activity Plan will be completed within 5 years.

PLAN MONITORING AND EVALUATION

The Fire Management Activity Plan and fire management practices will be reviewed at 5-year intervals to identify need for revision or modification.

Plan Maintenance, Monitoring and Review Notes



Notch Peak

Appendices

RPS 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	PORTION FEDERAL RANGE	TOTAL FEDERAL ACRES	EXCELLENT	GOOD	FAIR	POOR	IMPROVING	STATIC	DECLINING	KIND[1]	SEASON	ACTIVE PREFERENCE (AUMs)	AVERAGE[2] ACTUAL USE (AUMs) TOTAL/**FEDERAL**	TOTAL[3] INDICATED CAPACITY (AUMs) TOTAL/**FEDERAL**	BIG GAME[4]	WILD HORSES	INITIAL LIVESTOCK ALLOCATION (AUMs)
I	7	**Amasa**	.789	4,782	0	10	40	50	10	70	20	C	5/16 - 9/30	**144**	124/**100**	108/**85**	2	0	**83**
C	42	Anderson	1.000	513	0	52	40	8	0	100	0	C	5/1 - 10/31	**25**	25/**12**	25/**25**	0	0	**25**
I	5	Antelope Point	.965	2,895	0	0	100	0	88	0	12	C	10/1 - 4/30	**329**	277/**265**	207/**200**	2	0	**329**
C	41	Beeston	1.000	480	0	0	100	0	0	100	0	C	5/16 - 6/25	**10**	10/**10**	11/**11**	1	0	**10**
I	33	Big Wash	.880	4,489	0	95	0	5	25	75	0	S	11/1 - 5/31	**285**	176/**158**	224/**197**	4	0	**285**
I	8	**Black Point**	.868	20,600	0	36	45	19	80	20	0	C	11/1 - 5/6	**1,798**	2,020/**1,798**	1,868/**1,621**	1	0	**1,798**
C	5	Black Rock Summer	1.000	3,351	0	30	50	20	0	100	0	C	4/1 - 9/30	**294**	296/**41**	278/**278**	0	0	**294**
I	5	Black Rock Winter	.840	8,806	15	35	35	15	80	20	0	C	10/1 - 3/31	**996**	958/**788**	1,078/**906**	0	0	**996**
I	17	**Blackham**	.910	30,788	5	60	25	10	40	60	0	S	11/1 - 4/30	**2,163**	2,136/**1,918**	2,184/**1,988**	24	0	**2,163**
M	56	**Blind Valley†**	.871	39,940	20	50	30	0	70	30	0	S	11/1 - 4/30	**2,100**	2,295/**1,997**	2,474/**2,155**	15	29	**2,100**
M	53	**Boob Canyon†**	.900	30,025	15	45	30	10	0	30	70	C	11/1 - 5/31	**2,597**	1,248/**1,150**	2,134/**1,920**	1	54	**1,865**
I	1	Breck's Knoll	.851	69,393	20	40	35	5	0	100	0	C	11/1 - 5/15	**5,752**	4,412/**3,937**	5,048/**4,298**	3	234	**5,752**
M	36	Brown's Wash	.890	26,112	15	60	15	10	0	100	0	S	11/1 - 3/31	**2,608**	2,038/**1,877**	2,322/**2,066**	47	101	**2,608**
M	57	**Buckskin†**	.902	21,898	25	75	0	0	60	40	0	S	11/16 - 4/30	**2,264**	1,129/**1,012**	2,488/**2,245**	33	58	**2,264**
I	9	Church	1.000	1,253	0	21	69	10	0	100	0	C	5/1 - 8/31	**120**	124/**124**	131/**131**	1	0	**120**
M	52	**Clay Springs†**	.890	37,026	20	38	35	7	30	70	0	C	11/1 - 4/30	**2,640**	1,534/**1,419**	2,492/**2,219**	4	0	**2,215**
I	21	Coates	.911	19,229	0	0	90	10	0	50	50	S	11/1 - 4/30	**1,690**	1,182/**1,039**	1,235/**1,126**	10	0	**1,690**
M	35	Conger Spring	.892	70,425	5	79	15	1	0	100	0	S	11/1 - 4/30	**4,542**	4,282/**3,344**	4,599/**4,101**	109	105	**4,542**
I	20	Crickett	.893	90,205	0	10	75	15	65	35	0	S	10/15 - 4/30	**8,294**	5,892/**5,097**	6,151/**5,492**	30	0	**8,294**

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RPS 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	PORTION FEDERAL RANGE	TOTAL FEDERAL ACRES	EXCELLENT	GOOD	FAIR	POOR	IMPROVING	STATIC	DECLINING	KIND[1]	SEASON	ACTIVE PREFERENCE (AUMs)	AVERAGE[2] ACTUAL USE (AUMs) TOTAL/FEDERAL	TOTAL[3] INDICATED CAPACITY (AUMs) TOTAL/FEDERAL	BIG GAME[4]	WILD HORSES	INITIAL LIVESTOCK ALLOCATION (AUMs)
M	37	**Crow's Nest**	.893	25,358	30	50	15	5	38	62	0	C	11/1 - 5/31	**1,222**	1,593/**1,405**	1,789/**1,597**	3	0	**1,222**
I	25	**Crystal Peak**	.896	61,893	5	57	30	8	0	80	20	S	10/16 - 4/30	**4,835**	**2,538/2,407**	2,772/**2,483**	24	0	**4,835**
I	3	**Deadman's Wash**	.888	51,915	15	30	45	10	20	80	0	C S	11/1 - 4/30 11/1 - 4/30	**4,026**	**3,879/3,823**	4,524/**4,019**	57	0	**4,026**
I	14	Death Canyon	.874	27,279	0	50	45	5	0	100	0	S	11/1 - 4/30	**2,426**	1,525/**1,351**	1,295/**1,131**	15	0	**2,426**
M	55	**Deseret†**	.832	270,117	5	60	30	5	50	45	5	C	5/1 - 11/30	**8,043**	5,722/**4,488**	8,059/**6,687**	0	0	**6,687**
I	5	**East Antelope**	.876	16,404	0	13	49	38	5	65	30	C	6/16 - 10/15	**488**	471/**378**	672/**589**	5	0	**584**
I	10	Ephraim-Bagnall	.810	17,299	0	30	60	10	0	100	0	S	10/16 - 4/30	**1,515**	904/**770**	1,090/**882**	1	0	**1,515**
I	48	**Ephraim-Meadow*†**	.895	60,996	0	0	40	60	0	25	75	C S	5/16 - 9/23 10/21 - 4/5	**4,366**	2,725/**2,504**	3,036/**2,718**	1	0	**2,717**
I	48	**Ephraim-Meadow† Sheep**	.880	10,361	0	0	25	75	0	0	100	S	10/21 - 4/5	**1,818**	1,898/**1,613**	1,451/**1,277**	0	0	**1,277**
I	29	Fairview	.895	55,068	15	50	30	5	40	60	0	S	10/16 - 4/30	**5,005**	1,921/**1,653**	2,905/**2,601**	65	156	**5,005**
M	34	**Ferguson**	.919	18,672	10	70	20	0	70	30	0	C	11/1 - 4/30	**800**	609/**496**	1,068/**981**	1	0	**980**
M	58	Garrison	.872	44,408	0	40	60	0	40	60	0	C	11/16 - 6/15	**1,429**	1,715/**1,276**	1,665/**1,451**	2	0	**1,429**
M	51	**Granite†**	.876	48,801	0	50	45	5	0	70	30	S	11/16 - 4/15	**2,770**	2,179/**2,047**	2,147/**1,881**	10	0	**1,871**
I	30	**Holden Spring**	1.000	2,880	0	27	73	0	0	100	0	C	5/16 - 6/15	**262**	195/**217**	187/**187**	7	0	**180**
I	32	**Holden Winter**	.869	33,984	0	30	65	5	75	25	0	C	10/1 - 12/31	**1,368**	444/**383**	1,066/**926**	0	0	**926**
I	16	**King**	.880	48,035	0	20	65	15	10	60	30	S	11/1 - 4/30	**2,927**	1,392/**1,261**	1,325/**1,116**	24	19	**1,123**
I	15	Klondike	.910	32,700	0	50	45	5	0	100	0	S	11/1 - 4/15	**3,357**	1,574/**1,485**	1,676/**1,513**	20	0	**3,357**
M	50	**Knoll Springs†**	.890	34,116	5	35	45	15	67	33	0	C	5/1 - 10/31	**1,050**	632/**312**	768/**682**	0	0	**682**

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RPS 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	PORTION FEDERAL RANGE	TOTAL FEDERAL ACRES	EXCELLENT	GOOD	FAIR	POOR	IMPROVING	STATIC	DECLINING	KIND[1]	SEASON	ACTIVE PREFERENCE (AUMs)	AVERAGE[2] ACTUAL USE (AUMs) TOTAL/FEDERAL	TOTAL[3] INDICATED CAPACITY (AUMs) TOTAL/FEDERAL	BIG GAME[4]	WILD HORSES	INITIAL LIVESTOCK ALLOCATION (AUMs)
I	26	**Ledger Canyon**	.854	17,811[0]	0	50	45	5	0	100	0	S	11/16 - 4/15	**1,319**	692/**628**	820/**700**	22	101	**577**
C	45	McClintock	.460	1,600	0	0	68	32	0	100	0	C	10/1 - 10/31	**11**	11/**5**	11/**5**	0	0	**11**
I	31	**Meadow Springs**	.958	2,731	0	10	30	60	30	70	0	C	5/16 - 5/31	**126**	27/**26**	44/**42**	10	0	**32**
I	4	**Mormon Gap**	.878	46,606	15	40	30	15	50	50	0	C S	9/16 - 5/20 11/1 - 4/30	**2,965**	3,018/**2,519**	4,403/**3,865**	55	0	**3,810**
I	13	North Canyon	.922	19,611	0	30	60	10	0	100	0	S	12/1 - 3/31	**1,441**	1,416/**1,360**	1,316/**1,214**	12	0	**1,441**
I	12	Notch Peak	.906	34,588	0	20	70	10	0	100	0	S	11/21 - 4/20	**3,559**	2,208/**1,991**	1,865/**1,690**	21	0	**3,559**
I	24	Painted Potholes	.901	38,432	0	20	65	15	0	30	70	S	11/1 - 4/30	**2,326**	1,447/**394**	1,454/**1,310**	17	0	**2,326**
I	18	Painter Springs	.881	33,486	0	60	35	5	0	100	0	S	11/1 - 4/15	**2,833**	1,792/**1,421**	1,611/**1,420**	22	0	**2,833**
I	2	Pine Valley	.882	40,565	0	60	30	10	0	100	0	C	11/1 - 5/16	**3,750**	2,724/**2,224**	2,846/**2,511**	1	0	**3,750**
C	44	Section 31	1.000	440	0	0	100	0	0	100	0	C	5/16 - 6/15	**35**	35/**35**	43/**43**	1	0	**35**
I	19	Seely	.900	46,208	0	10	80	10	0	70	30	S	10/16 - 4/15	**4,635**	3,664/**3,116**	3,742/**3,368**	32	0	**4,635**
I	27	Skull Rock	.875	50,023	0	25	60	15	60	40	0	S	11/1 - 4/30	**4,138**	1,442/**1,428**	2,146/**1,878**	29	0	**4,138**
M	54	**Skunk Springs[t]**	.926	37,061	0	30	40	30	50	25	25	C S	5/16 - 10/15 11/9 - 4/15	**1,540**	1,146/**1,170**	1,535/**1,422**	33	115	**1,274**
M	38	**South Tract Summer**	.900	2,298	0	92	8	0	0	100	0	C	5/1 - 9/30	**1,130**	1,069/**397**	1,292/**1,163**	0	0	**1,130**
M	38	South Tract Winter	1.000	2,293	0	0	100	0	0	100	0	C	12/1 - 1/31	**45**	45/**45**	46/**46**	0	0	**45**
I	28	State Line	.904	33,045	0	50	40	10	40	60	0	S	11/1 - 4/30	**4,753**	3,115/**2,624**	3,419/**3,092**	25	68	**4,753**
I	23	Steamboat	.899	29,109	0	0	70	30	0	100	0	S	11/1 - 4/30	**2,040**	843/**591**	864/**777**	12	0	**2,040**
C	43	Stott	.667	160	0	0	100	0	0	100	0	C	10/1 - 2/15	**5**	5/**3**	5/**3**	0	0	**5**

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RPS 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	PORTION FEDERAL RANGE	TOTAL FEDERAL ACRES	EXCELLENT	GOOD	FAIR	POOR	IMPROVING	STATIC	DECLINING	KIND[1]	SEASON	ACTIVE PREFERENCE (AUMs)	AVERAGE[2] ACTUAL USE (AUMs) TOTAL/**FEDERAL**	TOTAL[3] INDICATED CAPACITY (AUMs) TOTAL/**FEDERAL**	BIG GAME[4]	WILD HORSES	INITIAL LIVESTOCK ALLOCATION (AUMs)
I	6	**Stott-Rowley[5]**	.917	15,145	0	10	50	40	0	80	20	C	5/1 - 10/15	**727**	430/**342**	369/**338**	0	0	**338**
I	59	Summit	1.000	1,872	0	100	0	0	66	34	0	C	5/1 - 9/20	**184**	184/**184**	184/**184**	1	0	**184**
C	40	T.O. Johnson	1.000	160	0	0	100	0	0	100	0	C	5/1 - 8/31	**12**	12/**12**	12/**12**	0	0	**12**
C	46	Teeples	1.000	920	0	0	100	0	0	100	0	C	10/1 - 10/31	**5**	5/**3**	5/**5**	0	0	**5**
I	49	**Twin Peaks†**	.870	179,869	0	29	58	13	39	56	5	C S	10/1 - 6/15 10/1 - 6/15	**19,661**	13,367/**10,930**	14,701/**12,790**	120	0	**12,790**
I	11	Voorhees	.950	26,958	0	50	45	5	0	100	0	S	12/1 - 4/15	**3,076**	979/**893**	1,235/**1,173**	16	0	**3,076**
C	39	Wallace	1.000	900	0	53	47	0	0	100	0	C	5/1 - 10/15	**39**	39/**22**	39/**39**	0	0	**39**
I	22	Wheeler	.872	17,522	0	10	70	20	0	70	30	S	11/16 - 4/30	**1,806**	1,407/**1,302**	1,499/**1,307**	9	0	**1,806**
I	60	Whiskey Creek	1.000	5,001	0	82	18	0	100	0	0	C	5/1 - 9/20	**469**	350/**92**	479/**479**	3	0	**469**
C	47	White Bush	1.000	80	0	50	50	0	0	100	0	C	4/1 - 9/30	**21**	21/**21**	21/**21**	0	0	**21**
		TOTAL		2,026,990										**149,009**	103,567/**87,733**	118,538/**104,281**	963	1,040	**133,409**

NOTE: Allotments with at least 5 years of actual use utilization data and two readings of trend completed are in **BOLD PRINT**. Necessary adjustments in livestock allocation in these allotments will commence in FY 87/88. Any additional monitoring data collected will be used to refine the estimates of indicated capacity. Climate data will be considered and permittees consulted prior to decision on any adjustments.

[1] Kind of Livestock: C - Cattle, S - Sheep

[2] Average Actual Use - Based on Actual Use Records 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.

† Existing AMP.

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APPENDIX 2

VEGETATION MONITORING STUDIES

	Utilization					Trend				
Allotment Name	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	3	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	6	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.

[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 normally read 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 PLANNED RANGE IMPROVEMENTS

		Structural												Non-Structural[a]	
		Spring Development		Pipelines (Mi.)		Wells		Reservoirs		Fences (Mi.)		Cattleguards		Vegetation Treatments	
Allotment Name	Number	Existing	Planned	Existing	Planned	Existing	Planned	Existing	Planned	Existing	Planned	Existing	Planned	Existing	Planned
Anderson													1		
Amasa	4300		2		3.0					0.5		2			
Antelope Point	5777									2.5				200	
Beeston	5780														
Big Wash	5797									3.0					
Black Point	5782									25.5		4		5,061	1,000
Black Rock Summer	5786					1									
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			
Breck's Knoll	4306							4		10.0		2			
Brown's Wash	4302	1													
Buckskin	4307							1		8.0		1			
Church	5799			1.0									1	839	
Clay Springs	4312			2.5	2.5			1		5.5			3		
Coats	5781							3							
Conger Spring	4313	3				1									
Crickett	5779					1		6		9.5					
Crow's Nest	4305				2.5	2		1		15.0		2			
Crystal Peak	4311							2		7.0					
Deadman's Wash	4316						1	1		5.5	15.0		2		
Death Canyon	4314							1							
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								7,304	
Ephraim Meadow	5774			2.0		4	1	1		50.0		5		2,185	
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													1,770	
Mormon Gap	4397			5.0	6.0	1		3		25.5		3			
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		25.0	15.0	10	2	4,241	6,500
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	33,897	14,300

[a]The priority for installation of planned improvements if the same as the priority for Allotment Management Plan development (see Appendix B-1).

[b]Planned vegetation treatments (prescribed burning, chaining, and/or seeding). Other suitable areas could be treated, based on priority of need, favorable benefit/cost ratio, and availability of funding.

[c]Includes 2,711 acres in Black Point Allotment and 9,489 acres in Ephraim Meadow Allotments which were 1986 fire rehabilitation seedings.

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LIST OF PREPARERS

EIS TEAM	TITLE	ASSIGNMENT	EDUCATION	YEARS OF PROFESSIONAL EXPERIENCE
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Editing/Typing	Shirley Taft

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.

GLOSSARY

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. As designated by Utah Division of Wildlife Resources or Fish and Wildlife Service that portion of wildlife habitat essential to the survival and perpetuation of a species in an area.

CRUCIAL WILDLIFE HABITAT. As designated by the BLM that portion of wildlife habitat necessary to sustain a species in an area.

CULTURAL RESOURCES. Those resources of historical, archaeological, or 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.

FISCAL YEAR. October 1 through September 30 of the following year.

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, Christmas trees, 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 livestock 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 grazng 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. See Mineral Administrative Classification.

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. See Mineral Administrative Classification.

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 Leaisng 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 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 were prepared under previous BLM planning procedures.

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. As used in previous BLM planning, a geographic unit within a BLM district. It included related lands, resources, and use pressure problems that were 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 will 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 geographic portion of a Bureau of Land Management district: An administrative subdivision whose manager has primary responsibility for day-to-day resource management activities and resource use allocations. In most instances it is the area for which Resource Management Plans are prepared and maintained.

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, therefore, of great importance to a wide variety of wildlife.

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 condi-

tion. These determinations may relate to ecological site or forage conditions. Also, vegetation trend that is improving (upward) not changing (static) and declining (downward).

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 should not be evident in the characteristic landscape. A contrast may be seen but should not attract attention. *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.

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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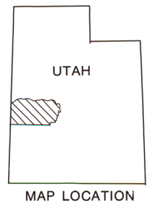
* ALLOTMENTS WITH EXISTING ALLOTMENT MANAGEMENT PLANS

WARM SPRINGS RESOURCE AREA

LIVESTOCK GRAZING ALLOTMENTS

MAP DOES NOT MEET NATIONAL MAP ACCURACY STANDARDS



MAP LOCATION

MAP 1

- 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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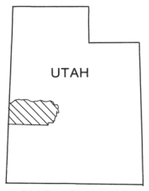
MULE DEER AND ANTELOPE HABITAT

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

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WEST DESERT HMP (1)

SEVIER LAKE DESERT HMP (4)

BLACK ROCK DESERT HMP (5)

TWIN PEAKS/FOOTHILL TRACTS HMP (3)

1

2

3

4

5

SOUTH TULE SPRING

PAINTER SPRING

PRUESS LAKE

LAKE CREEK

DESERT EXPERIMENTAL RANGE

CONFUSION RANGE

SNAKE VALLEY

NEVADA

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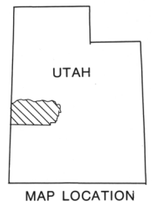
WILDLIFE HABITAT MANAGEMENT PLANS (HMPs) AND SPECIAL MANAGEMENT AREAS

MAP 3



MAP LOCATION

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

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Scale in miles

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MAP DOES NOT MEET NATIONAL MAP ACCURACY STANDARDS

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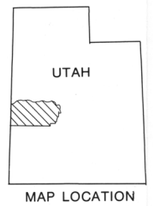
*ALLOTMENTS WITH EXISTING ALLOTMENT MANAGEMENT PLANS

MAP DOES NOT MEET NATIONAL MAP ACCURACY STANDARDS

WILD HORSE HERD MANAGEMENT AREAS (HMAs) AND CRUCIAL HABITAT

MAP 4



MAP LOCATION

HMA BOUNDARY

CRUCIAL HABITAT

LIVESTOCK GRAZING ALLOTMENT BOUNDARY

FOREST SERVICE BOUNDARY

RESOURCE AREA BOUNDARY

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Scale in miles

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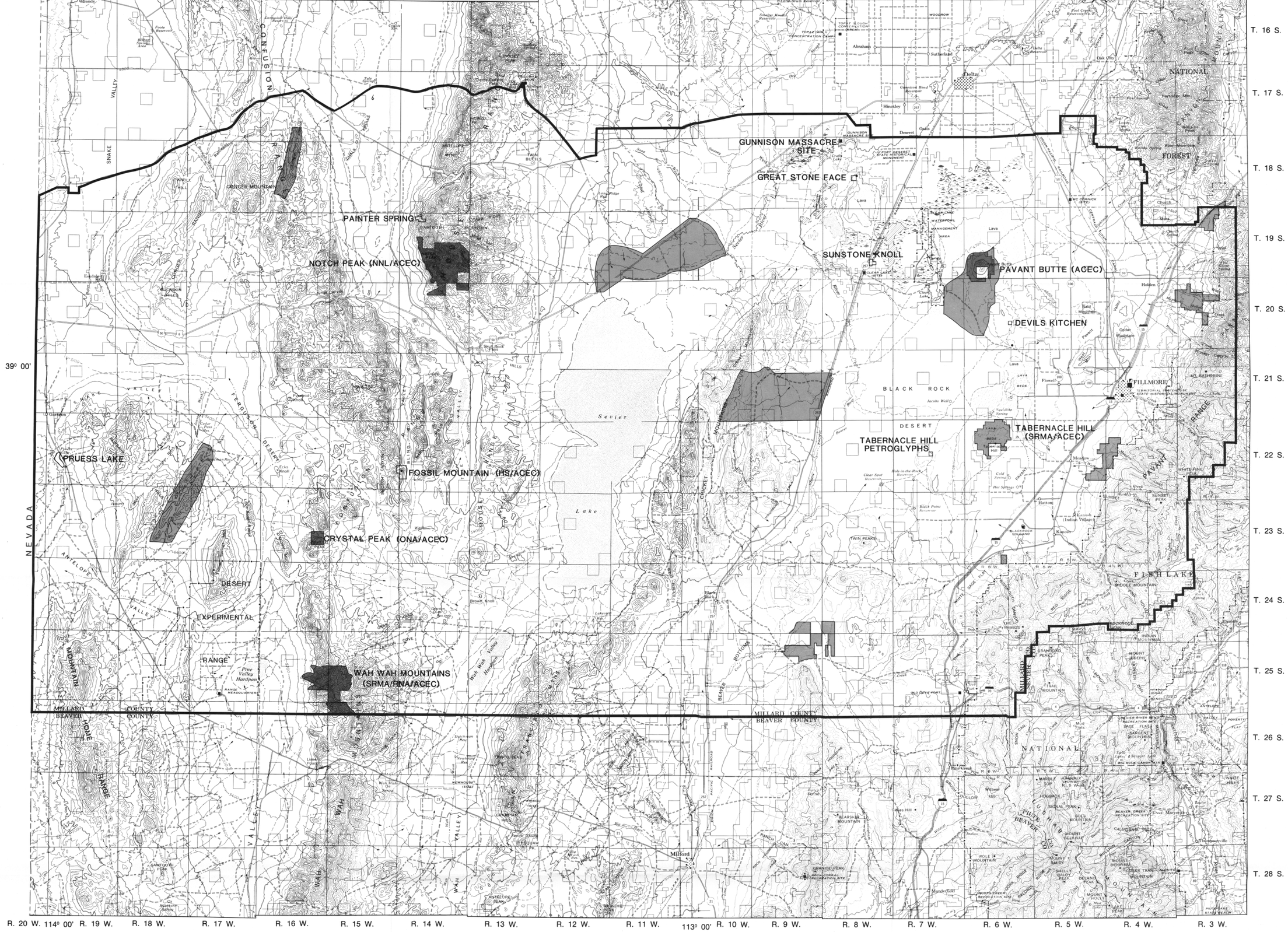
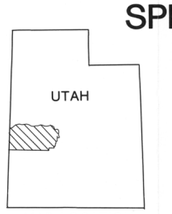
SPECIAL RECREATION SITES AND DESIGNATIONS



MAP DOES NOT MEET NATIONAL MAP ACCURACY STANDARDS

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

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Scale in miles

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RESOURCE AREA BOUNDARY

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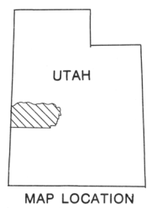
VISUAL RESOURCE MANAGEMENT

MAP DOES NOT MEET NATIONAL MAP ACCURACY STANDARDS



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

IPP TO NEVADA

IPP TO CALIFORNIA

SIGUARD TO NEVADA TRANSMISSION LINE

U.S. HIGHWAY 50 & 6

STATE HIGHWAY 257

UNION PACIFIC RAILROAD

INTERSTATE HIGHWAY 15

T. 16 S.
T. 17 S.
T. 18 S.
T. 19 S.
T. 20 S.
T. 21 S.
T. 22 S.
T. 23 S.
T. 24 S.
T. 25 S.
T. 26 S.
T. 27 S.
T. 28 S.

39° 00'

R. 20 W. 114° 00' R. 19 W. R. 18 W. R. 17 W. R. 16 W. R. 15 W. R. 14 W. R. 13 W. R. 12 W. R. 11 W. 113° 00' R. 10 W. R. 9 W. R. 8 W. R. 7 W. R. 6 W. R. 5 W. R. 4 W. R. 3 W.

[1] IF THE AREA IS NOT DESIGNATED WILDERNESS BY CONGRESS

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

MAP DOES NOT MEET NATIONAL MAP ACCURACY STANDARDS

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]

MILLARD COUNTY BEAVER COUNTY

Milford

T. 16 S.
T. 17 S.
T. 18 S.
T. 19 S.
T. 20 S.
T. 21 S.
T. 22 S.
T. 23 S.
T. 24 S.
T. 25 S.
T. 26 S.
T. 27 S.
T. 28 S.

39° 00'

R. 20 W. 114° 00' R. 19 W. R. 18 W. R. 17 W. R. 16 W. R. 15 W. R. 14 W. R. 13 W. R. 12 W. R. 11 W. 113° 00' R. 10 W. R. 9 W. R. 8 W. R. 7 W. R. 6 W. R. 5 W. R. 4 W. R. 3 W.

MINERALS

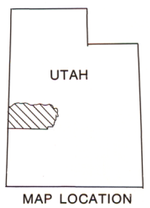
MAP DOES NOT MEET NATIONAL MAP ACCURACY STANDARDS

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