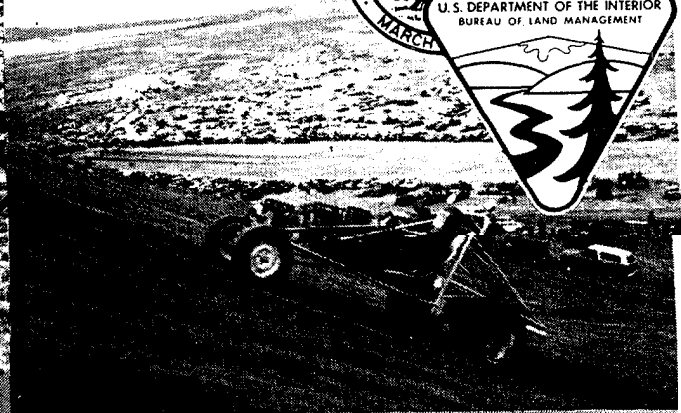
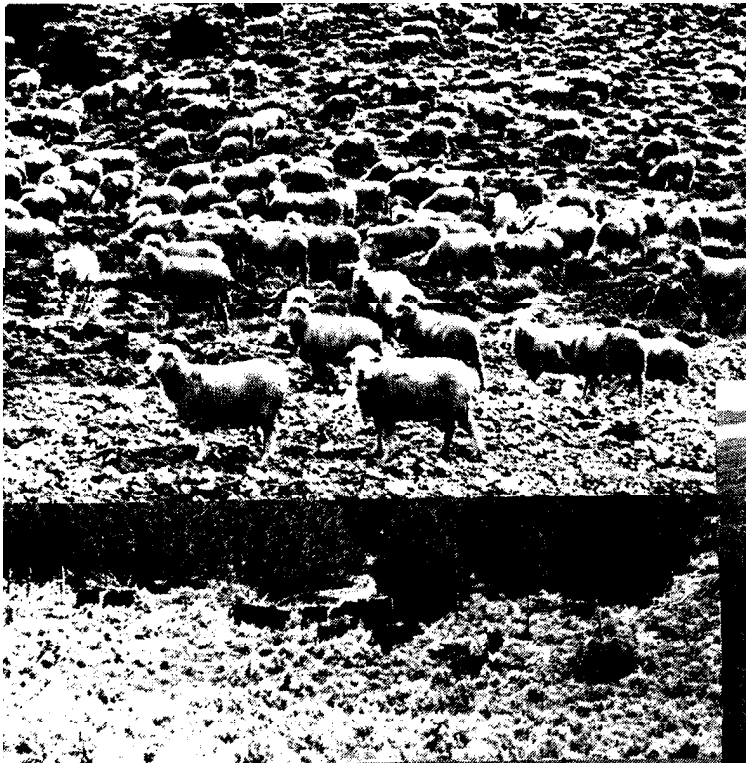
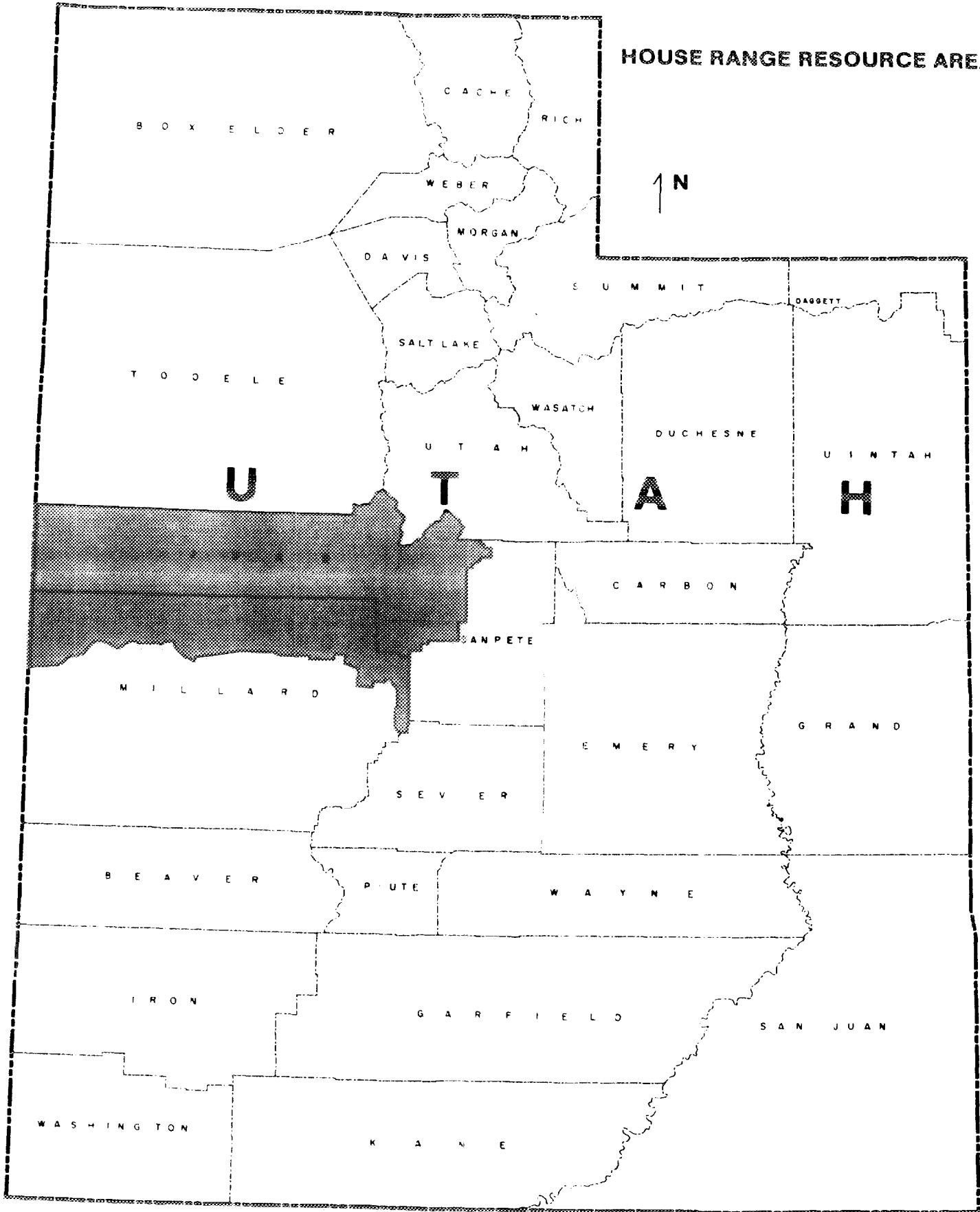


House Range
Resource Area
Resource Management Plan
And
Record of Decision
Rangeland Program Summary
October 1987



**RICHFIELD DISTRICT
BUREAU OF LAND MANAGEMENT
DEPARTMENT OF THE INTERIOR**

HOUSE RANGE RESOURCE AREA



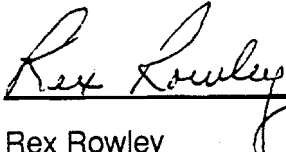
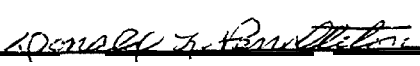
House Range Resource Area

The Resource Management Plan And Record of Decision Rangeland Program Summary


October 1987

RICHFIELD DISTRICT
BUREAU OF LAND MANAGEMENT
DEPARTMENT OF THE INTERIOR

Adoption of the House Range Resource Area Resource Management Plan as provided herein is recommended.

	<u>10-22-87</u>		<u>10/23/87</u>
Rex Rowley	Date	Donald Pendleton	Date
Area Manager		District Manager	
House Range Resource Area		Richfield District	

Adoption of the House Range Resource Area Resource Management Plan as provided herein is approved.

	<u>10/28/87</u>
Roland Robison	Date
Utah State Director	

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 House Range Resource Area (HRRRA), Millard and Juab Counties, 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 March 1986.

The RMP in Chapter 2 presents the decisions for future management of public land resources in the HRRRA. It is based on Alternative D, The Preferred Alternative. It has been presented in the Draft RMP/EIS and proposed in the Final 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 activity plans), support requirements, implementation sequences or priority, and follow up monitoring and evaluation intervals and standards are included in this document.

All resource maps are located in the inside back cover.



LIST OF ABBREVIATIONS

ACEC: Area of Critical Environmental Concern
AMP: Allotment Management Plan
APD: Application for Permit to Drill
APHIS: Animal and Plant Health Inspection Service
ATV: All Terrain Vehicle
AUM: Animal Unit Month
AWP: Annual Work Plan
BLM: Bureau of Land Management
CCC: Civilian Conservation Corps
CFR: Code of Federal Regulations
CMA: Cooperative Management Agreement
C&MU: Classification and Multiple Use Act
EA: Environmental Assessment
EIS: Environmental Impact Statement
EPA: Environmental Protection Agency
FLPMA: Federal Land Policy and Management Act
FWS: U.S. Fish and Wildlife Service
HMA: Herd Management Area
HMAP: Herd Management Area Plan
HMP: Habitat Management Plan
HRRRA: House Range Resource Area
IM: Instruction Memo
IMP: Interim Management Policy
IPP: Intermountain Power Project
KGRA: Known Geothermal Resource Area
KGS: Known Geologic Structure
LR: Land Report
MFP: Management Framework Plan
MOU: Memorandum of Understanding
NEPA: National Environmental Policy Act
NOI: Notice of Intent
NORA: Notice of Realty Action
NRHP: National Register of Historic Places
ONA: Outstanding Natural Area
ORV: Off-Road Vehicle
PL: Public Law
RMP: Resource Management Plan
ROD: Record of Decision
R&PP: Recreation and Public Purposes Act
RPS: Rangeland Program Summary
SCS: Soil Conservation Service
SRMA: Special Recreation Management Area
T&E: Threatened and Endangered
USDI: United States Department of the Interior
VRM: Visual Resource Management
WO: Washington Office
WSA: Wilderness Study Area

**HOUSE RANGE RESOURCE AREA
RESOURCE MANAGEMENT PLAN
RECORD OF DECISION/RANGELAND PROGRAM SUMMARY
TABLE OF CONTENTS**

**TITLE PAGE AND RESOURCE MANAGEMENT PLAN APPROVAL
READER'S GUIDE
LIST OF ABBREVIATIONS
CHAPTER 1: INTRODUCTION**

Organization of the Resource Management Plan/Record of Decision	1
The Resource Area	1
The Planning Process	2
Plan Implementation	2
Conformance Determinations	3
RMP Alternatives Considered	3
Reason for Selection	4
Monitoring	4
Cost of Implementation	4
Organization of the Plan	5

CHAPTER 2: THE RESOURCE MANAGEMENT PLAN

Administrative Features	9
Standard Design Construction, and Operation Features	9
Range Management/Rangeland Program Summary	13
Wildlife	35
Wild Horses	47
Recreation	51
Cultural Resources	63
Lands	67
Minerals	75
Watershed	81
Forest Resources	87
Fire Management	93

APPENDICES

Appendix 1: Livestock/Big Game Forage Summary	97
Appendix 2: Wildlife Forage Allocations	102
Appendix 3: Allotment Watershed Analysis	108

INDEX

LIST OF MAPS

MAPS IN MAP POCKET

- 1- Allotment Boundaries and Land Ownership
- 2- Mule Deer, Elk and Rocky Mt. Bighorn Sheep Habitat
- 3- Deep Creek Habitat Management Plan
- 4- Wild Horse Herd Boundaries and Critical Areas
- 5- Visual Resource Management
- 6- Special Management Areas and Off Road Vehicle (ORV) Designations
- 7- Areas of Critical Environmental Concern (ACECs) and Rights-of-Way Corridors
- 8- Geothermal Resources
- 9- Oil and Gas Categories and Locatable Minerals
- 10- Areas Suitable for Revegetation

CHAPTER 1

INTRODUCTION

ORGANIZATION OF THE RESOURCE MANAGEMENT PLAN/RECORD OF DECISION

The decisions presented in Chapter 2 form the Resource Management Plan (RMP) for the House Range Resource Area (HRRA). The Range Management section constitutes the Rangeland Program Summary (RPS) for the HRRA.

The RMP meets requirements of the Federal Land Policy and Management Act (FLPMA) and the court ordered evaluation of livestock grazing on public lands within the HRRA. The court order required examination of the effects of livestock grazing on public land administered by BLM. FLPMA requires an interdisciplinary approach and public involvement in planning and decision making on multiple resource management of public lands.

THE RESOURCE AREA

The HRRA consists of more than 2,245,000 acres of public land administered by BLM (See Table I-1). The area is semi-arid, with an annual rainfall of about eight to ten inches in the valleys and up to 20 inches in the Deep Creek Mountains. Major vegetation includes salt desert shrubs, sagebrush, pinyon-juniper woodlands, and native/seeded grasslands. Wildlife species found in the area include mule deer, antelope, elk, bighorn sheep, chukars, sage grouse, and raptors.

TABLE 1-1
House Range Resource Area Acreages

	Acres	Percent of Total
Public/ELM Administered	2,245,314	69.9
Private	591,346	17.3
State of Utah	300,529	6.6
Utah Division of Wildlife Resources	10,106	0.3
Other Federal:		
Forest Service	209,997	6.2
Fish and Wildlife Service	17,992	0.5
Fish Springs Refuge		
Goshute Indian Reservation	32,221	0.9
Total	3,407,505	

All of the resource area, and the western one-third of Utah lies in the Great Basin physiographic province. This topographic region is not a single basin, but consists of block-faulted mountains and intermountain basins in approximately equal portions. The landforms consist of an arid desert lowland without external drainage and north-south trending and isolated mountain ranges. The mountains are short ranges, rising abruptly to heights of 3,000 to 5,000 feet above the surrounding desert floor. Over 150 mountain ranges are found throughout the Basin and Range province; 20 of which extend into, or lie within, the resource area. Many intermountain basins exhibit internal drainage where runoff collects into depressed valley basins and eventually evaporates from desert playas.

Most population centers in the HRRA are scattered along the eastern perimeter of the planning unit along U.S. Highways 6 and Interstate (I) 15, near the foothills of the Pavant Mountains. The small farming settlements of Callao, Trout Creek, Partoun, and Gandy, connected by a county road in the western portions of the resource area, are exceptions to this locational pattern. The Goshute Indian Reservation is located in the northwest corner of the resource area.

CHAPTER 1: INTRODUCTION

The prevailing character of the region has been historically rural in nature, with agriculture playing a key role in economic development. However, in recent years, agriculture's importance has significantly declined. A wide range of support sectors produce a variety of goods and services that contribute to the area's economy. They include banking services, convenience goods, agriculture products, beryllium, gypsum, lava rock, and lime.

THE PLANNING PROCESS

The HRRRA 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 HRRRA. It was judged preferable to make the EIS part of this RMP rather than do a separate document.

Following public scoping for management alternatives, the environmental consequences of four alternative management plans were analyzed in the Draft RMP/EIS. That document was published in March, 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 were two letters of comment on the Proposed RMP/Final EIS; however, 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 five 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 and final RMP/EIS.

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 at least 20 years. Revisions will occur when management determines that maintenance and amendments are inadequate to adapt to changing circumstances, resource conditions, or policies.

No decisions or recommendations regarding wilderness designation of any of the four Wilderness Study Areas (WSAs) in the HRRRA have been made in the plan. Wilderness designation recommendations have been analyzed in the Utah BLM Statewide Wilderness Draft EIS (January 1986). Until Congress decides on designation or non-designation of the WSAs in the resource area, these areas will be managed in conformance with the BLM's Interim Management Policy (IMP). Designation of any of the four 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.

PLAN IMPLEMENTATION

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 activity requires adjustment, a schedule and action plan for making necessary management adjustments to licenses, permits, contracts, etc., will be included. Existing activity plans will also be reviewed to insure conformance with the RMP.

CHAPTER 1: INTRODUCTION

CONFORMANCE DETERMINATIONS

The basis 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 priorities to meet those objectives would be non-conforming.

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.

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, to commodity production, to continuing the current direction and intensity of management (No Action).

Alternative A: No Action

The No Action Alternative addresses the continuation of existing management practices at current levels and intensities. No management actions or changes designed to resolve planning issues are proposed under this alternative.

Alternative B

This alternative resolves any significant conflicts with livestock grazing in favor of the non-livestock resources. This type of conflict resolution allows benefits to accrue mostly to wildlife, wild horses, and watershed values. Livestock grazing would be curtailed and/or eliminated on some allotments to allow other uses and initial forage allocation would decrease. Land disposals would be limited to those areas identified for such use, and major transportation/utility corridors would be formally designated. Nine areas would be designated for special management (Areas of Critical Environmental Concern [ACECs], Outstanding Natural Areas [ONAs, etc.], and present oil and gas categories would become more restrictive in those areas in order to preserve wildlife and watershed values, Off-road Vehicle (ORV) use would be limited to existing roads and trails in seven allotments.

Alternative C

This alternative is designed to maximize livestock production. Other resource production would be enhanced only to the point that it does not conflict with livestock use. All competitive forage would be allocated to livestock. Noncompetitive forage would, in turn, be allocated to wild horses and mule deer. Lands actions would follow the Alternative B proposal because there is no conflict with livestock. No special designations (ACEC, ONA, etc.) would be made, and all public lands in the resource area would remain open to mineral entry except those under protective withdrawal, ORV use of the area would be curtailed during periods of livestock use. Twenty-four allotments would be closed to ORV use to protect rangeland values.

Alternative D

This alternative represents a balance of resource uses in the HRRA, and is the selected alternative. Livestock use would initially be licensed at the existing active preference level. Grazing allotments would continue to be monitored to identify problems, stocking adjustments, and needs. Forage for wildlife would be allocated to maintain current wildlife numbers and permit continued population growth. Present wild horse management would continue in accordance with the Wild Horse and Burro Act of 1971. Lands actions would follow the Alternative B proposal, and nine areas would be designated for special management (ACEC, ONA, etc.). Present oil and gas

CHAPTER 1: INTRODUCTION

categories would become more restrictive in those areas. Lands would remain open to mineral entry except where withdrawn. ORV use would be limited and controlled to protect watershed and wildlife values.

REASON FOR SELECTION

This RMP for the HRRR presents the decisions for future resource management on over 2.2 million acres of public lands. It is presented here with management goals and objectives, implementation priorities, support requirements, and monitoring procedures and standards for each program.

The rationale for selection of the RMP is as follows:

- Of the alternatives considered, the selected plan was judged best to maximize resource values for the public, based on the concept of sustained yield and 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 BLM's statutory mission and responsibilities, giving consideration to environmental, scientific, educational, 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 legislative mandated management objectives. The plan considers pertinent and prescribed decision factors, including ecological site conditions, existing uses, and relative values of resources within the HRRR. 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 and additions for clarification. Appendix 1 shows the revised table of grazing allotments and a complete listing of priorities for allotment development.

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:

- Determine 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 five years or less. Those intervals may be later reduced or increased, depending on the needs 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 HRRR's current operating budget. Additional costs from more intensive management of some programs, however, will occur for the following activities:

- Administrative costs of special management designations, Allotment Management Plans (AMPs), Habitat Management Plans (HMPs), other activity plan development, and on-the-ground management.

CHAPTER 1: INTRODUCTION

- Design and construction of proposed range developments, including vegetation treatments.
- Supervision of livestock use and monitoring and evaluation of decisions once they have been implemented.
- 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 could increase if inflation is a significant factor in the economy. Full implementation of the plan 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. 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 annually.

ORGANIZATION OF THE PLAN

The RMP is organized by resource program in the order shown on the Chapter 2 cover page. A margin index is provided to assist in locating each resource program. Each discussion is preceded by a brief description of that resource program. 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.

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The Resource Management Plan for the House Range Resource Area

Range Management/
Rangeland Program Summary 

Wildlife 

Wild Horses 

Recreation 

Cultural Resources 

Lands 

Minerals 

Watershed 

Forest Resources 

Fire Management 

Appendicies 



MARGIN INDEX
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CHAPTER 2

THE RESOURCE MANAGEMENT PLAN

RECORD OF DECISION

ADMINISTRATIVE FEATURES

The overall management must guide the multiple-use management of all actions and resources; including those which were not issues related or addressed in this plan. Those lands, resources, and programs not affected by the resolution of any issue or management concern would be managed in the future as they are at present (i.e., where no problem was identified that needed corrective action, no action has been prescribed).

Any future changes in management situation not addressed in the plan would be permitted on a case-by-case basis in accordance with applicable laws, regulations and policies.

Wilderness Study Areas (WSAs) will continue to be managed under BLM's wilderness Interim Management Policy (IMP), until Congress makes a decision as to their designation. Any decision to designate wilderness in the HERRA would constitute a plan amendment.

Major lands actions, such as Project BOLD, will be resolved by legislative action and are not addressed in this plan.

Site-specific improvement projects are not proposed for each individual resource at this level of planning. Resources that require priority management attention have been identified and a program has been outlined to reach the management objectives. Site-specific improvement project planning will take place during resource plan preparation and as individual projects are needed.

STANDARD DESIGN CONSTRUCTION AND OPERATION FEATURES

The following protective measures will be required as standard procedures:

- Existing access will be used to protect archaeological sites where possible. Soil disturbance at all projects will be held to a minimum.
- No vegetation clearing of project sites will be allowed except as authorized by the authorized officer.
- If necessary, disturbed areas will be re-seeded to provide ground cover and minimize soil loss.
- Site factors such as slope, precipitation, exposure, soil depth and erosion hazard will be criteria used in selecting sites for land treatments.
- A survey of potential habitat for threatened and endangered (T&E) species (including any sensitive species under consideration for formal designation as T&E) will be made prior to taking any action that could affect these species. Should ELM determine that there might be an effect on listed species, formal consultation with the Fish and Wildlife Service will be initiated.
- Cultural inventories will be required for all project sites (as specified in BLM Manual 8111.14) prior to new construction. BLM has entered into a memorandum of understanding with the Utah State Historic Preservation Officer regarding protection of cultural resources.
- When possible, water for wildlife will be maintained throughout the year at established watering facilities.
- The authorized officer will be notified if paleontological remains are encountered during any land treatment or construction activities. Recovery, protection, and preservation measures will be implemented, as necessary, to mitigate adverse impacts.

CHAPTER 2: THE RESOURCE MANAGEMENT PLAN

- Prior to development of projects, provision of the Memorandum of Understanding of April 1, 1979 between the BLM, Forest Service, Utah Division of Wildlife Resources and Soil Conservation Service and the master Memorandum of Understanding between BLM and Utah Division of Wildlife Resources of June 1979 will be met. These memoranda provide for coordination in the development and establishment of guidelines for buffer zones for water and other developments.
- All improvement projects will be designed and constructed in such a manner so as to minimize environmental impact while maximizing function and cost effectiveness. Prior to the installation of any new range improvements, an environmental assessment (EA) will be prepared analyzing the alternatives for the development. The EA will then be used to assist in the development of the final project design.
- All areas where land treatments are proposed will be totally rested from livestock grazing for a period necessary to allow for the recovery and re-establishment of key forage species. The minimum requirement will be to rest for one full growing season and until seed ripe time for the following season.
- Vegetation treatment projects will be designed in irregular patterns creating an "edge" effect, with islands of vegetation left intact for wildlife cover. All land treatment projects on crucial wildlife ranges will be limited in size, where necessary, by the cover requirements of wildlife. Proper mitigation measures will be incorporated.
- Consultation with the affected interest groups will be required before any vegetation treatment project is initiated.
- Before chemicals are applied, the BLM will comply with the Department of the Interior regulations. All chemical applications will be carried out in compliance with the State pesticide laws of Utah.



Range Management/ Rangeland Program Summary



CHAPTER 2: THE RESOURCE MANAGEMENT PLAN

RANGE MANAGEMENT/ RANGELAND PROGRAM SUMMARY

INTRODUCTION

The Resource Management Plan (WMP)

The following discussion presents the RMP for the range management program in the HRRRA. It also constitutes the Rangeland Program Summary (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. Allotment boundaries are shown on Map 1.

Actions taken and accomplishments made toward achieving RMP objectives will be communicated to the public and land users through RPS updates. An RPS update will be distributed in three to five years. At the end of five years, decisions or agreements regarding livestock forage allocations on all allotments will be made.

The HRRRA is divided into two distinct geographical and ecological regions. The western area comprises the desert basins which are dominated by the desert shrub community. The dominant plant species in this community is shadscale. The eastern region, which is characterized by the Tintic and Oak Creek mountain ranges, is made of big sagebrush, pinyon-juniper and mountain shrub communities.

A list of sensitive plants known to occur in or near the area is found in Table 2.1. Threatened or Endangered Species (T&E) are not known to occur in the HRRRA.

Presently, 197 permittees graze livestock on 101 allotments and 2,197,937 acres of public rangeland in the resource area. This represents 98 percent of the resource area that is within allotment boundaries. There is an additional 47,377 acres in unallotted category.

Of the 197 permittees, 158 have cattle permits (either yearling or cow/calf), 34 have sheep permits, and five dual use permits (sheep and cattle). Fifty-one permittees have more than one allotment, and 35 have permits/allotments in other districts/resource areas.

At the present time there are 101 allotments, 57 are individual and 44 are common use. Sixty-six cattle allotments, 26 sheep allotments, and nine dual use (cattle and sheep allotments) are in the resource area.

Portions of six of the 101 allotments (i.e., Table Mountain, Death Canyon, Sheep Rock, Maple Peak, Kimball Creek, and West Mona) are in the Salt Lake District. Portions of two allotments (Black Rock and Fandangle) are in the resource area but are administered and managed by the Salt Lake District. Three allotments (Marble Wash, Warm Creek, and Devils Gate), are managed by the Ely District in Nevada. The BLM cooperatively manages the Wringer Canyon Allotment for the Fishlake National Forest, Fillmore Ranger District, in accordance with the Dust Bowl Allotment Management Plan (AMP).

Current estimates of rangeland condition and trend have been recorded from permanent plots in 101 allotments and summarized on Table 2-2.

**TABLE 2-2
Range Condition
(Based on Ecological Site Information)**

Condition	Western Desert Topaz	Eastern Sem-Desert Upland Tintic	Total	Percent
Excellent	128,763	18,006	146,769	6.7
Good	702,471	230,442	932,913	42.4
Fair	645,891	51,770	697,661	31.7
POW	120,504	8,468	126,972	5.9
Other ¹	156,103	135,519	291,622	13.3
Total	1,753,732	444,205	2,197,937	100.0

¹ The "Other" category represents areas that may be rough and inaccessible, contain sparse vegetation, treatment areas, or have not been classified.

Apparent Range Trend

Trend Indication	Western Desert Topaz (acres)	Eastern Semi-Desert Upland Tintic (acres)	Total Acres ¹	Percent
Improving	84,766	44,842	129,610	5.9
static	1,600,756	353,661	1,954,617	88.9
Declining	68,208	45,502	113,710	5.2
Total	1,753,732	444,205	2,197,937	100.0

TABLE 2-1

Threatened, Endangered, and Sensitive Plant Species
HRRRA

Species	Common Name	Status ¹	Habitat/Location*
Known Population in the HRRRA:			
<i>Astragalus Uncialis</i>	Current milk-vetch	BLM Sensitive and FWS Category 2 <i>Federal Register</i> Nov. 85.	Elev. 4,650 ft. <i>Atriplex confertifolia</i> . Association in and near small wash areas. Old lake shores, gravel. Millard County and Nye County (Nevada).
<i>Atriplex canescens</i> var. <i>gigantea</i>	Giant four-wing saltbush	BLM Sensitive and FWS Category 2 <i>Federal Register</i> Sept. 85	Elev. 5,000 ft. Restricted to the sand dunes in the Rockwell Natural Area. Eastern Juab County.
<i>Hackelia ibapensis</i>	Deep Creek Mt. Stickseed	BLM Sensitive and FWS Category 2 <i>Federal Register</i> Sept. 85.	Elev. 8,000-10,000 ft. Upper reaches of the Deep Creek Mtns. Western Tooele and Juab Counties.
<i>Penstemon</i> <i>Tidestromii</i>	Tidestrom beardtongue	BLM Sensitive and FWS Category 2 <i>Federal Register</i> Sept. 85	Elev. 5,600 to 8,200 ft. variety of substrates, Desert shrub, snow- berry and juniper communities. Juab County.
Known Populations in Adjacent Resource Areas/Counties That May Occur in HRRRA:			
<i>Cryptantha compacta</i>	Compact catseye	BLM Sensitive and FWS Category 2 <i>Federal Register</i> Sept. 85.	Elev. 5,000 to 6,500 ft. Sevy dolomite formation gravelly foam, open slopes and ridges, outcropping covered with shallow soil layer; desert shrub and grassland community. Millard County.
<i>Eriogonum</i> <i>ammophilum</i>	Sand-loving buckwheat	BLM Sensitive and FWS Category 1 <i>Federal Register</i> Sept. 85.	Elev. 5,270 ft. Quaternary alluvium, sandy soil. Mountain shrub community. Millard County.
<i>Penstemon concinnos</i>	Tunnel spring beard tongue	BLM Sensitive and FWS Category 2 <i>Federal Register</i> Sept. 85.	Elev. 5,500 to 7,500 ft. Sevy dolomite formation gravelly soil; pinyon-juniper woodland. Beaver and Millard counties.
<i>Sphaeralcea</i> <i>caespitosa</i>	Jones globe mallow	BLM Sensitive and FWS Category 2 <i>Federal Register</i> Sept. 85.	Elev. 5,000 to 6,500 ft. Sevy dolomite, rocky calcareous soil, mixed shrub, pinyon-juniper. and grass community. Beaver and Millard Counties.
<i>Frasera gypsicota</i>	Green gentiar	BLM Sensitive and FWS Category 1 <i>Federal Register</i> Sept. 85.	No information available.
<i>Townsendia Aprica</i>	Last Chance townsendia	Endangered. <i>Federal</i> <i>Category 2 Register</i> Aug. 85	Elev. 6,500 to 8,000 ft. Arapian shale, scattered lava boulders in sandy soil; mixed pinyon-juniper grassland community. Sevier County.

New Species Not Yet Classified:

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

Note: FWS Category 1 - Plant species for which there is substantial data to support a recommendation as endangered.

FWS Category 2 - Plant species in which more data is needed to make a biological assessment as endangered.

¹USDI, FWS, 1983; FWS. 1984; USDI, FWS. 1985.

*Welsh and Thorne, 1979.

CHAPTER 2: THE RESOURCE MANAGEMENT PLAN

Stock water availability continues to be one of the major limiting factors in achieving proper livestock distribution throughout the resource area. Range suitability, based on water availability, is difficult to portray because of the uncertainty of snow on many winter sheep allotments and the hauling of water by permittees on a seasonal basis. It is known, however, that portions of many grazing allotments (particularly cattle allotments) are under-utilized and/or over-utilized because of lack of well-distributed water sources.

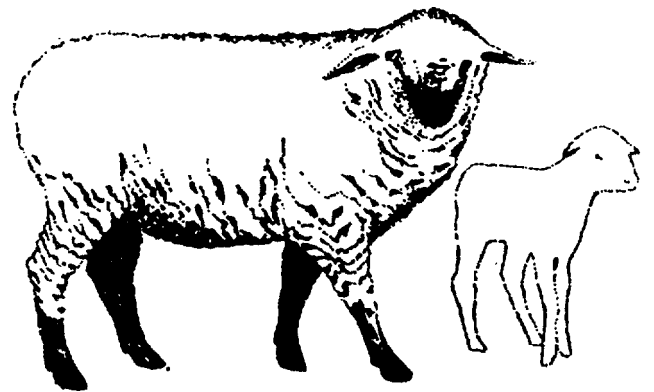
To offset these uncertainties, water development has received priority consideration for project construction. Forty nine wells, 44 reservoirs, and 13 catchments (guzzlers) provide water for livestock, wild horses, and wildlife. These improvements are widely scattered throughout the resource area.

There are over 440 miles of existing fenceline on public lands in the HRRRA. The majority of the fences consist of barbed wire along cattle allotment boundaries in the Tintic region and the south and western regions of the Topaz unit. Some sheep-tight woven wire fences are in the Topaz and Tintic units. However, the majority of the sheep allotments remain unfenced because of conflicts with antelope migration, economic constraints, and the control of sheep bands by herders. The unfenced winter sheep allotments have allotment boundaries that are posted or designated by topographic barriers.

Seedings have been established in many of the sagebrush and pinyon-juniper communities utilizing such techniques as chaining, raiing, or prescribed burning. The majority of these treatments have been restricted to semidesert, shallow loam, upland shallow loam, and upland stony loam range sites. Success has generally been good with yields estimated to average near 650 pounds air-dry forage per acre annually. Grazing capacity for livestock is estimated to average about 4.9 acres per AUM on these treatment areas. Approximately 63,022 acres have been seeded, and about 89,000 additional acres identified that have good seeding capabilities.

GOALS AND OBJECTIVES

- Provide a balanced allocation of forage for livestock, wild horses, and big game while ensuring the protection of rangeland values and providing a stable, renewable forage base (to be accomplished within five years of Final RMP approval).
- Reduce or eliminate rangeland resource problems on 32 priority allotments identified for intensive management.
- Maintain or improve current resource conditions on the remaining 69 allotments.
- Maintain a livestock production goal of approximately 155,000 AUMs over the long term (20 years).
- Control noxious weeds and pests to protect range sites.



CHAPTER 2: THE RESOURCE MANAGEMENT PLAN

PLANNED ACTIONS

Implementation

Monitoring

Modification

Establishment of Livestock Grazing and Unallotted Areas

- 1 Areas presently unallotted for livestock use will remain unallotted unless environmental analysis determines that grazing is a compatible use for the areas.
- 2 Livestock grazing will remain as an allowable use on approximately 2,197,937 acres (98 percent of the total Federal range) within the resource area. Federal ranges will be closed to grazing only under the authority of emergency conditions or land withdrawals.

Initial Forage Allocation

- 3 Allocation of forage for livestock use will not be made at this time. Monitoring studies (actual use, utilization, trend, precipitation data) will be continued to obtain data needed to support future forage allocation. It is anticipated that within five years all allotments within the area covered by this document will have forage allocated. Until determined otherwise, livestock forage is and will continue to be used at the current active preference level (See Appendix 1).

Prioritization of Allotments for Management and Development

- 4 Allotments have been categorized according to criteria in WO IM 82-292 (final Grazing Management Policy). The allotments within each category may change as new data is obtained or resource conditions change. These changes will be made by cooperative agreement or by decision of the area manager.
- 5 The following lists the allotments by category, priority for action, and action that needs to be taken:

CHAPTER 2: THE RESOURCE MANAGEMENT PLAN

CATEGORY I (IMPROVE)	Implementation	Monitoring	Modification
ACRES			
FEDERAL			
ALLOTMENT NAME	RANGE	PRIORITY	DECISION'
Beryllium	8,387	13	A, B
Big Hollow	3,978	44	A, D
Boulter	8,613	39	B, D
Broad Canyon	4,412	54	E
Callao Bench	18,803	33	D
Cedar Springs	628	53	E
Chriss Creek	1,144	35	D
Cove	3,183	38	
Cutler	120	52	E
Dear Foot	1,868	42	0
Dust Bowl (AMP)	11,326	8	C, D
Femer Dog Valley (AMP)	18,591	2	A, C, D
Finlinson 21A	1,351	45	D
Gandy (AMP)	52,515	47	C, F, G
Gilson	20,582	23	A, D
Jakes Canyon	2,069	29	A
Jenny Lind	1,321	41	D
Juab	1,253	9	A, B, D
Kimball Creek (AMP)	20,600	7	AC, D
Klondike	2,072	27	A, D
Levan	3,390	32	B
Lymdyl	11,154	2B	A
Maple Peak	59,520	1	A, B, D
McIntyre	51,610	22	B, D
Mountain	5,170	14	B, D

CHAPTER 2: THE RESOURCE MANAGEMENT PLAN

				Implementation	Monitoring	Modification
Middle Fork (AMP)	3,178	15	A, C, D			
Mills	9,353	31	B			
Nelson	8,288	29	A, B			
Nephi, Bench	1,387	51	E			
North Scipio (AMP)	4,525	16	A, C, D			
Oak City	19,281	37	A, B			
Okelberry (AMP)	5,633	3	A, C, D			
Paint Mine	2,674	30	A, F			
Riley Spring	3,469	40	D			
Rocky Ford (AMP)	10,008	17	C, O			
Round Valley (AMP)	3,639	48	C			
Sage Valley 16 (AMP)	4,916	5	A, C, D, F			
Sage Valley 17 (AMP)	11,044	4	A, C, D			
Sevier River	5,331	6	A, B, D			
Shearing	32,629	21	B, D, F			
Sheep	25,114	50	B, E, F			
Sheep flock (AMP)	20,767	11	C, D			
Smelter Mountain	60,057	49	B, E, f			
Snadge Hollow	3,399	26	A, D			
Spring Canyon	4,562	24	A, D			
Stone	2,303	26	A, D			
Stone Quarry	3,466	38	B, D			
Summit	3,752	18	A, C, D			
Tatow	56,839	46	B, G			
Thourand Peaks	332,022	20	B, D, F, G			
Valley Mountain	1,819	34	A, D			
Washboard	4,477	10	A, B, D			
West Mona	17,316	43	B, D, F			
Yuba	3,850	12	A, B, D			
Total	971,602					

CHAPTER 2: THE RESOURCE MANAGEMENT PLAN

CATEGORY M (MAINTAIN)				Implementation	Monitoring	Modification
ALLOTMENT NAME	ACRES FEDERAL RANGE	PRIORITY	DECISION			
Antelope	72,102	2	A, G			
Bitner Knoll	21,170	1	A			
Blue Spring	2,445	29				
Boyd Station	21,773	17	F			
Callao	20,794	16	F			
Cals Valley	2,244	20				
Chalk Knolls	45,527	30				
Cherry Creek (AMP) ²	36,562	14				
Chicken Creek	495	46				
Cowboy Pass (AMP) ²	41,059	19	C, G			
Coyote Knoll	34,934	24	G			
Crater	56,561	31				
Death Canyon	50366	10	A, C			
Desert Mountain	36,610	21				
Devils Gate	4,159	33				
East Fish Spring	50,930	31				
East Topaz (AMP) ²						
Flint	16,176	37				
Freighter	13,216	36				
Henry Crest	6,200	39				
Kane Spring	2,976	25				
Knoll Spring	11,652	32				
Lady Laird	53,797	6				
Little Drum	66,914	3				
Lunt-Latimer	592	41				
Meadow Creek	46,475	36				
Marble Wash	21,776	34				
Partoun (New) ²	71,963	2	B, F			

CHAPTER 2: THE RESOURCE MANAGEMENT PLAN

			Implementation	Monitoring	Modification
Red Butte	7,291	28			
Riverbed	52,175	8	A		
Salt Creek	3,323	11	A		
Sand Pass (AMP) ²	32,333	1	A, C		
Smith Creek	15,219	27			
Spor Mountain	53,053	26			
Sugarville (NDW) ²	51,391	13	B, F		
Swasey Knoll	47,262	4	A, G		
Swasey Knoll	36,469	5	A		
Table Mountain	3,618	43			
Topaz	3,124	22			
Tule Spring	14,986	42			
Tule Valley	14,500	23			
Warm Creek	6,050	35			
Wild Horse	44,383	9	A		
Twelve B	200	44	E		
Total	1,226,106				

CATEGORY C (CUSTODIAL)

ALLOTMENT NAME	ACRES FEDERAL RANGE	PRIORITY	DECISION
Fool Creek 1	959	1	A
Fool Creek 1	120	2	N/A
Garrett	780	3	N/A
TOTAL	1,859		

1

DECISION KEY

- A. Take administrative action or continue range studies to implement changes in allocation.
- B. Prepare an AMP
- C. Continue/Modify current AMP
- D. Improve Vegetation
- E. Re-evaluate for possible re-categorization.
- F. Evaluate for possible re-categorization.
- G. Allocate AUMs for wild horses

2. These six allotments show little potential for increase in AUMs through improvement management or additional development. However, there is a definite possibility that existing AUMs could be lost unless some development is implemented. As the rangeland program is further refined and implemented, the categorization of these allotments could change, or at least some investments made, because of the potential for loss if further action is not taken.

CHAPTER 2: THE RESOURCE MANAGEMENT PLAN

	Implementation	Monitoring	Modification
6	Livestock forage allocations for all allotments will be made. Priority for forage allocation will be:		
	1. By agreements for the following 38 allotments where adjustments are indicated (See Appendix 1) during the five year monitoring period:		
	Maple Peak		
	Ferner Dog Valley		
	Oakelberry		
	Sage Valley 17		
	Sage Valley 16		
	Sevier River		
	Kimble Creek		
	Riverbed		
	Juab		
	Washboard		
	Salt Creek		
	Yuba		
	Beryllium		
	Middle Fork		
	North Scipio		
	Summit		
	Jakes Canyon		
	Gilson		
	Spring Canyon		
	Snadge Hollow		
	Stone		
	Klondike		
	Lynndyl		
	Nelson		
	Paint Mine		
	Valley Mountain		
	Oak City		
	Big Hollow		
	Sand Pass		
	Antelope		
	Little Drum		

CHAPTER 2: THE RESOURCE MANAGEMENT PLAN

	Implementation	Monitoring	Modification
Swasey Knoll			
Table Mountain			
Lady Laird			
Bitner Knoll			
Wild Horse			
Death Canyon			
Fool Creek 1			

7 2. By agreement for all other allotments where forage appears to be adequate (See Appendix 1).

8 3. By decision on the balance of the 38 allotments listed above following the monitoring period, if agreements have not been obtained.

9 As future adjustments in allocations are determined, announcements will be made in subsequent RPS updates.

CHAPTER 2: THE RESOURCE MANAGEMENT PLAN

Implementation

Monitoring

Modification

AMP Development or Updating

- 10 BLM personnel, in cooperation with affected permittees, will develop or update AMPs to implement the grazing management program. If BLM personnel and permittees fail to reach an agreement, a grazing system that protects the resource will be implemented by decision of the area manager. The permittee will, however, have the right to appeal any such decisions. Priority for development is listed below:

TOPAZ UNIT	MANAGEMENT CATEGORY	PRIORITY
Callao Bench	I	16
Cherry Creek ¹	M	22
Cowboy Pass ¹	M	29
East Topaz ¹	M	28
Gandy ¹	I	11
Mountain	I	14
Partoun	M	13
Sand Pass ¹	M	25
Sheep	I	23
Smelter Mountain	I	21
Sugarville	M	19
Tatow	I	8
Thousand Peaks	I	7

CHAPTER 2: THE RESOURCE MANAGEMENT PLAN

Implementation Monitoring Modification

TINTIC UNIT	MANAGEMENT CATEGORY	PRIORITY
Beryllium	I	17
Boulter	I	2
Dust Bowl ¹ , Juab, Levan, and Mills	I	17
Ferner Dog Valley ¹	I	4
Kimball Creek ¹	I	6
Maple Peak	I	1
McIntyre	I	3
Middle Fork ¹	I	30
North Scipio ¹	I	31
Okelberry ¹	I	5
Rocky Ford ¹	I	32
Sage Valley 16 ¹	I	9
Sage Valley 17 ¹	I	10
Sevier River	I	15
Shearing	I	12
Sheeprock ¹	I	20
Washboard	I	18
West Mona	I	26
Yuba	I	24

¹ Allotments with existing AMPs scheduled for update/revision.

Permitting Procedure

- 11 Grazing licenses/permits will specify the allotment, number of AUMs, period/pattern of use, numbers, and kinds of livestock.
- 12 BLM will also make adjustments in the grazing management program during drought or other emergencies.

CHAPTER 2: THE RESOURCE MANAGEMENT PLAN

		Implementation	Monitoring	Modification
13	Administrative adjustments could be made to: <ul style="list-style-type: none">• 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.• Reduce livestock use temporarily if forage production is less than normal.• Authorize temporary, non-renewable use if there is an abundance of available forage.• Adjust livestock use to limit utilization of key plant species to a predetermined level based on allotment objectives.			
14	Permittees will be required to request, in writing, any desired changes in use prior to the grazing period.			
15	Grazing use outside the limits of the authorized allocation and without prior authorization will be considered unauthorized grazing use.			
16	Should unauthorized grazing occur, BLM will take action to ensure it is eliminated and that payment is made for vegetation consumed and/or damage done.			
17	Marking of livestock (preferred methods are ear tagging or dye marking) may be required to: <ul style="list-style-type: none">• Obtain Actual Use Data• Determine Proper Stocking Levels• Document Unauthorized Use• Monitor Livestock Movement• Verify Allotment Boundary Problems			
	Conversion in Kind/Class Livestock			
18	Conversions in both kind and class of livestock may be authorized on a case-by-case basis, providing a feasibility study and accompanying Environmental Assessment (EA) indicate such conversions are justified.			
19	Priority for consideration will be given to: (1) those operators who are considering dual use (sheep and cattle) as a management tool; and (2) those operators that would have the flexibility to change from sheep to cattle on west desert allotments suitable for that conversion.			

CHAPTER 2: THE RESOURCE MANAGEMENT PLAN

Livestock Season of Use Adjustments

Implementation

Monitoring

Modification

- 20 The existing seasons of use by livestock were primarily established to accommodate the needs of ranching operations but may change if monitoring determines a change is needed.
- 21 Major adjustments to season of use will be evaluated upon request or when resource conditions indicate a change is needed. A suitable analysis and EA will be completed prior to any major changes.
- 22 The 14 grazing allotments listed below will receive priority for monitoring to determine the impacts of spring grazing. Other allotments may be included for monitoring as operators or conditions change in other grazing areas.

Allotments with Continous Spring Use by Cattle

Topaz Unit	
Allotment	Federal Acres
Boyd Station	21,173
Callao	20,794
Cherry Creek	36,562
East Fish Springs	30,930
Gandy	52,515
Partoun	71,963
Sheep	25,114
Smelter Mountian	60,057
Sugarville	51,391
Thousand Peaks	332,022
Subtotal	722,541
Tintic Unit	
Paint Mine	2,674
Sage Valley 16	4,916
Shearing	32,629
West Mona	17,316
Subtotal	57,535
Total Acres	760,076

- 23 Should evaluations determine that early spring grazing by cattle is contributing to declining range conditions, one or more of the following steps may be employed:
1. The spring period will be shortened.
 2. Alternate year spring rest will be required through a grazing system.
 3. Spring grazing will be eliminated.

CHAPTER 2: THE RESOURCE MANAGEMENT PLAN

RANGE IMPROVEMENTS

Implementation

Monitoring

Modification

Structural

- 24 Continue to plan and install structural improvements, such as fences, water developments, cattleguards, etc., on a priority basis as funds become available. Projects must be environmentally acceptable and should have a favorable benefit cost ratio. See prioritization of allotments for management and development.
- 25 Continue to collect fees from permittees for maintenance of water developments such as pipelines, springs, and wells. The amount of the fees will be determined by the area manager and the grazing advisory board.
- 26 Maintenance of all structural-type facilities, excluding water developments, will continue to be the responsibility of the permittees.
- 27 Water developments will be periodically inspected to ensure that they remain in usable condition. Preventive maintenance will be performed as needed.
- 28 Wildlife escape devices will be installed and maintained in all water troughs.

Non-structural improvements

- 29 Conduct vegetation treatment projects on 31 priority I allotments. The following lists those allotments where vegetation treatment will be done in present priority order:

Allotments	Category	Acres Suitable for Treatment
Maple Peak ¹	I	16,000
Kimball Creek ¹	I	5,500
Shearing ¹	I	12,000

CHAPTER 2: THE RESOURCE MANAGEMENT PLAN

Implementation

Monitoring

Modification

<i>Allotments</i>	<i>Category</i>	<i>Acres Suitable for Treatment</i>
Okelberry	I	1,000
Sewier River	I	1,500
Big Hollow	I	400
Snadge Hollow	I	400
Stone	I	700
Riley Spring	I	1,000
Stone Quarry	I	1,500
Jenny Lind	I	685
Sheep Rock ¹	I	5,000
Rocky Ford	I	800
Chriss Creek	I	550
Juab	I	500
Gilson	I	1,600
Summit	I	300
Washboard	I	2,500
Yuba	I	1,850
Middle Fork	I	2,400
Dust Bowl ¹	I	3,200
McIntyre ¹	I	8,000

CHAPTER 2: THE RESOURCE MANAGEMENT PLAN

Implementation

Monitoring

Modification

Allotments	Category	Acres Suitable for Treatment
Ferner Dog Valley ¹	I	4,500
Sage Valley 16 ²	I	2,500
Sage Valley 17 ²	I	2,000
North Scipio	I	1,500
Klondike	I	243
Deer Foot	I	500
West Mona	I	400
Boulter	I	1,200
Spring Canyon	I	1,500
Total		817,282

¹ Approximately 70 percent of all treated would occur in these nine allotments.

² Includes total acres suitable in these allotments. However, not all of these acres would be treated (approximately 65,000 acres over 20 years).

30 Plan seeding mixtures to emphasize watershed stabilization, herbaceous cover, establishment of wildlife browse species, and improved livestock grazing forage.

31 Encourage cost/share opportunities with permittees, benefiting groups/association and cooperative agencies.

Grazing in Riparian Habitats

32 The estimated 2,500 acres of riparian habitat in the resource area would be evaluated and monitored for resource condition within three years. The perennial streams of the Deep Creek Mountains would receive first priority.

CHAPTER 2: THE RESOURCE MANAGEMENT PLAN

Names of streams, springs and wetlands are listed below: **Implementation** **Monitoring** **Modification**

Basin Creek*
Birch Creek*
Cherry Creek
Cottonwood Canyon Creek*
Cow Hollow Creek
DMAD Reservoir
Granite Creek*
Indian Farm Creek*
Red Cedar Creek*
Sevier River
Sevier Bridge Reservoir (Yuba)
Tom's Creek*
Trout Creek*
Antelope Springs
Baker Hot Springs
Cane Springs
Cold Spring
Coyote Springs Complex
Salt Marsh Lake Complex
Swasey Springs
Topaz Slough
Tule Spring
Twin Springs
Willow Spring

*Deep Creek Mountain Creeks

- 33 Where resource conditions show a need for protection from livestock grazing, management options of seasonal deferment, off-site water development, and/or enclosure fencing with water gaps would be applied as necessary.
- 34 No range improvement projects will be authorized in riparian areas, unless these will maintain or improve riparian habitat.

CHAPTER 2: THE RESOURCE MANAGEMENT PLAN

	Implementation	Monitoring	Modification
Weed and Insect Control			
35	Inventory knapweed and other noxious weeds by 1989 and update the inventory every three to five years.		
36	Develop a cooperative plan for control of knapweed and other noxious weeds with county and private land owners.		
37	Cooperate with Animal and Plant Health Inspection Service (APHIS) for control of grasshoppers and Mormon Crickets.		
38	Chemical treatment will consist of applying approved chemicals to control areas of noxious or poisonous plants.		
Predator Control			
39	Predator control will continue in accordance with the Richfield District Animal Damage Control Plan, to be reviewed annually.		

Threatened, Endangered and Sensitive Plant Species

A survey of potential habitat for T&E species (including any sensitive species under consideration for formal designation as T&E) will be made prior to taking any action that could affect these species. Should BLM determine that there might be an effect on listed species, formal consultation with the FWS will be initiated.

SUPPORT REQUIREMENTS

Support will be needed from the soil, water, and air programs for conducting ground water and well site investigations on proposed well sites and spring developments.

Division of Operations support will be needed for designing projects, for construction and/or installation, and for some contracting and maintenance purposes.

PLAN MONITORING AND EVALUATION

Monitor this plan each year to determine which items need to be brought forward into the Annual Work Plan (AWP). On a periodic basis the rangeland program will be evaluated to determine progress in decision implementation and if goals and objectives are being met. If significant progress or major changes have been made, then this will be announced in RPS updates.

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Wildlife



CHAPTER 2: THE RESOURCE MANAGEMENT PLAN

WILDLIFE

INTRODUCTION

Several species of wildlife inhabit the HRRRA. Map 2 shows mule deer, elk and Rocky Mountain bighorn sheep habitat. The planning decision deals with those of highest concern. These include four species of big game animals, two Federally listed endangered species and seven sensitive species.

Riparian habitat is very scarce in the area. Eight streams on the Deep Creek Mountains are of high concern since they support, or could support, the sensitive Bonneville cutthroat trout. Five springs support least chub populations. A new species of date has recently been found, however, its significance and range is undetermined.

GOAL AND OBJECTIVES

Elements of the Plan

Manage wildlife habitat to favor a diversity of game and non-game species. Continue to provide forage for current big game numbers and prior stable or long-term management goal numbers should populations increase and habitat improvements occur. Improve habitat in poor and fair condition on crucial and high priority habitat. Protect crucial and high priority habitat from encroachment by incompatible uses. Improve riparian and fisheries habitat currently in poor or fair condition. Protect all T&E and sensitive species habitats. Overall goals and objectives for wildlife are prioritized in the following order:

- Big Game
- Habitat Management Plans (HMPs)
- T&E Species
- Riparian
- Fence Modification
- Guzzler Development
- Well Modifications

Big game objectives are prioritized in the following order:

- Mule Deer
- Elk
- Antelope
- Bighorn Sheep



CHAPTER 2: THE RESOURCE MANAGEMENT PLAN

Implementation

Monitoring

Modification

PLANNED ACTIONS

Forage Allocation

- 1 Forage for Big Game will be allocated by the following priority:
 - Current Use
 - Objectives for Bighorn Sheep
 - Prior Stable Number of Mule Deer
 - Long Term Objective Numbers for Elk and Antelope

Appendix 1 and 2 show allocations for the various big game species. Where non-competitive forage is available, it has been allocated as far as possible to meet prior stable deer numbers or objective numbers for other big game species according to the priorities above. The difference shown on the tables indicate the deficit, or surplus, of non-competitive forage available to meet objectives.

Habitat Management Plans

- 2
 - Update and combine the Trout Creek and Deep Creek Mountains HMPs and include a section for the Rocky Mountain bighorn sheep.
- 3
 - Determine limiting factors for the reintroduction of desert bighorn sheep into other areas such as Fish Springs Mountain.
- 4
 - Determine limiting factors for and importance of the least chub and the new species of dace.

Mule Deer

Mule deer herd units are listed in priority order and actions listed under each herd unit are also listed by priority.

Herd Unit 13

- 5
 - Identify and monitor springs in critical summer habitat areas.
 - Monitor critical and high priority habitats to determine limiting factors, impacts of livestock grazing and habitat trend.
 - Modify south boundary fence on Riverbed Allotment to comply with BLM Manual 1737. Other fences will be similarly modified as needs are identified.

CHAPTER 2: THE RESOURCE MANAGEMENT PLAN

		Implementation	Monitoring	Modification
8	<ul style="list-style-type: none">Designate critical winter, summer, and fawning habitat as oil and gas leasing Category 2 with seasonal restrictions to exploration and drilling from December through April and May through November, respectively.			
9	<ul style="list-style-type: none">Leave three to five acres of pinyon-juniper islands for deer cover in treatment areas and leave travel lanes on the Maple Peak and Sheeprock Allotments if a large chaining is implemented. A pasture management system will be followed which allows complete rest of some of the pastures during the summertime to provide succulent forage for wildlife.			
Herd Unit 14				
10	<ul style="list-style-type: none">Prepare a monitoring plan to determine the herd limiting factors, impacts to winter browse from livestock grazing, and trend of vegetation condition on critical and high priority ranges.			
11	<ul style="list-style-type: none">Identify ways of improving 8200 acres, plus any other identified acres of critical wildlife habitat on the following allotments: Ferner Dog Valley, Kimball Creek, Okelberry, Riley Springs, Rocky Ford, Nephi Bench, and Shearing.Modify fences to comply with BLM Manual 1737 as problem fences are identified.			
Herd Unit 42				
12	<ul style="list-style-type: none">Monitor all critical and high priority habitats to determine limiting factors, impacts of livestock grazing and habitat trend.			
13	<ul style="list-style-type: none">Improve 7300 acres of critical winter habitat on Cedar Spring, Salt Creek and Yuba Allotments,			
14	<ul style="list-style-type: none">Critical winter and summer habitats will be placed in oil and gas leasing Category 2 with seasonal restrictions on exploration and drilling from December through April and May through November, respectively.			
Herd Unit 53				
15	<ul style="list-style-type: none">Monitor all critical and high priority habitats to determine limiting factors, impacts of livestock grazing and habitat trend on Summit and Oak City Allotments.			
16	<ul style="list-style-type: none">Critical winter and summer habitat will be placed in oil and gas leasing Category 2 with a seasonal restriction on exploration and drilling from December through April and May through November, respectively.			

CHAPTER 2: THE RESOURCE MANAGEMENT PLAN

		Implementation	Monitoring	Modification
Herd Unit 54				
17	<ul style="list-style-type: none">Identify critical and high priority habitats and prepare or update a written plan which identifies priority areas for monitoring and improvements.			
18	<ul style="list-style-type: none">Implement a monitoring program as described above. The monitoring plan should be designed to evaluate the effects of grazing on browse species.			
19	<ul style="list-style-type: none">Place critical winter and spring/summer habitat in oil and gas leasing Category 2 with a seasonal restriction on exploration and drilling from December through April and May through November respectively.			
Herd Unit 62 B				
20	<ul style="list-style-type: none">Implement a monitoring plan on critical habitat to include habitats in the Sand Pass, Freightier, and Lady Laird Allotments:			
21	<ul style="list-style-type: none">Identify ways to improve critical wildlife habitat.			
22	<ul style="list-style-type: none">Implement some of the methods identified above that would improve fair and/or poor wildlife habitat conditions.			
23	<ul style="list-style-type: none">Install guzzlers on Sand Pass, Freightier and Lady Laird Allotments.			
24	<ul style="list-style-type: none">Place a seasonal exploration and drilling restriction on critical summer habitat on a case-by-case basis where an adverse impact could otherwise occur.			
Herd Unit 62 A				
25	<ul style="list-style-type: none">Identify critical and high priority habitats and prepare or update a written monitoring plan.			
26	<ul style="list-style-type: none">Implement a monitoring program as described above.			
27	<ul style="list-style-type: none">Place critical winter and spring/summer habitat in oil & gas leasing Category 2 with a seasonal restriction on exploration and drilling from December through April and May through November respectively.			
28	<ul style="list-style-type: none">Hand thin 200 acres of aspen and conifer forest inside the Deep Creek Mountains WSA and reseed with native forbs and grasses.			
29	<ul style="list-style-type: none">Modify fences to comply with BLM Manual 1737.			
30	<ul style="list-style-type: none">Hand thin 200 acres of juniper and pinyon woodland on critical winter range, to reverse downward trend.			

CHAPTER 2: THE RESOURCE MANAGEMENT PLAN

- 31 • Install guzzlers on Bitner Knoll, Callao Bench, East Fish Springs, East Topaz, Spor Mountain and Wild Horse Allotments.

Implementation

Monitoring

Modification

Elk

Herd Units 11 and 28

- 32 • Identify critical habitats and prepare a written plan which identifies areas for monitoring and habitat improvements.
- 33 • Place critical winter and spring/summer habitats in oil and gas leasing Category 2 with a seasonal restriction on exploration and drilling from December through April and May through November, respectively.
- 34 • Determine additional suitable elk habitat on reseeded areas.
- 35 • Improve 11,000 acres of critical habitat including habitat in Ferner Dog Valley, Middle Fork and Spring Canyon Allotments.

Antelope

Herd Unit 2

- 36 • Install 12 guzzlers and modify six wells as shown on the following list:

Guzzler Development Location	Allotment
T. 17 S., R. 17 W., Sec. 17, NE	Cowboy Pass
T. 15 S., R. 17 W., Sec. 33, NE	Thousand Peaks
T. 17 S., R. 17 W., Sec. 4, SW	Cowboy Pass
T. 16 S., R. 17 W., Sec. 16, SE	Cowboy Pass
T. 15 S., R. 18 W., Sec. 1, NE	Thousand Peaks
T. 15 S., R. 18 W., Sec. 23, NE	Thousand Peaks
T. 13 S., R. 17 W., Sec. 32, SE	Thousand Peaks
T. 14 S., R. 16 W., Sec. 17, SW	Thousand Peaks
T. 14 S., R. 15 W., Sec. 28, SW	Thousand Peaks
T. 14 S., R. 15 W., Sec. 4, SW	Thousand Peaks
T. 13 S., R. 15 W., Sec. 24, SE	Thousand Peaks
T. 16 S., R. 14 W., Sec. 24, NE	Antelope

Well Improvement and Location	Changes Needed
Cline Well 1295 T. 15 S., R. 15 W., Sec. 29	Maintain a constant supply of water from May to October. install access and escape ramps.
Hole-in-the-Wall Well T. 13 S., R. 16 W., Sec. 6	Replace trough, install access and escape ramps Maintain water from May to October. install wildlife trough 400 yards from well.
Indian Trail Well 2122 T. 13 S., R. 16 W., Sec. 34	Install new pump and motor, Install a wildlife trough 200 or more yards from well. maintain water from May to October.
Well 56, 4306 T. 13 S., R. 15 W., Sec. 23	Install access and escape ramps, maintain a water supply from May to October. and install a wildlife trough 400 yards from well.
Well 58, 4307 T. 15 S., R. 16 W., Sec. 11	Same as for Well 56.
West Swasey Well 2072	Same as for Well 56

CHAPTER 2: THE RESOURCE MANAGEMENT PLAN

- Modify fences to comply with BLM Manual 1737 as shown on the following list:

Implementation

Monitoring

Modification

Name	JDR		
	Number	Spacing	Change To
East Ibapah Appeal	0324	8-8-8-6-10	16-10-10-6
West Ibapah Appeal	0327	8-8-8-8-13	16-10-10-6
Goshute Fire	0337	10-10-10-10	16-10-10-6
Deep Creek Seeding 1	0341	10-10-10-12	16-10-10-6
Goshute Fire Fence 2	0372	12-10-10-10	16-10-10-6
Goshute Reservation	4005	12-12-10-10	16-10-10-6
Pinyon Flat Allotment	4052	16-16-8-12	16-10-10-6
Ibapah Seeding	4103	16-6-8-12	16-10-10-6
South Overland Canyon	4126	tower 16-6-8-16 Upper 16-13-13	16-10-10-6 16-10-10-6

- 38
- Identify critical habitat and prepare a monitoring plan to evaluate the effect of spring sheep grazing.

Bighorn Sheep

- 39
- Prepare a written report to determine the limiting factors for bighorn sheep on the Fish Springs Range. This report will include recommendations for future management of the sheep.
- 40
- Install three water guzzlers on the Fish Springs Range for bighorn sheep use pending recommendations from the written report.
- 41
- Prepare a written report to determine the limiting factors for bighorn sheep on the Deep Creek Mountains. This report will include recommendations for future management and enhancement of the sheep herd.
- 42
- Do not allow grazing of domestic sheep above the 7,000 foot contour level on the Fish Springs and Deep Creek Mountains, Enforcement of this decision could include such stipulations as conditions on licenses, signing, preparing maps, and meeting with users.

CHAPTER 2: THE RESOURCE MANAGEMENT PLAN

Threatened, Endangered, and Sensitive Species Habitat and Use

Implementation

Monitoring

Modification

- 43
- Reconstruct habitat improvement structures in six streams in the Deep Creek Mountains. Map 3 shows the Deep Creek HMP. The following lists the order of priority for these streams:
 - a. Birch Creek
 - b. Trout Creek
 - c. Granite Creek
 - d. Red Cedar Creek
 - e. Indian Farm Creek
 - f. Tom's Creek
- 44
- Prepare a written report discussing the limiting factors for the least chub in the following areas (This list is in priority order for these springs):
 - a. Salt Marsh Lake Complex
 - b. Tule Spring
 - c. Willow Spring
 - d. Coyote Spring
 - e. Cold Spring

The report will contain recommendations for management and enhancement of the species.

- 45
- Determine the importance and status of the new species of date in the resource area. Prepare a written report containing recommendations for the management and enhancement of the species.

Riparian/Aquatic Habitat and Use

- 46
- Inventory all riparian/aquatic habitat within three years. A report will be prepared showing conditions, trend, and limiting factors for each of the riparian habitats listed below. This report will also recommend methods to improve habitat in poor or fair condition. The following list shows priority for inventory:

CHAPTER 2: THE RESOURCE MANAGEMENT PLAN

	Implementation	Monitoring	Modification
NAME	LOCATION (On BLM Administered Lands)		
Tule Springs			
Twin Springs			
Topaz Slough	T16S RBW	Sec. 6	
Salt Marsh Lake Complex	T15S R18W	sec. 20, 30, 31	
Swarey Springs	T16S R13W	sec. 24	
Tule Springs	T17S R15W	sec. 3	
Twin Springs	T16S R18W	sec. 22	
Willow Springs	T17S R15W	sec. 3	
Coyote Springs Complex	T16S R15W	sec. 12	
Cold Springs	T11S R14W	sec. 4	
Cane Springs	T16S R15W	sec. 12	
Baker Hot Springs	T14S R8W	sec. 10	
Antelope Springs	T17S R13W	sec. 11	
Trout Creek	T12S R19W	sec. 12	
Tom's Creek	T11S R18W	sec. 16	
Red Cedar Creek	T11S R18W	sec. 31 to T12S R17W	sec. 6
Indian Farm Creek	T12S R18W	sec. 4 to T12S R18W	sec. 12
Granite Creek	T12S R18W	sec. 6 to T12S R17W	sec. 6
Birch Creek	T12S R18W	sec. 25 to T12S R17W	sec. 10
Basin Creek	T11S R18W	sec. 4 to T11S R17W	sec. 6
Cherry Creek	T12S R5W	sec. 3	
Cottonwood Canyon Creek	T12S R18W	sec. 4 to T12S R18W	sec. 11
Cow Hollow Creek	T11S R5W	sec. 5 to T11S R5W	sec. 8
Sevier River	T15S R2W	sec 8 to T14S R2W	sec. 8
Sevier Bridge Reservoir	T17S R2W	1W	
(Yuba)			

47

- Place all riparian habitat in oil and gas leasing Category 3.

CHAPTER 2: THE RESOURCE MANAGEMENT PLAN

SUPPORT REQUIREMENTS

Bighorn Sheep

The Division of Operations may be needed to accurately identify and mark the 7,000 foot contour level. The division may also assist in construction of guzzlers.

The range program will need to take necessary actions to implement the 7,000 foot contour level closure.

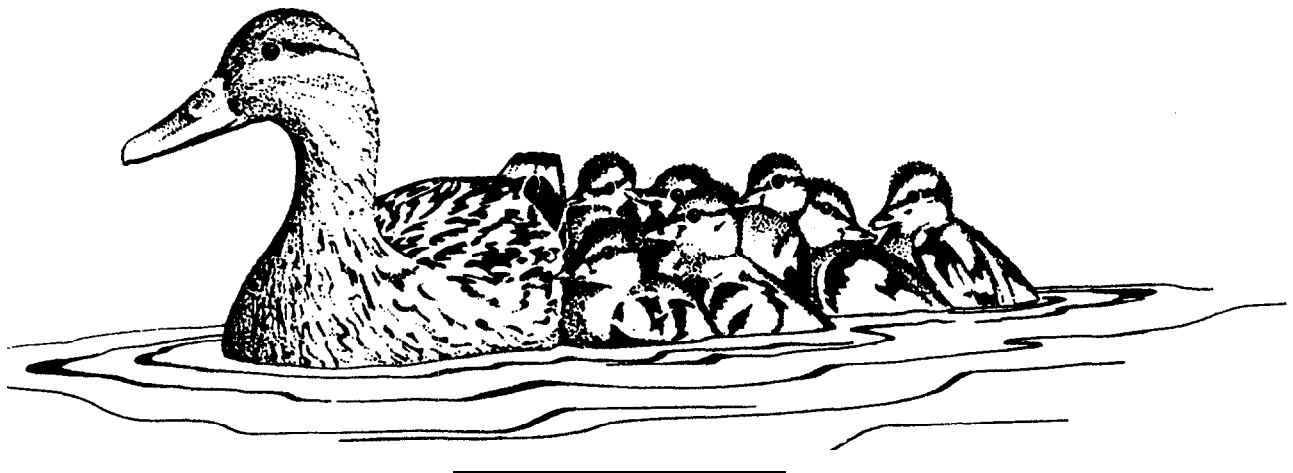
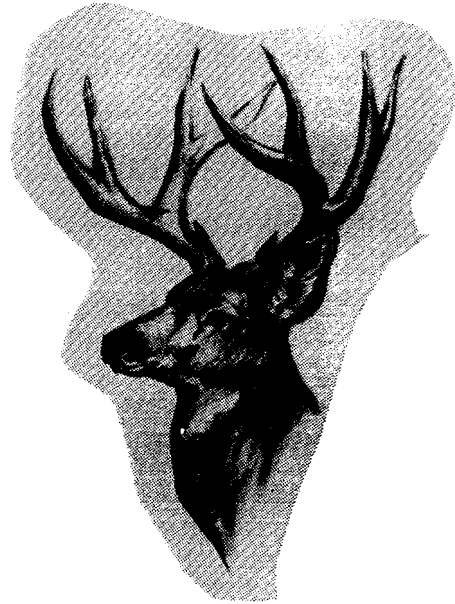
Riparian/Critical/High Priority Habitat

The minerals program will need to implement appropriate oil and gas leasing categories on riparian critical and high priority areas.

PLAN MONITORING AND EVALUATION

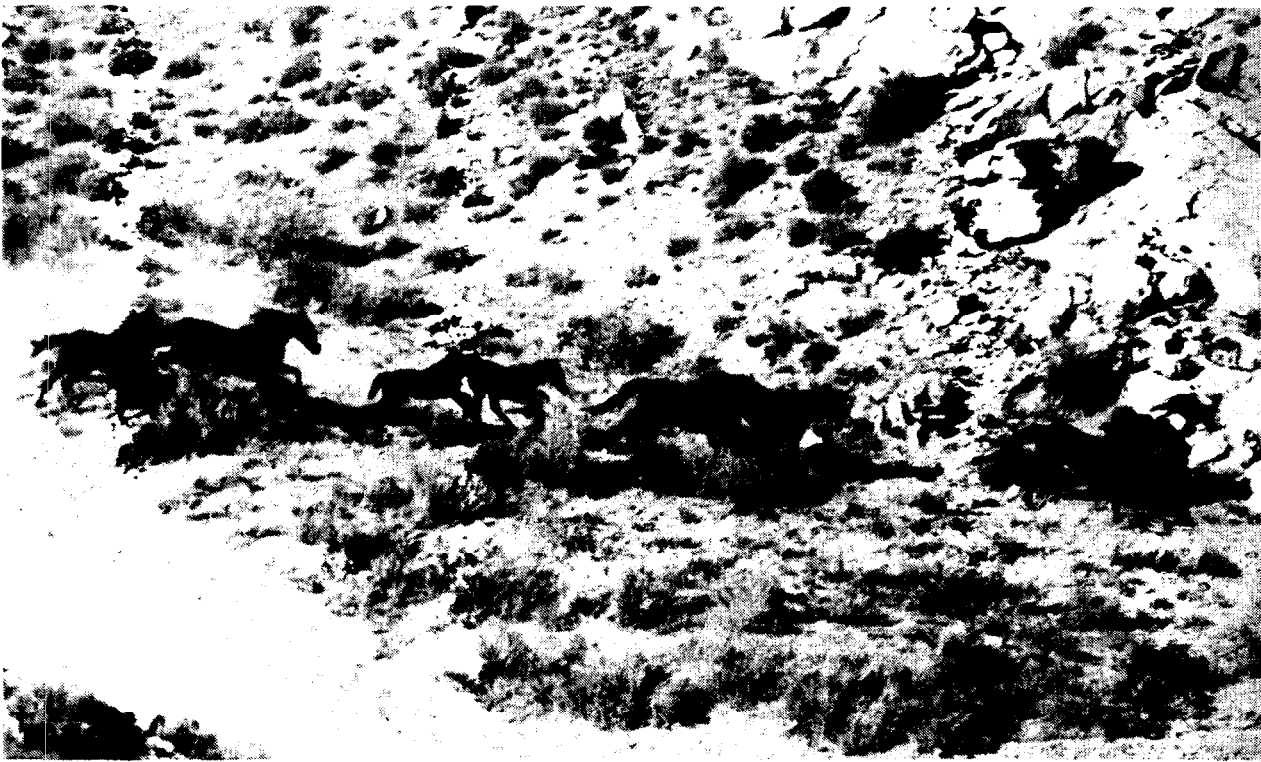
Monitor this plan each year to determine which items need to be brought forward into the Annual Work Plan (AWP).

At least every five years the wildlife program will be monitored and evaluated to determine its effectiveness in meeting goals and objectives.



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Wild Horses



CHAPTER 2: THE RESOURCE MANAGEMENT PLAN

WILD HORSES

INTRODUCTION

There are two Herd Management Areas (HMAs) (Confusion Herd Management Area-235,005 acres; Swasey Herd Management Area-120,113 acres) located in the resource area. Map 4 shows wild horse herd boundaries and critical areas. Wild horses in the HRRRA have been managed under provisions of a wild horse capture plan completed in 1977. Wild horses have been captured and removed periodically under provisions of this plan to maintain horse numbers at levels commensurate with available forage and herd management objectives.



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 and regulations. Herd Management Plans will be completed to provide detailed guidance for management of individual HMAs.

PLANNED ACTIONS

Implementation Monitoring Modification

- 1 Continue established HMAs (See Table 2-3 for forage allocations).

TABLE 2-3
Forage Allocation

- 2 Wild Horse numbers in the two HMAs will be maintained near the following levels:

HMA	Max-Number Horses	AUMs	Minimum Numbers Horses	AUMs
Confusion	115	1380 aums	70	84
Swasey	100	1200 aums	60	72

- 3 Forage allocation for wild horses is shown below. This allocation provides a buffer of 324 AUMs for the numbers proposed above.

HMA	Allotment	Allocation
Confusion	Thousand Peaks	1,320 aums
	Coyote Knolls	98 aums
	Gandy	120 aums
	Tule Valley	96 aums
	Total	1,644 aums
Swasey	Antelope	276 aums
	Cowboy Pass	0 aums
	Tatow	864 aums
	Swasey Knolls	0 aums
	Total	1,140 aums

CHAPTER 2: THE RESOURCE MANAGEMENT PLAN

- | | Implementation | Monitoring | Modification |
|---|--|------------|--------------|
| 4 | Initiate and compile inventory/monitoring studies to more precisely determine the following characteristics of the herds and their habitat: | | |
| | <ul style="list-style-type: none">• Accurate Population Numbers• Age and Sex Ratio• Social Structure• General Physical Conformation and Condition of Animals | | |
| 5 | Approximately 25 to 30 head of horses are presently using the Partoun Allotment. These are apparently wild horses encroaching from a contiguous HMA. The Partoun Allotment is not a recognized HMA and no forage has been, or will be, allocated to horses. These horses will be removed as quickly as possible. | | |
| 6 | Weekend surveillance patrols will be made especially during the spring foaling season to reduce harassment of wild horses during this critical period. | | |

SUPPORT REQUIREMENTS

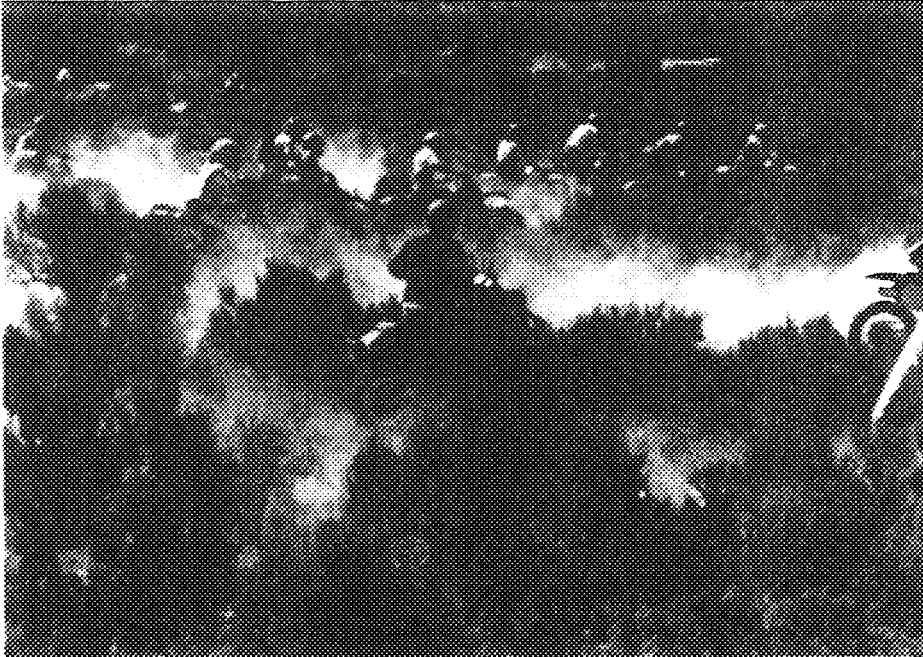
In order to control encroachment of horses across the Utah-Nevada border approximately 13 miles of fence would be maintained or modified.

PLAN MONITORING AND EVALUATION

This plan will be monitored each year to determine which items need to be brought forward into the annual work plan.

Populations will be determined on an annual basis by ground or aerial surveys, depending on availability of funds. 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 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.

Recreation



CHAPTER 2: THE RESOURCE MANAGEMENT PLAN

RECREATION

INTRODUCTION

The HRRA contains a wide variety of recreation resources. The Deep Creek range contains six perennial streams that support fish populations. Birch and Trout Creeks have potential for study and could be included in the National Wild and Scenic Rivers System. Additional areas with significant recreation resources include Yuba Reservoir, Topaz Mountain, Antelope Springs Cave, Gandy Mountain Caves, and Swasey Mountain. Yuba Reservoir, widely known for aquatic sports, has 150,000 visitors per year. Topaz Mountain offers rockhounds some of the finest examples of topaz crystals in the United States, Intensive Off Road Vehicle (ORV) use occurs at the Little Sahara Recreation Area with over 100,000 visitors per Year. Other popular ORV areas include the Deep Creek Mountains, Yuba Dam, Sheep Rock Mountains, Tintic Mountains, and Desert Mountain. A visual resource inventory and analysis has been completed for the entire resource area.

Deep Creek Mountains

The Deep Creek Mountains are noted for outstanding recreational and scenic values. The range is characterized by sheer granite cliffs and glacial cirques at the higher elevations. Recreational and scenic values in the Deep Creek Mountains are currently managed under IMP and the Deep Creek Mountains Management Plan (1975). There is an abundance of plant and animal species.

Several streams in the Deep Creek Mountains provide habitat needed to support remnant populations of the Bonneville cutthroat trout, *Salmo clarki Utah*, which is under status review for possible listing as threatened or endangered and is considered by the bureau as a sensitive species. These streams include: Birch Creek, Trout Creek, Granite Creek, Cottonwood Canyon Creek, Red Cedar Creek, Basin Creek, Indian Farm Creek, and Tom's Creek.

The Bonneville cutthroat trout is the only trout endemic to the Bonneville Basin and was once considered extinct. In its pure form, it is one of the rarest of the subspecies of cutthroat. The Continuing existence of this species is threatened by hybridization with rainbow trout. UDWR has initiated a fish eradication and stocking Program to

reestablish pure strain Bonneville cutthroat trout. There is also concern on all of these streams over the impending loss of habitat due to stream diversion and construction of a small hydroelectric power plant sometime in the future. These concerns are addressed in the Deep Creek Mountains Habitat Management Plan (HMP) (1981).

Rockwell Natural Area

The area consists of large sand dunes deposited along the southern shores of Pleistocene Lake Bonneville. The dunes have developed a unique associated ecology, in response to the specialized homogenous landform material. The most conspicuous plant growing on the dunes is the large four-wing salt bush *Atriplex canescens gigantea*. This species was recently (1985) added to the U.S. Fish and Wildlife Service (FWS) list as a Category 2 Candidate (sensitive) species under review. It frequently grows to a height of 8 to 10 feet and 10 to 15 feet across. This giant form of four-wing is found nowhere else in the world. It appears to be the last remaining relic of a once wide spread population which has now become extinct everywhere except on this sand dune island.

Management prescriptions for the Rockwell Natural Area are contained in the Little Sahara Management Plan (1979). This plan identifies uses incompatible with the natural environment: vehicle use, camping, campfires, and removal of plant or animal materials.

Gandy Mountain Caves

Gandy Mountain contains two known limestone solution caverns: Crystal Ball Cave and Gandy Mountain Cave. Both caverns remain in relatively pristine condition since their discovery in the late 1950s.

Crystal Ball Cave consists of a large cave avenue oriented along joint fractures approximately 700 feet long. Artificial entrances have been excavated at each end of the cave and walkways for visitors have been installed. The cave is named for its extensive crystalline deposits of dog tooth spar, Icelandic spar, helictes, and other speleothemic deposits. Only a few other limestone caverns are known to exist anywhere in the world with this type of mineral deposition. Numerous species of Pleistocene mammalian bones have been collected from the cave sediments. Gandy

CHAPTER 2: THE RESOURCE MANAGEMENT PLAN

Mountain Cave probably originated from the same joint system as Crystal Ball Cave and it contains numerous well-formed dripstone formations in its terminal room.

Currently, there are mining claims on Crystal Ball and Gandy Mountain Caves. Although the claimant has a strong conservation ethic, this claim provides the legal prerogative to mine the cave for its unique mineral deposits. Although the cave presently has two locked doors protecting access into each entrance, there is an on-going potential of vandalism of the fragile mineralization. Cave mineral deterioration may be currently occurring because of apparent interruption of normal ground water flow.

ELEMENTS OF THE PLAN

Goals and Objectives

Goals and objectives of the HRRR recreation program are to: (1) provide recreation opportunities under BLM's basic stewardship responsibilities for unstructured and structured recreational 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.

PLANNED ACTIONS

Visual Resource Management (VRM)

- 1
 - Re-evaluate and change, if necessary, the VRM classes in the area burned near Little Sahara.
- 2
 - Environmental conditions are constantly changing due to uncontrolled natural causes. (e.g., fires, erosion, etc.). Therefore, VRM classes will be re-evaluated every three to five years to determine if class changes are necessary. See Map 5 for VRM areas.



Implementation

Monitoring

Modification

CHAPTER 2: THE RESOURCE MANAGEMENT PLAN

		Implementation	Monitoring	Modification
	Special Management Designation			
3	<ul style="list-style-type: none">The following areas will be Special Recreation Management Areas (SRMAs) and are listed in priority:<ol style="list-style-type: none">Little Sahara Recreation AreaDeep Creek MountainsSwasey MountainsGandy Mountain CavesYuba ReservoirTopaz Mountain Rockhounding AreaAntelope Springs CaveSheeprock/Tintic ORV area			
4	<ul style="list-style-type: none">The following areas will receive ACEC designation:<ol style="list-style-type: none">Gandy Mountain Caves ACECDeep Creek Mountains ONA/ACECRockwell Natural Area ONA/ACEC			
5	<ul style="list-style-type: none">An ACEC activity plan will be prepared for those areas containing values at risk.			
6	<ul style="list-style-type: none">Other significant sites where other actions will be taken to preserve or support recreation values:<ol style="list-style-type: none">Baker Hot SpringsFumarole ButtePaul Bunyan's Woodpile			

CHAPTER 2: THE RESOURCE MANAGEMENT PLAN

Implementation

Monitoring

Modification

Off Road Vehicle (ORV) Designations

ORV designations will be the top priority for the HRRRA Recreation program. Specific actions, to be prepared in an implementation plan, are listed below in priority order.

- 7 • Little Sahara Recreation Area and Vicinity
 - a. ORV use in the Little Sahara Recreation Area would continue to be limited (i.e., restricting ORV use to roads and limiting speeds within campgrounds) on 2,782 acres and closed on 9,604 acres (Rockwell Natural Area).
- 8 b. The remaining portions of Little Sahara Recreation Area and adjoining lands would be established as a competitive events area, subject to present management. Limitations on ORV use in these areas would be required during periods of livestock and wildlife use to protect rangeland, wildlife, and other values (i.e., adjust dates of events, locations, amount of use, etc.). Allotments affected would include Cherry Creek, Death Canyon, Desert Mountain, Maple Peak, Meadow Creek, Riverbed, Sheep, Sheeprock, Sugarville, and the portions of McIntyre and Shearing Allotments outside Little Sahara (415,630 acres). The locations and conditions of roads and trails would be inventoried and monitored.
- 9 c. Three- and four-wheel All Terrain Vehicle (ATV) use would be allowed only on sand dune terrain, existing roads, and specially designated trails.
- 10 • 30,700-acres of the Deep Creek Mountains would be closed and 64,969-acres limited to existing roads and trails would continue.
- 11 • ORV use on Swasey Mountain (34,500 acres) would be limited to existing roads, ways, and trails.
- 12 • The sand dunes between the DMAD Reservoir/Oak City would be established as an ORV use area with special emphasis on ATVs.
- 13 • ORV use at Yuba Dam (1,650 Acres) would be limited to existing roads and trails.

CHAPTER 2: THE RESOURCE MANAGEMENT PLAN

Implementation

Monitoring

Modification

RECREATION RESOURCE MANAGEMENT

The following recreation areas are listed in order of priority. The specific management actions are also listed in order of priority. Changing conditions and future funding, however, may necessitate an adjustment in those priorities. Map 6 shows special management areas and ORV designations.

Little Sahara Recreation Area

- 14 Update the Little Sahara Recreation Management Plan. Emphasis in the plan will be :
- Campground Use and Maintenance
 - User Fees
 - Safety
 - ORV Trails and Management
 - Public Relations
 - Use Patrol
 - Visitor Center Complex
 - Access
 - Land Tenure Adjustment
 - Livestock Grazing
- 15 Implement critical action items in the current Little Sahara Recreation Management Plan. The following is a prioritized list of these items:
- Reroute and pave the White Sands Campground access road.
 - Close the north entrance to the Little Sahara Recreation Area.
 - Provide permanent housing for staff.
 - Install support facilities at Sand Mountain (such as permanent restrooms, water faucets, etc.).
 - Construct the second phase of White Sands Campgrounds.
 - Provide adequate staffing through permanent, temporary and volunteer assistance.
 - Construct additional campgrounds as needed.

CHAPTER 2: THE RESOURCE MANAGEMENT PLAN

Implementation

Monitoring

Modification

Deep Creek Mountains

- 16
 - Develop a recreation activity plan if not designated wilderness. This would include the following:
 - a. Campgrounds
 - b. Visitor Information Center
 - c. Trail Heads
 - d. Staging Areas
 - e. Improve Road and Trail Access
- 17
 - Designate 30,700 acres as ONA/ACEC.

Swasey Mountain

- 18
 - ORV use on Swasey Mountain (34,500 acres) would be limited to existing roads, ways, and trails.
- 19
 - Maintain access to, and construct minimal support facilities at, the Sinbad Overlook,
- 20
 - Install an interpretive and warning sign.
- 21
 - Provide safety measures at the Sinbad Overlook.

Gandy Mountain Caves

- 22
 - Designate Gandy Mountain Caves as an ACEC (1,120 acres).
- 23
 - Prepare an ACEC activity plan and emphasize the following items:
 - a. Recreation Use
 - b. Validity Determination of Mining Claim
 - c. Cooperation Plan for Visitor Management
 - d. Access and Trails
 - e. Protection
 - f. Caves Use Enhancement and Safety (Visitor Services)
 - g. Advertising and Promotion
 - h. Identify an On-Site Manager
- 24
 - Initiate a mineral withdrawal on 1,120 acres.
- 25
 - Expand present oil and gas leasing Category 3 to 1,120 acres.

CHAPTER 2: THE RESOURCE MANAGEMENT PLAN

		Implementation	Monitoring	Modification
	Yuba Dam Reservoir (Sevier Bridge Reservoir)			
26	<ul style="list-style-type: none">• Inventory visitor use patterns, including seasons, numbers, locations, and needs.			
27	<ul style="list-style-type: none">• Coordinate with U.S. Bureau of Reclamation for allocation of Central Utah Project Impact Funds for Yuba Reservoir:<ul style="list-style-type: none">a. Funding for implementation of the recreation plan with particular emphasis on:<ol style="list-style-type: none">1. Survey & Design of Facilities2. Recreation Construction3. Recreation Maintenance4. Land Tenure Adjustments			
28	<ul style="list-style-type: none">• Update and implement the recreation plan to manage and enhance the recreational resources available. Items of particular concern are:<ul style="list-style-type: none">a. Recreational Use Facilitiesb. Sanitation (to include sanitation contract)c. Water Safetyd. Cooperation with the Utah Division of State Parks in accordance with the Memorandum of Understanding (MOU)e. User Feesf. Use Patrolsg. ORV Supervision Use and Restrictions and Monitoringh. Land Patterns (Land tenure adjustment)i. Administrative Site			
	Topaz Mountain Rockhounding Area			
29	<ul style="list-style-type: none">• Develop and implement a recreation activity plan for the Topaz Mountain Rockhounding Area. Items to be included are:<ul style="list-style-type: none">a. Acquisition of State Landsb. Improvement of Accessc. Recreational Facilitiesd. Sanitatione. Resolution of Claim Validityf. Withdrawalsg. Safetyh. Visitor Managementi. Signing and Interpretation			

CHAPTER 2: THE RESOURCE MANAGEMENT PLAN

- | | Implementation | Monitoring | Modification |
|----|---|------------|--------------|
| 30 | <ul style="list-style-type: none">• Continue present minerals segregation, no shooting restriction, and use of hand tools only. | | |

Antelope Springs Cave

- | | | | |
|----|---|--|--|
| 31 | <ul style="list-style-type: none">• Prepare a recreation activity plan and emphasize the following items:<ul style="list-style-type: none">a. Cooperative Management Agreement with National Speleological Societyb. Restore Cave to a Natural Condition (remove graffiti trash)c. Emergency Rescue and Safety, Cooperative Management Agreement (CMA) with County Sheriffs Officed. Resource Protection and Interpretatione. Visitor Managementf. Improve Access and Support Facilities | | |
|----|---|--|--|

Rockwell Natural Area

- | | | | |
|----|--|--|--|
| 32 | <ul style="list-style-type: none">• Designate 9,630 acres as Outstanding Natural Area/Area of Critical Environmental Concern (ONA/ACEC). | | |
| 33 | <ul style="list-style-type: none">• Initiate mineral withdrawal on 9,630 acres. | | |

SUPPORT REQUIREMENTS

Little Sahara Recreation Area

Assistance will be needed from engineering technicians to help in facility design and layout. The Division of Operations will assist in construction.

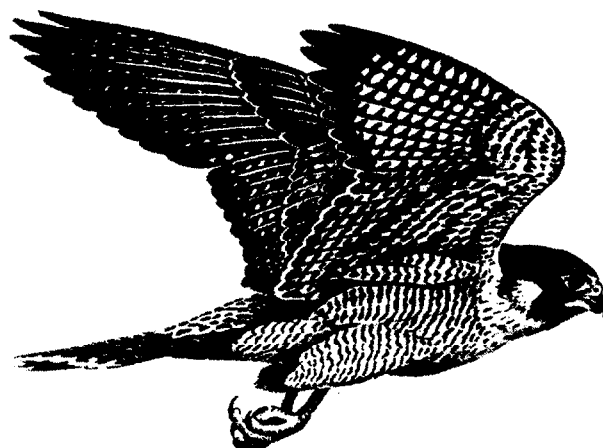
Special assistance will be needed from rangers, special agents and Public Information Specialists during peak visitor use periods.

Yuba Reservoir

Assistance will be needed from engineering technicians to help in facility design and layout. The Division of Operations will assist in construction.

Topaz Mountain Rockhounding Area

A minerals validity examination would be needed to determine mining claim validity.



CHAPTER 2: THE RESOURCE MANAGEMENT PLAN

Other

Support will be needed for mineral withdrawals and changes in oil and gas leasing categories for: The Deep Creek Mountains, Gandy Mountain Caves, Antelope Springs Cave, Swasey Mountain and the Little Sahara Recreation Area.

Program reviews at five-year intervals will assess the progress of the plan accomplishments and any need for modification.

PLAN MONITORING AND EVALUATION

Activity plans for the special management designation areas, and the ORV designations will define monitoring standards and intervals for those areas and activities.



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Cultural Resources



CHAPTER 2: THE RESOURCE MANAGEMENT PLAN

CULTURAL RESOURCES

INTRODUCTION

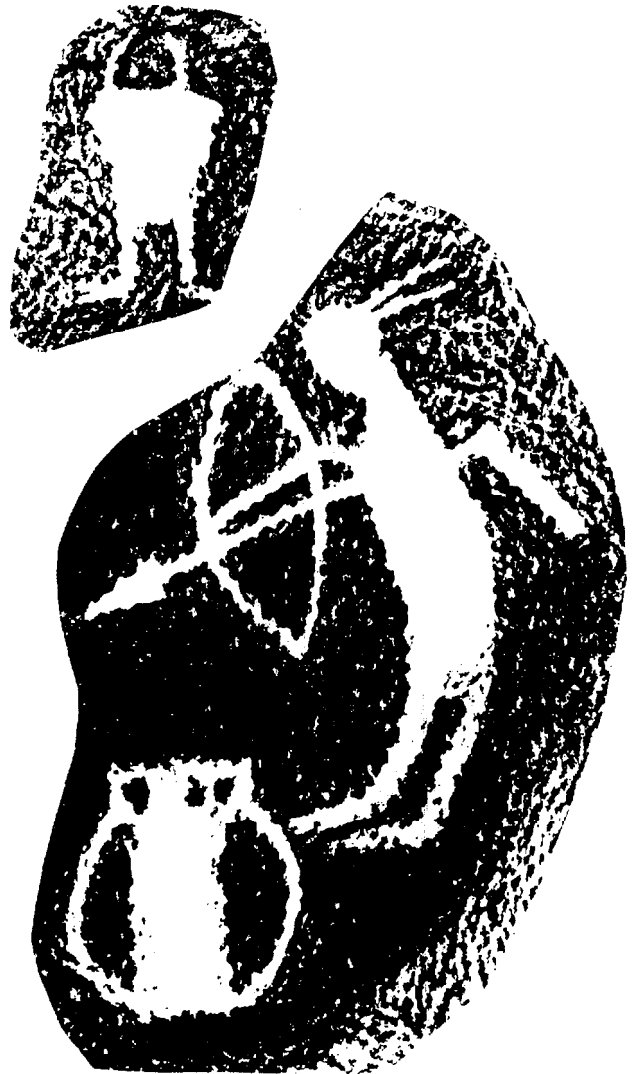
Utah's western desert has been host to sporadic human activity for almost 14,000 years. The HRRRA is known to have at least four distinctive prehistoric cultures represented: Paleo-Indian, Desert Archaic, Fremont, and Piute-Shoshone groups. Historic activity in this area consisted mostly of a few exploratory surveys (Dominguez-Escalante, Gunnison, etc.) the Pony Express, Civilian Conservation Corps (CCC) reclamation projects, mining, and ranching. The following are the types of sites found in the resource area:

- Sites listed on the National Register of Historic Places (NRHP):
 - Fish Springs Caves Archaeological District
 - Pony Express Trail
 - CCC camps near Antelope Springs, Tom's Creek, and Kane Springs
- Sites having qualities giving them the potential for nomination to the NRHP. To date, approximately 319 cultural sites have been identified within the area. About 20% of the sites have the qualities to make them eligible for nomination to the NRHP.
- Sites that do not meet the criteria for nomination to NRHP.

ELEMENTS OF THE PLAN

Goals and Objectives

Protect the cultural and historic values in the planning area from accidental or intentional destruction and give special protection to cultural sites having potential for the NRHP.



CHAPTER 2: THE RESOURCE MANAGEMENT PLAN

PLANNED ACTIONS (LISTED IN ORDER OF PRIORITY)

Implementation

Monitoring

Modification

- 1
 - Ensure that both BLM and non-BLM actions avoid damage to cultural resources so as to protect and preserve them for the benefit of scientific and educational use by present and future generations.
- 2
 - Perform predictive cultural resource inventories.
- 3
 - Prepare a Cultural Resource Activity Plan which will identify ways to enhance the historic and educational value of the Fish Springs Archaeological District.
- 4
 - Evaluate the Joy Townsite for eligibility on the NRHP.
- 5
 - Evaluate the Pony Express Trail to determine inclusion into the National Trail System.

SUPPORT REQUIREMENTS

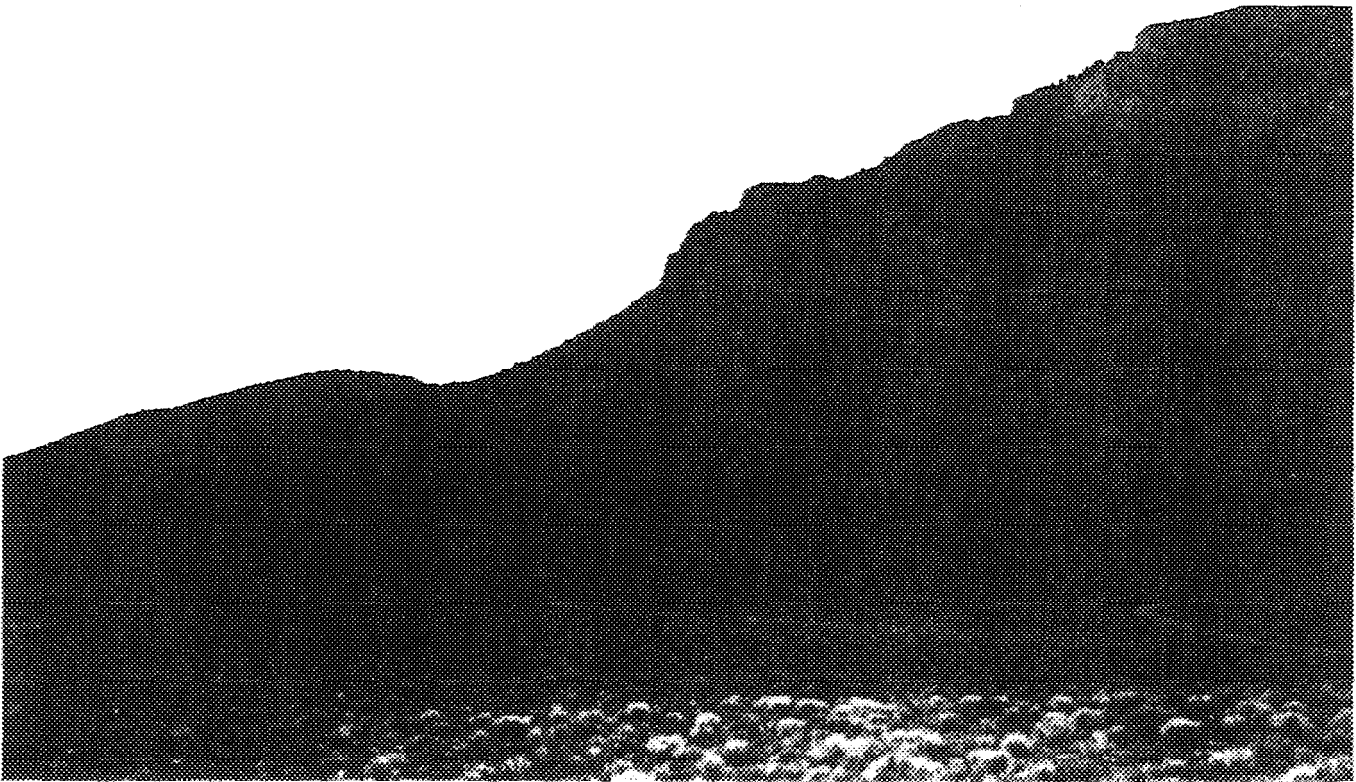
In order to accomplish the predictive inventories, it will be necessary to either hire temporary help or budget for contract inventories.

PLAN MONITORING AND EVALUATION

At least every five years the cultural resources program will be monitored and evaluated to determine its effectiveness in meeting the goals and objectives.



Lands



CHAPTER 2: THE RESOURCE MANAGEMENT PLAN

LANDS

INTRODUCTION

The lands program is characterized primarily by the processing of several rights-of-way applications and temporary land use permits each year. Periodically, work is also done on desert land entries, exchanges, withdrawals, and Recreation & Public Purpose Act (R & PP) leases. The lands program also provides support to other activities through processing special land designations.

ELEMENTS OF THE PLAN

Goals and Objectives

The objectives of the lands program are to provide effective public land management and to improve land use, productivity, and utility through: (1) accommodation of community expansion and economic development needs; (2) improved land ownership patterns; (3) providing for the authorization of legitimate uses of public lands by processing use authorizations, such as rights-of-way, leases, permits, and state land selections in response to demonstrated public needs; and (4) assist in orderly resource management through special designations. Map 7 shows Areas of Critical Environmental Concern (ACEC) and rights-of-way corridors.

PLANNED ACTIONS

Land Tenure Adjustments

- 1 Prior to any adjustment in land tenure on the 2,245,314 acres of public land in the HRRRA, conformance with the land use plan will be determined. Procedures to be followed will be as defined in the ELM Manual and regulations, in accordance with the type of land tenure adjustment.



Implementation

Monitoring

Modification

CHAPTER 2: THE RESOURCE MANAGEMENT PLAN

	Implementation	Monitoring	Modification
2	After a Land Report/Environmental Assessment (LR/EA) has been completed and a decision made that 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 three 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.		

3 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 45 day public comment period.

Public Sale

4 Since no lands have been identified for sale, disposal of any public lands by sale will require an amendment of the Resource Management Plan (RMP).

Exchange

5 The following lands are identified for acquisition by the U.S. through (exchange):

Salt Lake Base and Meridian, Utah

T. 11 S., R. 18W.

Sec. 3, S $\frac{1}{2}$

Sec. 4, S $\frac{1}{2}$

Sec. 5, Lots 1,2,3,4, S $\frac{1}{2}$ N $\frac{1}{2}$ S $\frac{1}{2}$

Sec. 6, SE $\frac{1}{4}$ SE $\frac{1}{4}$

Sec. 7, NE $\frac{1}{2}$ SE $\frac{1}{2}$

Sec. 8, All

Sec. 9, All

Sec. 17, W $\frac{1}{2}$ SW $\frac{1}{2}$.

Sec. 18, W $\frac{1}{2}$ NE $\frac{1}{4}$, S $\frac{1}{2}$ NW $\frac{1}{4}$, S $\frac{1}{2}$

Containing 3,210.2 acres

These are the private lands (Parrish Estate) proposed for acquisition by the U.S. as part of The Nature Conservancy Exchange, U-56998. Acquisition or disposal of any other lands as part of a land exchange will require an amendment of the RMP.

CHAPTER 2: THE RESOURCE MANAGEMENT PLAN

Implementation Monitoring Modification

Rights-of-Way Corridors

- 6 Section 503 of the Federal Land Policy and Management Act (FLPMA) states:
- 7 ". . . 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.
- 8 Existing major rights-of-way are designated as corridors (see Table 2-4). New rights-of-way will be restricted,

TABLE 2-4

Name	Corridor Width (ft.)	Specifications	Term*
IPP to Nevada Transmission Line	1,500	Available for all utility uses.	4,7
IPP to California d.c. Transmission	1,500	Available for all utility uses.	4,1
U.S. Highway 50&6	2,000	Available for all uses.	1,2,3,8
IPP to Mona, Utah	1,500	Available for all utility uses.	4,1
Mona North and South Transmission Lines	1,500	Available for all utility uses.	4,1
Interstate 15	3,000	Available for all uses.	6,8

*** Terms:**

- 1. The road or highway within the rights-of-way corridor shall be used to the maximum extent possible for construction and maintenance of new rights-of-way.
- 2. Road that are needed for, construction of a new rights-of-way shall be temporary and fully rehabilitated.
- 3. All land disturbed by new right-of-way, except authorized new access roads, shall be rehabilitated to as close to natural conditions as possible
- 4. Transmission line rights-of-way shall be adjacent to each other or located as close as possible.
- 5. Buried telephone cable lines shall be close to existing roads and highways and generally within the road rights-of-way.
- 6. New right-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 (VRM) Class guidelines.

Segregations

- 9 Public lands may be removed from the operation of the public land laws, including the mining laws, to allow for orderly administration. Segregations in the HRRRA will be in the form of withdrawals and classifications.

CHAPTER 2: THE RESOURCE MANAGEMENT PLAN

Withdrawals

Implementation

Monitoring

Modification

- 10 Withdrawals are initiated to limit use and protect special resource values or improvements on public lands. Existing HERRA withdrawals with varying segregations are: Little Sahara Recreation Area (campground), Goshute Indian Reservation, Fish Springs National Wildlife Refuge, Uinta National Forest, Fishlake National Forest, Wasatch National Forest, public water reserves, the Topaz Lake Wildlife Conservation Area, public water reserves, and power site reserves. These withdrawals will be continued.
- 11 Withdrawals with appropriate segregations will be initiated for all or a portion of the Rockwell Natural Area, Topaz Mountain, Dugway Geode Beds, and Gandy Mountain Caves.

Land Classification

- 12 Classification under the Classification and Multiple Use Act (C&MU) will remain effective on the following sites until alternative protective designation or stipulation can be implemented. Currently all these sites are segregated against all agricultural, land laws, sales, and location and entry under the mining laws:
- Fish Springs Pony Express Station
 - Black Rock Pony Express Station
 - Dugway Pony Express Station
 - Boyd Pony Express Station
 - Toms Creek
 - Dugway Geode Bed
 - Topaz Mountain
 - Paul Bunyan's Woodpile
 - Baker Hot Springs
 - Public Water Reserves
 - Power Site Classifications and Reserves
 - Oil Shale Withdrawal

Special Management Concerns

- 13 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. Many of the management actions described are not the responsibility of the lands program. The nominating programs have lead responsibility for accomplishment of management actions.

CHAPTER 2: THE RESOURCE MANAGEMENT PLAN

Areas of special management concern are found on Table 2-5.

TABLE 2-5

HRRR AREAS OF SPECIAL MANAGEMENT CONCERN

Area	Management Designation	Acres	Oil/Gas Category	Acres	Mineral Withdrawal	Acres
Rockwell Natural Area	ONA/ACEC*	9,630	CATEGORY 4	9,630	Yes	9,630
Gandy Mt. Caves	SRMA/ACEC	1,120	CATEGORY 3	1,120	Yes	1,120
Deep Creek Mts.	ONA/ACEC, SRMA **	30,740	CATEGORY 3	30,740		
Antelope Springs Cave	CLASS III RA, SRMA	150	CATEGORY 4	150		
Dugway Geode Beds		2,284			Yes	2,284
Paul Bunyan's Woodpile	CLASS III WA	338	CATEGORY 3	338		
Topaz Mt. Rockhounding Area	CLASS III RA, SRMA				Yes	
Joy Townsite			CATEGORY 3	80		
Swasey Mts.	SRMA		CATEGORY 4	29,840		
			CATEGORY 3	19,660		
Sheeprock/Tintic ORV Area	SRMA					
Yuba Reservoir	SRMA		CATEGORY 3	80		
Little Sahara Recreation Area	SRMA **		CATEGORY 4	12,650	Yes	3,500
Sevier Bridge Reservoir (Yuba Dam)			CATEGORY 3	80		
Baker Hot Springs			CATEGORY 2	160		
Fumarole Butte			CATEGORY 3	160		
Least Chub			CATEGORY 4	3,360		
Riparian Habitat			CATEGORY 3	2,500		
Critical Watershed			CATEGORY 2	10,800		
Gunnison Bend Reservoir			CATEGORY 2	80		
DMAD Reservoir and Sevier River			CATEGORY 2	2,600		
Topaz Migratory Bird Refuge			CATEGORY 2	3,360		
Deer and Elk Winter Range			CATEGORY 2	17,140		

* Part of the Little Sahara Recreation SRMA

** Continuation of current SRMAs

SUPPORT REQUIREMENTS

The following support will be required to achieve management objectives outlined for the lands program: clerical, land appraisals, mineral examinations, and site specific resource evaluations by appropriate staff specialists.

Program coordination between the lands program and other programs will be administered through the normal NEPA and LR process

CHAPTER 2: THE RESOURCE MANAGEMENT PLAN

Land Tenure Adjustment

As land ownership changes, livestock grazing capacity determinations will need to be made and adjustments made accordingly. Land acquired through exchange from The Nature Conservancy (Parrish estate) will be annexed to the Deep Creek Mountain WSA or ONA/ACEC. Requests for appraisals will be made through State Office staff.

Tresspass

Cadastral survey may be required on occasion to accurately identify land ownership.

Withdrawal

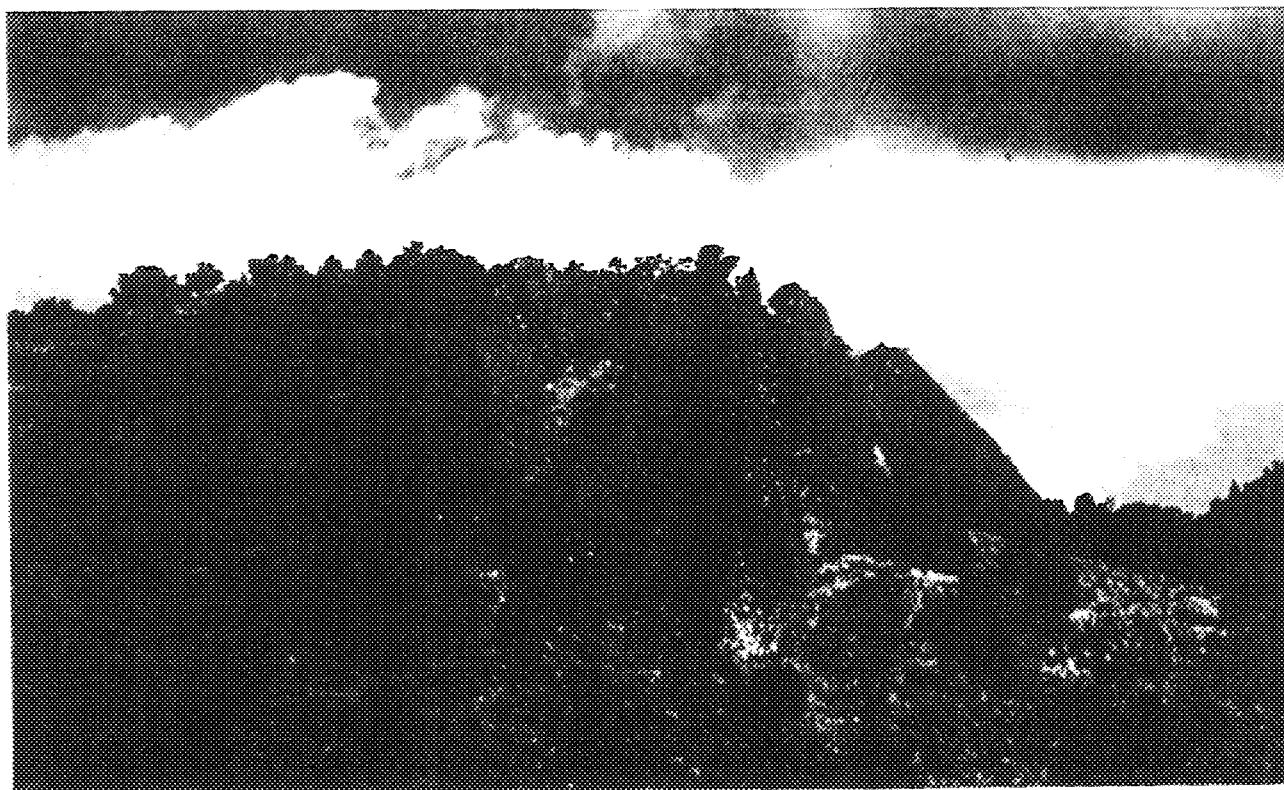
Permission to proceed and actual approval for withdrawals remain a Washington Office (WO) level function. Support will be required at the State and WO level.

PLAN MONITORING AND EVALUATION

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



Minerals



CHAPTER 2: THE RESOURCE MANAGEMENT PLAN

MINERAL RESOURCES

INTRODUCTION

The resource area has a speculative to very low potential for oil and gas resources, with the areas of highest potential being located in the eastern portion of the resource area. Geothermal resource potential ranges from moderate to low. The areas of moderate mineral potential include those areas in and around the Crater Springs KGRA, the Drum Mountains, and those areas delineated as being prospectively valuable for geothermal resources by the BLM. Locatable mineral resource potential ranges from low to high for precious, base and industrial minerals. Areas of high locatable mineral resource potential are located primarily within the mountain ranges. Saleable mineral resources occur throughout the HRRRA. Areas of greatest use of these commodities occur near more populated areas. Commercial and hobby collection of mineral specimens and gemstones also occurs throughout the resource area.



ELEMENTS OF THE PLAN

Goals and Objectives

The goals of the minerals program are to: (1) provide for exploration, 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

Geothermal

- 1 Offer over-the-counter leases on all areas with the fluid mineral leasing Categories 1, 2, & 3 except for Known Geologic Resource Areas (KGRAs). Map 8 shows locations of geothermal resources.
- 2 Offer by competitive sealed bids, all unleased, cancelled, expired, or otherwise terminated lease areas within KGRAs.

Implementation

Monitoring

Modification

CHAPTER 2: THE RESOURCE MANAGEMENT PLAN

Oil and Gas

Implementation

Monitoring

Modification

- 3 Lease, by non-competitive procedures, all areas within fluid mineral leasing Category 1, 2, and 3. In the event that oil or gas resources are discovered within the resource area, leases could be issued on a competitive basis within established Known Geologic Structures (KGS s) in accordance with the leasing category system set forth in the plan. Map 9 shows oil and gas categories and locatable minerals. The following special management areas are protected by oil and gas leasing categories:

TABLE 2-6

Name of Area	Category	Acreage
Rockwell Natural Areas	4	9,630
Gandy Mountain Caves	3	1,120
Deep Creek Mountains	3	30,740
Antelope Springs Cave	4	150
Paul Bunyan's Woodpile		320
Joy Townsite		80
Swasey Mountains	4	29,840
	3	19,660
Yuba Reservoir	3	80
Little Sahara Recreation Area	4	12,650
Sevier Bridge Reservoir (Yuba Dam)	3	80
Baker Hot Springs	2	160
Fumarole Butte	3	160
Least Chub	4	3,360
Riparian Habitat	3	2,500
Critical Watershed	2	10,800
Gunnison Bend Reservoir	2	80
DMD Reservoir and Sevier River	2	2,600
Topaz Migratory Bird Refuge	4	3,360
Deer and Elk Winter Range	2	17,140

Locatable Minerals

- 4 The following areas are or will be segregated from all mineral entry:

TABLE 2-7

AREAS SEGREGATED FROM MINERAL ENTRY

Name of Area	Acreage
Rockwell Natural Area	9,630
Topaz Wildlife Conservation Area*	4,142
Topaz Mountain	1,600
Dugway Geode Beds**	2,284
Gandy Mountain Caves	1,120
Little Sahara Recreation Area	3,500

* Existing Withdrawal

** Existing CMU Classification

CHAPTER 2: THE RESOURCE MANAGEMENT PLAN

- | | Implementation | Monitoring | Modification |
|---|---|------------|--------------|
| 5 | The entire resource area, except for those areas withdrawn, will remain open for mining claim location. Plans of operations are required for all activities with the exception of casual use within Areas of Critical Environmental Concern (ACECs). (See the Lands Section). | | |

Saleable Minerals

- 6 The entire resource area will be open to mineral disposal on a case-by-case basis except for those areas identified as oil and gas leasing Categories 3 & 4 .
- 7 The entire resource areas is open to hobby collection of invertebrate fossils and mineral specimens.

SUPPORT REQUIREMENTS

Oil and Gas

Sufficient personnel must be provided to process Applications for Permit to Drill (APDs) and Notices of Intent (NOIs) to conduct geophysical exploration operations within required time frames.

Geothermal

Sufficient personnel must be provided to process geothermal drilling permits, plans of operation, and NOIs to conduct geophysical exploration in the required time frames. Personnel must also be provided to monitor the surface and subsurface use of the resource.

Locatable Minerals

Locatable mineral activity is nondiscretionary and is regulated by 43 CFR 3800. Personnel must be provided to assure that activities are conducted in a manner which prevents undue or unnecessary environmental degradation.

NOIs and plans of operation are required as follows:

- NOI
- Any surface disturbance except casual use
- Plans of Operation
- Any surface disturbance in ACECS, Wilderness Study Areas (WSAs), Closed Off Road Vehicle (ORV) areas, etc.

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Watershed



CHAPTER 2: THE RESOURCE MANAGEMENT PLAN

WATERSHED

INTRODUCTION

The HRRRA is located in the Great Basin Hydrological Region. The area has 11 perennial streams including the Sevier River. Also, there are approximately 140 springs (3,840 acre-feet per year capacity) and seeps, 49 wells, and 49 reservoirs (98 acre-feet capacity). Spring water generally contains calcium bicarbonate or calcium chloride, while well water generally contains sodium chloride or sodium bicarbonate. No water quality data has been collected from reservoirs. Forty-three allotments in the resource area have been identified as having non-point source water pollution from soil loss under the criteria of Section 208 of the Federal Water Pollution Control Act.

Aquifers for the resource area are in three drainage basins: Southern Great Salt Lake Desert, Sevier Desert, and Sevier River.

Certificates or diligence claims are being obtained for water sources.

Water uses include irrigation, industrial, livestock, riparian, wildlife, and culinary.

Several vegetation treatment practices are commonly used for watershed improvement. Methods used in the HRRRA include chaining, burning, disc plowing, and pipe harrowing. Successful seedings have been established in many of the sagebrush and pinyon-juniper associations. See Map 10 for areas suitable for revegetation. This has allowed the land to be seeded to species that afford better soil protection. About 63,022 acres have been seeded, and approximately 89,000 additional acres have good seeding capabilities.

Soils of the HRRRA are found in desert basins and on parallel mountain ranges located in the Great Basin portion of western Utah. Approximately three percent of the resource area is high mountain, steep, containing well-drained soils on mountains and foothills in the humid climate zone. About five percent is very steep sites with rock outcrops on mountain sides in the moist sub-humid climate zone. About 12 percent is upland, well-drained, level to steep soils on mountain slopes, colluvial and alluvial fans in the dry sub-humid climate zone. About 35 percent is semi-desert well-drained, level to steep soils on hills,

lake terraces, alluvial fans in a semi-arid climate zone. About 45 percent is desert, well-drained to excessively drained, level to steep soils on hills, lake terraces, and alluvial fans in an arid climate zone.

GOALS AND OBJECTIVES

- Improve watershed conditions on areas identified with significant erosion condition problems and on other sensitive watershed and riparian areas.
- Avoid deterioration or improve watershed conditions on all other public lands.
- Assure an adequate supply of water for existing and proposed BLM management activities.
- Ensure production of quality water as required by state and federal legislative acts and regulations for on-site and downstream users.
- Coordinate with the proper local, state, and federal authorities on water-related issues.



CHAPTER 2: THE RESOURCE MANAGEMENT PLAN

PLANNED ACTIONS

Implementation

Monitoring

Modification

Watershed

- 1 Establish new, or continue existing, monitoring studies for: soil losses, channel erosion, and vegetation encroachment on the following problem allotments. A plan for possible remedial action will be prepared.

Maple Peak

Fool Creek #1

Oak City

Beryllium

McIntyre

West Mona

Nephi Bench

Sevier River

Rocky Ford

Shearing

Gilson

Valley Mountain

North Scipio

Jake's Canyon

Fool Creek #2

Finlinson

Sugarville

Sand Pass

Paint Mine

See Appendix 3

CHAPTER 2: THE RESOURCE MANAGEMENT PLAN

Water

Implementation

Monitoring

Modification

- 2 Continue to inventory and upgrade data on all water sources to provide the following information:
 - Location
 - Type of Water
 - Water Quantity
 - Water Quality
 - Public Needs
 - Current Status of Water Rights Appropriation
 - Public Water Reserve Identification
- 3 Continue to collect and refine soil surface data.

SUPPORT REQUIREMENTS

Division of operations support would be necessary for design, construction, and contract supervision on certain projects.

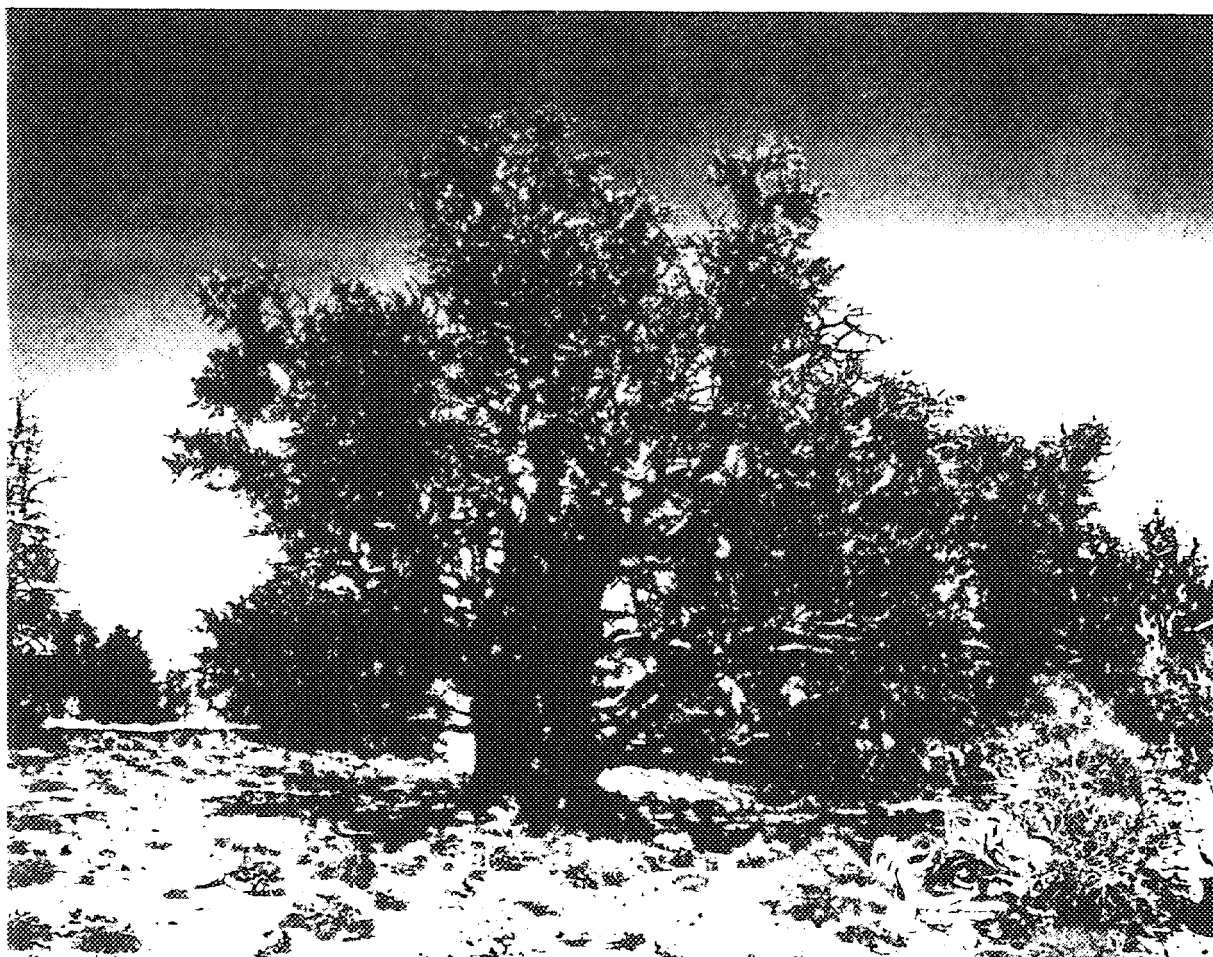
The rangeland and wildlife programs will need to prioritize monitoring to provide livestock and wildlife grazing study data to help determine causes and remedial action for watershed deterioration, and maintain soil loss within acceptable limits where required. If livestock grazing practices, wildlife use patterns, or wild horse uses prove detrimental to watershed values; the rangeland program will need to make necessary adjustments. The range program should provide input to obtain ecological site data.

PLAN MONITORING AND EVALUATION

This plan will be monitored each year to determine which action items need to be brought forward in the Annual Work Plan (AWP).

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Forest Resources



CHAPTER 2: THE RESOURCE MANAGEMENT PLAN

FOREST RESOURCES

INTRODUCTION

Forest resources in the HRRA consist of stands of mixed conifer timber (fir, spruce, pine), aspen, and pinyon-juniper woodlands. Scattered stands of mixed conifers are found at higher elevations in the Swasey Mountains and HRRA portion of the Deep Creek Mountains. These areas also have limited scattered stands of aspen. Throughout the resource area there are extensive areas of pinyon-juniper woodlands on lower mountain slopes and hills. Table 2-8 shows areas containing woodland products:

TABLE 2-8
AREAS CONTAINING WOODLAND PRODUCTS

AREA	Acres	Volume	
		Fuel Wood (cords-)	Post (each)
Keg Mountain	25,000	49,000	125,000
Swasey Mountain	23,000	82,000	20,000
Fish Springs Range	11,000	27,000	6,000
Deep Creek Mountains	17,000	63,000	11,000

¹Other areas (Thomas, Confusion, and Middle ranges, Drum Mountain, etc.) also contain significant, though predominantly scattered, volumes of woodland resources; however, no inventory of those areas has yet been conducted.

Although no inventory has been done, the total volume of timber in the HRRA is estimated to be approximately 625 thousand board feet (MBF). Most of the timber resources is on steep slopes (greater than 40 percent) without present access. Only about 15 percent is in areas with current access.

None of the timber resources in the Deep Creek Mountains are considered suitably stocked or located for commercial harvest operations.

ELEMENTS OF THE PLAN

Goals and Objectives

Manage woodland stands to supply woodland products on a sustained basis for fuelwood, posts, pinenuts, and Christmas trees at fair market value. Authorize harvest of woodland products that approximates the biological capability of the stands to replace trees harvested.

Increase the accessibility to and within the stands to more fully utilize woodland stands.



CHAPTER 2: THE RESOURCE MANAGEMENT PLAN

PLANNED ACTIONS	Implementation	Monitoring	Modification
1 • Wildlife will be considered during plans for timber harvest. Cutting areas, woodland sales, and vegetation treatments will be designed to provide adequate security and cover for wildlife.			
2 • Forest harvest and associated activities will be planned to minimize visual impacts.			
3 • Cutting areas, woodland sales, and vegetation treatments will be designed to meet Visual Resource Management (VRM) objectives.			
4 • Harvest activities could be restricted because of wet soil conditions to prevent soil compaction or rutting.			
5 • Harvesting on slopes exceeding 45 percent will be restricted to minimize surface disturbance.			
6 • 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., slopes, soil condition, and understory vegetation).			
7 • On crucial/critical wildlife ranges and riparian areas, only selective removal of woodland products or improvement will be allowed.			
8 • Christmas tree permits issued will be limited to estimated sustained yield capacity in accordance with Federal Land Policy Management Act (FLPMA).			

SUPPORT REQUIREMENTS

Engineering support will be required for the design and construction of access. Fire management support will be needed for management of wildfire.

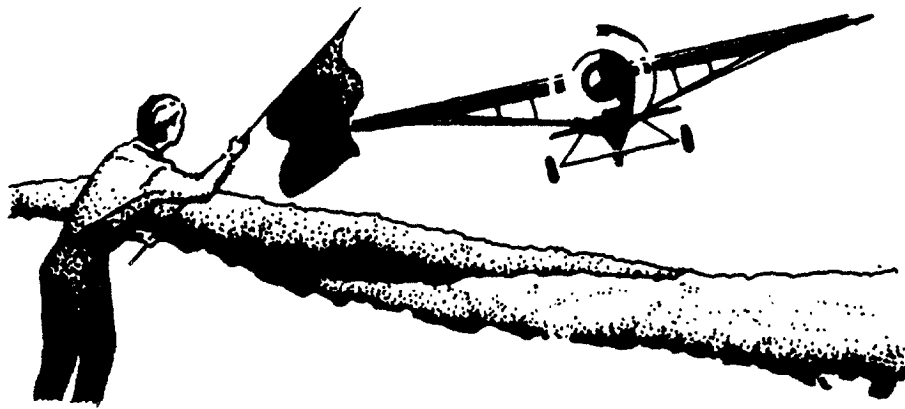
Program coordination with the range, wildlife, and watershed programs will be required in establishing green wood cutting areas, salvage areas, types of harvest methods, and planned results of harvest and mitigation requirements for the activity plan.

CHAPTER 2: THE RESOURCE MANAGEMENT PLAN

PLAN MONITORING AND EVALUATION

The forest resources plan elements will be reviewed at five-year intervals to determine if:

- Any measures to facilitate increased utilization of forest resources are warranted.
- Cutting practices are satisfactory or additional mitigation measures (increased monitoring of cutting activities, etc.) are required to protect other resources.
- There are unanticipated on- or off-site impacts.



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Fire Management



CHAPTER 2: THE RESOURCE MANAGEMENT PLAN

FIRE MANAGEMENT

INTRODUCTION

Historically, the 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.

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 1981 in the Dust Bowl, Blue Spring, and Red Butte Allotments and exceeded some 17,000 acres. In 1984, the resource area experienced 21 fires which burned 10,676 acres.



GOALS AND OBJECTIVES

The goals and objectives of the program will be to reduce human and ecological losses; complement resource management objectives and sustain productivity of biological systems through fire management.

PLANNED ACTIONS

- 1 A Fire Management Activity Plan will specifically identify and locate areas of full and limited suppression. Full suppression will continue up to 2,156,314 acres.
- 2 Limited suppression will be conducted up to 89,000 acres of pinyon-juniper and possibly other areas.
- 3 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.
- 4 Prescribed fire may be used in selected areas to convert vegetation types or meet other management objectives.

Implementation

Monitoring

Modification

CHAPTER 2: THE RESOURCE MANAGEMENT PLAN

- | | Implementation | Monitoring | Modification |
|---|--|------------|--------------|
| 5 | Following wildfire in normal wildfire areas, rehabilitation (chaining and seeding, drilling seed, etc.) will be conducted in accordance with the Richfield District Normal Year Fire Rehabilitation Plan (to be completed in FY 1987). | | |
| 6 | 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 Activity 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 U.S. Forest Service 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."

PLAN MONITORING AND EVALUATION

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



Appendicies



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APPENDIX 1

TOPAZ UNIT (WEST DESERT)

LIVESTOCK/BIG GAME FORAGE USE

CURRENT LIVESTOCK DATA		CURRENT ESTIMATED DEMAND FOR BIG GAME AND WILD HORSES (AUMs)								ESTIMATED FORAGE CAPACITY (AUMs)					
ALLOTMENT ¹	KIND	PERIOD OF USE		ACTIVE PREF. (AUMs)	AVG. A C T . USE (AUMs)	MULE DEER ²	BIG HORN SHEEP ²	ANTEL ²	WILD HORSES	TOTAL	COMP. FORAGE AVAIL	ADDT' L NON - COMP. BIG GAME FORAGE	TOTAL	INIT. INDI. L/S FORAGE CAP. ³	MGMT. CAT. (MC)
		CURRENT	PROP.												
*Antelope	Cattle	05/01-09/30	Same	99	98	140W	--	38YL	276YL	454	3,277	138	3,415	2,961	M
	Sheep	11/01-04/30	Same	3,956	987										
*Bitner Knoll	Sheep	11/16-04/30	Same	1,995	1,925	35YL		13YL		48	1,754	0	1,754	1,706	M
Boyd Station	Cattle	12/01-05/31	TBD	827	304	10YL		26YL	--	36	747	0	747	827	M
Callao	Cattle	11/01-06/15	TBD	703	703	--	--	19YL	--	19	660	0	660	703	M
Callao Bench	Cattle	11/01-05/31	Same	747	747	116W	2YL	19YL	--	137	706	137	843	747	I
Chalk Knolls	Cattle	03/15-09/30	Same	1,213	834	--	--	38YL	--	38	1,182	0	1,182	1,213	M
Cherry Creek	Cattle	03/01-02/28	TBD	1,500	1,378	--	--	38YL	--	38	1,856	0	1,856	1,500	M
Cowboy Pass	Sheep	11/01-04/30	Same	3,108	1,286	--	--	38YL	180YL	218	3,160	0	3,160	3,108	M
Coyote Knolls	Sheep	11/01-04/30	Same	2,331	2,034	--	--	38YL	48YL	86	2,099	30	2,129	2,331	M
Crater	Sheep	11/01-04/30	Same	3,026	2,449	--	--	38YL	--	38	2,986	0	2,986	3,026	M
*Death Canyon	Cattle	10/25-05/15	Same	1,110	1,070	56W	--	52YL	--	152	5,605	0	5,605	5,453	M
	Sheep	11/11-05/10	Same	5,028	4,858	44YL	--	--	--						
Desert Mtn.	Sheep	11/10-05/09	Same	3,544	1,572	112W	--	52YL	--	199	3,468	32	3,500	3,544	M
						35YL									
Devils Gate	Sheep	11/01-04/30	Same	306	300			13YL	13YL	13	327	0	327	306	
East Fish Sp.	Cattle	04/15-11/30	TBD	1,107	658	35YL	2YL	26YL	--	61	1,121	0	1,121	1,107	M
East Topaz	Sheep	12/11-03/31	Same	2,348	1,340	42YL	--	19YL	--	61	2,369	72	2,441	2,348	M
Flint	Sheep	11/01-04/15	Same	1,467	1,364	--	--	13YL	--	13	1,419	8	1,427	1,467	M
Freighter	Sheep	11/01-04/30	Same	954	958	11W	--	13YL	--	24	989	34	1,023	954	M
Gandy	Cattle	04/01-12/31	TBD	3,432	1,122	--	--	38YL	120YL	158	3,480	17	3,497	3,432	I
Henry Creek	Cattle	04/01-06/30	Same	171	24	--	--	6YL	--	6	205	0	205	171	M
Kane Spring	Sheep	04/01-04/17	Same	303	243	--	--	6YL	--	6	287	0	287	303	M
Knoll Springs	Cattle	05/01-10/31	Same	249	249	--	--	6YL	--	6	249	0	249	249	M
*Lady Laird	Sheep	11/01-04/30	Same	4,830	2,415	56W	--	38YL	--	94	4,158	0	4,158	4,064	M

APPENDIX 1

TOPAZ UNIT (WEST DESERT)

LIVESTOCK/BIG GAME FORAGE USE

CURRENT LIVESTOCK DATA		CURRENT ESTIMATED DEMAND FOR BIG GAME AND WILD HORSES (AUMs)									ESTIMATED FORAGE CAPACITY (AUMs)				
ALLOTMENT ¹	KIND	PERIOD OF USE		ACTIVE PREF. (AUMs)	AVG. ACT. USE (AUMs)	MULE DEER ²	BIG HORN SHEEP ²	ANTELOPE ²	WILD HORSES	TOTAL	COMP. FORAGE AVAIL	ADDT'L NON-COMP. BIG GAME FORAGE	INIT. INDI. L/S FORAGE CAP. ³	MGMT. CAT. (MC)	
		CURRENT	PROP.												TOTAL
*Little Drum	Sheep	11/01-04/30	Same	4,929	1,730	45W	--	38YL	--	83	4,419	0	4,419	4,336	M
Marble Wash	Sheep	11/01-04/30	Same	1,290	1,206	--	--	26YL	--	26	1,206	0	1,206	1,290	M
Meadow	Cattle	05/01-05/15	Same	58	58	56W	--	45YL	--	101	3,665	52	3,717	3,454	M
Creek	Sheep	11/01-05/10	Same	3,396	3,239	--	--	--	--	--	--	--	--	--	--
Mountain	Cattle	07/16-10/16	Same	352	352	214S	1W	--	--	298	352	411	763	352	I
Partoun	Cattle	03/01-12/31	TBD	2,185	732	169W	1W	64YL	--	355	4,260	455	4,715	4,379	M
	Sheep	11/02-04/26	Same	2,194	1,820	121S	--	--	--	--	--	--	--	--	--
*Riverbed	Sheep	11/02-04/15	Same	4,906	3,122	56W	--	77YL	--	157	4,239	327	4,566	4,239	M
*Sand Pass	Sheep	11/01-04/30	Same	2,000	1,141	22W	--	6YL	--	28	1,481	79	1,560	1,481	M
Sheep	Cattle	11/01-04/15	TBD	355	203	--	--	13YL	--	13	956	0	956	622	I
	Sheep	04/01-04/30	Same	267	200	--	--	--	--	--	--	--	--	--	--
Smelter Mtn.	Cattle	01/01-09/30	TBD	719	719	--	--	19YL	--	19	795	0	795	719	I
Smith Creek	Cattle	11/01-04/30	Same	138	76	--	--	--	--	0	161	0	161	138	M
Spor Mtn.	Sheep	11/01-04/01	Same	2,750	1,273	71YL	--	26YL	--	97	3,256	78	3,334	2,756	M
Sugarville	Cattle	03/16-10/31	TBD	2,959	2,090	--	--	13YL	--	13	3,044	0	3,044	2,959	M
*Swasey Knoll	Sheep	11/01-04/30	Same	4,350	2,649	28W	--	51YL	--	79	3,412	0	3,412	3,333	M
*Table M.	Sheep	11/01-04/30	Same	4,048	3,153	--	--	51YL	--	107	3,337	0	3,337	3,230	M
Tatow	Cattle	05/01-09/30	Same	220	220	--	--	32YL	864YL	1,436	5,317	166	5,483	4,131	M
	Sheep	11/01-04/30	Same	3,911	1,946	--	--	--	--	--	--	--	--	--	--
Thousand	Cattle	10/29-06/09	TBD	8,765	6,160	796YL	44YL	409YL	1,320YL	2,569	21,873	844	22,717	18,511	I
Peaks	Sheep	11/02-05/08	Same	9,746	6,634	--	--	--	--	--	--	--	--	--	--
Topaz	Cattle	12/01-04/30	Same	245	61	--	--	--	--	0	245	0	245	245	M
Tule Spring	Sheep	11/01-04/30	Same	1,196	762	--	--	13YL	--	13	1,084	0	1,084	1,196	M
Tule Valley	Cattle	05/16-10/15	Same	156	120	--	--	--	98YL	96	351	0	351	156	M
Trail Herds	Cattle				18YL	--	--	--	18		0				
Warm Creek	Sheep	11/01-04/30	Same	522	528	--	--	19YL	--	19	522	0	522	522	M
*Wild Horse	Sheep	12/01-04/30	Same	3,577	1,927	22W	--	51YL	--	98	2,880	109	2,989	2,880	M

APPENDIX 1

LIVESTOCK/BIG GAME FORAGE USE

TINTIC UNIT (EASTERN FOOTHILLS)

CURRENT ESTIMATED ESTIMATED
CURRENT LIVESTOCK DATA DEMAND FOR BIG GAME FORAGE CAPACITY (AUMs)

ALLOTMENT ¹	KIND	PERIOD OF USE		ACTIVE PREF. (AUMs)	AVG. ACT. USE (AUMs)	MULE DEER ²	ELK	ANTELOPE ²	TOTAL	COMP. FORAGE AVAIL	ADDT'L NON- COMP. BIG. GAME FORAGE	TOTAL	INIT. INDI. L/S FORAGE CAP. ³	POT. ADDT'L FORAGE VEG. TRTMT ⁴	MGMT. CAT. (MC)
		CURRENT	PROP.												
*Beryllium	Cattle	05/01-10/15	Same	666	666	--	--	6YL	6	539	0	539	533		M
*Big Hollow	Cattle	03/1 5-06/30	Same	216	0	35YL	--	--	35	35	85	110	35	80	|
Blue Spring	Cattle	04/01-05/31	Same	180	81	35YL	41YL	--	76	375	82	457	180		M
Boulter	Sheep	05/01-06/10	Same	723	497	176YL	--	--	176	947	284	1,231	723	240	|
Broad Canyon	Cattle	11/01-12/31	Same	20	20	35YL	34YL	--	69	29	68	97	20		|
Cals Valley	Cattle	04/01-05/31	Same	72	18	21YL	--	--	21	101	26	127	72		M
Cedar Springs	Cattle	07/01-10/28	Same	24	24	44YL	--	--	44	24	16	40	24		|
Chicken Creek	Cattle	04/01-05/31	Same	48	48	--	18YL	--	18	48	7	55	48		M
Chriss Creek	Cattle	06/01-10/28	Same	78	78	18YL	24YL	--	18	86	23	133	78	110	|
Cove	Cattle	11/01-05/15	Same	238	159	52YL	--	--	44	229	50	278	238		|
Cutler	Cattle	10/16-12/15	Same	32	26	10YL	--	--	10	10	6	16	32		|
Deer Foot	Cattle	01/10-03/31	Same	54	32	44YL	--	--	44	50	54	104	54	100	|
Dust Bowl	Cattle	03/15-05/31	Same	916	701	47W	58YL	--	155	1,651	300	1,951	916	640	|
						70YL									
*Ferner Dog Valley	Cattle	08/01-09/25	Same	1,218	1,148	101W	117YL	--	358	970	817	1,787	970	900	|
						157s									
Finlinson 21A	Cattle	05/01-06/30	Same	60	60	26YL	29YL	--	26	65	65	130	60		|
*Fool Creek 1	Cattle	05/16-12/15	Same	72	72	10YL	--	--	10	49	0	49	39		C
Fool Creek 2	Cattle	05/16-08/15	Same	16	6	10YL	--	--	10	6	0	6	16		C
Garrett	Cattle	11/01-04/30	Same	63	21	10YL	--	--	10	35	34	69	63		C
	Sheep	11/01-04/30	Same	1,298	788	121W	137YL	6YL	306	989	597	1,583	986	320	
						175S									|
*Jakes Canyon	Cattle	03/16-05/31	Same	113	68	35YL	--	--	35	38	37	75	38		|
Jenny Lind	Cattle	05/21-10/05	Same	108	108	35YL	6YL	--	35	118	61	177	108	137	|
Juab	Cattle	10/01-12/01	Same	112	0	10YL	--	--	10	82	12	94	82	100	|
*Kimball Creek	Cattle	06/01-09/21	Same	3,081	2,431	370YL	154YL	--	498	1,727	711	2,438	1,727	1,100	|
						13S									
*Klondike	Cattle	03/15-04/30	Same	60	35	52YL	--	--	44	14	37	51	14	49	|
Levan	Cattle	04/23-05/22	Same	269	30	38W	41YL	--	79	552	127	679	269		|
Lunt-Latimer	Cattle	04/01-06/15	Same	38	10	--	23YL	--	0	46	27	73	38		M
*Lynndyl	Cattle	05/01-10-01	Same	1,676	1,676	--	--	6YL	6	575	23	598	575		|

APPENDIX 1

TINTIC UNIT (EASTERN FOOTHILLS)

LIVESTOCK/BIG GAME FORAGE USE

CURRENT LIVESTOCK DATA				CURRENT ESTIMATED DEMAND FOR BIG GAME (AUMs)						ESTIMATED FORAGE CAPACITY (AUMs)					
ALLOTMENT ¹	KIND	PERIOD OF USE		ACTIVE PREF. (AUMs)	AVG. ACT. USE (AUMs)	MULE DEER ²	ELK	ANTEL ²	TOTAL	COMP. FORAGE AVAIL	ADDT' L NON-COMP. BIG. GAME FORAGE	TOTAL	INIT. L/S FORAGE CAP. 3	POT. ADDT' L THRU. VEG. TRTMT ⁴	MGMT. CAT. (M/C)
		CURRENT	PROP.								FORAGE		FORAGE		
*Maple Peak	Cattle	05/21-10/05	Same	5,137	4,973	2078YL	--	--	2,078	4,091	2,318	6,409	4,091	3,200	
*Middle Fork	Cattle	04/01-12/31	Same	564	153	44W 54S	47YL	--	145	259	137	396	251	480	|
Mills	Cattle	03/01-04/15	Same	200	200	22W	47YL	--	69	336	84	420	200	|	
*Nelson	Cattle	05/01-09/21	Same	521	521	--	--	13YL	13	322	0	322	309		|
Nephi Bench	Cattle	09/01-10/31	Same	122	37	16W	12YL	--	16	118	47	165	122		|
*North Scipio	Cattle	03/01-02/28	Same	762	333	72YL	--	--	72	539	169	708	539	300	|
Oak City	Cattle	05/16-08/31	Same	2,205	996	147W	--	--	147	1,149	153	1,302	1,149		|
*Okelberry	Cattle	05/10-09/30	Same	272	235										
	Sheep	05/01-06/30	Same	589	504	237	110YL	--	208	819	243	862	619	200	|
*Paint Mine	Cattle	04/06-06/05	TBD	545	241	26S	--	--	26	216	89	305	216		|
Red Butte	Cattle	04/01-06/30	Same	876	392	35YL	53W	--	88	1,295	78	1,373	876		M
Riley Spring	Sheep	05/01-05/30	Same	144	94	22W 24S	--	--	46	179	91	270	144	200	|
⁵ Rocky Ford	Cattle	05/16-08/15	Same	792	969	35YL	--	--	35	976	141	1,117	792	160	|
Round Valley	Cattle	12/16-03/31	Same	376	286	62YL	25YL	--	87	332	99	431	376		I
*Sage Valley 16	Cattle	12/01-05/31	TBD	948	433	28W	35YL	--	87	525	145	760	525	500	I
*Sage Valley 17	Cattle	11/01-05/15	Same	2,376	1,057	28W	80YL	--	121	1,376	153	1,529	1,376	400	I
*Salt Creek	Sheep	05/01-06/15	Same	225	225	84W 145S	69YL	--	298	164	178	342	164		M
*Sevier River	Cattle	03/15-11/30	Same	1,066	1,066	70YL	--	--	70	601	270	871	601	300	|
Shearing	Sheep	04/06-04/30	TBD	1,431	795	140W	--	--	89	2,020	974	2,994	1,431	2,400	|
Sheeprock	Cattle	05/21-10/05	Same	1,567	1,510	1148YL	--	--	1,148	1,456	1,099	2,555	1,567	1,000	|
*Snadge Hollow	Cattle	03/15-05/31	Same	77	76	52YL	--	--	44	34	61	95	34	80	|
*Spring Canyon	Cattle	11/01-07/31	Same	156	114										
	Sheep	05/01-05/15	Same	482	115	123YL	80YL	--	205	277	210	487	277	300	|
'Stone	Cattle	11/012-04/30	Same	120	120	52YL	--	--	52	61	54	115	61	140	|
Stone Quarry	Sheep	05/01-05/31	Same	225	210	34W	41YL	--	105	264	178	442	225	300	|

30S

APPENDIX 1

TINTIC UNIT (EASTERN FOOTHILLS)

LIVESTOCK/BIG GAME FORAGE USE

CURRENT LIVESTOCK DATA			CURRENT ESTIMATED DEMAND FOR BIG GAME AND WILD HORSES (AUMs)							ESTIMATED FORAGE CAPACITY (AUMs)					
ALLOTMENT ¹	KIND	PERIOD OF USE CURRENT	PROP.	ACTIVE PREF. (AUMs)	AVG. ACT. USE (AUMs)	BIG			WILD HORSES	TOTAL	COMP. FORAGE AVAIL	ADDT ¹ L NON- COMP. BIG GAME FORAGE		INIT. INDI. L/S FORAGE CAP. ³	MGMT. CAT. (MC)
						MULE DEER ²	SHEEP ²	ANTEL ²				TOTAL	TOTAL		
*Summit	Cattle	03/16-05/15	Same	238	58	104YL	..	..	104	138	160	298	138	60	|
⁵ Tintic Pastures	Cattle	04/01-10/31	Same	840	910	21YL	..	..	21	773	0	773	840		M
Twelve-B	Cattle	05/01-05/31	Same	7	7	--	--	..	0	8	0	8	7		M
*Valley Mtn.	Cattle	05/01-06/20	Same	100	100	21YL	..	..	21	54	19	83	52		|
*Washboard	Cattle	05/16-12/31	Same	860	204	35YL	24W	..	59	411	103	514	411	500	|
West Mona	Cattle	04/11-06/30	TBD	659	533	177YL	109YL	..	235	713	661	1,374	659	80	|
*Yuba	Cattle	03/01-02/28	Same	773	272	21YL	24W	..	45	542	54	596	542	370	|
TOTALS				147,390	98,594	9,964	1,063	1,581	15,558	139,962	15,016	155,068	130,100	17,077	

- The allotments that are denoted with * are the 38 target allotments that require monitoring and/or proposed allocation adjustments for livestock.
 - Seasons for Wildlife Species: S-Summer, W-Winter, YL-Year Long.
 - Initial Indicated Livestock Forage Capacity: The forage levels in this column are the same as those shown in the ACTIVE PREFERENCE column with the exception of the indicated reductions on the 38 allotments. These represent estimates only that will be refined through monitoring studies.
 - Potential Additional Forage through Vegetation Treatments: These estimates for the over 81,000 suitable treatment acres. Only approx. 65,000 acres are proposed for treatment, so the actual yields will be somewhat less than shown here.
 - These two allotments have actual use levels that presently exceed active preference. Both allotments have had forage increase due to vegetation treatments and have been licensed on an additional temporary renewable basis.
- TBD - To Be Determined through monitoring studies.

APPENDIX 2
WILDLIFE FORAGE ALLOCATIONS
MILE DEER

ALLOTMENT	CURRENT FORAGE USE	NON- COMP. FORAGE AVAILABLE	TOTAL ALLOCATION	PRIOR STABLE NUMBERS	DIFFERENCE
Antelope	140	35	175	175	0
Big Hollow	35	75	110	120	-10
Bitner Knoll	35	0	35	72	-37
Blue Spring	35	64	99	99	0
Boulter	176	250	426	426	0
Boyd Station	10	0	10	18	-8
Broad Canyon	35	0	35	33	2
Callao Bench	116	0	116	116	0
Cals Valley	21	26	47	54	-7
Cedar Spring	44	12	56	56	0
Chicken Creek	0	7	7	14	-7
Chriss Creek	18	4	22	22	0
Cove	52	50	102	98	4
Cutler	10	6	16	6	10
Death Canyon	100	0	100	471	-371
Deer Foot	52	54	106	55	51
Desert Mountain	147	0	147	93	54
Dust Bowl	167	0	167	167	0
East Fish Spring	35	0	35	85	-50
East Topaz	42	0	42	42	0
Ferner Dog Valley	258	0	258	258	0
Finlinson 21A	26	3	29	29	0
Fool Creek 1	10	0	10	10	0
Fool Creek 2	10	0	10	10	0
Freighter	11	3	14	14	0
Garrett	10	34	44	10	34
Gilson	296	0	296	296	0
Jake's Canyon	35	37	72	55	17
Jenny Lind	35	0	35	35	0
Juab	10	12	22	8	14
Kinball Creek	370	711	1081	1268	-187
Klondike	52	37	89	55	34
Lady Laird	56	0	56	56	0
Levan	38	0	38	38	0
Little Drum	45	0	45	45	0
Lunt-Latimer	0	27	27	98	-71
Maple Peak	2078	2318	4396	3195	1201
McIntyre	200	420	620	200	420
Meadow Creek	56	9	65	65	0
Middle Fork	98	0	98	98	0
Mills	22	76	98	98	0
Mountain	297	246	561	797	-236

APPENDIX 2
WLDLIFE FORAGE ALLOCATIONS
MULE DEER (Continued)

ALLOTMENT	CURRENT FORAGE USE	NON- COMP. FORAGE AVAILABLE	TOTAL ALLOCATION	PRIOR STABLE NUMBERS	D I F F E R E N C E
North Bench	16	0	16	16	0
North Scipio	72	169	241	72	169
Oak City	147	153	300	147	153
Okelberry	237	243	480	952	-472
Paint Mine	26	0	26	26	0
Partoun	290	391	681	1416	-735
Red Butte	35	28	63	63	0
Riley Spring	46	85	131	131	0
Riverbed	80	327	407	431	-24
Rocky Ford	35	82	117	117	0
Round Valley	62	9	71	71	0
Sage Valley 16	52	0	52	52	0
Sage Valley 17	52	153	205	775	-570
Salt Creek	229	178	407	1121	-714
Sand Pass	22	3	25	25	0
Sevier River	70	22	92	92	0
Shearing	140	0	140	140	0
Sheeprock	1148	1099	2247	2132	115
Snadge Hollow	52	61	113	136	-23
Spring Canyon	123	176	299	299	0
Spor Mountain	71	5	76	76	0
Stone	52	54	106	357	-251
Stone Quarry	64	80	144	144	0
Sunmit	104	160	264	104	0
Swasey Knoll	28	0	28	28	0
Table Mountain	56	0	56	134	-78
Tatow	540	0	540	540	0
Tintic Pastures	21	0	21	21	0
Thousand Peaks	796	546	1342	1673	-331
Trail Herd	18	0	18	46	-28
Valley Mountain	21	19	40	54	-14
Washboard	35	0	35	35	0
West Mna	177	52	229	229	0
Wild Horse	47	109	156	281	-125
Yuba	21	54	75	81	-6
Total	10268	8792	19060	20977	-1917

APPENDIX 2
WLDLIFE FORAGE ALLOCATIONS

ANTELOPE

ALLOTMENT	CURRENT FORAGE USE	NON-COMP. FORAGE AVAILABLE	TOTAL ALLOCATION	PRIOR STABLE NUMBERS	DIFFERENCE
Antelope	38	103	141	454	- 313
Beryllium	6	0	6	22	- 16
Bitner Knoll	13	0	13	86	- 73
Boyd Station	26	0	26	13	13
Callao	19	0	19	278	- 259
Callao Bench	19	106	125	278	- 153
Chalk Knolls	38	0	38	203	- 165
Cherry Creek	38	0	38	154	- 116
Cowboy Pass	38	0	38	174	- 136
Coyote Knolls	38	30	58	289	- 221
Crater	38	0	38	260	- 222
Death Canyon	52	0	52	208	- 156
Desert Mountain	52	32	84	177	- 93
Devils Gate	13	0	13	0	13
East Fish Spring	26	0	26	162	- 136
East Topaz	19	72	91	119	- 28
Flint	13	8	21	70	- 49
Freighter	13	31	44	54	- 10
Gandy	38	17	55	227	- 172
Gilson	6	16	22	22	0
Henry Creek	6	0	6	0	6
Kane Spring	6	0	6	33	- 27
Knoll Spring	6	0	6	6	0
Lady Laird	38	0	38	214	- 176
Little Drum	38	0	38	309	- 271
Lynndyl	6	23	29	27	2
Maple Peak	0	0	0	66	- 66
Marble Wash	26	0	26	26	0
McIntyre	6	76	82	82	0
Meadow Creek	45	43	88	198	- 110
Nelson	13	0	13	34	- 21
Partoun	64	0	64	64	0
Riverbed	77	0	77	208	- 131
Sand Pass	6	76	82	133	- 51
Shearing	0	49	49	49	0
Sheep	13	0	13	88	- 75
Sheeprocks	0	0	0	22	- 22
Smelter Mountain	19	0	19	272	- 253
Smith Creek	0	0	0	70	- 70
Spor Mountain	26	73	99	204	- 105
Sugarville	13	0	13	102	- 89
Swazy Knoll	51	0	51	200	- 149

APPENDIX 2
WLDLIFE FORAGE ALLOCATIONS
ANTELOPE (Continued)

ALLOTMENT	CURRENT FORAGE USE	NON- COMP. FORAGE AVAILABLE	TOTAL ALLOCATION	PRIOR STABLE NUMBERS	DIFFERENCE
Table Mountain	51	0	51	165	- 114
Tatow	32	166	198	208	- 10
Thousand Peaks	409	0	409	409	0
Topaz	0	0	0	3	- 3
Tule Spring	13	0	13	62	- 49
Warm Creek	19	0	19	19	0
Wild Horse	51	0	51	142	- 91
Total	1577	921	2498	6665	- 4167

APPENDIX 2
WILDLIFE FORAGE ALLOCATIONS

ELK

ALLOTMENT	CURRENT FORAGE USE	NON- COMP. FORAGE AVAILABLE	TOTAL ALLOCATION	PRIOR STABLE NUMBERS	DIFFERENCE
Blue Spring	41	18	59	41	18
Boulter	30	34	64	30	34
Broad Canyon	34	68	102	34	68
Cedar Spring	0	4	4	2	2
Chicken Creek	18	0	18	18	0
Chriss Creek	24	19	43	0	43
Dust Bowl	58	300	358	11	347
Ferner Dog Valley	117	817	934	117	817
Finlinson 21A	29	62	91	29	62
Gilson	137	581	718	137	581
Jenny Lind	6	61	67	6	61
Kimball Creek	167	0	167	0	167
Levan	41	127	168	41	127
Lunt-Latimer	23	0	23	23	0
Middle Fork	47	137	184	47	137
Mills	47	8	55	47	8
Nephi Bench	12	47	59	12	47
Okelberry	110	0	110	110	0
Paint Mne	0	89	89	29	60
Red Butte	53	50	103	53	50
Riley Spring	0	6	6	29	-23
Rocky Ford	0	59	59	63	-4
Round Valley	25	90	115	25	90
Sage Valley 16	35	145	180	35	145
Sage Valley 17	80	0	80	80	0
SaIt Creek	69	0	69	80	-11
Sevier River	0	248	248	18	230
Shearing	0	925	925	46	879
Spring Canyon	80	34	114	80	34
Stone Quarry	41	98	139	41	98
Washboard	24	103	127	24	103
West Mbn	109	609	718	109	609
Yuba	24	0	24	24	0
Total	1481	4739	6220	1441	4779

APPENDIX 2
WLDLIFE FORAGE ALLOCATIONS
BIGHORN SHEEP

ALLOTMENT	CURRENT FORAGE USE	NON- COMP. FORAGE AVAILABLE	TOTAL ALLOCATION	PRIOR STABLE NUMBERS	DIFFERENCE
Callao Bench	2	31	33	33	0
East Fish Spring	2	0	2	113	-111
Mountain	1	147	148	148	0
Partoun	1	64	65	65	0
Thousand Peaks	44	292	336	336	0
Trail Herd	0	0	0	31	-31
Total	50	534	584	726	-142

APPENDIX 3
ALLOTMENT WATERSHED
ANALYSIS

Priority	Allotment	Erosion Mod (%)	Condition Critical (Acres)	Class	Non-Point Source Poll	Critical Aquifer Recharge Areas	Potential for Over-Grazing	Ranking 2
4	Antelope					X	X	2
	Beryllium	34	335		X			4
	Boyd Station					X	X	2
	Big Hollow				X			1
	Bitner Knoll					X	X	2
	Blue Spring				X	X		2
	Boulter					X		1
	Broad Canyon	46			X			2
	Callao Bench					X		1
	Cal's Valley				X			1
	Chalk Knoll	42						1
	Cherry Creek	30						1
	Chicken Creek				X			1
	Chriss Creek				X			1
	Cove				X	X		2
	Cutler				X			1
	Cowboy Pass					X	X	2
	Coyote Knolls					X	X	2
	Crater					X		1
	Death Canyon					X	X	2
	Deer's Foot				X			1
	Desert Mountain					X		1
	Devil's Gate					X	X	2
	Oust Bowl				X	X		2
	East Fish Spring					X		1
	East Topaz					X		1
	Ferner Dog Valley	67						1
	16	Finlinson	100			X	X		3
Flint						X		1
2	Fool Creek #1				X		1	
15	Fool Creek #2		120		X			3
	Freighter					X		1
	Gandy					X		1
	Garrett	64						1
11	Gilson	50			X	X		3
	Henry Creek					X		1
14	Jake's Canyon				X	X	X	3
	Jenny Lind					X		1
	Juab				X	X		2
	Kane Spring					X		1
	Kimball Creek					X	X	2
	Klondike				X			1
	Knoll Spring	42				X		2
	Lady Laird					X	X	2
	Levan				X			1
	Little Drum					X	X	2
	Lunt-Latimer				X			1
	Lynndyl	155			X			2

**APPENDIX 3
ALLOTMENT WATERSHED
ANALYSIS**

Priority	Allotment	Erosion Condition Class Mod (%)	Critical (Acres)	Non-Point Source Poll	Critical Aquifer Recharge Areas	Potential for Over-Grazing	Ranking 2
1	Maple Peak		1,554		X	X	3
	Marble Wash				X		1
5	McIntyre		24,515	X	X		3
	Meadow Creek				X		1
	Middle Fork			X			1
	Mills			X			1
	Nelson		3,264				2
7	Nephi Bench	34		X	X		3
13	North Scipio			X	X	X	3
3	Oak City	3	7,134	X			4
	Okelberry				X	X	2
19	Paint Mine	54		X	X	X	4
	Partoun				X		1
	Red Butte			X	X		2
	Riley Spring	80					1
	Riverbed				X		1
9	Rocky Ford	70		X	X		3
	Sage Valley 16			X			1
	Sage Valley 17			X			1
	Salt Creek			X			1
18	Sand Pass			X	X	X	3
8	Sevier River			X	X	X	3
10	Shearing	56	326				3
	Sheep	33					1
	Sheep Rocks	57					1
	Smelter Mountain	60					1
	Smith Creek				X		1
	Snadge Hollow			X			1
	Spor Mountain				X		1
	Spring Canyon			X			1
	Stone			X			1
	Stone Quarry			X			1
17	Sugarville	40	3,597				3
	Swasey Knoll				X	X	2
	Table Mountain				X	X	2
	Tatow				X		1
	Tintic Pasture				X		1
	Thousand Peaks				X		1
	Trail Herd				X		1
	Tule Spring				X	X	2
	Tule Valley	31					1
12	Valley Mountain			X	X	X	3
	Warm Creek				X		1
	Wash Board			X			1
6	West Mtn	35		X	X		3
	Wild Horse				X	X	2
	Yuba			X			1

1. Entries in the Acres Critical Condition column are given a double ranking as it appears to be twice as important to decision making as other items.
2. This ranking provides a range within which priorities were established.

INDEX

Acquisition	57,68
Activity plans	iii, 2, 4, 56
Adjustment	2, 3, 21, 22, 24, 26, 55, 57, 67, 72, 83
Agriculture	2
Air quality maintenance requirements	94
All Terrain Vehicle (ATV)	54
Allocation (adjustment)	3, 15, 16, 21, 25, 57
Allotment Management Plan (AMP)	4, 23
Alternatives	2, 3, 4, 10
Amendment	2, 3, 4, 9, 68, 72
Animal and Plant Health Inspection Service (APHIS)	31
Antelope	1, 15, 35, 36, 39
Antelope Springs	30, 63
Antelope Springs Cave	51, 53, 58
Appeal	23
Application for Permit to Drill (APD)	77
Area of Critical Environmental Concern (ACEC)	3, 5, 53, 56, 58, 67, 77
Atriplex canescens gigantea	51
Authorized practices	3
BLM	iii, 1, 2, 4, 9, 10, 13, 23, 24, 25, 31, 36, 37, 38, 40, 52, 64, 67, 70, 75, 81, 94
BLM Manual	9, 36, 37, 38, 40, 67, 94
Baker Hot Springs	30, 53, 70
Basin Creek	30, 51
Big game	15, 35, 36
Bighorn sheep	1, 35, 36, 40, 43
Birch Creek	30, 41, 51
Bonneville cutthroat trout	35, 51
Burning	15, 81, 94
Cadastral survey	72
Callao	1
Cane Springs	30
Cattle	13, 25, 26, 27
Central Utah Project	57
Certificates	81
Chaining	15, 37, 81, 94
Chemical	10, 31
Cherry Creek	30, 54
Civilian Conservation Corps (CCC)	63
Climate zone	81
Cold Spring	30, 41
Conformance	2, 3, 4, 67
Contour level	40, 43
Contracts	2
Cooperative Management Agreement (CMA)	16, 58
Costs	4, 5, 10, 27, 29
Canyonwood Canyon Creek	30, 51
Cow Hollow Creek	30
Coyote Spring	30, 41
Crater Springs KGRA	75
Criteria	iii, 9, 16, 63, 81
Critical habitat	36, 37, 38, 39, 40, 43, 88
Crystal Ball Cave	51, 52
Cultural inventory	9
Cultural resources..	9, 63, 64

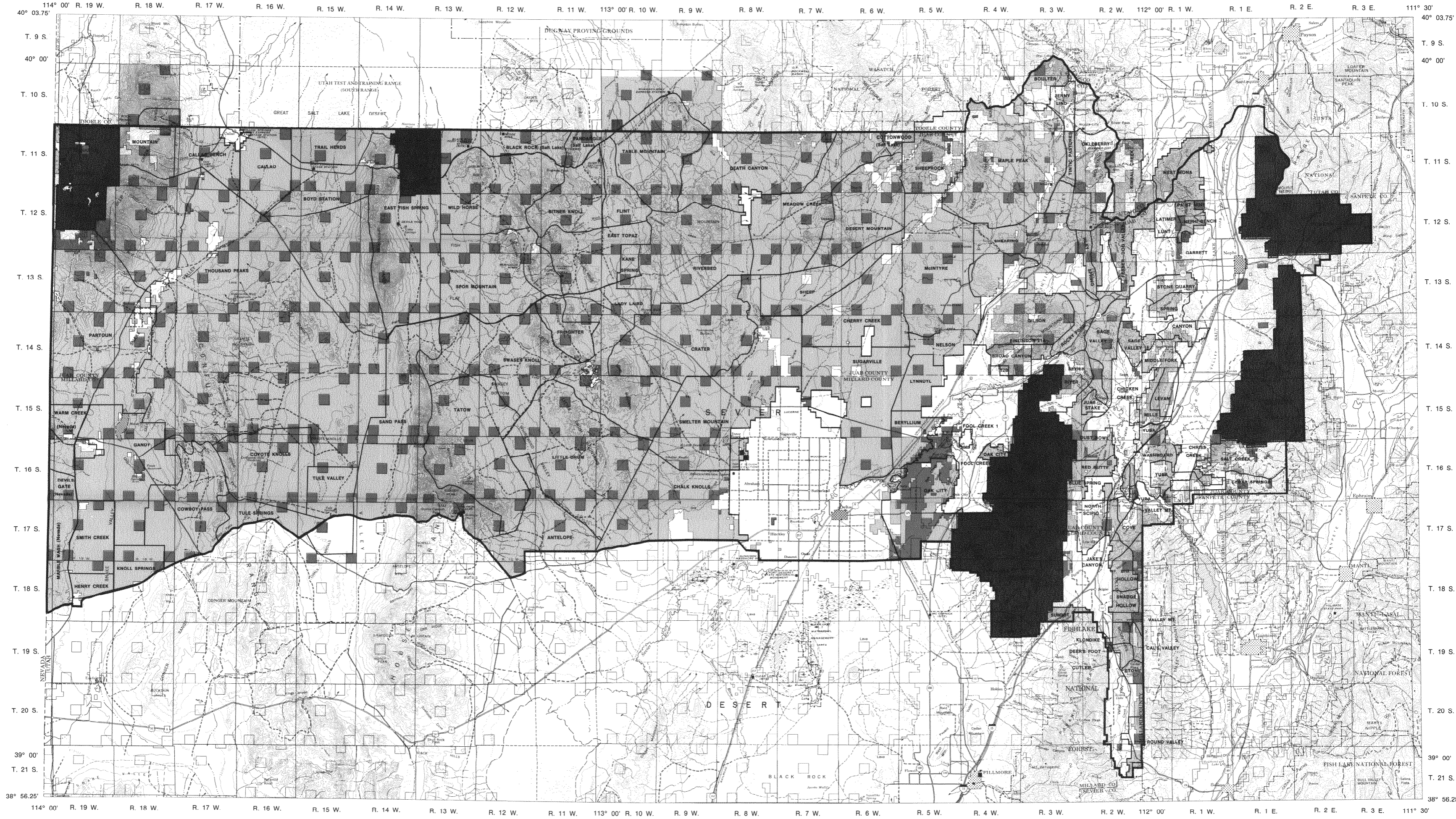
DMAD Reservoir	30, 54
Dace	35, 36, 41
Deep Creek Mountain creeks	30
Deep Creek Mountains	29, 35, 36, 38, 40, 41, 51, 53, 56, 59, 87
Deep Creek Mountains WSA	38
Desert Archaic Culture	63
Desert bighorn sheep	1, 35, 36, 40, 43
Desert land entries	67
Designation	2, 3, 4, 9, 31, 53, 54, 55, 59, 67, 70
Diligence	81
Disc plowing	81
Disposal (land)	3, 68, 77
Division of Operations	31, 43, 58
Drum Mountains	75
Dugway Geode Beds	70
Elk	1, 35, 36, 39
Ely District	13
Environmental Assessment (EA)	10, 25, 68
Environmental Impact Statement (EIS)	iii, 2, 4
Environmental Protection Agency (EPA)	2
Erosion	9, 52, 81, 82
Exchange	67, 68, 88
Federal Land Policy and Management Act (FLPMA)	1, 69
Federal Water Pollution Control Act	81
Fence modification	35
Fire management activity plan	93, 94
Fire management	88, 93, 94
Fire rehabilitation	94
Fish Lake National Forest	13, 63, 70
Fish Springs Mountain	36, 40
Fish Springs National Wildlife Refuge	70
Fish Springs Pony Express Station	70
Fish and Wildlife Service (FWS)	31, 51
Forage allocation	3, 13, 16, 21, 36, 47
Forest Service (FS)	10, 94
Forest resources	87, 89
Fremont Culture	63
FumaroleButte	53
Gamespecies	35, 36
Gandy	1
Gandy Mountain Caves	51, 52, 56, 59, 70
Geothermal resource	75, 80
Goshute Indian	1, 70
Granite Creek	30, 41, 51
Grazing	1, 2, 3, 4, 10, 15, 16, 23, 24, 25, 26, 27, 29, 30, 36, 37, 38, 40, 55, 68, 74, 85
Grazing management policy	16, 21
Grazing licenses/permits	24
Great Basin hydrological region	81
Guzzlers	15, 35, 38, 39, 40, 43
Habitat Management Plan (HMP)	4, 35, 36, 41
Hand thin	38
Helicites	51
Herd Management Areas (HMAs)	47

Herd Unit 2 - Antelope	39
Herd Units 11 and 28 - Elk	39
Herd Unit 13 - Mule Deer	36
Herd Unit 14 - Mule Deer	37
Herd Unit 42 - Mule Deer	37
Herd Unit 53- Mule Deer	37
Herd Unit 54- Mule Deer	38
Herd Unit 62 - Mule Deer	38
Herd Unit 62A - Mule Deer	38
Herd limiting factors	37
High priority habitat	36, 37, 38, 43
House Range Resource Area (HRRA) ...	iii, 1, 2, 3, 4, 9, 13, 15, 35, 47, 51, 52, 54, 63, 69, 70, 75, 81, 87
Icelandic spar	51
Implementation (plan)	2, 3, 4, 5, 54, 57, 72, 94
Indian Farm Creek	30, 41, 51
Insect control	31
Instruction Memorandum (IM)	13, 16
Interim Management Policy (IMP)	2, 9, 51
Issue	3, 9
Joy Townsite	64
Kane Springs	63
Known Geologic Resource Areas (KGRAs)	75
Known geologic structures	76
Land Report (LR)	68, 71
Landexchange.. ..	68
Land tenure adjustment	55, 57, 67, 72
Landforms	1, 51
Lands ownership	67, 72
Leasing category	37, 38 39, 42, 43, 56, 59, 69, 75, 76, 77
Least chub	35, 36, 41
Licenses	2, 24, 40
Little Sahara Recreation Area	51, 52, 53, 54, 55, 58, 59, 70
Locatable minerals	75, 76, 77
Maintenance (plan)	2, 3, 4, 5, 27, 31, 55, 57
Management Framework Plan (MFP)	2
Management alternatives	2
Management constraints	3
Memorandum of Understanding (MOU)	10, 57
Mineral resources	75
Mineral withdrawal	56, 58, 59
Mining claims	52, 56, 58, 77
Monitor	2, 3, 4, 5, 13, 16, 21, 22, 25, 26, 29, 31, 36, 37, 38, 39, 40, 43, 48, 54, 57, 59, 64, 72, 77, 82, 83, 89
Mountain ranges	1, 13, 75, 81
Mule deer	1, 3, 35, 36, 37
Multiple-use	10
National Environmental Policy Act (NEPA)	3, 71
National Register of Historic Places (NRHP)	63, 64
National Speleological Society (NSS)	58
Natural Wild and Scenic Rivers System	51
No Action	3, 9
Non-designation	2
Non-gamespecies	35
Non-livestock	3

Non-structural Improvements	27
Notice of Intent (NOI)	77
Notice of Realty Action (NORA)	68
Noxious weeds	15, 31
Oak Creek Mountain Range	13
Off-road-vehicle (ORV)	3, 4, 51, 53, 54, 55, 56, 57, 59, 77
Oil and Gas	3, 37, 38, 39, 42, 43, 56, 59, 69, 75, 76, 77
Oil and gas exploration	37, 38, 39, 75, 77
Outstanding Natural Area (ONA)	3, 53, 56, 58, 72
Paleontological	9
Paul Bunyan's Woodpile	70
Pavant Mountains	1
Perennial streams	29, 51, 81
Permits	2, 13, 24, 67, 77, 88
Pesticide	10
Pipe harrowing	81
Piute-Shoshone Culture	63
Plan maintenance	3, 4, 5
Plan monitoring and evaluation	5, 31, 43, 48, 59, 64, 72, 83, 89, 94
Planning	iii, 1, 2, 3, 4, 9, 13, 35, 63, 70, 94
Pleistocene	51
Pony Express Trail	63, 64, 70
Power Site Reserves	70
Predator control	31
Prior stable numbers	35, 36
Project BOLD	9
Protest	2, 4
Public Information Specialist	58
Public Water Reserves	70, 83
Public comment	68
Public lands	iii, 1, 3, 4, 15, 67, 68, 75, 81
Publicsale	68
Public scoping	2
Range improvement	5, 10, 27, 30
Rangeland Program Summary (RPS)	1, 13
Rangeland values	3, 15
Raptors	1
Record of Decision (ROD)	2
Recreation	51, 52, 55, 56
Recreation & Public Purpose Act (R&PP)	67
Red Cedar Creek	30, 41, 51
Resource Management Plan (RMP)	iii, 1, 2, 3, 4, 5, 13, 15, 48, 68
Revision (plan)	2, 4, 72, 94
Right-of-way (ROW)	67
Right-of-way Application	67
Riparian habitats	29, 30, 35, 41, 42, 43, 81, 88
Rockwell Natural Area	51, 53, 54, 58, 71
Sage grouse	1
Saleable minerals	75, 77
Salmo clarki Utah	51
Salt Lake Base and Meridian	68
Salt Lake Desert drainage basin	81
Salt Lake District	13
Salt Marsh Complex	23, 41
Salt Marsh Lake	30, 41

Sanitation	57
Seasonal	15, 30, 37, 38, 39
Seeding	15, 29, 81, 94
Segregations	58, 69, 70
Sevier Bridge Reservoir	30, 57
Sevier River	21, 30, 81, 82
Shadscale	13
Shale withdrawal	70
Sheep	1, 13, 15, 25, 35, 36, 40, 41, 51
Sheeprock/Tintic ORV Unit	53
Sinbad Overlook	56
Soil Conservation Service	10
Soils	9, 31, 81, 82, 83, 88
Special Management Concerns	53, 70, 71
Special Recreation Management Areas (SRMA)	53, 55
Special management designations	34, 59, 67, 70
Speleothemic deposits	51
Statutory mission	4
Stock water	15
Structural improvements	27
Support Requirements	iii, 4, 5, 31, 43, 48, 58, 64, 71, 75, 77, 83, 88, 94
Surveillance patrols	48
Swasey Mountain	51, 53, 54, 56, 59, 87
Swasey Springs	30
The Nature Conservancy	70
The Nature Conservancy exchange	68
Threatened and Endangered (T&E) and Sensitive species	9, 13, 31, 35
Tintic Mountain Range	13, 51
Tintic Unit	15
Tom's Creek	30, 41, 51, 63, 70
Topaz Mountain Rockhounding Area	53, 57, 58, 70
Topaz Slough	30
Topaz Unit	15, 51
Trespass.. ..	72
Trout Creek	1, 30, 36, 41, 51
Tule Springs	30, 41
Twin Springs.. ..	35
U.S. Bureau of Reclamation	57
U.S. Fish and Wildlife Service	51
Uinta National Forest	70
Use patrol	55, 57
User fees	55, 57
Utah Division of State Parks	57
Utah Division of Wildlife Resources (UDWR)	10
Utah State Historic Preservation Officer	9
Utah-Nevada border	48
Utilization	16, 25, 48, 69, 89
Vegetation.. ..	1, 9, 10, 24, 37, 48, 81, 82, 88, 93
Vegetation treatment	5, 10, 27, 81, 88
Visitor management	56, 57, 58
Visual Resource Management (VRM)	51, 52, 88
Visual resources	88
Wasatch National Forest	70
Washington Office (WC)	13, 16, 72
Water safety	57

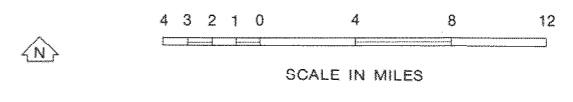
Watershed	3, 4, 29, 81, 82, 83, 88, 93
Weed control	15, 31
Well modification.....	35
Wild Horse and Burro Act	3
Wild horse capture plan	47
Wild horses	3, 15, 22, 39, 47, 48, 83
Wilderness/Wilderness Study Area (WSA)	29, 56, 77
Wildfire	88 94
Wildlife	1, 3, 4, 5, 9, 10, 15, 27, 29, 35, 37, 38, 43, 51, 54, 70, 81, 83, 88, 93
Willow Spring	30, 41
Withdrawal	3, 4, 16, 56, 57, 58, 59, 67, 69, 70, 72, 77
Woodland products	87, 88
Yuba Reservoir	30, 51, 52, 54, 57, 58



HOUSE RANGE RESOURCE AREA

ALLOTMENT BOUNDARIES AND LAND OWNERSHIP

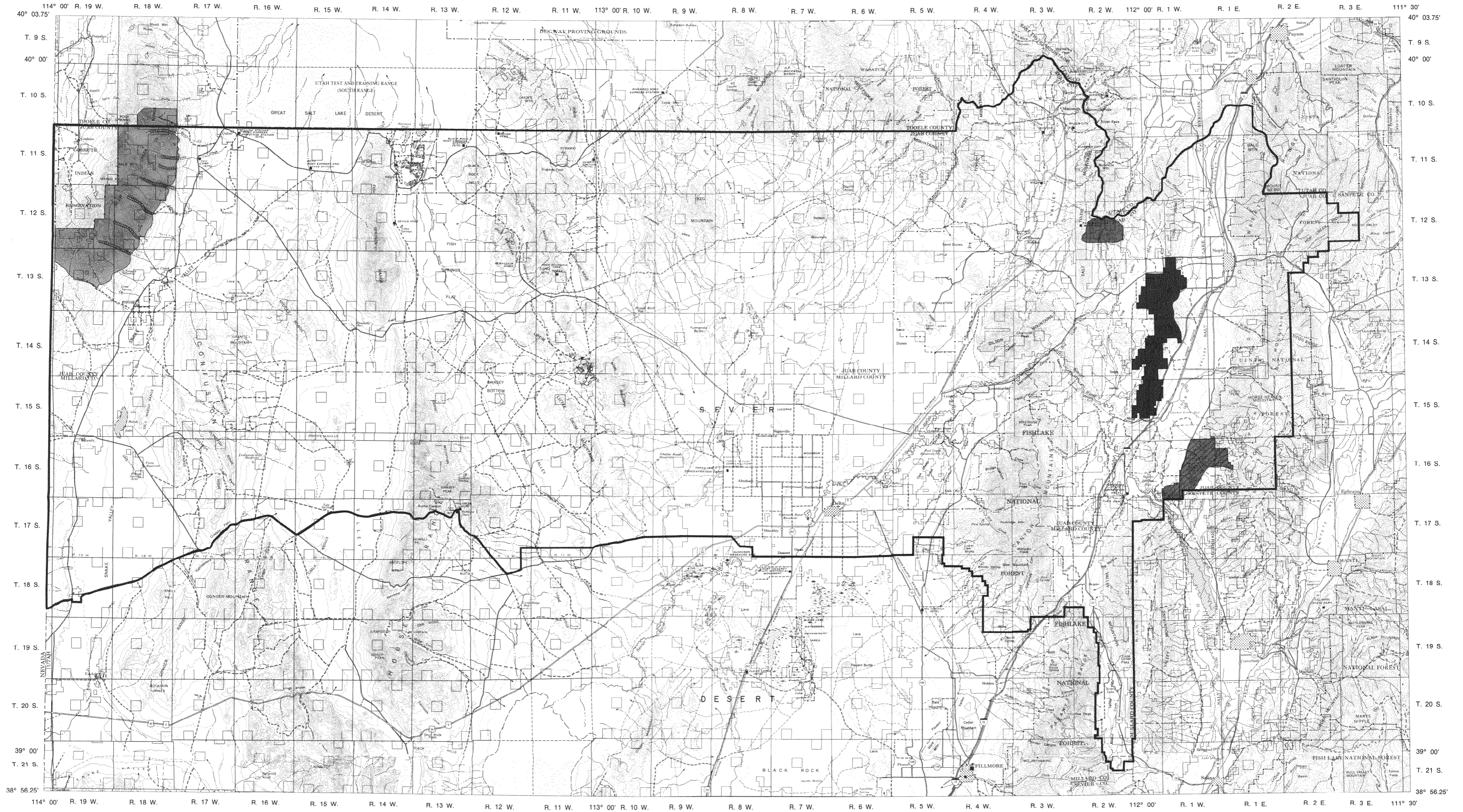
- PUBLIC LAND (BLM)
- FEDERAL LAND, OTHER AGENCIES
- STATE LAND
- PRIVATE LAND
- LIVESTOCK GRAZING ALLOTMENT BOUNDARIES



MAP 1








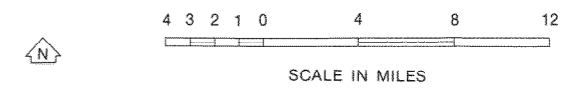
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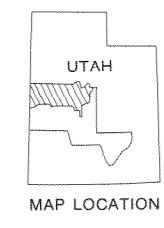
HOUSE RANGE RESOURCE AREA

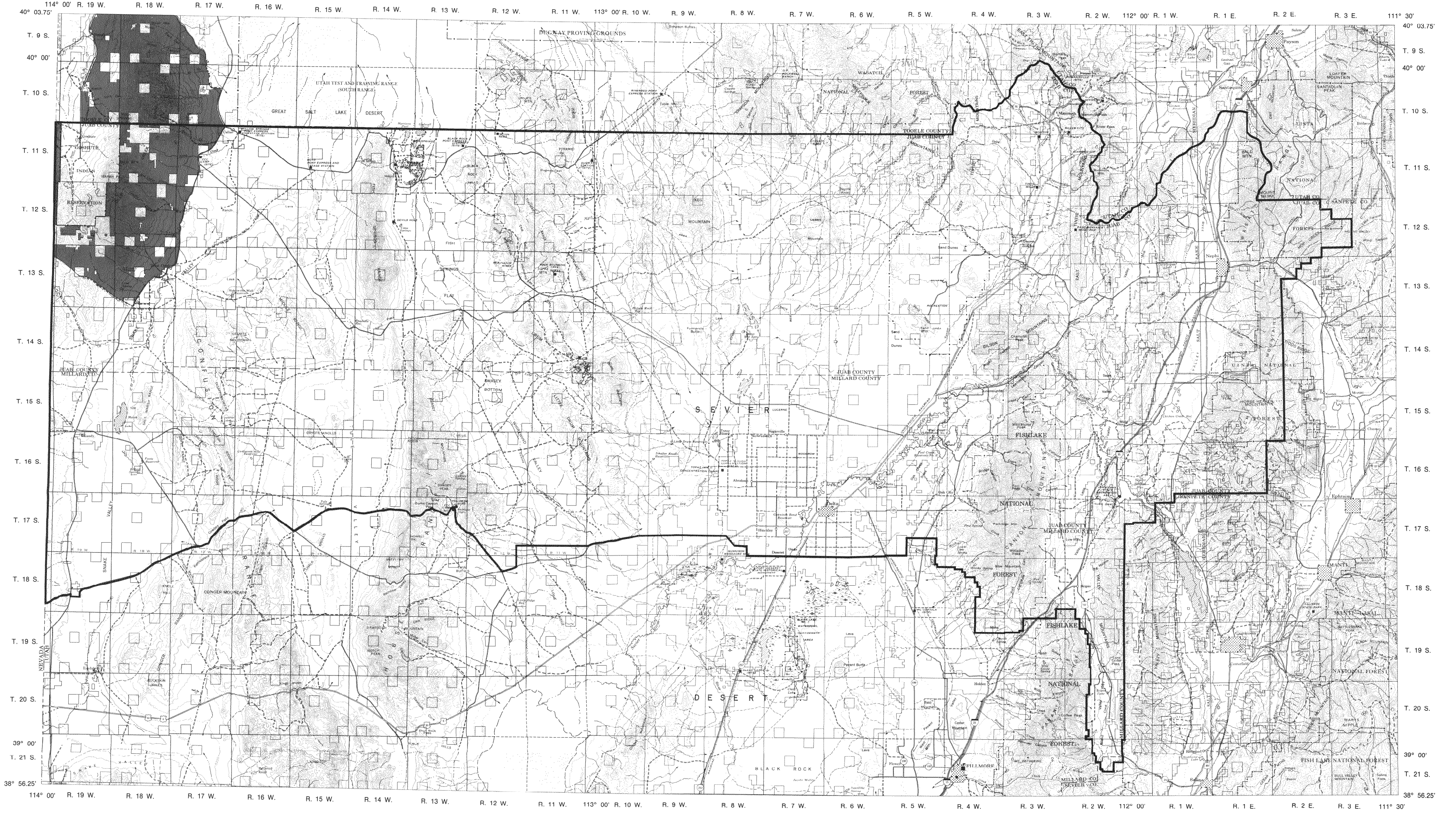
MULE DEER, ELK AND ROCKY MOUNTAIN BIGHORN SHEEP HABITAT

-  ROCKY MOUNTAIN BIGHORN SHEEP AREA
-  CRITICAL ELK SUMMER RANGE
-  CRITICAL ELK WINTER RANGE
-  CRITICAL MULE DEER WINTER RANGE
-  CRITICAL MULE DEER FAWNING AREAS



MAP 2

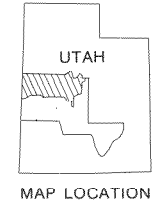




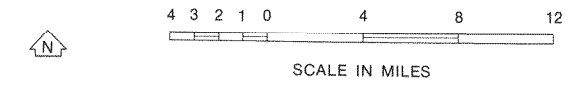
HOUSE RANGE RESOURCE AREA

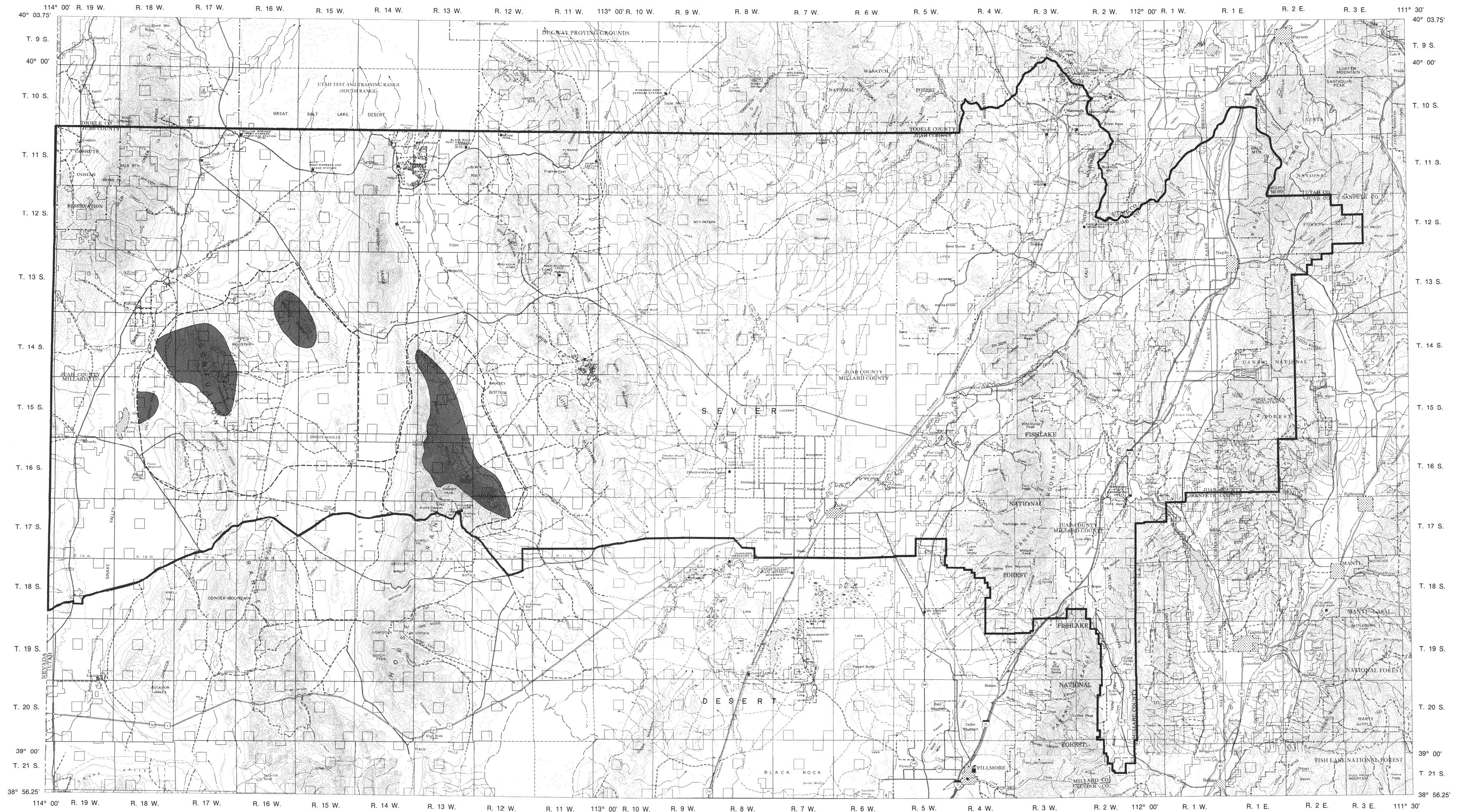
DEEP CREEK HABITAT MANAGEMENT PLAN

 DEEP CREEK HMP



MAP 3

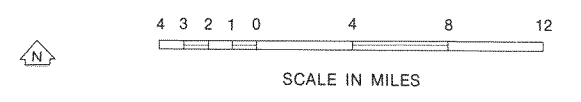




HOUSE RANGE RESOURCE AREA

WILD HORSE HERD BOUNDARIES AND CRITICAL AREAS

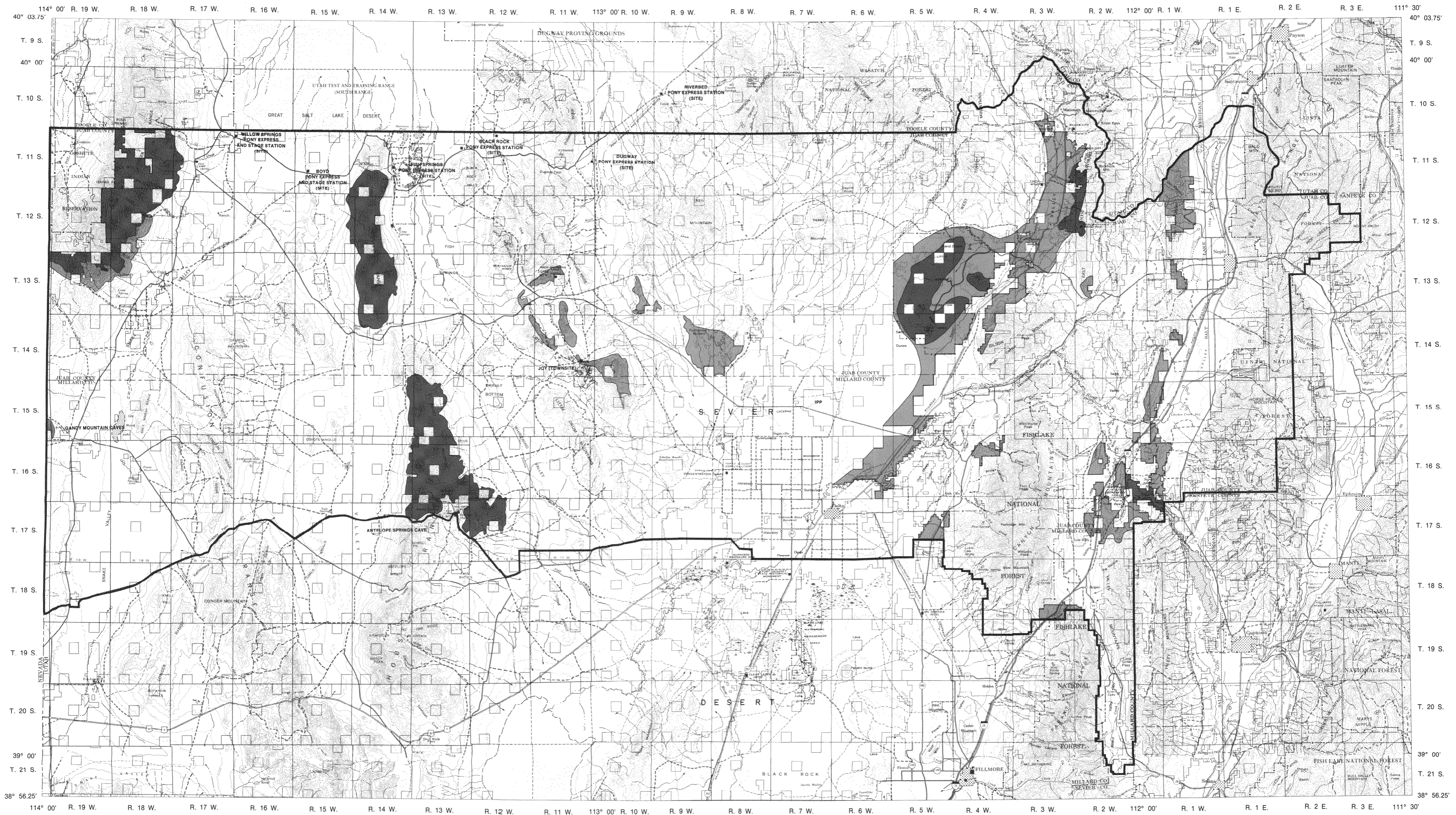
- WILD HORSE HERD BOUNDARIES
- CRITICAL WILD HORSE AREAS



MAP 4



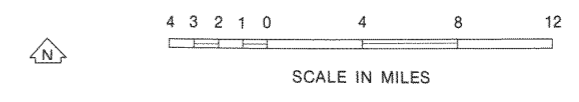
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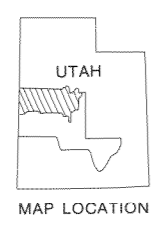
HOUSE RANGE RESOURCE AREA

VISUAL RESOURCE MANAGEMENT CLASSES

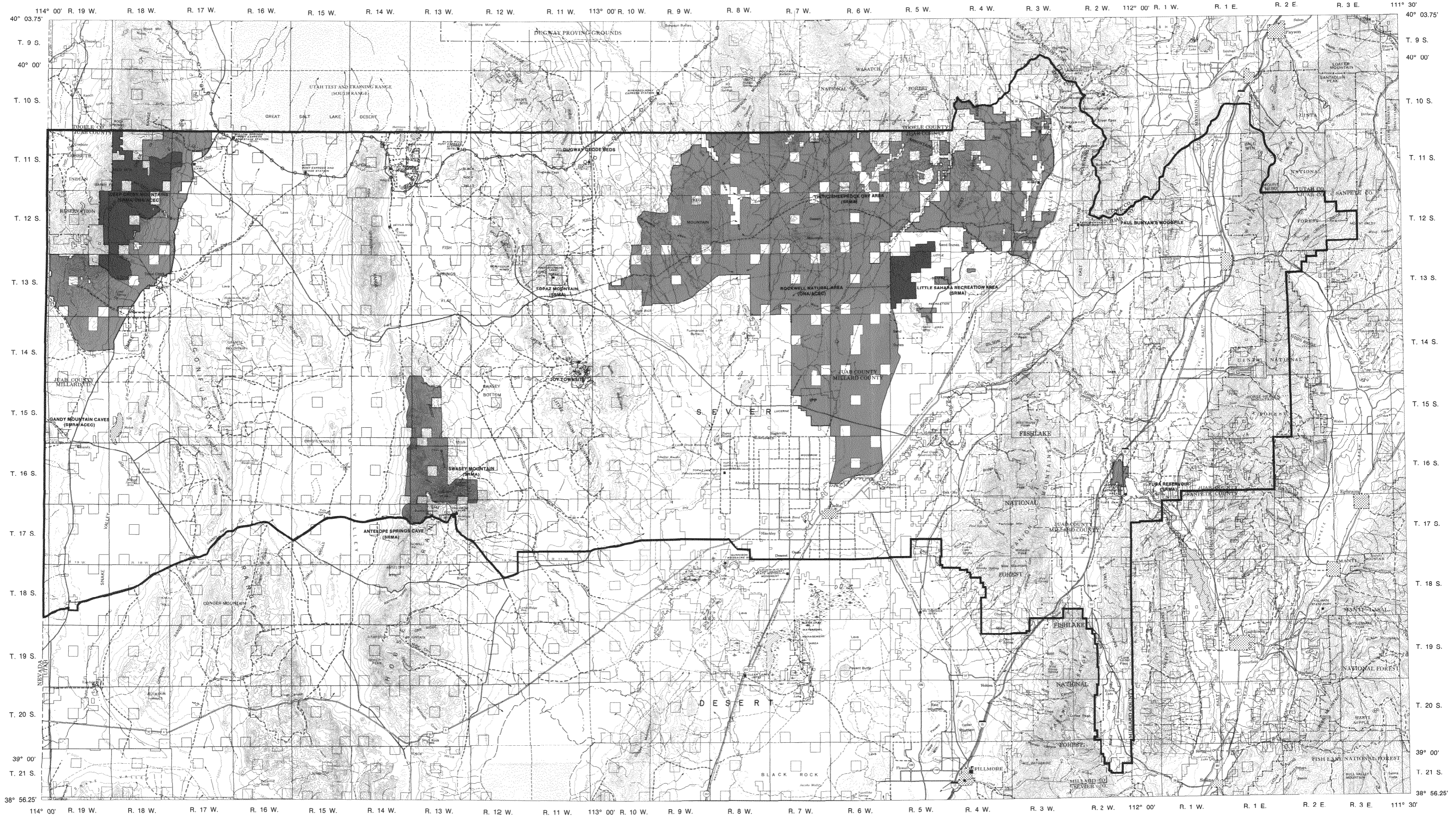
- VRM — CLASS II
- VRM — CLASS III
- VRM — CLASS IV



MAP 5



MAP LOCATION

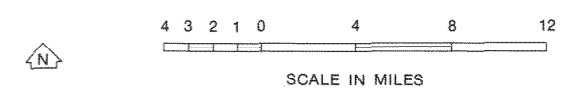


HOUSE RANGE RESOURCE AREA

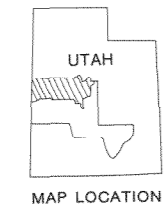
SPECIAL MANAGEMENT AREAS AND OFF ROAD VEHICLE (ORV) DESIGNATIONS

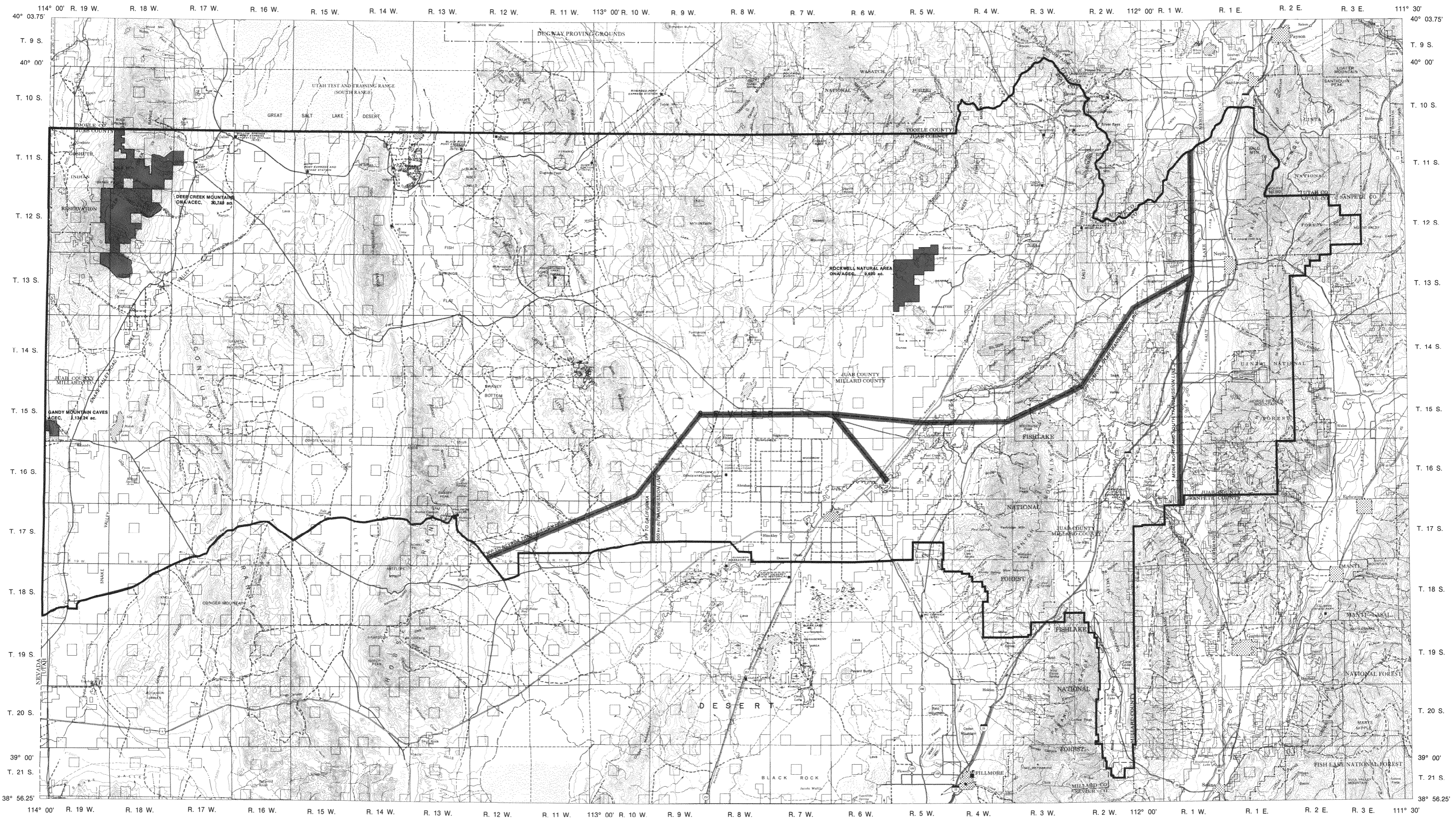
SPECIAL MANAGEMENT AREAS
 ONA/ACEC Outstanding Natural Area/Area of Critical Environmental Concern
 ACEC Area of Critical Environmental Concern
 SRMA Special Recreation Management Area

OFF ROAD VEHICLE (ORV) DESIGNATIONS
 ■ **CLOSED** TO ORV'S
 ■ **LIMITED** TO EXISTING AND/OR DESIGNATED ROADS AND TRAILS
 □ **OPEN** TO ORV USE
 ○ ○ ○ PONY EXPRESS ROUTE



MAP 6





HOUSE RANGE RESOURCE AREA

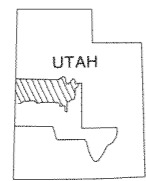
AREAS OF CRITICAL ENVIRONMENTAL CONCERN (ACECs)
AND
RIGHTS — OF — WAY CORRIDORS

- AREAS OF CRITICAL ENVIRONMENTAL CONCERN (ACECs)
- RIGHTS — OF — WAY CORRIDORS

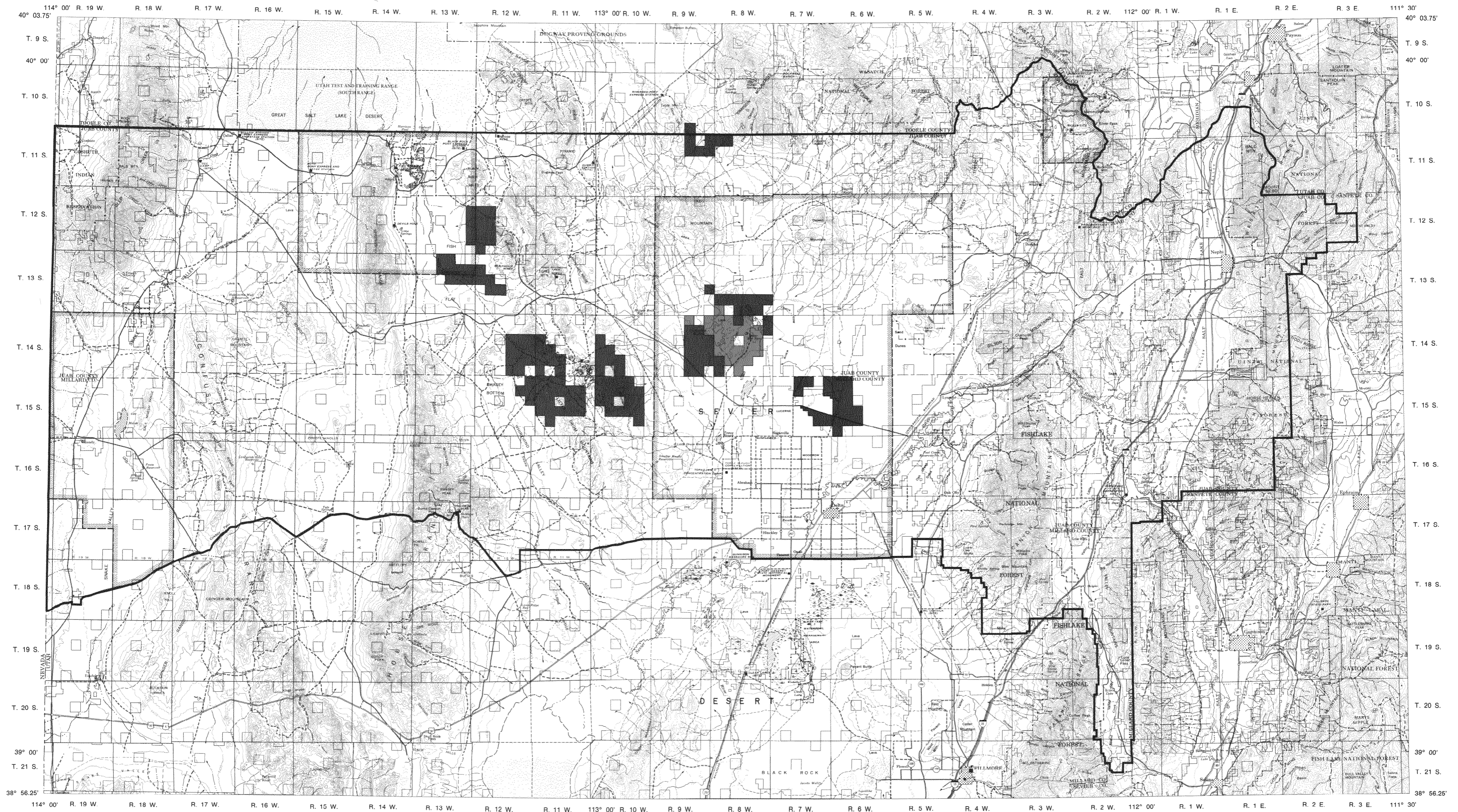


SCALE IN MILES

MAP 7






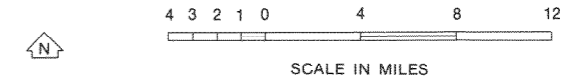
MAP LOCATION



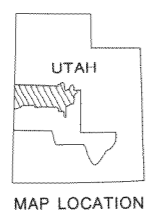
HOUSE RANGE RESOURCE AREA

GEOHERMAL RESOURCES

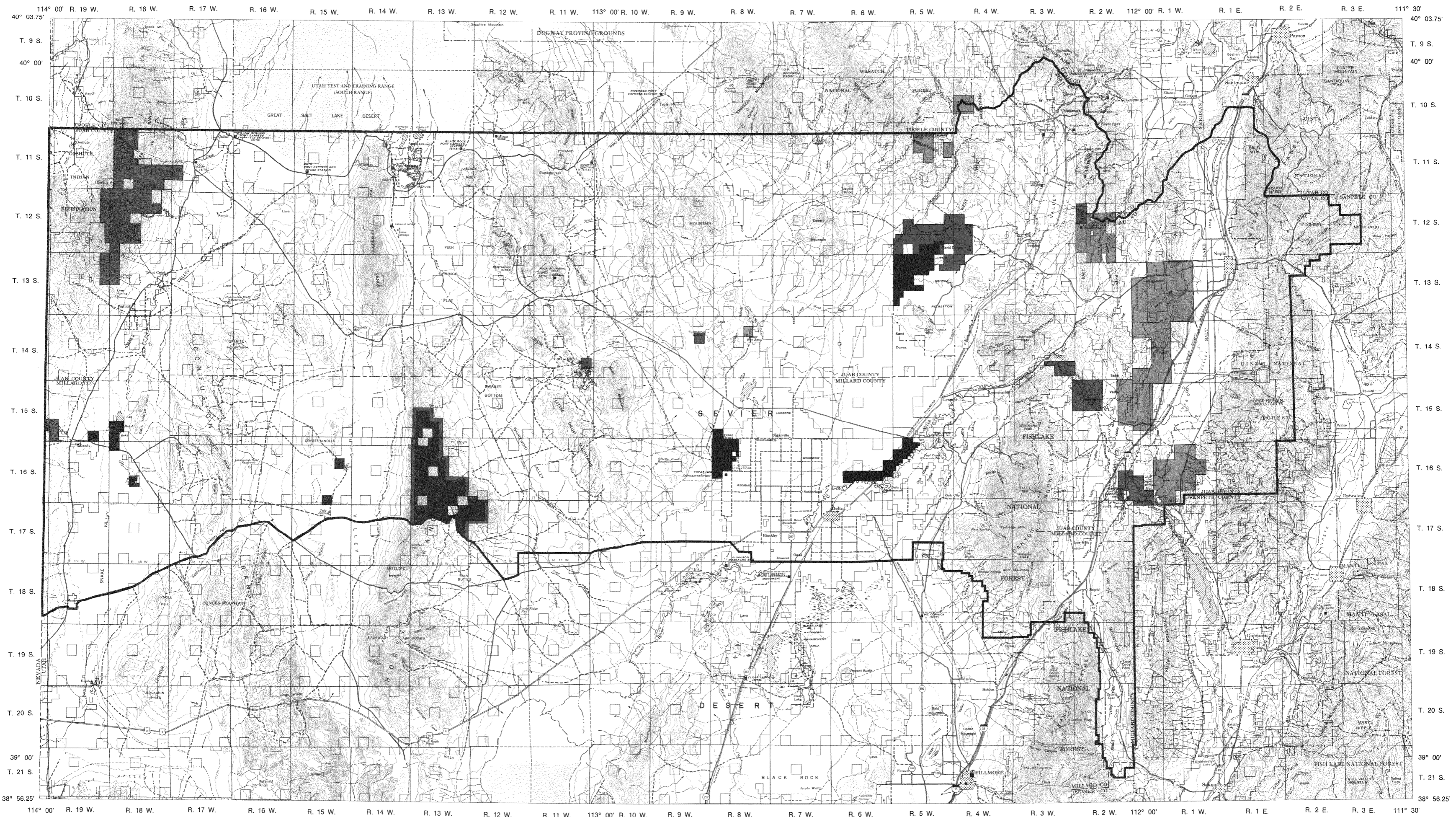
-  LANDS CLASSIFIED IN A KNOWN GEOHERMAL RESOURCE AREA (KGRA)
-  GEOHERMAL LEASES
-  LANDS CLASSIFIED PROSPECTIVELY VALUABLE FOR GEOHERMAL RESOURCES



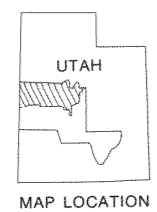
MAP 8



MAP LOCATION



HOUSE RANGE RESOURCE AREA



MAP 9

MAP LOCATION

LOCATABLE MINERALS

THE FOLLOWING AREAS WILL BE WITHDRAWN FROM ALL MINERAL ENTRY EXCEPT PERSONAL RECREATIONAL USE OF MINERAL MATERIALS.

NAME OF AREA	ACREAGE
Rockwell Natural Area	9,630
Topaz Wildlife Conservation Area* (oil & gas)	4,142
Topaz Mountain	1,600
Dugway Geode Beds	1,920
Gandy Mountain Caves	1,120
Little Sahara Campground*	3,542
*Existing Withdrawal	

OIL AND GAS CATEGORIES AND LOCATABLE MINERALS

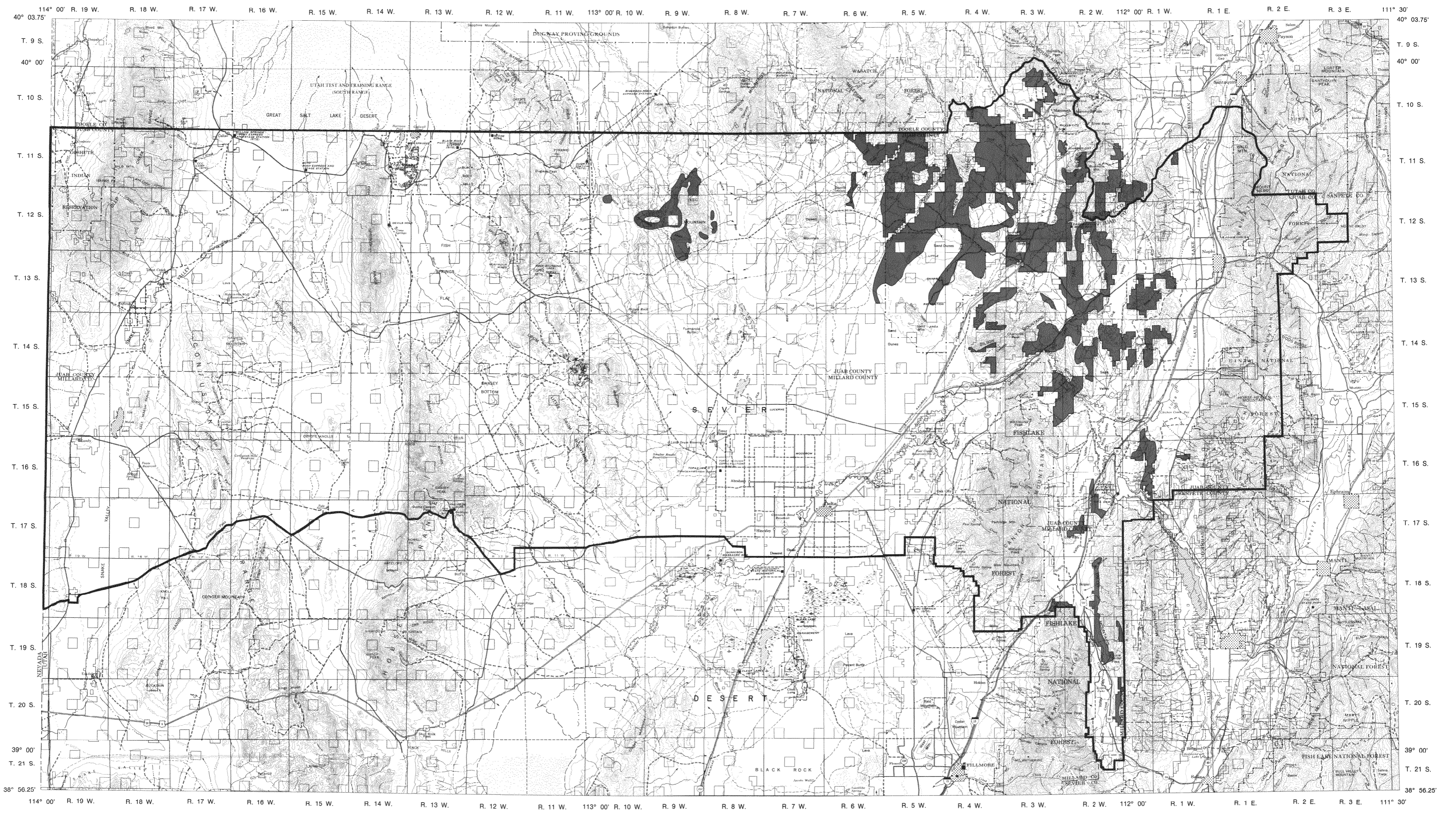
OIL AND GAS CATEGORIES

- CATEGORY 1
- CATEGORY 2
- CATEGORY 3
- CATEGORY 4



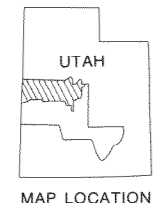
4 3 2 1 0 4 8 12

SCALE IN MILES



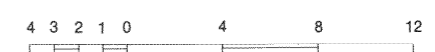
HOUSE RANGE RESOURCE AREA

AREAS SUITABLE FOR REVEGETATION



MAP 10

MAP LOCATION



SCALE IN MILES