# PINYON MANAGEMENT FRAMEWORK PLAN

Form 1600-8 (April 1975)

# UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

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	PINYON	Į.

	(URA	or MFP)		
	TITL	E PAGE*	·	
State	UTAH	District CEDAR	CITY	
Resource Area	BEAVE	ER RIVER		
Planning Unit	PINYON	Number		
Total Acres NRL Withdrawn Other	1,738,353 1,225,198	Federal Sub-Surface State Private Other	170,970 304,084	
	PREPARED	OR REVIEWED		
1 (1)	(Area Manager)		Unly 15 (Dates)	, 1982
·///_	ORIGINALI	Y APPROVED	June 1, 1 (Date)	983
	(District Manager)		(Date)	
•	REVIEWED	AND UPDATED		
	AREA MANAGER		DATE	
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(State Director Concurrence) 4/10/83
(Date)

<sup>\*</sup> This form may be used as the Title Page for the Unit Resource Analysis and/or the Management Framework Plan

Respondents vary from individuals to small businesses and major corporations.

All responses to this notice will be summarized and included in the request for Office of Management and Budget approval. All comments will also become part of the public record.

Dated February 29, 1996.

#### Annetta L. Cheek,

Chief, Regulatory Management Team. [FR Doc. 96–5105 Filed 3–4–96; 8:45 am] BILLING CODE 4310–84–P

[UT-040-06-1020-00]

# Notice of Intent to Amend Management Framework Plan

AGENCY: Bureau of Land Management, DOI.

**ACTION:** Notice of intent to amend Management Framework Plan.

SUMMARY: The Bureau of Land
Management (BLM) is preparing an
Environmental Assessment (EA) to
consider a proposed amendment to the
Pinyon Management Framework Plan
(MFP). The proposed amendment would
consider alternatives for additional
opportunities for land tenure
adjustments in Iron County.

DATES: The comment period for
identification of issues for the proposed
plan amendment will commence with
the date of publication of this notice.
Comments must be submitted on or

FOR FURTHER INFORMATION CONTACT:
Arthur L. Tait, Beaver River Resource
Area Manager, Bureau of Land
Management, Cedar City District, 176
D.L. Sargent Drive, Cedar City, Utah
84720, telephone (801) 586–2401.
Comments on the proposed plan
amendment should be sent to the above
address.

before April 14, 1996.

SUPPLEMENTARY INFORMATION: The Beaver River Resource Area (BRRA) Of the Cedar City district, BLM, is proposing to amend the Pinyon MFP to allow for land tenure adjustments on the following federal properties not previously identified in the MFP:

Federal land: 5,975.71 acres

### Salt Lake Meridian

T. 35 S., R. 17 W., Sec. 18 lots 1, 2, 3, 4; E½SW¼; E½NW¼; T. 35 S., R. 18 W.,

Sections: 13; 14 E½; 24 NW¼;

T. 34 S., R. 17 W.,

Sec. 19 lots 3 and 4 inclusive;

T. 33 S., R. 17 W.,

Sections: 23 W½; 34 W½; 35 W½;

Г. 31 S., R. 13 W.,

Sections: 1 lots 4, 5, and 12; 3; 4 lots 1 to 4 and 7 to 10, inclusive; 5 lots 1 to 6,

inclusive, 11, and 12; 6 lots 1 and 2; 8 E<sup>1</sup>/<sub>2</sub>; 9; 10 W<sup>1</sup>/<sub>2</sub>; 20 E<sup>1</sup>/<sub>2</sub>;

The main purpose is to identify and analyze the land for exchange to private parties for acquisition of lands that result in a net gain of important and manageable resource values on public land. The United States is considering the acquisition of the following described NON-FEDERAL:

Land: 6,590.44 acres

#### Salt Lake Meridian

T. 35 S., R. 18 W.,

Sections: 23 NW<sup>1</sup>/<sub>4</sub>; 25 W<sup>1</sup>/<sub>2</sub>; 27 N<sup>1</sup>/<sub>2</sub>; 29 N<sup>1</sup>/<sub>2</sub>; 33 S<sup>1</sup>/<sub>2</sub>; 34 N<sup>1</sup>/<sub>2</sub>; 35 W<sup>1</sup>/<sub>2</sub>.

T. 31 S., R. 15.W.,

Sections: 2; 16; 36 W½NE¼, W½, and NW¼SE¼.

T. 31 S., R. 17 W.,

Section 32;

T. 32 S., R. 17 W.

Sections: 2 lots 1 to 4, inclusive, S½N½, SW¼, N½SE¼, and SW¼SE¼; 16.

T. 34 S., R. 19 W.,

Section 16.

Lands transferred out of Federal Ownership as a result of the exchange, would be available to meet the various needs of the respective parties. An EA will be prepared to analyze the impacts of this proposed plan amendment and alternatives.

Public participation is being sought at this initial stage in the planning process to ensure the MFP amendment addresses all issues, problems and concerns from those interested in the management of lands within the BRRA. Necessary amendments to the approved plan will keep the document viable.

#### Doug Koza,

Acting State Director, Utah.
[FR Doc. 96–5020 Filed 3–4–96; 8:45 am]
BILLING CODE 4310–00–P

#### Minerals Management Service

Aboriginal Title and Rights Claims Information in Cook Inlet and Prince William Sound. AL

AGENCY: Minerals Management Service (MMS), Department of the Interior.

ACTION: Request for information regarding claims of aboriginal title and rights in Cook Inlet and Prince William Sound of southern Alaska.

data relevant to claims of aboriginal title and rights to unspecified portions of the Alaska Federal Outer Continental Shelf (OCS) included in the areas proposed for lease in OCS Lease Sales 149 (Cook Inlet) and 158 (Gulf of Alaska/Yakutat).

In a separate Federal Register notice, the Department of the Interior announced receipt of, and requested comments on, a petition for rulemaking on issues regarding claimed aboriginal title and aboriginal hunting and fishing rights of federally recognized tribes in Alaska exercisable on the OCS.

**DATES:** Comments on this request for information are requested through April 4, 1996.

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ADDRESSES: Comments should be directed to: Paul Stang, Chief, Branch of Leasing Coordination, Office of Program Development and Coordination, (MS–4410) Minerals Management Service, 381 Elden Street, Herndon, Virginia 20270–4817. Please indicate that your comment is in response to the request for factual data regarding aboriginal title and rights on the Alaska OCS.

FOR FURTHER INFORMATION CONTACT: William Quinn at (703) 787-1191. SUPPLEMENTARY INFORMATION: The Minerals Management Service (MMS) exercises the delegated duties of the Secretary of the Interior under the Outer Continental Shelf (OCS) Lands Act, 43 U.S.C. 1331 et seq. for management of the resources of the OCS, the seabed seaward of three miles from the coastline (except in the case of Texas and Florida). Pursuant to the current 1992-1977 5-Year OCS Leasing Program, announced July 1, 1992, MMS has advanced to the final planning stages for the scheduled 1996 offering of natural gas and oil leases on the federal OCS in Cook Inlet, Sale 149. This is the fourth federal OCS lease sale in Cook Inlet. The State of Alaska has included portions of Cook Inlet in 28 of its offshore lease sales.

The Native Villages of Eyak, Tatilek, Chenega, Port Graham, and Nanwalek have, through correspondence, petition and litigation, advised MMS of their claims of aboriginal title and aboriginal hunting and fishing rights to unspecified portions of the sale area. The Villages are located in the Cook Inlet and Prince William Sound area of southern Alaska, The Villages have submitted a petition for rulemaking requesting the promulgation of regulations that recognize and protect such Villages' "exclusive fishing rights" on the Alaska OCS. Petitioners claim that there is legal support for the existence and recognition of such rights under the doctrine of aboriginal title and that such Villages have "exclusively used and occupied" the OCS for "subsistence purposes" since "time immemorial". The Villages assert that Sale 149 would interfere with the existence of their rights and deprive them of mineral income rightfully theirs. This information will also be considered in making final decisions on Sale 149, Cook Inlet and Sale 158, Gulf of Alaska, Yakutat.

The Government has consistently taken the position that no person or entity has title to, or hunting and fishing rights on, the Alaska OCS, which is

### PREFACE

The Pinyon MFP is transitional between new Resource Management Plans (RMP) and the older MFP land use plans. Issue, and management concerns were the focusing points around which the MFP was organized. Issues, are forage management, which includes forage allocation and land treatment and improvements, oil and gas categories, fire management and rights-of-way corridors. MFP recommendations are formulated by an interdisciplinary team representing major resources and economics. The team recommendations to resolve issues are examined by the area manager who makes a recommendation for the district manager's consideration. The district manager makes final land use decisions following publication of the final environmental statement. Upon concurrence by the state director, a summary of land use decisions is published.

# memorandum

DATE: October 15, 1981

REPLY TO ATTHOR: District Manager, Cedar City

1608 UT-040

SUBJECT: Pinyon Planning Unit Planning Issues. Planning Questions, Manager's Concept of the Plan, and Planning Criteria

To: State Director, Utah (U-922)

Attached is a copy of a memo to the District Chief, PEC, amending a previous memo of August 20, 1981.

Please note we have incorporated the requirement for an economic analysis of alternatives as required by Instruction Memorandum No. UT-81-386.

We have eliminated MX and development of molybdenum as issues. Oil and gas leasing category designation is a separate issue and we have added right-of-way corridors as an issue as suggested by your memo of September 4, 1981.

Planning criteria I have approved are also attached to the memo to the CCDO Chief, PEC.

Also attached hereto is a copy of a letter announcing open houses to be held in connection with MFP and EIS development. MFP proposals will be presented at the open houses. You may wish to have a member of the State Office team that will review and coordinate MFP I and II present at the open houses. In view of the fact that forage allocation associated with livestock grazing, wildlife, and wild horses along with alternatives for management of wild horses are the principle issues, I request the USO team be made up of Earl Hindley, Ken Boyer, and Bill McMahan.

Attachments





memorandum

DATE: October 15, 1981

ATTNOS. District Manager

1608 UT-040

SUBJECT: Pinyon Planning Unit Issues, Planning Questions, Manager's Concept of the Plan, and Planning Criteria

To: Chief, PEC

This memo amends the memo of the same subject dated August 20, 1981.

A regional economic analysis of alternatives in MFP II and in the range EIS will be required as described in Instruction Memorandum No. UT-81-386. This will amend my concept of the plan pertaining to the formulation of alternatives. The alternatives will range from full protection to intensive development of major resource values as well as a "no action" alternative. Major resource values in the Pinyon Planning Unit are those associated with the pertinent issues.

Attached are approved planning criteria associated with each issue. These criteria shall be followed to develop analyses and alternatives.

MX is no longer an issue. Discussions on MX can remain in sections of the URA that are near completion but it will not be addressed in the MFP. Molybdonum development is also dropped as an issue based on information from Pine Grove Associates that a decision on production will be delayed for an undetermined period of time.

Please note that criteria are developed for oil and gas categories as a separate issue and criteria are developed for rights-of-way corridors as an issue.

Attachment





#### **ISSUES**

### ISSUE 1 FORAGE MANAGEMENT

- A. Forage Allocation
  - 1. Allocations to wildlife will not exceed current numbers. UDWR objectives for the area will be honored as forage is available and as range condition merits increased allocation.
    - Allocations for deer will not exceed current numbers (1,300) with the long term objective to allow for prior stable numbers (2,470 deer).
    - Allocations for antelope will be for 600 animals with the long term objective to allow for 1,070 antelope.
    - Allocations for elk will be for 60 animals with the long term objective to allow for 200 elk.
  - 2. Allocations for wild horses will be limited to the amount of forage necessary to sustain no more than the number of animals estimated to be present in the planning unit at the time of the passage of the act and from no more geographic areas than was estimated to be occupied by those animals at that time.
    - Allocations for wild horses will consider herd consolidations
    - Management options for wild horses will consider herd relocations which will be proposed on the basis of BLM's ability to control and manage herd size(s), herd movements, and the availability of horses for public observation
  - 3. Each allotment will be categorized in the planning process into one of the following three categories for management of forage allocated to domestic livestock. Allotments will be placed in the categories based on the following criteria:
  - M (Management to maintain or improve the existing situation)

Present range condition is satisfactory.

Present management is satisfactory.

Limited land-use or resource conflicts.

Allotment is producing near potential or has potential for increased vegetative production through grazing management.

I - (Management with the principal objective to <u>improve</u> existing conditions)

Present range condition is fair to poor.

Grazing management practices are inadequate.

Allotment has potential for increased production through grazing management.

Land use or resource conflicts exist.

Allotment has potential for positive economic return on public investment.

C - (Manage in a <u>custodial</u> manner with the principal short-term objective to prevent deterioration of current resource conditions)

Allotment has low forage productivity.

Allotment has low potential for improvement through grazing management or potential is limited by economic criteria.

Grazing management practices are minimumal.

Present range condition is generally poor but stable.

For management actions associated with category designation see Instruction Nemo No. CCDO 82-3.

Allocations for livestock will be based on actual use and the grazing inventoried capacity. Initial adjustments will be made based on the following criteria.

- Reductions for an individual operator whose allotment is in the I or C category will not exceed 10 percent of his average actual use or his average licensed use.
- Increases for an individual operator whose allotment is in the M category will not exceed 10 percent of his active grazing preference.
- Subsequent adjustments, increases or reductions, will be based on monitoring studies.

Isolated unmanageable tracts of public land consisting of parts or all of some allotments will be identified and considered for disposal. Size of tracts for consideration will usually be 640 acres or less. Forage will not be allocated in the plan for tracts to be disposed of. Grazing, where appropriate, will be licensed at present levels until disposal.

B. Land Treatments and improvements analyzed in the plan and EIS will be limited to I category allotments pursuant to the following policy:

### 1. Benefit Cost Ratio

All the projects together, which are needed within an allotment to implement management, must have a benefit cost ratio of at least 1:1 unless needed to protect critical resources. An individual project may not have a favorable cost benefit ratio, but a total of all projects within an allotment must have.

- 2. a. Priorities for development of projects in each allotment are:
  - (1) Water developments
  - (2) Fences
  - (3) Land treatments
  - b. Type of improvements, priority, and constraints:
    - (1) Water Developments
      - (a) Priority
        - The first priority will be in dry areas which are potentially or limited suitable, and will become suitable with the addition of water.
        - The second priority will be for waters to improve management in suitable areas. These would include waters needed to implement grazing systems.
      - (b) Constraints
        Waters will normally not be developed for
        livestock that water areas which are unsuitable because of slope and/or production.
        Waters can be developed in unsuitable areas,
        where it is piped to suitable areas.
    - (2) Fencing
      - (a) Priority
        - Allotment boundary fences should normally be constructed first.
        - Management fences needed for implementation of grazing systems and protection of other resource values.
      - (b) Constraints
        - All fences will comply with fence standards in BLM Manual 1737.
    - (3) Vegetation Treatment
      - (a) Priority
        - Areas needing treatment to implement grazing systems or to balance pastures for AMP implementation.

- Areas needing treatment to restore suspended preference will be second priority.
- (b) Policy
  - The range user's projected grazing capacity after treatment will not exceed total preference for the allotment, unless needed to implement management.
- (c) Constraints
  - Areas estimated to attain 75 percent of natural vetetation potential, through management in 20 years will not be treated.
  - Areas which are treated should have grazing capacity after treatment of at least 10 acres per AUM.
  - Native range will not be treated if naturally they are presently producing 15 acres per AUM or better.
  - Native range will not be treated if the present grazing capacity cannot be doubled.
- 3. Land treatment proposals for wildlife will be to maintain and/or improve important wildlife habitat condition.

Important habitat is defined as those areas where it can be demonstrated they will be used by mule deer, antelope, sage grouse, or elk.

### ISSUE 2 OIL AND GAS CATEGORIES

- A. All lands in the planning area should be considered in Category 1 Open Leasing unless:
  - 1. Special stipulations are needed to protect significant resource values (Category 2 Special Stipulations) or,
  - They are high value lands of limited area where irreversible damage could occur by on site surface operations but offsite drilling methods make oil and gas production feasible without surface disturbance (Category 3 No Surface Occupancy) or,
  - 3. They are high value lands of great area similar to candidate wilderness areas where irreversible damage would occur by on site surface operations (Category 4 Suspended or No Lease).
  - B. Resources on Category 3 and 4 lands must be unique scenic or cultural areas, floodplains and wetlands, unique natural areas in which exist threatened or endangered plant or animal species, or critical wildlife nabitat. These are areas where surface disturbances, previous mineral or energy exploration, extensive presence of roads and trails, or other irreversible intrusions on the land surface are minimal.
  - Categories will be determined by an interdisciplinary team using all current guidance and resource information.

### ISSUE 3 FIRE MAMAGEMENT

- A. Wild fire will be used to improve and maintain desirable vegetation types. Areas will be identified for limited wild fire suppression. Wild fires will be so managed on the unit except on:
  - Areas adjacent to concentrations of private or State lands
  - Areas of extensive BLM or other authorized developments or improvements
  - Areas where the resources are identified as not capable of being improved or not capable of being successfully rehabilitated following fires
  - Areas where a vegetative composition change is not desirable

### ISSUE 4 RIGHTS-OF-WAY AND CORRIDORS

- A. A right-of-way corridor will be considered for designation along the IPP right-of-way in accordance with the needs identified by the Western Regional Corridor Study.
- B. Rights-of-way will not be authorized in:
  - Wilderness study areas
  - In areas where oil and gas designation is Category 3 or 4
  - Other areas where rights-of-way should not be allowed because of significant resource value
- C. Unless specifically identified in B above, no other restrictions of rights-of-way will be made and rights-of-way would not have to be restricted to the area identified in 1 above. The plan should identify areas to be avoided, then recommend whether the corridor needs to be identifed and designated.

# UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

# MANAGEMENT FRAMEWORK PLAN - STEP 1 ACTIVITY OBJECTIVES

Range	
Objective	Number
RM-1	

Name (MFP)

Pinyon

Activity

Objective RM-1. On 31 allotments with significant forage resource conflicts, protect and improve 379,277 acres of suitable, 49,170 acres of limited suitable, 241,793 acres of potentially suitable, and 26,581 acres of unsuitable public rangelands within the context of balanced use and sustained yield. Resolve forage resource conflicts by increasing forage production to total grazing preference. Through intensive grazing management over an appropriate timeframe (approximately 20 years) increase forage production of 31,799 AUMs (present forage production) by 7,783 AUMs to achieve the allotments' natural potentials of 39,582 AUMs. Through land treatment projects, increase production by 15,650 AUMs to achieve these allotments total preference of 55,232 AUMs. Range improvements, including land treatments will achieve the most costeffective use of public funds in improving rangeland productivity. Monitoring studies will be established or continued on an appropriate schedule and of an appropriate intensity.

Rationale. The public land in the Pinyon Planning Unit makes up 67 percent of the grazing land in the unit and threfore contributes significantly to the stability of the livestock industry in the area. It is Bureau policy to provide forage to help meet the needs of individual users and dependent communities. Analysis of SVIM data reveals there are 31 allotments (table 1) that have significant forage resource conflicts and the potential to be developed through intensive livestock grazing management, which includes implementing grazing systems (may require inclusion of several allotments into a single system), adjusting livestock numbers to carrying capacity, limiting wild horse use, controlling season of use, changing the kind of livestock, constructing range improvements, and vegetative manipulation. Monitoring studies and subsequent evaluation provide a basis for making needed adjustments to grazing management systems to assure management objectives are being met.

# UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

İ	Pinyon
	Activity Range
	Overlay Reference
	Stan 1 Stan 3

#### MANAGEMENT FRAMEWORK PLAN

RECOMMENDATION-ANALYSIS-DECISION

Recommendation RM 1.1. Intensively manage 31 allotments with significant resource conflicts and forage improvement potential through management as follows. On 24 of the 31 allotments manage 18,294 AUMs for cattle on 252,820 suitable, 416 limited suitable, and 114,901 potentially suitable Federal acres. On 10 of the 31 allotments, manage 16,834 AUMs for sheep on 181,617 suitable, 45,571 limited suitable, and 5,774 acres of potentially suitable Federal acres (table 1). Three allotments have capacity for both sheep and cattle allocated separately.

Rationale. Evaluation of allotment analysis results indicate that an average downward adjustment from active grazing preference of 29 percent is needed in order to achieve the natural potentials on these 31 allotments. This adjustment corresponds to an average upward adjustment from average licensed use of 6 percent.

It is Bureau policy to phase in adjustments to carrying capacity over a number of years. The proposed initial stocking levels in table 1 represent the first stage of this phasing in process. This is in accordance with Instruction Memorandum CCDO 82-3. In the first stage an average downward adjustment of 21 percent will be made. This adjustment corresponds to an average upward adjustment from licensed use of 18 percent. Grazing at these proposed stocking levels will help desirable species regain vigor and increase in composition. Allocation of forage on limited and potentially suitable areas is necessary on 18 allotments where policy dictates that no more than a 10 percent downward adjustment from average licensed or actual use may be made (table 1).

### Conflicts and Interactions

RM 1.1 and WL 1.3 - Interact in that RM 1.1 does not identify Government Well, Holt Mine, Shauntie, SUSC Winter, and Uvada for intensive management where WL 1.3 does.

RM 1.1 and WL 1.6 - Interact in that RM 1.1 may not provide sufficient forage for present numbers of mule deer and antelope on Antelope Peak, Bagnall, Beaver Lake, Bennion Spring, Buckhorn, Eight Mile Spring, Gold Spring, Haystack Mountain, Hebron, Indian Creek, Johns, Kiln Spring, Matheson, Modena Canyon, Mt. Elinor, Rose Valley, Sevy West, Smith Jones, Tilly Creek, and Water Hollow. It is important to note that this is a short-term (one to five years) effect and that with the initial forage allocation to livestock shown in table 1, more forage will be provided to mule deer and antelope than at the present time. Monitoring studies will provide the basis for additional adjustments needed to stocking levels so that in the long-term (more than 5 years) any short-term forage resource conflicts will be eliminated.

# UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

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F	Activity lange	
Γ	Overlay Reference	ce
	Step 1	Step 3

Name (MED)

#### MANAGEMENT FRAMEWORK PLAN

RECOMMENDATION-ANALYSIS-DECISION

Recommendation RM 1.2. Implement Allotment Management Plans (AMPs) which provide for the physiological requirements of key forage species on the 31 allotments with significant forage resource conflicts. To help in the design and implementation of grazing systems include 15 of the 31 allotments into 6 AMPs. Of the remaining 16 allotments, 3 may only require revision of an existing AMP, and 13 will require individual AMPs be developed (table 2). On the 31 allotments, implement 22 AMPs which would include 9 rest-rotation grazing systems, 11 deferred-rotation grazing systems, 1 summer-fall grazing system, and 1 winter grazing system (table 2).

Rationale. The present season of use on 20 of the 31 allotments allows for continuous winter and spring grazing of key browse and grass species. The present season of use on 8 additional allotments allow for continuous spring grazing on key grass species (table 1). Continuous winter and spring grazing on key browse species removes much of the shrub's carbohydrate reserves (stored largely in the stems) and limits that plant's capacity for growth and reproduction. Similarly, continuous spring utilization of key grass species removes new growth made possible by translocation of carbohydrates stored in the roots, thus depleting carbohydrate reserves and the plant's capacity for continued growth and reproduction. There are three allotments on which the physiological requirements of key forage species are not being met because of poor livestock distribution and overstocking. Implementation of AMPs provide periodic rest from livestock grazing during the critical spring growing season, proper stocking levels, and for proper livestock distribution, all of which allow the desirable forage species to gain vigor and improve in condition and composition.

### Conflicts and Interactions

RM 1.2 and WL 1.1 - Have a positive interaction on Bennion Spring, Indian Peak, Mountain Spring, and Sheep Spring in that WL 1.1 recommends horse removal from limited elk summer range and RM 1.2 proposes these allotments for intensive management.

RM 1.2 and WL 1.2 - Have a positive interaction on Antelope Peak, Beaver Lake, Bull Spring, Frisco, Gold Spring, Hardpan, Haystack Mountain, Hebron, Jockeys, Kiln Spring, Modena Canyon, Mt. Elinor, Rose Valley, Sevy West, Smith Jones, Tilly Creek, Water Hollow, and Willow Creek in that WL 1.2 recommends reduction of horse numbers from habitat shared with deer, antelope, and elk and RM 1.2 proposes these allotments for intensive management.

RM 1.2 and WL 1.3 - Interact in that WL 1.3 recommends a grazing system on Government Well, Holt Mine, Shauntie, SUSC Winter, and Uvada and RM 1.2 does not.

RM 1.1 and WH 1.2 - Interact in that RM 1.1 may not provide sufficient forage for wild horse numbers identified in WH 1.2 on Bagnall, Beaver Lake, Bennion Spring, Eight Mile Spring, Haystack Mountain, Hebron, Jockeys, Kiln Spring, Sevy West, Smith Jones, Tilly Creek and Water Hollow. It is important to note that this is a short-term (one to five years) effect and that with the initial forage allocation to livestock shown in table 1, more forage will be provided to wild horses than at the present time. Monitoring studies will provide the basis for additional adjustments needed to stocking levels so that in the long-term (more than 5 years) any short-term forage resource conflicts will be eliminated.

RM 1.1 and WH 1.3 - Have a positive interaction in that WH 1.3 recommends removal of horses from Antelope Peak which would be overallocated without it.

RM 1.2 and WL 1.4 - Have a positive interaction in that WH 1.4 recommends removal of horses from Gold Spring, Modena Canyon, Mt. Elinor, and Rose Valley, which would be overallocated without it.

### Multiple Use Recommendation

Adjust initial allocation of livestock forage to that shown in table 1. Future adjustments in stocking levels will be based on monitoring studies which includes climate, actual use, utilization, and trend. Data from these studies will be evaluated at the third and fifth year after initial adjustments are made to determine if additional adjustments are needed.

#### Reason

The initial adjustments are as per the rationale presented for RM 1.1. RM 1.1 was modifed to include RM 1.6 and monitoring studies will be conducted as presented in RM 1.6. Evaluation of monitoring studies to determine if additional adjustments are needed is as directed by Instruction Memorandum CCDO 82-3. Additional adjustments will resolve conflicts with WL 1.6 and WH 1.2.

Decision RM 1.1. No adjustments in stocking levels will be based only on inventory data. Where information is available to show adjustments are appropriate and they can be agreed upon, reductions will be made. On other "I" allotments, monitor and adjust to grazing capacity after sufficient data has been gathered.

Table 1
"I" MANAGEMENT CATEGORIES
Intensive Management Program

			Cı	urrent Situa	ation			1	<del>"'</del>		Proposed	Situatio	on		
									Potential			<u> </u>	<u> </u>		1
				Active	Suspended		[	1	and	İ	ĺ	j .	Initial	j	Ì
	Federal	Kind of	Season	Preference	Non-Use	Licensed	Management	Suitable	Limited	Unsuitable	Kind of	Season	Stocking	Surveyed	Management
Allotment	Acres	Livestock	of Use	AUMs	AUMs	Use AUMs	System	Acres	Acres <sup>e</sup>	:	1	1	Level-AUMs		System
Antelope Peak	51,264	cattle	  1 0/1 6-   5/1 5	1,575 <sup>d</sup>		4,163 <sup>a</sup>	continuous seasonal	38,617	4,152 L 8,231 P	•	cattle	10/16-	1,630	3,773	deferred
		sheep	10/16-	3,856	1,088		Seasonar	42,074		264	   sheep	5/15  10/16=   5/15	2,656 <sup>b</sup>	(3,678) 4,167 <sup>b</sup> (4,096 <sup>b</sup> )	rotation 
Bagnal I	12,395	sheep	  1 0/1 6-   4/30	   1,399 	535	932	continuous seasonal	0	11,384 L 494 P	:	sheep	10/10-	932 <sup>c</sup>	622 <sup>b</sup> (621 b)	
Beaver Lake	14,372	sheep	1 2/1 6- 2/28 4/1- 4/1 8	2,722	   261 	1,365	deferred   rotation	11,333	2,190 L 646 P	•	sheep	12/6-	1,365 <sup>c</sup>	868 <sup>b</sup> (797 <sup>b</sup> )	deferred rotation
∃ennion Spring	27,127	cattle	3/1-	2,126	386	1,689	rest rotation	11,678	11,779 P	3,670	   cattle	3/1- 2/28	1,689 <sup>C</sup>	1,620	rest rotation
Buckhorn	30,294	   cattle	10/16-	3,370 <sup>d</sup>	0	3,370	  continuous   seasonal	25,177	4,885 P	232	   cattle 	10/16-	3,033°	1,830	deferred   rotation
Bull Spring	21,050	   cattle	3/1-	1,197	187	1,099	  continuous   seasonal	9,751	10,568 P	   731	   cattle 	3/1-	1,095	1,172	rest rotation
Chokecherry	7,621	   cattle 	7/1-	159	202	202	  continuous   seasonal	4,327	1,183 L 2,111 P	1	   cattle 	7/1-	175	493 (492)	rest rotation
Eight Mile Spring	3,798	   cattle	10/1-	248	0	140	continuous seasonal	703	3,095 P	0	   cattle	10/1-	140 <sup>c</sup>	80 (23)	rest rotation

--- ·--

Table 1 continued

			C	urrent Situa	ation						Proposed :	Situatio	on		
			1						Potential			1			
				Active	Suspended	1	•		and			1	Initial	Ì	Ì
	Federal	Kind of	Season	Preference	Non-Use	Licensed	Management	Suitable		Unsuitable	Kind of	Season	Stocking	Surveyed	Management
Allotment	Acres	Livestock	of Use	AUMs	AUMs	Use AUMs	System	Acres	Acres <sup>e</sup>	Acres	Livestock	of Use	Level-AUMs	Capacityf	System
Frisco	29,781	sheep	  1 0/1 5-   4/1 5	2,856	1,429	1,656	continuous seasonal	18,658	4,680 L 5,938 P	505	sheep	10/15-	1,984 <sup>b</sup>	2,025 <sup>b</sup> (1,986 <sup>b</sup> )	deferred rotation
Gold Spring	15,232	   cattle 	5/1-	366	0	232	  continuous   seasonal	654	13,989 P	   589 	cattle	10/15-	232 <sup>c</sup>	36 (36)	rest rotation
Hardpan	35,815	sheep	10/10-	2,099	0	1,812	continuous seasonal	9,692	20,218 L 1,607 P	4,298	sheep	1 0/1 0- 5/1 5	2,099 <sup>b</sup>	2,506 <sup>b</sup> (2,485 <sup>b</sup> )	deferred   rotation
Haystack Mountain	10,305	   cattle	11/1-	677	41	496	continuous   seasonal	5,993	3,852 P	460	cattle	11/1-	496 <sup>C</sup>	328	rest rotation
lebron	4,442	   cattle 	11/1-	664	   86 	638	continuous seasonal	4,442	0	0	   cattle 	11/1-	638	360 (283)	rest rotation
Indian Creek	21,637	cattle	3/1-	966 <sup>d</sup>	0	416	deferred   rotation	5 <b>,</b> 503	15,947 P	187	   cattle 	6/1-	416 <sup>C</sup>	181	deferred   rotation
Indian Peak	72,419	cattle	3/1-	1,311	1,332	1,341	continuous   seasonal	30,804	41,188 P	427	   cattle 	3/1-	1,475	2,082	rest rotation
Jockeys	32,773	cattle	5/16-	2,175	   886 	956	  continuous   seasonal	8,017	22,253 P	2,503	   cattle	   5/16-  11/15	990	1,053	rest rotation
Johns	4,896	cattle	5/1-	220	0	175	deferred   rotation	64   64	   4,671 P 	161	   cattle 	   5/16-  11/15	   175 <sup>c</sup> 	19 (19)	deferred   rotation
(iin Spring	19,791	sheep	11/1-	2,165	312	1,232	continuous seasonal	14,198	4,192 P	1,401	sheep	11/1-	1,232°	1,227	deferred   rotation

Table 1 continued

	1,972 cattle   3/1-   274   0   234   12/31     5,091   cattle   5/16-   370   445   313   10/15										Proposed :	Situatio	on	· <u>-</u>	
				}					Potential			1			
·			Ì	Active	Suspended				and	Ì		i	Initial	1	j
	Federal	Kind of	Season	Preference	Non-Use	Licensed	Management	Sultable	Limited	Unsuitable	Kind of	Season	Stocking	Surveyed	Management
Allotment	Acres	Livestock	of Use	AUMs	AUMs	Use AUMs	System	Acres	Acres <sup>e</sup>	Acres	Livestock	of Use	Level-AUMs	Capacityf	System
				1											
4atheson	1,972	cattle	3/1-	274	0	234	continuous	1,852	120 P	0	cattle	3/1-	234°	152	deferred
			12/31	Į	1		seasonal					12/31		(151)	rotation
			]	]	ļ	]	ļ	]		]		1			}
411ford	5,091	cattle	•	370	445	313	continuous	4,132	935 P	24	cattle	6/16-	347	348	continuous
Cattle			10/15	1	}		seasonal					11/15		(348)	seasonal
	1 07 460	} !	1 = 4	(70	1 ^	1	ļ	1	00 707 5	1 . 700	1	1 - 4	1 4046	1	1
1odena Canyon	23,469	cattle	1	672	1	121	continuous	1,377	20,783 P	1,309	cattle	5/1-	121 <sup>C</sup>	131	rest
	] ]	} 1	10/31 	1	l 1	! 1	seasonal	{ 1	 	1	! !	10/31	! 1	(66)	rotation
Mountain Home	1 40 446	l none	l	! !	1	! !	ı İunallotted		l	 	none		 		l  unallotted
nountain nome	1 40,440	10110	i	1	1	1	1	( [	i	1	10110	1	( {	1	i i
4ountain	24.185	cattle	6/1-	786	551	438	continuous	14,072	8,878 P	1,235	cattle	6/1-	786	1,014	deferred
Spring	j ,		10/31	1	Ì	ì	seasonal	ĺ		į ´		10/31		(817)	rotation
, ,	İ	i	j	j	İ	İ	j	Ì	Ì	Ì		İ	]	Ì	
4t. Elinor	5,658	cattle	12/1-	352	0	352	continuous	2,850	142 L	504	cattle	12/1-	317¢	143	rest
	ĺ	1	4/30	1		1	seasonal	1	2,162 P	1		4/30		(99)	rotation
	1	1	1		1					1	1	1	1	1	1
Rose Valley	5,959	cattle	11/1-	340	0	146	continuous	2,450	3,509 P	0	cattle	11/1-	146 <sup>C</sup>	98	rest
			4/30				seasonal		]			4/30	1	(57)	rotation
	1	}				ļ		ļ	ļ	ļ		1	]	ļ	}
Sevy West	34,157	cattle	11/1-	1,776	590	1,535	continuous	17,098	•	•	cattle	11/1-	1,535¢	730	rest
	}		4/30	1 500		1 770	seasonal	1 00 057	16,509 P	1		4/30	} }	(633)	rotation
	1	sheep	1/1-	588	546	339	continuous	29,053	:	:	sheep	1/1-	588 <sup>b</sup>	2,033 <sup>b</sup>	rest
	1	1	3/31	1	) 1	1	seasonal	1	3,840 P	1	1	3/31	1	(1,984 <sup>b</sup> )	rotation
Sewing	1 11,306	sheep	10/16-	1 - 376	1 0	l   331	  continuous	8,224	1 2,136 L	946	sheep	10/16-	!   376b	   750 <sup>b</sup>	deferred
Yachine	111,500	l suech	5/15	)		1	seasonal	0,224	2,130 L	1 340	Sueeh	5/15	] -076- ]	(749 <sup>b</sup> )	,
MOTITIE	1	1		1	1	1	300301101	İ	}		1	//	1	(/45")	101011011
Sheep Spring	14,071	cattle	5/16-	491	0	0	  continuous	1,909	108 L	1,413	cattle	6/16-	86	165	  continuous
			9/30			İ	seasonal		10,641 P	,		10/31		(86)	seasonal
		-1	١	· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·		1	•	· · ·		<del>'</del>	-l		1	1

Table 1 concluded

	1		Cı	urrent Situa	ation						Proposed	Situatio	on		
									Potential			1			
	1	1		Active	Suspended	İ			and			1	Initial	Ì	ĺ
	Federal	Kind of	Season	Preference	Non-Use	Licensed	Management	Suitable	Limited	Unsuitable	Kind of	Season	Stocking	Surveyed	Management
Allotment	Acres	Livestock	of Use	AUMs	AUMs	Use AUMs	System	Acres	Acres <sup>e</sup>	Acres	Livestock	of Use	Level-AUMs	Capacityf	System
Smith Jones	   3,339   	   cattle     	   5/1-   7/30   9/1-  10/31	   260   	   188   	   147     	continuous seasonal	3,060	279 P	0	cattle	6/15- 11/15	1 47 <sup>C</sup>	135	continuous seasonal No Grazing Pasture #2
Tilly Creek	7,091	   sheep 	2/28	715	0	705	continuous seasonal	6,649	442 P	0	sheep	  12/1 <del>-</del>   2/28	635 <sup>c</sup>	365	continuous seasonal
Water Hollow	28,760	   cattle 	5/1-	2,128	610	1,602	rest rotation	16,249	9,129 P	3,382	cattle	5/1-	2,041 <sup>c</sup>	1,481	rest rotation
Willow Creek	56,479	sheep cattle	10/20 <b>-</b> 5/15	5,317 <sup>d</sup>	957	1,580	continuous seasonal	41,041	1,892 L 12,385 P	:	sheep cattle	10/20 <b>-</b> 5/15	4,967 350	5,618 <sup>a</sup> (5,338 <sup>a</sup> )	rest rotation
TOTALS	  676,995 			45,112	10,477	  29,757 		:	53,322 L 241,793 P	:			35,128	31,799 (31,659)	

<sup>&</sup>lt;sup>a</sup>Cattle and sneep.

bincludes suitable and limited suitable AUMs.

<sup>&</sup>lt;sup>c</sup>Includes suitable, limited suitble, and potentially suitable AUMs where applicable.

 $<sup>{}^{\</sup>mathrm{d}}\mathrm{Temporary}$  non-renewable cattle use authorized in the past.

eL = limited suitability, P = potentially suitable.

f(n) = surveyed capacity constrained by current wild horse and wildlife numbers.

# Grazing , justments For I Category Allotments or M Category Allotments If AUMs Are Increased Over Active Grazing Preference

### eral Guidelines For Intial Adjustment

uctions for an individual operator will not exceed 10 percent of his average actual use or his average licensed use. reases for an individual operator will not exceed 10 percent of his active grazing preference.

	Grazing Inventory		Adjustment Beginning	Adjustment Beginning 3rd Year. To be Determined By Monitoring Studies	Adjustment Beginning 5th Year. To be Determined By Monitoring Studies	<u>Initial Adjustment</u> Percent Change from	Initial Adjustmen Percent Change from Actual Use or Licensed Use
When Gr	azing Inve	ntory Exceeds	Actual Use	:			
-00.	400	300	400	<del></del>	-	-20	+33
When Gr	l razing Inve	ntory Exceeds	Grazing Pr	eference and Permitte	lee is Running at Prefe	erence:	
00	50 <b>0</b>	500	55 <b>0</b>	<del>-</del>	, <u>-</u>	+10	+10
When Gr	azing Inve	ntory Exceeds	Grazing Pr	eference and Permitte	ee is Running at Less	Than Preference:	4
00	600	400	· 50 <b>0</b>	-	~	0	+25
When Gr	l azing Inve	intory is Less	Than Actua	l Use:			
<b>00</b>	300	400	400	- -	-	-20	0
When Gr	l Pazing Invo	entory is Less	Than Actua	1 Use But Permittee	is Running at Prefere	nce:	
00	300	500	450	-	-	-10	-10
Communi	i ity Allotme i	ent:					
)0 )0 )0	- - - 400	#1 250 #2 175 #3 75 500	237 158 <u>79</u> 474			-21 -21 -21 -21	- 5 -10 + 5 - 5

RM 1.2 and WH 1.2 - Interact on 16 allotments (table 3) where WH 1.2 recommends supporting horse herds and RM 1.2 recommends them for intensive management.

RM 1.2 and WH 1.3 - Have a positive interaction in that WH 1.3 recommends removal of horses from Antelope Peak, which RM 1.2 recommends for intensive management.

RM 1.2 and WH 1.4 - Have a positive interaction in that WH 1.3 recommends removal of horses from Gold Spring, Modena Canyon, Mt. Elinor, and Rose Valley, which RM 1.2 recommends for intensive management.

### Multiple Use Recommendation

Accept RM 1.2 as written.

### Reason

There are no conflicts with RM 1.2.

Decision RM 1.2. On a case-by-case basis as season-of-use and stocking levels are agreed upon or determined by monitoring, implement AMPs until all "I" allotments have implemented AMPs.

Table 2

"I" Management Categories

Facilities and Treatments Necessary for Intensive Management

					Proposed	Management					<del></del>
					1			Land Trea	atments	Neces:	sary
	1	1	İ		į			to Meet			-
	1	Management	Number of	Potential	Key	Livestock F	acilities				AUMs
Allotment	Combined with:	System	Pastures	AUMs	Species	Туре	Units	Method	Acres	SWA	Realize
Andrian Dark	1		7	4 200	1 00/17		1 2 5				
Antelope Peak	1	Deferred	3	4,200	ORHY	Pasture fence	2.5 miles	Chain-burn-	3,100	[A113]	620
	1	rotation			AGSP	1	1	broadcast-	1	1	•
	1	[Allow change]	ĺ	i	PUTR2		ļ	chain	ţ	Į.	
	1	for partial			ARARN	Antelope	1	ļ	1	!	į
		AUMs from			Ì	Spring pipe-		!	ļ		ļ
	1	sheep to			!	line	3 miles	!	ļ	}	
	ļ	cattle			ļ	Troughs	2 each	Chain-burn-			
	}	]				Woodhouse		broadcast-	1	1	
		1			l	Spring	Į	chain	3,100	A086	620
		]				plpeline	2 miles	1	1	A087	
		]			1	Troughs	1 each		1	A089	1
		1			1	Coyote Spring	1	Chain-burn-	5,400	A068	1,080
		1			1	pipeline		broadcast-	ĺ	A092	
				}		extension	4 miles	chain	1	İ	Ì
	1				į	Troughs	1 each	j	İ	A119	j
	1				1	Sevy's Well	İ	j	j	i	j
	İ	1			j	pipeline	3 miles	İ	İ	i	j
	<u> </u>					Troughs	2 each		<u> </u>	Ì	]
Bagnall	1	]		1,035	ARARN		1	 	1	1	
bayıları	1	1		ردن,۱	ORHY	1	1	Presently ad		ed by	Warm ı
	1				I ORHT			Springs R.A.	1	1	<u> </u>
Beaver Lake	Kiln Spring	Deferred	3 (1 In this	1,659	ORHY	Develop Smith		Chain-burn-	1,000	H024	200 <sup>a</sup>
		rotation	allotment)		ATCO	Spring	1 each	broadcast-	200	H023	!
	1			1	ARARN	Pipeline	4 miles	chain	200	H027	:
	}	1			Ì	Troughs	3 each	j	750	H028	•
		İ		İ	İ	Allotment	j	Burn-drill	:	H031	<b>!</b>
	1		ĺ	Ì	j	fence	3 miles	i	i ´ -	i	ì

j

Table 2 continued

					Proposed	Management					
		1						Land Tre			
	1	Management	Number of	Potential	Key	Livestock F	acilities		1	1	AUMs
Allotment	Combined with:	System	Pastures	AUMs	Species	Туре	Units	Method	Acres	SWA	Realized
Bennion Spring AMP		Present   rest	1 4	2,206           	EULA5 ATCA AGCR ORHY	Develop Arrow-   head Spring   Pipeline   Troughs   Develop Bob   LeRoy Spring   Drift fence   Protection   fence	1 each 3 miles 2 each 1 each •5 miles 7 miles	Chain-burn-  broadcast   		  B045  B208  B270 	320 152
Buckhorn		Deferred rotation Allow change from sheep to cattle	4	2,468	EULA5 ORHY	Buckhorn   Spring pipe-   line extension   Troughs   Willow Spring   pipeline   extension   Troughs   Pots-Um-Pa   Spring pipe-   line extension   Troughs   Pasture fence   Cattleguards	2 each 1.5 miles 1 each	  Burn-Drill                   	   3,600   900                 	  C01 4  C01 3         	!

Table 2 continued

					Proposed	Management					<del></del>
								Land Trea	atments	Neces	sary
								to Meet	Total Pr	efere	nce
		Management	Number of	Potential	Key	Livestock Fa		J		1	AUMs
Allotment	Combined with:	System	Pastures	AUMs	Species	Туре	Units	Method	Acres	SWA	Realized
Bull Spring		l Rest	3	2,049	l I ORHY	   Leigh Well		<b> </b>	1	ļ	
But 1 Spi Ting		rotation	J	1 2,049	EULA5			!	<b> </b>	1	
	1	1 1 0/ 0/ 10/ 1		I	l COLAD	pipeline   extension	1		1		
	 	1 1		! 	[ ]	Trough	1 mile	1	!		
		i i		! ]	! 	1 -	1 each	<b> </b>	 	1	1
		! !	_			Cattleguard	1 each			 	 
Chokecherry		Deferred	2	91 2	ORHY	   Chokecherry		-			
*		rotation			STC04	pipeline		1		1	
		[			EULA5	extension	2 miles				ĺ
					AGCR	Trough	1 each				
Eight Mile	Modena Canyon	   Rest	4 (1 in this	135	HIJA	Develop		0-:	1 500	10177	700
Spring	Mt. Elinor	rotation	allotment)	135	ORHY	Unnamed Spring	1 each	Chain-burn- broadcast-	1,500	D1 33	!
opg	1	Control wild		 	l Oxin	Pipeline	2 miles	chain		D330	   (187) <sup> </sup>
		horses	 	! 	1	Trough	1 each	Chain	l i	1	1 (187),
		1101 303				l Ough	i eacii				1
Frisco		Deferred	   3	2,480	EULA5	  Coyote Spring		  Chain-broad-	2,500	10030	500
	Ì	rotation	_	] = <b>,</b>	ORHY	pipeline	1	cast-chain	2,500 	1	1 000
		1		! }	ARARN	extension	l 8 miles	Casi-cilaiii	1,000	10070	200
		1		! !	1	Troughs	2 each	  Chain-broad-	•	٥٥٥٥	535
				i		II Oughs	2 60011	cast	<b>2,</b> 077	1	1 223
	i			Ì		1		Chain-broad-	700	G045	140
	i			i				cast	1,700	G045	•
		1		, 				Casi		G037	•
				i	1			; ;	400 	1605/	1 00

Table 2 continued

					Proposed	Management					
	``				1	l		Land Tre	atments	Neces	sary
								to Meet	Total Pr	efere	nce
		Management	Number of	Potential	Key	Livestock Fa	acilities		1		AUMs
Allotment	Combined with:	System	Pastures	AUMs	Species	Туре	Units	Method	Acres	SWA	Realized
Gold Spring	Rose Valley	l Rest	5 (3 in this	83	!   POA++			  Chain-burn-	1,080	D239	216
		rotation	allotment)		ARARN	pipeline	2.5 miles	broadcast-	•	D237	•
	j	Control wild			i	Troughs	2 each	chain	1	1	/ L
	j	horses			i	Develop Gold	2 0 0 0 0 1 1		1	1	( 
	j				1	Spring	1 each		i İ	1	i I
	i				i	Pipeline	•5 miles	1	1		[ ]
	j	1	, 		j	Trough	1 each		i	1	{ 1
	j				j	Develop	. 00011		! 	[	( [
		i			i	Cottonwood			1	1	[ ]
	j	j			j	Spring	1 each		:		! 
	j	Ī	<u>'</u>			Trough	1 each		t i	1	! 1
	j				i	Pasture fence	3 miles	1	! !	1	ł j
	j	]	]	j	ì	Pasture fence	3 miles	1	1	i i	t 
	i	İ				Pasture fence	2.5 miles	1	! 	1	! }
	j	j	,		Ì	Allotment		1	1	1	( 1
	<u> </u>	i			İ	fence	6 miles		]		
									Ì		
Hardpan	Sewing Machine	1	3 (2 In this	2,714	ORHY	Wah Wan Spring			1		Ì
		rotation	allotment)		ARARN	pipeline			1		
	ļ	!	,		ļ	extension	2.5 miles		1		
		!			]	Trough	1 each			1	1
		ŀ				Corral (per-		1			
		}		1		mittee to			1		1
	1	]	<b> </b> 		1	construct)	1 each		1		1
41 - 4 - 1			15 /1 / 1	750							
Haystack	Hebron,	Rest	5 (1 in this	350	STC04	Reservoir	l each	Chain-burn-		D124	•
Mountain	Sevy West	rotation	allotment)	1	ORHY	Well	1 each	broadcast-	1,500	D162	
		1	1	<u> </u> 	PUTR2	Pipeline	1 mile	chain	!		(91) <sup>t</sup>
	1		1	1		Trougn	1 each	!	ļ		
<del></del>		<u>l.                                    </u>		<u> </u>	<u> </u>	Windmill	1 each	<u> </u>		l	

Table 2 continued

				· · · · · · · · · · · · · · · · · · ·	Proposed	Management	<del></del>		<del>,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,</del>		
								Land Trea	atments	Neces	sary
	j							to Meet	rotal Pr	efere	nce
		Management	Number of	Potential	Key	Livestock Fa	cilities			}	AUMs
Allotment	Combined with:	System	Pastures	AUMs	Species	Туре	Units	Method	Acres	SWA	Realized
Hebron	Haystack Mountain, Sevy West	Rest rotation	5 (1 in this allotment)	400	(   ORHY   AGOR   COMES 	Reservoir   	1 each	  Burn-driii    Chain-burn-  broadcast-  chain	1,200	j	į
Indian Creek	Rotation includes Jackson, Johns, Pine Grove, Red Cove, Sheep Creek, Well	Present deferred rotation allow change from sheep to cattle	7 (1 in this allotment)	503     	ORHY POFE PUTR2 EPNE	Allotment   fence	5 miles	Chain-burn-  broadcast-  chain  Burn-drill  Chain-burn-  broadcast-  chain	500	  B028    B028  B028	100
Indian Peak AMP		Rest rotation Control wild horses	6	2,191	EULA5   ORHY 	Ripgut Spring   pipeline   extension   Troughs   Develop Ryan   Spring   Pipeline   Troughs   Develop   Unnamed Spring   Pipeline   Trough   Trough   Develop North	4 miles 2 each 1 each 7 miles 3 each 1 each 1 each 1 each	Chain-burn-   broadcast-   chain   Plow-drill   Plow-drill   Chain-burn-   broadcast-   chain	     800   400		   160   80   80

Table 2 continued

					Proposed	Management					
								Land Tre	atments	Neces	sary
	İ			1				to Meet	Total Pr	eferer	nce
		Management	Number of	Potential	Key	Livestock F	acilities	J	1		AUMs
Allotment	Combined with:	System	Pastures	AUMs	Species	Туре	Units	Method	Acres	SWA	Realized
Indian Peak	! !		[ ]	 	[ ]	   Pipeline	   4 miles		1		Í
AMP continued	1			ì	ì	Troughs	2 each	! }	1	1	 
// com maca	 		! }	1	1	Develop	2 each	1	1		 
				i	İ	Unnamed Spring	l 1 each		1		<u> </u>
		Ì		Ì	Ì	Pipeline	2.5 miles	i	i	i '	ì
	i	İ	į	İ	İ	Trough	1 each	İ	İ		İ
			1	Ì	Ì	Pasture fence	6 miles	Ì	Ì		1
		j .	İ	İ	į	Pasture fence	9 miles	į	i	ĺ	
		 	 		]	Pasture fence	15 miles		Ì		
Lead of				1 250	1000						
Jockeys		Rest	4	1,259	AGCR	Develop		Chain-burn-	6,000	B062	
	1	rotation	<b>!</b>	l j	ORHY	Unnamed Spring		drill	!	B080	•
	1	 	1	1	1	Pipeline	2 miles	1		B256	•
		i	i i	1	1 	Trough McKnight well	1 each	Burn	300	B257	•
		1	!		 	pipeline	l   4 miles	Chain-burn-		B062	•
		1	Ì	1		Troughs	2 each	drill	1 2,700	B080	1
		1	ì	ì		Develop the	l 2 Gadii	]	i	B256	•
		İ	i		i	Seeps Spring	l 1 each		ŀ	B257	•
•	Ì	i	j	i	Ì	Pipeline	1 mile		1	1	1
	İ	İ	i	İ	İ	Trough	1 each	İ	ĺ	i	İ
	j	Ì	Ì		i	Develop	j	i	ì	1	1
		ĺ	Ì	ĺ	į	Unnamed Spring	1 each	İ	i	i	i
					Ì	Pipeline	3 miles	Ì	i	i	i
		1	1	1		Troughs	2 each	İ	i	İ	i
	1			1		Allotment			İ	Ì	Ì
		1		1		fence	1 mile	İ	İ	ĺ	İ
			1	1	1	Pasture fence	4 miles	1	Ì	Ì	j
	<u> </u>	<u> </u>	<u> </u>	<u> </u>		1	,	<u> </u>			

Table 2 continued

					Proposed	Management					
				1				Land Tre	atments	Neces	sary
			1		1	!		to Meet Total Prefe		efere	nce
Allotment	Combined with:	Management System	Number of Pastures	Potential   AUMs	Key   Species	Livestock F	acilities   Units	<u>}</u>	1	10.44	AUMs
			1 43741 03	, NOMS	) Species	1 iybe	] UILLE	Method	Acres	SWA	Realized
Johns	Rotation includes:	Present deferred	7 (1 in this allotment)	147	POFE	Allotment   fence	11.5 miles	Chain-burn-  broadcast-	400	  B178 	80
	Indian Creek,  Jackson, Pine    Grove, Red    Cove, Sheep    Creek, Well	rotation		       	PUTR2       	     	1	chain   	500     	B51 0       	120   (127) <sup>t</sup> 
Kiln Spring	Beaver Lake	Deferred rotation	3 (2 in this allotment)	1,416	ORHY ATCO ARARN	Develop Three Kilns Spring Pipeline			3,000	F055	   600 <sup>a</sup> 
						Trough Develop Horse Spring Pipeline Troughs Allotment fence	1 each 1 each 5 miles 2 each	Chain-burn-  broadcast-  chain	1,000	F058         	200
				1	1	Tence	3 miles	1	i i	1	
Matheson		Deferred rotation	3	235	ORHY EULA5	Mountain Spring pipe-	   2.5 miles	Burn-broad-  cast	200	B228  B231	40
		   		 		Troughs   Pasture fence   Pasture fence   Cattleguard	2 each 1 mile 1 mile 1 each	# 			1         

Table 2 continued

					Proposed	Management	<del></del>				······································
								Land Tre	atments	Neces	sary
					1	1		to Meet	Total Pr	eferer	nce
		Management	Number of	Potential	Key	Livestock Fa	cilities				AUMs
Allotment	Combined with:	System	Pastures	AUMs	Species	Туре	Units	Method	Acres	SWA	Realized
Milford Cattle		SU-FA   grazing	1	564 	ORHY EULA5 SIHY	Pipeline     Trougn   	2 miles 1 each				
Modena Canyon	Eignt Mile Spring, Mt. Elinor	Rest rotation Control wild horses	4 (2 in this allotment)	180	POA++ SIHY	Develop Paradise Spring Pipeline Trougn Paradise Canyon Reservoir Modena Canyon pipeline extension Trougn Pasture fence	1 each 3 miles 1 each 1 each 1.5 miles 1 each 8 miles	Chain-burn-  broadcast-  chain	3,500	  D091  D243  D328 	
Mounțain Spring		Deferred rotation Control wild horses	4	1,050	AGCR ORHY	Develop Typhoid Spring Pipeline Troughs Bible Spring pipeline extension Trougn Protection fences	,	Cnain-burn-  broadcast 	1,685	  B134         	337

Table 2 continued

					Proposed	Management					
		ĺ	Ì					Land Tre	atments	Neces:	sary
	1	!						to Meet	efere	псе	
		Management	Number of	Potential	Key	Livestock Fa	acilities			1	AUMs
Allotment	Combined with:	System	Pastures	AUMs	Species	Туре	Units	Method	Acres	SWA	Realized
Mountain		] ]		 	<u> </u>	  Pasture fence	2 miles	1	<u> </u> 		1
Spring con-		1			l İ	Protection	2 111165	<b>!</b> !	1		[ 
tinued	1	! !			]	;	7 5 1 1	! 1	1	1	1
Tinued		<b>!</b>			1	fence	3.5 miles	!	1	[	İ
	1					Cattleguards	2 each	ļ	ļ	Į (	
						Mountain		!			ļ
	Į.	Į į		1	Ĺ	Spring pipe-	!	ļ	ļ	ţ	ĺ
		[ [	[		1	line extension	2.5 miles	1			
		( ]		}	1	Trough	l each	1	1	1	<u> </u> 
Mt. Elinor	Eight Mile	Rest	4 () in this	284	SIHY	Modena Canyon		Chain-burn-	1,300	D1.5.7	260
111 • 2111101	Spring, Modena	•	allotment	204	1	pipeline		!	1,500 	וכל וטן ו	[ 200 1
		Control wild		 	1			broadcast-	<u> </u>	i i	<u> </u>
	Canyon	:			j 1	extension	3 miles	chain	!	!	] 
	1	horses	}	 	1	Trough	1 each	İ	ļ	1	(192) <sup>b</sup>
						Develop Desert	:			ļ	ļ
		1		1	ļ	Spring	1 each	l	]	1	
				į		Pipeline	1.5 miles	1	ļ		l
					<u> </u>	Trough	1 each 	<b> </b>			 
Rose Valley	   Gold Spring	Rest	5 (2 in this	259	ORHY	Allotment	3 75 miles	 	100	01.76	00
Nose variey	Gord Spiring	rotation		1 209	1		J•/J miles	Chain-burn-	400	D1 75	80
		•	allotment)	( 	PUGL2	fence	[	broadcast-		1	[
		Control wild	[ ]	[ 	<u> </u>	Protection		chain	1		1
	ļ	horses	1	<u> </u>	ļ	fence	.5 miles	Burn	200	D177	40
			ļ	!	•	Mud Spring	!	1			1
		ļ	[		!	pipeline	ļ	ļ			1
		1		l		extension	2.5 miles	1		1	1

Table 2 continued

					Proposed	Management					
			1					Land Tre			
		Management	Number of	Potential	Key	Livestock Fa	acilities		]	1	AUMs
Allotment	Combined with:	System	Pastures	AUMs	Species	Туре	Units	Method	Acres	SWA	Realized
Sevy West	Haystack Mountain, Hebron	Rest rotation	  5 (3 in this   allotment)   	767(c)	AGCR HIJA POTR2 EULA5	Wells Windmills Trougns Reservoirs Pasture fence Pipeline	2 each 2 each 2 each 2 each 3 miles 2.5 miles	Burn-drill Burn-drill Cnain-burn- broadcast- chain Chain-burn- broadcast- chain	1,000 3,000	  D025  D032  D030    D356	200 600
Sewing Machine	   Hardpan	Deferred rotation	3 (1 in this allotment)	1,059	EULA5 ORHY					     	
Sheep Spring		SU-FA grazing	1	200	POAA ORHY	Develop Unnamed Spring Pipeline Trougns Protection fence	l each 2 miles 2 each 8 miles	Chain-burn-  broadcast-  chain	2,500	B075	500 (159) <sup>b</sup>
Smith Jones		SU-FA grazing Allow no grazing on Pasture 2	1	167	AGCR ORHY	Drift fence Protection fence	•5 miles 2 miles	Burn-broad- cast	500	  D013  D262	•

Table 2 continued

					Proposed	Management					······································
				ļ				Land Tre	Method Acres SWA Reachain-burn- 1,000 D131 roadcast- hain urn-broad- 310 B021 ast urn-broad- 410 B012 ast 940 B014 50 B018 100 B019 180 B022 440 B185 250 B232 360 B234 300 B285 350 B303 hain-burn- 1,000 F096 roadcast- hain urn 2,000 F093		
				ļ	}			to Meet	Total Pr	efere	nce
A 1 1 - 1		Management	Number of	Potential	Key	Livestock Fa		_			AUMs
Allotment	Combined with:	System	Pastures	AUMs	Species	Туре	Units	Method	Acres	SWA	Realized
Tilly Creek	]	l Continue l	1	l 1 450	I I ATCA2	l  Develop Upper		1Chain-hunn-	1 1 000	10171	<b> </b>   200
,	j	winter	·	, , , ,	EULA5	Trough Spring	1 each	:	1,000 	ן וכוטן	200 
	j	grazing		Ì	ORHY	Pipeline	;	chain	[ ]	1	[ ]
					]	Troughs	2 each	:	900	1    10130	I 160
	İ			Ì	Ϊ	l	2 0001	Court di iii	1 500	 	(95)
	<u> </u>						! !				(9))-
Water Hollow		   Present	4	2,000	EULA5	   Pinto Spring		Burnehroade	310	10021	62
AMP		rest		, -,,,,,	ORHY	pipeline	! 	cast	טוכ ן	10021	02 
		rotation		1	STC04	extension	2.5 miles	!	1 410	l lental	l 82
į					1	Trough	1 each	cast	1	•	
	Ì	İ		j	i	Allotment	. 545		•	•	•
				j	<u>.</u>	fence	4 miles	1	•	•	
	İ	ĺ		İ	i	Driveway fence		i	•	•	•
				j	j				•	• •	
	1			ĺ	İ	j		j	:	•	
				1	Ì	i			•	, ,	
	1			Į	ĺ	ĺ		j	!	•	
		 			<u> </u>				1		
				1					<u>                                       </u>		
Willow Creek	1	Rest	4	6,301	EULA5	Bumblebee		Chain-burn-	1,000	F096	200
	ļ	rotation		<u> </u> 	ARARN	Spring		broadcast-			
	1	Allow par-		1	ORHY	pipeline	4.5 miles	chain			
	1	tial change		<b> </b> 	1	Willow Creek			•		
	1	from sheep to cattle		<b>{</b> 1	 	pipeline		Burn	2,000		
	[	10 cattle    Control wild		<b>∤</b> 1	l 1	extension	3.5 miles	1		F094	
		;		ł 1	! 1	Trougn	1 eacn	1		!!	(600) <sub>p</sub>
		horses [		!	1	Kiin Spring		!		}	

Table 2 concluded

					Proposed	Management					
		Management   System	Number of Pastures	1			l	Land Tre	eatments	Neces	sary
						Į		to Meet	ence		
				Potential	Key	Livestock F	acilities				AUMs Realized
Allotment	Combined with:			AUMs	Species	Туре	Units	Method	Acres	SWA	
Willow Creek				i	ł	l   pipeline	  3 miles		1	1	ł
continued	Ì	ĺ		İ	j	Trough	l each		i	i	i
		] [			 	Pasture fence	8 miles				
TOTALS				39,582°		Fence	152.25 mi		84,515	<del>                                     </del>	16 007
		 		1	i	Pipeline	130.75 mi		104,515	l i	16,903
		İ	l e e e e e e e e e e e e e e e e e e e	ĺ	1	Troughs	65 each		1	1	
	1			1	1	Springs	20 each		i	i	i
	1			1		Wells	3 each		j	j	İ
	1				1	Reservoirs	5 each		İ	i	i
	,			l	1	Cattleguards	4 each		İ	İ	İ
				}	1		İ		Ì	i	İ

<sup>&</sup>lt;sup>a</sup>Cannot meet total preference with treatments.

bAUMs above and beyond that required to meet total preference but necessary to balance pastures. These AUMs are a subset of the identified SWA by SWA AUMs

<sup>&</sup>lt;sup>c</sup>Single use livestock AUMs. Wild horse and wildlife AUMs not removed.

Name (MFP)		
Pinyon		
Activity		
Range		
Overlay Ref	erence	
Sten 1	Step 3	

## MANAGEMENT FRAMEWORK PLAN

RECOMMENDATION-ANALYSIS-DECISION

Recommendation RM 1.3. Provide for intensive livestock management with the following new facilities: 3 wells, 3 windmills, 20 springs, 130.75 miles of pipeline, 5 reservoirs, 65 water troughs, 152.25 miles of fence, 7 cattleguards, and 1 corral (table 2).

Rationale. These facilities as listed are necessary to implement intensive grazing management systems on the 31 allotments identifed in table 2.

## Conflicts and Interactions

RM 1.3 and WH 1.2 - Conflict because RM 1.3 recommends considerable fencing in Beaver Lake, Bennion Spring, Indian Peak, Jockeys, Kiln Spring, Mountain Spring, Sevy West, Sheep Spring, Smith Jones, and Water Hollow, which WH 1.2 recommends as wild horse management areas.

### Multiple Use Recommendation

Accept RM 1.3 with the modification that mitigating measures be included for fences to be constructed within horse herd units to allow for wild horse passage.

#### Reasons

The facilities in RM 1.3 are necessary for intensive management. The modification is necessary to provide for the wild, free-roaming nature of the horses.

<u>Decision RM 1.3.</u> New facilities will be determined by AMP formulation in accordance with decisions in RM 1.1 and RM 1.2.

Name (MFP Pinyon	)
Râfige <sup>ty</sup>	
Overlay Ref	erence
Step 1	Step 3

#### MANAGEMENT FRAMEWORK PLAN

RECOMMENDATION-ANALYSIS-DECISION

Recommendation RM 1.4. Complete the following land treatments to provide 16,903 additional AUMs to the 31 allotments proposed for intensive management (table 2).

Prescribed burn - 2,500 acres
Burn and broadcast - 4,390 acres
Burn and drill - 11,200 acres
Plow and drill - 1,200 acres
Chain and broadcast - 5,475 acres
Chain, burn, and broadcast - 4,045 acres
Chain, burn, and drill - 8,700 acres
Chain, broadcast, and chain - 3,500 acres
Chain, burn, broadcast, and chain - 43,505 acres

Rationale. In addition to the present forage production of 31,799 AUMs, through intensive grazing management 7,783 AUMs can be realized of the 55,232 AUMs required to meet management objectives. The deficit of 15,650 AUMs may be obtained through the land treatments identified above and on table 2. There may be 6,265 acres of land treatment which would yield 1,253 AUMs included within the recommended land treatments solely for the purpose of balancing pastures (table 2). Balanced pastures are needed in order to implement an effective rest rotation grazing system.

#### Conflicts and Interactions

RM 1.4 and WL 1.5 - Interact on Indian Peak in that both recommend including SWA D303 for land treatment.

RM 1.4 and WL 1.6 - Have a positive interaction in that land treatments recommended in RM 1.4 will provide forage for present and prior stable wildlife numbers as recommended in WL 1.6.

RM 1.4 and WH 1.2 - Interact in that RM 1.2 recommends land treatments on all allotments in table 3 except Bull Spring and WH 1.2 recommends managing horse herds there.

## Multiple Use Recommendation

Accept RM 1.4 with the modification that any land treatments are fully coordinated with wildlife and wildlife mitigation is followed on each land treatment.

#### Reasons

The land treatments in RM 1.4 are necessary for intensive management. The modification is necessary to assure wildlife habitat improvement.

<u>Decision RM 1.4</u>. Land treatment will be determined by AMP formulation in accordance with decisions in RM 1.1, RM 1.2 and RM 1.3.

Decision RM 1.5. Accept the Multiple Use Recommendation.

## Reasons

RM 1.6 deals with monitoring to determine whether or not additional adjustments to livestock allocations are needed to those made in RM 1.1. These two recommendations have been combined since each of them deals with allocation of forage.

on RM 1.6. Accept the Multiple Use Recommendation.

------  $\underline{\text{Decision RM 1.7}}.\quad \text{Accept the Multiple Use Recommendation.}$ 

Table 3 Seasonal Wild Horse Use Within Allotments Recommended for Intensive Management

Horse		Recommendation WH 1.1		Livestock Level	Surveyed Capacity	Recommended Miles of	Potential Management	Required Lan- to Implement Manage	Intensive	Total Preference
Herd Unit	Allotment	Number	Season	AUMs	AUMs 1	Fence	AUMs	Acres	AUMs	AUMS
Bible	   Bennion Spring	Δ	yearlong	1,689	1,496	7.5	2,206	2,360	472	2 512
DIDIC.	Eight Mile Spring	1	yearlong	140	23	0	135	1,500	300	2,512
	Modena Canyon	î	SU-FA	121	66	8.0	180	3,500	700	672
	Mountain Spring	ŝ	yearlong	786	817	7.5	1,000	1,685	337	1
	Sheep Spring	ĭ	vearlong	86	86	8.0	150	2,500	500	1,337
	Tilly Creek	i	yearlong	635	362	0.0	450	1,800	360	
	Tirry or eck	1	yeur rong	055	302	\	430	1,000	300	715
Blawn Wash	Bull Spring	4	yearlong	1,095	1,095	o	2,049	0	1 0	1,384
	Jockeys	3	vearlong	990	956	5.0	1,259	9,000	1,800	3,061
	Water Hollow	2	yearlong	2,041	1,410	5.5	2,000	3,710	742	2,733
		}	1		ĺ		1	•		
Frisco	Beaver Lake	2	WI-SP	1,365	797	3.0	1,659	4,150	830	2,983
	Frisco	3	yearlong	1,984	1,986	0	2,480	8,975	1,795	4,285
	Kiln Spring	7	yearlong	1,232	1,066	3.0	1,416	4,000	800	2,477
North Hills	   Haystack Mountain	3	vearlong	496	198	0	309	2,500	500	718
	Hebron	1 4	yearlong	633	283	٥	400	2,400	480	750
	Sevy West	5	yearlong	1,535*	633*	8.0	767*	6,000	1,200	2,366*
	Smith Jones	2	yearlong	147	103	2.5	167	500	100	448
Sulphur	Indian Peak	32	yearlong	1,475	1,768	30.0	2,191	2,400	480	2,673
	TOTALS	80		16,455	13,145	88.0	18,646	56,980	11,396	29,858

 $<sup>^{1}\</sup>mbox{Constrained}$  by present wildlife and wild horse numbers. \*Cattle AUMs only.

#### MANAGEMENT FRAMEWORK PLAN - STEP 1

ACTIVITY OBJECTIVES

Name (MFP)	
Pinyon	
Activity	
Range	
Objective Number	
RM-2	

Objective RM-2. Maintain and improve 323,754 acres of suitable, 44,533 acres of limited suitable, 131,338 acres of potentially suitable, and 25,278 acres of unsuitable public rangelands that are in satisfactory ecological condition and are being managed satisfactorily.

Rationale. There are 22 allotments in the Pinyon Planning Unit that are managed satisfactorily and do not require changes in management or implementation of range improvements to change forage condition or overcome resource conflicts (see table 4). If the individual operator wants to further improve his allotment with private funds he will be encouraged to do so.

#### MANAGEMENT FRAMEWORK PLAN

RECOMMENDATION-ANALYSIS-DECISION

Name (MFF	•)
Pinyon	
Activity	
Range	
Overlay Re	lerence
Step 1	Step 3

Recommendation RM 1.8. Remove or reduce wild horse numbers on 17 allotments (table 3) proposed for intensive grazing management above and beyond the reductions called for in Recommendation WH 1.1.

Rationale. Seventeen of the 31 allotments proposed for intensive grazing management will support a residual herd of wild horses during the critical spring and summer growing seasons. It is management's objective that the natural potentials of these allotments be managed for in order to meet the goal of total grazing preference. Where management cannot meet this goal, land treatments may be completed in order to do so. Land treatments may also be completed to balance pastures. On these 17 allotments land treatments will be needed (table 3). The forage obtainable through management as shown in table 3 is based on the assumption that an appropriate intensive grazing management system will be developed and implemented which meets the physiological growth requirements of the key forage species (table 2). With wild horses left at the levels recommended by Recommendation WH 1.1 (table 3) many of the problems wild horses present to an intensive management plan will be alleviated. However, on the 17 allotments in table 3 the physiological growth requirements will not be met completely and the allotments' natural potentials will not be met within the estimated 20 year timeframe. Wild horses present the following obstacles with respect to intensive grazing management:

- 1. Season and area of use cannot be controlled. Since passage of P.L. 92-195, wild and free-roaming horses have been allowed to establish seasonal use areas. Concentrations of horses year after year are especially detrimental on spring and summer ranges.
- 2. Wild horse numbers are not easily controlled because of rough topography, dense cover, manpower, budget restrictions, and other considerations. Due primarily to expected budget restrictions, complete removal is the primary recommendation wherever possible. By simply reducing horse numbers on the given herds, the Bureau would be faced with the continuous task of capturing horses to keep them within recommended (WH 1.1) levels. The recommended (WH 1.1) 6 wild horse herds should be reduced to a more manageable number.
- 3. Intensive grazing management plans are based in part upon obtaining a specific composition of key forage species as will be identified in that plan. Wild horses compete with cattle for these key species. Extent of this competition varied from 45 percent identical (Olsen and Hansen, 1977), 59-75 percent identical (Hubbard and Hansen, 1976), to 77 percent identical (Hansen, Clark, and Lawhorn, 1977). When wild horses make continuous seasonal use of key forage species, that plant's vigor, condition, and composition cannot be expected to improve to meet management objectives.

- 4. In order to implement intensive management on these 17 allotments, 88 miles of allotment and pasture fence are required (table 3) to eliminate uncontrollable residual wild horse use. Where wild horses would normally be using an allotment, this additional fencing will restrict their wild free-roaming nature to some degree. Removal or further reductions are recommended so that fencing of these allotments does not cause amplified forage resource and management conflicts on surrounding, unfenced allotments.
- 5. In order to implement intensive grazing management on these 17 allotments, 56,980 acres of seedings are required (table 3). Bureau policy is to provide at least 2 ungrazed growing seasons in order that they may become established. With horses at levels recommended in WH 1.1 the seedings would become a concentration area for horses while seedings are establishing. In other words, the number of horses shown in table 3 would be expected to increase to utilize the young, succulent forage provided by a new seeding. The benefit/cost ratio for each AMP would decrease if horses are allowed to utilize the new seedings or if the seedings are fenced.

## Conflicts and Interactions

- RM 1.8 and WL 1.1 Have a positive interaction in that both recommend horse removal from Bennion Spring, Indian Peak, Mountain Spring, and Sheep Spring.
- Rm 1.8 and WL 1.2 Have a positive interaction in that both provide for reductions in wild horse numbers on Beaver Lake, Bull Spring, Frisco, Haystack Mountain, Hebron, Jockeys, Kiln Spring, Mt. Elinor, Sevy West, Smith Jones, Tilly Creek, and Water Hollow.
- RM 1.8 and WL 1.6 Have a positive interaction in that horse removal recommended in RM 1.8 for 16 allotments in table 3 would help provide sufficient forage for deer, antelope, and elk, as recommended in WL 1.6.
- RM 1.8 and WH 1.1 Conflict on 17 allotments (table 3) where RM 1.8 recommends removal and WH 1.1 recommends managing horses.
- RM 1.8 and WH 1.2 Conflict in that RM 1.8 recommends removal of three of four horse herds which WH 1.2 recommends to combine into two horse herds.

### Multiple Use Recommendation

Modify RM 1.8 to recommend removal, reduction, or maintaining wild horse numbers on 25 allotments (table 3 - MFP 2) recommended for intensive grazing management in order to manage horse herds (see WH 1.1 and 1.2 and WL 1.1 and 1.2) at the following 1971 inventoried levels:

Blawn Wash - 30 head Chokecherry - 25 head Frisco - 20 head North Hills - 35 head Sulphur - 105 head

215

#### Reasons

By managing wild horses in these five horse herd units rather than the existing nine herds, existing resource conflicts will be eliminated or reduced on these 25 allotments. The problems wild horses create with intensive grazing systems were broken into five categories in RM 1.8, which include: 1) season and area of use, 2) numbers of horses, 3) management plan's objectives, 4) fencing conflicts, and 5) impacts on land treatments. By eliminating horses on four herd units, conflicts 1 through 5 will be eliminated on 11 of the 25 allotments. By reducing horses from present numbers on 4 horse herd units, conflicts 1 through 5 will be partially alleviated on 13 allotments. Horses will be maintained at present numbers on one herd unit where no conflict was identified.

### Decision RM 1.8, WH 1.1, WH 1.2, WH 1.3, WL 1.1, WL 1.2

Several alternatives for population control and herd unit consolidation have been considered during development of the Pinyon MFP and EIS. The best method to achieve long term objectives is not clear at this time. The effects of water development and distribution projects, vegetative rehabiliation, and other wildlife and range development projects on the location, and movement of wild horses needs additional study and observation. Significant changes in the Wild Horse and Burro Act also appear to be probable in the near future.

In view of this situation the following long term general objectives will be established, and short term (approximately two years) actions taken pending the results of monitoring studies on herd viability, range condition, viewing opportunities, cooperative management opportunites, and range development proposals:

- a. Accept as the long term objective, management for horse numbers at 1971 levels. The number of herd units would not be established at this time but would depend on the results of monitoring studies.
- b. In the short term, remove horses as required to maintain horse numbers at or below 1982 inventory levels but not less than 1971 levels except for the North Hills and Mountain Home-Sulphur herds.
- c. Continue cooperative management of the North Hills herd with the Dixie National Forest in accordance with the existing management plan. Horses in this unit will be maintained between 40 and 60 horses as specified in the plan.
- d. Consolidate and stabilize the Mountain Home-Sulphur herd unit and establish these numbers between 135 and 180 horses.

The Mountain Home allotment presently has no grazing privileges. Live-stock grazing will not be permitted unless monitoring studies following consolidation and stabilization of the horse numbers confirm adequate forage exists for the established numbers and wildlife.

ł	Į		uation - 1980-	-81 Inventory	MFP 2 Reco	ommendation	Conf	lict Resol	ution
Horse		Total	Number by	Season	Total	Number by	No Conflicts	Conflicts	Conflicts
Herd Unit	Allotment	Herd Size	Allotment <sup>1</sup>	of Use	Herd Size	Allotment <sup>1</sup>	Identified <sup>2</sup>		
Bible Control	Donnion Comina	<b>#</b> 0	0		•				
Bible Spring		50	0	corridor	0	0	1	ļ	!
i	Jackson Wash		11	yearlong		0	1	!	<u> </u>
	Lone Pine Spring	1	12	yearlong	•	0	!	ļ	
	Mountain Spring		23	yearlong		0	]	1	X
i	Sheep Spring		4	yearlong		0	1		X
Blawn Wash	Antelope Peak	41	(5)	FA-WI-SP	30	0	1	1	l X
				su			Ì	Ì	Ì
	Bucket Ranch		(13)	FA-WI-SP		(13)	Ì	Ì	İ
]				SU			j	1	İ
	Bucket Ranch		0	corridor		0	j	i	i
	Lambing					Ì	Ì	j	<u> </u>
	Burn Knoll		(2)	FA-WI-SP		0	ì	i	
	Jockeys		3	yearlong	,	(3)	İ	X	· •
	Shauntie		(3)	FA-WI-SP		0	i	i	1
	Water Hollow		5	yearlong		4	i	X	<u> </u>
	Willow Creek		(10)	FA-WI-SP		(10)	i	X	(
				su			•		
Chokecherry	Chokecherry	25	10	yearlong	25	   10	l x	<b>[</b>	[
	Stateline	i	15	yearlong		15	Î	ĺ	
Four Mile	Bull Spring	48	8	yearlong	0	0		1	l l x
Wash	Lone Pine Spring		12	yearlong		0	<b>!</b>		, ^ !
•	Lund		2	yearlong		0	1	i	 
	Jockey	}	3	yearlong		0	1	! 	! !
	Mountain Spring		23	yearlong		i o	i .	{	i I
		1		, ,	'	Ĭ	1	1	i i

(continued)

Table 3-MFP 2 continued

		Present Site	uation - 1980	-81 Inventory	MFP 2 Reco	ommendation	Conf	lict Resol	ution
Horse	[	Total	Number by	Season	Total	Number by	No Conflicts	Conflicts	Conflicts
Herd Unit	Allotment	Herd Size	Allotment	of Use	Herd Size	Allotment	Identified <sup>2</sup>	Minimized	Eliminated
Frisco	   Bagnal	65*	0	corridor	20	0		   x	<u>{</u>
	Beaver Lake		(4)	WI-SP	20	์ (เ)	;	ı x	! !
	Frisco	Ì	10	yearlong		3	1	ı ^	į t
	Hardpan	i	5	yearlong		1	i	l x	i I
	Highrock	j	5	yearlong		2	1	! ^ !	f \$
<u>.</u>	Kiin Spring	Ì	(23)	WI-SP		(7)	-	l x	1
		j		SU-FA			}	1 ^	( 
	Wah Wah - Lawson		(18)	WI-SP		(6)		! 	
	Cove			SU-FA	,				
Mt. Elinor	   Gold Spring	20	5	l   yearlong	0	l 0	1	<b>[</b>	)   x
i	Government Well	j	(5)	SU-FA	_	Ö	i	•	i ^
	İ	Ì		WI-SP	,		i		1
	Modena Canyon	j	(2)	SU <del>-F</del> A		0	i	i	X
	Mt. Elinor	1	3	yearlong	·	0	i	Í	X
	Rose Valley	ĺ	5	yearlong		0			X
North Hills	County Line	60	0	corridor	35	0	<u> </u>	<u>{</u> 	[ [
	Haystack Mtn.	Í	10	yearlong		6	Ì	X	( {
	Hebron	İ	11	yearlong		7	ì	x	•
	Holt Mine	İ	8	yearlong		4	i	,	•
	Sevy West	ĺ	14	yearlong		8	İ	X	i
	Smith Jones	1	5	yearlong		3	i	X	•
	SUSC Winter	•	10	yearlong		6	i		
	Uvada	1	2	yearlong		1		İ	
Sulphur	l Atchison Creek	130	<b>1</b> 3	l ∫ yearlong	105	2		<b>1</b> 5	•
	Indian Peak	1	42	yearlong		34	i	X	i
	Mountain Home	1	26	yearlong		21	Ì	1	1
	Warm Spring R.A.	<u> </u>	59	yearlong		İ	i	i	i

(continued)

<sup>\*</sup>Increase of 10 horses between 79-80 and 80-81 inventories.

Table 3-MFP 2 concluded

	1	Present Situ	uation - 1980-	-81 Inventory	MFP 2 Reco	ommendation	Conflict Resolution			
Hor se	1	Total	Number by	Season	Total	Number by	No Conflicts	Conflicts	Conflicts	
Herd Unit	Allotment	Herd Size	Allotment <sup>1</sup>	of Use	Herd Size	Allotment <sup>1</sup>	Identified <sup>2</sup>	Minimized	Eliminate	
Tilly Creek	   Bennion Spring	37	16	yearlong	0	0		1	X	
·	Eight Mile	i	4	yearlong		0		i	х	
	Spring									
	Modena Canyon	ĺ	(1)			0	Í	İ		
	Mountain Spring	1	0	corridor		0		1		
	Rosebud	1	12	yearlong		0				
	Sheep Spring		0	corridor		0		Ì		
	Tilly Creek	i	4	yearlong		0		ĺ	Х	
					. ,	i .	1			

<sup>1 (</sup>n) = yearlong equivalent (i.e., the prorated number of horses in an allotment if the same number occurred yearlong.

This table only concerns allotments recommended for intensive management. Other allotments on which no conflicts were identified are included as an indicator of wild horse occurrence, but will not be given a rating.

Table 3
Seasonal Wild Horse Use Within Allotments Recommended for Intensive Management

Horse		Recommendat	tion WH 1.1	Livestock Level	Surveyed Capacity	  Recommended   Miles of	Potential Management	Required Land to Implement Managem	Intensive	Total Preference
Herd Unit	Allotment	Number	Season	AUMs	AUMs 1	Fence	AUMs	Acres	AUMs	AUMs
Bible	Bennion Spring Eight Mile Spring Modena Canyon Mountain Spring Sheep Spring	4 1 1 5	yearlong yearlong SU-FA yearlong yearlong	1,689 140 121 786 86	1,496 23 66 817 86	7.5 0 8.0 7.5 8.0	2,206 135 180 1,000 150	2,360 1,500 3,500 1,685 2,500	472 300 700 337 500	2,512 248 672 1,337 491
	Tilly Creek	1	yearlong	635	362	0	450	1,800	360	715
Blawn Wash	Bull Spring Jockeys Water Hollow	4 3 2	yearlong yearlong yearlong	1,095 990 2,041	1,095 956 1,410	0 5.0 5.5	2,049 1,259 2,000	0 9,000 3,710	0 1,800 742	1,384 3,061 2,738
Frisco	Beaver Lake   Frisco   Kiln Spring	2 3 7	WI-SP yearlong yearlong	1,365 1,984 1,232	797 1,986 1,066	3.0 0 3.0	1,659 2,480 1,416	4,150 8,975 4,000	830 1,795 800	2,983 4,285 2,477
North Hills	Haystack Mountain Hebron Sevy West Smith Jones	3 4 5 2	yearlong yearlong yearlong yearlong	496 638 1,535* 147	198 283 633* 103	0 0 8.0 2.5	309 400 767* 167	2,500 2,400 6,000 500	500 480 1,200 100	718 750 2,366* 448
Sulphur	Indian Peak	32	yearlong	1,475	1,768	30.0	2,191	2,400	480	2,673
	TOTALS	80		16,455	13,145	88.0	18,646	56,980	11,396	29,858

 $<sup>^{1}\</sup>mbox{Constrained}$  by present wildlife and wild horse numbers. \*Cattle AUMs only.

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Pinyon	
Activity Range	
Overlay Refer	ence
Step 1	Ston 3

#### MANAGEMENT FRAMEWORK PLAN

RECOMMENDATION-ANALYSIS-DECISION

Recommendation RM 2.1. On 22 allotments in good condition with limited resource conflicts and present management is adequate, manage 33,533 AUMs for cattle on 315,345 suitable Federal acres in 20 allotments and 4,475 AUMs for sheep on 77,322 suitable and 38,761 limited suitable Federal acres in 3 allotments. One allotment has the capacity for both sheep and cattle allocated separately (table 4).

Rationale. The present grazing management is satisfactory on the 22 allotments and if it continues the livestock forage should maintain itself or continue to improve. If the individual operator wants to further improve his allotment through private funds he will be encouraged and possibly assisted in doing so. Principal opportunities for development are present in table 5.

### Conflicts and Interactions

RM 2.1 and WL 1.3 - Conflict in that RM 2.1 recommends Shauntie and SUSC Winter for continued management and WL 1.3 recommends them for more intensive management.

RM 2.1 and WH 1.3 - Have a positive interaction in that the removal of horses from Shauntie and Burn Knoll will increase the effectiveness of continued management.

#### Multiple Use Recommendations

On 22 allotments where present grazing management has been satisfactory, continue with existing management practices with forage allocation as shown in table 4. Modify to include "No Grazing" into the Jockeys Allotment. Initiate or continue monitoring studies, including climate monthly, actual use yearly, trend at three to five year intervals, and utilization as time and funds permit.

#### Reasons

Continued management on these 22 allotments is as per the rationale presented for RM 2.1. "No Grazing" is included into Jockeys Allotment as per the reason presented for RM 1.7. Monitoring studies will be conducted on to determine the extent of the conflict between RM 2.1 and WL 1.3.

Table 7 continued

			1		1		Intens	ive Managemen	†		
	1	Proposed Management	Number of		1			Land	Treatm	ents	
				Potential	Key	Livestock Fa	acilities		· · · · · · · · · · · · · · · · · · ·	1	AUMs
Allotment	Combined with:		Pastures	AUMs	Species	Туре	Units	Method	Acres	SWA	Realized
Delvecthio		Deferred rotation	2	115	ORHY EULA5 HIJA	 					 
Flat Top		Remove grazing privileges	1	4	PUTR2						
Government	Uvada	Rest rotation	2 (1 in this allotment)	196	ORHY STC04	Allotment fence	     3.75 miles 	Plow-driil Burn		D248 D249 D247	į
Holt Mine		Deferred rotation	2	353           	HIJA   ORHY 	Pipeline extension Trough Allotment fence Pasture fence	.75 miles   1 each   .75 miles   3 miles	Burn-broad- cast		  001 7  D031  D263 	160
Meadow Valley		Custodial SU-FA grazing	3	   15 	ORHY						
Modena		FA-WI grazing	1	100	ORHY HIJA		1	Burn	400	  D095  D096  D097	i i
	į		İ	i	Ì	i	i	j	j	D098	•

	-						Inten	Intensive Management	+		
		Proposed	Number of	Potential				Land	Land Treatments	ents	
Allotment	Combined with:		Pastures	AUMs	Species	Livestock Facilities Type   Unite	acilities				AUMs
Delvecch io		   Deferred	2	115	ORHY ORHY				ACLES	V MA	Kealized
		rotation 			EULA5 H 1 JA						
Flat Top		Remove		A	0						
		grazing privileges		·—·	SIH						
Sovernment		4	1 '								
Well	000	rotation	2 (1 in this allotment)	961	ORHY STC04	Allotment	3.75 miles	Plow-drii!		D2 48	44
								Burn	200	0247	1 00
Holf Mine		Deferred	2	353	HIJA	Pipeline		Burn-broad-	008	0017	160
					5	Trough	1 .75 miles cast	cast		1500	
					. ~~	Allotment				C971	
						fence	.75 miles				
			~			Pasture fence	3 mlles				
Meadow Valley		Custodial	m	15	ORHY						
		grazing									
Modena		   FA-w		100	) ORHY						
		grazing		-	HIJA			= 50	004	960a	80
										1600	
										8600	

Table 7 continued

Decision RM 2.1. Accept the Multiple Use Recommendation.

Table 4
"M" MANAGEMENT CATEGORIES
Continued Management Program

	ļ		Cı	urrent Situa	ation			1			Proposed	\$1+ua+1	20		
	} }			Active	Suspended				Potential	i			on	1	
Allotment	Federal Acres	Livestock Kind	Season of Use	Preference	Non-Use AUMs	•	Management System	Sultable Acres	and Limited Acres	Unsultable Acres	Livestock Numbers Kind	Season	Initial Stocking Level-AUMs	Surveyed	Management System
cnlson eek	   32,932 	cattle	   7/1-   8/10	266	0	26 ó	deferred rotation	12,387	19,651 P	894 	cattle	7/1-	293	912	deferred rotation
ue Mountain	9,982	cattle	10/16-   6/30	826	441	692 	deferred rotation	8,537	0	1,445	cattle	  10/16-   6/30	826	865	deferred rotation
cket Ranch	30,352	cattle	6/14 <b>-</b>  10/5	1,425	721	721	deferred rotation	12,587	   16,961 P	804	cattle	   6/14-  10/5	1,425	1,354	deferred rotation
cket Ranch ambling	2,041 	sheep	4/23- 5/30	360	0	152	deferred rotation	999	1,042 P	0	sheep	4/23- 5/30	360	316	deferred rotation
rn Knoll	18,023	cattle <sup>a</sup>	10/1-   5/15	950	705	955	deferred rotation	15,094	2,929 P	0	cattle <sup>a</sup>	10/1 <b>-</b>   5/15	1,045ª	1,107ª	deferred rotation
tcner	6,336	cattle	8/11-  11/30 	939 	0	801 1	deferred rotation	6,336	0	0	cattle	8/11 <b>-</b>   11/30	939 	1,191	deferred rotation
ok :	28,184	cattle	3/1- 2/28	2,736	1,030	2,825	rest rotation	25,328	2,843 P	13	cattle	3/1- 2/28	3,010	3,017	rest rotation
ghrock	24,344	cattle	  11/1-   5/31	1,440	1,970	1,344	continuous seasonal	9,369	5,722 L 6,202 P	   3,051 	cattle	  11/1-   5/31	1,440	1,435	deferred rotation
ckson	18,800	cattle	10/16- 4/30	1,938	774	1,803	deferred rotation	18,652	148 P	   0 	cattle	10/16 <b>-</b> 4/30	1,938	1,883	deferred rotation

(continued)

ible 4 continued

		·	C	urrent Situa	ation						Proposed	Situatio			<del> </del>
Allotment	  Federal   Acres	Lives tock Kind	  Season  of Use	Active Preference AUMs	Suspended Non-Use AUMs	•	  Management   System	]	Potential and Limited Acres	i	Livestock	Season	Initial Stocking		Management
ackson Wash	19,530	   cattle 	3/1-	1,422	181	   811 	deferred rotation	14,604			cattle	3/1-	Level-AUMs	1,315	System  deferred rotation
one Pine oring	29,824	cattle	5/16- 9/30	1,368	365	   575 	   deferred   rotation	   11,022 	18,008 P	   794 	   cattle	5/16- 9/30	1,368	   1,175 	deferred rotation
ınd	31,453	cattle	3/1-	2,443	872	2,038	rest rotation	24,193	6,087 P	   1,173 	   cattle   	3/1 <b>-</b> 2/28	2,443	2,232	rest rotation
→ Grazing	7,984	none	   	 		   	unallotted		3,209 P 3,621 P	•	cattle	6/14 <b>-</b> 10/5	314	314 314	deferred rotation
ne Valley	5,271	cattle	5/16- 9/30	608	0	572	deferred	2,798	2,473 P	0	cattle	5/16~ 9/30	608	619	deferred rotation
·d Cove	30,999	cattle	10/16 <b>-</b>   4/30 	2,894	0	1,144	deferred rotation	23,666	4,727 P	2,606	cattle	10/16- 4/30	2,894	3,224	deferred rotation
∍sebud	7,352	cattle	8/11 <b>-</b>  11/30	83	0	72 	deferred rotation	2,106	5,246 P	0	cattle	8/11 <b>-</b> 11/30	83 	69	deferred rotation
auntie.	18,455	cattle	10/15 <b>-</b>   5/15	1,530	560	   1,260 	   deferred   rotation	13,895	4,068 P	   492 	cattle	10/15 <b>-</b> 5/15	1,530	1,667	rest rotation
leep Creek	20,301	cattle	5/1 <b>-</b>  10/15	3,300	0	   2,541 	deferred rotation	10,550	9,334 P	   417 	cattle	5/1-     10/15	3,300	3,198	deferred rotation
∍anisn :orge	9,984	cattle	5/15 <del>-</del> 6/30	939	0	71 1   71 1 	   deferred   rotation	8,184	1,786 P	   14 	cattle	5/15- 6/30	939	849	deferred rotation
rateline	11,881	cattle	7/1- 8/10	197	0	197	continuous seasonai	3,597	8,284 P	0	cattle	7/1- 8/10	217	217	rest rotation

able 4 concluded

	<u> </u>		C	urrent Situa	ation						Proposed	Situatio		·	
	1	 	<u>.</u> 1						Potential			1	]	ī ·	i
A11.2	1	•		Active  Preference	Suspended Non-Use	:	  Management	  Suitable	and Limited	Unsultable	Livestock Numbers	Season	Initial Stocking	Surveyed	     
Allotment	Acres	Kind	of Use	AUMs	AUMs	Use AUMs	System	Acres	Acres	Acres	:		Level-AUMs	Canacity	System
JSC Winter	11,155	sneep	  12/11 <b>-</b>   3/10		)   	630	continuous seasonal	7,410	1,311 L 1,945 P		sheep	12/11-		672 <sup>b</sup>	continuou seasonal
ah Wah - awson Cove	126,669	cattle sneep	10/6- 6/13 10/15 <b>-</b> 5/30	5,588 3,486	1,014 <sup>c</sup>	6,064 <sup>c</sup>	rest rotation	   68,913   	   37,450 L   12,475 P 	• •	cattle sheep	  10/6-   6/13  10/15-   5/30		  11,405bc   	Ì
TOTALS	27,180	ĺ	10/16- 4/30	<u>2,224</u> 37,592	<u>0</u> 8,633	2,407 28,581	deferred rotation	23,598 323,825	İ	26,432	cattle	5/1-   11/30	2,224 38,008 38,322	40,132	deferred rotation

ncludes 6 stock norses ncludes suitable and limited suitable oth cattle and sneep otentially suitable due to lack of water

Table 5

"M" Management Categories

Facilities and Treatment Opportunities for Intensive Management

					Proposed M	lanagement					<del></del>
Allotment	Combined with:	Management System	Number of Pastures	Potential AUMs	   Key   Specles	Livestock F	acilities     Units	La: Metnod	nd Treatm	l	AUMs
Atchison Creek	   Rotation	Present	4 (In this	975	0RHY	Develop Salt	91119	Hemod	Acres	SWA	Realized
	Includes Butcher, Rose- bud, Spanish	deferred rotation	allotment)		SIHY EULA5	Cabin Spring Trough Develop	1 each 1 each				939
	George				1	Merril's Camp Spring Trough	l each   l each			]   	
					 	Pasture fence Pasture fence Develop Big	4.5 miles   5 miles				
						Basket Spring   Pipeline   Trough	1 each     1 mile     1 each				<u> </u>    -
Blue Mountain AMP		Present deferred rotation	4	1,161	EULA5 ORHY SPCR						1,161
Bucket Ranch	Bucket Ranch Lambing	Present deferred rotation	5 (4 in this   allotment)	1,550	AGCR ORHY						1,520
Bucket Ranch Lambing AMP	   Bucket Rancn	Present deferred rotation	5 (1 in this allotment)	356	ARARN AGCR						356

(continued)

Table 5 continued

	ļ				Proposed M	lanagement		****	<del></del>		****
Allotment	Combined with:	Management System	Number of Pastures	Potential AUMs	   Key   Species	Livestock Fa	ucilities Units	Lan Method	d Treatm		AUMs
Burn Knoll AMP		Deferred rotation	3	1,349	EULA5 ORHY AGCR	Fence Develop Merton's Spring Pipeline Troughs Allotment fence Pasture fence		Burn-broad- cast	Acres   1,500   1,200	A01 1	
Butcher	Rotation includes: Atchison Creek, Rose- bud, and Spanish George	Present deferred rotation	  4 (1 in this   allotment)   	1,957	AGCR AGSM ORHY EULA5	Butcher Spring   pipeline   extension   Troughs   Spring pipe-   line extension   Troughs	1 mile 1 each 1.5 miles 1 each				1,957
Cook AMP		Present rest rotation	4	3,550         	ORHY CULA5	Develop well Windmill Trough Bull Spring pipeline extension Trough	1 each	  Burn-dri    Burn-dri       	İ	  F024    F008 	j

Table 5 continued

	i			F	Proposed Ma	anagement					
								Lai	nd Treatm	ents	
	1	Management	Number of	Potential	Кеу	Livestock Fa	acilities			1	AUMs
Allotment	Combined with:	System	Pastures	AU11s	Species	Туре	Units	Method	Acres	SWA	Realized
		!			!			1			
Highrock		Deferred	3	2,500	ORHY	Highrock		Burn	1,150	H091	230
		rotation			EULA5	Spring			į		
			İ		AGCR	horizontal		1	1	Ì	2,730
		İ	Ì		1	well	1 each		1	1	
					1	Storage tank	1 each	1			ì
		1	1		l	High Rock		1		1	
	1		1		{	Spring		1	1		1
	1	}				pipeline	1	1		1	
			-		İ	extension.	7.5 miles	ĺ	į	İ	İ
				1	İ	Troughs	5 each	Ì	i	İ	Ì
	į	İ	i		i	Develop James	į	į	i	i	i
	i	İ	i	ĺ	i	Spring	1 each	i	i		i
	Ì	j	i	İ	i	Pipeline	6.5 miles	i	i	i	i
	ì	ì	Ì	Ì	ì	Troughs	4 each	ì	ì	ì	1
	i	j	İ	İ	i	Storage tank	1 each	i	i	i	i
	ì	Ì	ì		i	Allotment	i	Ì	j	i	
		İ	İ	İ	i .	fence	7 miles	i	i	i	1
		i	i	<u>.</u>	i	Cattleguards	3 each	i	ì	1	;
		i	i	İ	i	Allotment		i	i	i	1
	j	ì	ì	,	i	tence	10 miles	1	1	i	
		i	i	i	i	Cattleguard	1 each	i	i	1	i
	1		}	1	1	Pasture fence	4 miles	1	1	1	ì
		<del>                                     </del>	<del> </del>	1	<del>                                     </del>	l asture rence	1 4 111165	<u> </u>	<del> </del>	+	<del></del>
Jackson AMP	Rotation	Present	  7 (1 in this	4,565	I ORHY	Pots-Um-Pa	1	1	1	i i	1 4,565
Juckson (m)	includes:	deferred	allotment)	1 7,707	EULA5	pipeline	l 6 miles	1	l I	1	4,JUJ 
	Indian Creek,	rotation	l arronnentr	l	ATCA2	Troughs	2 each	 	l l	1	[
	Johns, Pine			1	SPGR2	i noughs	i ∠ each	1	ļ	1	1
	Grove, Red	1	1	1	1 35000	1	1	1	l i	1	1
	1	1	1	1	1	1	1	1	1	1	1
	Cove, Sheep	1	l l	1	1	1	1	1	1		1
	Creek, Well		<u></u>	<u> </u>	<u> </u>	_L	<u> </u>	<u> </u>			

Table 5 continued

				1	Proposed M	anagement					
								Lan	d Treatm	ents	
	1	Management	Number of	Potential	Key	Livestock Fa	cilities			1	AUMs
Allotment	Combined with:	System	Pastures	AUMs	Species	Туре	Units	Metnod	Acres	SWA	Realized
				1				ļ	ļ	ļ	ļ
Jackson Wash		Present	6	1,450	AGCR	Cattleguards	6 eacn	Chain-burn-	1,070	B006	214
AMP		deferred			EULA5	1		drlll		1	)
	ł l	rotation			ORHY	!!		Chain-burn-	370	B006	74
				<u> </u>	<u> </u>			drill	<u> </u>	<u> </u>	1,688
Lone Pine	1	   Present	4	1,400	AGCR	Troughs	1 each	  Cnain-burn-	2,500	lonas	500
Spring AMP	1	deferred	(	1,400	ORHY	Develop	i each	drill	1 2,500	10040	1 200
Spring AME	1	rotation	 	1	PUTR2	Unnamed Spring	1 0200	ariii  Burn	2,455	10050	1 400
			<b>{</b>		i FUIKZ	Pipeline	1 each 2 miles	lourn I	1 2,400	18072	490
	1	[ ]	[ 	1	i I	Troughs	2 each	{ }	l i	1	1 2 300
	1	<b>!</b> {	! !	1				1	ļ	1	2,390
		f 1	l 1	1	1	Butcher Spring		ł	t 1	1	1
	≀ 	t 1	₹ 1	1 	1	pipeline	4.5 miles	₹ 1	l 1	1	1
	1	<u>{</u>	{ 1	1	1	extension	3 each	1	1	1	ļ
		i I	l I	i I	1	Troughs Redrill well		1 1	t I	i i	1
	i I	<b>{</b> 1	i 1	l 1	ł	Allotment	1 each	t 1	↓ 1	1	i i
	1	!	1	į.	1	:	3 5 mll ==	1		1	1
Lund AMP		Present	6	3,028	AGCR	fence	2.5 miles		1,500	B101	300
CUBO AME		rest	1	3,020	ORHY	Mountain		Spray	1,500	B201	•
	1	rotation	1	1	EULA5	Spring piper	l 2 mlles	1	1	10201	:
		1	1	1	1 202/13	Troughs	2 each		1	1	3,328
	1	1	t I	1	1	Pasture fence	2.5 miles	1	1	1	<u> </u>
		<del> </del>	<u> </u>	<del></del>	<del></del>	Tastare Tence	2.0 111103	<del> </del>	<del> </del>	<del> </del>	<del> </del>
No Grazing	Bucket Ranch	Deferred	i	i	i	Ì	Ì	į	i	i	
		rotation	İ	Ì	i	İ	Ì	İ	ì	i	İ
Pine Valley		Present	2	737	AGCR	Reservoirs	2 each		1	1	737
·	į	deferred	ĺ		İ	Water Hollow	ĺ	İ	İ	į	İ
	İ	rotation	Ì	İ	Ì	Spring pipe-	İ	Ì	i	i	i
	i ·	Ì	1	İ	Í	line extension	.75 mile:	s <b>j</b>	İ	j	j
		1		1	Ì	Trough	1 each	Ì	i	į	į
	İ	i	i	İ	Ĭ	j	i	j	i	i	i

Table 5 continued

				-	Proposed M	anagement					
		Management	Number of	Potential	Key	Livestock Fa	scilities	Land	d Treatm	ents 	AUMs
Allotment	Combined with:	System	Pastures	AUMs	Species	Type	Units	Method	Acres	SWA	Realized
Red Cove	Rotation includes: Indian Creek, Jackson, Johns, Pine Grove, Sheep Creek, Well	Present deferred rotation allow change from sheep to cattle	7 (1 in this allotment)	   4,451         	CRHY EULA5 ATCA2 STCO4	Allotment fence Pine Grove Spring pipe- line extension Troughs	.5 miles 10 miles   6 each				4,451
Rosabud	Rotation includes: Atchison Creek, Butcher, Spanish George	Present deferred rotation	4 (1 in this allotment)	104	AGCR ORHY						104
Shaunt i e		Rest rotation Allow change from sheep to cattle	3	1,822	EULA5 AGCR AGSP ORHY ARARN	Develop Unnamed Spring Trough Well windmill Pipeline Troughs Flooded Mine- shaft pipeline Troughs Allotment fence Pasture fence	1 each   1 each   1.5 miles   2 each   3 miles   1 each   12 miles	Chain-burn-  broadcast-  chain	1,340	1402-	270

(continued)

Table 5 continued

	l		<del>,</del>		Proposed M	lanagement	· · · · · · · · · · · · · · · · · · ·				
Allotment	Combined with:	Management System	Number of Pastures	Potential AUMs	Key   Species	Livestock F	acilities     Units	L ar Method	d Treatm		AUMs
Sheep Creek	Rotation includes: Indian Creek, Jackson, Johns, Pine Grove, Red Cove, Well	Present deferred rotation	7 in this allotment	3,786		Fence Fence Fence	5 miles 1.5 miles 2 miles	Hermod	Acres	SWA	Realized
Spanish George	Rotation includes: Atchison Creek, Butcher, Rosebud	Present deferred rotation	4 (1 in this   allotment) 	1,321	AGCR AGSM CRHY						1,321
Stateline		R⊗t rotation	3	740	   ORHY       	Pasture fence   Pasture fence   Allotment   fence   Butcher Spring   pipeline   extension   Trough	2.75 miles .5 miles .5 miles .5 miles .75 miles				740
SUSC Winter		Continue winter grazing	1	986	CRHY POTR 2 ARARN	Develop Unnamed Seep Trough Storage tank	1 each 1 each 1 each			<u> </u>	986

Table 5 concluded

	{				Proposed M	anagement					
			l				I	Lar	nd Treatm	ents	
		Management	Number of	Potential	Кеу	Livestock Fa	cilities				AUMs
Allotment	Combined with:	System	Pastures	AUMs	Species	Туре	Units	Method	Acres	SWA	Realized
	İ		1			1			ļ		
Wah Wah -	į į	Present	7	17,911	EULA5	Newhouse (	Ĺ		Į	ļ	17,911
Lawson Cove		rest			ORHY	Spring pipe-			1		•
AMP	{	rotation	(		ARARN	line extension			Į.	1	
			!		!	Trough	l each		1	1	
			1		ļ	Wah Wah Spring	j		j	1	1
					1	pipeline					
					Į	extension	2.5 miles				
		Į		l	l	Trough	1 each		-		
		•		1	1	Develop	1		1		1
		1	1	l	1	[Unnamed Spring	1 each		1	1	1
		1	}	1	1	pipeline	.5 miles			1	Ì
	}	1	1	1	1	Trough	1 each		1	1	
		1	İ		1	Pitchfork	j		j	İ	İ
				1	1	Spring pipe-	Ì		1	Ì	Ì
	· ·	l	1		1	line extension	9 miles		ĺ	ĺ	ĺ
		ļ	<u> </u>	<u> </u>	<u> </u>	Troughs	2 each	, <del></del>		Ĺ	
Well	Rotation	Present	  7 (1 in this	6,683	ORHY	  Pasture fence			1	1	6,683
	includes:	deferred	allotment)	ì	EULA5	Allotment	i		i	j	, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
	Indian Creek,	rotation	į	j	SPOR2	fence	2 miles		i	ì	i
	Jackson,	i	j		ATCA2	Pots-Um-Pa			1	Í	
	Johns, Pine	ì	i	ĺ	i	Spring pipe-	, 	1	i	1	1
	Grove, Red	ì	ì	Ì	ì	line extension	6.5 miles		ì	ì	]
	Cove, Sheep	i	Ì	i	i	Troughs	2 each		,	ί.	1
	Creek	i	1	i	i	Pine Grove	;		1	i	ì
			}	}	}	Spring pipe-	;	)	}	ì	1
	j	i	i	j	1	line extension	l mile		i		1
		j	1			Trough	1 each	1	1	1	1
TOTALS		-	1	62,266	<del> </del>	1 2391	1		1	+	80,470

<sup>&</sup>lt;sup>a</sup>Presents inventory data and management options available to the operator. Proposed management would be to continue present grazing practices.

## MANAGEMENT FRAMEWORK PLAN - STEP 1

ACTIVITY OBJECTIVES

Name (MFP)	
Pinyon	
Activity	
Range	
Objective Number	
RM_3	

Objective RM-3. Prevent further deterioration of the range resource by continuing to allow the use presently authorized on 18 allotments containing 58,223 acres of public lands of which 32,251 acres are suitable public rangelands. Allow for uses other than livestock grazing or for the exchange or sale of isolated tracts of public land in 7 of these allotments and on unalloted areas.

Rationale. There are 18 allotments that presently have relatively low production and any change in grazing management would result in little if any resource improvement (table 6). Seven of these allotments consist of isolated tracts of public lands not conducive to management. There are isolated tracts in unalloted areas which are also not conducive to management.

	Name (MFP)	Name (MFP)	
	Pinyon	Pinyon	
	Activity		
Range Overlay Reference			
	Step 1 S	ten 3	

#### MANAGEMENT FRAMEWORK PLAN

RECOMMENDATION-ANALYSIS-DECISION

Recommendation RM 3.1. On 18 allotments where potential for natural improvement of the forage resource is restricted and further degradation is not expected, allow custodial management of 3,929 AUMs on 58,223 acres of public range of which 32,251 are suitable rangelands.

Rationale. Since it has been determined there is relatively low potential through grazing management for the vegetative resource on these allotments they will continue to be managed as they have been in the past. If the individual operator wants to develop his allotment with his own money he will be encouraged and possibly assisted in doing so. Principal opportunities for development are presented in table 7.

### Conflicts and Interactions

RM 3.1 and WL 1.3 - Conflict in that RM 3.1 recommends Government Well, Holt Mine, and Uvada for custodial management and WL 1.3 recommends intensive management.

RM 3.1 and WL 1.6 - Conflict on Austin, Beryl, County Line, Culver Spring, Delvecchio, Flat Top, Government Well, Holt Mine, Meadow Valley, Modena, Modena Reservoir, Pine Grove, Uvada, and Winsor in that RM 3.1 recommends an allocation which does not provide for present and prior stable deer and antelope numbers.

RM 3.1 and WH 1.4 - Have a positive interaction on Government Well in that WH 1.4 recommends removal of horses which would eliminate some grazing pressure from this custodial allotment.

#### Multiple Use Recommendation

Continue the present stocking level and season of use on 18 allotments as shown in table 6 and place them under custodial management. Monitor climate monthly and actual use annually. Utilization and trend studies will be conducted on a priority basis as the need is identified.

#### Reason

These allotments will be managed custodially as per the rationale presented for RM 3.1.

 $\underline{\text{Decision RM 3.1}}. \quad \text{Accept the Multiple Use Recommendation.}$ 

Table 6
"C" MANAGEMENT CATEGORIES

# Custodial Management Program

			Cı	urrent Situa	ation						Proposed :	Situatio	on <sup>a</sup>		
			1						Potential	1					
			1	Active	Suspended	1	] [		and	1			Initial		1
	Federal	Kind of	Season	Preference	Non-Use	Licensed	Management	Suitable		Unsultable	Kind of	Season	Stocking	Surveyed	Management
Allotment	Acres	Livestock	of Use	AUMs	AUMs	Use AUMs	System	Acres	Acresb	Acres	Livestock	of Use	Level-AUMs	Capacity	System
irport	5,246	   cattle 	   3/1-   5/31	   158 	0	   150 	continuous seasonal	3,607	1,591 P	}   48 	   cattle	   3/1-   5/31	   158 	188	deferred rotation
nltei	   1,128   	   cattle   	3/1-   3/31  11/1-  11/16	63		63	  continuous   seasonal	451   	677 P	0	   cattle   	3/1- 3/31 11/1- 11/16	63	14	  continuous   seasonal
∍ryl	   1,579   	   cattle   	10/1- 11/30 2/1- 5/15	230   	0	94	  continuous   seasonal	   1,579   	0	0	   cattle 	  10/1-  11/30   2/1-   5/15	   230 	   190   	rest rotation
ounty Line	2,471	cattle	3/1-   5/31   9/1-  10/31	351 351	0	198	  continuous   seasonal	0	585 L 1,886 F	•	cattle	9/1-	]   351   	28	continuous   seasonal
ılver Sprinç	  }   423 	   cattle	   4/1-   9/30	42	0	0	continuous   seasonal	   423 	   0 	0	cattle	10/1-	42	35	deferred rotation
:Iveccnio	1,305	cattle	10/10-	•	0	80	continuous   seasonal	1,305	   0 	0	cattle	10/10-	102	90	deferred   rotation
lat Top	424	4 cattle	4/16- 8/15	•	0	40	continuous   seasonal	, c	424	0	cattle	   4/16-   8/15	42 <sup>c</sup>	0	continuous <sup>c</sup> seasonal

(continued)

able 6 continued

	ļ		Cı	urrent Situa	ation	·					Proposed :	Situatio	on <sup>a</sup>		
			<u> </u>	Active	  Suspended	<u> </u>			Potential and	;	Livestock		Initial		
Allotment	: :	Kind of Livestock		Preference AUMs	Non-Use AUMs	Licensed Use AUMs	Management System	Suitable Acres		Unsultable Acres	Kind of	Season			  Management
overnment	5,003   5,003	cattle	5/10-	   240 	) 	48	continuous seasonal				cattle	5/16-	240	49	System rest rotation
olt Mine	6,725	cattle	4/1- 6/15	726	0	188	  continuous   seasonal	5,739	986 P	 	   cattle 	4/1-   6/15	726 	186	deferred rotation
∋adow Valley	416	cattle	6/15 <b>-</b>   12/4	18	0	   19 	continuous seasonal	36	380 P	   0 	   cattle 	6/15 <b>-</b> 12/4	18	1	continuous seasonal
odena	4,442   4,442	cattle	1  12/1-   5/31	314	0	346	  continuous   seasonal	1,717	2,086 P	639	   cattle 	  10/1-	346	68	confinuous seasonal
odena Oservoir	2,571	cattle	   7/1-  12/31	   182 	)   0 	   141 	continuous seasonal	2,467	104 P	   0 	   cattle 	   7/1-    12/31	182	107	deferred rotation
ine Grove	3,894	căttle	   5/15 <b>-</b>  10/15	113	   0 	   96 	deferred   rotation	]   367	3,039 P	488 	   cattle 	5/15-   5/15-  10/15	110	12	deferred rotation
nithson	13,579	   cattle 	111/1-	602	   47 	602	  continuous   seasonal	8,841 8,841	3,011 P	1,727	   cattle 	  11/1~     4/15	602	711	deferred rotation
outh of the Milroad	1,884	cattle	  12/1-   3/31 	80	   0 	   48 	  continuous   seasonal	0	1,884 P	   0 	cattle	  12/1-     3/31	80	   105 <sup>d</sup> 	continuous seasonal
/ada	4,434	   cattle 	   5/16-  11/15	360 	   0 	   29 	continuous   seasonal	0	4,265 L 169 P	•	   cattle 	   5/16-   11/15	360	157	rest rotation

ble 6 concluded

			C	urrent Situ	ation			Proposed Situation <sup>a</sup>							
		<u> </u> 	1	1	1	ļ			Potential					1	<u> </u>
	  Endomal	1 1	1	Active	Suspended				and		Livestock		Initial		İ
Allotment	Federal			Preference	:		Management	Suitable	•	Unsuitable	Kind of	Season	Stocking	Surveyed	Managemen
VITOTIMENT	Acres	Livestock	of Use	AUMs	AUMs	Use AUMs	System	Acres	Acresb	Acres	Livestock	of Use	Level-AUMs	Capacity	System
nsor	1 120	   cattle 	   6/16-   8/31 	   15 		   15 	continuous seasonal	   0 	120 P	ļ	cattle	6/16- 8/31	150		continuous seasonal
od Winter	2,579	į	10/1-	262	0	262	deferred rotation	2,564	I 15_P	0	   cattle 	  10/1-   5/15	262	289	deferred   rotation
TOTALS	58,223	1		3,929 	47	2,419		32,311	4,850 L 18,160 P	•			3,929	2,230	l

resents inventory data and management options available to the operator. Proposed management would be to continue present grazing practices.

roposed to exchange, sell, or remove grazing privileges.

ncludes suitable and limited suitable.

Table 7
"C" Management Categories
Facilities and Treatment Opportunities for Intensive Management

	Proposed Management												
	<u> </u>	Management	Number of	   Potential	Key	Livestock Fa	cilitles	Land	l Treatm	ents	AUMs		
Allotment	Combined with:	System	Pastures	AUMs	Species	Туре	Units	Method	Acres	SWA	Realized		
Airport	Smithson	Deferred rotation	3 (1 in allotment)	   200 	   SIHY 	Allotment     fence     Realign	1.75 miles		 				
		  - 	    -	     		Smithson fence Develop well Windmill Troughs	1 each 1 each 1 each						
Austin		Custodial winter grazing	 	   25   	   HIJA   ARTRW 			       	       				
ВегуІ		Rest	3	234	ORHY EULA5	Mountain   Spring pipe-  line extension   Troughs  Pasture fence	1 mile   2 each   1.5 miles	Burn     	860       	B209  B21 3 	•		
County Line		  Graze FA-WI 	1 1	50	ORHY   ALIH	Protection fence	   2.5 miles	  Burn-broad-  cast	300	D010	60		
Culver Spring	   Wood Winter	Deferred   rotation	3	35	ORHY	Allotment fence	   1 mile						

(continued)

Table 7 continued

	1	i	1		!		Inten	sive Manageme	nt		
	1	D	1	_	ļ			Lan	d Treatm	ents	<del></del>
A 1 1 - + +	10	Proposed	Number of	Potential	Key	Livestock F	acilities			Ī	AUMs
Allotment	Combined with:	Management	Pastures	AUMs	Species	Туре	Units	Method	Acres	SWA	Realize
Delvecchio		Deferred rotation	2	115	ORHY EULA5 HIJA	     					   
Flat Top		Remove grazing privileges	1 1	4	   PUTR2   SIHY						       
Government Well	Uvada	Rest rotation	2 (1 in this	196	ORHY STC04	Allotment   fence	     3.75 miles	  Plow-dril   Burn	1	D2 48	İ
Holt Mine		Deferred rotation	2	353	HIJA   ORHY 	Pipeline extension Trough Allotment fence Pasture fence	.75 miles 1 each .75 miles 3 miles	Burn-broad- cast	]	D247    D01 7  D031  D263 	
Meadow Valley		Custodial SU-FAgrazing	3	15.	   ORHY 	   					
Modena		FA-WI grazing	   1   	100	ORHY HIJA			Burn	400	  D095  D096  D097  D098	•

Table 7 continued

					1		Inten:	sive Manageme	nt		
	!							Lan	d Treatm	ents	
		Proposed	Number of	Potential	Key	Livestock F	acilities			1	AUMs
Allotment	Combined with:	Management	Pastures	AUMs	Species	Туре	Units	Method	Acres	SWA	Realized
Modena con- tinued					 	   	    -	  Burn-drill 	   1,100 	  D095  D096  D097	•
Modena Reser- voir		Deferred rotation	2	117	ORHY	Drill well Windmill Trough Allotment fence	1 each   1 each   1 each   1 each	  Burn-drill   	425     	  D155  D331 	   85   
Pine Grove	Rotation includes: Indian Creek, Jackson, Johns, Red Cove, Sheep Creek, Well	Present deferred rotation	  7 (1 in this   allotment)       	85	ORHY AGSP EPNE	Allotment fence	   6 miles         	  Chain-burn-  broadcast-  chain   	   125         	  F106     	25           
Smithson	Airport   	Deferred rotation	3 (2 in this allotment)	800	ORHY EULA5	Pasture fence   Allotment   fence   Well   Windmill   Trough	1.75 miles     1.5 miles   1 each   1 each   1 each				
South of the Railroad Tracks		Custodial Continue winter grazing	1	   167 	EULA5 ORHY						

(continued)

Table 7 concluded

	1				1		Inten	sive Manageme	nt		
					l			Lan	d Treatm	ents	
		Proposed	Number of	Potential	Key	Livestock Fa	acilities			1	AUMs
Allotment	Combined with:	Management	Pastures	AUMs	Species	Туре	Units	Method	Acres	SWA	Realized
H			]	105	07004						
Uvada	Government	Rest	2 (1 in this	195	ST∞4	Well	1 each	Chain-burn-	825	D1 74	164
	Well	rotation	allotment)		PUTR2	Windmill	1 each	broadcast <del>-</del>	ĺ	1	1
						Trough	1 each	burn	} }		 
Winsor		Remove	1	1 4	SIHY		<u> </u>	1			 
WITISOI	1		'	1 <del>4</del>	l siui			1	[	{	[
		grazing	1	1	ļ ,	1	<b>,</b>	ļ	!	ļ	ļ
		privileges				<u> </u>		) 	<u> </u> 		<u> </u> 
Wood Winter	Culver Spring	Present	] 3	562	ORHY	Mountain					
	1	deferred		1	EULA5	Spring pipe-			! }	1	! }
		rotation	]	} !	) LOLAS			]	]	]	,
	<b>i</b>	i rotation	1	[ 1	ļ	line extension	<b>'</b>	ļ	ļ	ļ	Į.
				\ 	1	Trough	1 each	1	1	1	<b>1</b> 1
TOTALS				3,257	<u> </u>				<del>                                     </del>	<del> </del>	1,110

<sup>&</sup>lt;sup>a</sup>Presents inventory data and management options available to the operator. Proposed management would be to continue present grazing practices.

1

 $\underline{\text{Decision RM 3.2}}.\quad \text{Accept the Multiple Use Recommendation.}$ 

Table 8
Proposed Exchange or Sale

Allotment	BLM Acres	Total Preference (AUMs)	Actual Use (AUMs)	Inventoried Capacity (AUMs)
Austin	1,128	63	63	14
Beryl	3201	46	19	39
Delvecchio	1,305	102	80	90
Flat Top	424	42	40	0
Meadow Valley	416	18	19	1
South of the Railroad Tracks	1,884	80	48	02
Winsor	120	<u>366</u>	284	144
TOTAL	5,597	366	284	144

 $<sup>\</sup>overset{1}{2}_{105}$  a small isolated tract within the allotment.  $\overset{2}{2}_{105}$  AUMs available if operator hauls water.

 $\underline{\text{Decision RM 3.3}}. \quad \text{Accept the Multiple Use Recommendations.}$ 

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RANGELAND PROGRAM SUMMARY RECORD OF DECISION

PINYON E.I.S. AREA

CEDAR CITY DISTRICT

Dated: 08-11-83

# Rangeland Program Summary Record of Decision

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#### RANGELAND PROGRAM SUMMARY RECORD OF DECISION FOR PINYON E.I.S. AREA

#### I. INTRODUCTION

The Pinyon Rangeland Management Program was developed to improve long-term productivity and use of the rangeland resources on grazing allotments in the Pinyon E.I.S. area, located in southwestern Utah. The area is administered by BLM from its Beaver River Resource Area Office in Cedar City, Utah and contains 1.6 million acres of rangeland interspersed with private and state-owned land. The program involves 72 allotments and 1.3 million acres of public lands located in parts of Iron, Beaver, Millard, and Washington Counties. This program evolved from the BLM Planning System and the environmental analysis as found in the Pinyon Grazing Management Environmental Impact Statement (EIS) which includes five alternatives. The program will be implemented over a period of years beginning in FY 1983.

The Pinyon EIS was written in compliance with the National Environmental Policy Act (NEPA) of 1969 - 42 USC 4321 et seq. and the Federal Land Policy and Management Act (FLPMA) of 1976 - 43 USC 1711 - 1712. The EIS is also responsive to a Federal Court judgement on a 1973 suit filed by Natural Resources Defense Counsil, et al. The final Pinyon EIS was filed with the Environmental Protection Agency and released to the public on September 30. 1982.

A soil-vegetation study was completed in 1981. The study showed available forage annually in the amount of 75,990 AUMs for livestock, 8,345 AUMs for wild horses and 2,663 AUMs for big game. This is 20 percent higher than the five year average annual active authorized use for livestock of 60,757 AUMs but is a 12 percent reduction from the active grazing preference of 86,121 AUMs.

Land ownership acreages for this area are:

<u>Ownership</u>	<u>Acres</u>	Percent
Public Land (BLM)	1,264,250	80
State of Utah	163,961	11
Private	148,107	9
Total	$\overline{1,576,318}$	100

The area is rural and lifestyles reflect a strong agricultural dominance, although agriculture's relative economic importance is declining. In terms of income and employment, government (local, State, and Federal), service and trade, transportation, and construction sectors dominate the economics of the area.

Most of the 59 livestock operators using BLM managed rangelands run cow-calf operations. The following list shows the number of allotments used by each kind of livestock and total public land acres in these allotments.

Existing Livestock Use	Number of Allotments	Public Land <u>Acres</u>
Cattle	58	793,465
Sheep	9	143,747
Cattle and Sheep	4	268,569
Cattle and Horses	1	18,023
Unallocated	1	40,446

There are nine wild horse herd units in the area. The approximate current numbers by herd unit are as follows:

Herd Unit	Current Numbers
Bible Spring	30
Blawn Wash	65
Chokecherry	30
Four Mile Wash	65
Frisco	60
Mt. Elinor	25
North Hills	60
Mountain Home - Sulphur	210
Tilly Creek	_50_
Totals	595

An estimated, 333 species of wildlife are found in the area. Mule deer are the most important big game species; a small number of elk, and several bands of antelope are also present. Most important habitat types are riparian, pinyon-juniper, sagebrush, and grassland.

In accordance with the Rangeland Management Policy, the grazing allotments within the EIS area have been grouped into selective management categories based on the application of specific criteria. These management categories and their major characteristics are as follows: "M" allotments (22) - objective is to maintain or improve the existing situation, "I" allotments (31) - objective is to improve existing resource conditions, and "C" allotments (18) - objective is to prevent deterioration of current resource conditions. One allotment is not categorized since it is unallotted. The breakdown by allotment is shown in Table 2. The initial grazing use adjustments will be in the "I" category since these are the allotments where immediate action is to be taken to resolve resource conflicts and improve forage conditions. Future adjustments in grazing use may include the allotments in the "M" and "C" categories, if resource conditions change or after problems in "I" category allotments are corrected.

# A. Purpose and Need

The purpose of the rangeland management program is to improve and/or maintain the vegetation resource. The specific rangeland management objectives relating to vegetation are covered later under Summary of Objectives for range, wild horses, wildlife, watershed and fire.

Apparent trend on the 1,264,250 BLM administered acres is up on 10.2 percent, static on 73.2 percent, and down on 15.4 percent. The results of the soil and weight estimate vegetation study (conducted from

1979 to 1981) indicates the need to rehabilitate the rangelands through developments and improvements. Livestock use could be adjusted from the 60,757 AUMs average licensed use to a inventoried capacity of 75,990 AUMs. This would amount to an approximate 20 percent overall increase from average licensed use, but would remain 12 percent below the active preference level of 86,121 AUMs. There are 40 allotments where downward stocking levels are indicated, and 32 allotments where upward adjustments are indicated.

Resource planning documents have identifed that 284,151 acres in 19 allotments are being overutilized where wildlife, wild horses, and livestock are using the area. On the most important big game habitat areas in the Pinyon E.I.S. area, 14 percent is in good condition, 42 percent in fair condition, and 44 percent in poor conditions.

# II. <u>Summary of Objectives</u>

Public Land Acres

#### Range

Maintain or improve existing livestock forage condition and range trend on 22 allotments where management practices and range condition are presently satisfactory. Provide for physiological needs and maintain vigor of key species by continuing with present grazing management (see Table 2).

696,821

524,903

Improve existing resource conditions and range trend on 31 allotments where management practices and range conditions are inadequate and range trend is staic or down. Provide for the physiological needs and improve vigor of key forage species. Initiate specific grazing management systems to improve livestock forage condition and range trend. Resolve forage resource conflicts by increasing forage production through management and/or treatment. Complete range improvements as needed to enhance forage production, and improve management. Establish and evaluate range monitoring studies to determine progress toward management goals. Studies are to include actual use, utilization, trend, and climate data (see Table 2).

58,223

Allow present grazing management and maintain current resource conditions and range trend on 18 allotments, where management practices and range conditions are inadequate but generally range trend is static, and significant additional resource loss is not occurring. These are areas with low management potential for improvement (see Table 2).

Implementation of rangeland improvements will be prioritized based upon such factors as range condition potential, productivity, resource conflicts, management, and benefit-cost/internal rate of return analysis.

#### Wild Horse

Accept as the long term objective, management for horse numbers at 1971 levels. The number of herd units would not be established at this time but would depend on the results of monitoring studies.

1,264,250

In short term, remove horses as required to maintain horse numbers at or below 1982 inventory levels but not less than 1971 levels except for the North Hills and Mountain Home-Sulphur herds.

Continue cooperative management of the North Hills herd with the Dixie National Forest in accordance with the existing management plan. Horses in this unit will be maintained between 40 and 60 horses as specified in the plan.

Stabilize the Mountain Home-Sulphur wild horse herd numbers at between 135 and 180 horses.

# Wildlife

Improve wildlife habitat to reach estimated prior stable numbers, mule deer (2,467 head in winter and 2,219 in summer); antelope (1,071 head); elk (200 head). Increase upland game bird numbers in relation to their habitats' potential.

1,264,250

#### Wa tershed

Reduce or minimize wind and water erosion on soils in 21,281 critical condition, by management or land treatment, to stabilize soils and improve or maintain soil productivity.

#### Fire

Allow alternatives to full fire suppression in areas 1,264,250 within the planning unit where resource values are low or where fire may be a positive factor in vegetation change.

# III. Summary of Alternatives

# Continuation of Present Management (No Action) - Alternative 1

The objective of this alternative would be to project the effects of continuing existing management practices and intensities into the future. No new management actions would be undertaken, but existing grazing plans would be continued. Existing levels of livestock, wildlife, and wild horse use would be maintained at 60,757, 2,663, and 8,345 AUMs respectively.

# Planning Recommendations - Alternative 2 (Preferred Alternative)

Because this alternative proposes a multiple use program, it is also considered the environmentaly preferred alternative and all necessary actions to avoid environmental harm would be done.

The overall objective of this alternative would be to provide a balanced multiple use resource management program. The major management actions that would be implemented are the design and implementation of livestock grazing systems in selected allotments, vegetation treatments (over 98,000 acres could be treated), and the installation of rangeland facilities (water developments, fences, etc.) (see Table 1). Over the long term, it is anticipated that the actions carried out under this alternative would increase stocking for livestock and wildlife from current stocking levels of 60,757 and 2,663 to 88,103 and 5,407 AUMs respectively, while wild horse AUMs would be reduced from 8,345 to 3,225 and stabilized at that level.

# Livestock Grazing Preference - Alternative 3

The overall objective of this alternative would be to restore to active status all AUMs which have been placed in suspended non-use - That is, to restore total livestock grazing preference. The major management actions which would be undertaken in this alternative are vegetation treatments (nearly 105,000 acres could be treated), installation of rangeland facilities, implementation of intensive grazing systems, and the removal of over 400 wild horses. By such actions, it is anticipated that over the long term, forage for wild horses would be reduced from 8,345 to 1,950 AUMs and maintained at that level.

#### Resident Resource Values - Alternative 4

The overall objective of this alternative would be to formulate a management format which favors the resident resources - that is, the nonlivestock values. However, since there are conflicts between the two major resident resources, wildlife and wild horses, a separate subalternative for each has been developed.

Wildlife Subalternative - The objectives of this subalternative would be to provide sufficient forage over an extended period to support long-term and prior stable numbers of wildlife and to provide for qualitative habitat improvements not necessarily associated with forage production. The major management actions that would be implemented under this alternative closely parallel those proposed under the Planning Recommendations Alternative: the implementation of intensive livestock grazing management systems, vegetation treatments for both livestock and wildlife (over 107,000 acres), installation of rangeland facilities especially those protecting special habitat features and wet areas, and the removal of wild horses from elk range and deer summer range. The anticipated long-term effects of these actions would be increases of forage for livestock and wildlife from 75,990 and 2,663 AUMs respectively to 103,463 and 5,425 AUMs respectively. Wild horses would be reduced from 8,345 to 2,010 AUMs and maintained at that level.

<u>Wild Horse Subalternative</u> - The objectives of this subalternative would be to stabilize horse herd populations and to encourage genetic improvement. The major managerial actions which would be undertaken are adjustments of

livestock grazing to capacity, the implementation of intensive livestock grazing, and long-term effect of these actions would be the increase of forage for livestock from 75,990 AUMs to 78,237 AUMs. Wildlife forage would be maintained at the current level of 2,663 and forage for wild horses would be increased from 8,345 to 12,825 AUMs.

# Livestock Maximization - Alternative 5

The objective of this alternative would be to establish an upper limit for the capacity of the Pinyon Planning Unit to produce livestock forage. The major management actions that would be undertaken to accomplish this are the treatment of nearly 841,000 acres, the implementation of intensive grazing systems on all allotments, the installation of numerous rangeland facilities and the elimination fo wild horses from the planning unit. It is anticipated that over the long term, these actions would yield an increase in livestock forage from 75,990 to 209,006 AUMs. Forage for wildlife would be maintained at 2,663 AUMs while wild horse AUMs would be reduced from 8,345 to 0.

# IV. Summary of Decisions

- 1. On 31 allotments in the "I" category make initial adjustments and allocations of livestock forage. Initial and future adjustments in stocking levels will be based on inventory, consultation and monitoring studies which includes climate, actual use, utilization, and trend. Data from the studies will be evaluated at the beginning of the third and fifth year following initial adjustments to determine if additional adjustments are needed. No adjustments will be totally based on Range Inventory data. Adjustments will be made by mutual agreement, where this is not possible by decision. Where adequate data is not avilable, it will be gathered prior to any adjustment (Table 2 shows allotments, and indicated adjustments).
- 2. Implement Allotment Management Plans (AMPs) which provide for the physiological requirements of key forage species on the 31 "I" category allotments with significant forage resource conflicts. In development of grazing systems, 15 of these allotments will be combined into 6 AMPs. Of the remaining 16 allotments, 3 may only require revision of an existing AMP, and 13 will require individual AMPs be developed. The development of these AMPs will be within the guidelines of current Range Improvement Policy. There are deferred rotation (DR), rest rotation (RR), and continuous seasonal (CS) grazing systems proposed.
- 3. Allow the change in class of livestock from sheep to cattle on Antelope Peak, Buckhorn, Indian Creek, Kiln Spring, Beaver Lake, and Willow Creek allotments contingent upon the operator's acceptance of an appropriate AMP. Allow for change in class of livestock in other allotments upon written request from the operator if it can be supported by an Environmental Assessment.
- 4. Allow for the inclusion of 3,209 acres of suitable public rangelands, which produce 314 currently unallocated AUMs and are known as the No Grazing Areas, into the Jockeys Allotment.
- 5. On 22 allotments in the "M" category where present grazing management has been satisfactory, continue with existing management practices. Initiate or continue monitoring studies, including climate studies, actual use

yearly, trend at three to five year intervals, and utilization as time and funds permit. No adjustments from active preference is proposed (see Table 2). Where studies and inventories indicate increases, they will be allowed. Where actual use is less, than active perference, an attempt will be made to obtain an agreement to not exceed actual use.

- 6. Continue the present active preference level and season of use on 18 allotments in the "C" category unless a mutual agreement can be reached to make grazing use adjustments. Monitor climate, actual use, utilization and trend studies on a priority basis as time and funds permit (see Table 2). No adjustment from active preference will be made unless by agreement.
- 7. Manage isolated tracts within seven allotments (Austin, Beryl, Del Vecchio, Flat Top, Meadow Valley, South of R.R. Tracks, Winsor) in a custodial manner until other action can be taken. Exchange or sell these areas and other unalloted tracts as soon as practical.
- 8. Accept as the long term objective, management for horse numbers at 1971 levels. The number of herd units would not be established at this time but would depend on the results of monitoring studies.
- 9. Continue cooperative management of the North Hills herd with the Dixie National Forest in accordance with the existing management plan. Horses in this unit will be maintained between 40 and 60 horses as specified in the plan.

Stabilize the Mountain Home-Sulphur herd unit horse numbers at between 135 and 180 horses.

- 10. To facilitate wildlife needs, retain wild horses in the allotments within Sulphur herd unit but control numbers to reduce or minimize conflicts.
- 11. Establish studies on key wildlife forage species on four allotments (Government Well, Shauntie, SUSC Winter, and Uvada) to determine the ecological trend and forage suitability trend of key big game forage species and make necessary changes in management if the monitoring studies so indicate the need.
- 12. Incorporate intensive monitoring studies on 61,236 Federal acres of antelope habitat and 4,495 Federal acres of mule deer habitat on Wah Wah-Lawson Cove.
- 13. Perform wildlife oriented vegetation treatments on approximately 15,101 Federal acres in a mosaic pattern. Of these, 4,552 acres are important mule deer habitat and 10,549 acres are important antelope habitat. There are 8,329 acres of important sage grouse habitat within the antelope habitat.
- 14. Allocate sufficient forage to satisfy the demands of current big game populations (estimated at a combined total of 2,742 AUMs). This includes mule deer at 1,314 head in winter and 1,066 head in summer, 60 elk, and 598 antelope.
- 15. In the design of the grazing systems (AMP development), provide for protection of those areas in critical erosion condition. In grazing system design, give consideration to projects which will benefit the watershed.

- 16. Examine those stream channels identified for evaluation as part of AMP development. Coordination between resource activity specialists will be used to decide the watershed needs as each AMP is developed. Grazing system design during AMP development will consider riparian habitat protection. Seeding needs will also be evaluated during AMP development.
- 17. Rangeland studies and monitoring programs will be continued and/or initiated to determine if rangeland management objectives are being achieved and if proposed grazing use levels must be adjusted. This monitoring program will continue on all allotments. Particular attention will be given those areas where there is high resource conflict or there is the possibility of rapid improvement or deterioration of the rangeland resources. The concentration of rangeland monitoring will be on those allotments in the "I" category.

The monitoring program will evaluate changes in range condition and trend which includes determination of plant vigor, plant character, plant density, plant phenology, ground cover and degree of forage utilization on key species. Four primary studies will be used in this evaluation: (1) actual grazing use, (2) forage utilization, (3) range trend, and (4) climate analysis. In addition, data on wildlife habitat, riparian vegetation, and watershed condition will be collected and used as needed. When results of studies are evaluated and it is determined that the objectives are not being achieved on a specific allotment, modifications could include changes in grazing systems, livestock numbers, season of use, additional rangeland developments, or any combination of these alternatives.

# V. <u>Implementation Schedule</u>

Agreements or decisions to implement livestock use adjustments and management is planned for completion by the end of FY 1984. Agreements will be obtained on 22 "M" and 18 "C" category allotments in FY 1983. Agreements or decisions will be obtained or issued on 31 "I" category allotments in FY 1984. Initial adjustments in livestock use will commence with the first turn out date after completion of the agreement or decision. Subsequent adjustments as needed will follow monitoring, evaluation, and consultation, at the beginning of the third and fifth years after initial adjustments are made.

# VI. Record of Decision

This document is a true summary of the decisions regarding the Rangeland Program for the Pinyon EIS area, as contained in the Pinyon MFP approved, June 17, 1983.

Recommended for Approval

Skeridan dansen

8 -15 -83

Approved:

District Manager

8-15-83

Date

Table 1

<u>Treatments and Projected Animal Unit Months</u>

	:	cast-	:	Burn-	:	Burn- Broad-	:	cast-	:	Chain- Broad-	:	Plow-	:5	cribed	:	Burn-	:	Burn- Broad-	:		:	T. 1. 1
Acres	:		:	11,200	:	4,045	:	3,500	:	5,475	:	1,200	:	2,500	:	8,700	:	4,890 878	:	-	:	99,616

# <u>Facilities</u>

Miles of pipeline1	21
Spring developments	20
Troughs	65
Miles of fence1	52
Cattleguards	4
Tanks	_
Reservoirs	5
Wells	3
Windmills	3

Note:

The proposed facilities and treatments listed above are those which would be needed to attain full grazing preference on the "I" category allotments. Benefit/Cost constraints may result in less than full development of these projects.

Table 2 Continued

	Curren	t Situation				Proposed Ac	ljustment and	Management			
Allotment Name	Management Category	Active Grazing Preference (AUMs)	Actual or <sup>a</sup> Licensed Use (AUMs)	Inventory Grazing Capacity (AUMs)	First Allocation (AUMs)	Second Allotation (AUMs)	Third Allocation (AUMs)	Management <sup>b</sup> Systems	Number of Pastures	Development Treatments	
Spanish George	M	939	711	849	939	939	939	DR	4		
Stateline	М	197	197	217	197	197	197	RR	3		
SUSC Winter	М	630	630	672	630	630	630	CS	1	1	
Tilly Creek	I	715	705	362	635	498	362	cs	1	pipeline trough spring treatment	4.5 m 2 1 1800 ac
Uvada	С	360	29	157	360	360	360	RR	2		
Wah Wah-Lawson	M	C 5588 S 4586 9074	6064	11405	5588 3486 9074	10240	11405	RR	7		
Water Hollow	I	2128	1602	1410	1602	1506	1410	RR	4	fence pipeline trough treatment	5.5 mi 2.5 mi 1 4190 ac
Well	M	2224	2407	3411	2224	2818	3411	DR	7		
Willow Creek  a- Five year ave	I	C 687 <u>S4630</u> 5317	1580	5338	687 4630 5317	5338	5338	RR	4	fence pipeline trough treatment	8 mi 11 mi 2 3000 ac

b- DR - Deferred Rotation; RR - Rest Rotation; CS - Continuous Seasonal
c- Only the proposed rangeland improvement projects for "I" (and one "M") category allotments are listed since these will receive funding priority

Table 2

# Pinyon E.I.S. Area Proposed Grazing Use Adjustment and Rangeland Management

·	Curre	nt Situation				Proposed Ad	ljustment and	Management		
Allotment Name	Management Category	Active Grazing Preference (AUMs)	Actual ora Licensed Use (AUMs)	Inventory Grazing Capacity (AUMs)	First Allocation (AUMs)	Second Allotation (AUMs)	Third Allocation (AUMs)	Management <sup>b</sup> Systems	Number of Pastures	Developments/ <sup>C</sup> Treatments
Airport	С	158	150	188	158	158	158	DR	3	fence 2.5 mi.
Antelope Peak	I	C 1575 S 3856 5431	4163	5009	5009	5009	5009	DR	3	fence 2.5 mi. pipeline 12 mi. troughs 6 treatment 11600 ac
Atchison Creek	М	266	266	912	293	603	912	DR	4	
Austin	С	63	63	14	63	63	63	CS	1	
Bagnal 1	I	1911	932	621	932	776	621	_	: -	
Beaver Lake	I	2722	1365	1029	1029	1029	1029	RR	4	fence 9 mi cattleguard 1 pipeline 4 mi. trough 3 spring 1 treatment 14,80 ac
Bennion Spring	I	2126	1689	1496	1689	1592	1496	RR	14	fence 7.5 mi. pipeline 3 mi. trough 2 spring 2 treatment 2,360 a
Bery1	C rage where data	230	94	190	230	230	230	RR	3	

a- rive year average where data are available 'b- DR - Deferred Rotation; RR - Rest Rotation; CS - Continuous Seasonal c- Only the proposed rangeland improvement projects for "I" (and one "M") category allotments are listed since these will receive funding priority NOTE: The proposed grazing use adjustments do not include changes that may occur in available AUMs due to rangeland developments and vegetation treatments

Table 2 Continued

	Currer	nt Situation				Proposed Ad	djustment and	Management		
Allotment Name	Management Category	Active Grazing Preference (AUMs)	Actual or <sup>a</sup> Licensed Use (AUMs)	Inventory Grazing Capacity (AUMs)	First Allocation (AUMs)	Second Allotation (AUMs)	Third Allocation (AUMs)	Management <sup>b</sup> Systems	Number of Pastures	Developments/ <sup>C</sup> Treatments
Blue Mountain	M	826	692	865	826	826	826	DR	4	
Bucket Ranch	М	1425	721	1354	1425	1425	1425	DR	5	·
Bucket Ranch Lambing	М	360	152	316	360	360	360	DR	5	,
Buckhorn	I	3370	3370	1824	3033	2428	1824	DR	4	fence 16.5 mi pipeline 7.5 mi trough 4 cattleguard 3 treatment 4500 ac
Bull Spring	I	1197	1099	1095	1099	1095	1095	RR	3	pipeline 1 mi trough 1 cattleguard 1
Burn Knoll	М	950	955	1107	1045	1076	1107	DR	3	
Butcher	М	939	801	1191	939	1065	1191	DR	4	
Chokecherry	I	159	202	492	175	334	492	RR	4	pipeline 2 mi trough 2
Cook	M	2736	2825	3017	3010	3017	2017	RR	4	
County Line a- Five year aver	С	315	198	28	315	315	315	CS	1	

a- Five year average where data are available b- DR - Deferred Rotation; RR - Rest Rotation; CS - Continuous Seasonal c- Only the proposed rangeland improvement projects for "I" (and one "M") category allotments are listed since these will receive funding priority

Table 2 Continued

	Currer	nt Situation				Proposed Ad	justment and	Management		•
Allotment Name	Management Category	Active Grazing Preference (AUMs)	Actual or <sup>a</sup> Licensed Use (AUMs)	Inventory Grazing Capacity (AUMs)	First Allocation (AUMs)	Second Allotation (AUMs)	Third Allocation (AUMs)	Management <sup>b</sup> Systems	Number of Pastures	Developments/ <sup>C</sup> Treatments
Culver Spring	С	42	0	35	42	42	42	DR	3	
Del Vecchio	С	102	80	90	102	102	102	DR	2	
Eight Mile Spring	I	248	140	23	140	81	23	RR	4	pipeline 2 mi. trough 1 spring treatment 1870 ac.
Flat Top	С	42	40	0	42	42	42	-	_	
Frisco	I	2855	1656	1986	1986	1986	1986	DR	3	pipeline 8 mi. trough 2 treatment 8975 ac.
Gold Springs	I	366	232	36	232	134	36	RR	5	fence 14.5 mi. pipeline 3 mi. trough 4 spring 2 treatment 1440 ac.
Government Well	С	240	48	49	240	240	240	RR	2	
Hardpan	I	2099	1812	2485	2099	2292	2485	DR	3	pipeline 2.5 mi. trough 1 corral 1

a- Five year average where data are available
b- DR - Deferred Rotation; RR - Rest Rotation; CS - Continuous Seasonal
c- Only the proposed rangeland improvement projects for "I" (and one "M") category allotments are listed since these will receive funding priority

Table 2 Continued

	Currer	t Situation				Proposed Ad	ljustment and	Management		1	
Allotment Name	Management Category	Active Grazing Preference (AUMs)	Actual ora Licensed Use (AUMs)	Inventory Grazing Capacity (AUMs)	First Allocation (AUMs)	Second Allotation (AUMs)	Third Allocation (AUMs)	Management <sup>b</sup> Systems	Number of Pastures	Developments, Treatments	/ <sup>c</sup>
Haystack Mountain	I	677	496	198	496	347	198	RR	4	pipeline trough corral	1 mi 1 1
Hebron	I	664	638	283	638	460	283	RR	4	reservoir treatment	2 565 <b>a</b> c
Highrock	М	1440	1344	1435	1440	1440	1440	RR	4	fence pipeline trough spring cattleguard	22 mi 3.5 mi 1 1 3
Holt Mine	С	u26	188	186	726	726	726	DR	2		
Indian Creek	I	966	416	181	416	299	181	DR	: 7	fence treatment	30 mi 3915 ac
Indian Peak	I	1311	1240	1768	1445	1605	1768	RR	6	fence pipeline trough spring treatment	30 mi 21 mi 9 4 2400 ac
Jackson	М	1938	1802	1882	1938	1938	1938	DR	7		

b- DR - Deferred Rotation; RR - Rest Rotation; CS - Continuous Seasonal
c- Only the proposed rangeland improvement projects for "I" (and one "M") category allotments are listed since these will receive funding priority

Table 2 Continued

	Curren	it Situation				Proposed Ad	justment and	Management		
Allotment Name	Management Category	Active Grazing Preference (AUMs)	Actual or <sup>a</sup> Licensed Use (AUMs)	Inventory Grazing Capacity (AUMs)	First Allocation (AUMs)	Second Allotation (AUMs)	Third Allocation (AUMs)	Management <sup>b</sup> Systems	Number of Pastures	Developments/ <sup>C</sup> Treatments
Jackson Wash	М	1422	811	1315	1422	1422	1422	DR	6	
Jockeys (this includes unalloted area)	I	2175	956	1222 <sup>d</sup>	1222	1222	1222	DR	3	fence 6 mi. cattleguard 2 pipeline 10 mi trough 6 spring 3 reservoir 1 treatment 6500 ac.
Johns	I	220	174	18	174	96	18	DR	7	fence 11.5 mi. treatment 1000 ac.
Kiln Spring	I	2165	1232	786	786 <sup>e</sup>	786	786	RR	<b>4</b>	fence 6.5 mi. cattleguard 1 pipeline 7.5 mi. trough 3 spring 2 treatment 4240 ac.
Lone Pine Spring	М	1368	575	1175	1368	1368	1368	DR	4	
Lund a- Five year aver	М	2443	2038	2232	2443	2443	2443	DR	6	

a- Five year average where data are available
b- DR - Deferred Rotation; RR - Rest Rotation; CS - Continuous Seasonal
c- Only the proposed rangeland improvement projects for "I" (and one "M") category allotments are listed since these will receive funding priority

d- This includes 232 AUMs added for the unalloted area which was added to the allotment

This is cattle AUMs, use changed from sheep to cattle

Table 2 Continued

	Currer	t Situation				Proposed Ad	ljustment and	Management			
Allotment Name	Management Category	Active Grazing Preference (AUMs)	Actual ora Licensed Use (AUMs)	Inventory Grazing Capacity (AUMs)	First Allocation (AUMs)	Second Allotation (AUMs)	Third Allocation (AUMs)	Management <sup>b</sup> Systems	Number of Pastures	Developments/ Treatments	,c
<u>Matheson</u>	I	274	234	151	234	192	151	DR	3	fence pipeline trough cattleguard treatment	2 mi. 2.5 mi. 2 1 200 ac.
Meadow Valley	С	18	19	1	18	18	18	CS	3		
Milford Cattle	I	370	313	348	348	348	348	CS	1	pipeline trough	2 mi. 1
Modena	С	346	314	68	346	346	346	CS	1		
Modena Canyon	I	672	121	66	121	93	66	RR		pipeline trough spring treatment	4.5 mi. 2 1 1955 ac.
Modena Reservoir	С	182	141	107	182	182	182	DR	2		
Mountain Home	N.A.		(Horse AUMs)	798				(Unalloted)			***************************************

a- Five year average where data are available
b- DR - Deferred Rotation; RR - Rest Rotation; CS - Continuous Seasonal
c- Only the proposed rangeland improvement projects for "I" (and one "M") category allotments are listed since these will receive funding priority

Table 2 Continued

	Curren	t Situation				Proposed Ad	ljustment and	Management		•
Allotment Name	Management Category	Active Grazing Preference (AUMs)	Actual or <sup>a</sup> Licensed Use (AUMs)	Inventory Grazing Capacity (AUMs)	First Allocation (AUMs)	Second Allotation (AUMs)	Third Allocation (AUMs)	Management <sup>b</sup> Systems	Number of Pastures	Developments/ <sup>C</sup> Treatments
Mountain Spring	I	786	438	817	786	802	817	DR	4	fence 7.5 m pipeline 7.75 mi trough 4 spring 1 cattleguard 2 treatment 1685 ac
Mt. Elinor	I	352	352	99	317	208	99	RR	4	pipeline 3 mi trough 2 treatment 1685 ac
Pine Grove	С	110	96	12	110	110	110	DR	7	
Pine Valley	М	608	572	619	608	608	608	DR	2	
Red Cove	М	2894	1144	3224	2894	3059	3224	DR	7	
Rose Valley	I	340	146	57	146	101	57	RR	5	fence 4.25 mi pipeline 2.5 mi treatment 600 ac
Rosebud a- Five year aver	M	83	72	69	83	83	83	DR	4	

a- Five year average where data are available
 b- DR - Deferred Rotation; RR - Rest Rotation; CS - Continuous Seasonal
 c- Only the proposed rangeland improvement projects for "I" (and one "M") category allotments are listed since these will receive funding priority

Table 2 Continued

	Currer	nt Situation				Proposed Ad	justment and	Management		
Allotment Name	Management Category	Active Grazing Preference (AUMs)	Actual or <sup>a</sup> Licensed Use (AUMs)	Inventory Grazing Capacity (AUMs)	First Allocation (AUMs)	Second Allotation (AUMs)	Third Allocation (AUMs)	Management <sup>b</sup> Systems	Number of Pastures	Developments/ <sup>C</sup> Treatments
Sevy West	I	C 1776 S 588 2364	1535 339 1874	633 1984 2617	1535 <u>588</u> 2123	1084 1286 2370	633 1984 2617	RR	4	fence 10.5 mi cattleguard 2 pipeline 2 mi. trough 2 rėservoirs 2 treatment 4381 ac.
Sewing Machine	I	376	331	749	414	582	749	DR	3	
Shauntie	М	1530	1260	1667	1530	1599	1667	RR	3	
Sheep Creek	М	3300	2541	3198	3300	3300	3300	DR	7	
Sheep Spring	I	491	0	86	86	86	86	CS	1	fence 8 mi. pipeline 2 mi. trough 2 spring 1 treatment 2500 ac.
Smith Jones	I	260	147	103	147	125	103	cs	1	fence 2.5 mi. treatment 500 ac.
Smithson	С	602	602	711	602	602	602	DR	3	
South of R.R.  Tracks  a- Five year ave	С	80	48	105	80	80	80	CS	1	

b- DR - Deferred Rotation; RR - Rest Rotation; CS - Continuous Seasonal
c- Only the proposed rangeland improvement projects for "I" (and one "M") category allotments are listed since these will receive funding priority

Table 2 Continued

	Curren	t Situation				Proposed Ad	justment and	Management		
Allotment Name	Management Category	Active Grazing Preference (AUMs)	Actual or <sup>a</sup> Licensed Use (AUMs)	Inventory Grazing Capacity (AUMs)	First Allocation (AUMs)	Second Allotation (AUMs)	Third Allocation (AUMs)	Management <sup>b</sup> Systems	Number of Pastures	Developments/ <sup>C</sup> Treatments
Winsor	С	15	15	0	15	15	15	-	_	
Wood Winter	С	262	262	289	262	262	262	DR	3	

DR - Deferred Rotation; RR - Rest Rotation; CS - Continuous Seasonal
Only the proposed rangeland improvement projects for "I" (and one "M") category allotments are listed since these will receive funding priority

# Decision RM 1.8, WH 1.1, WH 1.2, WH 1.3, WL 1.1, WL 1.2

Several alternatives for population control and herd unit consolidation have been considered during development of the Pinyon MFP and EIS. The best method to achieve long term objectives is not clear at this time. The effects of water development and distribution projects, vegetative rehabiliation, and other wildlife and range development projects on the location, and movement of wild horses needs additional study and observation. Significant changes in the Wild Horse and Burro Act also appear to be probable in the near future.

In view of this situation the following long term general objectives will be established, and short term (approximately two years) actions taken pending the results of monitoring studies on herd viability, range condition, viewing opportunities, cooperative management opportunites, and range development proposals:

- a. Accept as the long term objective, management for horse numbers at 1971 levels. The number of herd units would not be established at this time but would depend on the results of monitoring studies.
- b. In the short term, remove horses as required to maintain horse numbers at or below 1982 inventory levels but not less than 1971 levels except for the North Hills and Mountain Home-Sulphur herds.
- c. Continue cooperative management of the North Hills herd with the Dixie National Forest in accordance with the existing management plan. Horses in this unit will be maintained between 40 and 60 horses as specified in the plan.
- d. Consolidate and stabilize the Mountain Home-Sulphur herd unit and establish these numbers between 135 and 180 horses.

The Mountain Home allotment presently has no grazing privileges. Livestock grazing will not be permitted unless monitoring studies following consolidation and stabilization of the horse numbers confirm adequate forage exists for the established numbers and wildlife.

# UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

Name (MFP)	
Pinyon	
Activity	
Wild Horses	
Overlay Reference	
Step 1	Step 3

#### MANAGEMENT FRAMEWORK PLAN

RECOMMENDATION-ANALYSIS-DECISION

Recommendation WH 1.4. Remove all horses from the Mt. Elinor herd unit.

Rationale. The Mt. Elinor herd unit lies within an area that has been heavily overutilized in the past both by livestock and wild horses. SVIM data shows that forage production is low and apparent trend is downward on the herd unit. In order to manage wild horses "in a manner that is designed to achieve and maintain a thriving natural ecological balance on the public lands" as PL 92-195 mandates significant reductions by both livestock and wild horses would be necessary. The resultant wild horse herd size would be small enough that inbreeding would increase resulting in inferior horses and possibly a non-viable herd. With the Nevada-Utah line proposed to be fenced on the boundary of the herd unit this problem would be compounded by no exchange with Nevada herds. The cost of managing a small herd is relatively higher than managing larger herds. For forage and manageability reasons it would be more feasible to manage horses on better sites that offer more opportunities for public observance and enjoyment.

#### Conflicts and Interactions

There are no resource conflicts with this recommendation. There are positive interactions with RM 1.1, 1.2, 3.1, and WL 1.6.

#### Multiple Use Recommendation

Accept WH 1.4.

#### Reason

See the above rationale. There are no conflicts and positive interactions as above.

Note: Attach additional sheets, if needed

# Decision RM 1.8, WH 1.1, WH 1.2, WH 1.3, WL 1.1, WL 1.2

Several alternatives for population control and herd unit consolidation have been considered during development of the Pinyon MFP and EIS. The best method to achieve long term objectives is not clear at this time. The effects of water development and distribution projects, vegetative rehabiliation, and other wildlife and range development projects on the location, and movement of wild horses needs additional study and observation. Significant changes in the Wild Horse and Burro Act also appear to be probable in the near future.

In view of this situation the following long term general objectives will be established, and short term (approximately two years) actions taken pending the results of monitoring studies on herd viability, range condition, viewing opportunities, cooperative management opportunites, and range development proposals:

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- b. In the short term, remove horses as required to maintain horse numbers at or below 1982 inventory levels but not less than 1971 levels except for the North Hills and Mountain Home-Sulphur herds.
- c. Continue cooperative management of the North Hills herd with the Dixie National Forest in accordance with the existing management plan. Horses in this unit will be maintained between 40 and 60 horses as specified in the plan.
- d. Consolidate and stabilize the Mountain Home-Sulphur herd unit and establish these numbers between 135 and 180 horses.

The Mountain Home allotment presently has no grazing privileges. Livestock grazing will not be permitted unless monitoring studies following consolidation and stabilization of the horse numbers confirm adequate forage exists for the established numbers and wildlife.

# UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

# Name (MIP) Pinyon Activity Wild Horses Overlay Reference Step 1 Step 3

#### MANAGEMENT FRAMEWORK PLAN

RECOMMENDATION-ANALYSIS-DECISION

Recommendation WH 1.3. Remove wild horses from Antelope Peak, Burn Knoll, and Shauntie allotments into which the Blawn herd has expanded their herd boundary.

Rationale. Section 9 of Public Law 92-195 states that,

"Nothing in this Act shall be construed to authorize the Secretary to relocate wild free-roaming horses or burros to areas of the public lands where they do not presently exist."

Horses have been on these allotments for about five years expanding into the area after the passage of the Act. With the Act allowing no expansion into new geographic areas these horses should be removed.

# Conflicts and Interactions

There are no resource conflicts with this recommendation. It has a positive interaction with RM 1.1, 1.2, 2.1, and WL 1.6.

## Multiple Use Recommendation

Accept WH 1.3.

#### Reason

As described in the rationale above.

### Decision RM 1.8, WH 1.1, WH 1.2, WH 1.3, WL 1.1, WL 1.2

Several alternatives for population control and herd unit consolidation have been considered during development of the Pinyon MFP and EIS. The best method to achieve long term objectives is not clear at this time. The effects of water development and distribution projects, vegetative rehabiliation, and other wildlife and range development projects on the location, and movement of wild horses needs additional study and observation. Significant changes in the Wild Horse and Burro Act also appear to be probable in the near future.

In view of this situation the following long term general objectives will be established, and short term (approximately two years) actions taken pending the results of monitoring studies on herd viability, range condition, viewing opportunities, cooperative management opportunites, and range development proposals:

- a. Accept as the long term objective, management for horse numbers at 1971 levels. The number of herd units would not be established at this time but would depend on the results of monitoring studies.
- b. In the short term, remove horses as required to maintain horse numbers at or below 1982 inventory levels but not less than 1971 levels except for the North Hills and Mountain Home-Sulphur herds.
- c. Continue cooperative management of the North Hills herd with the Dixie National Forest in accordance with the existing management plan. Horses in this unit will be maintained between 40 and 60 horses as specified in the plan.
- d. Consolidate and stabilize the Mountain Home-Sulphur herd unit and establish these numbers between 135 and 180 horses.

The Mountain Home allotment presently has no grazing privileges. Livestock grazing will not be permitted unless monitoring studies following consolidation and stabilization of the horse numbers confirm adequate forage exists for the established numbers and wildlife.

ĺ	Name (MFP)		
	Pinyon		
	Activity		
	Wild Horses		
	Overlay Reference		
	Step 1	Sten 3	

### MANAGEMENT FRAMEWORK PLAN

RECOMMENDATION-ANALYSIS-DECISION

Recommendation WH 1.2. Consolidate the following four herd units into two herd units.

Bible Spring Herd Unit -- Bible Herd Unit Tilly Creek Herd Unit --

Blawn Wash Herd Unit -- Blawn Herd Unit --

Rationale. When original boundaries were set up for each herd unit ridgetops were used as boundary lines, assuming horses would not traverse them. Such assumptions have not proved valid in the Pinyon Planning Unit because of the close proximity of each herd to adjoining units, the availability of relatively easy access between herd units, shared habitat needs, and intermingling due to harassment or invasion of their ranges by human activities. In these herd units it is hard to manage one without significantly affecting the other as evidenced by the drop in the Tilly Creek herd numbers when horses were removed from the Bible Spring herd unit.

### Conflicts and Interactions

Consolidation of these herd units does not change the wild horse resource or affect management of other resources. Other horse conflicts are described in WH 1.1 Conflicts and Interactions section.

### Multiple Use Recommendation

Totally remove wild horses from the Bible Spring, Tilly Creek, and Four Mile herd units. No herd consolidation is required.

### Reason

The Bible Spring, Tilly Creek, and Four Mile herd units have the greatest forage conflicts of all the herd units. Removal of horses in these herds is expected to reduce wild horse conflicts with private grazing land and private water sources. Improvement of the forage resource will be enhanced. Wild horses are presently grazing spring and summer grazing areas on a continuous basis.

### Decision RM 1.8, WH 1.1, WH 1.2, WH 1.3, WL 1.1, WL 1.2

Several alternatives for population control and herd unit consolidation have been considered during development of the Pinyon MFP and EIS. The best method to achieve long term objectives is not clear at this time. The effects of water development and distribution projects, vegetative rehabiliation, and other wildlife and range development projects on the location, and movement of wild horses needs additional study and observation. Significant changes in the Wild Horse and Burro Act also appear to be probable in the near future.

In view of this situation the following long term general objectives will be established, and short term (approximately two years) actions taken pending the results of monitoring studies on herd viability, range condition, viewing opportunities, cooperative management opportunites, and range development proposals:

- a. Accept as the long term objective, management for horse numbers at 1971 levels. The number of herd units would not be established at this time but would depend on the results of monitoring studies.
- b. In the short term, remove horses as required to maintain horse numbers at or below 1982 inventory levels but not less than 1971 levels except for the North Hills and Mountain Home-Sulphur herds.
- c. Continue cooperative management of the North Hills herd with the Dixie National Forest in accordance with the existing management plan. Horses in this unit will be maintained between 40 and 60 horses as specified in the plan.
- d. Consolidate and stabilize the Mountain Home-Sulphur herd unit and establish these numbers between 135 and 180 horses.

The Mountain Home allotment presently has no grazing privileges. Livestock grazing will not be permitted unless monitoring studies following consolidation and stabilization of the horse numbers confirm adequate forage exists for the established numbers and wildlife.

### Multiple Use Recommendation

Maintain wild horse numbers in the herd units as follows:

Blawn Wash - 30 head Chokecherry - 25 head Frisco - 20 head North Hills - 35 head Sulphur - 105 head

(Bible Spring, Tilly Creek, and Four Mile herd units are eliminated by total wild horse removal; see WH 1.2).

### Reason

Elimination of the Bible Spring, Tilly Creek, and Four Mile herd units (see WH 1.2), and managing the other herd units at these numbers, brings the wild horse population to 1971 levels for the planning unit. Forage for these numbers of horses is available although forage conflicts remain with wildlife in the Sulphur herd and with livestock in the Frisco herd. Of the wild horse herds in the planning area, the above herds have the best viewing opportunities. Because of reductions in the numbers in the remaining herd units, overall viewing opportunities will decrease from the present situation. Manageability of the wild horse resource will improve by reducing some of the factors that make population control difficult such as extended range (beyond that at the passage of the Wild Horse and Burro Act) and lack of natural and artificial barriers.

Name (MFP) Pinyon		
Activity Wild Hor	`ses	
Overlay Refe	erence	
Step 1	Step 3	

### MANAGEMENT FRAMEWORK PLAN

RECOMMENDATION-ANALYSIS-DECISION

Recommendation WH 1.1. Maintain 6 wild horse herds at the following levels in designated herd units:

Sulphur -- 110 head

Chokecherry -- 20 head

Blawn Wash II -- 25 head

Bible II -- 20 head

Frisco -- 20 head

North Hills -- 20 head

Rationale. These reductions from present levels (see Range URA Step 3) are manageable numbers and allow multiple use and sustained yield for the forage resource. Numbers are at 1971 levels for the planning unit overall. On December 15, 1971 Congress passed Public Law 92-195 making a place for wild free-roaming horses as "an integral part of the natural system of the public lands," because they were "fast disappearing from the American scene." The 1971 Act did not provide a place for unlimited numbers of horses nor for priority over other uses (American Horse Protection Assn. Inc. v. Frizzell) but it did provide a place where they were present in 1971 and inferentially, the population should be maintained at 1971 levels (American Horse Protection Assn. Inc. v. Andrus) in conjunction with other uses.

### Conflicts and Interactions

- RM 1.1 and 1.2 Conflict with WH 1.1 because they would establish intensive management on 31 allotments which would necessitate control of wild horses on some 16 allotments.
- RM 1.3 Conflicts with WH 1.1 because it would provide fences which would interfere with the wild and free-roaming nature of wild horses on some 10 allotments.
- RM 1.8 Conflicts with WH 1.1 because it would remove or reduce wild horses in some 16 allotments.
- WL 1.1 Conflicts with WH 1.1 because it would remove wild horses on 6 allotments.
- WL 1.2 Conflicts with WH 1.1 because it would maintain wild horse numbers at no more than 1971 levels on the Sulphur and Frisco herd units.

### MANAGEMENT FRAMEWORK PLAN - STEP 1 ACTIVITY OBJECTIVES

Name (MFP)
Pinyon
Activity
Wild Horses
Objective Number
WH-1

Objective WH-1. Manage and allow forage for up to the number of horses estimated to be present in the Pinyon Planning unit at the 1971 passage of Public Law 92-195.

Rationale. Planning criteria based on American Horse Protection Assn. Inc. v. Andrus directed that planning area wild horse numbers be maintained at about their 1971 population levels.

### MANAGEMENT FRAMEWORK PLAN - STEP 1

ACTIVITY OBJECTIVES

ţ	Name (MFP) inyon
Ų	Activity Iil dlife
Ļ	Objective Number  L-1

Objective WL-1. Improve high priority wildlife habitat to reach prior stable mule deer (2,467 head in wintr and 2,219 head in summer) and long term elk (200 head) and antelope (1,071 head) population numbers per BLM-UDWR agreement, and to increase upland game bird numbers in relation to their habitats' potential.

Rationale. The big game population numbers in the Pinyon Planning Unit are low in general, compared to the potential of the existing habitat. Currently there are 365,142 acres of mule deer habitat in poor and 346,855 acres in fair condition, 34,434 acres of elk habitat in poor and 21,279 acres in fair condition, and 300,024 acres of antelope habitat in poor and 370,051 acres in fair condition. Improvement of the habitat, especially those acres in fair and poor condition, would help to reach the population goals and thereby increase hunters' days use, and improve aesthetic values in the unit with increased wildlife numbers.

<sup>1</sup>The descriptors of the habitat good, fair, and poor are used for the description of the suitability condition of the habitat for the particular animal listed. They are not describing ecological condition or plant community's seral stage position, although habitat and ecological condition are interrelated.

Name (MFP)		
Pinyon		
Activity		
Wildlife		
Overlay Referen	nce	
Step 1	Step 3	

### MANAGEMENT FRAMEWORK PLAN

RECOMMENDATION-ANALYSIS-DECISION

Recommendation WL-1.1. Provide additional forage and improve the habitat condition for elk by removing wild horses from 6 grazing allotments (Table 1) where wild horses and elk are using the same key forage species (primarily grass) on 8,188 Federal acres of limited elk summer range.

Rationale. Wild horses and elk are primarily grazers and have between a 40 percent to 70 percent dietary overlap. This dietary overlap is of special concern where both animals are concentrating on 8,188 Federal acres of limited elk summer range. Spring and summer use by wild horses and elk will not allow grasses to improve in vigor and thereby improve the habitat condition for elk. Currently, there are approximately 13,631 total acres of summer elk range (9,719 Federal acres). The Pinyon Wildlife Inventory revealed the following habitat condition: good - 1,636 acres; fair - 6,242 acres; and poor - 5,753 acres.

The long term population goal for elk is 200 head. Currently there are approximately 60 head of elk in the planning unit. In spite of 3 previous transplant efforts by UDWR in 1948 (19 head), 1949 (34 head), and 1980 (25 head), the long term goal has not been reached. The potential of the existing habitat should support 200 head. To help achieve this goal, wild horses are recommended for removal in six allotments to allow the improvement of habitat on 8,188 Federal acres of elk summer range.

### Conflicts and Interaction

WH 1.2 - Recommends that wild horses be retained in Atchison Creek and Indian Peak allotments. WL 1.1 recommends they be removed from these allotments.

RM 1.8 - Did not recommend that wild horses be removed on Atchison Creek and Lone Pine Spring. WL 1.1 recommended their removal.

### Multiple Use Recommendations

Remove horses on allotments within the Bible horse herd unit (Bennion Spring, Lone Pine Spring, Mountain Spring, and Sheep Spring). Retain horses in the allotments within the Sulphur horse herd unit (Atchison Creek and Indian Peak) but control numbers to reduce conflicts.

### Reasons

These four allotments are within the greatest diversity of resource conflicts (refer to WH 1.1 and WH 1.2). Yearlong use by wild horses also detrimentally impacts the ability of big game (especially on 4,025 Federal acres of elk summer range) to reach prior stable and long-term population goals. Wild horses are retained in the Indian Peak and

Table 1

Allotments Recommended for Wild Horse Management to Reduce Competition and/or Conflicts with Wildlife

Horse Herd Unit	T	T	Maintain at or
and 1971 Popula-		Reduce or Control	Below Existing
tion Levels of		Numbers to Allow	Numbers to Prevent
<u>Wild Horses</u> <sup>1</sup>	Total Removal	Habitat Improvements	Future Problems
Bible - 25	Bennion Spring Lone Pine Spring Mountain Spring Sheep Spring	Jackson Wash (a por- tion of Jackson Wash also occurs in the Four Mile horse herd)	
Blawn Wash - 17		Antelope Peak Bucket Ranch Shauntie Water Hollow Willow Creek	
Chokecherry - 29		Chokecherry Stateline	
Four Mile - 25		Bull Spring Jockeys	Lund
Frisco - 12		Beaver Lake Frisco Kiln Spring Wah Wah - Lawson/	Bagnall
Mt. Elinor - 15		Gold Spring Modena Canyon (a por- tion of Modena Canyon also occurs in the Tilly Creek horse herd)	Government Well Mt. Elinor
North Hills - 28		Hebron Haystack Mountain Holt Mine Sevy West Smith Jones SUSC Winter	
Sulfur - 43	Atchison Creek   Indian Peak	Mountain Home	
Tilly Creek - 21		Rosebud Tilly Creek	

 $<sup>^{1}\</sup>mathrm{Figures}$  taken from the Pinyon Range URA Step 3, Table 8.

Atchison Creek allotments because of their high wild horse observability factor and that if horses are totally removed, 1971 horse populations cannot be retained in the planning unit.

Decision WL 1.1. Accept the Multiple Use Recommendation. See RM 1.8, WL 1.2 and WH 1.1.

### Decision RM 1.8, WH 1.1, WH 1.2, WH 1.3, WL 1.1, WL 1.2

Several alternatives for population control and herd unit consolidation have been considered during development of the Pinyon MFP and EIS. The best method to achieve long term objectives is not clear at this time. The effects of water development and distribution projects, vegetative rehabiliation, and other wildlife and range development projects on the location, and movement of wild horses needs additional study and observation. Significant changes in the Wild Horse and Burro Act also appear to be probable in the near future.

In view of this situation the following long term general objectives will be established, and short term (approximately two years) actions taken pending the results of monitoring studies on herd viability, range condition, viewing opportunities, cooperative management opportunites, and range development proposals:

- a. Accept as the long term objective, management for horse numbers at 1971 levels. The number of herd units would not be established at this time but would depend on the results of monitoring studies.
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- c. Continue cooperative management of the North Hills herd with the Dixie National Forest in accordance with the existing management plan. Horses in this unit will be maintained between 40 and 60 horses as specified in the plan.
- d. Consolidate and stabilize the Mountain Home-Sulphur herd unit and establish these numbers between 135 and 180 horses.

The Mountain Home allotment presently has no grazing privileges. Live-stock grazing will not be permitted unless monitoring studies following consolidation and stabilization of the horse numbers confirm adequate forage exists for the established numbers and wildlife.

### MANAGEMENT FRAMEWORK PLAN

RECOMMENDATION-ANALYSIS-DECISION

Name (MFP)		
Pinyon		
Activity		
Wildlife		
Overlay Referen	ce	
Step 1	Step 3	

Recommendation WL-1.2. Control wild horse numbers in 25 allotments to 1971 levels where they share the same habitat with high priority wild-life species on 145,467 acres of mule deer habitat, 59,994 acres of antelope habitat, and 5,258 acres of elk habitat. Also, maintain wild horse numbers in five allotments at or below existing population levels (table 1).

Rationale. Wild horses have increased in numbers on Federal lands since the passage of the Wild Horse and Burro Act (USDI 1978a, USDI 1975, and USDI 1978b; see URA Step 3 references for all MFP citations). These animals are concentrating in some areas to the point that they are contributing to the damage of riparian habitat on at least 33 special habitat features (not including others that are on private lands) used by mule deer and other wildlife species (USDI 1979-80) and the terrestrial vegetation on limited mule deer summer range by hoof action and overutilization of the forage resoruce (Anderson 1979 and USDI 1979-80). In some areas, their increase in numbers is contributing to the creation of sagebrush and pinyon-juniper monocultures (on mule deer and antelope habitat) through their yearlong grazing of the herbaceous understory without a rest from grazing (USDI 1979-80, Clary 1975, and Laycock 1978). Mule deer and antelope require a diversity of forage species to meet their nutritional needs (Yoakum 1980, Dietz 1978, and Call 1974); monoculture plant communities do not fill those needs. Wild horses and elk are competing for forage and water in the Jackson Wash allotment.

An increase in wild horse numbers causes a decrease of limited water availability (needed by all large ungulates) especially in drouth years. This can cause poor distribution of big game and limit their use of range that could supply their seasonal nutritional needs. Recently wild horses have been observed monopolizing the limited summer thermal cover areas used by big game (primarily aspen and conifer groves) on limited summer range (personal observation, Ball 1979). Because of the monopolizing behavior observed by Pellegrini (1971) between wild horse bands on watering sites, it is strongly suspected that they would monopolize watering sites and resting cover near water that would be available to big game.

If wild horse numbers are allowed to increase unchecked, the problems described above will increase, thereby increasing wild horse conflicts with high priority wildife species for habitat components and accelerate the destruction of key habitat (Zarn et al. 1977) and special use areas. This will not allow the needed improvement of high priority wildlife habitat to achieve prior stable and long term big game populations goals and habitat potential goals of sage grouse.

For all cited references, refer to the Wildlife URA Step 4 Bibliography section.

### Conflicts and Interactions

WH 1.2 - Recommends that wild horse herds be maintained above 1971 levels in Wah Wah, Kiln Spring, Hardpan, Beaver Lake, Frisco, and Mountain Home.

### Multiple Use Recommendations

Control wild horses at 1971 population levels on 25 allotments (identified in table 1) and also control horses on two other allotments (Atchison Creek and Indian Peak) so that a total of 27 allotments will have wild horse population control. (See Wildhorse Table #3)

### Reasons

Conflicts will be reduced between wild horses, range, and wildlife concerns in areas where sufficient forage is available to support all concerns. Conflicts will also be reduced where many of the conflicts with horses can be mitigated.

This is necessary to allow 1971 wild horse population levels to be maintained with the knowledge that some conflicts between horses and other resources will be reduced but not completely mitigated.

### Decision RM 1.8, WH 1.1, WH 1.2, WH 1.3, WL 1.1, WL 1.2

Several alternatives for population control and herd unit consolidation have been considered during development of the Pinyon MFP and EIS. The best method to achieve long term objectives is not clear at this time. The effects of water development and distribution projects, vegetative rehabiliation, and other wildlife and range development projects on the location, and movement of wild horses needs additional study and observation. Significant changes in the Wild Horse and Burro Act also appear to be probable in the near future.

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- c. Continue cooperative management of the North Hills herd with the Dixie National Forest in accordance with the existing management plan. Horses in this unit will be maintained between 40 and 60 horses as specified in the plan.
- d. Consolidate and stabilize the Mountain Home-Sulphur herd unit and establish these numbers between 135 and 180 horses.

The Mountain Home allotment presently has no grazing privileges. Livestock grazing will not be permitted unless monitoring studies following consolidation and stabilization of the horse numbers confirm adequate forage exists for the established numbers and wildlife.

### MANAGEMENT FRAMEWORK PLAN

RECOMMENDATION-ANALYSIS-DECISION

Name (MFP)		
Pinyon		
Activity		
Wildlife		
Overlay Referen	ce	
Step 1	Step 3	

Recommendation WL-1.3. Improve the vigor and increase the species composition of key wildlife forage species (primarily bitterbrush) on five allotments (Government Well, Holt Mine, Shauntie, SUSC Winter, and Uvada) by either developing grazing plans or consolidating allotments into grazing systems.

There are 28 allotments that need some type of livestock grazing system to help improve high priority wildlife species' habitat (table 2). However, all but five of these (listed above) are recommended to be placed in the "I" category which would require a grazing system (refer to Range Recommendation RM 1.2).

Rationale. There are four grazing allotments which are not recommended to have grazing systems; however the lack of intensive management on these allotments is causing a reduction of key big game forage species (black sage, bitterbrush, bud sage, and forbs) on a total of 28,059 Federal acres of mule deer habitat (14,909 acres in poor condition and 13,150 acres in fair condition) and on a total of 14,096 Federal acres of antelope habitat (6,024 acres in poor condition and 8,072 acres in fair condition).

Establishing intensive grazing management systems for livestock will help to improve the habitat condition by stabilizing the reduction of forage diversity on big game habitat and help to bring back key forage species on habitat sites where they should occur (see the Pinyon Habitat Analysis, URA 3 and 4, Appendix D, and the Pinyon SCS Range Site Guide). Systems would allow periodic rest and meet the physiological needs of key forage species. This habitat improvement is necessary to obtain prior stable mule deer numbers and long term antelope population goals.

### Conflicts and Interactions

- RM 2.1 Conflicts with WL 1.3 on the SUSC Winter and Shauntie allotments because it recommends no change in existing management.
- RM 3.1 Recommends that Government Well, Holt Mine, and Uvada be placed under custodial management. WL 1.3 recommends that grazing systems be developed for these allotments.

### Multiple Use Recommendations

Establish studies on key wildlife forage species on four allotments (Government Well, Shauntie, SUSC Winter, and Uvada) to determine the ecological trend and forage suitability trend of key big game forage species and make necessary changes in management if the monitoring studies so indicate the need.

### Reasons

The Government Well and Uvada allotments have had very little if any use for the past several years. Trend studies will help management determine the plant communities' successional direction after livestock use. The Shauntie allotment permittees are wanting to change from sheep to cattle. Studies are needed to mark any changes that occur from this action. The SUSC Winter allotment reportedly has a permittee designed rotation system. The Bureau does not currently have studies to mark any vegetation changes that may occur. The Holt Mine allotment does not need intensive studies. It has become basically a closed stand of big sagebrush.

Decision WL 1.3. Accept the Multiple Use Recommendation.

### Table 2

The following allotments should have some type of grazing system developed to increase the quality and quantity of key wildlife forage plants (this information is taken from Appendix D, Wildlife, URA 3).

\*Johns

Bagnall

Kiln Spring

Beaver Lake

Milford Cattle

Buckhorn

Modena Canyon

Bull Spring

Mt. Elinor

Chokecherry

Rose Valley

Frisco

Sevy West

Government Well

Sewing Machine

Hardpan

†Shauntie

Haystack Mountain

Smith Jones #1

Hebron

tSUSC Winter

tHolt Mine

Tilly Creek

Indian Peak

tUvada

Jockeys

Willow Creek

\*This allotment would only require a change in season of use.

†Allotments are recommended to have grazing systems because (in reference to Range Recommendation RM 1.2) they are not in the I management category.

Name (MFP)		
Pinyon		
Activity Wildlife		
Overlay Re	ference	
Step 1	Step 3	

#### MANAGEMENT FRAMEWORK PLAN

RECOMMENDATION-ANALYSIS-DECISION

Recommendation WL-1.4. Incorporate intensive monitoring studies on 61,236 Federal acres of antelope habitat and 4,495 Federal acres of mule deer habitat on Wah Wah-Lawson Cove which currently has a rest rotation grazing system and make the necessary changes in the existing system if the habitat condition does not improve (refer to URA 3 and 4, Appendix D, for detailed information).

Rationale. Past grazing practices have eliminated most of the key forage species (black sagebrush, bud sage, and forbs) on 61,236 Federal acres of antelope habitat and 4,495 Federal acres of mule deer habitat in the Wah Wah allotment. Intensive monitoring studies are needed to determine if the habitat's habitat condition is improving or declining for mule deer and antelope.

### Interactions

RM 2.1 - Places Wah Wah allotmeth in a continued present management category. WL 1.4 recommends that if wildlife habitat is in a downward trend changes be made in grazing practices.

### Multiple Use Recommendations

Accept WL 1.4. The minimum length of the study will be for at least two cycles of the current grazing system.

### Reasons

The studies will help determine the success of the current system to improve the habitat condition of big game. The minimum timeframe will allow sufficient time to judge vegetation changes resulting from the total cycle of the existing grazing system.

Decision WL 1.4. Accept the Multiple Use Recommendation.

### Pinyon

Name (MFP)

Activity Wildlife

Overlay Reference

Step 1

Step 3

### MANAGEMENT FRAMEWORK PLAN RECOMMENDATION-ANALYSIS-DECISION

Recommendation WL-1.5. Perform vegetation treatments on approximately 15,101 Federal acres in a mosaic pattern on 4,552 acres of important mule deer habitat (table 3, 3 allotments) 10,549 acres of important antelope habitat (Indian Peak allotment) of which 8,329 acres are important sage grouse habitat.

Rationale. Pinyon and juniper trees and sagebrush have increased to the point of reducing or eliminating palatable key forage species (browse, grass, and succulent forbs) used by high priority wildlife species on 15,101 acres in four allotments suitable for treatment. Vegetation treatments would improve the diversity and quality of forage available for mule deer, antelope, and sage grouse in an area where big game numbers are low in general. The treatments would help the productivity of these wildlife species by improving the forage diversity and succulent forage availability required for increased wildlife production.

### Interaction

WH 1.2 - Interacts with WL 1.5 in that fencing developments will be necessary to protect vegetation treatments and will preclude wild horse use from that area until treatments are established.

### Multiple Use Recommendations

Accept WL 1.5 as written. Coordinate with recommendation RM 1.4.

### Reason

There are no conflicts between recommendation WL 1.5 and other resources. However, coordination is needed between wildlife vegetation treatments and range vegetation to achieve multiple use improvement of the forage resource.

Table 3
Areas With Recommended Treatments

Allotment	Antelope	Deer	Sage Grouse
Indian Peak	10,549	0	8,329
Mountain Home	0	1,500	0
Sheep Creek	0	1,844	0
Willow Creek	0	1,208	0

Decision WL 1.5. Accept the Multiple Use Recommendation.

Name (MFP	)	
Pinyon		
Activity Wildlife		
Overlay Reference		
Step 1	Step 3	

### MANAGEMENT FRAMEWORK PLAN

RECOMMENDATION-ANALYSIS-DECISION

Recommendation WL-1.6. Allocate sufficient forage to satisfy the demands of current big game populations (estimated at a combined total of 2,742 AUMs for mule deer at 1,314 head in winter and 1,066 head in summer, 60 elk, and 598 antelope; see Wildlife URA Step 3, table 1 and Wildlife URA Appendix G) in the Pinyon Planning Unit Deer Herd Units 61-C and 62-C and allow for additional forage requirements up to prior stable (deer) and long term (elk and antelope) numbers (estimated at a combined total of 5,414 AUMs for mule deer at 2,467 head in winter and 2,219 head in summer, 200 elk, and 1,071 antelope) if big game numbers increase.

Rationale. Allocating sufficient forage to satisfy the demands of current big game numbers and allowing for increases in forage demands up to prior stable or long term big game numbers would help assure that the vegetation resources would not be overutilized and that the goal of obtaining prior stable or long term numbers could be achieved. Habitat improvement and forage availability are necessary to achieve prior stable mule deer and elk and antelope long term population goals.

### Conflicts and Interactions

This recommendation interacts with virtually all Rangeland Management and Wild Horse recommendations. It would constrain the types, locations, and intensities of rangeland treatments which could be performed and all grazing systems and plans which would be implemented would have to account for wildlife needs. This recommendation would also necessitate accounting for wildlife needs in any plans for manipulating wild horse herds or establishing long term numbers for wild horses. Disposal of lands identified for public expansion in Recommendation L 1.1 (Lands MFP overlay) would eliminate these allotments (AUMs lost shown in parentheses): Flat Top (42 AUMs), Meadow Valley (18 AUMs), and Smith Jones Pasture #2 (0 AUMs). Portions of the Airport (8 AUMs) and Milford Cattle allotments (83 AUMs) would also be affected.

### Multiple Use Recommendations

Accept WL 1.6 as written with the understanding that allotments listed as "C" category allotments (table 6, Range MFP) may not improve to the point that prior stable and long-term big game population goalds can be supported on those allotments. The additional big game AUMs required for the increase in numbers will have to come from future range and wildlife vegetation treatment projects in the "I" category allotments (table 1, Range MFP) and habitat improvement from management practices in the "I" and "M" category allotments (table 4, Range MFP).

### Reasons

Additional forage needed to support prior stable mule deer and long-term population goals for elk and antelope can be feasibly produced through vegetation treatments on the "I" category allotments and through proper management practices on both the "I" and "M" category allotments.

Decision WL 1.6. Accept the Multiple Use Recommendation.

# Name (MEP) Pinyon Activity Wildlife Overlay Reference

Step 3

Step 1

#### MANAGEMENT FRAMEWORK PLAN

RECOMMENDATION-ANALYSIS-DECISION

Recommendation WL-1.7. Encourage the development of cooperative agreements between BLM, UDWR, and land owners adjacent to isolated tracts of Federal lands near Beryl, New Castle, and Enterprise for making selective agricultural purposes which would expand and improve ringneck pheasant habitat.

Rationale. There is limited pheasant habitat in the area which could be improved. Development of isolated tracts of Federal land for agricultural uses would have a three-fold benefit.

- 1. Increase ringnecked pheasant habitat.
- 2. Place those lands into a higher order of productivity.
- 3. Provide increased hunting opportunities for upland game.

Under a cooperative agreement program with the Utah Division of Wildlife Resources, BLM, and private land owners, a high degree of productivity from these lands would be achieved.

### Interaction

RM 3.2 and 3.3 - Interacts with WL 1.7 in that if WL 1.7 or other uses cannot be accomplished then these lands could be exchanged or sold under RM 3.2 and RM 3.3.

### Multiple Use Recommendation

Sell or trade the small tracts of land in WL 1.7.

### Reason

The habitat on these small tracts is unmanageable. They should be sold or traded to block land into more manageable units.

Decision WL 1.7. Accept the Multiple Use Recommendation.

### MANAGEMENT FRAMEWORK PLAN - STEP 1

**ACTIVITY OBJECTIVES** 

Name (MFP)	
Pinyon	
Activity Watershed	
Objective Number V-1	

Objective W-1. Reduce or minimize wind and water erosion on soils in critical condition by management or land treatment to stabilize soils and improve or maintain soil productivity (table 1).

Rationale. This objective follows Bureau of Land Management Watershed program objective 1603.12 E.3.a. The ultimate purpose is to manage the soil resource to enhance onsite resource uses.

As identified in the Unit Resource Analysis, there are many areas where improved management or land treatments could effectively protect soils or reduce soils loss. The reduction of erosion and associated improvement or maintenance of soil productivity will also be beneficial to livestock grazing, wildlife use, and aesthetics.

Name (MFP)	
Pinyon	
Activity	
Watershed	
Overlay Referen	ce
Step 1	Step 3

### MANAGEMENT FRAMEWORK PLAN

RECOMMENDATION-ANALYSIS-DECISION

Recommendation W 1.1. Eliminate or reduce livestock grazing on 7,423 acres defined in the SVIM inventory to have an SSF greater than 60 (Table 1). Eliminate 300 acres in the Beaver River Blow Area from livestock grazing (Smithson allotment). Determine acreage to reduce or eliminate grazing from the watershed drained by Blawn Wash in the Jockeys Allotment.

Rationale. Livestock grazing reduces ground cover and increases soil compaction. These contribute to increased runoff and soil loss. Elimination of grazing will allow vegetation recovery. Increased infiltration will result from increased vegetation and reduced soil compaction.

Beaver River Bottom Blow area is nearly devoid of vegetation. Elimination of any grazing will provide an opportunity for the existing sparse vegetation to propogate, increasing cover and decreasing soil loss due to wind.

Blawn Wash watershed is in a state of active erosion. Hillsides are laced with rills. Blawn Wash is exhibiting large scale soil movement involving deep, sharply incised gully formation. Grazing elimination will increase plant cover.

### Conflicts and Interactions

Initial allocations presented in RM 1.1 will be affected by reduction or elimination of grazing as proposed. Land treatments proposed in RM 1.4 include 1,550 acres recommended in W 1.1 for reduction or elimination of grazing. Modena and Smithson allotments are proposed for custodial management in RM 3.1.

### Multiple Use Recommendation

In the design of the grazing systems (AWP development), provide for protection of those areas in critical erosion condition. In grazing system design, give consideration to projects which will benefit the watershed.

### Reason

Protection of the above acres in critical erosion condition can be accommodated in AMP development.

Decision W 1.1. Accept the Multiple Use Recommendation.

Table 1
Allotments Containing Acreage in Critical Condition

Allotment	SWA#	Range Site #	% Slope	Critical Acreage
Atchison Creek	D116	435	*35	6,262
Beaver Lake	Н018	453	15	252
	Н028	460	8	785
Bennion Spring	D202	451	15	83
	D203	451	15	340
Blue Mountain	A058	475	2	471
Eight Mile Spring	D134	451	6	368
	D135-01	451	6	189
	D135-02	457	6	442
Indian Peak	D226	461	6	1,318
	D313	435	*35	463
Kiln Spring	F051	458	2	499
	F054	416	*35	653
Modena	D324-01	451	6	114
	D324-02	457	6	49
Smithson	6082	414	1 4	118
Tilly Creek	D130	451		2,092
Wah Wah Lawson	6127 -03 6129 -02	435 435	*40 *35 *45	1,332 1,465 869
Willow Creek	6200 F072 F081 F088	459 456 461 454	*40 *45 2	1,564 1,250 303
Total				21,281

<sup>\*</sup>Sites not suitable for vegetation manipulation because of excessive slope.

Name (MPP) Pinyon	)	
Activity Watershed		
Overlay Refe	erence	
Step I	Step 3	

#### MANAGEMENT FRAMEWORK PLAN

RECOMMENDATION-ANALYSIS-DECISION

Recommendation W-1.2. In the future, construct roads to avoid stream channels, areas of unstable soils, and seeps. Avoid constructing long, down slope straight aways, providing instead curves with water drainages off the road bed.

Rationale. Roads produce more erosional soil loss than other resource activities.

### Conflicts and Interactions

No specific roads are specified for construction or rerouting. There appear to be no conflicts.

### Multiple Use Recommendation

Accept W-1.2.

### Reason

See the above rationale and conflicts and interactions.

Decision W 1.2. Accept Recommendation W 1.2.

Name (MF) Pinyon	,
Activity Watersh	ed
Overlay Re	ference
Step 1	Step 3

### MANAGEMENT FRAMEWORK PLAN

RECOMMENDATION-ANALYSIS-DECISION

Recommendation W-1.3. Design and construct check dams on 27.3 miles of stream identified in table 2. Establish riparian habitat along these same streams by fencing and seeding areas on 27.3 miles of stream shown in table 2.

Rationale. Destruction of stream channels lowers the water table, reduces the amount and time flow will be maintained into the dry season, and reduces water quality by adding suspended sediments to the flow.

Riparian habitat helps maintain flow during drought periods and also acts as a filter, helping remove sediments.

### Conflicts and Interactions

Conflicts with RM 1.4 and WL 1.5 could occur if land treatments disturb riparian and streamside vegetation.

### Multiple Use Recommendation

Examine stream channels on table 2 as part of AMP development. Coordination between resource activity specialists will be used to decide the suitability of check dams as each AMP is developed. Grazing system design during AMP development will consider riparian habitat protection. Seeding needs will also be evaluated during AMP development.

### Reason

Before construction of the check dams and riparian habitat fencing and seeding can be done, an evaluation at the level of detail provided by the development of allotment management plans is needed. Coordination between resource specialists during AMP development will give consideration to riparian protection and management.

(April 1975) Form 1600-21 (April 1975)

 $\underline{\text{Decision W 1.3}}. \quad \text{Accept the Multiple Use Recommendation.}$ 

Table 2
Stream Channels Where Sediment Control Structures Could be Located

Stream	Allotment	BLM Stream Miles
Atchison Creek	Atchison Creek	3.5
Commissary Creek	Sheep Creek	3.0
Cottonwood Creek	Sheep Creek	1.5
Sheep Creek	Sheep Creek	3.0
Chokecherry Spring Creek	Johns	0.9
Rice Canyon Spring	Stateline	1.0
Meadow Srping Creek	Johns	0.8
Pinto Creek	Sheep Creek	5.0
Pine Grove Creek	Pine Grove	0.5
Indian Creek	Indian Creek	1.7
Mackelprang Spring	Indian Peak	0.7
Willow Creek	Bucket Ranch	1.5
Prout Wash	Jockeys	0.5
Bull Spring Wash	Bull Spring	0.0
Vances Spring	Mountain Home	0.0
Chokecherry Creek	Nevada Cattle	0.3
Salt Cabin Wash	Atchison Creek	1,5
Unnamed Creek A	Johns	1.0
Modena Canyon Wash	Modena Canyon	0.9
TOT AL		27.3

## MANAGEMENT FRAMEWORK PLAN - STEP 1

ACTIVITY OBJECTIVES

Name (MFP)	
Pinyon	
Activity Watershed	
Objective Number W-2	

Objective  $\mbox{W-2.}$  Meet water quality and yield requirements for wildlife, livestock, and human consumption as needed.

Rationale. Sufficient water of good quality is essential for the health of all users.

Name (MFP) <b>Pinyon</b>		
Activity Watershe	·d	
Overlay Ro	ference	
Step 1	Step 3	

# MANAGEMENT FRAMEWORK PLAN

RECOMMENDATION-ANALYSIS-DECISION

Recommendation W-2.1. Continue to test water sources in the planning unit. Conduct further intensive tests on the springs found unsuitable for use in table 3.

Rationale. These springs are currently below recommended chemical quality. Further tests would help determine if use of the source should be discontinued.

# Conflicts and Interactions

There are no conflicts with other resources or MFP recommendations.

### Multiple Use Recommendation

Accept W-2.1.

### Reason

See the above rationale. There are no conflicts.

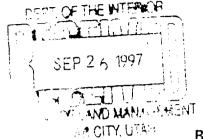
<u>Decision W 2.1</u>. Deny the recommendation. Baseline data studies should be conducted. The continued monitoring of these springs is not required unless problems resulting from the quality concerns on Table 3 are identified in the future.

Table 3
Springs Found to be of Marginal Quality

Allotment	Item Location	Suitability	Quality Concerns
Airport	   Well   (C-27-10) 17 bbd 	   marginal   	excessive hardness, cadmium, TDS, and sodium
Antelope Peak	Antelope Spring   (C-28-13) 18 ad	   marginal 	   excessive hardness 
Atchison Creek	   Merrils Camp Spring   (C-30-18) 21 b	   marginal	   excessive cadmium 
Bucket Ranch	Blawn Wash (C-29-15) 28 ca	   marginal	   excessive hardness 
	Willow Creek I (C-29-16) 12 ac	marginal	   excessive hardness
Burn Knoll	Mertons Spring (C-29-13) 15 ac	marginal	excessive hardness
Jockeys	McKnights Well (C-30-14) 19 db	marginal	excessive hardness
Mountain Spring	Bible Spring   (C-32-16) 8 dc	marginal	excessive hardness
 	Bible Spring I (C-32-16) 8 cd	marginal   	excessive hardness
	Polliwog Spring   (C-32-16) 3 dd	marginal   	excessive hardness and flouride

# CEDAR BEAVER GARFIELD ANTIMONY RESOURCE MANAGEMENT PLAN (RMP) AND PINNON MANAGEMENT FRANCISMORY DI ANI (MER)

PINYON MANAGEMENT FRAMEWORK PLAN (MFP)



APPROVED
AMENDMENTS AND
DECISION RECORD

Prepared by

DEPARTMENT OF INTERIOR

BUREAU OF LAND MANAGEMENT (BLM)

UTAH STATE OFFICE

<u>Decision:</u> It is my decision to approve the multiple plan amendments for the Cedar Beaver Garfield Antimony Resource Management Plan (RMP) and Pinyon Management Framework Plan (MFP). This decision adds five new land tenure adjustment criteria (listed below) for public lands located in Cedar City District of the Bureau of Land Management (BLM).

Public lands in order to be considered for any form land tenure adjustment (LTA) including but not limited to exchanges, in lieu selections, desert land entries, R&PPs etc. (except FLPMA 203 Sales) within the above stated planning areas, must meet one or more of the following criteria:

- 1) is in the public interest and accommodates the needs of state, local or private entities, including needs for the economy, community growth and expansion and are in accordance with other land use goals and objectives and RMP/MFP planning decisions;
- 2) results in a net gain of important and manageable resource values on public lands such as crucial wildlife habitat, significant cultural sites, high value recreation areas, high quality riparian areas, live water, threatened & endangered species habitat, or areas key to the maintenance of productive ecosystems;
- 3) ensures the accessibility of public lands in areas where access is needed and cannot otherwise be obtained;
- 4) is essential to allow effective management of public lands in areas where consolidation of ownership is necessary to meet resource management objectives;
- results in the acquisition of lands which serve a national priority as identified in national policy directives.

In addition to above criteria, all future land disposal actions will require a site specific environmental analysis in accordance with the National Environmental Policy Act when an actual land tenure adjustment action is proposed. A subsequent analysis may reveal resource conditions that could not be mitigated to the satisfaction of the authorized officer and may therefore preclude disposal.

All future land tenure adjustments must meet one or more of the above land tenure adjustment criteria as well as be in conformance with other goals and objectives in the subject plan, some of which could preclude land tenure adjustment. All land tenure adjustments would be subject to valid existing rights as determined by the authorized officer.

<u>Finding of No Significant Impact (FONSI):</u> A finding of no significant impact was made on July 3, 1997 by the Utah BLM State Director. This determination was made based on the analysis provided in Environmental Assessment (EA) UT-044-97-17. He determined that the Proposed Amendments to the Cedar Beaver Garfield Antimony RMP and Pinyon MFP will not create significant impacts to the human environment and that an Environmental Impact Statement is not required.

Rationale for Decision: The above decision was made to provide for planning consistency between District and Area Offices and increase its ability to conduct land tenure adjustments in a more flexible manner.

These planning amendments have shown the potential to improve management of sensitive resources, as well as provide possible community growth and economic development.

In reviewing numerous environmental elements, no significant impacts were identified. Refer to Appendix A for the analysis assumptions that were used in the EA.

Issues and Concerns: In response to a Scoping Notice sent out by the Cedar City District Office, the State of Utah School and Institutional Trust Lands Administration suggested the following be added as a sixth criterion in this Decision Record: "satisfies an outstanding in-lieu or Quantity Grant selection right of the State of Utah." However, it has been determined that the addition of a sixth criterion is not necessary as this concern is addressed above in Criterion 1.

G. William Lamb

State Director, Utah

### APPENDIX A: ANALYSIS ASSUMPTIONS

The rationale for not considering these environmental elements further is documented below:

# • Impacts on Air Quality or Airshed Classification

There is a potential for development of parcels that have left public ownership to temporarily degrade air quality periodically once construction or development begins. Anticipated soil disturbance from development is a potential source of fugitive dust and other air pollutants. However, the disturbed areas would be in scattered locations and at different times. There would be temporary increases in fugitive dust and other emissions, but the increases are not anticipated to be large enough to affect air quality on a regional basis.

In addition, the State of Utah in coordination with the Environmental Protection Agency would be responsible for any air quality permits and or restriction/mitigation necessary for the prevention of significant impacts for subsequent development proposals. Therefore, impacts on air quality are not addressed in detail at this time.

# Impacts on Floodplains/Wetlands/Riparian

All areas and area groupings were reviewed on topographical maps to determine if potential land tenure adjustments could adversely affect floodplains, wetlands or riparian areas. In accordance with executive order 11988 regarding floodplains, it is not anticipated that any land tenure adjustment that may conflict with floodplain protection, management or local zoning controls regarding these resources would be allowed unless it could be mitigated to the satisfaction of the authorized officer and other permitting authorities. Site specific impacts to these values would be analyzed and mitigated during subsequent environmental analysis at the implementation stages. Currently, it is Bureau policy that land tenure adjustments do not result in the loss of riparian areas or wetland areas unless such an adjustment results in the acquisitions of a net gain these resources.

# • Impacts on Prime/Unique Farmland

Existing policies mandated by the Surface Mining Control and Reclamation Act of 1977 require the consideration of Prime or Unique Farmlands. Further, there are no known prime or unique farmlands that could be impacted by either alternative and therefore, these elements will not be considered further.

# • Impacts on Proposed Areas of Critical Environmental Concern (ACEC)

Under either Alternative, no ACECs would be impacted, however, all relevance and importance criteria would be protected on a case by case basis.

Existing law and policy would preclude taking any action that would cause significant adverse impacts to any of the values that were identified under the relevance and importance criteria in a designated ACEC. As such no land tenure adjustment would be allowed that would cause significant adverse impacts to any of the ACECs that have been designated in these planning areas.

# • Impacts on Cultural and Paleontological Resources

Cultural clearances and other mitigation required by law would protect these resources and thereby prevent any significant adverse impacts. It is anticipated that potential land tenure adjustments that would be found to have significant cultural or historical resources would be precluded from disposal. In addition, mitigation as coordinated with and approved by the Utah State Historical Preservation Officer would be required prior to authorizing any form of land tenure adjustment affecting cultural resources. Therefore, impacts to these resources will not be considered further

# Impacts on Hazardous Waste Materials

The addition of five new land exchange criteria is not anticipated to result in any potential action that would promote generation of hazardous wastes or interfere with management of hazardous waste under applicable Federal or State laws. Further, prior to any subsequent land tenure adjustment proposal, inventories for hazardous materials would be conducted and mitigation would be required (if possible) or the site would be precluded from land tenure adjustment. Therefore, this element has not been considered further.

# • Impacts on Wilderness Study Areas or Other Special Designations

Existing policies would preclude land tenure adjustment of public lands within any Wilderness Study Areas, Areas of Critical Environmental Concern, Research Natural Areas, etc. Growth in general throughout the region will most likely cause increased visitor use of these areas. Impact analysis of this sort would be beyond the scope of this Environmental Analysis.

### • Impacts on Soil Resources/Water Resources

There is a potential for loss of soil structure and productivity, with resultant impacts on vegetation and water quality from surface disturbance should a LTA result in subsequent development. Impacts on soils are closely linked to impacts on vegetation and water quality. It is anticipated that such impacts would be addressed on a site specific basis and

that LTAs would not be considered where there is a potential for significant impacts unless such impacts could mitigated to the satisfaction of the authorized officer in accordance with known statutory environmental thresholds. The same would be true of water quality and therefore these resources were not considered further in this assessment.

# • Impacts on Forestry Management

It is not anticipated that any of the proposed land tenure adjustment criteria identified would have any appreciable effect on the existing management of or harvest of forest products and thus is not considered further in this analysis.

### • Impacts on Energy and Mineral Resources

There is no known potential for disposing of any significant amount of land deemed valuable for energy and mineral resources. Additionally, it is anticipated that most land tenure adjustments would take place with the mineral estate being maintained in public ownership; therefore, transfer of the values would not occur. In the rare instance where the mineral estate would be transferred out of public ownership, land tenure adjustments would take into account fair market values including mineral resources and the general fund would be compensated accordingly with no overall loss to the public at large. Some land tenure adjustment authorities specifically preclude the land tenure adjustment of lands known to be mineral in character. Therefore, impacts to these resources will not be discussed further.

### Impacts to Wildlife Resources

It is not anticipated that any proposed LTA would be allowed if it is determined that significant adverse impacts on wildlife or associated high value habitat including sensitive species habitat would occur unless it could be mitigated to the satisfaction of the authorized officer or other authorizing agency.

DEPARTMENT OF INTERIOR BUREAU OF LAND MANAGEMENT

4310-DQ-M 6-00152

UT-040-06-1020-00

NOTICE OF INTENT TO AMEND MANAGEMENT FRAMEWORK PLAN

AGENCY: Bureau of Land Management, DOI.

**ACTION:** Notice of intent to amend management framework

plan.

Iron County.

**SUMMARY:** The Bureau of Land Management (BLM) is preparing an Environmental Assessment (EA) to consider a proposed amendment to the Pinyon Management Framework Plan (MFP). The proposed amendment would consider alternatives for additional opportunities for land tenure adjustments in

**DATES:** The comment period for identification of issues for the proposed plan amendment will commence with the date of publication of this notice. Comments must be submitted within 30 days of publication of this notice.

FOR FURTHER INFORMATION CONTACT: Arthur L. Tait, Beaver River Resource Area Manager, Bureau of Land Management,

Cedar City District, 176 D.L. Sargent Drive, Cedar City, Utah 84720, telephone (801) 586-2401. Comments on the proposed plan amendment should be sent to the above address.

SUPPLEMENTARY INFORMATION: The Beaver River Resource Area (BRRA) Of the Cedar City district, BLM, is proposing to amend the Pinyon MFP to allow for land tenure adjustments on the following federal properties not previously identified in the MFP:

### Federal land: 5,975.71 acres

Salt Lake Meridian

### Township Range Section Subdivision

35 S. 17 W. 18 lots 1,2,3,4; E½SW¼; E½NW¼;

35 S. 18 W. 13;

14 E½;

24 NW1/4;

34 S. 17 W. 19 lots 3 and 4 inclusive;

33 S. 17 W. 23 W½;

34 W1/2;

35 W1/2.

31 S. 13 W. 1 lots 4, 5, and 12

3;

4 lots 1 to 4 and 7 to 10, inclusive;

5 lots 1 to 6, inclusive, 11, and 12;

6 lots 1 and 2;

8 E½;

9;

10 W½;

20 E½;

The main purpose is to identify and analyze the land for exchange to private parties for acquisition of lands that result in a net gain of important and manageable resource values on public land. The United States is considering the acquisition of the following described NON-FEDERAL

# LAND: 6,590.44 acres:

Salt Lake Meridian

Township	Range Sec	tion <u>Subdivision</u>
35 S.	18 W.	23 NW¼;
		25 W½
		27 N½;
		29 N½;
		33 S½;
		34 N½;
		35 W½.
31 S.	15 W.	2;
		16;
		36 W½NE¼, W½, and NW¼SE¼.
31 S.	17 W.	32;
32 S.	17 W.	2 lots 1 to 4, inclusive, S%N%
		SW¼, N½SE¼, and SW¼SE¼;

34 S. 19 W. 16;

Lands transferred out of Federal Ownership as a result of the exchange, would be available to meet the various needs of the respective parties. An EA will be prepared to analyze the impacts of this proposed plan amendment and alternatives.

Public participation is being sought at this initial stage in the planning process to ensure the MFP amendment addresses all issues, problems and concerns from those interested in the management of lands within the BRRA. Necessary amendments to the approved plan will keep the document viable.

William G. Lamb
State Director, Utah

Name (MFP) Pinyon		
Activity Lands		
Overlay Refer	ence	
Step 1	Step 3	

#### MANAGEMENT FRAMEWORK PLAN

RECOMMENDATION-ANALYSIS-DECISION

Recommendation L 1.1. Classify public lands adjacent to the communities of Enterprise and Milford for community expansion purposes (sale, lease, or exchange).

Rationale. The communities of Milford and Enterprise have indicated their interest in obtaining lands near their boundaries for public purposes and community expansion.

### Conflicts and Interactions

Disposal of lands identified for public expansion (Lands MFP overlay) would eliminate these allotments (AUMs lost shown in parentheses): Flat Top (42 AUMs), Meadow Valley (18 AUMs), and Smith Jones Pasture #2 (0 AUMs). Portions of the Airport (8 AUMs) and Milford Cattle allotments (83 AUMs) would also be affected.

### Multiple Use Recommendation

Accept L 1.1.

#### Reason

See the above rationale. Community expansion needs outweigh the range resource values involved.

Name (MFP) Pinyon	
Activity Lands	
Objective Number	

### MANAGEMENT FRAMEWORK PLAN - STEP 1

**ACTIVITY OBJECTIVES** 

### Land Tenure Adjustments

<u>Objective L-1.</u> Provide suitable public lands for community expansion purposes and to assist in developing the area's agricultural potential through sales, leases, and permits.

Rationale. The Secretary of the Interior is authorized to manage the use, occupancy, and development of the public lands (43 U.S.C. 1731), and to dispose of public lands where such lands are difficult and uneconomic to manage, where the disposal of such lands will serve important public objectives, or where the public interest will be well served (43 U.S. C. 1712, 1716).

Bureau policy states that, where appropriate, BLM will provide public lands to help meet people's needs for growth and stability in their communities (BLM 1602.1)

Scattered throughout the Escalante Desert farming area are several tracts of public land which may be suitable for agricultural purposes. Making these lands available for such purposes would increase the area's agricultural base (see recommendation RM 3.3).

Decision L 1.1. Accept L 1.1.

# MANAGEMENT FRAMEWORK PLAN - STEP 1

Name (MFP)	
Pinyon	
Activity	 
Lands	
Objective Number	 _
L-2	

ACTIVITY OBJECTIVES

# Rights of Way

Objective L-2. Make sufficient public lands in the planning unit available for right-of-way purposes in designated corridors or sites.

Rationale. The Secretary of the Interior is authorized to grant rights-of-way across the public lands (43 U.S.C. 1761).

Demand for rights-of-way, while generally limited, is expected to continue in the future, and increase with any increase in population.

Bureau policy states that, where appropriate, the BLM will provide public lands to help meet people's needs for growth and stability in their communities (BLM 1602.1). Allowance of non-major rights-of-way throughout the planning unit will give management the ability to be responsive to future needs, with the latitude to utilize alternatives.

Name $(MFP)$	
Pinyon	
Activity Lands	
Overlay Reference	e
Step 1	Step 3

### MANAGEMENT FRAMEWORK PLAN

RECOMMENDATION-ANALYSIS-DECISION

Recommendation L 2.1. Require all major utility systems that pass through the planning unit to utilize the corridors identified on the MFP Step 1 Overlay.

Rationale. By locating major utility systems within a specific geographic area a substantial savings in land needs can be achieved. This results from the sharing of support facilities such as access roads, communication sites, and storage yards. Corridors on the MFP overlay are taken from the Western Regional Corridor Study and represent the best industry needs to date.

### Conflicts and Interactions

Conflicts may occur with range projects proposed in RM 1.3 at some future time where a utility using the corridor may intersect a fence or pipeline. At the present time, no major utilities not already identified have requested rights-of-way.

# Multiple Use Recommendation

Accept L 2.1.

#### Reason

See the above rationale. Mitigation of conflicts with range improvements can be handled on a case-by-case basis.

Name (MFP)	
Pinyon	
Activity	
Visual R	esources
Overlay Refe	rence
Step 1	Step 3

# MANAGEMENT FRAMEWORK PLAN

RECOMMENDATION-ANALYSIS-DECISION

Recommendation VR-1.2. Provide Visual Resource Management (VRM) Class IV management level (Appendix VR-1) to all areas delineated on the VRM MFP 1 overlay.

Rationale. These areas are of low scenic quality or receive little visitor use. Concern for the preservation of the visual resources of these areas is assumed to be low.

Most management activities which would be acceptable within Class IV areas could meet the constract rating standards without additional mitigating measures or redesign.

### Conflicts and Interactions

No identifiable conflicts.

# Multiple Use Recommendation

Accept VR-1.2.

#### Reason

See the above rationale. There are no conflicts.

would apply to areas identified in the scenic evaluation where the quality class has been reduced because of unacceptable cultural modification. The contrast is inharmonious with the characteristic landscape. It may also be applied to areas that have the potential for enhancement, i.e., add acceptable visual variety to an area/site. It should be considered an interim or short-term classification until one of the other VRM class objectives can be reached through rehabilitation or enhancement. The desired visual resource management class should be identified.

#### APPENDIX VR-1

# VISUAL RESOURCE MANAGEMENT CLASSES (Excerpt from BLM Manual 8411)

Each visual resource management class describes a different degree of modification allowed in the basic elements of the landscape. The primary character of the landscape should be retained regardless of the degree of modification.

<u>Class I.</u> This class provides primarily for natural ecological changes; however, it does not preclude very limited management activity. Any contrast created within the characteristic environment must not attract attention. It is applied to wilderness areas, some natural areas, wild portions of the wild and scenic rivers, and other similar situations where management activities are to be restricted.

Areas of Critical Environmental Concern for Scenic Values. The ACEC for scenic values, as defined in .27, are lands of high scenic value of relative scarcity. For this reason, priority identification must be made for presentation in the management framework process. Conformance with VRM Class II objectives constitutes interim management.

- Class II.\* Changes in any of the basic elements (form, line, color, texture) caused by a management activity should not be evident in the characteristic landscape. A contrast may be seen but should not attract attention.
- Class III.\* Contrasts to the basic elements (form, line, color, texture) caused by a management activity may be evident and begin to attract attention in the characteristic landscape. However, the changes should remain subordinate to the existing characteristic landscape.
- Class IV.\* Contrasts may attract attention and be a dominant feature of the landscape in terms of scale; however, the change should repeat the basic elements (form, line, color, texture) inherent in the characteristic landscape.
- Class V. Change is needed or change may add acceptable visual variety to an area. This class applies to areas where the naturalistic character has been disturbed to a point where rehabilitation is needed to bring it back into character with the surrounding landscape. This class

<sup>\*</sup>Structures located in the foreground distance zone (0-1/2 mile) often create a contrast that exceeds the VRM class, even when designed to harmonize and blend with the characteristic landscape. This may be especially true when a distinctive architectural motif or style is designed. Approval by the District Manager is required on a case-by-case basis to determine whether the structure(s) meet the acceptable VRM class standards and, if not, whether they add acceptable visual variety to the landscape.

 $\frac{\text{Decision VR 1.2.}}{\text{under present policy.}} \ \ \text{No decision is required for VRM class designation} \\ \text{under present policy.} \ \ \text{The existing information will be retained as baseline data.}$ 

#### MANAGEMENT FRAMEWORK PLAN - STEP 1

ACTIVITY OBJECTIVES

Name (MF	P)
Pinyon	
Activity Visual	Resources
Objective VR –1	Number

Objective VR-1. Retain the present visual character of the landscapes in the Pinyon Planning Unit. Allow modifications in the basic elements of the landscape standards. Proposals which cannot meet VRM class standards may be either not allowed or redesigned to meet accepted standards.

Rationale. Such a management objective is commensurate with the visual resource management guidance outlined in BLM Manual Section 8411, Upland Visual Resource Inventory and Evaluation. In addition, BLM Manual Section 1602, Basic Guidance (1602.12, 1602.33a, and 1602.42c), the Federal Land Policy and Management Act of 1976 point out the importance of visual resource considerations in land-use decision making.

#### MANAGEMENT FRAMEWORK PLAN

RECOMMENDATION-ANALYSIS-DECISION

Name (MFP	)
Pinyon	
Activity	
Visual	Resources
Overlay Ref	erence
Step 1	Step 3

Recommendation VR-1.1. Provide Visual Resource Management Class III management level (Appendix VR-1) to Wah Wah and San Francisco Mountains as indicated on Visual Resource MFP 1 overlay.

Rationale. These areas are associated with the major travel routes in the planning unit. Management activities allowed within the areas must be compatible with the scenic values. The conflicts with a Class III management level should be identified on a case-by-case basis. The vast majority of recommendations can meet these guidelines with proper planning.

### Conflicts and Interactions

No conflicts if projects and treatments proposed in RM 1.3 and RM 1.4 are designed to protect visual resources.

### Multiple Use Recommendation

Accept VR-1.1.

#### Reason

See the above rationale. There are no conflicts.

	Name (MFP) Pinyon	
	Activity Minerals	
Overlay Reference		ice
l	Step 1	Step 3

#### MANAGEMENT FRAMEWORK PLAN

RECOMMENDATION-ANALYSIS-DECISION

Recommendation M-1.1. Issue sand and gravel free use permits and/or sales from the delineated identified-subeconomic deposits as legitimate demand dictates.

Support Needs. Site specific EARs. Access roads are needed.

Rationale. The unit contains known and inferred deposits of sand and gravel. The identified-subeconomic deposits occur off main roads or in the vicinity of towns where access is available without great expense. It is within these deposits that sand and gravel development can be expected to occur, exactly where is dependent on further needs and the results of future exploration.

### Conflicts and Interactions

Identified-subeconomic deposits are extensive enough in the planning unit that many alternate sites exist if conflicts arise with any proposed use of the resource.

### Multiple Use Recommendation

Accept M-1.1.

#### Reason

See the above rationale. Conflicts can be handled by alternate site location once site specific recommendations are made.

(bistructions on reverse)

# MANAGEMENT FRAMEWORK PLAN - STEP 1

ACTIVITY OBJECTIVES

Name (MFP) Pinyon	
Activity Minerals	
Objective Number M-1	

Objective M-1. Provide sufficient salable and free use minerals to meet local and certain regional demands through the issuance of free use permits and mineral material contracts.

Rationale. Demand for these materials which are used in construction and for road maintenance is expected to increase within the unit, especially if a major project such as MX is deployed. Private sources are limited and supply from BLM managed lands will be necessary.

Decision M 1.1. Issue sand and gravel free-use permits and/or sales in areas of potential demand. Identified subeconomic sand and gravel deposits are deposits close to towns or near roads. Other deposits may be considered if required on a case by case basis.

Name (MFP) Pinyon	
Activity Minerals	
Objective Number M 2	

### MANAGEMENT FRAMEWORK PLAN - STEP 1

ACTIVITY OBJECTIVES

Objective M 2. Make available as much area as possible for oil and gas exploration and development.

 $\underline{\text{Rationale}}$ . Oil and gas exploration and development is critical to the energy requirements of the United States.

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# MANAGEMENT FRAMEWORK PLAN

RECOMMENDATION-ANALYSIS-DECISION

Name (MFP) Pinyon		
Activity Minerals		
Overlay Reference		
Step 1	Step 3	

Recommendation M-2.1. Within the Pinyon unit delete 4,363 acres from oil and gas Category 1 and add 12,048 acres. Delete 540 acres from Category 2 and add 4,373 acres. Delete 5,395 acres from Category 3 and delete 5,853 acres from Category 4 (See Table M2.1-1).

Rationale. These changes will result in less restrictive stipulations for oil and gas exploration and development while providing protection for critical resource values. Category changes are shown on Table M2.1-1. A description of each area shown on the overlay is presented in Table M2.1-2.

# Multiple Use Analysis

# <u>Minerals</u>

With only minor exceptions almost all of the Pinyon Planning Area is underlain by sedimentary formations having the potential for containing oil. To date no producing oil and gas wells have been drilled in the Planning Area nor have any areas been identified as known geologic structures. Past drilling activities in the Planning Area consist of only three or four strictly wildcat ventures.

Impacts on oil and gas leasing include a net reduction of 5,853 acres in Category 4 (no leasing) and 3,155 acres in Category 3 (no surface occupancy). There will be a net increase in Category 2 of 1,583 acres. Category 2 special stipulations applied are seasonal restrictions for two periods, (see Wildlife section) March 1 to May 15 and February 15 to June 30. The proposed categories are shown on Table M2.1-la and Figure 1. Present categories are shown on Table M2.1-lb and Figure 2. The proposed action results in reduced leasing restrictions from the existing categories. Since there are no known oil and gas deposits in the area, impacts on oil and gas production cannot be estimated. Other minerals in the area will not be affected by oil and gas category changes.

#### Range

Standard stipulations will protect range resources from long-term damage to vegetation and to facilities. Short-term impacts will be high for very small areas but not significant because of the small area disturbed. Cumulative impacts of disturbance of many small areas is not expected to be significant under the activity expected. Reductions in AUMs are not anticipated. A range study area of 476 acres will be deleted from Category 3 and added to Category 1. Studies on this pinyon-juniper area have been completed and protection is no longer required.

### Watershed

Impacts on general watershed conditions will be insignificant because of the small area disturbed. Careful monitoring of disturbance at drill sites and rehabilitation success needs to be done to avoid future problems. There is a danger that unchecked erosion caused by excavation of mud pits or discharge tests could cause long-term problems if rehabilitation is not completed or is unsuccessful. These impacts will be covered under standard stipulations.

### Wildlife

During the mating season, sage grouse strut at particular sites and confine their activities within a radius of less than one mile from the strutting grounds. Mating occurs on these sites from March 1 to May 15. Migration can occur when an area is disturbed during the mating season and reduce mating success. Category 2 classification on these sites with special stipulation 7 (no drilling or exploration will be allowed from March 1 through May 15) will prevent disturbance on identified sites during critical times of the year. The proposed action reflects strutting ground changes based on recent wildlife inventories.

About 1,700 acres will be added to Category 2 (from Category 1) to protect raptor nests during the nesting seasons. Most nesting activity occurs from February 15 to June 30. Human activities disturb the nesting birds and cause them to move to other areas which can preclude successful hatching of the young birds. The proposed Category 2 special stipulation 7 (no drilling or exploration will be allowed from February 15-June 30) would prevent disturbance of raptor nests.

Changing 2,240 acres from Category 1 to Category 3 (no occupancy) would protect prairie dog towns from surface disturbance that may collapse burrows or cause vegetative losses. Heavy equipment use, explosive charges, or vibrator methods used in oil and gas exploration could cause such disturbance. Displacement of a few small game and non-game animals could result from exploration activities. Crucial and critical habitat will not be significantly damaged.

#### Recreation

Special protection (Categories 2, 3, and 4) will be lost on five recreation sites (numbers 12, 62, 81, and 82) in the Pinyon Planning Unit. Adjustment of drilling sites is expected to mitigate exploration and drilling impacts by avoiding specific features such as buildings, foundations, and old equipment. Features are limited in areal extent as compared to sites which involve a legal subdivision. Coordination on location of drilling activities needs to be done to assure that no damage occurs to these features.

Three historic sites, Gold Springs, Newhouse, and Old Frisco, will remain under Category 3, no surface occupancy. These old mining and townsites require more land area to protect their larger perimeters. Gold Springs has been nominated to the National Register of Historic Places.

The Wah Wah mountains as a recreation resource would not be significantly impacted. Little or no exploration or drilling is expected because mountain and ridge topography characteristically has limited potential for oil and gas resources and because access is severely limited due to rugged terrain.

Wilderness Study Areas (WSAs) and wilderness inventory areas that are protected by interim management are shown on Figures 1 and 2, the MFP overlay, and Table M2.1-1b. The WSAs are the White Rocks WSA and the Wah Wah WSA. Planning for these WSAs is being handled by other Districts which have major portions of the WSAs within their boundaries. One inventory unit, the Central Wah Wah unit, has been remanded by IBLA for further study. Until a decision is made on the WSA status of the unit, interim management protection applies to this area. A decision on the status of this unit is not expected before December of 1983. Interim management protects wilderness values by stipulation in any leases issued within the boundaries of these units during the time they are being considered for wilderness designation.

These units do not contain values beyond wilderness values which may be impacted by the proposed action or alternatives. Therefore, no protection by oil and gas categories is required. The stipulations of interim management attached to leases in these units protect their wilderness values.

### Socioeconomic

No identifiable impacts will result from a change in oil and gas categories.

# Irreversible and Irretrievable Commitment of Resources

Production of oil and gas represents an irretrievable and irreversible commitment by harvesting a finite and nonrenewable resource.

### Alternatives Considered

- 1. No change in existing categories.
- 2. Designate the entire Pinyon Unit as open to oil and gas leasing.

### Multiple Use Analysis

#### Alternative 1

### Minerals

No action would result in 5,853 acres in no leasing category (Category 4) and 5,502 acres in no surface occupancy (Category 3) and 2,336 acres in open with special stipulations (Category 2). This results in more restrictive leasing categories than the proposal (Table M2.1-1).

#### Range

This alternative would not have a significant impact on the range resource. Impacts would be similar in intensity and kind to the proposal. Category 3 protection on the Pinyon-Juniper Study Area (#51) would continue; however, this protection is not needed since range studies have been discontinued.

### Watershed

If drilling should occur where slopes are excessive or if lease activities disturb existing drainage patterns or cover, small areas of high impacts may result. Monitoring and rehabilitation should be stipulated. The 10,572 acres of watershed in the Wah Wah Mountains would benefit from no leasing or no surface occupancy categories.

### Wildlife

Sage grouse strutting grounds have changed from those protected under the existing categories. There are only 280 acres of the 820 present sage grouse Category 2 lands that protect presently active sage grouse strutting grounds. The balance of 540 acres protects abandoned sage grouse strutting grounds because periodic shifting of strutting grounds occurs. The 2,240 acres of prairie dog towns would remain in Category 1 and could be subjected to exploration and drilling which could cause collapse of burrows and suffocate young prairie dogs. About 1,700 acres around raptor nests would not be protected from disturbance that may preclude successful hatching of young birds.

### Recreation

Areas surrounding the charcoal kilns and recreation sites at Willow Springs and Rose Canyon and the bristlecone pine in the Wah Wah Mountains would be included in Category 3 and Category 4 (Table M2.1-1); however, this protection would not be greater than that offered in the proposal (M-2.1) based on the discussion in the multiple use analysis of the proposed action.

### Socioeconomic

Extraction of oil and gas may be more costly under this alternative than under the proposal, due to constraints placed by Categories 3 and 4 should oil and gas development occur on the 11,248 acres in these categories.

### Irreversible and Irretrievable Commitment of Resources

Production of oil and gas represents an irretrievable and irreversible commitment by harvesting a finite and nonrenewable resource.

### Alternative 2

### <u>Minerals</u>

Designation of the entire planning unit as open would provide the maximum acreage for exploration and other leasing activities. The 6,266 acres proposed for Category 2 or 3 restriction would be open without seasonal limitation (3,919 acres) or no surface occupancy restrictions (2,347 acres).

# Range

This resource would not be significantly impacted. Small areas of high impacts would occur. It is felt that leasing activities would not be extensive in nature to the point that a significant cumulative impact would result. Impacts to the Pinyon-Juniper Study Area (#51) are not significant since range studies have been discontinued on the area.

# Watershed

There is a high potential impact should leasing activities accelerate under this alternative. Drilling and road building could destroy watershed cover and accelerate erosion in drainages. The significance of the impact is conditional upon the extensiveness of the leasing activity.

# Wildlife

Sage grouse strutting grounds identified in recent inventories will not receive protection needed during the important reproductive period. If exploration or drilling activities occur during the strutting period on identified areas, sage grouse may abandon strutting and move out of the area.

If exploration and drilling or other disturbing activities are allowed within one-fourth mile of raptor nests during the nesting season, hatching of the young raptors may not occur.

Exploration activities that collapse prairie dog burrows could suffocate young prairie dogs if allowed within one-fourth mile of designated prairie dog towns.

### Recreation

Historic and recreation sites, numbers 25, 38, and 42 on Table M2.1-1, could receive some damage if the entire area were open to oil and gas leasing, assuming exploration and development would occur. One site, Gold Spring, has been nominated to the National Register of Historic Places. Impacts of Alternative 2 on historic and recreation sites, numbers 12, 62, and 78, would be the same as the proposed action.

# Socioeconomic

Less restrictive categories do not necessarily equate to more oil and gas production. Some extraction and exploration costs may be lower, but it is doubtful that this would increase the socioeconomic impact over the proposal.

# Irreversible and Irretrievable Commitment of Resources

Production of oil and gas represents an irretrievable and irreversible commitment by harvesting a finite and nonrenewable resource.

# Multiple Use Recommendation

Accept M-2.1.

# Reason

See the above rationale. There are no apparent conflicts.

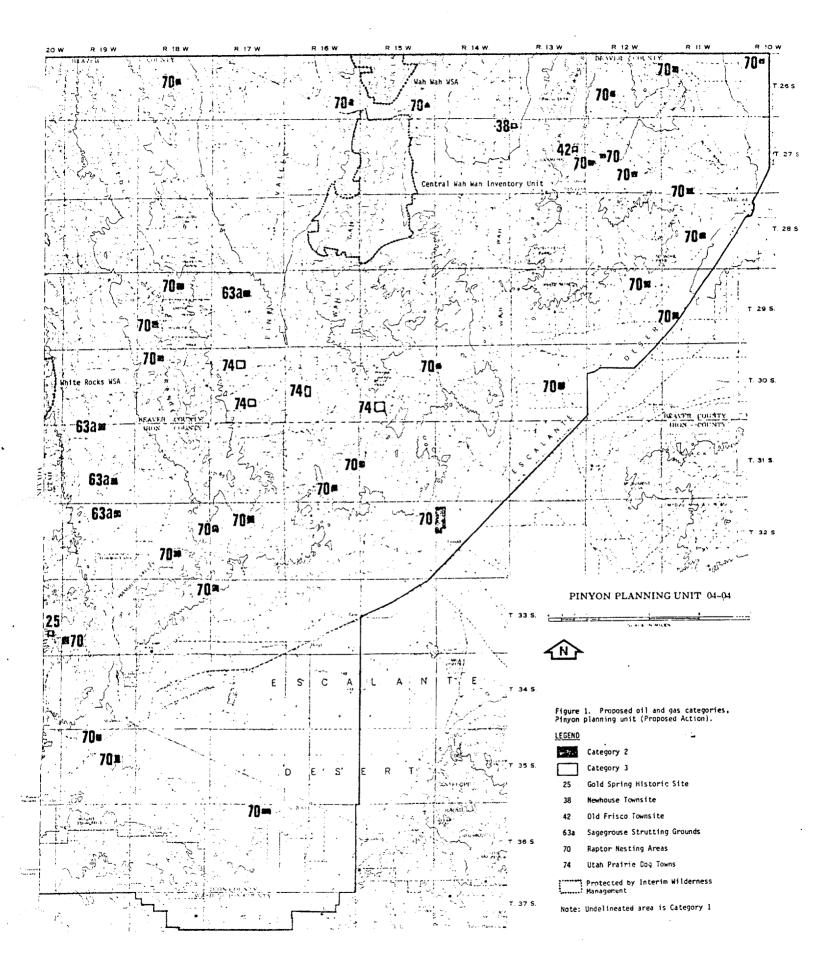
Decision M 2.1. Accept M 2.1.

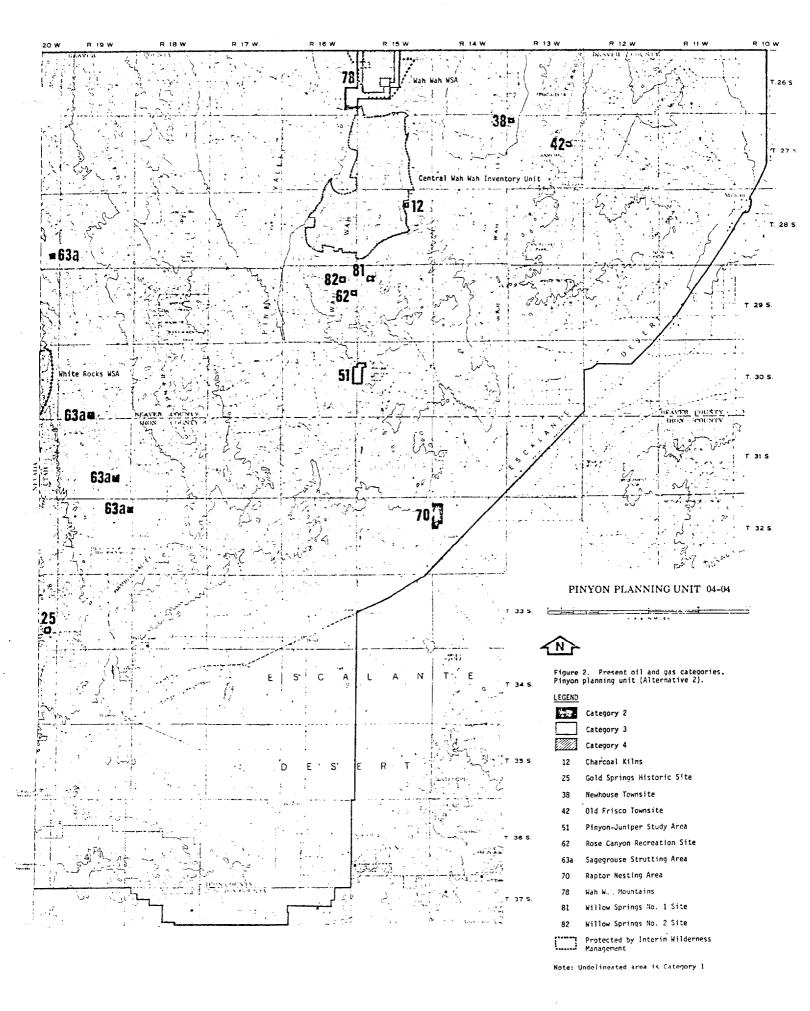
Table M2.1-1a
Proposed Action Acres for Pinyon Oil and Gas Categories

Area	Name	2	3	4
12	Charcoal Kilns 1 and 2			
25	Gold Springs Historic Site		27	
38	Newhouse Townsite		40	
42	Old Frisco Townsite		40	
51	Pinyon-Juniper Study Area			
62	Rose Canyon Recreation Site		<u> </u>	
63 <b>a</b>	Sage Grouse Strutting Grounds	720		
70	Raptor Areas	3,199		
74	Utah Prairie Dog Town		2,240	
78	Wah Wah Mountains			
81	   Willow Springs #1		 	
82	Willow Springs #2	كالتابات جندونا التحفر فاستجنبها الاستانات والتحد		
	TOTAL	3,919	2,347	

Area	Name	2	3	4	WSA*
12	Charcoal Kilns 1 and 2		   80		
25	Gold Springs Historic Site		27		
38	Newhouse Townsite		40		
42	Old Frisco Townsite		40	[   	
51	Pinyon-Juniper Study Area		476		
62	Rose Canyon Recreation Site		40	   	
63a	Sage Grouse Strutting Grounds	8 <b>20</b>			
70	Raptor Areas	1,516			
74	Utah Prairie Dog Town			   	
78	Wah Wah Mountains		4,719	5,853	
81	   Willow Springs #1		40	 	
82	   Willow Springs #2		40		
i	Interim Wilderness Management Areas*				
	Wah Wah				10,600
	Central Wah Wah			 	37,238
	White Rocks				2,600
	TOTAL	2,336	5,502	5,853	

<sup>\*</sup>Note: This data supplied for information only. There is no WSA category.





No.	Name	Major Values
12	Charcoal Kilns No. 1 and 2	The Charcoal Kilns were set aside to protect one of the best preserved artifacts of this early mining era in the west. Most historical sites and structures within the District are located on private ground. Charcoal Kilns represent the primary historic evidences within the District which remain on public lands. The kilns are masonry domes constructed in the late 1800s to produce charcoal for the stamping mills in Frisco and Milford.
25	Gold Spring Historic Site	The remains of Gold Spring, an old mining town, lie along the Utah-Nevada border in the northern region, 10 miles northwest of Modena. This ghost town was an active gold mining town during the turn of the century.
		Presently there is no mining activity at this location. Miscellaneous mining and milling equipment can be found there. Several wooden buildings and houses still stand at Gold Spring. A 40 acre site, including an old wooden house, has been nominated to the National Register of Historic Places.
38	Newhouse Townsite	The "desert town" of Newhouse grew out of desolation to become an oasis of the miners of the copper producing Cactus Mine just over the mountain from the Frisco Mine.
		Little evidence remains today of these once thriving, bustling, rough mining communities.
		The townsite is now composed largely of many stone and concrete ruins, foundations and excavations presenting a very ghostly atmosphere. The shearing pen, barely intact up on the hillside, still bears the faint lettering of the town's name. The railroad depot still exists intact but has been moved to a private ranch five miles west across the valley where it is in daily use. The old railroad bed parallels the highway between Frisco and Newhouse, with old, square, wooden culverts still in place.

No.	Name	Major Values
42	Old Frisco Town- site	Frisco, born in 1876, after the chance discovery of silver and lead ores in 1875, lies in the southern tip of the San Francisco mountains, from which comes its name.
		Fifteen miles on State Highway 21 west from the center of Milford is a short dirt road leading off to the right (northwest) into the business district of Frisco. Five beehive-shaped charcoal kilns sit over empty stone walls, derelict equipment, and remains of a mill. Railroad grades run in several directions. A block and a half further west along the highway a well marked railroad grade leads into the mining section of town. Several ancient frame stores and houses are dug into the hill, while more sturdy buildings sit on the tailings dumps.
51	Pinyon-Juniper Study Area	This area was set aside as a study area for research being conducted by Utah State University on the patterns and rates of pinyon-juniper woodland invasion in the Great Basin.
62	Rose Canyon Recreation Site	This area is a potential recreation site which was selected and segregated because of its inherent capability to provide the amenities for a recreation development, i.e., water, a variety of vegetation, proper land form, and a variety of appealing natural resources in the immediate area. This site is presently receiving some recreation use.
63a	Sage Grouse Strutting Grounds	All aspects of the sage grouse's life history, nesting, feeding, etc., are in association with various types of sagebrush. No other upland game bird is so highly specialized in its food and cover requirements and so dependent on one plant taxon, (Artemisia) as the sage grouse. Since each aspect of the life history and required cover type is essential to the grouse, removal or substantial change in any one of these types or subtypes could be a limiting factor. Meadow areas and alfalfa fields provide essential forage and insect life during the early stages of chick development. Courtship and breeding begins in late February or March, depending on climatic conditions, followed by nesting in May and June. Brood rearing continues through the summer. Nesting generally occurs within two miles of the strutting grounds. The hen and chicks usually remain in the vicinity of the nest for the first few

No.	Name	Major Values
		weeks after hatching and then move to meadow areas for the summer. Harassment of the grouse during March 1 through May 15 could cause considerable damage to the population. Damage to critical areas such as meadows could also have lasting effects on sage grouse populations.
70	Sulfur Spring and Black Point* Raptor Nesting Areas	Several species of raptors winter in the subject area of this analysis, and six species (see the wildlife section) remain year-round and nest in the subject area. Raptors require a secluded area of high rocky cliffs or tall dead trees as a nesting area. Ferruginous hawks are also known to nest on the ground.
		Raptors are normally quite wary, especially during the nesting season. Human activities disturb the nesting birds and cause them to move to other areas.
		Two major raptor nesting areas and several single nests have been identified in the Escalante Desert. These are primarily in remote desert and foothill areas of the northern region.
		One area is located near Sulfur Spring about four miles northwest of Lund. Golden Eagles nest in rock cliffs along the top of the east side of a north-south trending ridge.
		The other nesting area is along the ridge that extends from Black Point to Parowan Gap on the east side of the Escalante Desert. The ridge consists of folded sedimentary rocks. The south half has a cap of basalt.
		There are open rocky cliffs all along the ridge in which golden eagles nest.
		Both of these areas are in unpopulated areas of the Escalante Desert. Roads pass near each area but human activities are confined to the passing cars and short-term visits of ranchers.
		The surrounding desert floor and foothills are covered with sagebrush, saltbush, or pinyon-juniper vegetation. Rabbits and other rodents live in this vegetation and provide food for the raptors.
74	Utah Prairie Dog Town	The Utah prairie dog, <u>Cynomys parvidens</u> , is officially listed by the U.S. Fish and Wildlife Service as an

\*Note: Black Point is located in the Cedar Planning Unit which is east of the Pinyon Planning unit.

No.	Name	Major Values
		endangered species. Surface activities that cause vegetative losses or burrow collapse can have a high impact on prairie dogs. Young pups are particularly vulnerable to suffocation in collapsed burrows. Heavy equipment usage within the core of the colonies could cause these impacts. Explosive charges or vibrator methods used in preliminary oil and gas exploration madamage or collapse burrows. Oil or gas activities on the periphery of the colonies would cause less intense impacts.
		Protection of the endangered Utah prairie dog will necessitate avoidance of surface disturbance that may collapse burrows or cause vegetative losses. This would require no surface occupancy within the Prairie Dog towns. Directional or slant drilling could be use from outside the area.
78	Wah Wah Mountains	These mountains are an isolated range in the west desert. Water and wildlife are very limited. Bristlecon pine (Pinus aristata), one of the hardiest and felt to be the oldest living thing, is found along the rugged mountain tops of the range. Trees in one pure stand of the Wah Wah Mountains are estimated to be 4,000 years old, perhaps the oldest in the State. Bristlecone is found in only a few locations in the State.
81	Willow Springs No. 1 Recreation Site	This area is a potential recreation site which was selected and segregated because of its inherent capability to provide the amenities for a recreation development, i.e., water, variety of vegetation, proper lanform, and a variety of appealing natural resources in the immediate area. This site is presently receiving some recreation use.
82	Willow Springs No. 2 Recreation Site	This area is a potential recreation site which was selected and segregated because of its inherent capability to provide the amenities for a recreation devel opment, i.e., water, variety of vegetation, proper lanform, and a variety of appealing natural resources in the immediate area. This site is presently receiving some recreation use.
205	Wah Wah Mountains WSA	This unit includes the northern portion of the Wah Wah Mountains. This range is situated between Pine Valley

on the west and Wah Wah Valley on the east. Highway 21 borders this unit on the south and the Garrison-Black Rock Road on the north. Most of the unit is in Millard County with a small portion in Beaver County. The Wah Wah Mountains are a massive mountain range with very steep, rugged cliffs on the west and more gentle terrain on the east. Vegetation ranges from low desert shrub and grasses to stands of fir, ponderosa pine, and bristlecone pine. No water sources exist in this portion of the Wah Wah Mountains.

The large and rugged Wah Wah Mountains offer outstanding opportunities for solitude. The steep cliffs and canyon walls provide substantial separation between ridge top and valley bottom, enhancing opportunities to avoid the sights and sounds of others. The vegetation complements the topographic screening in this unit by creating enclosures.

The Wah Wah Mountains provide outstanding opportunities for primitive and unconfined type of activities including hiking, backpacking, horseback riding, snowshoeing, cross-country skiing, hunting, sightseeing, etc. The high elevations provide spectacular scenic views.

The Wah Wah Mountain unit contains geologic, historic, and scenic values. Crystal Peak, a large white rock formed by ash flow tuff from nearby volcanic activity, is a Millard County landmark. It is located at the northern tip of the Wah Wah Range. A portion of the Ely-Frisco Stage Coach Trail is the same as the southwest border of this unit. Stands of bristlecone pine in this unit have been estimated to be over 4,000 years old. The Wah Wah Mountains are very scenic from bypassing roads and provide panoramic views from the mountain top.

The White Rock Range is located southwest of the Hamblin Valley in Lincoln County, Nevada, and Beaver County, Utah. The unit is an interstate Utah/Nevada unit. The area with wilderness characteristics contains 19,100 acres (2,600 acres in Utah, 16,500 acres in Nevada) of public land.

The White Rock Range runs north-south through the central part of the review area. To the east and west, the mountains fade into rolling foothills and flatlands which are punctuated by washes and gullies. White Rock Peak, the highest point in the range (9,196 feet), is

White Rock Range

216

Name

located in the northcentral part of the unit. The area is naturally vegetated with pinyon-juniper, bunchgrass, and sagebrush, with isolated stands of quaking aspen, willow, mountain mahogany, chokecherry, willow, and ponderosa pine. Two natural portions exist within the intensive inventory area, NV-040-202 (17,100 acres), and NV-040-202B (11,300 acres).

The unit, at its maximum, is approximately 7 miles in length and 5 miles in width. Its roughly rectangular shape poses no obstacle to the ability of the individual to experience solitude. The White Rock Range, a north-south trending single ridge, is a moderately rugged range. The highest peak in the area is 8,502 feet. The topography of the flanks of the ridgeline varies from gently rolling to steep.

The unit is heavily forested by dense stands of pinyon-juniper.

The pinyon in this unit has been characterized as large in size for the species. Other tree species such as mountain mahogany, fir, and Engelmann spruce are also present as individuals or in scattered stands. The vegetation screening in this area is adequate to provide outstanding opportunities for solitude. Size, topographic screening, and vegetation screening combine to provide outstanding opportunities for solitude within the unit.

The diversity of topographic and vegetation screening are more than sufficient to permit multiple users of the area to avoid contact with each other. Since no special destination points exist in the unit, congestion of users is not anticipated. Among the types of recreation suitable to this area are hiking, horseback riding, hunting, photography, and camping.

The diversity of the terrain in this part of the unit furnishes a range of difficulties and challenges for the recreationist. Hiking is generally good, although the dense forest limits scenery variety and hiker enjoyment. Camping and photography are even more limited by vegetation and topography. Few decent campsites are available which are relatively flat and open. Horseback riding would be difficult due to density of vegetation, but could take place and is enhanced by several springs in the unit. Hunting around the springs should be good, but again, vegetation limits opportunities.

### PINYON OIL AND GAS REVISION

# Purpose and Need

Oil and gas leasing under the Utah Oil and Gas Category System was considered in the Pinyon Management Framework Plan (MFP) as part of the Cedar City District planning schedule. Policy guidance for oil and gas revisions is to make available as much area as possible for oil and gas exploration and development while providing adequate protection for other resources. The analysis (Pinyon MFP), the district programmatic EA (District Files), and the Pinyon Oil and Gas Decision Record constitute the analysis, documentation and decision on the revision of the Pinyon planning unit oil and gas leases. A list of agencies and individuals consulted during the development of the Pinyon MFP, including oil and gas category revision, is attached.

Enclosures - 2

- 1. Pinyon MFP
- 2. Public Participation List

#### PINYON OIL AND GAS DECISION RECORD

The preferred alternative or MFP Recommendation M-2.1 was selected in the MFP 3 decision. The Cedar City District Oil and Gas Programmatic Environmental Analysis, the MFP 2 Multiple Use Analysis and the MFP 3 Decision became the decision on oil and gas category revision in the Pinyon planning unit. The two latter documents will be attached to the programmatic EA. This Decision Record will be attached to the Pinyon MFP 3 to complete that document.

Alternatives considered during the revision process included the Proposed Action or MFP Recommendation M-2.1; a no action alternative, or continue the present leasing categories and designation of the entire unit as open to leasing (Category 1).

Impacts under the Proposed Action were considered for Minerals (including oil and gas), range, watershed, wildlife, recreation (including cultural resources), and socioeconomic resources. This alternative would result in more acreage open for leasing than the present categories and reduced restrictions on exploration and development. Range and watershed resources would be protected sufficiently by the standard surface protection stipulations of Category 1 (see BLM form 3109-5).

Sage grouse, raptors, and prairie dogs require special stipulations to protect them (Category 2). Details on how Category 1 classification would not protect these species are included in the analysis. In summary, sage grouse mating is protected by special stipulation prohibiting drilling or exploration on strutting grounds from March 1 through May 15. Raptors are protected during their nesting season by a special stipulation which requires no drilling or exploration around nest sites from February 15 through June 30. Prairie dogs require Category 3 protection of no occupancy or drilling within prairie dog towns. This prevents collapse of burrows and subsequent mortality of young prairie dogs. These stipulations and categories are adequate for protection of these resources and provide the least restrictive oil and gas categories. Areas protected are limited in area and only require protection during critical periods except Utah prairie dog towns which are always occupied.

Categories protecting recreation resources will be changed by the proposed action by removal of 200 acres from Category 3, no surface occupancy, to Category 1 with protection remaining on important features within the previously protected sites by coordination of drilling and exploration activities. This change in the method of protection is not considered to result in significant impact. Other sites, Gold Springs, Newhouse, and Old Frisco, require Category 3 protection because of historic values on larger areas where many individual features exist. Besides protection of individual features, the historic integrity of the townsite would be compromised by surface occupancy.

WSAs and inventory units protected by interim wilderness management and natural areas in Categories 3 and 4 have been deleted from these categories because WSA status and interim wilderness management provide adequate protection or because consideration of the oil and gas resource outweighs the existing Category 3 or 4 designation.

No identifiable impacts to the socioeconomics of the planning unit can be identified from the proposed action.

Table M2.1-1 in the MFP 2 analysis and Figure 1 in this document show the acreage changes.

The "no action" or continue present oil and gas categories alternative make 4,363 fewer acres available for Category 1 leasing. Changes in sage grouse strutting grounds and raptor nest sites would not be considered. Prairie dog towns would not be protected. Recreation sites, historic sites, and natural areas would remain in Category 3, 4 or WSA classifications. Given the paucity of data on the oil and gas resource, no identifiable socioeconomic impacts can be identified with this alternative. This alternative was not selected because it makes fewer acres available for Category 1 leasing and does not adequately protect other resources. Acreage changes are shown on Table M2.1-1 in the MFP 2 analysis and on Figures 1 and 2 in this document.

The last alternative was to open the entire planning unit to oil and gas leasing without special stipulation (Category 1). While this alternative is the least restrictive as far as oil and gas leasing is concerned, it does not provide adequate protection of sage grouse strutting grounds, raptor nests, prairie dog towns or historic sites. No socioeconomic benefits can be attributed to this alternative.

Oil and gas was given equal consideration in the analysis. The proposed action represents the least restrictive oil and gas categories while providing adequate protection for other resources.

# Finding of No Significant Impact and Decision on the Proposed Action

Environmental impacts and land use recommendations contained in the MFP pertaining to this proposal have been reviewed by the undersigned.

We have determined that the proposed action including the mitigating measures would not have significant effects on the human environment. The recommendations contained in the Management Framework Plan are technically adequate and consideration has been given to all resource values. Therefore, an environmental impact statement is not required.

We recommend that the proposed action be approved, subject to the stipulations and mitigating measures identified in the Pinyon MFP and Decision Record.

repared by:	
Area Manager	Date
District Manager	Date

# NOTE:

The accompanying plats should replace those currently in District and State Office oil and gas category books. In addition, the following plats should be taken out of the books because they no longer have oil and gas Category 2, 3, or 4 on them.

28	S.	20	W.
29	S.	15	W.
29	S.	16	W.
30	S.	19	W.

The accompanying plats have references to Category 2 Special Stipulations. These are referred to by the same numbers used throughout Utah. Other Cedar City Category 2 Special Stipulations already in the books use Special Stipulation numbers unique to the District. Eventually the entire District will be using the State numbering system. On the plats, red pencil was used to outline the Category 2 boundaries with the Special Stipulations written in the margin of the plats. Category 3 is outlined in blue with appropriate notes in the margin.

Name (MFP)	
Pinyon	
Activity	
Recreation	
Objective Number	
D 1	

## MANAGEMENT FRAMEWORK PLAN - STEP 1

ACTIVITY OBJECTIVES

Objective R-1. Manage the Pinyon Planning Unit as an extensive recreation management area providing recreation opportunities ranging in spectrum from roaded natural to primitive as indicated on the Recreation Opportunity Spectrum Overlay. Minimal management actions related to the Bureau's stewardship responsibilities are adequate in this area.

Rationale. BLM policy provides for a systematic process within the framework of the Bureau planning system through which the Bureau can identify recreation values on public lands and make decisions which will ensure that these values are maintained on a long term, sustained yield basis. The primary output from the MFP is the identification of special and extensive recreation management areas. In extensive recreation management areas significant recreation management opportunities and problems are limited and explicit recreation management is not required. The Pinyon Planning Unit contains no special recreation management areas. Present use is extensive in nature (see Recreation URA Step 3).

Name (MFP)		
Pinyon		
Activity		
Recreat	ion	
Overlay Reference		
Step 1	Step 3	

### MANAGEMENT FRAMEWORK PLAN

RECOMMENDATION-ANALYSIS-DECISION

Recommendation R-1.1. Manage the Pinyon Planning Unit as an extensive recreation management area providing recreation opportunities ranging from natural to primitive as indicated on the overlay. Minimal management actions will be required to maintain these recreation opportunities. Additional actions required to implement this recommendation include:

- 1. Special consideration should be given to design and authorization of surface disturbing activities to protect the values identified in the primitive and semi-primitive non-motorized areas.
- 2. Do not designate as closed or limited to existing roads and trails the primitive and semi-primitive non-motorized zones to ORV use. Do not authorize ORV events within these zones, but route around the area as much as possible.
- 3. Minimal management actions regarding visitor management will be required within the Pinyon Planning Unit. The basic Bureau stewardship responsibilities are adequate to handle the limited visitor management activities.

Rationale. Recreation use of the Pinyon Planning Unit is extremely light. Visitor use is confined to extensive type recreation activities, particularly big game and pinyon nut collecting. Local residents of the communities in and around the planning unit (Enterprise, Modena, Milford, Cedar City, and nearby Nevada residents) provide the bulk of visitor use in the area. Extensive management allows public safety activities and visitor information dissemination on public land. The ORV use currently will not affect the opportunities within the primitive and semi-primitive non-motorized zones. Terrain and vegetational variables limit ORV use. These zones tend to be on the ridge tops and steep slopes unsuitable for ORV use.

# Conflicts and Interactions

There are no conflicts. Any of the activities in the spectrum can be preserved under the proposed recommendations. More disturbing activities may conflict with some recreation activities such as primitive or semip-rimitive non-motorized.

## Multiple Use Recommendation

Accept R-1.1.

# Reason

See the above rationale. There are no serious conflicts at the present time. Some re-evaluation of recreation activities as they presently exist may be needed if surface disturbing activities are permitted in primitive or semiprimitive activity areas. The immediate potential for this to occur appears to be low.

Decision R 1.1. Manage the Pinyon Planning Unit as an extensive recreation management area. The existing ROS inventory will be used as reference only. Currenty policy does not call for ROS inventory on extensive management areas and the terminology used to describe the various zones is misleading, obsolete and is not approved.

# Name (MFP) Pinyon Activity Recreation Overlay Reference Step 1 Step 3

## MANAGEMENT FRAMEWORK PLAN

RECOMMENDATION-ANALYSIS-DECISION

Recommendation R-1.2. Allow off-road vehicle use on all public lands in the Pinyon Planning Unit to provide opportunities for casual ORV use.

Support. Identify potential hazards to ORV use in the planning unit. Provide and maintain road sign program.

Rationale. Off-road vehicle use on public lands is a legitimate recreational pursuit. This recommendation is consistent with Bureau of Land Management policy (1603.12C3) of providing a variety of recreation uses, meeting public needs, and maintaining a quality environment.

# Conflicts and Interactions

Primitive recreation areas are not accessible by ORVs so no conflict exists with R 1.1. Unless ORV use increases from the present, no conflicts with other resource ore recommendations exist.

# Multiple Use Recommendation

Accept R-1.2. As needed, place signs at high hazard areas and sensitive watershed areas. In these areas encourage ORV users to stay on existing roads and trails.

#### Reason

In the planning unit, ORV use is limited by topography and other natural and artificial barriers. Where there are areas where there are problems and access is not limited, signs are one way to inform the public of these problems.

<u>Decision R 1.2</u>. Accept the Multiple Use Recommendation.

Name (MFP)	
Pinyon	
Activity Forestry	
Objective Number F-1	

# MANAGEMENT FRAMEWORK PLAN - STEP 1

ACTIVITY OBJECTIVES

Objective F-1. Manage the woodland (pinyon-juniper) resources for commercial and non-commercial values, satisfying demands for Christmas trees, fence posts, cordwood, and pine nuts, on a sustained yield basis. Promote the harvest of woodland resources scheduled for vegetative manipulation to gain maximum benefit of the woodland products that are currently on site. Protect the limited timber resources for their value for aesthetic, wildlife, and watershed values.

Rationale. The quantity of woodland products within this planning unit is impressive. Over 230,000 acres of commercial woodlands have been identified which contain stocking rates, site indexes, favorable slope, access and products suitable for commercial utilization. There are an additional 308,000 acres which contain woodland products but are less accessible for economic commercial harvest.

Currently demand is high for woodland products. Authorization of cordwood harvest (mostly free use for green pinyon pine) district wide has increased from 35 cords in 1960 to 20,000 cords in 1980. The Pinyon Planning Unit has received similar increases.

Current available woodland resources far exceed expected demand, if the population of southern Utah and Nevada grow at existing rates. Available woodland resources could be authorized at existing levels and provide sufficient resources to meet demand, without intensive management practices (seedings, plantings, and fertilization).

Better utilization of woodland resources could be realized by concentrating cutting in areas scheduled for chainings. Cutting could be stimulated commercially by eliminating stumpage fees if the cutters would clear cut the stands and seed to palatable species.

Commercial cutting of Christmas trees has been static to declining within the planning unit. Permits for commercial harvest of trees has declined while permits for family use has increased with the increases in population. Between 1,500-2,000 trees per year are harvested within the unit. Increases in commercial harvest is not expected because most the premium and standard Christmas trees, which are concentrated in small areas suitable for harvesting, have over the years been high graded. There are still sufficient quantities of trees to supply family use.

No commercial stands of timber are present in this unit. There are a few scattered tracts of ponderosa pine, Douglas fir, and aspen in the mountain ranges; but they are so small and isolated as to be marginal for logging. These timber stands have more value for wildlife, watershed, and aesthetic purposes than for the production of wood fiber.

Name (MFP) Pinyon		
Activity Forestry		
Overlay Reference		
Step 1	Step 3	

#### MANAGEMENT FRAMEWORK PLAN

RECOMMENDATION-ANALYSIS-DECISION

Recommendation F-1.1. Do not authorize the harvest of ponderosa pine, aspen, and fir and maintain the stands for their values for wildlife habitat, aesthetic, watershed, and other resource values.

Rationale. These small, isolated, and inaccessible stands of trees have low values as sources of commercial timber. A 60-year span is needed to produce any amount of harvestable timber. The monetary values gained from cutting these stands would be insignificant in relation to the long range values in the form of wildlife habitat and aesthetics.

# Conflicts and Interactions

There are no conflicts. Some positive interaction as described in the recommendation.

# Multiple Use Recommendation

Accept F-1.1.

### Reason

See the above rationale. There are no conflicts and positive interaction with other resources.

Decision F 1.1. Accept F 1.1.

Name (MFP) Pinyon				
Activity Forestr	°y			
Overlay Ref	erence			
Stop 1	Stop 3			

### MANAGEMENT FRAMEWORK PLAN

RECOMMENDATION-ANALYSIS-DECISION

# Protective Woodland

Recommendation 1.2. Allow free use permits for dead and downed firewood and noncommercial sales of posts within the protective woodland zones. Do not promote cutting of green firewood for commercial purposes. Do not allow commercial sales of Christmas trees.

Rationale. These stands represent the least productive woodland stands. They are generally located on slopes over 30 percent, the poorer sites, and most severely erodible sites due to steep terrain. Any ground cover, even P-J, is useful promoting soil stability. These sites are generally unsuitable for grazing or forage production.

Surface disturbances created by commercial harvest of woodland products would be manifested by steep slopes. Revegetation of these sites after cutting would be difficult, especially on south and southeast facing slopes. Any access required for harvest would be expensive due to steep slopes.

The utilization of these stands for non-commercial family use would have little impact. This type of use generally is confined to existing roads and trails, and material would already be dead and downed due to natural causes. It is not expected that significant resources will be utilized from these unproductive sites.

# Conflicts and Interactions

No conflicts exist. Positive interactions with soils, watershed, and wildlife resources exist.

# Multiple Use Recommendation

Accept F-1.2.

#### Reason

See the above rationale. There are no conflicts and there are some positive interaction with other resources.

 $\frac{\text{Decision F 1.2.}}{\text{forest products.}} \ \, \text{Presently policy does not allow free-use permits on} \\ \, \text{forest products.} \ \, \text{Allow noncommercial sales of firewood and Christmas} \\ \, \text{trees on the protective woodland zones.} \ \, \text{Do not allow commercial sales} \\ \, \text{of Christmas trees or firewood on protective woodland zones.} \\$ 

Pinyon	
Activity Forestry	
Overlay Reference	

Step 3

Step 1

# MANAGEMENT FRAMEWORK PLAN

RECOMMENDATION-ANALYSIS-DECISION

### Commercial Woodlands

Recommendation F-1.3. Allow the commercial and non-commercial harvest of all woodland products within the commercial woodland stands. Promote the utilization of green pinyon and juniper products by establishing green cutting areas within these zones. Promote the cutting of forest products within areas scheduled for chainings by removing stumpage fees to commercial cutters of all woodland products.

Rationale. The commercial woodlands (F-3) represent the pinyon-juniper stands which are most productive, have the highest site indexes, soils which promote P-J growth, slopes less than 30 percent, available seed for reproduction, and contain the greatest volumes of woodland products. These stands are typical of stands found in the western deserts of Utah which were historically cut for production of charcoal 60-80 years ago and now contain mature stands. There are sufficient stands and volume to support commercial and non-commercial demand with a minimum of management. Currently these stands are underutilized by non-commercial users because of the 60-100 mile travel time from local towns.

Better utilization of green pinyon and juniper for firewood can be realized by setting up green free use areas for non-commercial users and directing commercial cutters to areas scheduled for chainings. Experimental clear cut areas could be set up where commercial cutters would have stumpage fees waived if they would clear cut both pinyon and juniper and reseed to suitable species for livestock and wildlife. Investigations at green cutting areas in the Cedar Planning Unit indicate that the slash left after cutting promotes establishment of forbs and grasses.

# Conflicts and Interactions

May conflict with W 1.1 which indicates SWAs where the SSF is greater than 60.

#### Multiple Use Recommendation

Accept F-1.3.

# Reason

See the above rationale. Conflicts can be mitigated at the activity planning level.

Name (MFP) Pinyon
Activity Wild Fire
Objective Number WF 1

# MANAGEMENT FRAMEWORK PLAN - STEP 1

**ACTIVITY OBJECTIVES** 

 $\frac{\text{Objective WF 1.}}{\text{within the planning unit where resource values are low or where fire may}}{\text{be a positive factor in vegetation change.}}$ 

Rationale. Fire suppression costs will be reduced in areas where resource values which may be lost to wild fire are low. Much of the planning unit is covered with vegetation types, where large fires are rare and loss of vegetation is not critical, i.e., pinyon-juniper. In these areas, vegetative conversion is desirable. Improvement in wildlife and wild horse habitat and improvement in forage production and diversity for all grazing animals will result. Safety and property protection can be maintained under modified suppression activities.

Name (MFP) Pinyon	
ARITIU Fi	re
Overlay Ref	erence
Step 1	Sten 3

### MANAGEMENT FRAMEWORK PLAN

RECOMMENDATION-ANALYSIS-DECISION

Recommendation WF 1.1. Accept the Pinyon Modified Fire Suppression Plan as attached.

Rationale. This plan was developed to meet the objective outlined in  $\overline{\text{WF 1.}}$  The fire plan will also reduce fire suppression costs by reduced personnel and equipment needs. Property and life will still be protected and vegetation converstion goals will be met under this plan.

# Conflicts and Interactions

WF 1.1 interacts with all range recommendations that allocate forage (RM 1.1, RM 2.1, and RM 3.1) by limiting forage by burning AUMs. This is temporary while providing long term improvement of forage production. Range recommendations that suggest treatment (RM 1.4) will be beneficially affected by WF 1.1 by clearing existing vegetation for the prescribed activity. Range recommendations (RM 1.3) that suggest the construction of projects may conflict where fences and corrals are called for. It is expected that the size of fires will be limited and little real damage to these facilities will occur.

Wildlife recommendation WL 1.5 will be benefited by aiding the recommended regetative treatments. Allocation of forage to wildlife (WL 1.6) may conflict as AUMs are burned. As above, long term increases in forage is expected.

In watershed recommendation W 1.1, a portion of Blawn Wash in the Jockey's allotment is in an observation area. The extent of the conflict cannot be measured because W 1.1 provides no graphic presentation of the Blawn Wash problem. It is probable that no extensive damage will occur by wild fire. Destruction of riparian habitat along streams in W 1.3 could occur. This would probably be no more than if a full suppression policy were in effect.

All lands identified in L 1.1 for community expansion are located in a full suppression area.

VR 1.1 recommends that the Wah Wah Mountains and Frisco Mountain be Class III management areas. The east half of the Frisco Mountains is in observation. No recent fires have taken place in this area (1975-1979). Fires will probably be rare in the Frisco Mountains and small in area. The west half of the Frisco Mountains is in a full suppression area. The Wah Wah Mountains are mostly in a modified fire suppression are. Three fires have occurred in this area. All were less than 100 acres. Impacts of wild fire on VRM class will not be significant.

Forestry resources may be slightly impacted by WF 1.1. Protective woodland timber species (F 1.1) occur in observation areas in the southern Wah Wah Mountains and a small timber area is divided between observation and full suppression on Frisco Mountain. The fire occurrence overlay (URA 2) indicates no fires were reported in the Wah Wah area from 1975 to 1979. One fire less than a quarter of an acre occurred near or in the timber area in the Frisco Mountains during this period. Other timber areas occur in a modified suppression area (Area III). WF 1.1 will not conflict with Forestry recommendations F 1.2 and F 1.3 which deal with firewood collection and post sales in protective woodland zones and commercial and non-commercial harvest in commercial woodland stands.

# Multiple Use Recommendation

Accept WF 1.1 as written.

# Rationale

See above rationale. In addition, burning seems to increase the use of juniper as fuelwood by home owners. Homeowners are reluctant to harvest or purchase green or unburned dead juniper because of the bark which creates an undesirble messy condition when handling the wood in the home. This condition is relieved somewhat when a fire burns through a juniper stand. The fire removes the bark but seldom burns hot enough to destroy the wood.

Decision WF 1.1. Accept the recommendation. Implementation of the plan is contingent on acceptance of the plan and associated memorandum of understanding by the State of Utah. Initiate public participation as soon as the state approves the memorandum and the plan.

# PINYON MODIFIED FIRE SUPPRESSION PLAN

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### PINYON MODIFIED FIRE SUPPRESSION PLAN

# I. OBJECTIVES

- A. Develop a workable alternative to full fire suppression in areas within the planning unit where resource values are low or where fire may be a positive factor in vegetation change.
- B. Reduce the costs of fire suppression in areas where fire may be a positive factor in vegetation changes or where loss of resource values is expected to be low. Costs may be expected to be reduced by one of the following.
  - 1. Implement less than full suppression on appropriate areas where access by ground fire fighting equipment is limited.
  - 2. During periods of multiple fire occurrence, workload can be reduced by freeing personnel and equipment to report to areas of higher resource values.
  - C. Maintain an effective fire control program.
    - 1. Prevent loss of life and property.
    - 2. Control (but not necessarily suppress) all wild fires.
    - 3. Provide adequate suppression where and when required.
    - 4. Reduce hazardous fuel buildups.
    - 5. Carry out effective pre-suppression activities.

#### II. AREA DESCRIPTION

The Pinyon Planning Unit is located in Beaver, Iron, and Washington Counties north and west of the Union Pacific right of way north of Zane. From Zane, south to just below the Iron-Washington County line (figure 1). It is located within the southeastern portion of the Basin and Range physiographic province. The Basin and Range province is characterized by relatively short, narrow, and subparallel mountain ranges separated by closed alluvial-filled intermontane basins.

Within the Pinyon Planning Unit there are three principal north-south trending mountain ranges: Needle Range, Wah Wah Mountains, and San Francisco Mountains. Less prominent ranges include Beaver Lake Mountains, Star Range, and Shauntie Hills.

From east to west the major valleys of the planning unit include the Escalante Valley, Wah Wah Valley, Pine Valley, and Hamblin Valley.

Most of the secondary drainage is east-west into the valleys from the adjacent ranges. Primary drainage is to the north along the axis of the valleys.

There are 1,936,804 acres within the planning unit. Of these, 1,390,709 acres are public lands administered by the BLM; 315,372 acres are privately owned; and 192,623 acres are owned by the State.

Access in the planning unit is fair during dry weather conditions with most of the roads and trails accessible by two-wheel drive vehicles. The suppression areas are delineated mainly by roads and trails. Steeper slopes and rocky or sandy areas require four-wheel drive vehicles with good clearance. There are approximately 1,400 miles of roads and trails and three developed airstrips. Airstrips are located in Beryl Junction, Modena, and Milford. The strips are dirt except the latter which is oiled and meets FAA standards.

#### Vegetation Type by Suppression Area

Area I. The dominant vegetation is pinyon-juniper with big sagebrush or mountain shrub in the understory. Seedings and small areas of conifer and aspen are inclusions in this area. Fuel models are F (80%), T (15%), and L (5%) (see fuel model key in the appendix).

Area II. The dominant vegetation is big sagebrush with curly grass in the understory. The dominant fuel model is T.

Area III. This area is dominated by pinyon-juniper with a shrub understory. Open stands of mountain shrub, low sagebrush, small conifer, and aspen groves are inclusions. This area has important deer range resource values (the Wah Wah Mountains include desert shrub in 20% of the area). Fuel models are F (80%) and T (20%).

Area IV. Open pinyon-juniper and big sagebrush dominate this area. There are large areas of seedings which are important livestock grazing areas.

Sage grouse use the big sagebrush areas. Fuel models are F (20%-50%), L (20%-50%), and T (20%-50%).

Area V. Pinyon-juniper is the dominant vegetation but there are significant areas of big sage with perennial grass in the understory and big sage and desert shrub areas with annual grasses in the understory. Seedings are small inclusions. Recovery is more limited than the above areas because of shallow soils, excessive slope, and low productivity of the range sites. Erosion could be a problem if large acreages are denuded. Fuel models are F (60%), T (20%), A (10%), and L (10%).

Area VI. Although variable, the dominant vegetation is desert shrub. This is not the most productive land in the planning unit, but is valuable livestock grazing land in its present condition. It is believed that fire would trigger an invasion of undesirable plant species and a significant reduction in forage production would result. Rehabilitation potential is considered to be limited. The fuel model varies. Large tracts of private land are included here.

#### Fire Behavior

Fire behaviour of the Pinyon Planning Unit is influenced by topography and fuels represented by slope class II and III and fuels modes T, F, and A.

Annual precipitation in the Pinyon Planning Unit varies from about 8 inches in the land area to about 16 inches on the peaks of the Needle Range. Elevations in the unit vary from 9800 feet in the Needle Range to 5200 feet at Zane. The wettest months in the higher elevations are November through

February and the driest months are May and June. The lower elevations are also dry during May and June but recieve the most precipitation during July and August.

Most of the fires of the unit occur along the middle and lower eastern slopes of the Needle Range and extend into Pine Valley. Also, most fire starts occur during August as a result of lightning storms common to the area at this time. However, fires become larger in July as temperatures are higher than either May or August, relative humidities are lower, and flash fuels are cured.

Topography has relatively little influence as most of the mature pinyonjuniper stands on slopes have relatively few fine fuels that would help carry a new start.

Forty-three fires occurred in the unit from 1975-79. Of these, four exceeded 100 acres in size. All four occurred in July. More than 80 percent of all starts and nearly all acreage is burned during July and August.

#### III. FIRE HISTORY AND EFFECTS

Fire starts and acreages burned for the period 1975 through 1979 are provided in the following data. Table 1 shows the date of occurrence, location, and cause of all fires reported during this five-year period. Table 2 provides a comparison of the number of man-caused starts to natural fire during this period. About 936 acres burned from 26 lightning starts and about 1,346 acres burned from 17 man-caused fires.

Table 1 Fires in the Pinyon Planning Unit 1973 through 1977

		T		ocation		
Date	Fire	Size	Township	Range	Section	Cause
<u>1975</u> November 5	7014	0.1	26 S	13 W	23	lightning
1976 June 9 July 8 July 15 August 2 August 12 August 12 August 13 August 30 November 5	7004 7015 7020 7031 7036 7038 7039 7050 7264	4.0 650.0 0.1 0.3 30.0 3.0 5.0 0.3 30.0	31 S 30 S 31 S 31 S 28 S 28 S 29 S 31 S 27 S	14 W 18 W 14 W 19 W 19 W 19 W 18 W 17 W 19 W	17 6 8 31 23 19 29 33 27	incendiary lightning lightning lightning pyromania pyromania pyromania lightning pyromania
1977 June 17 July 29 August 3 August 5 August 5 August 5 August 5 August 5 August 5 August 5 August 7 September 1	6961 6992 6993 6997 6998 6999 7000 7001 7005 7015	5.0 25.0 20.0 0.1 0.1 0.1 0.1 0.1 8.0	29 S 29 S 28 S 30 S 30 S 30 S 30 S 28 S 28 S 29 S	18 W 17 W 18 W 16 W 16 W 16 W 18 W 18 W	9 32 14 11 10 11 14 23 27 5	lightning lightning lightning lightning lightning lightning lightning lightning lightning
1978 July 17 July 19 July 23 July 24 July 27 August 10 August 10 August 16 August 16 August 25 December 6	7010 7018 7020 7022 7023 7032 7046 7047 7052 7053 7057 7064	1.0 150.0 600.0 1.0 1.0 0.1 1.0 0.1 75.0 0.1	34 S 30 S 29 S 31 S 30 S 32 S 31 S 30 S 29 S 28 S 32 S	19 W   18 W   17 W   16 W   16 W   18 W   18 W   16 W   16 W	19 1 33 13 17 9 12 17 9 15 36 10	lightning lightning land clearing lightning lightning lightning lightning lightning lightning lightning lightning burning burning
1979 July 14 July 19 July 29	7017 7026 7029	35.0 3.0 600.0	30 S 37 S 26 S	15 W 17 W 11 W	16 15 16	land clearing lightning land clearing

(continued)

Table 1 concluded

				Location		
Date	Fire	Size	Township	Range	Section	Cause
July 29 July 31 August 9 August 9 August 11 August 29 September 16 August 9	7032 7034 7039 7042 7043 7044 7049 7053	15.0 0.1 1.0 0.1 0.1 1.0 10.0 5.0	28 S 27 S 27 S 29 S 28 S 30 S 30 S 32 S	18 W 15 W 14 W 19 W 16 W 18 W 18 W 15 W	33 28 31 35 35 35 34 13	land clearing lightning lightning miscellaneous miscellaneous field burning field burning

Table 2 Fire Cause and Acreage Summary Pinyon Planning Unit

		Fires		Acres			
Year	Total	Lightning	Man	Total	Lightning	Man	
1975	1	1		0.1	0.1		
1976	9	4	5	722.7	650.7	72.0	
1977	10	9	1	58.6	50.6	8.0	
1978	12	9	3	830.4	230.2	600.2	
1979	<u>11</u>	_3	8	670.3	4.1	666.2	
Total	43	26	17	2,282.1	935.7	1,346.4	

Most fires in the unit have been the result of lightning. Although most fires that increased to large acreages were started by man, a current trend seems to show a substantial reduction in man-caused starts.

Although fires have occurred in the unit during most months from June to December, table 3 (Fires by Month of Occurrence) shows that 36 of the unit's 43 fires occurred during July and August. Even though temperatures are warm and conditions are dry during June and September, the lightning storms of July and August are generally required to initiate starts.

Most fires occur in Area I. Of these, most are less than 10 acres. Only two fires have exceeded 100 acres and only one exceeded 300 acres in Area I. Other large fires, greater than 300 acres, have occurred in Areas III and VI.

#### Impacts of Fire by Suppression Area

Area I. Past experience with pinyon-juniper in dense stands show that fire conditions need to be high (burning index greater than 80) for fire to carry. Fires will burn a single tree but large acreages are rarely consumed. Observation in this area will allow the occasional fire to clear a few trees which will aid in vegetation production and diversity. Watershed conditions are not expected to degenerate by the scale of burning anticipated.

Area II. Observation in this big sagebrush area would not significantly alter the vegetation because very little acreage would be burned. An increase in grass in burned areas would result from fire. Intermingled State and private land in this area require careful coordination and the consent of the land manager before observation is allowed.

Table 3
Fires by Month of Occurrence
Pinyon Planning Unit

Year	Jan April	May	June	July	August	Sept.	Oct Dec.	Total
1975	0	0	0	0	0	0	1	1
1976	0	0	1	2	5	0	1	9
1977	0	0	1	1	7	1	0	10
1978	0	0	0	6	5	0	1	12
1979	<u>0</u>	<u>o</u>	<u>0</u>	_5	_5	1	<u>0</u>	11
Total	0	0	2	14	22	2	3	43

Area III. The pinyon-juniper stands are more open than in the above areas. Fire may occur more frequently but large acreages are not expected to burn. It is believed that periodic fires will maintain a balance of trees, shrubs, and understory plants. Vegetation may change in composition but no single plant species would be eliminated. Deer and livestock forage is expected to improve over time. Limited burning potential and initial attack will preclude large wild fires in this modified area.

Area IV. Fire will have a more variable effect in this area. Large areas of seedings may need to be protected depending on the fuels available at a particular time of year. As the season progresses from spring to fall, the fuels dry, but harvest by grazing animals may eliminate fuel buildups. Pinyon-juniper and big sagebrush areas would benefit from fire. Large acreage fires in these fuel types are not likely. Modified action by providing initial attack will stop most fires.

Area V. This is another area with mixed vegetation sites. Fire must be suppressed because of limited rehabilitation potential and erosion hazard caused by soil and slope problems. Fire under modified action will limit acreages burned, because most fires can be put out with initial attack. Production and diversity of vegetation is expected to increase under the proposed action.

Area VI. Full suppression will not impact this area because no change is expected from present management. Fire is not expected to be beneficial to forage increases because of the potential for invasion of non-desirable plants.

#### Impacts of Fire in General

Sage grouse areas are marked with an "X." All are in areas where initial attack is planned. These areas will appear on maps provided to fire personnel so that they may be considered in responding to fires. A standoff radius of 1.86 miles is recommended for these areas. Full suppression should occur within these standoff areas.

Some damage to range improvements, particularly fences, is expected to occur. This damage will be limited because large acreage fires in observation and modified areas are not expected.

Constraints to the suppression actions will preclude air quality impacts.

Occurrence data indicates about 1 fire exceeding 100 acres in size could be expected annually on a long-term basis. Approximately one half of these fires would occur in a modified suppression or observation area. Therefore, about every two years a fire of size class D (table 4) or above would occur and have a positive effect on reduction of suppression costs and/or vegetative improvement. Additionally, modified suppression methods could substantially reduce costs normally incurred due to required action on several small fires in the unit each year.

#### IV. MODIFIED ACTION

This planned action involves applying one of three levels of suppression determined by resource values, fire weather, and effects of burn on plants, soils, wildlife, and other specific resources of the area. Considerations

Table 4 Size Class vs. Time of Year 1975 - 1979

Month	А	В	С	D	E	F	Total
May	0	0	0	0	0	0	0
June	0	2	0	0	0	0	2
July	2	6	2	1	3	0	14
August	11	10	1	0	0	0	22
September	0	1	1	0	0	0	2
October	0	0	0	0	0	0	0
December	_1	0	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	_0
TOTAL	15	19	5	1	3	0	43

## Size Class

Key:	Α	0-	.25	acres
	В	.26	9	acres
	С	10	99	acres
	D	100	299	acres
	Ε	300	999	acres
	F	1000	4999	acres

for maintaining adequate controls require level of suppression to vary with burning index.

#### Strategy

The three levels of suppression to be applied to designated areas within the unit are observation, modified suppression, and full suppression. The planning unit has been divided into six suppression areas (see figure 1). A level of suppression keyed to fire conditions (burning index) is assigned each suppression area.

Observation. This level of suppression will be applied to areas of low resource values or where access by ground fire fighting equipment is severely limited. Costs incurred to extinguish fires do not justify values of resources protected.

A qualified fire boss\* will inspect the site daily to insure the fire does not threaten a predetermined boundary and does not exceed the constraints outlined in the action guide. Full suppression action will be initiated if a predicted burning index for the following day requires a change to the full suppression level.

Modified Suppression. Provide initial atack to a reported fire. If initial attack is unsuccessful and additional fire suppression equipment is required fires may be permitted to burn if the fire boss and a designated resource advisor are reasonably assured that the fire will remain within established constraints and its results will be consistent with resource objectives.

<sup>\* &</sup>quot;Red card" or equivalent.

If the fire is permitted to burn it will be confined to predetermined boundary lines such as roads or natural barriers (rock outcrops or ridge tops). Actions to permit spread toward identified strategic points while control action is taken on other perimeters will require activation of fewer control forces than those obligated in a full suppression action.

The decision to apply modified suppression will be made by the Area Manager through the resource advisor. However, full suppression action may be initiated by the fire boss through the Division of Operations if the fire does not meet constraints or if a predicted condition class would change the action to full suppression during the next burning period.

<u>Full Suppression</u>. Take full suppression action with necessary fire resources to extinguish fire before beginning of next burning period. Initial attack and subsequent actions may include use of specialized crews, heavy equipment, retardant aircraft, and other means to make effort successful.

	Suppression Action Guide	
<u>Observation</u>	Modified	Full Suppression
Fire in observation area and not a threat to a full suppression area.	Fire in modified area and not a threat to a full suppression area.	Fire in full suppression area or in observation or modified area and a threat to a full suppression area.
Burning index favorable to observation ( $\leq 80$ ).	Burning index favorable to modified ( $\leq 80$ ).	Burning index exceeds maximum for observation or modified $(\geq 80)$ .
Smoke dispersal favorable clearing index $\geq 500$ .	Smoke dispersal favorable clearing index $\geq 500$ .	Smoke dispersal unfavorable clearing index $\leq 500$ .
Fire not a threat to private land.	Fire not a threat to private land.	Fire a threat to private land. Fire on private or State land threatening public land in full suppression area.

#### Observation

Qualified observer present to assess fire activity.

#### Modified

Qualified fire boss present, qualified resource advisor present.

Fire in wilderness study

#### Full Suppression

Qualified fire boss present.

The fire boss will constantly monitor critical factors and formally evaluate decisions at least two times daily.

area.

The following levels of suppression will be applied to the areas identified on the Pinyon Planning Unit Suppression Map consistent with the predicted or actual burning indexes.

Area	Burning Index 0-20	Burning Index 20-50	Burning Index 50-80	Burning Index 80-100	Burning Index 100+
I	observation	observation	observation	ful1	full
II	observation	observation	observation	full	full
III	modified	modified	modified	full	full
ĪV	modified	modified	modified	full	full
V	modified	modified	full	full	full
۷Ï	full	full	full	full	full

#### Constraints

A fire boss will be dispatched to initial reports to verify that activity will remain within guidelines permitting application of observation or modified suppression methods. Subsequent frequency of inspections will depend on size of fire, distance from control lines, fire condition class, and specific resource considerations. A public information officer will be notified any time modified or observation efforts are in progress.

Full suppression with sufficient personnel and equipment to control the fire before the next burning period will be undertaken if one or more of the following conditions are not favorably met:

- a. Fire will burn on only public land and State land in accordance with terms set forth in a Memorandum of Understanding or Cooperative Agreement. Written agreements will provide means to mitigate claims by private landowners pertaining to encroachment of fire on private or State land.
- b. Immediate suppression action will be taken on any fire endangering life or threatening unmitigated State or private land.
- c. Full suppression action will be taken on any fire when predicted or actual burning index is greater than 80 (condition class V).
- d. Action will be taken when any fire is a threat to a predetermined boundary line identifying a full suppression area.
- e. Action to reduce fire activity must be applied when pollutants approach legal maximums. Full suppression will be initiated when clearing index rating is 500 or lower.
- f. Full action will be taken when results of fire will cause soil erosion, extensive damage to identified principal resources, or man-made improvements.

g. Fires in wilderness study areas will be suppressed in accordance with wilderness guidelines.

#### Fire Behavior

Burning index, access, resource values, resource objectives and other specific criteria are the considerations identified to define areas for the observation, modified, and full levels of suppression. Latitude to commit varying levels of suppression as burning conditions change (burning index) will insure controls required to maintain suppression standards consistent with the area identified.

Criteria outlined in the suppression guide establish the conditions when each of the three levels of suppression are to be conducted.

#### Smoke Management

Air pollution resulting from smoke will be closely monitored while each observation or modified fire action is in progress. Fire Dispatch will obtain a smoke dispersal forecast from the National Weather Service, Salt Lake City, phone (801) 245-5066, prior to commencing any modified operations. This forecast will include the clearing index. Additionally, each forecast will provide estimates of the height of the smoke column and which direction it will drift.

Very little public concern is anticipated as the fires will be in a remote area. Commercial aircraft flights and vehicle traffic will not be affected. Modified suppression will only be undertaken when the clearing index is 500 or higher.

#### Emergency Suppression Contingency Plan

If a fire threatens to escape or does not adhere to the criteria outlined in the action guide the observation and/or modified suppression area will receive priority for suppression resources.

Suppression actions will be to a degree necessary to control the fire before the beginning of the next burning period. Heavy equipment, organized fire crews, fixed and rotor wing aircraft and other needs will be obtained to reasonably assure a successful control effort.

#### Land Status

State lands adjacent to Federal lands will fall under a cooperative agreement between the District and the Utah Division of Lands. This will be attached to this document in the appendix. Private land owners will be contacted and their cooperation in implementing this plan will be documented after the plan is explained to them.

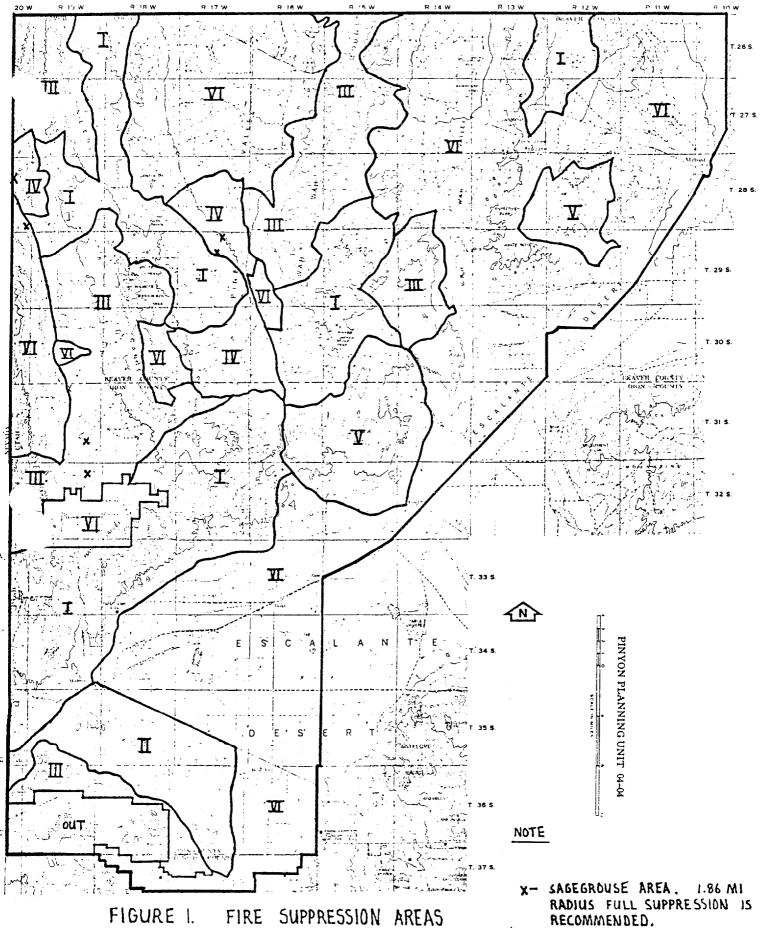
Where full suppression on State or private lands is desirable, the fire control officer will assure that full suppression boundaries are guarded from fire spreading from Federal land (see Constraints section).

#### Evaluation

This plan will be analyzed at five-year intervals to assure that the objectives established herein are being met and that unanticipated adverse impacts are not occurring. Revisions can be made at the time of analysis based on the findings at that time.

#### Public Information Action

Range users will be the major group most affected by this plan. Grazing permittees and other interested parties whose names appear on the Pinyon mailing list will be contacted and this plan will be explained. Representatives from wildlife, wild horse, ORV, and mineral and energy interests are included on these lists. Private landholders will be contacted where modified or observation fire suppression is called for. These contacts are anticipated as part of the Pinyon MFP development.



DESIGNATION OF FIRE SUPPRESSION AREAS DOES NOT INFER FIRE MANAGE-MENT RESPONSIBILITY.

# APPENDIX B

#### SELECTION OF FUEL MODELS

Ideally, a protection unit should be subdivided into fire-danger rating areas of relatively homogeneous climate, fuels, and topography. Fire-danger rating values would be calculated for each rating area; a weighted average of these numbers would then determine the readiness plan for the protection unit.

At the present time, however, the protection unit is usually the smallest geographical division recognized. The protection unit may be quite homogeneous and satisfy the criteria for a fire-danger rating area. Most units, however, do not. For the calculation of the fire-danger ratings needed to manage fire suppression activities on such units, the fire manager must select an area he considers representative of the fire problem on the unit. We will call this area the base area--not to be confused with a fire-danger rating area.

Several options may be considered in selecting the base area:

- 1. It might be where most fires occur.
- 2. Where fires are most often fought.
- 3. Where the potential cost of suppression plus loss of resource and improvement is greatest.

Regardless of the option chosen, a careful study of the protection unit's fire history is essential.

The next step is to select the fuel model that best represents the fuels in the base area. Twenty fuel models are available to choose from. However, it is unlikely that more than two or three will be appropriate for any one protection unit.

The following key and narrative descriptions should help in selecting the correct fuel model.

With the exception of Model F, the fuel models carried over from the 1972 NFDRS have retained their letter designations. The 1972 NFDRS Fuel Model F was seldom used, so for 1978, the F designator was assigned to the intermediate brush fuel model.

# **FUEL MODEL KEY**

, I.	Mosses	, lichens, and low shrubs predominate ground fuels.
		overstory of conifers occupies more than one-third of the site
		the site (tundra)
II.	Marsh	grasses and/or reeds predominate
III.	Grasse	s and/or forbs predominate.
-		ere is an open overstory of conifer and/or hardwood trees MODEL C
		Woody shrubs occupy more than one-third, but less than two-thirds of the site
		<ul><li>a. The grasses and forbs are primarily annuals</li></ul>
IV.		shrubs, tree reproduction or dwarf tree species predominate.  Final Junior  crage height of woody plants is 60 ft or greater.
	1.	
		a. One-fourth or more of the woody foliage is dead.
		(1) Mixed California chaparral
		b. Up to one-fourth of the woody foliage is dead MODEL Q c. Little dead foliage
	2.	Woody plants occupy less than two-thirds of the site MODEL F
	B. Ave	rage height of woody plants is less than 6 ft.
	1.	Woody plants occupy two-thirds or more of the site.
		a. Western United States
	2.	Woody plants occupy less than two-thirds but greater than one- third of the site.
		a. Western United States
	3.	Woody plants occupy less than one-third of the site.
	-	a. The grasses and forbs are primarily annuals
v	Trees p	redominate.

A. Deciduous broadleaf species predominate.

	1.	The area has been thinned or partially cut, leaving slash as the major fuel component	
	2.	The area has not been thinned or partially cut.	
		<ul><li>a. The overstory is dormant; the leaves have fallen MODEL E</li><li>b. The overstory is in full leaf MODEL R</li></ul>	
В.	Con	ifer species predominate.	
		Lichens, mosses, and low shrubs dominate as understory fuels MODEL Q Grasses and forbs are the primary ground fuels MODEL C Woody shrubs and/or reproduction dominate as understory fuels.	
		a. The understory burns readily.	
		(1) Western United States MODEL T (2) Eastern United States.	
		(a) The understory is more than 6 ft tall MODEL 0 (b) The understory is less than 6 ft tall MODEL D	
		b. The understory seldom burns MODEL H	
	4.	Duff and litter, branchwood, and tree boles are the primary ground fuels.	
	•	<ul> <li>a. The overstory is overmature and decadent; there is a heavy accumulation of dead tree debris</li></ul>	
, ***		(1) The needles are 2 inches or more in length (most pines).	
		(a) Eastern United States	
•		(2) The needles are less than 2 inches long MODEL H	
Sla	sh i	s the predominant fuel.	
Α.	The	foliage is still attached; there has been little settling.	
	1.	The loading is 25 tons/acre or greater	
	3.	15 tons/acre	
В.		tling is evident; the foliage is falling off; grasses, forbs, shrubs are invading the areas.	
	1.	The loading is 25 tons/acre or greater	

VI.

#### FUEL MODEL A

This fuel model represents western grasslands vegetated by annual grasses and forbs. Brush or trees may be present but are very sparse, occupying less than one-third of the area. Examples of types where Fuel Model A should be used are cheatgrass and medusahead. Open playon-lumiper, sagebrush-grass, and desert sprub associations may apprepriately be assigned this fuel model if the war in plants meet the density criteria. The quantity and continuity of the ground fuels vary greatly with rainfall from year to year.

#### FUEL MODEL B

Mature, dense fields of brush 6 feet or more in height are represented by this fuel model. One-fourth or more of the aerial fuel in such stands is dead. Foliage burns readily. Model B fuels are potentially very dangerous, fostering intense, fast-spreading fires. This model is for California mixed chaparral generally 30 years or older. The F model is more appropriate for pure chamise stands. The B model may also be used for the New Jersey pine barrens.

#### FUEL MODEL C

Open pine stands typify Model C fuels. Perennial grasses and forbs are the primary ground fuel but there is enough needle litter and branchwood present to contribute significantly to the fuel loading. Some brush and shrubs may be present but they are of little consequence. Situations covered by Fuel Model C are open, longleaf, slash, ponderosa, Jeffrey, and sugar pine stands. Some pinyon-juniper stands may qualify.

#### FUEL MODEL D

This fuel model is specifically for the palmetto-gallberry understory-pine overstory association of the southeast coastal plains. It can also be used for the so-called "low pocosins" where Fuel Model O might be too severe. This model should only be used in the Southeast because of a high moisture of extinction.

#### FUEL MODEL E

Use this model after leaf fall for hardwood and mixed hardwood-conifer types where the hardwoods dominate. The fuel is primarily hardwood leaf litter. The oakhickory types are best represented by Fuel Model E, but E is an acceptable choice for northern hardwoods and mixed forests of the Southeast. In high winds, the fire danger may be underrated because rolling and blowing leaves are not accounted for. In the summer after the trees have leafed out, Fuel Model E should be replaced by Fuel Model R.

#### FUEL MODEL F

Fuel Model F is the only one of the 1972 NFDRS Fuel Models whose application has changed. Model F now represents mature closed chamise stands and oakbrush fields of Arizona, Utah, and Colorado. It also applies to young, closed stands and mature, open stands of California mixed chaparral. Open stands of pinyon-juniper are represented; however, fire activity will be overrated at low windspeeds and where there is sparse ground fuels.

#### FUEL MODEL G

Fuel Model G is used for dense conifer stands where there is a heavy accumulation of litter and downed woody material. Such stands are typically overmature and may also be suffering insect, disease, wind, or ice damage--natural events that create a very

heavy buildup of dead material on the forest floor. The duff and litter are deep and much of the woody material is more than 3 lnches in diameter. The undergrowth is variable, but shrubs are usually restricted to openings. Types meant to be represented by Fuel Model G are hemlock-Sitka spruce, Coast Douglas-fir, and windthrown or bugkilled stands of lodgepole pine and spruce.

#### FUEL MCDEL H

The short-needled conifers (white pines, spruces, larches, and firs) are represented by Fuel Model H. In contrast to Model G fuels, Fuel Model H describes a healthy stand with sparse undergrowth and a thin layer of ground fuels. Fires in H fuels are typically slow spreading and are dangerous only in scattered areas where the downed woody material is concentrated.

#### FUEL MODEL I

Fuel Model I was designed for clearcut conifer slash where the total loading of materials less than 6 inches in diameter exceeds 25 tons/acre. After settling and the fines (needles and twigs) fall from the branches, Fuel Model I will overrate the fire potential. For lighter loadings of clearcut conifer slash, use Fuel Model J, and for light thinnings and partial cuts where the slash is scattered under a residual overstory, use Fuel Model K.

#### FUEL MODEL J

This model complements Fuel Model I. It is for clearcuts and heavily thinned conifer stands where the total loading of materials less than 6 inches in diameter is less than 25 tons/acre. Again, as the slash ages, the fire potential will be overrated.

#### FUEL MODEL K

Slash fuels from light thinnings and partial cuts in conifer stands are represented by Fuel Model K. Typically the slash is scattered about under an open overstory. This model applies to hardwood slash and to southern pine clearcuts where the loading of all fuels is less than 15 tons/acre.

#### FUEL MODEL L

This fuel model is meant to represent western grasslands vegetated by perennial grasses. The principal species are coarser and the loadings heavier than those in Model A fuels. Otherwise the situations are very similar; shrubs and trees occurry less than one-third of the area. The quantity of fuel in these areas is more stable from year to year. In sagebrush areas Fuel Model T may be more appropriate.

#### FUEL MODEL N

This fuel model was constructed specifically for the sawgrass prairies of south Florida. It may be useful in other marsh situations where the fuel is coarse and reedlike. This model assumes that one-third of the aerial portion of the plants is dead. Fast-spreading, intense fires can occur even over standing water.

#### FUEL MODEL O

The O fuel model applies to dense, brushlike fuels of the Southeast. O fuels, except for a deep litter layer, are almost entirely living in contrast to B fuels. The foliage burns readily except during the active growing season. The plants are typically over 6 feet tall and are often found under an open stand of pine. The high

pocosins of the Virginia, North and South Carolina coasts are the ideal of Fuel Model O. If the plants do not meet the 6-foot criteria in those areas, Fuel Model D should be used.

#### FUEL MODEL P

Closed, thrifty stands of long-needled southern pines are characteristic of P fuels. A 2- to 4-inch layer of lightly compacted needle litter is the primary fuel. Some small diameter branchwood is present but the density of the canopy precludes more than a scattering of shrubs and grass. Fuel Model P. has the high moisture of extinction characteristic of the Southeast. The corresponding model for other long-needled pines is U.

#### FUEL MODEL Q

Upland Alaskan black spruce is represented by Fuel Model Q. The stands are dense but have frequent openings filled with usually inflammable shrub species. The forest floor is a deep layer of moss and lichens, but there is some needle litter and small-diameter branchwood. The branches are persistent on the trees, and ground fires easily reach into the tree crowns. This fuel model may be useful for jack pine stands in the Lake States. Ground fires are typically slow spreading, but a dangerous crowning potential exists. Users should be alert to such events and note those levels of SC and BI when crowning occurs.

#### FUEL MODEL R

This fuel model represents the hardwood areas after the canopies leaf out in the spring. It is provided as the off-season substitute for E. It should be used during the summer in all hardwood and mixed conifer-hardwood stands where more than half of the overstory is deciduous.

#### FUEL MODEL S

Alaskan or alpine tundra on relatively well-drained sites is the S fuel. Grass and low shrubs are often present, but the principal fuel is a deep layer of lichens and moss. Fires in these fuels are not fast spreading or intense, but are difficult to extinguish.

#### FUEL MODEL T

The bothersome sagebrush-grass types of the Great Basin and the Intermountain West are characteristic of T fuels. The shrubs burn easily and are not dense enough to shade out grass and other herbaceous plants. The shrubs must occupy at least one-third of the site or the A or L fuel models should be used. Fuel Model T might be used for immature scrub oak and desert shrub associations in the West, and the scrub oak-wire grass type in the Southeast.

#### FUEL MODEL U

Closed stands of western long-needled pines are covered by this model. The ground fuels are primarily litter and small branchwood. Grass and shrubs are precluded by the dense canopy but occur in the occasional natural opening. Fuel Model U should be used for ponderosa, Jeffrey, sugar pine, and red pine stands of the Lake States. Fuel Model P is the corresponding model for southern pine plantations.

# APPENDIX G

#### INTERPRETATION OF THE BURNING INDEX

The summary publication of the 1972 NFDRS postulated that the effort required to contain a fire was proportional to the length of flames at the fire's head. New information indicates that distinctly of containment is proportional not to the flame length, but to the fireline intensity, the rate of heat release her unit length of fireline (Byram 1959). Following this latter hypothesis, the magnitude of the containment job actually increases here than twice as fast as the Si.

Flame length was related to fireline intensity by Byram (1959). Because the BI is based on flame length, the BI, fireline intensity, and flame length are interrelated.

Roussopoulos and Johnson (1975) compiled observations of Canadian, Australian, and American fire researchers relating fireline intensity to fire controllability and behavior. That information and the flame length and BI's corresponding to the critical fireline intensities are summarized in table 9.

It should be noted that the 1978 BI has been scaled to equal 78 when the predicted flame length is 7.5 feet. That flame length corresponds to a fireline intensity of 500 Btu/sec/ft. Above a fireline intensity of 500 Stu/sec/ft, it is unlikely that a fire can be controlled by conventional means. (Chemical retardants can possibly reduce the intensity of a fire below the 500 Btu/sec/ft level making direct attack feasible.)

In nomogram G-1 the BI is plotted against fireline intensity. It can be used to derive ideal fireline intensity values from intermediate values of the BI.

Table 9 .-- Fire behavior, controllability, and fireline intensity

Burning	:	Fireline	:	Flame	:		
index	:	intensity	:	length	:	Narrative	
		Btu/s/jt		Ft			
0-28		0-50		2.8		Most prescribed burns are conducted in this range	
38		100		3.8		Generally represents the limit of control for manual attack methods.	4
78		500		7.8		The prospects for control by any means are poor above this intensity.	
96		700		9.6		The heat load on people within 30 feet of the fire is dangerous.	
108	. •	1,000		10.8		Above this intensity, spotting, fire whirls, and crowning should be expected.	

January 4, 1983

District Manager, Cedar City District

1600 9214 UT-040

Modified Fire Suppression

State Director, Utah (U-932, 941)

As part of our land use planning effort in the Pinyon Planning Unit, we have developed a modified fire suppression plan. Me request that you review the enclosed Pinyon Modified Fire Suppression Plan and the attached Memorandum of Understanding. This plan would be implemented by inclusion in the Pinyon MFP. Realizing that state and private land will be affected by any change in BLM fire suppression, we have made provisions to include these lands. A memorandum of understanding between the Cedar City District Manager and the Director, Division of State Lands, outlines the roles and responsibilities of the District and the State and includes provisions for affected private land owners to cooperate if they so desire.

The modified fire suppression plan has been reviewed by local representatives of the Division of State Lands. The attached memorandum is the result of discussions with them to facilitate state cooperation should the plan be implemented.

Enclosure-1

Pinyon Modified Fire Suppression Plan and Memorandum of Understanding.

PWilkins:jp 12-16-82 Revised 1-4-83:1a 0000

#### A. Open Designations

Areas which are designated open to motorized vehicle travel comprise approximately 280,455 acres of public land. Much of the open public lands are scattered tracts intermingled with private and State lands. Permission from Landowners will have to be received by vehicle users to gain access to many of the open public lands.

#### **B.** Limited Designations

Areas which are designated limited ::: comprise approximately 735,684 acres of public land. Limited designation was determined appropriate to protect the resources of the public land, promote the safety of all users of the public lands, and to minimize conflicts among various users of the public land. The following identifies the type of limitation on motorized vehicle travel, a brief rationale, the specific area(s) where the limitation applies, and the affected acreage.

1. Motorized vehicle travel limited to designated roads and trails to protect highly erosive soils in critical to severe condition watersheds from surface disturbance associated with crosscountry motorized vehicle travel.

- a. Upper Rio Puerco-382,835 acres.
- b. Santa Ana Mesa-12,946 acres.
- c. Tent Rocks—8,603 acres. d. Ball Ranch—22,731 acres.
- e. 114 area—22,440 acres.
- f. El Malpais-273,500 acres. g. Petaca Pinta—12,629 acres.
- Intensive recreation use areas are designated to provide opportunities for quality off-road vehicle (ORV)

experiences. a. San Ysidro Trials Area—The trials area (4.060 acres) located just west of San Ysidro, New Mexico is available for trails motorcycle riding, both as a "playarea" and for competitive events. All other motirized vehicle travel in the area

is limited to designated roads and trails. b. Competitive Dune Buggy Event Area—The event area (2,880 acres) is located in the western portion of the 114 area. The area is designated for competitive dune-buggy events using existing routes. All other motorized vehicle travel in the area is limited to designated roads and trails.

c. Recreation Off-Road Vehicle (ORV) Recreation Trail system. The 124 mile trail system is located in the Upper Rio Puerco. The trail system includes a variety of route conditions from primitive to graded and is designed to accommodate both day-use and overnight through a variety of terrain. It will accommodate both play and exploration demands for a variety of ORV recreation types.

3. "Limited to authorized users only" designations apply to five road segments in two Special Management Areas. The following identifies the Special Management Area where the designation applies, miles of road affected, and provides a brief rationale.

a. Ignacio Chavez Special Management Area—Three road segments totalling about eight miles are limited to use by holders of existing permits or leases. The designation allows for intensive management of 23,587 acres as a primitive recreation use area. All other motorized vehicle travel on the three road segments is prohibited.

b. Ojito Special Management Area/ Area of Critical Environmental Concern (ACEC)—Two road segments totalling about 4 miles in the Las Milpas Gas Storage Area of the ACEC are limited to use by holders of existing permits or leases. Other motorized vehicle use on the two road segments is prohibited. The gas storage area (6,840 acres) is

managed as a geologic hazard to protect human life, safety and property. The designation promotes the proper management and safe use of the geologic hazard area.

#### G. Closed Designation

-Areas and routes which are designated closed comprise approximately 10,337 acres, and include 8 road segments totalling about 16 miles. The following identifies the type of closure, where the closure applies, a brief rationale, and the affected areas (acres or miles).

#### 1. Closed Areas

 Azabache Station Special Management Area—motorized vehicle travel is prohibited on the 80 acre area to protect the Azabache Stage Station ruins for approved scientific study.

b. Guadalupe Ruin and Community Special Management Area—Motorized vehicle travel is prohibited on the 40acre ruin area to protect the Chacoan outlier for approved scientific study and public visitation.

c. Cabezon Peak Special Management Area/Area of Critical Environmental Concern-Motorized vehicle travel is prohibited on the 4,785 acre area to protect rare plant communities, sociocultural values, and to allow for intensive management of the area for semi-primitive non-motorized recreation

d. Ojito Special Management Area/ Area of Critical Environmental Concern (ACEC)—Motorized vehicle travel is prohibited on the Querencia Watershed Study are and on the majority of the Las Milpas Gas Storage Area of the ACEC.

The closure protects the integrity of the 640 acre watershed study area to ensure that reliable data is collected from the site. The closure of 3.563 acres of the Las Milpas Gas Storage Area provides for the protection of human life, safety, and property.

e. Bluewater Canyon Special Management Area/Area of Critical **Environmental Concern—Motorized** vehicle travel is prohibited on the 89acre area to allow protection and enhancement of the natural values of the canyon, especially riparian habitat ... for wildlife, visual values, and primitive recreation opportunities.

#### 2. Closed Roads and Trails

a. Ignacio Chavez Special Management Area—Motorized vehicle travel is prohibited on two road segments totalling about four miles. The closure allows for intensive management of 3,696 acres for semiprimitive non-motorized recreation use.

b. Ojito Special Management Area/ Area of Critical Environmental Concern-Motorized vehicle use is prohibited on two road segments totalling six miles. The closure allows for intensive management of about 8,200 acres for semi-primitive non-motorized recreation use.

c. Road closures outside Special Managment Areas are described as follows: (1) BLM Route 20-3-20 totalling about two and a half miles is closed to motorized vehicle travel. The road is nonessential and parallels the main road system in the area.

(2) Portions of BLM Routes 21-4-27.1, 21-4-10 and 21-4-16 totalling about three and a half miles are closed tomotorized vehicle travel, except that which is needed to perform monitoring studies in the Pelon Watershed Special Management Area. The closed road segments provide the only access into study sites in the watershed area. For all other motorized vehicle travel the road segments are nonessential and parallel the main road system in the area.

Dated: April 7, 1967. L. Paul Applogate. District Manager. [FR Doc. 87-8498 Filed 4-15-87; 8:45 am] BILLING CODE 4319-FB-46

#### [UT-040-07-4113-08]

**Utah: Plan Amendment for Pinyon** Plan: Proposed Geothermal Leasing Stipulations, Beaver and Iron Countles

AGENCY: Bureau of Land Management, Interior.

ACTION: Plan Amendment Decision
"Geothermal Leasing

susmany: The Cedar City District of the Bureau of Land Management has finalized the environmental assessment/plan amendment to change the geothermal leasing stipulations in the Pinyon Planning Unit. See notice of intent in August 14, 1986 Federal Register, page 29164.

The Pinyon Planning Unit is located in western Beaver and from Counties of southern Utah. The Pinyon Planning Unit is the westernmost planning unit of the Beaver River Resource Area in the Cedar City District. There are 1,390,800 acres of BLM administered federal land in the planning unit. Only 1,460 acres of this area are now under lease. There is a potential for 93,750 acres to be leased under simultaneous leasing procedures.

Upon their renewal or initial granting, seasonal stipulations will be placed upon geothermal leases for the protection of 3,919 acres of raptor and sage grouse habitat. A no surface occupancy stipulation for the protection of 2,347 acres of Utah prairie dog habitat and three historical recreation sites will be placed upon geothermal leases in the responding unit. Unneeded seasonal

'ations on 15,360 acres will be ...

DATE: A 30 day protest period will begin on April 16, 1987. Unless a protest is received, these lease stipulations will become final immediately following the protest period. Protests must be in writing and must be sent to the Director of the Bureau of Land Management.

FOR FURTHER REFORMATION CONTACT:

POR FURTHER REFORMATION CONTACT:
Pete Wilkins, District Planning
Coordinator in the Cedar City District
Office, 176 East D.L. Sargent Drive,
Cedar City, Utah 84720, (801) 586-2401.
Dated: April 7, 1967.

Mergan 8. Jensen, District Manager,

[FR Doc. 87-8495 Filed 4-15-87; \$45 am]

[NV-843-07-4220-11; Nev-043897]

Proposed Modification and Continuation of Withdrawat; Nevada

AGENCY: Bureau of Land Management.

**ACTION:** Notice.

summany: The U.S. Forest Service

oses that the withdrawal of 274
covering portions of nine
inistrative and recreation sites in
the Totyabe National Forest be modified
to establish a 25-year term and that

certain legal descriptions be modified to conform to current maps, cadestral protraction diagrams, or surveys. The land will remain closed to surface entry and mining, but has been and will remain open to mineral leasing.

EFFECTIVE DATE: Comments should be received by July 15, 1987.

FOR FURTHER INFORMATION CONTACT: Vienna Wolder, Bureau of Land Management, Nevada State Office, P.O. Box 12000, Reno, NV 89520, (702) 784– 5481.

SUPPLEMENTARY INFORMATION: The U.S. Forest Service proposes that a portion of the withdrawai made by Public Land Order 1718 of August 15, 1958, be modified to establish a 25-year term and that certain legal descriptions be modified to conform to current maps, cadastral protraction diagrams, or surveys. This action is taken pursuant to section 204 of the Federal Land Policy and Management Act of 1976 (90 Stat. 2751; 43 U.S.C. 1714). The lands are described as follows:

#### Indian Valley Administrative Site

T. 10 N., R. 40 E., (Unsurveyed) sec. 4 described as follows:

Begin at SE Corner of sec. 32, T. 11 N., R. 40 E., MDM Thence S 43°30′ E 81.18 chains to true point of beginning Thence N 21° E 3 chains; Thence S 69° E 10 chains; Thence S 21° W 5 chains; Thence N 57° W 10.41 chains to point of beginning.

#### Peavine Forest Camp

(conformed to current maps and protraction diagram)

T. 9 N., R. 42 E., (Unsurveyed) Sec. 30, W%NW%NE%.

San Juan Administrative Site

(conformed to current maps and protraction diagram)

Kingston Administrative Site

T. 16 N., R. 43 E., Sec. 17, W4B½NW¼NE¼, W½NW¼ NE¼.

#### **Kingston Forest Camp**

T. 16 N., R. 43 E.

Sec. 28, SEWNEWNEW, NEWSEWNEW, excepting the areas included in Mineral Survey Nos. 1811 and 3422.

#### **Big Creek Forest Camp**

(conformed to current maps and survey)
T. 17 N., R. 43 E.,
Sec. 10, S%SW%SW%.

Meadow Carryon Administrative Site (conformed to current maps and protraction diagram)

T. 10 N., R. 45 E., (Unsurveyed)
Sec. 21, S%S%NW%, N%N%SW%.

Fine Creek Forest Camp
T. 11 N., R. 46 K. (Unsurveyed)
Sec. 11 SEMNEM.

Hunts Canyon Administrative Site (conformed to current maps and survey) T. 7 N., R. 46 E.,

80c. 23, Newnewswy, Bysey Newswy, 8wynewnwysey, 84nwynwysey, Swynwysey, Wyseynwysey,

The areas described aggregate 274 acres in Nye County.

The purpose of the withdrawal is to provide the minimum essential acreage required to protect these administrative sites and developed recreation sites within the Toiyabe National Forest. Many of these sites have meadow areas which are scarce in such a desert environment and are therefore extremely sensitive to disturbance.

For a period of 90 days from the date of publication of this notice, all persons who wish to submit comments in connection with the proposed withdrawal continuation may present their views in writing to the Chief. Branch of Lands and Minerals Operations, Bureau of Land Management, Nevada State Office, P.O. Box 12000, Reno, Nevada 89520.

The authorized officer of the Bureau of Land Management will undertake such investigations as are necessary to determine the existing and potential demand for the land and its resources. A report will also be prepared for consideration by the Secretary of the Interior, the President, and Congress, who will determine whether or not the withdrawal will be continued and, if so. for how long. The final determination on the continuation of the withdrawal will be published in the Federal Register. The existing withdrawal will continue until such final determination is made. Robert G. Steele

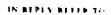
Deputy State Director, Operations.
[FR Doc. 87-8549 Filed 4-15-67; 8:45 am]
sulting code 4318-40-46

#### [NV-020-4132-02]

# Winnemucca District Advisory Council Meeting and Tour

AGENCY: Bureau of Land Management.
ACTION: Winnemucca District Advisory
Council Meeting and Tour.

SUMMARY: Notice is hereby given in accordance with Pub. L. 92–463 that a meeting, including a field tour, of the Winnemucca District Advisory Council will be held on May 26 and 27, 1967. The tour will be conducted in Humboldt County, Winnemucca District,





# United States Department of the Interior

BUREAU OF LAND MANAGEMENT

4310-DQ 7-00152-ILM

Cedar City District Office 176 East DL Sargent Drive Cedar City, Utah 84720 (801) 586-2401

DEPARTMENT OF THE INTERIOR Bureau of Land Management (UT-040-07-4113-08)

Pinyon Planning Amendment for Geothermal Leasing

Utah: Plan Amendment for Pinyon Plan; Proposed Geothermal Leasing Stipulations, Beaver and Iron Counties

AGENCY: Bureau of Land Management, Interior

ACTION: Plan Amendment Decision Notice; Geothermal Leasing Stipulations

SUMMARY: The Cedar City District of the Bureau of Land Management has finalized the environmental assessment/plan amendment to change the geothermal leasing stipulations in the Pinyon Planning Unit. See notice of intent in August 14, 1986 Federal Register, page 29164.

The Pinyon Planning Unit is located in western Beaver and Iron Counties of southern Utah. The Pinyon Planning Unit is the westernmost planning unit of the Beaver River Resource Area in the Cedar City District. There are 1,390,800 acres of BLM administered federal land in the planning unit. Only 1,460 acres of this area are now under lease. There is a potential for 93,750 acres to be leased under simultaneous leasing procedures.

Upon their renewal or initial granting, seasonal stipulations will be placed upon geothermal leases for the protection of 3,919 acres of raptor and sage grouse habitat. A no surface occupancy stipulation for the protection of 2,347 acres of Utah prairie dog habitat and three historical recreation sites will be placed upon geothermal leases in the planning unit. Unneeded seasonal stipulations on 15,360 acres will be dropped.

DATE: A 30 day protest period will begin upon the date of publication of this notice. Unless a protest is received, these lease stipulations will become final immediately following the protest period. Protests must be in writing and must be sent to the Director of the Bureau of Land Management.

FOR FURTHER INFORMATION CONTACT: Pete Wilkins, District Planning Coordinator in the Cedar City District Office, 176 East D. L. Sargent Drive, Cedar City, Utah 84720, (801) 586-2401.

4-7-87/ Date

Morgan S. Jensen

District Manager

# PINYON PLANNING AMENDMENT FOR GEOTHERMAL LEASING DECISION RECORD/RATIONALE EA UT-040-86-39

### Environmental Compliance

The proposed action as analyzed in the attached Environmental Assessment would not result in any significant impacts to the human environment. An Environmental Impact Statement is not required for the further analysis of environmental impacts.

#### Decision

Replace the existing geothermal lease stipulations with the recommended stipulations (see page 3 and page 20 of the EA) on geothermal leases in the Pinyon Planning Unit as they are renewed or granted.

#### Rationale

Adoption of the recommended stipulations provide for the protection of resources currently not protected by the existing stipulations. The recommended stipulations will be consistent with existing oil and gas categories and special stipulations. The recommended stipulations will free up areas for exploration and leasing not requiring protection by special stipulations and are the least restrictive stipulations which afford protection to sensitive resources.

Prepared by:	
Rete Wilkins Team Leader	2-18-87 Date
Recommended by:	•
Shendan Kansen Area Manager	$\frac{2-19-87}{\text{Date}}$
Recommended by:  M. Sissen	3- 2-87
District Manager Approved by:	Date
	<b>3.31.87</b>
State Director	Date

## Bureau of Land Management Cedar City District

# <u>Final</u>

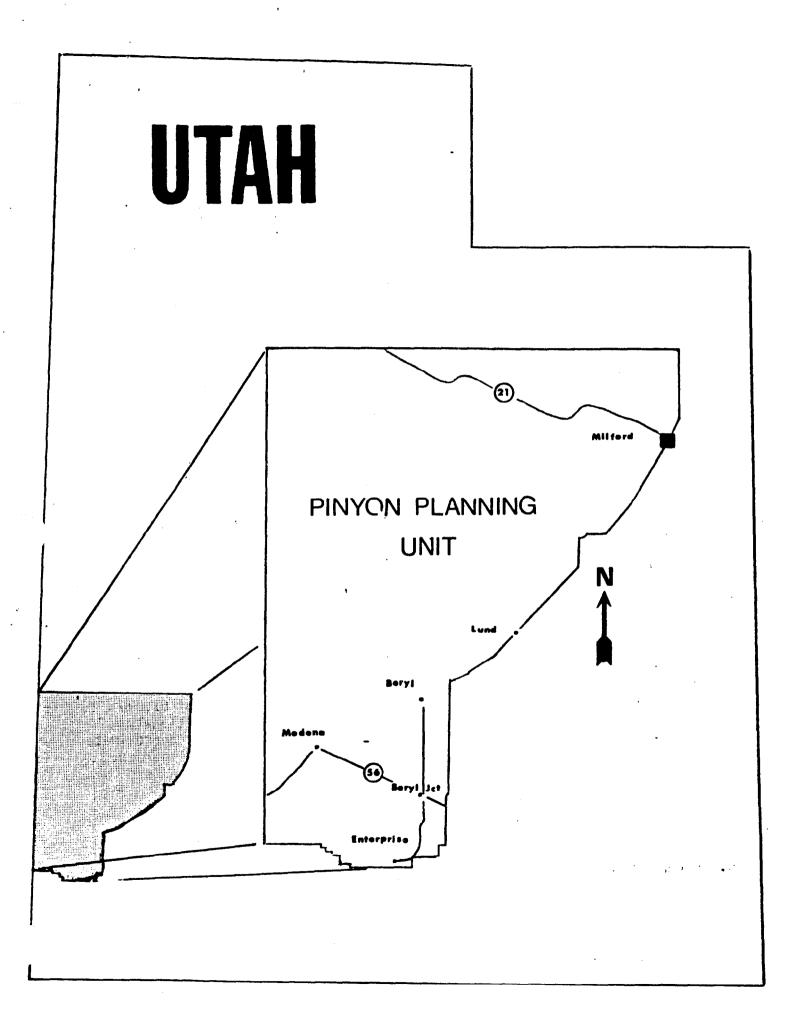
PINYON PLANNING AMENDMENT FOR GEOTHERMAL LEASING

February 18, 1987

EA 86-39

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Map 1. General Location, Pinyon Planning Unit.

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### PINYON PLANNING AMENDMENT FOR GEOTHERMAL LEASING

#### I. Introduction

### A. Purpose and Need

There are 1,460 acres of Federal lands in the planning unit under geothermal leases. There is a potential 92,290 additional acres which could be offered under simultaneous lease offerings. These lands contain a variety of resources and are used by various resource users. These leases are issued for a primary term of ten years. Producing leases may be extended for an additional period up to 40 years, after which they are subject to a renewal of a second 40 year lease term. Non producing leases expire at the end of the primary term. The original lease conditions were determined using resource information available in 1975 and 1976. Since that time resource conditions have changed. Because geothermal leasing was not addressed in the Pinyon Management Framework Plan (MFP), this amendment is required to provide the least restrictive geothermal leasing stipulations necessary to protect the affected resources. Stipulations provided as a result of this amendment will be adopted in all geothermal leases issued or renewed after approval of this amendment.

#### B. Location

The Pinyon Planning Unit is located in western Beaver and Iron Counties in Southern Utah. The Pinyon Planning Unit is the westernmost planning unit of the Beaver River Resource Area in the Cedar City District (Map 1).

### C. Planning Process

The Pinyon MFP was completed in June, 1983. Geothermal resources were described in the Unit Resource Analysis (URA) but no changes in the geothermal leasing stipulations were brought forward. The stipulations now in effect are the product of programmatic environmental assessments on the area completed in

1975 and 1976. When completed, this amendment would be attached to the MFP and become part of the plan. All future geothermal leases would contain the stipulations developed in the amendment.

#### D. Conformance

Revision of the existing geothermal leasing stipulations is not in conformance with the existing MFP. It is for that reason a plan amendment is being done. Because a revision of geothermal leasing stipulations will change the terms, conditions and decisions of the existing MFP, a plan amendment is required (43 CFR 1610.5-5).

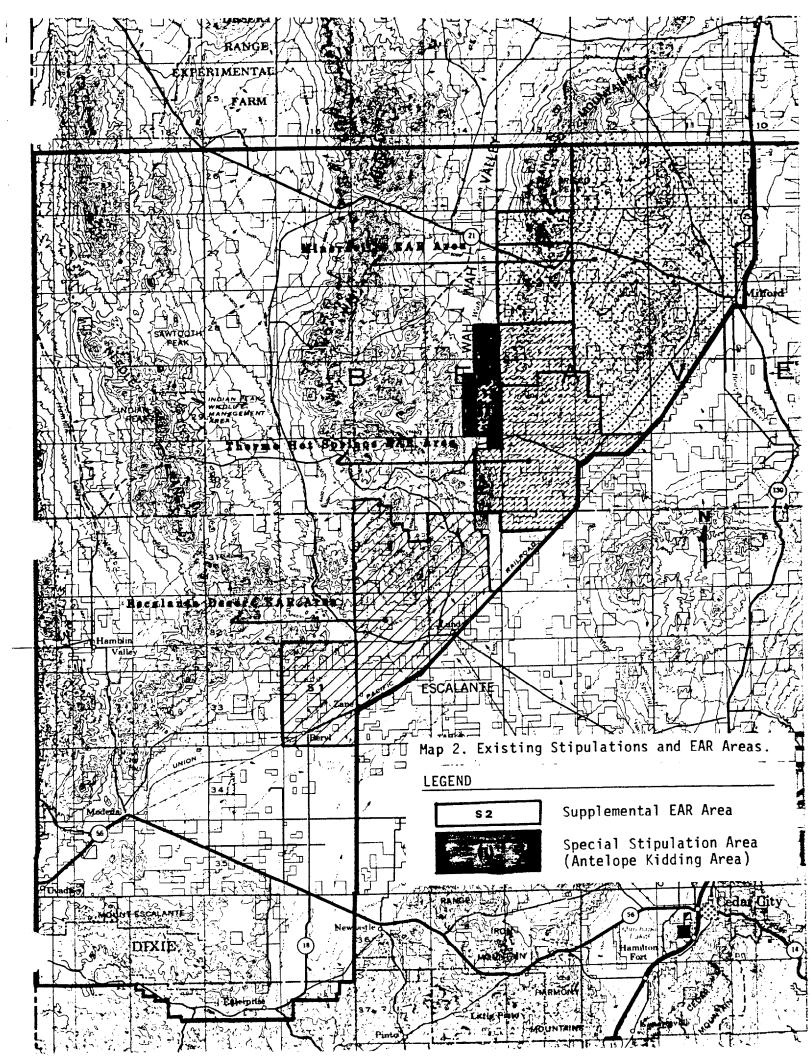
## II. Planning Issues and Criteria

There are 15,360 acres of Federal land under seasonal restrictions which are not presently required. There are 6,266 acres of Federal land which have significant resource values which are not being sufficiently protected from impacts resulting from geothermal leasing and exploration.

There are existing oil and gas leasing category stipulations developed in the Pinyon MFP which could be applied to the same resources requiring similar protection from geothermal exploration and leasing. Since impacts resulting from oil and gas and geothermal operations are basically similar, the same kinds of protection would work for both energy resources. Because geothermal and oil and gas exploration and leasing operations are essentially the same, it would be inconsistent to have different protective stipulations for each resource.

#### III. Proposed Action and Alternatives

The proposed action is to drop 15,360 acres of unneeded protection of antelope kidding grounds seasonal stipulation (Map 2.) and add 3,919 acres of seasonal stipulations for protection of raptors and sage grouse, and 2,347 acres of no surface occupancy to protect the Utah Prairie Dog and three historical



recreation sites (Map 3.). The proposal will bring the same protection of resources afforded by the oil and gas leasing categories to the geothermal lease stipulations. [A comparison was made between oil and gas and geothermal standard stipulations to see if the standard geothermal stipulations were more protective of the resources and could be used in place of the oil and gas special stipulations. The standard stipulations in both cases provide for specific protective stipulations to be developed by the surface managing agency. Because the proposed stipulations are site specific and were developed to protect resources unique to the Pinyon Planning Unit, they are necessary for the protection of the resources.]

Protection for sage grouse will be a no surface occupancy stipulation from March 1 to May 15 annually on 720 acres. Seasonal stipulations of no surface occupancy from February 15 to June 30 annually is proposed to protect raptor nesting areas on 3,199 acres. The Utah prairie dog colonies will be protected by year round no surface occupancy stipulation on 2,240 acres. Three historic sites will also be protected using a year round no surface occupancy stipulation totalling 107 acres. Map 3. shows the proposed stipulation areas.

Alternative 1 is the no action alternative. Under this alternative there would be no change to the existing geothermal leasing stipulations. Map 2. shows the existing geothermal steam lease stipulations in the area.

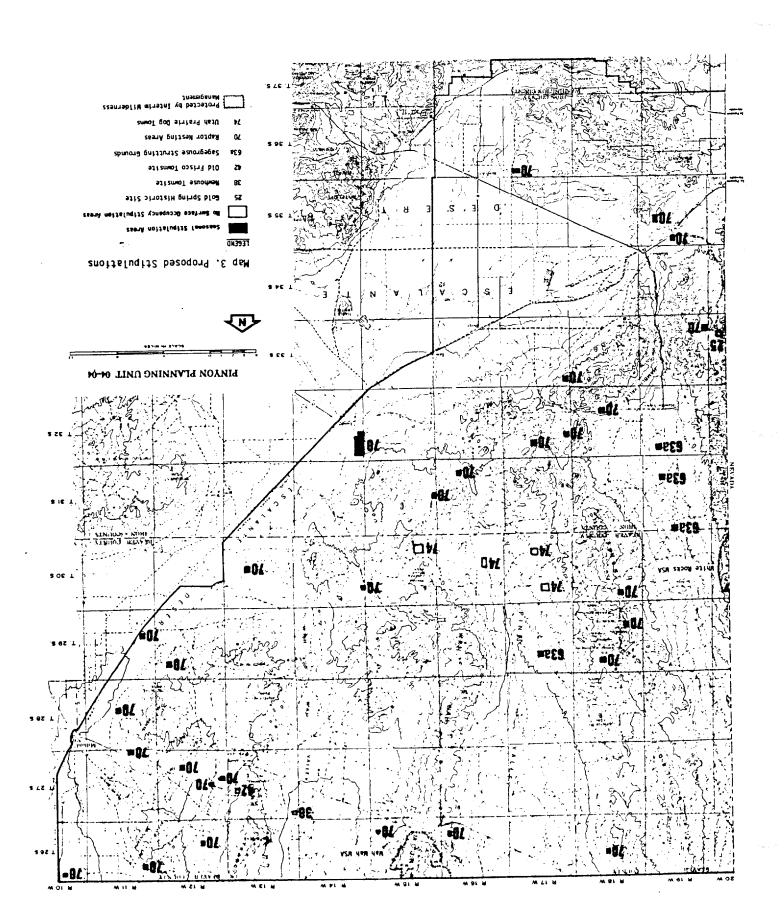
Alternative 2 would open the entire planning unit to geothermal leasing without any protective stipulations.

#### IV. Affected Environment

#### A. Minerals

#### 1. Geothermal Resources

Most geothermal resources in the western United States appear to be in seven provinces: the northern California Coast Ranges; the High Cascade



Mountains; the Salton Trough; the western and eastern margins of the Basin and Range province; the Rio Grand rift zones; and the Snake River Plain.

<u>Basin and Range Province</u>. Two major geothermal belts extend along the eastern and western margins of the Basin and Range province: one in California, Nevada, and Oregon; the other in Idaho and Utah. Geothermal fields or prospects also occur between these belts in Nevada, and far to the south in southern Arizona.

The eastern belt lies just west of the Wasatch Front, which is the faulted boundary between the Basin and Range province and the Colorado Plateau-Rocky Mountains. This belt extends north-south across the entire State of Utah and into southern Idaho, for a distance of some 560 kilometers (350 miles); its width is about 100 kilometers (62 miles).

Within the Pinyon Planning Unit, 4,800 acres of the total 26,019 acres of the Thermo Hot Springs Known Geothermal Resource Area (KGRA) are present. Adjacent to the planning unit the Lund and New Castle KGRAs occur as well as the remainder of the Thermo KGRA.

No production of geothermal resources for electrical power generation occurs in the planning unit. The Christensen Brothers have a shallow well (152 meters or 500 feet) that produces warm water at 96°C (250°F). The water is used in growing tomatoes hydroponically. This well is located in Sec. 20, T. 36 S., R. 15 W. near New Castle.

One deep exploratory well has been drilled within the planning unit. The well, De Armand No. 1, was drilled to 2,134 meters (7,000 feet) where temperatures up to 149°C (300°F) were reached. The well is located in Sec. 18, T. 34 S., R. 16 W. on private surface and mineral estates.

Adjacent to the planning unit, Republic Geothermal, Inc. completed a deep well in Sec. 29, T. 30 S., R. 12 W on their Federal lease U-32256 in 1978. No information is available regarding results of this drilling.

Possible localized geothermal resources may occur along the eastern boundary of the planning unit from Milford to New Castle. Much of this area has potential only for low temperature (less than 90°C or 194°F) water. This area is determined to be an undiscovered geothermal resource based on the presence of thermal springs and wells and geohydrologic and geologic settings generally favorable for recovery of thermal water. Exploration in the area over the past 5 years has consisted primarily of various geophysical surveys and drilling shallow temperature gradient holes.

Geothermal lease potential in the Pinyon Planning Unit totals 93,750 acres. Only 1,460 acres are now under lease. As new offerings are made available (under simultaneous leasing as administered by the Utah State Office and regulations in 43 CFR 3200), the entire 93,750 acres could be under lease (Table 1.).

#### 2. Oil and Gas

Except for portions of the various mountain ranges, all of the Pinyon Planning Unit is considered an undiscovered resource for oil and gas due to the presence of thick sequences of sedimentary rocks. Classification is based more on lack of information than on known favorable conditions for hydrocarbon accumulation.

There are no producing oil and gas wells within the planning unit. The closest production occurs at the small Anderson Junction field, 43 kilometers (27 miles) southeast of the unit. One recent exploratory hole has been drilled in the Pinyon Unit and three holes have been proposed.

Some geophysical exploration has occurred in the planning unit. Recent activity has consisted of seismic and gravity surveys. In 1979 Husky Oil conducted a seismic survey in Pine Valley. This information was used by Husky to select their proposed drilling locations mentioned above.

Nevertheless, there has been a tremendous increase in oil and gas leasing in this unit in the last 5 years. In 1975 only 10,500 acres within the unit were under lease. By 1980 this figure had increased to over 1.1 million acres with very little if any acreage remaining to be leased. This increase in leasing is generally regarded as being speculative. Even though an increase in geophysical exploration activities is already apparent there has not been a notable increase in drilling activity to date.

## 3. Sand, Gravel and Borrow Materials

The unit contains economic reserves of sand, gravel, and borrow materials within the northerly trending intermountain valleys such as Hamblin Valley, Pine Valley, Wah Wah Valley and Escalante Valley. Deposits currently being used are located along State Highways 21 and 56.

#### 4. Other Minerals

Other minerals found in the Planning Unit are gold, silver, copper, lead, zinc, alunite, molybdenum, flourite and uranium. The only producing mine in the unit is the Escalante Silver Mine.

#### B. Lands

There are 1,936,804 total acres in the Pinyon Planning Unit. The Federal BLM administered State and private acreages are respectively 1,390,800 acres, 192,600 acres and 315,400 acres. The Planning Unit is rural in nature with a population center in Milford, 1,293 inhabitants (Map 2). Local zoning permits mineral exploration, leasing and development.

TABLE 1. Geothermal Lease Areas by Township

## MINERSVILLE EAR AREA

			_	
Townships	Lease #	Acres	NOL or List Acres*	TOTAL
T26S R10W	U-29442	1,040	1,160	2,200
T26S R11W			2,560	2,560
T26S R12W				0
T27S R10W	U-29439	420	3,200	3,620
T27S R11W			6,240	6,240
T27S R12W			1,280	1,280
T27S R13W			7,460	7,460
T28S R10W				0
T28S R11W			880	880
T28S R12W			2,560	2,560
T28S R13W			5,760	5,760
T29S R11W			1,560	1,560
T29S R12W			9,600	9,600
		1,460	42,260	43,720
TUEDMO EAD	ADEA			
THERMO EAR	AKEA			
T28S R13W				0
T28S R14W				0
T29S R12W			2,560	2,560
T29S R13W			16,640	16,640
T29S R14W			3,200	3,200
T30S R12W			2,240	2,240
T30s R13W			11,960	11,960
T30S R14W			640	640
T31S R13W			1,970	1,970
		0	39,210	39,210

TABLE 1. (continued)

## ESCALANTE EAR AREA

Townships	Lease #	Acres	NOL or List Acre	s <sup>*</sup> TOTAL
T30S R15W				0
T31S R14W			4,320	4,320
T31S R15W				0
T32S R14W			4,740	4,740
T32S R15W				0
T32S R16W				0
T33S R15W				0
T33S R16W			1,760	1,760
		0	10,820	10,820
Pinyon Uni	t			
TOTAL		1,460	92,290	93,750

NOTE: All acres are estimated from the plats to nearest ten acres.

\*Acres not presently under lease but eligible for simultaneous leasing.

### C. Forest Products

The unit has a large fuelwood resource which is being actively utilized by both local and regional commercial and private users. Pinyon nuts are also extensively harvested in the unit.

### D. Range Resources

Vegetation in the planning unit is sagebrush, desert brush, grassland and pinyon-juniper vegetation types. The Planning Unit produces 73,000 AUM's (Animal Unit Months) on over 800,000 acres. Range improvements include fences, corrals, reservoirs, wells, pipelines, tanks, troughs, springs and seedings.

#### E. Watershed

Most of the watershed in the unit is in the none and slight erosion hazard category at 1,239,000 acres. In the severe and critical erosion hazard category are 686,000 acres. The area also has 12,000 acres of high soil blowing category.

#### F. Wildlife

The unit provides habitat for an estimated 1,300 mule deer, 600 antelope and 60 elk. Other economic wildlife species include sagegrouse, eagles, various raptors and prairie dogs.

### Antelope

Most of the planning unit is utilized by scattered herds of antelope. The broad valleys and sagebrush-grass benches are the primary habitat of the pronghorn. However, antelope are frequently found in the pinyon-juniper habitat. The antelope's habitat in the planning unit is generally listed as yearlong, but pronghorn use is seasonally dictated by

their dietary preference. Antelope need vast unrestricted areas to facilitate movement to habitat supporting the forage required for their seasonal dietary needs. No special use areas have been identified in recent wildlife surveys.

## Sage Grouse Strutting Grounds

All aspects of the sage grouse's life history, nesting, feeding, etc., are in association with various types of sagebrush. No other upland game bird is so highly specialized in its food and cover requirements and so dependent on one plant taxon, Artemisia, as the sage grouse. Each aspect of the life history and required cover type is essential to the grouse. Meadow areas and alfalfa fields are critical habitat areas and provide essential forage and insect life during the early stages of the chick development. Courtship and breeding begins in February or March, depending on climatic conditions, followed by nesting in May and June. Brood rearing continues through the summer. Nesting generally occurs within two miles of the strutting grounds. The hen and chicks usually remain in the vicinity of the nest for the first few weeks after hatching and then move to meadow areas for the summer. Sage grouse strutting areas are shown on Map 3.

#### Raptor Habitat

Several species of raptors winter in the area of this analysis, and six species remain year-round and nest in the subject area. Raptors require a secluded area of high rocky cliffs or tall dead trees as a nesting area. Ferruginous hawks are also known to nest on the ground.

Raptors are normally quite wary, especially during the nesting season. Human activities disturb the nesting birds and cause them to move to other areas.

Two major raptor nesting areas and several single nests have been identified in the Escalante Desert. These are primarily in remote desert and foothill areas.

Only one area is located in the planning unit near Sulfur Spring about four miles northwest of Lund. Golden Eagles nest in rock cliffs along the top of the east side of a north-south trending ridge. Roads pass near the area but human activities are confined to the passing cars and short-term visits of ranchers. Map 3 shows the raptor nesting areas proposed for protection by special stipulation.

The surrounding desert floor and foothills are covered with sagebrush, saltbush, or pinyon-juniper vegetation. Rabbits and other rodents live in this vegetation and provide food for the raptors.

### Utah Prairie Dog Towns

The Utah prairie dog, <u>Cynomys Parvidens</u>, is officially listed by the U.S. Fish and Wildlife Service as an endangered species. Utah prairie dogs are present in four different localities. These colonies are the result of a cooperative transplant program between the U.S. Fish and Wildlife Service, Utah's Division of Wildlife Resources, and the Bureau of Land Management. Utah prairie dog towns in the Pinyon unit are shown on Map 3.

#### G. Recreation Values

Recreation is extensive in nature and generally undeveloped. Common activities include big game hunting, pinyon nut collecting, sightseeing, off-road vehicle use and rock collecting. There are many historical sites. Those which may be threatened by geothermal exploration are listed below and shown on Map 3.

## Gold Spring Historic Site

The remains of Gold Spring, an old mining town, lie along the Utah-Nevada border, 10 miles northwest of Modena. This ghost town was an active gold mining town during the turn of the century.

Presently there is no mining activity at this location.

Miscellaneous mining and milling equipment can be found there. Several wooden buildings and houses still stand at Gold Spring. A 40 acre site, including an old wooden house, is listed on the National Register of Historic Places.

#### Newhouse Townsite

The "desert town" of Newhouse grew out of desolation to become an oasis of the miners of the copper producing Cactus Mine just over the mountain from the Frisco Mine.

Little evidence remains today of these once thriving, bustling, rough mining communities.

The townsite is now composed largely of many stone and concrete ruins, foundations and excavations presenting a very ghostly atmosphere. The shearing pen, barely intact up on the hillside, still bears the faint lettering of the town's name. The railroad depot still exists in tact but has been moved to a private ranch five miles west across the valley where it is in daily use. The old railroad bed parallels the highway between Frisco and Newhouse, with old, square, wooden culverts still in place.

#### Old Frisco Townsite

Frisco, born in 1876, after the chance discovery of silver and lead ores in 1875, lies in the southern tip of the San Francisco mountains, from which comes its name.

Fifteen miles on State Highway 21 west from the center of Milford is a short dirt road leading off to the right (northwest) into the business district of Frisco. Five beenive-shaped charcoal kilns sit over empty stone walls, derelict equipment, and remains of a mill. Railroad grade leads into the mining section of town. Several ancient frame stores and houses are dug

into the hill, while more sturdy buildings sit on the tailings dumps.

### Wilderness Study Areas

Wilderness Study Areas (WSAs) that are protected by interim management are shown on Map 3.. The WSAs are the White Rocks WSA and the Wah WSA. Planning for these WSAs is being handled by other Districts which have major portions of the WSAs within their boundaries. Interim management protects wilderness values by stipulation in any leases issued within the boundaries of these units during the time they are being considered for wilderness designation.

These units do not contain values beyond wilderness values which may be impacted by the proposed action or alternatives. The stipulations of interim management attached to leases in these units protect their wilderness values.

## V. Environmental Consequences

### A. Proposed Action

#### 1. Minerals

#### a. Geothermal Resources

The proposed action would eliminate 15,360 acres of protective stipulation to protect antelope kidding ground and add 3,919 acres of seasonal stipulations to protect raptors and sagegrouse, and 2,347 acres of no surface occupancy stipulations to protect Utah prairie dogs and historic recreation sites. These stipulations will not affect the present geothermal leases. When the present leases expire, the new stipulations will go into effect on any renewed leases. When new lease areas are opened to competitive bidding, the new leases will also contain the stipulations.

Since no production is now occuring in the Pinyon Planning Unit, it is expected that the new stipulations will not affect utilization of the geothermal resource. The area covered by the old EAR's is the only area in the unit that has the potential for geothermal resource development. Impact of the proposal on the geothermal resource is therefore considered to be insignificant.

#### b. Oil and Gas

The proposed action would give the same protection to other resources from geothermal exploration and leasing that are now in effect under the oil and gas leasing categories. The adoption of the same stipulations provided for oil and gas leasing categories will bring these similar resources under the same protection.

There will be no impact on the oil and gas resource under the proposed action.

c. Sand, Gravel, and Borrow Materials and Other Minerals

The proposed action would have no effect on other mineral resources. They will all be available for development to same degree that they have been in the past.

#### 2. Lands

A change in the geothermal leasing stipulations will not affect the sale, transfer, or land uses of lands as directed by the Pinyon MFP.

#### 3. Forest Products

A change in the geothermal leasing stipulations will not affect the utilization of forest products in the planning unit.

### 3. Range Resources

Lease terms and conditions (Attachment 1) will protect range resources from long term damage to vegetation and to facilities. Short-term impacts will be high for very small areas but not significant because of the small area disturbed. Cumulative impacts of disturbance of many small areas is not expected to be significant. Reductions in forage is not anticipated.

#### 4. Watershed

Impacts on general watershed conditions will be insignificant because of the small area disturbed. Careful monitoring of disturbance at drill sites and rehabilitation success needs to be done to avoid future problems. There is a danger that unchecked erosion caused by excavation of mud pits or discharge tests could cause long-term problems if rehabilitiation is not completed or is unsuccessful. These impacts will be mitigated by standard lease terms and conditions (Attachment 1) which require that environmentally sound practices be observed in drilling and exploration activities.

### 5. Wildlife

Sage grouse, raptors, and the Utah prairie dog are the only wildlife species affected by the proposed action.

The antelope kidding area, identified in a supplement to the Thermo Hot Springs EAR, was not identified in a more recent wildlife inventory as a special use area. The more recent inventory did not conclude that the existing stipulation area is used for antelope kidding. Elimination of the special stipulation area will not adversely impact antelope kidding in the planning unit.

During the mating season, sage grouse strut at particular sites and confine their activities within a radius of less than one mile from the strutting grounds. Mating occurs on these sites from March 1 to May 15.

Migration can occur when an area is disturbed during the mating season and reduce mating success. A seasonal stipulation on 720 acres for this period will prevent disturbance on identified sites during critical times of the year. The proposed acton reflects strutting ground areas based on recent wildlife inventories.

About 3,199 acres will be added to protect raptor nests during the nesting seasons. Most nesting activity occurs from February 15 to June 30. Human activities disturb the nesting birds and cause them to move to other areas which can preclude successful hatching of the young birds. The proposed seasonal stipulation will prevent disturbance of raptor nests.

The addition of 2,240 acres of no surface occupancy will protect prairie dog towns from surface disturbance that may collapse burrows or cause vegetative losses. Heavy equipment use, explosive charges, or vibrator methods used in oil and gas exploration activities. Crucial and critical habitat will not be significantly damaged.

#### 6. Recreation

Three historic sites, Gold Springs, Newhouse, and Old Frisco, will be protected by a no surface occupancy stipulation on a total of 107 acres for all three sites. Gold Springs has been nominated to the National Register of Historic Places.

## B. Environmenal Consequences for Alternative 1 (No Action Alternative)

### 1. Minerals

No action would result in 15,360 acres of seasonal restrictions left in the antelope kidding area seasonal stipulation area. No action would result in more restrictions than in the proposed action for geothermal leasing and exploration in the form of seasonal stipulations for antelope. Other minerals will not be impacted under the no action alternative.

# 2. Range

This alternative would not have a significant impact on the range resource. Impacts would be similar in intensity and kind to the proposal.

#### 3. Watershed

If drilling should occur where slopes are excessive or if lease activities disturb existing drainage patterns or cover, small areas of high impacts may result. Monitoring and rehabilitation should be stipulated under the exploration permitting program (43 CFR 3203.6 and 3264.4).

#### 4. Wildlife

Retention of the antelope kidding area special stipulation will not provide protection of antelope kidding areas. Recent wildlife inventories did not identify the stipulation area as requiring special protection. No kidding areas were identified in this recent inventory (1979-80).

Sage grouse strutting grounds are not being protected under the current geothermal lease stipulations. Disturbance of the grouse during March 1 through May 15 could cause considerable damage to the population. Damage to critical areas such as meadows could also have lasting effects on sage grouse populations.

Disturbance of raptor nesting areas by exploration activities from February 15 to June 30 could adversely affect raptor populations by disturbing nesting activities.

Under the No Action Alternative without the no surface disturbance stipulation to protect the Utah prairie dog, exploration activities (heavy equipment use, explosive charges, or vibrator equipment) could cause mortality among the young of this species by disturbance of the burrows.

### 5. Recreation

The Gold Springs, Newhouse, and Old Frisco townsites would not be protected from geothermal exploration activities by stipulation. Current levels of geothermal leasing and exploration activity have not been a threat to these recreation sites. If exploration activities were to increase, a possiblity exists that these sites could be threatened by disturbance.

## C. Environmental Consequences for Alternative 2 (All Open Alternative)

#### 1. Minerals

Designation of the entire planning unit as open would provide the maximum unrestricted acreage for exploration and leasing activities. This would not necessarily increase the rate of exploration and leasing revenue over the proposed action.

### 2. Range

This resource would not be significantly impacted. Small areas of high impacts would occur. It is felt that leasing activities would not be extensive to the point that a significant cumulative impact would result.

#### 3. Watershed

Under current leasing activities, the potential for watershed impacts are not significant. Should exploration activities accelerate, there is a potential that significant impacts could occur if exploration activities are not carefully monitored under the exploration permitting system (43 CFR 3203.6 and 3264.4).

### 4. Wildlife

Sage grouse strutting grounds identified in recent inventories will

not receive the protection needed during the important reproductive period. If exploration or drilling activities occur during the strutting period on identified areas, sage grouse may abandon strutting and move out of the area. Harassment of the grouse during March 1 through May 15 could cause considerable damage to the population. Damage to critical areas such as meadows could also have lasting effects on sage grouse populations.

The standard geothermal leasing stipulations imposed under this alternative would not provide adequate protection for wildlife. The standard stipulations call for the formulation of site specific stipulations to protect individual resource values as under the proposed action (Attachment 1, Section 8).

If exploration and drilling or other disturbing activities are allowed within one-fourth mile of raptor nests during the nesting season (February 15 to June 30), hatching of the young raptors may not occur.

Exploration activities could collapse prairie dog burrows and possibly suffocate young prairie dogs if allowed within the prairie dog towns.

#### 5. Recreation

The Gold Springs, Newhouse, and Old Frisco townsites would not be protected from geothermal exploration activities by stipulation. Current levels of geothermal leasing and exploration activity have not been a threat to these recreation sites. If exploration activities were to increase, a possiblity exists that these sites could be threatened by disturbance.

## VI. Administrative Actions Required for Implementation

The following stipulations will be required on designated areas (Map 3.) to protect raptors (seasonal stipulation), sage grouse (seasonal stipulation), Utah prairie dog (no surface occupancy stipulation), and historic sites (no surface occupancy stipulation).

## A. Seasonal Wildlife Stipulations

- 1. In order to protect important sage grouse strutting and nesting areas, exploration, drilling, and other development activity will be allowed only during the period from May 16 to February 28. This limitation does not apply to maintenance and operation of producing wells. Exceptions to this limitation in any year may be specifically authorized in writing by the District Manager, Bureau of Land Management.
- 2. In order to protect important raptor nesting areas, exploration, drilling, and other development activity will be allowed only during the period from July 1 to February 14. This limitation does not apply to maintenance and operation of producing wells. Exceptions to this limitation in any year may be specifically authorized in writing by the District Manager, Bureau of Land Management.

## B. No Surface Occupancy Stipulations

No occupancy or other activity on the surface of Utah prairie dog colonies, and the Gold Springs, Old Frisco, and the Newhouse Historic Sites, as shown in Map 3., is allowed under this lease.

# VII. Coordination, Consistency, and Public Participation

This draft document was available for review through announcement in the Federal Register and local news media. During the 30 day review period, only one comment letter was received. The State Historic Office also commented on the status of Gold Spring on the NRHP and asked about other cultural resource protection. A letter was received from the Governor's Office responding to the official State of Utah consistency review. These letters are attached to the EA. As a result of these letters, reference to the Gold Spring site has been changed to show the current status on the NRHP. Cultural protection on other sites in the planning unit will be handled on a case-by-case basis using the APD process.

The following geothermal lease holders have been sent a copy of the plan amendment/environmental assessment and asked for their comments:

Republic Geothermal, Inc. 11823 E. Slauson Ave., Ste 1 Santa Fe Springs, CA 90670 Lease # U 25383

Geothermal Power Corporation P.O. Box 1186 Novato, CA 94947 Lease # U 25584 & 26267

Roosevelt Hot Spring 1102 Walker Bank Salt Lake City, UT 84111 Lease # U 29439 & 29442

No comment was received from any of these lease holders.

#### IX. List of Preparers

The document was prepared from the Pinyon Management Framework Plan and other planning documents which were produced by an interdisciplinary team. Review of this amendment was accomplished by District and Area resource specialists representing range, wildlife, watershed, recreation, lands, socio-economics, cultural, and mineral resources. Pete Wilkins, the District Planning Coordinator, is the author of the document.

#### UNITED STATES DEPARTMENT OF THE INTERIOR **BUREAU OF LAND MANAGEMENT**

GEOTHERMAL	RESOURCES LEASE
Competitive	Noncompetitive

rial Number		
GS - KGRA	Determination	:
do - KUKA	Determination	•

In consideration of the terms and conditions contained herein, and the grant made hereby, this lease is entered into by the UNITED STATES OF AMERICA (hereinafter called the "Leasor"), acting through the Bureau of Land Management (hereinafter called the "Bureau") of the Department of the Interior (hereinafter called the "Department"), and

thereinafter called the

This lease is made pursuant to the Geothermal Steam Act of 1970 (84 Stat. 1566; 30 U.S.C. 1001-1025) (hereinafter called "the Act") to be effective on herein after called "the provisions of the Act and to all the terms, conditions, and requirements of (a) all regulations promulgated by the Secretary of the Interior (hereinafter called "the Secretary") in existence upon the effective date, specifically including, but not limited to, 43 CFR Parts 3000 and 3200 and 320 CRR Parts 2700 and 271, (b) all geothermal resources operational orders (hereinafter called "GRO orders") issued pursuant thereto, all of which are incorporated herein and by reference made a part hereof, and (c) any regulations hereafter issued by the Secretary (except those inconsistem with any specific provisions of this lease other than regulations incorporated herein by reference) all of which shall be, upon their effective date, incorporated herein and, by reference, made a part hereof.

Sec. 1. GRANT - The Lessor hereby grants and leases to the Lessee the exclusive right and privilege to drill for, extract, produce, remove, utilize, sell, and dispose of geothermal steam and associated geothermal resources, (hereinafter called "geothermal resources"), in or under the following described lands situated within the County of

National Resource Lands			Acquired Lands				
T.	; R.	;	Meridian	T.	; R.	;	Meridian
	Total A	rea			Total Area		
	2 0000 110	· <del></del>			I Dia I nica		

Containing acres (hereinafter called the "leased area" or "leased lands"), together with:

(a) The nonexclusive right to conduct within the leased area geological and geophysical exploration in accordance with applicable regulations; and

(b) The right to construct or erect and to use, operate, and maintain within the leased area, together with ingress and egress thereupon all wells, pumps, pipes, pipelines, buildings, plants, sumps, brine pits, reservoirs, tanks, waterworks, pumping stations, roads, electric power generating plants, transmission lines, industrial facilities, electric, telegraph or telephone lines, and such other works and structures and to use so much of the surface of the land as may be necessary or reasonably convenient for the production, utilization, and processing of geothermal resources or to the full enjoyment of the rights granted by this lease, subject to compliance with applicable leaws and regulations; Provided that, although the use of the leased area for an electric power generating plant or transmission facilities or a commercial or industrial facility is authorized hereunder, the location of such facilities and the terms of occupancy therefor shall be under separate instruments issued under any applicable laws and regulations; and

(c) The nonexclusive right to drill potable water wells in accordance with state water laws within the leased area and to use the water produced therefrom for operations on the leased lands free of cost, provided that such drilling and development are conducted in accordance with procedures approved by the Supervisor of the Geological Survey (hereinafter called "Supervisor"); and

(d) The right to convert this lease to a mineral lease under the Mineral Leasing Act of February 25, 1920, as amounted the supervisor of the conducted the conducted the conducted of the conducted of the conducted of the conducted of the conducted of the conducted of the conducted of the conducted of the conducted of the conducted of the conducted of the conducted of the cond

(d) The right to convert this lease to a mineral lease under the Mineral Lessing Act of February 25, 1920, as amended, and supplemented (30 U.S.C. 181-287) or under the Mineral Leasing Act for Acquired Lands (30 U.S.C. 351-359), whichever is appropriate, if the leasehold is primarily valuable for the production of one or more valuable by-products which are leasable under those statutes, and the lease is incapable of commercial production or multization of geothermal steam: Provided that, an application is made therefor prior to the expiration of the lease extension by reason of by-product production as hereinsiter provided, and subject to all the terms and conditions of said appropriate Acts. The Lease is also granted the right to locate mineral deposits under the mining laws (30 U.S.C. 21-54), which would constitute by-products if commercial production or utilization of geothermal steam continued, but such a location to be valid must be completed within ninety (90) days after the termination of this lease. Any conversion of this lease to a mineral lease or a mining claim is contingent on the availability of such lands for this purpose at the time of the conversion. If the lands are witherawn or agency on the such as the partner or agency, the mineral lease or mining claim shall be subject to such additional terms and conditions as may be prescribed by such Department or agency for the purpose of making operations thereon commistent with the purposes for which these lands are administered, and

Department or signify lot the purpose of the purpose of the purpose of the leased lands geothermal resources and conintered; and

(e) The right, without the payment of royalties hereunder, to reinject into the leased lands geothermal resources and condensates to the extent that such resources and condensates are not utilized, but their reinjection is necessary for operations under
this lease in the recovering or processing of geothermal resources. If the Lessee, pursuant to any approved plan, disposes of the
unusable brine and produced waste products into underlying formations, he may do so without the payment of royalties.

Sec. 2. TERM

(a) This lease shall be for a primary term of ten (10) years from the effective date and so long thereafter as geothermal steam is produced or utilized in commercial quantities but shall in no event continue for more than forty (40) years after the end of the primary term. However, if at the end of that forty-year perhod geothermal steam is being produced or utilized in commercial quantities, and the leased lands are not needed for other purposes, the Lease shall have a preferential right to a renewal of this lease for a second forty-year term in accordance with such terms and conditions as the Leasor deems appropriate.

(b) If actual drilling operations are commenced on the leased lands or under an approved plan or agreement on behalf of the leased lands prior to the end of the primary term,

and are being diligently prosecuted at the end of the primary term, this lease shall be extended for five (5) years and so long thereafter, but not more than thirty-five (35) years, as geothermal steam is produced or utilized in commercial quantities. If at the end of such extended term geothermal steam is being produced or utilized in commercial quantities, the Leasee shall have a preferential right to a renewal for a second term as in (a) above.

(c) If the Leasor determines at any time after the primary term that this lease is incapable of commercial production and utilization of geothermal steam, but one or more valuable by-products are or can be produced in commercial quantities, this lease shall be extended for so long as such by-products are produced in commercial quantities but not for more than five (5) years from the date of such determination.

Sec. 3. RENTALS AND ROYALTIES
(a) Annual Renial — For each lease year prior to the commencement of production of geothermal resources in commercial quantities on the leased lands, the Lease shall pay the Leasor on or before the anniversary date of the lease e rental of \$

- a rental of \$ for each acre or fraction thereof.

  (b) Escalating Rental Beginning with the sixth lease year and for each year thereafter until the lease year beginning on or after the commencement of production of geothermal resources in commercial quantities, the Leasee shall pay on or before the anniversary date of the lease an escalated rental in an amount per acre or fraction thereof equal to the rental per acre for the preceding year and an additional sum of one (1) dollar per acre or fraction thereof. If the lease is extended beyond ten (10) years for reasons other than the commencement of production of geothermal resources in commercial quantities, the rental for the eleventh year and for each lease year thereafter until the lease year beginning on or after the commencement of such production will be the amount of rental for the tenth lease year. If any expenditures are made in any lease year for diligent exploration on the leased lands in excess of the minimum required expenditures for that year, the excess may be credited against any rentals in excess of \$ per acre or fraction
- in excess of \$ per acre or fraction thereof due the Lessor for that or any future year.

  (c) Royalty On or before the last day of the calendar month after the month of commencement of production in commenced the sense of commencements. mercial quantities of geothermal resources and thereafter on a monthly basis, the Lessee shall pay to the Lessor:
- (1) A royalty of percent on the amount or value of steam, or any other form of heat or other associated energy produced, processed, removed, sold, or utilized from this lease or reasonably susceptible to sale or utilization
- (2) A royalty of percent of the value of any by-product derived from production under this lease, produced, processed, removed, sold, or utilized from this lease or reasonably susceptible of sale or utilization by the Leasee, except that as to any by-product which is a mineral named in Sec. 1 of the Mineral Leasing Act of February 25, 1920, as amended, (30 U.S.C. 181), the rate of royalty for such mineral shall be the same as that provided in that statute and the maximum rate of royalty for such mineral shall not record the extraction of the statute and the maximum rate of royalty for such mineral shall not exceed the maximum royalty applicable under that statute
- (3) A royalty of percent of the value of commercially demineralized water which has been produced from the leased lands, and has been sold or utilized by the Lease or is reasonably susceptible of sale or utilization by the Lease. In no event shall the Lease pay to the Leasor, for the lease year beginning on or after the commencement of production in commercial quantities on the leased lands or any subsequent lease year, a royalty of leas than two (2) dollars per acre or fraction thereof. If royalty paid on production during the lease year has not satisfied this requirement, the Lease shall pay the difference on or before the expiration due to the lease year for which it is paid.

  (d) Waiver and Suspension of Rental and Royalties—Rentals or royalties may be waived, suspended, or reduced pursuant to the applicable regulations on the entire leasehold or any portion thereof in the interest of conservation or for the purpose of encouraging the greatest ultimate recovery of geothermal resources if the Leasor determines that it is necessary to do so to promote such development, or because the lease cannot be successfully operated under the terms fixed herein.

(e) Undivided Fractional Interests - Where the interest of the Lessor in the geothermal resources underlying any tract or tracts described in Sec. 1 is an undivided fractional interest, the rentals and royalties payable on account of each

interest, the rentels and royalties payable on account of each such tract shall be in the same proportion to the rentals and royalties provided in this lease as the individual fractional interest of the Lessor in the geothermal resources underlying such tract is to the full fee interest.

(f) Readjustments - Rentals and royalties hereunder may be readjusted in accordance with the Act and regulations to rates not in excess of the rates provided therein, and at not less than twenty (20) year intervals beginning thirty-five (35) years after the date geothermal steam is produced from the lease as determined by the Supervisor.

- the lease as determined by the Supervisor.

  Sec. 4. PAYMENTS It is expressly understood that the Secretary may establish the values and minimum values of geothermal resources to compute royalities in accordance with the applicable regulations. Unless otherwise directed by the Secretary, all payments to the Lessor will be made as required by the regulations. If there is no well on the leased lands capable of producing geothermal resources in commercial quantities, the failure to pay rental on or before the anniversary date shall cause the lease to terminate by operation of law except as provided by Sec. 3244.2 of the regulations. If the time for payment falls on a day on which the proper office to receive payment is closed, payment shall be deemed to be made on time if made on the next official working day.
- Sec. 5. BONDS The Lessee shall file with the Authorized Officer of the Bureau (hereinafter called the "Authorized Officer") shall maintain at all times the bonds required under Officer") shall maintain at all times the bonds required under the regulations to be furnished as a condition to the issuance of this lease or prior to entry on the leased lands in the amounts established by the Lessor and to furnish such addi-tional bonds or security as may be required by the Lessor upon entry on the lands or after operations or production have begun.

Sec. 6. WELLS
(a) The Lessee shall drill and produce all wells necessary to protect the lessed land from drainage by operations on lands not the property of the Lessor, or other lands of the Lessor lessed at a lower royalty rate, or on lands as to which royalties and rentals are paid into different funds from those

- into which royalties under this lease are paid. However, in lieu of any part of such drilling and production, with the consent of the Supervisor, the Leaser may compensate the Leasor in full sech month for the estimated loss of royalty through drainage in the amount determined by said Supervisor.

  (b) At the Leaser's election, and with the approval of the Supervisor, the Leasee shall drill and produce their wells in conformity with any system of well specing or production silotenents affecting the field or area in which the leased lands are situated, which is authorized by applicable law.

  (c) After due notice in writing, the Leasee shall diligently drill and produce such wells as the Supervisor shall require so that the leased lands may be properly and timely developed and for the production of geothermal steam and its by-products, including commercially demineralized water for beneficial uses in accordance with applicable state laws. However, the Supervisor may waive or modify the requirements of this subparagraph (c) in the interest of conservation of natural resources or for economic feasibility or other reasons satisfactory to him. If the products or by-products of geothermal production from wells drilled on this lease are susceptible of producing commercially demineralized water for beneficial uses, and a program therefor is not initiated with due diligence, the Leasor may at its option elect to take such products or by-products and the Leasee's materially deliver all or any portion thereof to the Lease at any point in the Leasee's geothermal gathering or disposal system without cost to the Leasee, if the Leasee's activities, under the lease, would not be impaired and such delivery would otherwise be consistent with field and operational requirements. The retention of this option by the Leasor shall in no way relieve the Lease from the duty of producing commercially demineralized water where required to do so by the Leasor, except when the option is being exercised and then only with respect to wells wher
- Sec. 7. INSPECTION The Lessee shall keep open at all reasonable times for the inspection of any duly authorized representative of the Lessor the lessed lands and all wells, improvements, machinery, and fixtures thereon and all production reports, maps, records, books, and accounts relative to operations under the lesse, and well logs, surveys, r investigations of the lessed lands.
- Sec. 8. CONDUCT OF OPERATIONS The Lessee shall conduct all operations under this lesse in a workmanlike manner and in accordance with all applicable statutes, regulations, and GRO orders, and all other appropriate directives of the Lessor to prevent bodily injury, danger to life or heatth, or property damage, and to avoid the waste of resources, and shall comply with all requirements which are set forth in 43 CFR Group 3200, including, but not limited to, Subpart 3204, or which may be prescribed by the Lessor pursuant to the regulations, and with the special stipulations which are attached to the lesse, all of which are specifically incorporated into this lesse. A breach of any term of this lesse, including the stipulations attached hereto, will be subject to all the provisions of this lesse with respect to remedies in case of default. Where any stipulation is inconstatent with a regular provision of this lesse, the stipulation shall govern. Sec. 8. CONDUCT OF OPERATIONS - The Lessee shall

- Sec. 9. INDEMNIFICATION

  (a) The Lessee shall be liable to the Lessor for any damage suffered by the Lessor in any way arising from or connected with the Lessee's activities and operations conducted pursuant to this lesse, except where damage is caused by employees of the Lessor acting within the scope of their authority.
- authority.

  (b) The Lessee shall indemnify and hold harmless the Lessor from all claims arising from or connected with the Lessee's activities and operations under this lesse.

  (c) In any case where liability without fault is imposed on the Lessee pursuant to this section, and the damages involved were caused by the action of a third party, the rules of subrogation shall apply in accordance with the law of the jurisdiction where the damage occurred.
- Sec. 10. CONTRACTS FOR SALE OR DISPOSAL OF PRO-DUCTS—The Lessee shall file with the Supervisor not later than thirty (30) days after the effective date thereof any contract, or evidence of other arrangement for the sale or disposal of geothermal resources.
- Sec. 11. ASSIGNMENT OF LEASE OR INTEREST THEREIN-Sec. 11. ASSIGNMENT OF LEASE OR INTEREST THEREIN— Within ninety (90) days from the date of execution thereof, the Leasee shall file for approval by the Authorized Officer any instruments of transfer made of this lease or of any in-terest therein, including assignments of record title and working or other interests.
- Sec. 12. REPORTS AND OTHER INFORMATION—At such times and in such form as the Lessor may prescribe, the Lessee shall comply with all reporting requirements of the geothermal resources lessing, operating, and unit regulations and shall submit quarterly reports containing the data which it has collected through the monitoring of air, land, and water quality and all other data pertaining to the effect on the environment by operations under the lease. The Lessee shall also comply with such other reporting requirements as may be imposed by the Authorized Officer or the Supervisor. The Lessor may release to the general public any reports, maps, or other information submitted by the Lessee except geologic and geophysical interpretations, maps, or data subject to 30 CFR 270.79 or unless the Lessee shall designate that information as proprietary and the Supervisor or the Authorized Officer shall approve that designation.
- Sec. 13. DILIGENT EXPLORATION In the manner required by the regulations, the Lessee shall diligently explore the lessed lands for geothermal resources until there is production in commercial quantities applicable to this lesse. After the fifth year of the primary term the Lessee shall make at less

the minimum expenditures required to qualify the operations on the leased lands as diligent exploration under the regulations

Sec. 14. PROTECTION OF THE ENVIRONMENT (LAND, AIR AND WATER) AND IMPROVEMENTS — The Lessee shall take all mitigating actions required by the Lessor to prevent: (a) soil erosion or damage to crops or other vegetative cover on Federal or non-Federal lands in the vicinity; (b) the polition of land, air, or water; (c) land subsidence, seismic activity, or noise emissions; (d) damage to seathetic and recreational values; (e) damage to fish or wildlife or their habitats; (f) damage to or removal of improvements owned by the United States or other parties; or (g) damage to or destruction or loss of fossils, historic or prehistoric ruins, or artifacts. Prior to the termination of bond liability or at any other time when required and to the extent deemed nacessary by the Lessor, the Lessee shall reclaim all surface disturbances as required, remove or cover all debris or solid waste, and, so far an possible, repair the offaite and onsite damage caused by his activity or activities incidental thereto, and return access roads or trails and the lessed lands to an acceptable condition including the removal of structures, if required. The Supervisor or the Authorized Officer shall prescribe the steps to be taken by Lessee to protect the surface and the environment and for the restoration of the lessed lands and improvements thereon, whether or not the improvements are owned by the United States. Timber or mineral materials may be obtained only on terms and conditions imposed by the Authorized Officer.

Sec. 15. WASTE — The Lessee shall use all reasonable precautions to prevent waste of natural resources and energy, including geothermal resources, or of any minerals, and to prevent the communication of water or brine zones with any oil, gas, fresh water, or other gas or water bearing formations or zones which would threaten destruction or damage to such deposits. The Lessee shall monitor noise, air, and water quality conditions in accordance with any orders of the Super-

Sec. 16. MEASUREMENTS — The Lessee shall gauge or otherwise measure all production, sales, or utilization of geothermal resources and shall record the same accurately in records as required by the Supervisor. Reports on proon, sales, or utilization of geothermal resources shall ubmitted in accordance with the terms of this lease and the regulations.

Sec. 17. RESERVATIONS TO LESSOR -- All rights in the

Sec. 17. RESERVATIONS TO LESSOR — All rights in the leased area not granted to the Lessee by this lease are hereby reserved to the Lessor. Without limiting the generality of the foregoing such reserved rights include:

(a) Disposal — The right to sell or otherwise dispose of the surface of the lessed lands or any resource in the leased lands under existing laws, or laws bereafter enacted, subject to the rights of the Lessee under this lease;
(b) Rights-ol-war — The right to suthorize geological and geophysical explorations on the lessed lands which do not interface with resonance actual exercisions under this

and geophysical explorations on the leased lands which do not interfere with or endanger actual operations under this lease, and the right to grant such easements or rights-of-way for joint or several use upon, through or in the leased area for steam lines and other public or private purposes which do not interfere with or endanger actual operations or facilities constructed under this lease;

(c) Mineral Rights — The ownership of and the right to extract oil, hydrocarbon gas, and helium from all geothermal steam and associated geothermal resources produced from the leased lands;

(d) Casing — The right to acquire the well and casing at the fair market value of the casing where the Leasee finds only potable water, and such water is not required in lease operations; and

(e) Measurements — The right to measure geothermal

(e) Measurements — The right to measure geothermal resources and to sample any production thereof.

Sec. 18. ANTIQUITIES AND OBJECTS OF HISTORIC VALUE — The Lessee shall immediately bring to the attention of the Authorized Officer any antiquities or other objects of historic or actentific interest, including but not limited to historic or prehistoric ruins, fossils, or artifacts discovered as a result of operations under this lesse, and shall leave such discoveries intact. Failure to comply with any of the terms and conditions imposed by the Authorized Officer with regard and conditions imposed by the Authorized Officer with regard to the preservation of antiquities may constitute a violation of the Antiquities Act (16 U.S.C. 431-433). Prior to operations, the Lessee shall furnish to the Authorized Officer a certified statement that either no archaeological values exist or that they may exist on the lessed lands to the best of the of the Lessee's knowledge and belief and that they might be impaired by geothermal operations. If the Lessee furnishes a statement that archaeological values may exist where the land is to be disturbed or occupied, the Lessee will engage a qualified archaeologist, acceptable to the Authorized Officer, to survey and salvage, in advance of any operations, such archaeological values on the lands involved. The responsibility for the cost for the certificate, survey, and salvage will be borne by the Lensee, and such aslvaged property shall remain the property of the Lessor or the surface owner.

19. DIRECTIONAL DRILLING -Sac. 19. DIRECTIONAL DRILLING — A directional well drilled under the leased area from a surface location on nearby land not covered by the lease shall be deemed to have the same effect for all purposes of this lease as a well drilled from a surface location on the leased area. In such circumstances, drilling shall be considered to have been commenced on the nearby land for the purposes of this lease, and production of geothermal resources from the leased area through any directional well located on nearby land, or drilling or reworking of any such directional well shall be considered production or drilling or reworking operations (as the case may be) on the leased area for all purposes of this lease. Nothing contained in this section shall be construed as granting to the Lesser any right in any land outside the

Sec. 20. OVERRIDING ROYALTIES — The Lessee shall not create overriding royalities of less than one-quarter (1/4) of one percent of the value of output nor in excess of 50 percent of the rate of royality due to the Lessoe specified in Sec. 3 of this lesse except as otherwise authorized by the regulations. The Lessee expressly agrees that the creation of any overriding royality which does not provide for a prorated reduction of all overriding royalities so that the aggregate rate of royalities does not exceed the maximum rate permissible under this section, or the feilure to suspend an overriding royality during any period when the royalities due to the Lessor have been suspended pursuant to the terms of this lesse, shall been suspended pursuant to the terms of this lease, shall constitute a violation of the lease terms.

See. 21. READJUSTMENT OF TERMS AND CONDITIONS Sec. 21. READJUSTMENT OF TERMS AND LUMBITUMS — The terms and conditions of this lease other than those related to rentals and royalties may be readjusted in accordance with the Act at not less than ten-year intervals beginning ten (10) years after the date geothermal steam is produced from the leased premises as determined by the Supervisor.

Sec. 22. COOPERATIVE OR UNIT PLAN — The Lessee agrees that it will on its own, or at the request of the Lessor where it is determined to be necessary for the conservation of the resource or to prevent the waste of the resource, subscribe to and operate under any reasonable cooperative or unit plan for the development and operation of the area, issid, or pool, or part thereof embracing the lands subject to this lesse as the Secretary may determine to be practicable and necessary or advisable in the interest of conservation. In the event the lessed lands are included within a mait, the terms of this lesse shall be deemed to be modified to conform to such unit agreement. Where any provision of a cooperative or unit plan of development which has been approved by the Secretary, and which by its terms affects the lessed area or any part thereof, is inconsistent with a provision of this lesse, the provisions of such cooperative or unit plan shall govern.

Sec. 23. RELINQUISHMENT OF LEASE - The Lessee may Sec. 23. RELINQUISHMENT OF LEASE — The Lessee may relinquish this entire lease or any officially designated subdivision of the lessed area in accordance with the regulations by filing in the proper BLM office a written relinquishment, in triplicate, which shall be effective as of the date of filing. No relinquishment of this lease or any portion of the leased area shall relieve the Lessee or its surety from any liability for breach of any obligation of this lease, including the obligation to make payment of all accrued rentels and royaltzes and to place all wells in the lessed lands to be relinquished in condition for suspension or absendonment, and to protect or restore substantially the surface or subsurface resources in a manner satisfactory to the Lessor.

24. REMOVAL OF PROPERTY ON TERMINATION OR

Sec. 24. REMOVAL OF PROPERTY ON TERMINATION OR EXPIRATION OF LEASE

(a) Upon the termination or expiration of this lease in whole or in part, or the relinquishment of the lease in whole or in part, as herein provided, the Leasee shall within a period of ninety (90) days (or auch longer period as the Supervisor may authorize because of adverse climatic conditions) thereafter remove from the leased lands, no longer subject to the lease all structures, machinery, equipment, tools, and materials in accordance with applicable regulations and orders of the Supervisor. However, the Leasee shall, for a period of not more than six (6) months, continue to main-

and orders of the Supervisor. However, the Lessee shall, for a period of not more than six (6) months, continue to maintain any such property needed in the relinquished area, as determined by the Supervisor, for producing wells or for drilling or producing geothermal resources on other leases.

(b) Any structures, machinery, equipment, tools, appliances, and materials, subject to removal by the Lessee, as provided above, which are allowed to remain on the leased lands shall become the property of the Leasor on expursion of the 90-day period or any extension of that period which may be granted by the Supervisor. If the Supervisor directs the Lessee to remove such property, the Lessee shall do so at its own expense, or if it fails to do so within a reasonable period, the Lessor may do so at the Lessee's expense.

Sec. 25. REMEDIES IN CASE OF DEFAULT

(a) Whenever the Lessee fails to comply with any of the provisions of the Act, or the terms and stipulations of this lesse, or of the regulations issued under the Act, or of any order issued pursuant to those regulations, and that default shall continue for a period of thirty (30) days after service of notice by the Lessor, the Lessor may (1) suspend operations until the requested action is taken to correct the noncompliance, or (2) cancel the lesse in accordance with Sec. 12 of the Act (30 U.S.C. 1011). However, the 30-day notice provision applicable to this lesse under Sec. 12 of the Act shall also apply as a prequisite to the institution of any legal proceedings by the Lessor to cancel this lesse while it is in a producing status. Nothing in this subsection shall be construed to apply to, or require any notice with respect to any legal sction instituted by the Lessor other than an action to cancel the lesse pursuant to Sec. 12 of the Act.

(b) Whenever the Lessee fails to comply with any of the provisions of the Act, or of this lesse, or the regulations, or of any GRO Orders, or other orders, and immediate action is required, the Lessor without waiting for action by the Lessee may enter on the lessed lands and take such measures as it may deem necessary to correct the failure, including a suspension of operations or production, all at the expense of the Lessee.

(c) A waiver of any particular violation of the provisions of the Act or of this lesse, or of any regulations promilerated for the Act or of this lesse, or of any regulations promilerated for the Act or of this lesse, or of any regulations promilerated for the Act or of this lesse, or of any regulations promilerated for the Act or of this lesse, or of any regulations promilerated for the Act or of this lesse, or of any regulations promilerated for the Act or of this lesse, or of any regulations promilerated for the Act or of this lesse.

of the Lessee.

(c) A waiver of any particular violation of the provisions of the Act, or of this lesse, or of any regulations promulgated by the Secretary under the Act, shall not prevent the cancellation of this lesse or the exercise of any other remedy or remedies under paragraphs (a) and (b) of this section by reason of any other such violation, or for the same violation occuring at any other time.

(d) Nothing herein shall limit or affect the Lessee's right to a hearing and appeal as provided in Sec. 12 of the

Act and in the regulations promulgated thereunder.

(e) Upon cancellation, the Lessee shall remove all property in accordance with Sec. 24 hereof, and shall restore the lessed lands in a manner acceptable to the Lessor or as may be otherwise required by the Lessor.

Sec. 26. HEIRS AND SUCCESSORS IN INTEREST — Each obligation bereunder shall extend to and be binding upon, and every benefit hereof shall inure to the heirs, executors, administrators, successors, or assigns, of the respective

Sec. 27. UNLAWFUL INTEREST — No Member of, or Delegate to Congress, or Resident Commissioner, after his election or appointment, either before or after he has quelified, and dwing his continuance in office, and no officer, agent, or employee of the Department shall be admitted to any share or part in this lesse or derive any benefit that may arise therefrom; and the provisions of Sec. 3741 of the Revised Statutes (41 U.S.C. Sec. 22), as amended, and Sections 431, 432, and 433 of Title 18 of the United States Code, relating to contracts made or entered into, or accepted by or on behalf of the United States, form a part of this lesse so far as the same may be applicable. so far as the same may be applicable.

Sec. 28. MONOPOLY AND FAIR PRICES - The Lessor reserves full power and authority to protect the public interest by promulgating and enforcing all orders necessary to insure the sale of the production from the leased lands at reasonable prices, to prevent monopoly, and to safeguard the public interest.

Sec. 29. EQUAL OPPORTUNITY CLAUSE — The Lessee agrees that, during the performance of this contract:

(1) The Lessee will not discriminate against any employee or applicant for employment because of race, color, religion, sex, or national origin. The Lessee will take affirmative action to ensure that applicants are employed, and that employees are treated during employment, without regard to their race, color, religion, sex, or national origin. Such action shall include, but not be limited to the following: employment, upgrading, demotion, or transfer, recruitment or recruitment advertising, layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The Lessee agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided by the Lesser setting the provisions of this Equal Opportunity clause.

(2) The Lessee will, in all solicitations or advertisents for employees placed by or on behalf of the Lessee, ate that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, or national origin.

or national origin.

for employment without regard to race, color, religion, sex, or national origin.

(3) The Lessee will send to each labor union or representative of workers with which Lessee has a collective bargaining agreement or other contract or understanding, a notice, to be provided by the Lessoe, advising the labor union or workers' representative of the Lessee's commitments under this Equal Opportunity clause, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.

(4) The Lessee will comply with all provisions of Executive Order No. 11246 of September 24, 1965, as amended, and of the rules, regulations, and relevant orders of the Secretary of Labor.

(5) The Lessee will furnish all information and reports required by Executive Order No. 11246 of September 24, 1965, as amended, and by the rules, regulations, and orders of the Secretary of Labor, or pursuent thereto, and will permit access to its books, records, and accounts by the Secretary

of the Interior and the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations, and orders.

Istions, and orders.

(6) In the event of the Lessee's noncompliance with the Equal Opportunity clause of this lesse or with any of said rules, regulations, or orders, this lesse may be canceled, terminated or suspended in whole or in part and the Lesse may be declared ineligible for further Federal Government contracts or lesses in accordance with procedures authorized in Executive Order No. 11246 of September 24, 1965, as amended, and such other sanctions as may be imposed and remedies invoked as provided in Executive Order No. 11246 of September 24, 1965, as smended, or by rule, regulation, or order of the Secretary of Labor, or as otherwise provided by law.

(7) The Lessee will include the provisions of Peragraphs (1) through (7) of this Section (29) in every contract, subcontract or purchase order unless exempted by rules, regulations, or orders of the Secretary of Labor issued pursuant to Section 204 of Executive Order No. 11246 of September 24, 1965, as amended, so that such provisions will be binding upon each contractor, subcontractor, or subcontract, or purchase order as the Secretary may direct as a means of enforcing such provisions including senctions for noncompliance; provided, however, that in the event the Lessee becomes involved in, or is threatened with, litigation with a contractor, subcontractor, or worder as a result of such direction by the Secretary, the Lessee may request the Lesse to enter into such litigation to protect the interests Lessor to enter into such litigation to protect the interests

Sec. 30. CERTIFICATION OF NONSEGREGATED FACILITIES — By entering into this lease, the Leasee certifies
that it does not and will not maintain or provide for its employees any segregated facilities at any of its establishments, and that it does not and will not permit its employees
to perform their services at any location, under its control,
where segregated facilities are maintained. The Lessee
agrees that a breach of this certification is a violation of the
Equal Opportunity clause of this lease. As used in this
certification, the term "segregated facilities" means, but is
not limited to, any waiting rooms, work areas, rest rooms and
wash rooms, or restaurants or other eating areas, time clocks,
or locker rooms, and other storage or dressing rooms, parking
lots, drinking fountsins, recreation or entertainment areas,
transportation, and housing facilities provided for employees
which are segregated by explicit directive, or are in fact
segregated on the basis of race, color, religion, or national
origin because of habit, local custom, or otherwise. Lessee
further agrees that (except where it has obtained identical
certifications from proposed contractors and subcontractors
for specific time periods) it will obtain identical certifications
from proposed contractors and subcontractors for specific time periods) the villes; and that it will reven such certifications in its
files; and that it will forward the following certification to
such proposed contractor or subcontractor (except where
the proposed contractor or subcontractor has submitted
identical certifications for reportire time periods); it will
obtain the proposed contractor or subcontractor has submitted
identical certifications for specific time periods); it will such proposed contractors and subcontractors (except where the proposed contractor or subcontractor has submitted identical certifications for specific time periods); it will notify prospective contractors and subcontractors of requirement for certification of nonsegregated facilities. A Certification of Nonsegregated Facilities, as required by the May 9, 1967 Order (32 F.R. 7439, May 19, 1967) on Elimination of Segregated Facilities, by the Secretary of Labor, must be submitted prior to the award of a contract or subcontract exceeding \$10,000 which is not exempt from the provisions of the Equal Opportunity clause. The certification may be submitted either for each contract and subcontract or for all contracts and subcontracts during a period (i.e., quarterly, semiannually, or annually).

Sec. 31. SPECIAL STIPULATIONS - (stipulations, if any, are attached hereto and made a part bereof)

In witness whereof the parties have executed this lease. Lessee:	THE UNITED STATES OF AMERICA, Lesson			
(Signature of Lessee)	By(Authorized Officer)			
(Signature of Lessee)	(Title)			
SEAL] (Date)	(Date)			
	nno +44 - 471			



STATE OF UTAH

OFFICE OF THE GOVERNOR

SALT LAKE CITY

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September 24, 1986

Morgan S. Jensen
District Manager
Bureau of Land Management
Cedar City District
P.O. Box 724
Cedar City, Utah 84720

Dear Mr. Jensen:

NORMAN H. BANGERTER

GOVERNOR

The Resource Development Coordinating Committee has reviewed the Pinyon Planning Unit Amendment for Geothermal Leasing. Other than a need to address the comments submitted to you under separate cover by the Utah Preservation Office, the State approves of the amendment and finds no inconsistencies with state plans, policies, or programs.

The State appreciates the opportunity to conduct this final consistency review.

Sincerely,

Norman H. Bangerter

Governor

NHB/ras