



**U.S. DEPARTMENT OF THE INTERIOR  
Bureau of Land Management**

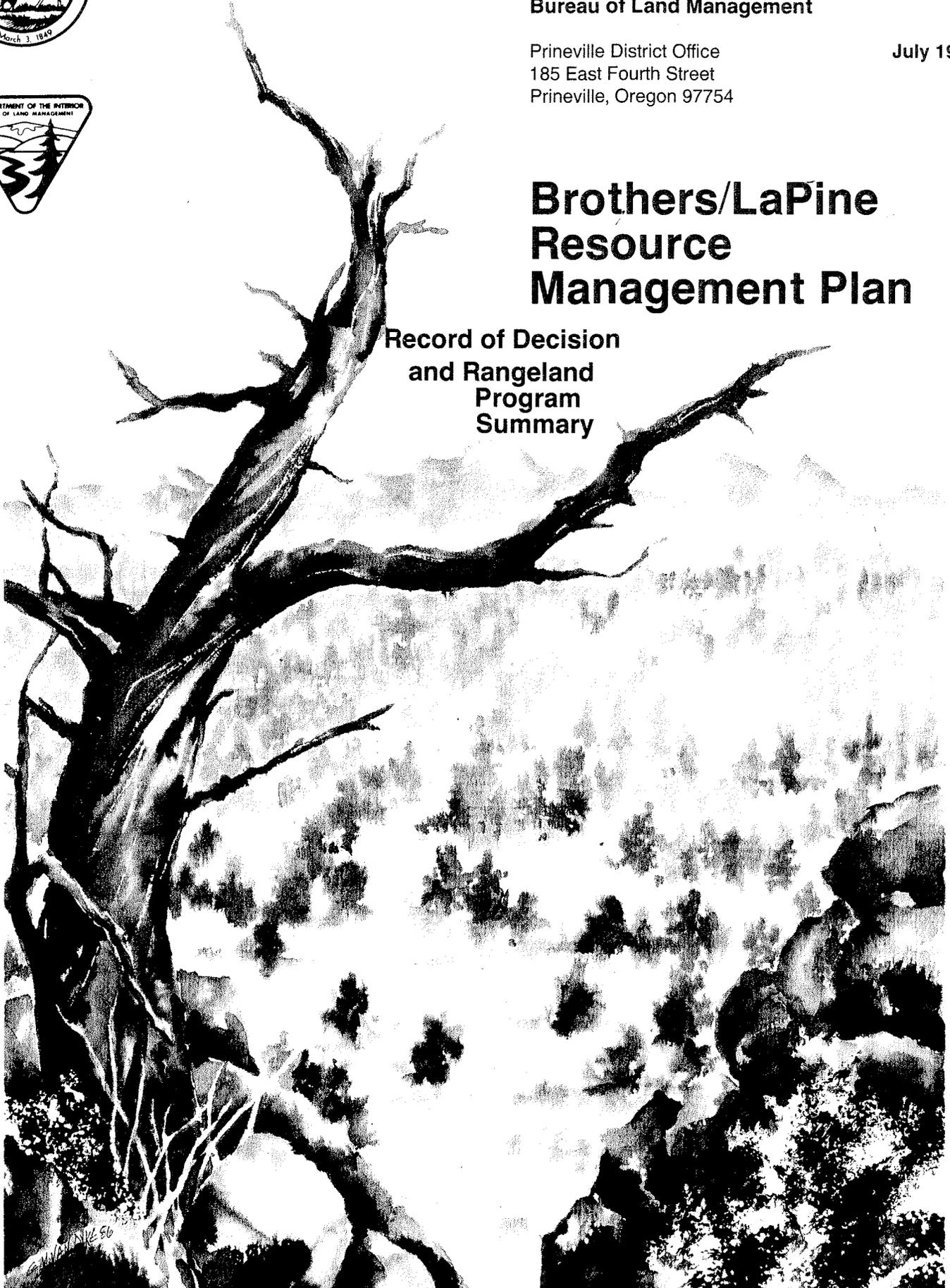
Prineville District Office  
185 East Fourth Street  
Prineville, Oregon 97754

July 1989



# **Brothers/LaPine Resource Management Plan**

**Record of Decision  
and Rangeland  
Program  
Summary**



As the Nation's principal conservation agency, the Department of the Interior has responsibility for most of our nationally owned public lands and natural resources. This includes fostering the wisest use of our land and water resources, protecting our fish and wildlife, preserving the environmental and cultural values of our national parks and historical places, and providing for the enjoyment of life through outdoor recreation. The Department assesses our energy and mineral resources and works to assure that their development is in the best interest of all our people. The Department also has a major responsibility for American Indian reservation communities for people who live in Island Territories under U.S. administration.

**BLM-OR-ES-89-14-2410**



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

# **BROTHERS/LA PINE RESOURCE MANAGEMENT PLAN**

## **RECORD OF DECISION**

### **RANGELAND PROGRAM SUMMARY (RPS)**

Prepared by:

DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT  
PRINEVILLE DISTRICT



## RECORD OF DECISION

### BROTHERS/LA PINE RESOURCE MANAGEMENT PLAN PRINEVILLE DISTRICT, PRINEVILLE, OREGON

This resource management plan documents decisions on 1,111,100 acres of public land administered by the Bureau of Land Management in the Prineville District. Implementation of the decision provides for timber harvest on 41,651 acres with an accelerated harvest level of up to 14 million board feet (MMbf) annually for four years in the LaPine portion; a potential increase in forage allocations for livestock up to 16,000 AUMs in the LaPine portion; management of a herd of 10-25 wild horses and maintenance or improvement of wildlife habitat. A total of 35,454 acres of public land will be considered for sale or exchange over the planning period; approximately 1,000,000 acres will be open to mineral leasing; and cultural soil, water, botanical, visual and recreational resources including wild and scenic rivers will be protected.

#### Alternatives Considered and Rationale for Decision

Six alternatives for managing the public lands in the Brothers/LaPine Planning Area were analyzed in the Resource Management Plan/Environmental Impact Statement (RMP/EIS). The environmental consequences of implementing each of the alternatives were described in detail in chapter 4 of the Draft Brothers/LaPine RMP/EIS. They are summarized in Table 1 of this document.

The selected Resource Management Plan (the Preferred Alternative in the Draft RMP/EIS) emphasizes production on a sustained yield basis and use of the renewable resources on the majority of public lands in the Brothers/LaPine Planning Area. This alternative is the environmentally preferable alternative. This Resource Management Plan best meets national guidance, best satisfies the planning criteria, including consistency with other Federal, State, local and tribal plans and best resolves issues while contributing to the local economy.

The Emphasize Commodity Production and Enhancement of Economic Benefits Alternative would have emphasized economic benefits to the economy through production of goods and services on public lands to meet local and possibly regional demands.

The Continue Existing Management Alternative would have provided for management of all resources at current levels. This is the No Action Alternative required by the National Environmental Policy Act.

The Emphasize Natural Values While Accommodating Commodity Production Alternative would have provided for protection, maintenance and enhancement of the natural environment. The production of commodities would have occurred where significant conflicts with the protection of natural values could be avoided or mitigated.

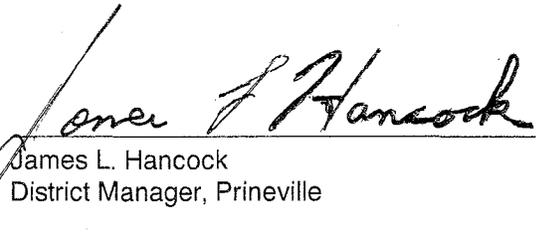
The Emphasize Natural Values Alternative would have enhanced natural values in all areas.

## Mitigation Measures

All protective measures and standard operating procedures identified in the plan will be taken to mitigate adverse impacts. These measures will be strictly enforced during implementation. Monitoring and evaluation will tell how effective these measures are in minimizing environmental impacts. Therefore, additional measures to protect the environment may be taken during or following monitoring.

## District Manager Recommendation

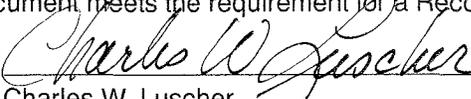
I recommend adoption of the Brothers/LaPine RMP/EIS.

Signed:  Date: 6/30/89  
James L. Hancock  
District Manager, Prineville

## State Director Approval

I approve the Brothers/LaPine RMP/EIS decisions as recommended. Individual grazing decisions will be issued to affected lessees for those allotments where changes are proposed and agreement has not been reached. Those decisions will explain and provide for the protest and/or appeal procedures under 43 CFR 4160 and 43 CFR 4.470.

This document meets the requirement for a Record of Decision as provided in 40 CFR 1505.2.

Signed:  Date: 7/5/89  
Charles W. Luscher  
State Director, Oregon/Washington  
Bureau of Land Management

**Table 1. Summary, Long-term Environmental Consequences: Comparison of Alternatives**

	Alternative A (Commodity Production)	Alternative B (Commodities with Natural Values)	Alternative C <sup>1</sup> (Existing Management)	Alternative D (Preferred)	Alternative E (Natural Values with Commodities)	Alternative F (Natural Values)
Resource						
Air Quality	NC	NC	NC	NC	NC	NC
Soil/Water	-L	-L	NC	+ L	+ L	+ M
Forestland						
Harvest Levels (MMbf)	16-18	12-14	7-9	up to 14	7-9	0
Harvest Period (Years)	6	7	10	4	8	-
Woodland						
Harvest Levels	+ M	NC	NC	NC	NC	-M
Livestock Grazing LaPine Portion Available Forage (AUMs)	19,697	16,000	3,301	16,000	2,996	0
Wild Horses Herd Populations (Number)	0	15	14	25	50	0
Wildlife Habitat	-M	-L	NC	+ L	+ L	-L
Fire Management						
Aggressive suppression (acres)	806,000	706,000	1,000,000	506,000	506,000	206,000
Conditional suppression (acres)	305,000	405,000	111,000	605,000	605,000	905,000
Recreation Use						
Rockhounding	+ H	+ H	NC	+ M	-L	-M
Off Road Vehicles	+ M	+ L	NC	+ L	-L	-M
Open to ORV use (acres)	1,102,360	1,065,961	901,627	833,302	822,002	793,322
ORV Use Limited (acres)	7,000	39,899	204,858	267,076	276,996	302,634
Closed to ORV use (acres)	1,740	5,240	4,615	10,722	12,102	15,144
Millican Valley ORV Area (acres)	85,000	71,000	60,000	65,000	53,000	0
Overall Use	+ M	+ L	NC	+ L	-L	-L
Areas of Critical Environmental Concern						
Protection of Values	+ L	+ L	NC	+ M	+ M	+ H
Areas designated	5	9	1	12	12	12
Acres designated	1,560	35,556	600	36,916	36,916	42,329
Energy and Minerals Availability						
No oil & gas leasing (acres)	600	600	600	600	600	42,329
Open with restrictive stipulations (acres)	0	0	64,000	64,000	364,000	364,000
Open with standard stipulations (acres)	1,110,500	1,110,500	946,000	946,000	746,500	704,771
Reserved Federal Mineral Estate Open With Standard Stipulations	130,570	130,570	130,570	130,570	130,570	130,570
Socioeconomics Overall Value	+ L	+ L	NC	+ L	-L	-L

<sup>1</sup> This alternative depicts the existing situation for the various resource allocations and management actions shown.

+ Enhanced  
- Degraded  
NC No Change

H High  
M Moderate  
L Low

# TABLE OF CONTENTS

Page

<b>Record of Decision</b> .....	<b>i</b>
<b>Chapter 1 Introduction</b> .....	<b>1</b>
Purpose and Need .....	2
Description of the Planning Area .....	2
Implementation .....	7
Valid Existing Rights .....	7
Administrative Actions .....	7
Public Involvement .....	7
Summary of Alternatives .....	8
Environmental Preferability of the Alternatives .....	8
<b>Chapter 2 Brothers/LaPine Resource Management Plan Decisions</b> .....	<b>11</b>
Introduction .....	12
Goal and Objectives of the Plan .....	12
Criteria Used in the Selection of the Plan .....	13
Planned Management Actions Under the Plan .....	15
<b>Lands</b> .....	<b>16</b>
Land Tenure .....	16
Public Access .....	25
Land Sales .....	28
Land Exchanges .....	28
Agricultural Use of Public Land .....	29
Rights-of-Way and Utility and Transportation Corridors .....	29
<b>Forestland and Woodlands</b> .....	<b>34</b>
<b>Recreation</b> .....	<b>45</b>
Off-Road Vehicles .....	45
Rockhounding .....	49
<b>Areas of Critical Environmental Concern</b> .....	<b>52</b>
<b>Wild Horses</b> .....	<b>72</b>
<b>Livestock Grazing</b> .....	<b>74</b>
<b>Wildlife Habitat</b> .....	<b>92</b>
<b>Riparian and Aquatic Habitat</b> .....	<b>98</b>
<b>Fish Habitat</b> .....	<b>98</b>
<b>Fire Management</b> .....	<b>101</b>
<b>Energy and Minerals</b> .....	<b>107</b>
Leasable Minerals .....	107
Locatable Minerals .....	108
Salable Minerals .....	120
Federal Reserved Mineral Estate .....	121
<b>Ongoing Management Programs</b> .....	<b>121</b>
Soil, Water and Air .....	121
Threatened, Endangered or Sensitive Species Habitat .....	121
Wilderness .....	122
Wild and Scenic Rivers .....	122
Visual Resources .....	129

Cultural Resources .....	126
Noxious Weed Control .....	126
Cadastral Survey and Engineering .....	126
Withdrawal Review .....	126
Plan Monitoring, Maintenance and Evaluation .....	130
Management of Newly Acquired Lands .....	133

### List of Maps

1 General Location .....	3
2 Land Status - Brothers Portion .....	4
3 Land Status - LaPine Portion .....	6
4 Land Tenure - Brothers Portion .....	18
5 Land Tenure - LaPine Portion .....	20
6 Public Access Needs - Brothers Portion .....	26
7 Utility/Transportation Corridors - Brothers Portion .....	30
8 Utility/Transportation Corridors - LaPine Portion .....	32
9 Timber Management Areas - Brothers Portion .....	36
10 Timber Management Areas - LaPine Portion .....	38
11 Off-Road Vehicle Designation - Brothers Portion .....	46
12 Millican Valley ORV Area .....	48
13 Rockhounding Areas - Brothers Portion .....	50
14 Areas of Critical Environmental Concern - Brothers Portion .....	54
15 Wild Horse Range - Brothers Portion .....	73
16 Livestock Grazing Allotments - Brothers Portion .....	82
17 Livestock Grazing Allotments - LaPine Portion .....	84
18 Riparian/Wetland Areas and Wildlife Habitat - Brothers Portion .....	94
19 Deer Migration Routes/Riparian Areas - LaPine Portion .....	96
20 Fire Management - Brothers Portion .....	104
21 Fire Management - LaPine Portion .....	106
22 Oil and Gas Potential - Brothers Portion .....	110
23 Geothermal Potential - Brothers Portion .....	112
24 Minerals Management Areas - Brothers Portion .....	114
25 Locatable Minerals Potential - Brothers Portion .....	118
26 Rivers Designated or Eligible for Further Study as National Wild and Scenic Rivers, Brothers Portion .....	124
27 Visual Resources - Brothers Portion .....	128
28 Visual Resources - LaPine Portion .....	130

### List of Tables

1 Summary, Long-Term Environmental Consequences: Comparison of Alternatives .....	iii
2 Public Land Acreage .....	7
3 Land Tenure Zone Acreages by County .....	10
4 Public Lands Potentially Suitable for Disposal .....	21
5 Forestland Management - Brothers Portion .....	35
6 Forestland Management - LaPine Portion .....	35
7 Forestland and Woodland Harvest Levels Under the Plan .....	35

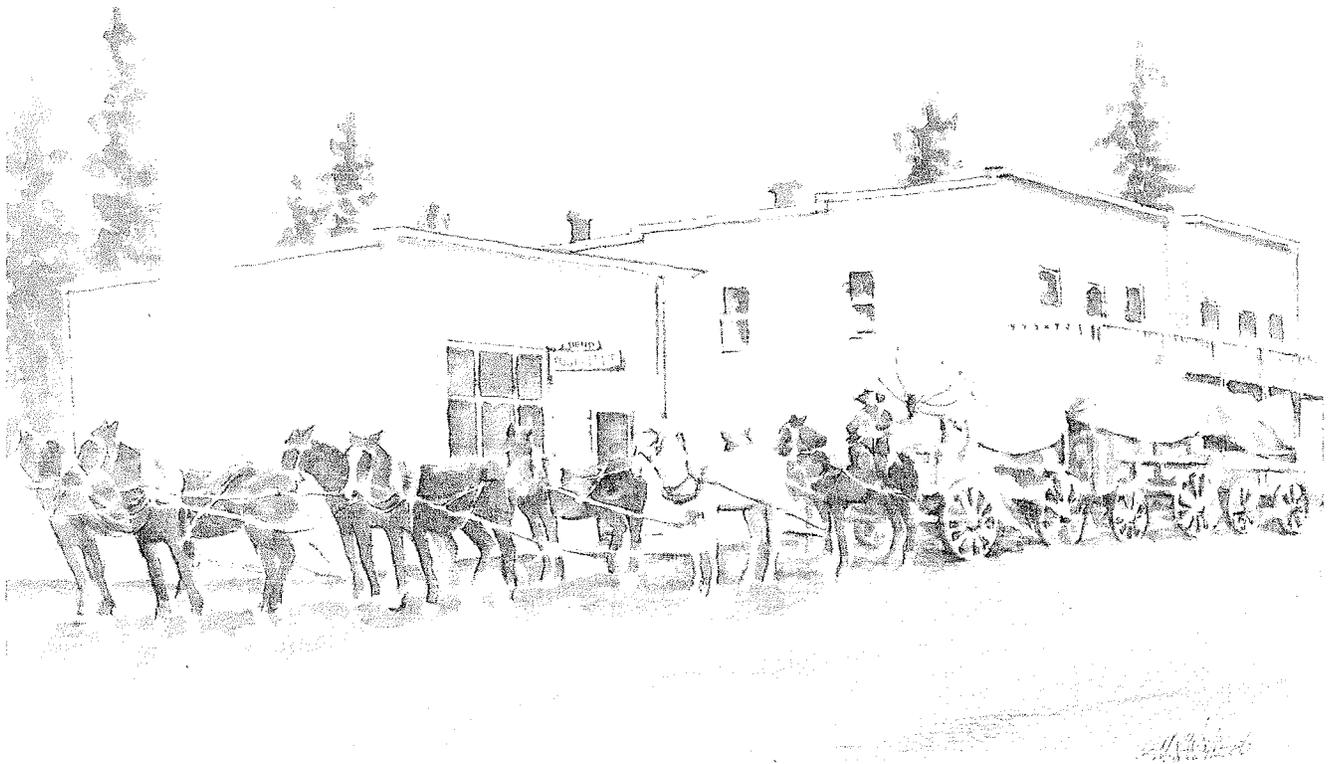
	<b>Page</b>
8 Areas Limited or Closed to Off-Road Vehicle Use Under the Plan .....	45
9 Management of Rockhounding Areas Under the Plan .....	49
10 Areas Designated as Areas of Critical Environmental Concern .....	56
11 Management Direction for Areas of Critical Environmental Concern .....	58
12 Grazing Management Program - Brothers Portion .....	76
13 Status of Rangeland Development Implementation - Brothers Portion ..	80
14 Grazing Allotments by Category - LaPine Portion .....	85
15 Grazing Management Program Under the Plan - LaPine Portion .....	86
16 Wildlife Habitat and Populations - Brothers Portion .....	92
17 Wildlife Habitat and Populations - LaPine Portion .....	92
18 Fish Habitat Conditions and Estimated Trend - Brothers Portion .....	99
19 Conditional Fire Suppression Parameters Under the Plan .....	101
20 Acres Potentially Valuable for Oil and Gas and Geothermal .....	107
21 Acres Potentially Valuable for Locatable Minerals .....	117
22 Rivers Designated or Eligible for Further Study as National Wild and Scenic Rivers .....	123

**List of Figures**

1 Sample Notice of Restrictions for Sensitive Visual Resources .....	109
2 Sample Notice of Special Stipulations .....	109
3 Sample Notice of Restrictions for Wildlife .....	109
4 Process for Changing the RMP .....	132



# Chapter 1. Introduction



Wall Street - Bend, about 1910

# Introduction

This plan contains the decisions on all land use proposals presented in the September 1988 final environmental impact statement (EIS) and describes in general terms the implementation, monitoring and amendment processes for those decisions. It describes how each resource will be managed, the order in which projects will be implemented, and what support will be needed.

The plan does not present information on environmental consequences, rationale, consistency or effects of the management. This information was previously covered in the draft and final EISs which may be obtained by contacting the Prineville District Office.

Wilderness study areas within the planning area will be addressed in the BLM Final Oregon Statewide Wilderness EIS. This analysis involves the Badlands, Cougar Well, Hampton Butte, South Fork, Sand Hollow, Gerry Mountain and North Fork WSAs. Several rivers within the planning area were designated as National Wild and Scenic Rivers in the Oregon Omnibus Wild and Scenic Rivers Bill passed by Congress in October 1988. They include the North Fork of the Crooked River as well as portions of the Crooked and Deschutes Rivers.

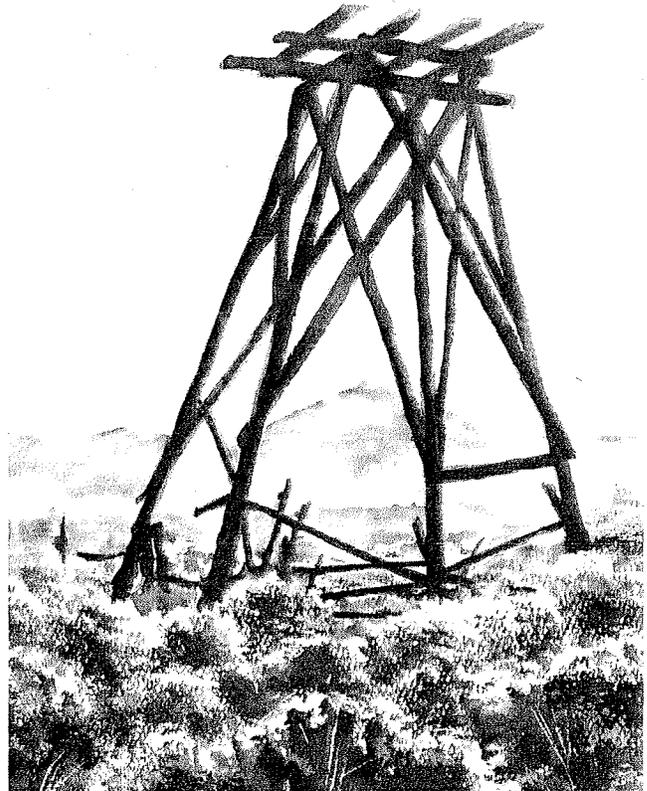
This Brothers/LaPine RMP summarizes and incorporates decisions from the Brothers Grazing Management Rangeland Program Summary (1983) and the Brothers Management Framework Plan (1982) and identifies future program development for other resources in the Brothers portion of the planning area. In addition, it identifies program direction for all resources in the LaPine portion of the planning area.

## Purpose and Need

This plan provides a broad framework for multiple use management on public land within the Brothers/LaPine Planning Area. This plan makes land use allocations, sets broad production goals and protects important resource values.

This plan meets the requirements in the Federal Land Policy and Management Act of 1976 for land use planning (43 CFR, Part 1600).

The plan identified in this document was selected on the basis of input from public meetings and comments



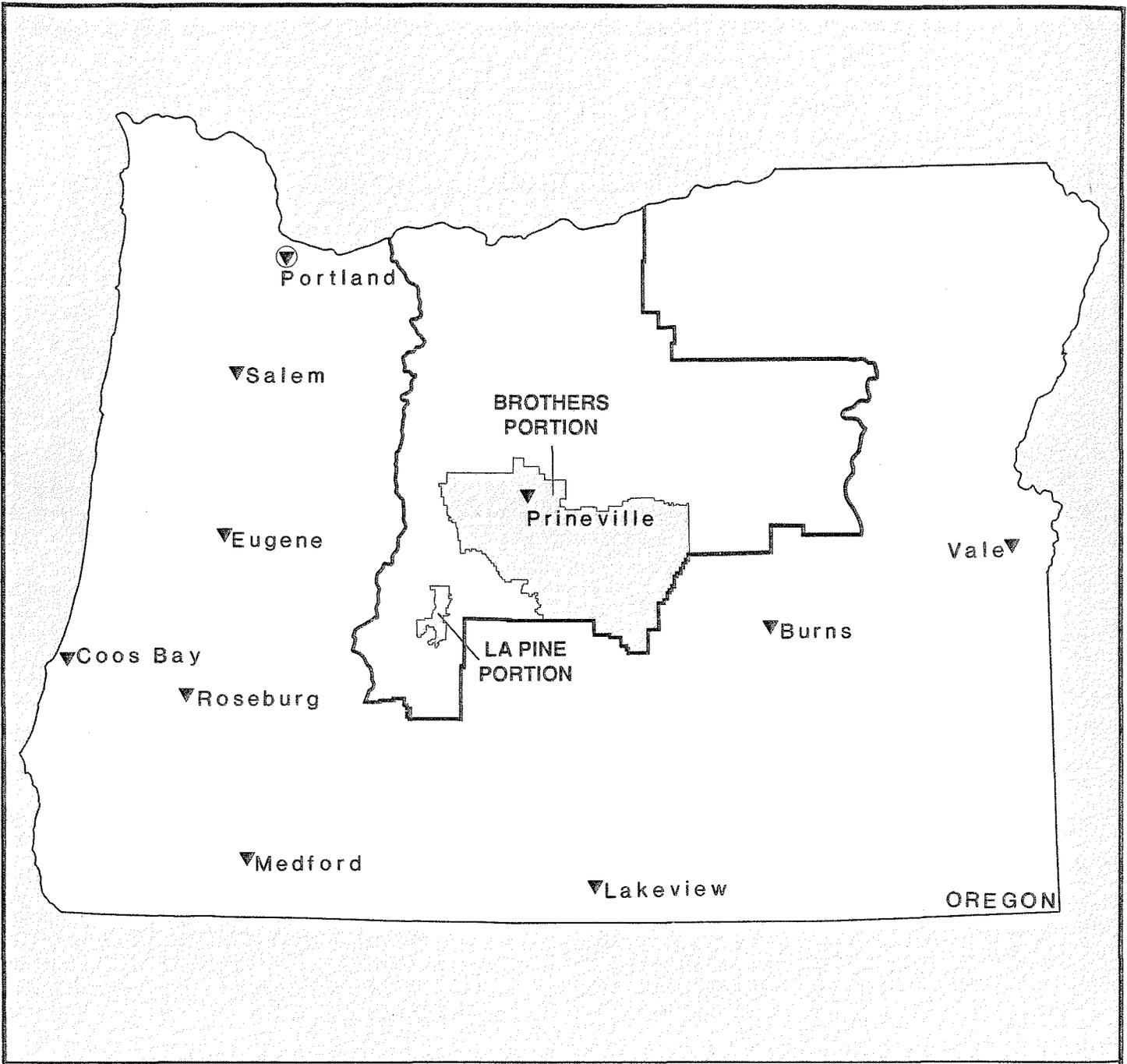
Old Millican Well

made through correspondence, contacts with local governments, suggestions from user groups and staff discussions.

## Description of the Planning Area

This document provides a comprehensive framework for managing public lands and allocating resources in the Brothers/LaPine Planning Area as shown on Map 1 for the next ten to 15 years. It provides the direction and policy for the management of 1,111,100 acres of public land and 130,570 acres of subsurface mineral estate underlying private land where the Bureau of Land Management (BLM) is the administering agency.

Table 2 summarizes public land in the five counties located within the Brothers/LaPine Planning Area.



- ⊙ BLM State Office
- ▼ BLM District Office
- Prineville District Boundary
- Brothers/La Pine Planning Area

U. S. DEPARTMENT OF THE INTERIOR  
Bureau of Land Management

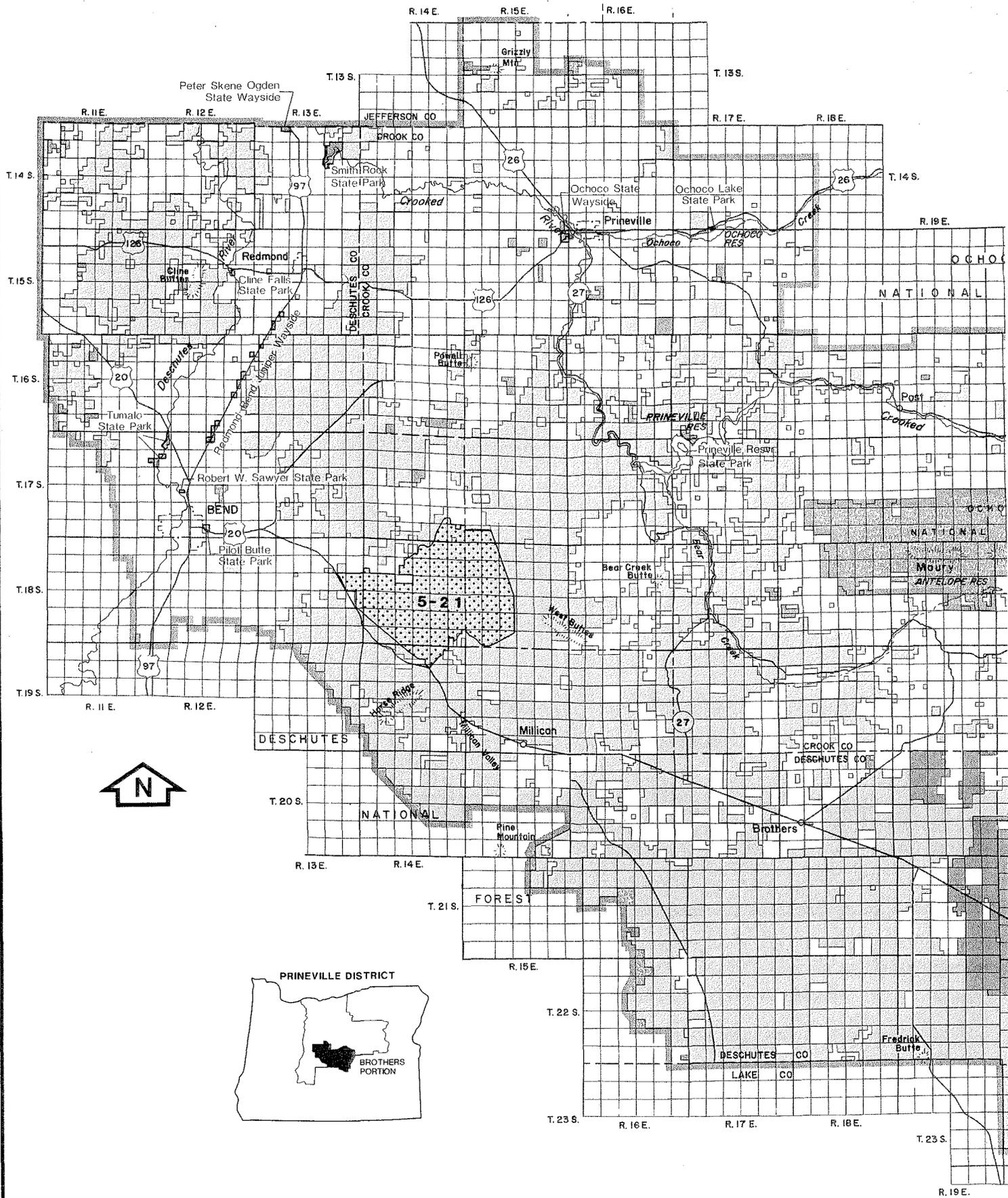
**PRINEVILLE DISTRICT**

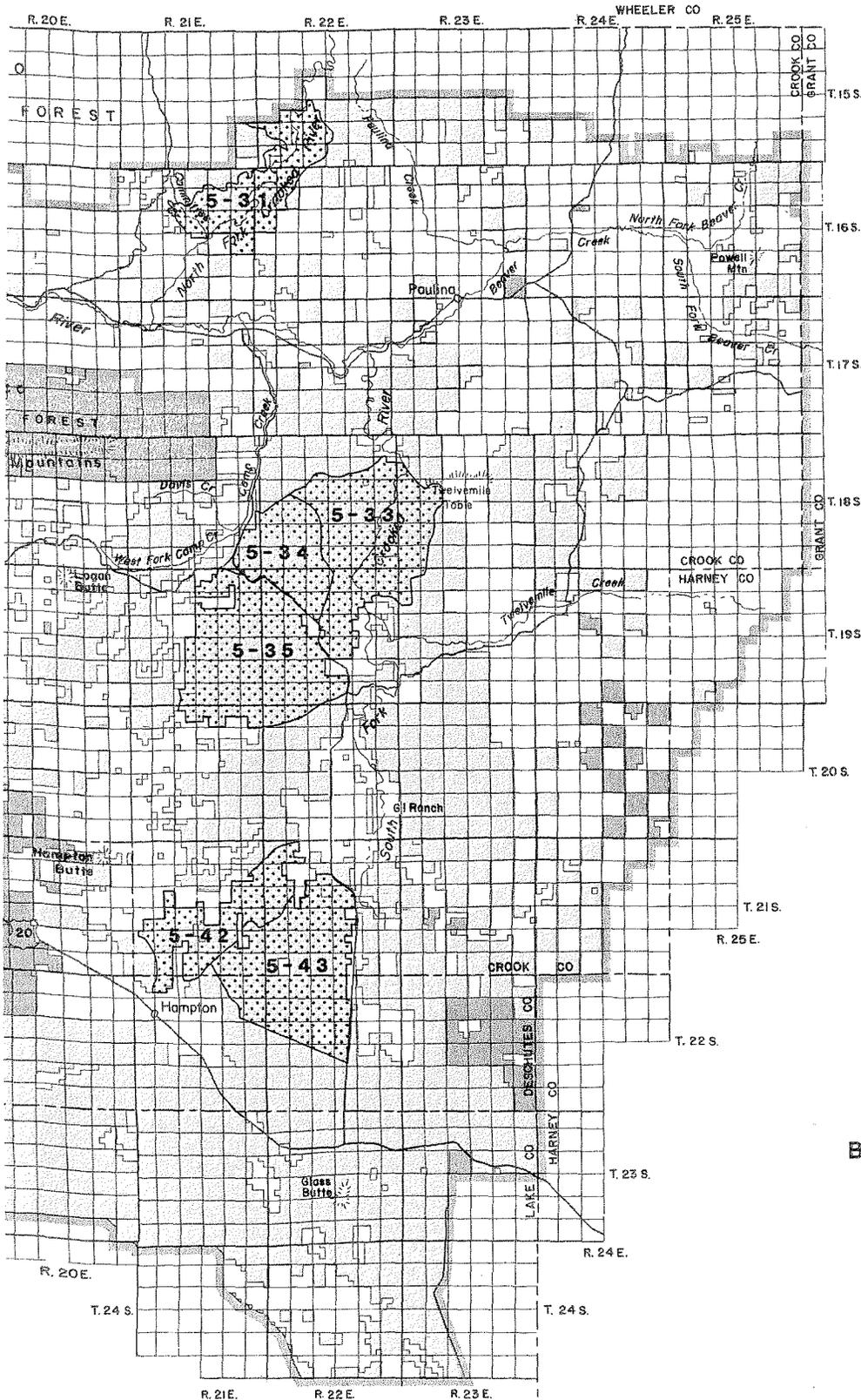
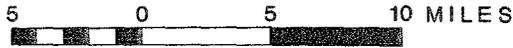
**BROTHERS/LA PINE PLANNING AREA**

MAY 1989

**MAP 1**

**General Location  
Brothers/La Pine Planning Area**





-  BLM Land
-  US Forest Service Land
-  State Land
-  Private Land
-  Wilderness Study Area

- 5-21 Badlands
- 5-31 North Fork
- 5-33 South Fork
- 5-34 Sand Hollow
- 5-35 Gerry Mountain
- 5-42 Hampton Butte
- 5-43 Cougar Well

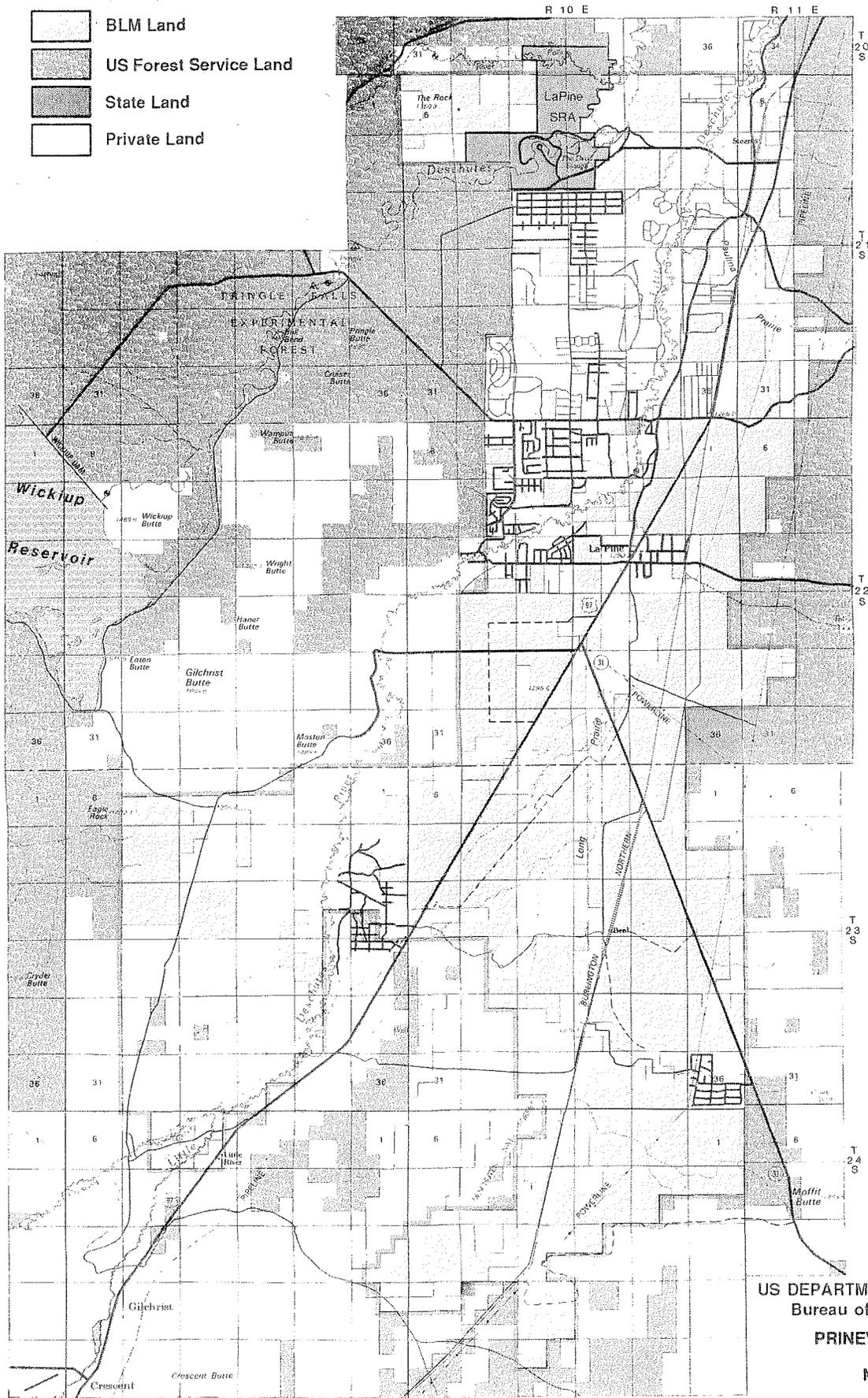
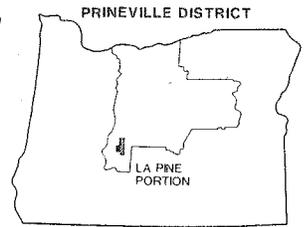
US DEPARTMENT OF THE INTERIOR  
Bureau of Land Management

PRINEVILLE DISTRICT  
MAY 1989  
BROTHERS/LA PINE PLANNING AREA

## MAP 2

### Land Status Brothers Portion

-  BLM Land
-  US Forest Service Land
-  State Land
-  Private Land



US DEPARTMENT OF THE INTERIOR  
Bureau of Land Management  
PRINEVILLE DISTRICT

MAY 1989

BROTHERS/LA PINE PLANNING AREA

**MAP 3**  
**Land Status**  
**La Pine Portion**

1 0 1 2 MILES

**Table 2. Public Land Acreage, Brothers/LaPine Planning Area**

County	Public Land Administered by BLM	Private Surface Federal Subsurface Mineral Estate	Approximate Total Acreage of County
Crook	507,710	108,514	1,914,000
Deschutes	488,427	17,180	1,955,000
Harney	1,080	3,018	6,546,000
Klamath	21,178	0	3,926,000
Lake	92,705	1,858	5,350,000
Total	1,111,100	130,570	19,691,000

The Ochoco, Deschutes and Winema National Forests are the other major Federal lands in the planning area.

The land is located on central Oregon's high desert as shown on Map 2 and in an area concentrated around the town of LaPine as shown on Map 3. The Brothers portion is characterized by juniper and sagebrush with the Deschutes and Crooked River drainages being the primary geographic features in the area. Population is centered in and near Bend, Redmond and Prineville. The LaPine portion is characterized by dense stands of lodgepole pine with occasional mountain meadows. Population is centered in LaPine. The Bureau of Land Management administers this public land from the district office in Prineville, Oregon.

## Implementation

Decisions in this plan will be implemented over a period of years and are tied to the BLM budgeting process. Therefore, priorities have been established for each resource to guide the order of implementation. Priorities for each program will be reviewed annually to help develop the work plan commitments for the coming year. The priorities of implementation are presented by resource in Chapter 2.

## Valid Existing Rights

This plan will not repeal valid existing rights on public lands. Valid existing rights are those claims or rights to public land that take precedence over the actions in this plan. Valid existing rights may be held by other federal agencies or by private individuals or companies. Valid existing rights may pertain to mining claims, oil and gas leases, rights-of-way and water rights.

## Administrative Actions

Various types of administrative actions will require special attention beyond the scope of this plan. Administrative actions are the day-to-day transactions required to serve the public and to provide optimal use of the resources. These actions are in conformance with the plan. They include issuance of permits for fuelwood, sawtimber, Christmas trees and competitive and commercial recreation activities; lands actions, including issuance of grants, leases, permits and resolution of trespass; facility maintenance; law enforcement; enforcement and monitoring of permit stipulations; cadastral surveys to determine legal land ownership; and engineering support to assist in mapping, designing and implementing projects. These and other administrative actions will be conducted at the resource area, district or state level. The degree to which these actions are carried out will be based upon BLM policy, available personnel and funding levels.

## Public Involvement

A notice was published in the Federal Register and local news media in August 1986 to announce the formal start of the RMP/EIS planning process. At that time a planning brochure and the Central Oregon Public Lands map were sent to the public to request assistance in further defining the issues within the planning area. A copy of the Brothers Rangeland Program Summary Update was also sent to help define the existing management direction. An opportunity was provided to submit comments on proposed criteria to be used in formulating alternatives, as well as verify the public acceptance of the Brothers rangeland management direction.

Thirty-nine written responses were received from the mailing. A total of 39 people attended the three public meetings in Prineville, Bend and LaPine on September 9, 10 and 11, 1986.

In March 1987, 466 copies of proposed issues and alternatives booklet were mailed to interested agencies, organizations and individuals. A notice of document availability was also published in the local news media and Federal Register.

On October 5, 1987, a notice of document availability was published in the Federal Register and in local news media for the Draft Brothers/LaPine Resource Management Plan (RMP)/Environmental Impact Statement (EIS). The Draft RMP/EIS was sent to the same mailing list. Public meetings for the purpose of receiving oral and written comments were held in

Prineville, Bend and LaPine on November 2, 4 and 5, 1987. A total of 42 people attended the meetings. A total of 27 written comment letters and 131 copies of two different form letters were received before the end of the comment period on January 4, 1988. These comments were addressed in the final EIS.

On September 30, 1988, the Proposed Brothers/LaPine Resource Management Plan and Final Environmental Impact Statement was released for public review. It was sent to the same mailing list as the Draft RMP/EIS. There were no protests of the proposed decision filed.

## Summary of Alternatives

Six multiple use alternatives for the management of public lands in the Brothers/LaPine Planning Area were developed and analyzed in the Draft Brothers/LaPine RMP/EIS in accordance with the BLM's planning regulations issued under authority of the Federal Land Policy and Management Act of 1976.

The alternatives responded to major issues identified through the planning process. They include management of forestland and woodland, livestock grazing, wild horses, wildlife habitat, fire, recreation, areas of critical environmental concern, minerals and energy resources, as well as land tenure and access. The purpose of the alternatives were to present and evaluate various options for managing, protecting and enhancing public resources.

## Environmental Preferability of the Alternatives

Environmental preferability is judged using the criteria in the National Environmental Policy Act of 1969 (NEPA). Title 1, Section 101(b) of NEPA establishes the following goals:

1. Fulfill the responsibilities of each generation as trustee of the environment for succeeding generations;
2. Assure for all Americans a safe, healthful, productive and esthetically and culturally pleasing surroundings;

3. Attain the widest range of beneficial uses of the environment without degradation, risk to health or safety, or other undesirable and unintended consequences;
4. Preserve important historic, cultural and natural aspects of our national heritage, and maintain, wherever possible, an environment which supports a diversity and variety of individual choice;
5. Achieve a balance between population and resource use which will permit high standards of living and a wide sharing of life's amenities; and
6. Enhance the quality of renewable resources and approach the maximum attainable recycling of depletable resources.

The Preferred Alternative in the EIS ranked first in overall environmental preferability. It was considered to be in compliance with all NEPA goals, especially goals 1, 3, 5 and 6. The Preferred Alternative was followed by the Emphasize Natural Values While Accommodating Commodity Production Alternative (Alternative E). The Emphasize Natural Value Alternative (Alternative F) followed Alternative E in environmental preferability. While alternatives E and F were in greater compliance with goal 2 than the Preferred Alternative, they did not comply as well with goals 5 and 6.

The Emphasize Commodity Production and Enhancement of Economic Benefits Alternative (Alternative A) was in greatest compliance with goal 6 and to a lesser degree goals 1 and 5 because of its emphasis on economic and commodity production. The Continue Existing Management or No Action Alternative (Alternative C) was in compliance with goals 2 and 4 because it maintains current conditions. This alternative was not in compliance with goals 1, 3, 5 and 6 since it makes no attempt to enhance environmental quality of diversity and does not improve social or economic well being.



Antelope running free on high desert near Brothers.



# Chapter 2 Brothers/LaPine Resource Management Plan Decisions



Main Street — Redmond, in 1915

# Introduction

This chapter describes the plan, which provides a middle ground or balance between the protection of fragile and unique resources and the production and development of renewable and non-renewable resources. Management actions were selected on the basis of their ability to resolve the issues raised during the planning process, satisfy planning criteria and public input, mitigate environmental consequences and provide for the best management of public land resources in the planning area.

The plan is patterned after the Preferred Alternative identified in the Draft Brothers/La Pine Resource Management Plan and Environmental Impact Statement (RMP/EIS). As a result of public comment and additional data becoming available, revisions of the preferred alternative occurred as follows:

1. Proposed average annual timber harvest levels in the LaPine portion have been increased from 7-9 million board feet over a 7 year harvest period to up to 14 million board feet per year for approximately a 4 year period.
2. The wild horse herd will be retained and managed for a herd size of from 10 to 25 animals, rather than completely removing them from the areas they now roam.

Approval of the RMP marks the completion of one stage of the planning process. The RMP is not a final implementation decision on actions which require further more detailed program management plans under specific provisions of law and regulations. More site specific plans such as recreation area management plans, will be done through the resource activity programs. Procedures and methods for accomplishing the objectives of the RMP will be developed through the activity plan. Further environmental analyses will be conducted and additional engineering and other studies or project plans done if needed.

## Goal and Objectives of the Plan

### Goal:

Provide for commodity production while protecting natural values.

### Objectives:

1. Harvest up to 14 MMbf annually from 1,500 to 2,000 acres in the LaPine portion. When the beetle-killed timber stands have been harvested (approximately 4 years), timber management will again be based on the productive capacity of the land. Once the beetle-killed mature and over mature stands have been salvaged, no commercial timber harvest other than periodic salvage, is expected to occur in the LaPine portion for 30 to 40 years.
2. Allocate up to 16,000 AUMs in the LaPine portion. Construct 98 miles of fence and 14 waterholes if operators assume development expense. Implement intensive grazing management systems while protecting riparian and other sensitive areas.
3. Manage for an average herd size of 15 animals with lower limits of 10 and upper limits of 25 animals. Exclude horses from 2,000 acres in the South Fork of the Crooked River Canyon to protect riparian values. Allocate 300 AUMs to wild horses. Allow wild horses to roam a 25,000 acre area.
4. Provide optimum habitat diversity for game and non-game wildlife species. Meet ODFW management objective numbers for deer and elk.
5. Provide aggressive suppression for 506,000 acres (values at risk classes 4 to 6). Designate 605,000 acres as conditional suppression areas.  
  
Use prescribed fire to meet management objectives throughout the planning area.
6. Limit ORV use on 266,556 acres; close 11,242 acres to ORV use. Remaining 833,302 acres open to ORV use. Expand Millican Valley ORV use area to 65,000 acres.
7. Manage 51,280 acres (10 high to moderate quality areas) for rockhounding and propose the Secretary of Interior withdraw 13,000 acres in Congleton Hollow/Liggett Table area from entry under the 1872 mining law as amended for chalcidony type material.
8. Designate Horse Ridge Research Natural Area and 11 additional areas totalling 36,916 acres as ACECs. Also designate three of these additional areas totalling 1,565 acres as RNAs.



Off road vehicle in Millican Valley

9. Maintain or increase public land holdings in Zones 1 and 2. Exchange, or if exchange is not feasible, sell Zone 3 lands if they continue to meet FLPMA Section 203 disposal criteria. Acquire legal access to inaccessible public lands in Zone 1 and 2.
10. Authorize agricultural use of public land if no conflict with public values exist.
11. Exchange or sell land in the LaPine core area. Exchange, transfer or sell public land near Bend, Redmond and Prineville to local governments as needed to accommodate community expansion and other public purposes.
12. Public lands will remain open for exploration (including geophysical) and development of mineral resources and related rights-of-way. Fluid mineral leasing will continue with the entire 130,570 acres of Federal reserved mineral estate and 910,000 acres of public land open to

exploration subject to standard lease requirements and stipulations. The no surface occupancy stipulation on 16,480 acres around Prineville Reservoir and seasonal restrictions on 44,580 acres of deer wintering areas and 3,560 acres of sage grouse strutting grounds would continue. A no-surface occupancy stipulation for fluid minerals exploration and development will be imposed on 36,000 acres designated as Areas of Critical Environmental Concern. A 600-acre area around the Horse Ridge Research Natural Area will continue to be closed to mineral leasing. Restrictions to protect 100,000 acres of land that are visually sensitive or of high scenic quality would be continued.

Exceptions to the no surface occupancy and visual restriction may be permitted if certain criteria are met.

## Criteria Used in the Selection of the Plan

The following decision criteria were used in evaluating the various alternatives analyzed in the Draft RMP/EIS and in the selection of the proposed plan.

### Lands

Provides for land exchanges, transfers and sales that best serve public interests.

Allows adequate land allocation for communication sites, access development and designation of right-of-way corridors while protecting other significant resource values.

### Forestland

Establishes a timber sale harvest level that assists in meeting local and regional needs. Protects other resource values through set asides or appropriate restrictions on management, harvest or operational practices.

Best utilizes standing dead timber and reduces the extreme fire hazard in the LaPine portion while accommodating other resource values, especially wildlife habitat and visual resources.

### Recreation

Meets the demands for developed and dispersed recreation opportunities.

## **Areas of Critical Environmental Concern (ACEC)**

Provides for designation of areas that meet ACEC criteria of relevance and significance.

### **Wild Horses**

Meets the requirements of the Wild Horse and Burro Act, Federal Land Policy and Management Act and Public Rangelands Improvement Act. Considers public interest and preferences, established uses and resource values of the public lands and the manageability of the herd area.

### **Livestock Grazing**

Meets the requirements of the Federal Land Policy and Management Act, Public Rangelands Improvement Act and Taylor Grazing Act. Meets the long-term objective of producing a sustained level of livestock forage to meet regional and national needs.

### **Wildlife Habitat**

Protects or improves important wildlife habitat offering food, water and shelter during all seasons of the year.

Protects, maintains or enhances habitat of special status animal species.

### **Fire Management**

Meets resource protection requirements specified by BLM policy. Meets conditions of interagency agreements as well as State and Federal laws. Provides fire management direction best meeting natural resource management goals and objectives.

### **Visual Resources**

Provides for maintaining or enhancing the visual quality of the landscape in areas having high or sensitive visual qualities.

### **Cultural and Paleontological Resources**

Protects cultural and paleontological resources in accordance with applicable laws and regulations.

### **Minerals**

Allows exploration and development of mineral and energy resources consistent with the BLM's minerals policy while protecting other significant resource values.



Peck's long bearded mariposa lily

### **Soil, Water and Air Resources**

Protects and/or improves the quality of the soil, water and air resources. Provides for compliance with applicable pollution control laws. Coordinates with other related resources and programs of State, local and Federal agencies.

Provides for watershed rehabilitation to areas where deterioration of watershed values due to accelerated erosion and runoff has been significant.

### **Socioeconomic Conditions**

Maintains or expands the total level of local employment and personal earnings which are dependent on raw materials, recreation and other use opportunities available on lands administered by the BLM.

Maintains or expands the contribution of the BLM's programs to the local public revenues.

### **Consistency with State, Local and Other Federal Natural Resource Plans, Programs and Policies**

Demonstrates consistency with statewide planning goals (Oregon Department of Land Conservation and Development), local comprehensive plans and officially approved local resource-related plans, programs and policies.

Demonstrates consistency with other Federal agencies' officially approved resource-related plans, programs and policies. Provides coordinated approaches to regional issues and projects.

## Planned Management Actions Under the Plan

This section describes the planned actions and determines priorities for implementing those actions. The management actions would be used to resolve the planning issues identified. Unless otherwise noted, management direction, implementation, monitoring and support needs apply to the entire planning area.

The priorities were established based on public input, administration policy, and Department of the Interior and BLM directives. These priorities may be revised as policy and directives change.

The highest priorities for each resource is funding normal operating costs, completing administrative duties, and processing public inquiries. Priorities are placed in one of three categories--high, medium or low based on comparative ranking of the management actions.

The listed support actions are foreseeable at this time. The need for additional support actions, such as engineering and other studies, or specific project plans may be identified as a result of further planning. These actions will be designed to achieve the objectives of the RMP. Additional environmental analyses will be conducted where appropriate to supplement the analysis in the RMP/EIS.



Logan Butte.

# Lands

## Land Tenure

### Management Direction

Public land in the Brothers/LaPine Planning Area has been placed into three zones as shown on Maps 4 and 5 with acreages by county listed in Table 3.

The three zones categorize the public lands for potential land tenure adjustments, (e.g., land exchanges, transfers, or land sales), consistent with existing regulations and BLM policy. Section 102(a)(1) of the Federal Land Policy and Management Act of 1976 (FLPMA) provides that “the public lands be retained in Federal ownership, unless as a result of the land use planning procedure provided for in this Act, it is determined that disposal of a particular parcel will serve the national interest.”

In accordance with the FLPMA and other laws, Executive Orders and Departmental and Bureau policies, the following criteria will be used to evaluate opportunities for retention or disposal and for identifying acquisition priorities. This list is not considered all inclusive, but represents the major factors to be evaluated. They include:

- Threatened or Endangered or sensitive plant and animal species habitat;
- riparian areas;
- fish habitat;
- nesting/breeding habitat for game and non-game animals;
- key big game seasonal habitat;
- developed recreation sites and recreation use areas;
- high quality scenery;
- energy and mineral potential;
- land in or adjacent to rivers designated or eligible for designation under the National Wild and Scenic Rivers Act;
- significant cultural resources and sites eligible for inclusion on the National Register of Historic Places;
- designated wilderness areas and areas being studied for possible wilderness designation;
- accessibility of the land for public recreation and other uses;

- amount of public investments in facilities or improvements and the potential for recovering those investments;
- difficulty or cost of administration (manageability);
- suitability of the land for management by another Federal agency;
- significance of the decision in stabilizing business, social and economic conditions, and/or lifestyles;
- whether private sites exist for the proposed use;
- encumbrances, including but not limited to, withdrawals or existing leases or permits;
- consistency with cooperative agreements and plans or policies of other agencies; and
- suitability (need for change in land ownership or use) for purposes including but not limited to community expansion or economic development, such as industrial, residential, or agricultural (other than grazing) development.

**Table 3. Land Tenure Zone Acreages by County, Brothers/LaPine Planning Area**

County	Zone 1 Public Acres	Zone 2 Public Acres	Zone 3 Public Acres	Total Public Acres
Crook	342,056	139,645	26,009	507,710
Deschutes	344,597	134,505	9,325	488,427
Harney	0	1,000	80	1,080
Klamath	0	21,138	40	21,178
Lake	67,360	25,345	0	92,705
Total	754,013	321,633	35,454	1,111,100

The land ownership adjustment criteria identified above will be considered in land reports and environmental assessments prepared for specific adjustment proposals.

Transfers to other public agencies will be considered where consistent with public land management policy and where improved management efficiency would result. Minor adjustments involving sales or exchanges or both may be permitted based on site specific application of the land ownership adjustment criteria.

Land to be acquired by the BLM through exchanges generally must:

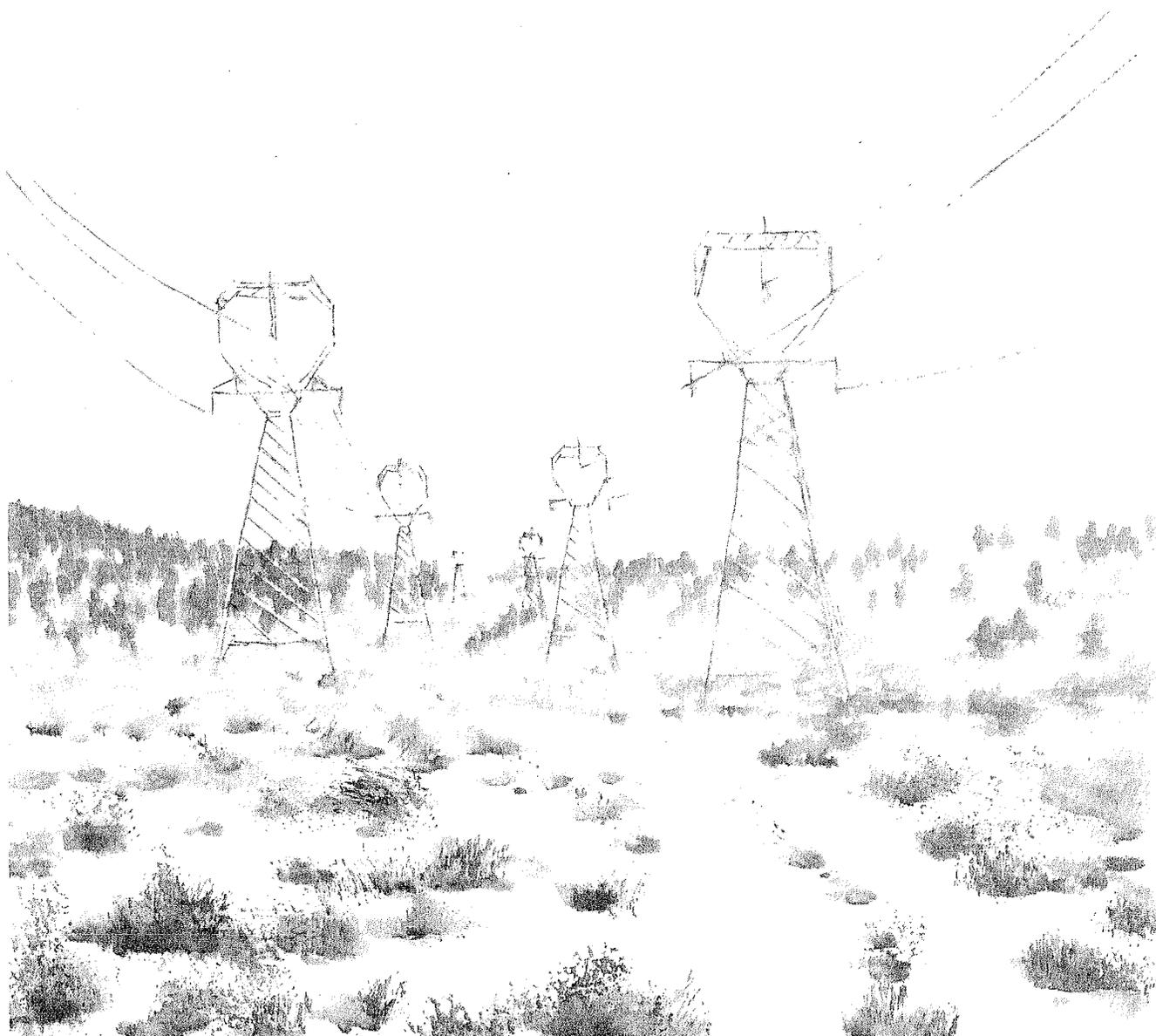
- facilitate access to public land and resources, or
- maintain or enhance important public values and uses, or

- maintain or enhance local social and economic values in public ownership, or
- facilitate implementation of other aspects of the approved Brothers/LaPine Resource Management Plan.

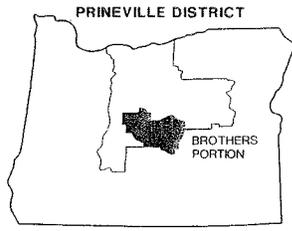
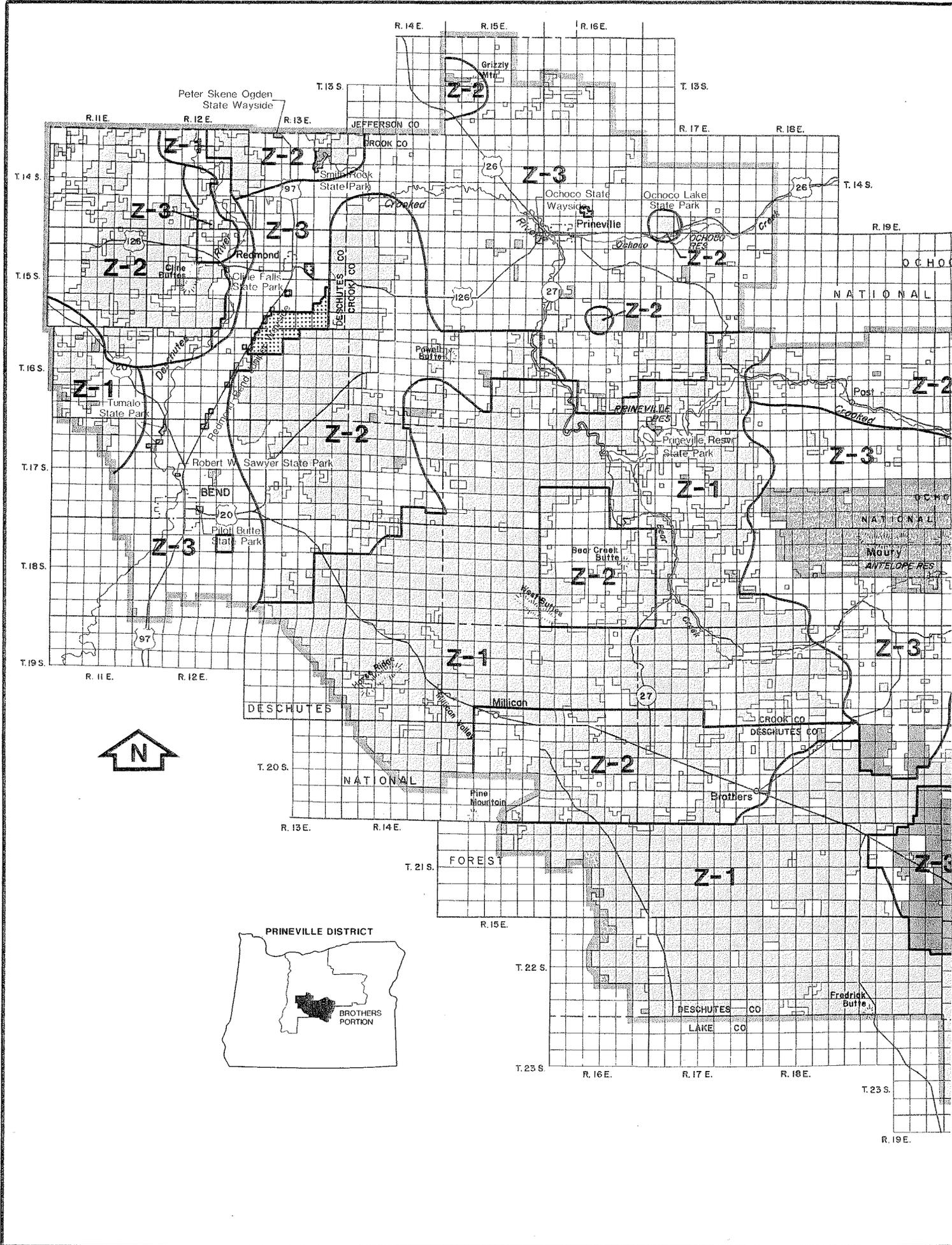
Zone 1 delineates lands which have been identified as having national or statewide significance; they are identified for retention in public ownership. They are also areas where emphasis will be placed on increasing public land holdings through donation, exchange or sale. These lands possess significant visual, wildlife, watershed, special status species, wilderness, recreation, vegetative, cultural or other public values.

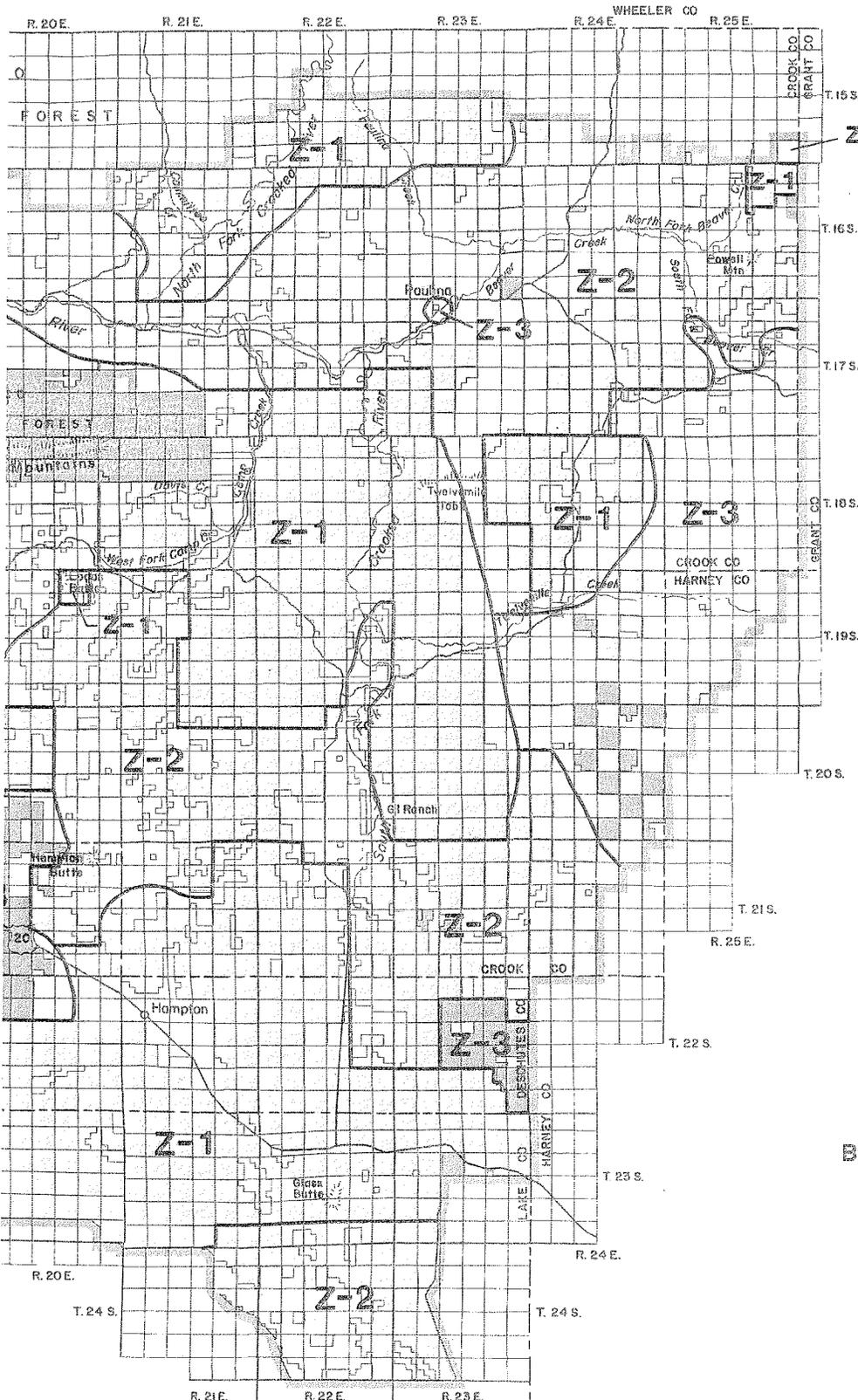
Public lands in Zone 2 have potentially high resource values for timber, recreation, riparian, watershed, special status species, cultural and/or wildlife. They are identified for retention or possible exchange for land with higher resource values or transfer through the Recreation and Public Purposes Act (R&PP).

Public lands in Zone 3 are scattered, isolated tracts with generally low or unknown resource values. They are lands potentially suitable for transfer or disposal if significant recreation, wildlife, watershed, special status species and/or cultural values are not identified. Those public lands which may be considered for disposal are listed in Table 4.



Utility corridor near Brothers.





- Z-1** Areas currently identified as having high public resource values and generally to be retained in public ownership.
- Z-2** Areas with potential for high public resource values that may be exchanged for lands with higher public values.
- Z-3** Areas with public lands which may be suitable for disposal through transfer to another agency, exchange or public sale
-  Public lands which have been identified for possible transfer or exchange to local governments as needed to accommodate community expansion and other public purposes.

US DEPARTMENT OF THE INTERIOR  
Bureau of Land Management

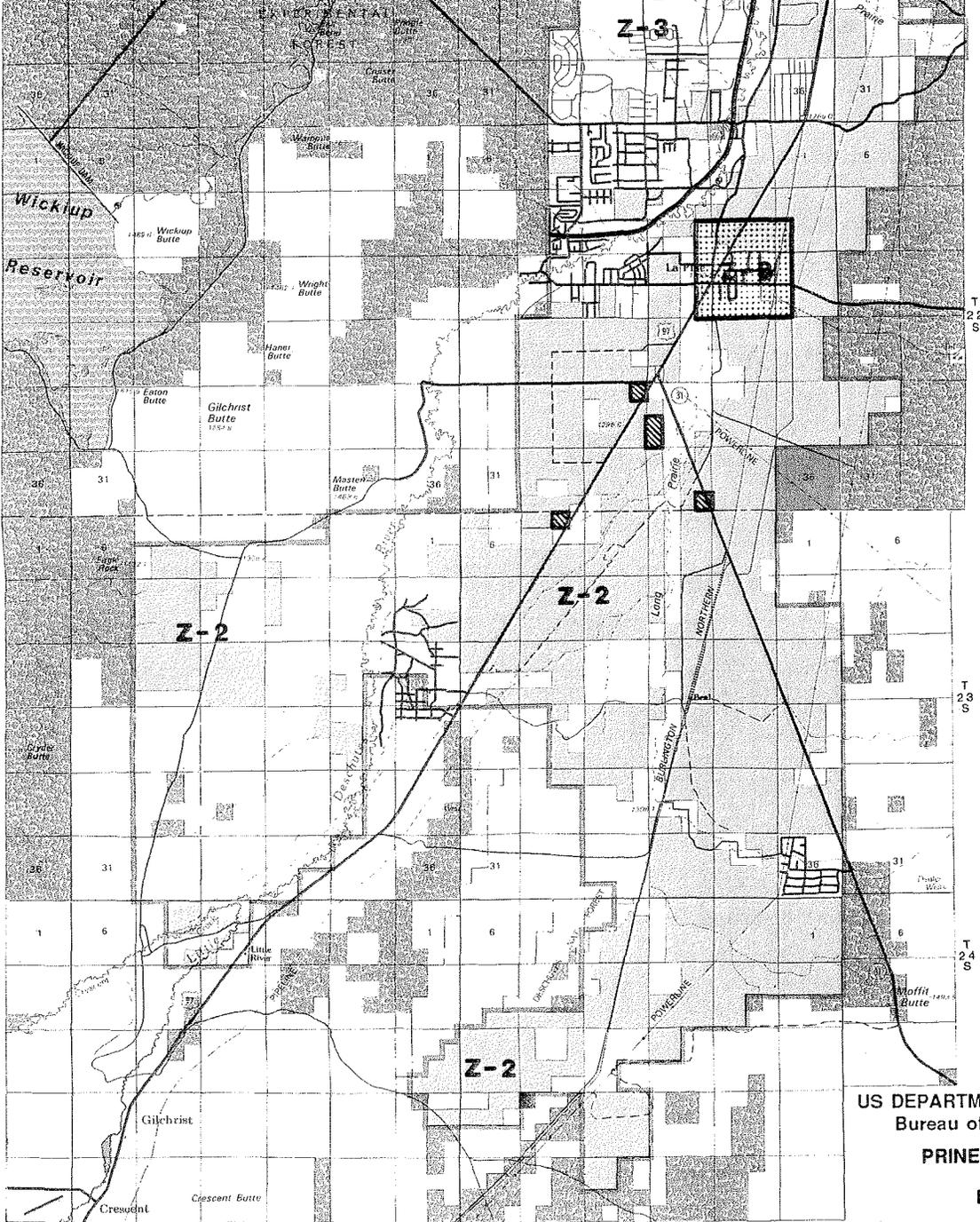
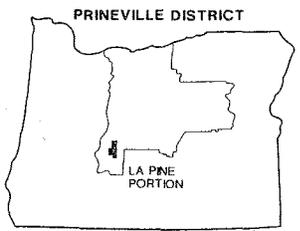
PRINEVILLE DISTRICT  
MAY 1989  
BROTHERS/LA PINE PLANNING AREA

## MAP 4 Land Tenure Brothers Portion

**Z-2** Areas with potential for high public resource values that may be exchanged for lands with higher public values

**Z-3** Areas with public lands which may be suitable for disposal through transfer to another agency, exchange or public sale

 Public lands which have been identified for possible transfer or exchange to local governments, or offered for sale as needed to accommodate community expansion



 These 4 parcels are involved in occupancy trespass. If appropriate, the trespass will be resolved through issuance of a lease or permit. Part or all of a parcel may be sold to the adjacent owner at fair market value, if a lease or permit is not appropriate.

US DEPARTMENT OF THE INTERIOR  
Bureau of Land Management  
PRINEVILLE DISTRICT

MAY 1989

BROTHERS/LA PINE PLANNING AREA

1 0 1 2 MILES

**MAP 5**  
Land Tenure  
La Pine Portion

**Table 4. Public Lands Potentially Suitable for Disposal**

**Lands in Crook County**

Township	Range	Section	Subdivision	Public Acres
13S	15E	3	NWSW	40.00
13S	15E	15	NWNW NSW	120.00
13S	15E	24	SESW SWSE EE	240.00
13S	15E	25	WSW NENW WNE	200.00
13S	15E	26	ESW SENE SE	280.00
13S	15E	27	NWNE	40.00
13S	15E	28	SESW SE	200.00
13S	15E	32	NWNE	40.00
13S	16E	19	L3 NESW NENW NE	281.34
13S	16E	20	SS SN NWSW	360.00
13S	16E	21	SWNW NNE SENE NESE	200.00
13S	16E	29	SW NENW NWNE	240.00
13S	16E	30	SE	160.00
13S	16E	32	W	320.00
14S	14E	5	SWNW NWSW	80.00
14S	14E	9	ESE	80.00
14S	14E	10	SENE	40.00
14S	14E	24	NN SWNW	200.00
14S	15E	18	NSE SNE	160.00
14S	15E	30	NNE SSE	160.00
14S	16E	1	L1-3 SNE SE	322.46
14S	16E	12	E SW SWNW	520.00
14S	16E	14	SESE NN WSW SWNW	320.00
14S	16E	22	NENE	40.00
14S	16E	28	NESW NWSE SSE	160.00
14S	17E	26	NWSE	40.00
14S	17E	34	NWNW	40.00
15S	15E	31	SSW	80.00
15S	16E	2	SE SESW	200.00
15S	16E	10	NENE	40.00
15S	16E	14	ESE SWNE SENW	160.00
15S	16E	22	E	320.00
15S	16E	26	NN	160.00
15S	16E	30	SWNE SESW WSE SESE	200.00
15S	16E	32	NWNE NW NSW SWSW	320.00
15S	17E	2	L2	41.89
15S	17E	12	SESW SWSE	80.00
15S	17E	14	NSW SWSW	120.00
15S	17E	18	L4	38.44
15S	17E	20	WSW SWNW	120.00
15S	17E	24	NENE	40.00
15S	17E	28	All	640.00
15S	17E	32	All	640.00
15S	17E	34	WNW S	400.00
15S	18E	6	SSE	80.00
15S	18E	8	NNE WNW	160.00
15S	18E	18	NESW	40.00
16S	16E	2	L1	37.28
16S	16E	4	L1-3 SENE	161.86
16S	16E	6	L5 NWSE SESE	119.04
16S	16E	12	SENE	40.00
16S	16E	13	SSE	80.00
16S	16E	21	NE ENW NESW NESE	320.00
16S	16E	22	SWSW	40.00

**Table 4. Public Lands Potentially Suitable for Disposal (continued)**

**Lands in Crook County**

<b>Township</b>	<b>Range</b>	<b>Section</b>	<b>Subdivision</b>	<b>Public Acres</b>
16S	16E	23	ESW SWNE NENW	160.00
16S	16E	24	SSE	80.00
16S	16E	26	SESE NSE NESW ENW NE	400.00
16S	16E	27	SESW ENE	120.00
16S	16E	28	ENW ESW NWSE SSE	280.00
16S	17E	4	NWNW	40.00
16S	17E	6	E WNW	400.00
16S	17E	7	NE NENW SNW SW NSE	520.00
16S	17E	8	N NS	480.00
16S	17E	9	All	640.00
16S	17E	15	N NWSW SESE	400.00
16S	17E	16	NE SNW	240.00
16S	17E	17	WSW	80.00
16S	17E	18	NW SESW NESE SSE	320.00
16S	18E	28	SESE	40.00
16S	18E	31	SWNE	40.00
16S	18E	32	NESW	40.00
17S	18E	1	L4 SWNW SW	239.40
17S	18E	2	L3 SENW SWNE ESW WSE	278.38
17S	18E	11	SNE SENW	120.00
17S	18E	12	NNW SWNW	120.00
17S	18E	30	SESE	40.00
17S	18E	31	NENE	40.00
17S	18E	32	NNE	80.00
17S	19E	9	WNE SSW	160.00
17S	19E	10	NENE	40.00
17S	19E	14	SS NESE SENE	240.00
17S	19E	15	NNE NWNW SS	280.00
17S	20E	6	ESW WSE	160.00
17S	23E	4	SWNW	40.00
17S	24E	26	NENE ENW	120.00
17S	24E	34	ENE	80.00
17S	24E	36	WE W	480.00
17S	25E	8	SWNE SENW SNE	160.00
17S	25E	12	NWSW	40.00
17S	25E	14	NWNE SSE	120.00
17S	25E	21	NESW NWSE	80.00
17S	25E	28	NN SWSE	200.00
17S	25E	30	NWNW	40.00
17S	25E	32	SWNE SNW	120.00
18S	18E	6	L1	35.30
18S	18E	18	SSE NESE	120.00
18S	18E	19	NESW NWSE	100.00
18S	18E	21	NWSE	40.00
18S	19E	19	ENE	80.00
18S	19E	20	SWNW WSW SESW ESE	240.00
18S	19E	29	NNW	80.00
18S	19E	30	NWSE	40.00
18S	19E	31	L1	39.22
18S	19E	32	ENE	80.00
18S	20E	15	NW	160.00
18S	20E	17	NWNW	40.00
18S	20E	18	L1	37.73
18S	20E	19	NENW WNE NWSE	160.00

**Table 4. Public Lands Potentially Suitable for Disposal (continued)**

**Lands in Crook County**

Township	Range	Section	Subdivision	Public Acres
18S	20E	20	ENW	80.00
18S	20E	21	N	320.00
18S	20E	22	NN SWNW WSW	280.00
18S	20E	23	WW	160.00
18S	20E	26	SESE	40.00
18S	20E	27	NENW WNW SESW SWSE	200.00
18S	20E	28	ENE SENW SSE	200.00
18S	20E	29	NE NSE	240.00
18S	20E	32	NENE SNE SENW ESW SE	400.00
18S	20E	33	WNW SWSW	120.00
18S	20E	34	NENW	40.00
19S	18E	1	L2	40.45
19S	18E	2	L3 SNW	121.13
19S	18E	12	SENE	40.00
19S	19E	1	NESE ESW	120.00
19S	19E	5	L3 SNW NWSW	159.06
19S	19E	6	L5-6 SENW NESW SNE NSE	318.87
19S	19E	7	L4	39.62
19S	19E	11	ESE	80.00
19S	19E	12	NENW SNW SWSE	160.00
19S	19E	17	SENE SWNW	80.00
19S	19E	21	ESW WSE	160.00
19S	19E	23	SENE	40.00
19S	19E	24	SWNW	40.00
19S	19E	25	SNW NWSE	120.00
19S	19E	26	SNE WSE SW	320.00
19S	19E	27	SE	160.00
19S	19E	30	ESW	80.00
19S	19E	33	NE	160.00
19S	19E	35	NENW NWNE	80.00
19S	20E	4	NWSE	40.00
19S	20E	5	NE ENW	240.00
19S	20E	6	L7	39.85
19S	20E	8	SENW SWSW ESW SWSE	200.00
19S	20E	9	NWSE NENE	80.00
19S	20E	17	WNE ENW	160.00
19S	24E	2	L1-4 SN S	636.26
19S	24E	14	N NS SESE	520.00
19S	24E	22	All	640.00
20S	22E	14	SWSW	40.00
20S	22E	15	SWNE	40.00
20S	22E	23	SNW NWNW SWSE	160.00
20S	22E	26	WE	160.00
20S	22E	35	WNE NWSE	120.00
20S	24E	8	SSW SESE	120.00
21S	22E	3	L2	41.81

Subtotal of acres in Crook County

26,009.39

**Table 4. Public Lands Potentially Suitable for Disposal (continued)**

**Lands in Deschutes County**

Township	Range	Section	Subdivision	Public Acres
14S	12E	22	NENE SWNE WW SESW WSE	360.00
14S	12E	27	NNW SWNW	120.00
14S	12E	34	NSW SWSW ESE	200.00
14S	12E	35	SESW SE	200.00
14S	13E	29	L1 4 SWNE NENW ESE	205.00
14S	13E	30	L6 SWNENW WSENW WNESW SESW	110.00
14S	13E	31	EW	160.00
15S	12E	1	SESW	40.00
15S	12E	2	SWNE NSW SWSW	160.00
15S	12E	3	SESW NSE	120.00
15S	12E	10	SWSW	40.00
15S	12E	11	NWNW	40.00
15S	13E	15*	L3 7 NE NESW	255.00
15S	13E	21*	ESESW WSWSE	40.00
15S	13E	23*	ESE	80.00
15S	13E	26*	NENE SWNWNE SNE S	450.00
15S	13E	32*	NE SWNW NESW SSW SE	480.00
15S	13E	33*	All	640.00
15S	13E	34*	All	640.00
15S	13E	35*	All	640.00
16S	12E	11	SWSE	40.00
16S	12E	12*	SWSE	40.00
16S	12E	34	NWSE	40.00
16S	13E	4*	All	360.00
16S	13E	5*	All	360.00
16S	13E	6*	E SESW	220.00
16S	13E	7*	E EW L2-4	600.00
16S	13E	8*	All	640.00
18S	12E	11*	All	640.00
21S	19E	17	SNE	80.00
21S	10E	21	NE	160.00
21S	10E	22	NNE	80.00
21S	10E	26	NENW	40.00
21S	10E	33	WSE	80.00
21S	10E	34	SWSE ESE	120.00
21S	11E	29	SWSW	40.00
21S	20E	24	NNE	80.00
22S	10E	3	L1-2	80.83
22S	10E	5	NSE	80.00
22S	10E	9	NE	160.00
22S	10E	10	NWNW	40.00
22S	10E	11	L1-4 L6-7 ENWSWSW WNESWSW SESWWSW NNESESW SWNESESW NESWSESW SSESESW	46.25
22S	10E	14	L14 44-45 52 62 64-65 75 82-84 88-89 94-95 100 102-103 108 113-114 117-119 124-127 129-131 133 136-139 141-147 149-154 156-159 161 SESW NENWNW	277.72
22S	10E	34	SENE	40.00
Subtotal of acres in Deschutes County				9,324.80

\*Available only for public purposes

**Table 4. Public Lands Potentially Suitable for Disposal (continued)**

**Lands in Harney County**

Township	Range	Section	Subdivision	Public Acres
19S	25E	8	NWSE SESE	80.00
Subtotal of acres in Harney County				80.00

**Lands in Klamath County**

Township	Range	Section	Subdivision	Public Acres
23 S	10 E	5	L2	39.53
Subtotal of acres in Klamath County				39.53

**TOTAL Acreage of Public Lands in Zone 3** **35,453.72**

A block of Zone 2 public land containing approximately 25,000 acres located east of U.S. Highway 97 between Bend and Redmond possesses high public values due to its proximity to the expanding communities of Bend and Redmond as well as access to major highways, the railroad and the Redmond Municipal Airport. It also provides important open space and dispersed recreation opportunities. This land will be retained as undeveloped open space until such time as it may be transferred to another public entity to accommodate community expansion needs or used for other public purposes.

Issuance of leases and/or patents under the Recreation and Public Purposes Act and other permits or leases for development of public lands will continue. Applications will be reviewed on an individual basis for conformance with the Brothers/LaPine RMP/EIS to minimize conflicts with other resources or users.

**Public Access**

In general, legal access, either vehicular or by foot, is available to most of the larger tracts of public land in the Brothers/LaPine Planning Area. There are, however, some existing roads without access rights across private land which are important for administrative purposes and public use.

Map 6 shows areas with high public value where public access is lacking in the Brothers' portion. There are no needs for additional public access in LaPine portion.

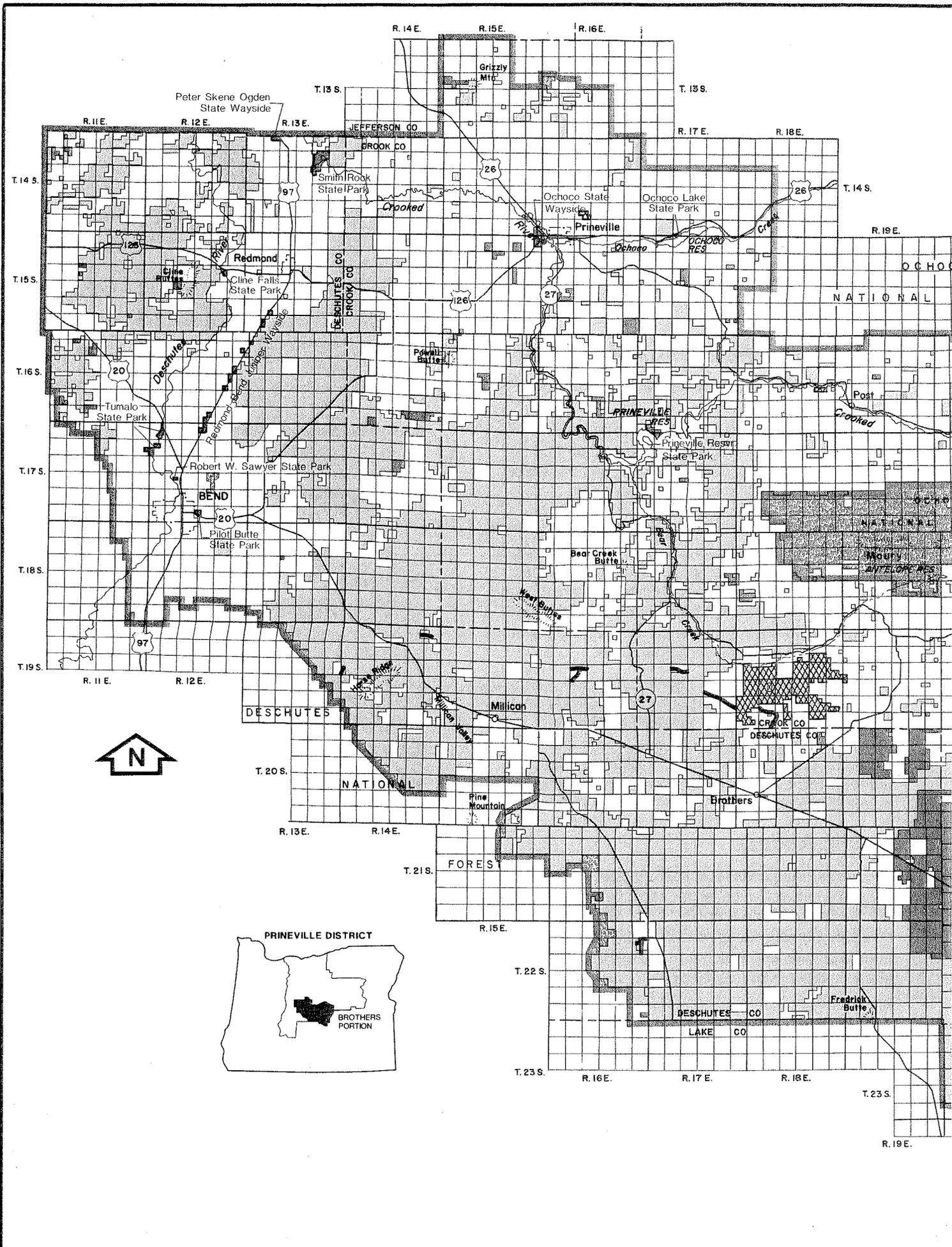
**Management Direction**

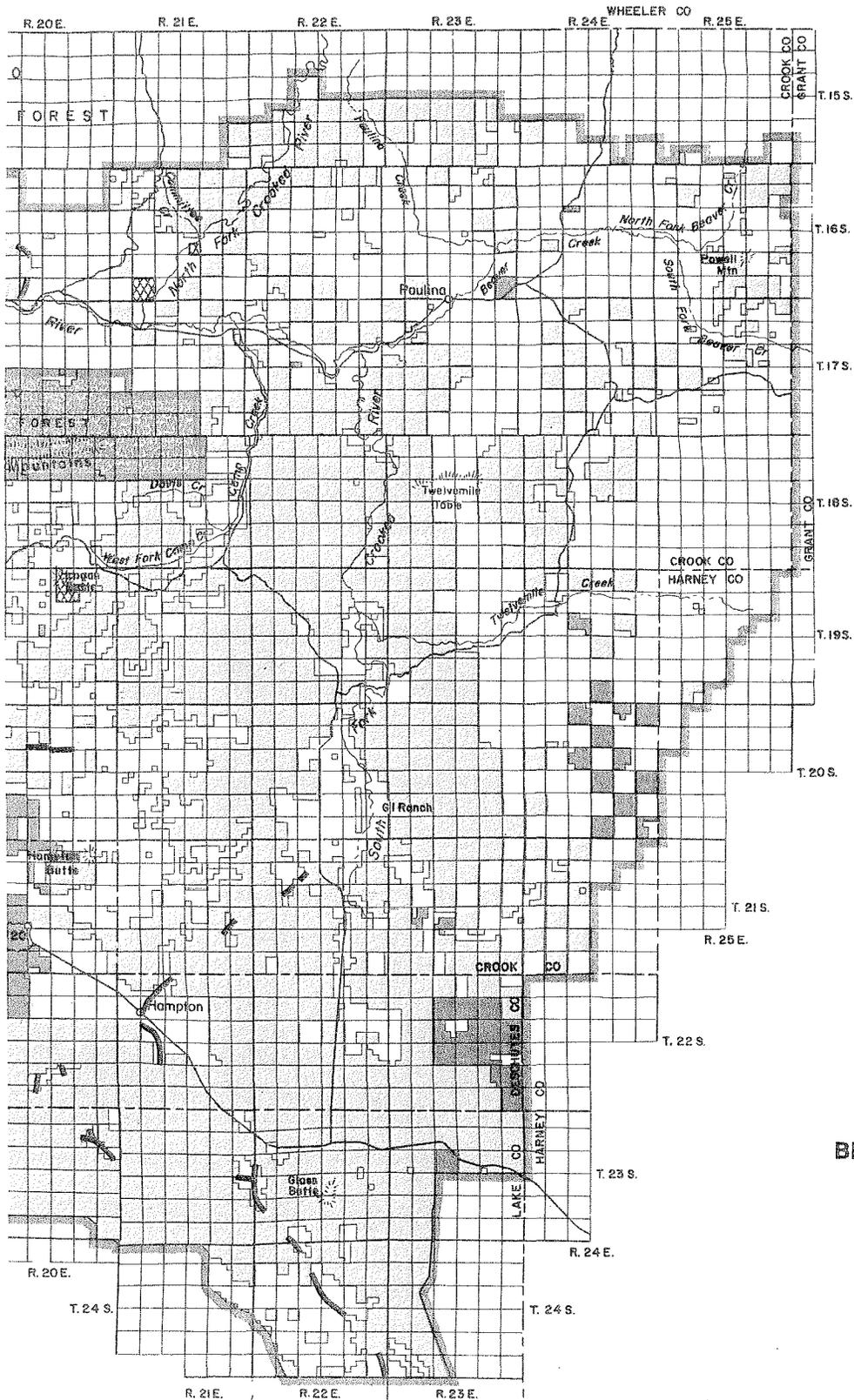
Additional public access may be acquired in Zones 1 and 2 if access is consistent with management

objectives. Where public access is desired, the minimum access needed to achieve management objectives will be acquired. The preferred methods will be through negotiated purchase of an easement or acquisition (in fee title) through land exchange.



**Dry River Gorge at Horse Ridge.**





-  Existing Roads without Legal Access (Easements)
-  Areas with High Recreation Values without Legal Access

US DEPARTMENT OF THE INTERIOR  
Bureau of Land Management

PRINEVILLE DISTRICT  
MAY 1989  
BROTHERS/LA PINE PLANNING AREA

**MAP 6**  
**Public Access Needs**  
**Brothers Portion**

## Land Sales

### Management Direction

Sales of public land in Zone 3 will continue to be conducted under the authority of Section 203 of the Federal Land Policy and Management Act of 1976 (FLPMA) which requires that one of the following conditions exist before land is offered for sale:

- 1) Such tract, because of its location or other characteristics, is difficult or uneconomical to manage as part of the public lands and is not suitable for management by another Federal department or agency; or
- 2) Such tract was acquired for a specific purpose and the tract is no longer required for that or any other Federal purpose; or
- 3) Disposal of such tract will serve important public objectives, including but not limited to, expansion of communities and economic development, which cannot be achieved prudently or feasibly on land other than public land and which outweigh other public objectives and values including, but not limited to, recreation and scenic values, which would be served by maintaining such tract in Federal ownership.

Generally, exchanges are the preferred method of disposal but sales will be utilized when:

- it is required to achieve disposal objectives on a timely basis, and where disposal through exchange would cause unacceptable delays; or
- the level of interest in a specific tract indicates that competitive bidding is desirable for reasons of fairness; or
- disposal through exchange is not feasible

The preferred method of selling public land will be by competitive bidding at public auction to qualifying purchasers. However, modified competitive bidding procedures may be used when there is not legal public access to a tract, when necessary to avoid jeopardizing an existing use on adjacent land, or to avoid dislocation of existing public land users.

Public land may be sold by direct sale at fair market value when:

- such land is needed by state or local governments; or
- direct sale is needed to protect equities arising from authorized use; or

- direct sale is needed to protect equities resulting from inadvertent, unauthorized use that was caused by surveying errors or title defects; or
- there is only one adjacent landowner and no legal public access.

All sales of public land will be preceded by field inventories, environmental assessments and public notification procedures. Activity plans for land sales are not required under BLM policy.

## Land Exchanges

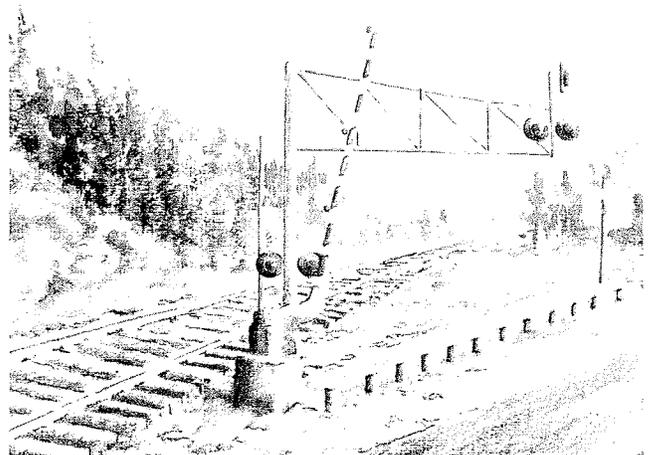
### Management Direction

Exchanges of public land will continue under Section 206 of FLPMA which requires:

- 1) A determination that the public interest will be well served by making an exchange;
- 2) Lands to be exchanged are located in the same state; and
- 3) Exchanges must be for equal value but differences can be equalized by payment of money by either party.

Exchanges will be made only when they will enhance public resource values and only when they improve land patterns and management capabilities of both private and public lands within the planning area by consolidated ownership and reducing the potential for conflicting land uses.

Exchanges would be utilized to acquire lands in Zone 1 and to make adjustments to consolidate public lands in Zone 2.



Railroad crossing of U.S. Highway 97 at Wickiup Junction near LaPine.

## **Agricultural Use of Public Land**

### **Management Direction**

Public lands with agricultural potential will be considered for sale if they meet the sale criteria and fall in Zone 3. If they are in Zone 2, they could be exchanged if the offered lands met the acquisition criteria stated earlier. Lands with agricultural potential in Zone 1 will be retained in public ownership.

Existing and potential agricultural use of public lands in the planning area will be authorized by permit or lease if the following criteria are met:

- (1) the use does not conflict with riparian area management, important wildlife habitat, recreational use of public lands, or other significant resource values, and
- (2) the use is compatible with historical use on adjacent private lands, and
- (3) the use would maintain or enhance other resource values, such as providing all habitat requirements for game and non-game wildlife species.

The 12 short term irrigated and non-irrigated permits for small, irregular shaped parcels of public land located adjacent to cultivated private land which has been incorporated into agricultural fields as a result of physical boundaries or overlap of a sprinkler system will be continued. This totals 94 acres of public land. Six additional parcels of public land totaling 33 acres which is also located adjacent to private land and is currently being cultivated will be authorized by permit. Private appropriation of water as it relates to agricultural use on adjacent public lands will be coordinated through the Oregon Department of Fish and Wildlife, the Oregon Water Resources Board, and the Oregon State Parks and Recreation Division of the Department of Transportation to ensure that fish, wildlife and recreational values are not affected.

When significant conflicts occur, resource values on public lands will be protected and agricultural use will not be authorized.

### **Implementation and Priorities**

The proposed plan designates the following land transfer actions in priority order:

1. BLM/Other Federal Jurisdictional Transfers;
2. Transfers to State and Local Agencies (R&PP and other actions);

3. State Exchanges
4. Private Exchanges;
5. Sales and Agricultural Leases
6. Desert Land Entries

## **Monitoring**

The lands program will be monitored on a yearly basis to determine if the program objectives are being met. These objectives include, but are not limited- to, monitoring progress in the following areas: land tenure adjustments in the management areas, cooperative management agreements district wide, access to public lands, trespass abatement, withdrawal revocations, issuance of rights-of-way, issuance of recreation and public purpose leases and patents, land sales, and land exchanges.

### **Support**

Support will be needed for conducting land appraisal reports to estimate the value of public land identified for disposal. Support will also be needed to conduct mineral, cultural, and threatened and endangered species resource evaluations. These evaluations will contribute to the environmental analyses on land disposals. Cadastral surveys to delineate specific tracts may be needed in some cases.

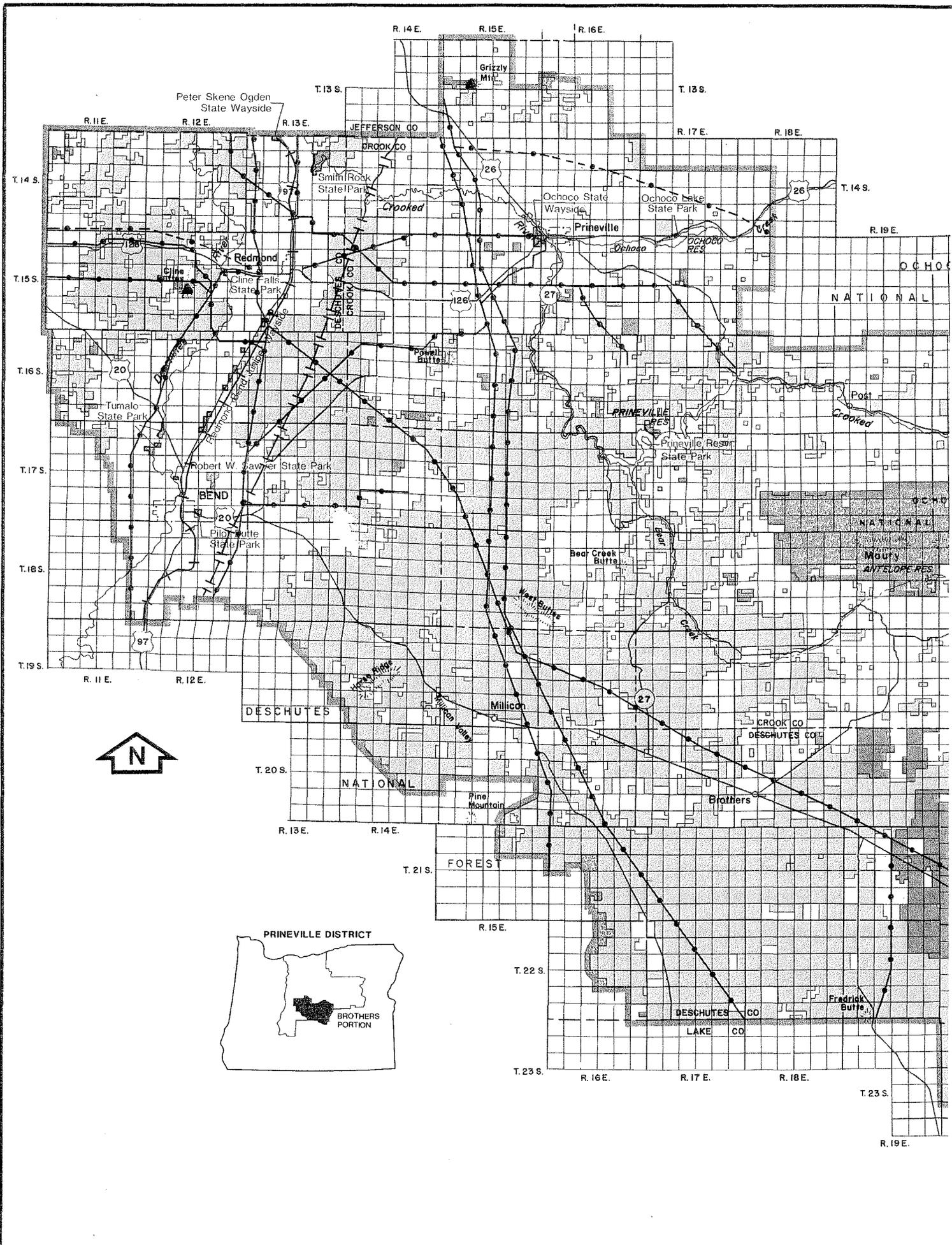
## **Rights of Way and Utility and Transportation Corridors**

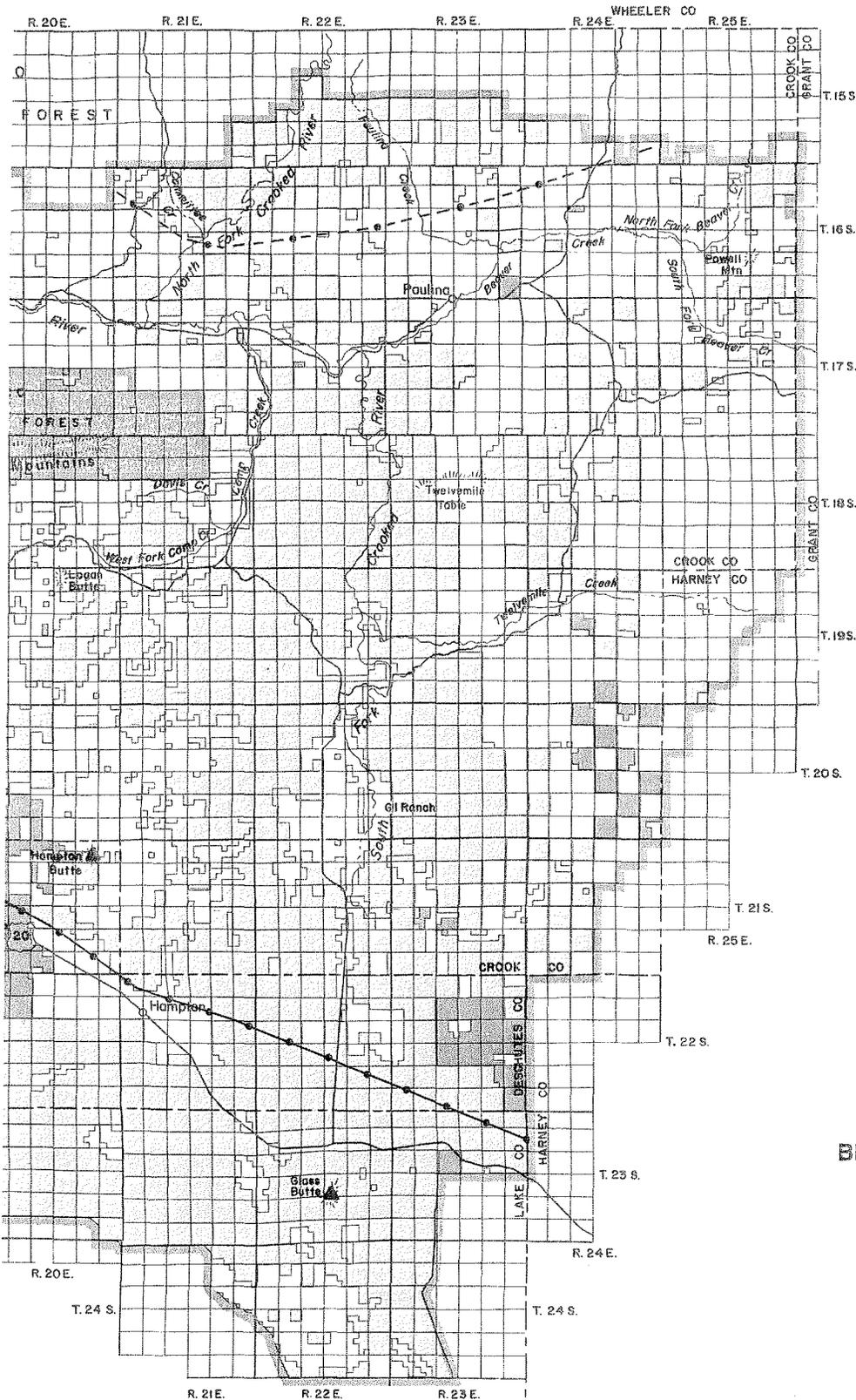
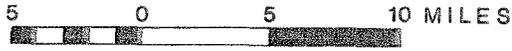
### **Management Direction**

Public lands will continue to be available for rights-of-way, including multiple use and single use utility/ transportation corridors following existing routes, communication sites and roads.

All utility/transportation corridors identified by the Western Regional Corridor Study are currently occupied and are hereby designated. The corridors are displayed on Maps 7 and 8.

Corridor widths vary depending on the number of parallel facilities, but are a minimum of 2,000 feet (1,000 feet either side of existing centerlines) unless adjacent to exclusion areas described below. Applicants will be encouraged to locate new facilities (including communication sites) adjacent to existing facilities to the extent technically and economically feasible.





- Pipeline
- Railroad
- Powerline
- Proposed Powerline
- Developed Communication Sites

US DEPARTMENT OF THE INTERIOR  
Bureau of Land Management

PRINEVILLE DISTRICT

MAY 1989

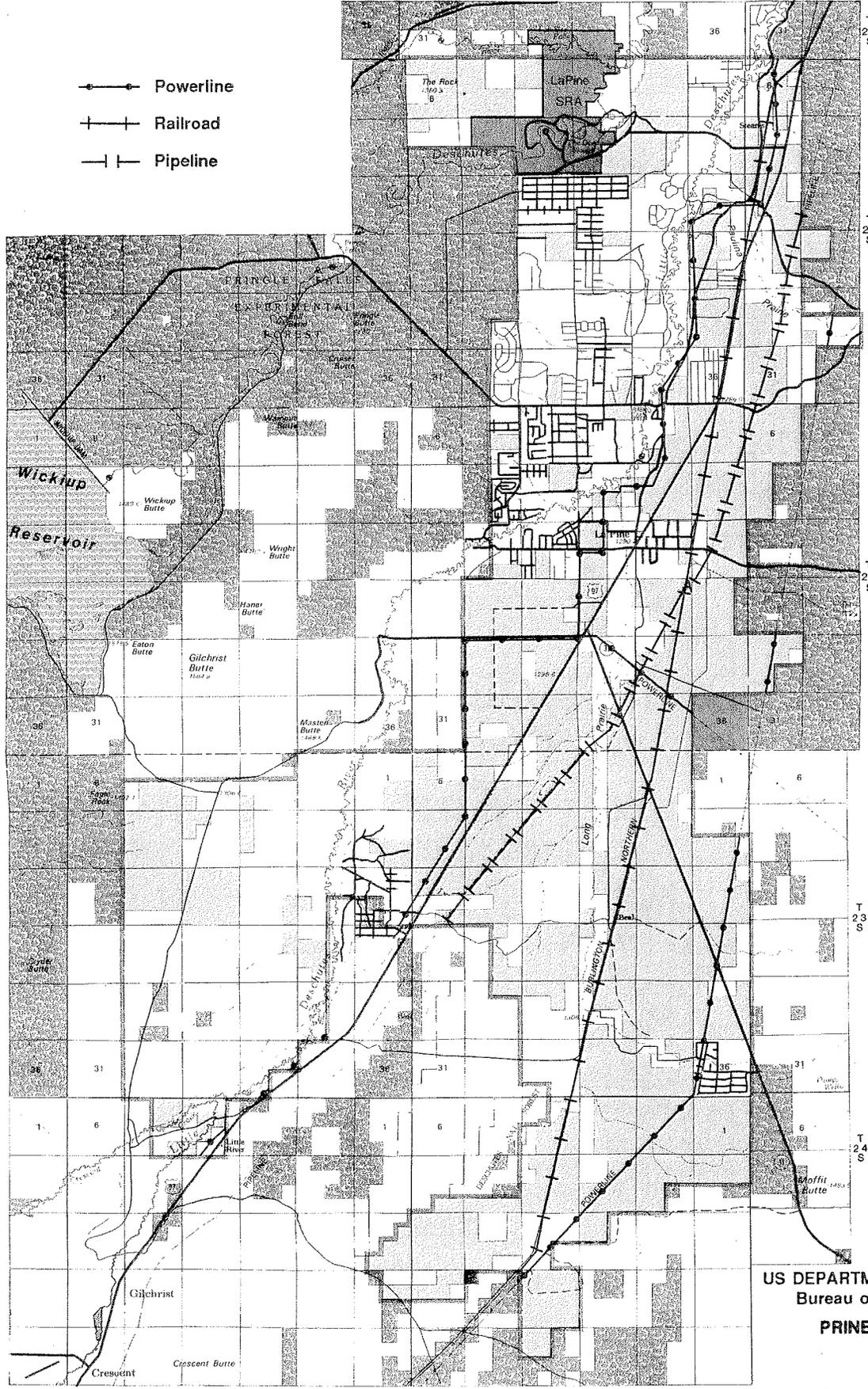
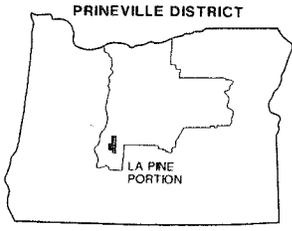
BROTHERS/LA PINE PLANNING AREA

**MAP 7**  
**Utility/Transportation**  
**Corridors,**  
**Communication Sites**  
**Brothers Portion**

R 10 E R 11 E

T 20 S  
T 21 S  
T 22 S  
T 23 S  
T 24 S

-  Powerline
-  Railroad
-  Pipeline



US DEPARTMENT OF THE INTERIOR  
Bureau of Land Management  
PRINEVILLE DISTRICT

MAY 1989

**BROTHERS/LA PINE PLANNING AREA**  
**MAP 8**  
**Utility/Transportation**  
**Corridors**  
**La Pine Portion**



All rights-of-way applications will be reviewed using the criteria of following existing corridors wherever practical and avoiding proliferation of separate rights-of-way. Recommendations made to applicants and actions approved will be consistent with the objectives of the RMP. All designated areas of critical environmental concern and wilderness study areas will be considered right-of-way exclusion areas. Federally designated wild and scenic rivers, as well as rivers identified as eligible as potential wild and scenic rivers, will also be considered exclusion 1 areas. All areas identified as having special status plant or animal species will be avoidance areas. Areas having high or sensitive visual qualities will be avoided or appropriate mitigation measures taken. Public lands will continue to be available for local rights-of-way, including multiple use and single use utility/ transportation corridors following existing routes, communication sites and roads.

## Implementation and Monitoring

Prior to granting or renewing a right-of-way, the applicant must submit plans, maps or other information related to the use of the proposal for

evaluation by the BLM. Each right-of-way shall be limited to the area necessary for operation and maintenance, will consider the protection of public safety and will do no unnecessary damage to the environment.

Each right-of-way shall contain terms and conditions requiring compliance with environmental quality standards applicable to Federal or State law. Such terms and conditions are intended to provide efficient management of the lands subject to the right-of-way and to protect the interest of individuals living in the area as well as the public interest in the Federal lands.

Right-of-way grants will be monitored to insure that development is consistent with the terms and conditions of the grant. A prework conference will be conducted with the grantee, contractor and BLM authorized officer to discuss the stipulations of the grant and plans for construction. Monitoring is performed during and after construction.

Each right-of-way or permit shall reserve to the BLM District Manager the right to issue additional rights for compatible uses on or adjacent to the subject permit.



Communication site on Grizzly Mountain.

## Implementation Priorities

Right-of-way applications will be processed on a case-by-case basis using the adequacy of the application to determine priority. Projects or applications of national and regional significance will be emphasized.

## Support

Applicant funded contract studies or inventories will be used whenever possible prior to use of BLM staff for right-of-way clearance studies for special status plant and animal species, cultural resources, etc.

## Forestland and Woodlands

There are 5,746 acres of commercial forestland, mostly Douglas-fir and ponderosa pine, in the Brothers portion of the planning area as shown on Map 9. They are generally located in the transition zone between the ponderosa pine/fir stands of the Ochoco Mountains and the sagebrush/juniper land of the high desert. A potential annual sustainable harvest

of 463,000 board feet from 5,746 acres has been identified. Table 5 summarizes forestland management in the Brothers portion including land set aside to protect wildlife habitat, streams, riparian and other uses.

Additional data collected since the publication of the Draft Brothers/LaPine RMP/EIS in October, 1987 indicates the mountain pine beetle infestation in the lodgepole pine stands in the LaPine portion has killed a larger percentage of the trees sooner than was expected. As a result, an extreme fire hazard has been created for intermingled private land and residential areas. Essentially all mature and over-mature trees have been or will be killed. Once dead, these trees are only expected to remain standing for 3 to 5 years, after which they will fall down and begin to decay.

As a result, decisions on timber harvest in the LaPine portion will be made with four primary objectives: 1) reduction of extreme fire hazard; 2) salvage of dead and dying timber; 3) successful reforestation and 4) increasing subsequent growth of commercial tree species.



Woodcutting in LaPine.

**Table 5. Forestland Management, Brothers Portion, Brothers/LaPine Planning Area**

	Public Land Acres
Total Forestland <sup>1</sup>	12,497
Forestland unavailable for production of forest products <sup>2</sup>	( 3,851)
Forestland available for production of forest products	8,646
Forestland set aside for other uses <sup>3</sup>	( 2,900)
Forestland available for intensive production of forest products	5,746

<sup>1</sup> Land which is now, or is capable of being, at least 10 percent stocked by forest trees, and is not currently developed for nontimber use.

<sup>2</sup> Land which is not considered suitable for commercial timber production due to low site productivity.

<sup>3</sup> Other values include wildlife habitat, riparian areas and visual quality.

Approximately 30,000 acres of forested public land in the LaPine portion has been harvested over the last 25 years. These lodgepole stands are not at risk from the beetle infestation, however, they will not be of merchantable size for another 30 to 40 years.

### Management Direction

Up to 14 MMbf will be salvaged annually from 1,500 to 2,000 acres in the LaPine portion within timber management areas shown on Map 10. When the beetle-killed timber stands have been salvaged (approximately 4 years), timber management will again be based on the productive capacity of the land. Once the beetle-killed mature and over-mature stands have been salvaged, no commercial timber harvest, except for periodic salvage, will be expected to occur in the LaPine portion for 30 to 40 years. Table 6 displays the commercial forest acreage base for the LaPine area which is the basis for the forest and woodland program in that portion of the planning area.

A total of 200 acres in the LaPine portion will be managed for posts, poles and commercial firewood. Woodlands totaling 156,000 acres in the Brothers portion will also be managed for posts, poles and firewood. Woodland is forestland which is not included in the commercial intensive timber production base. It includes all non-commercial forestland and non-suitable commercial forestland. Table 7 summarizes the forestland and woodland harvest levels for the entire planning area.

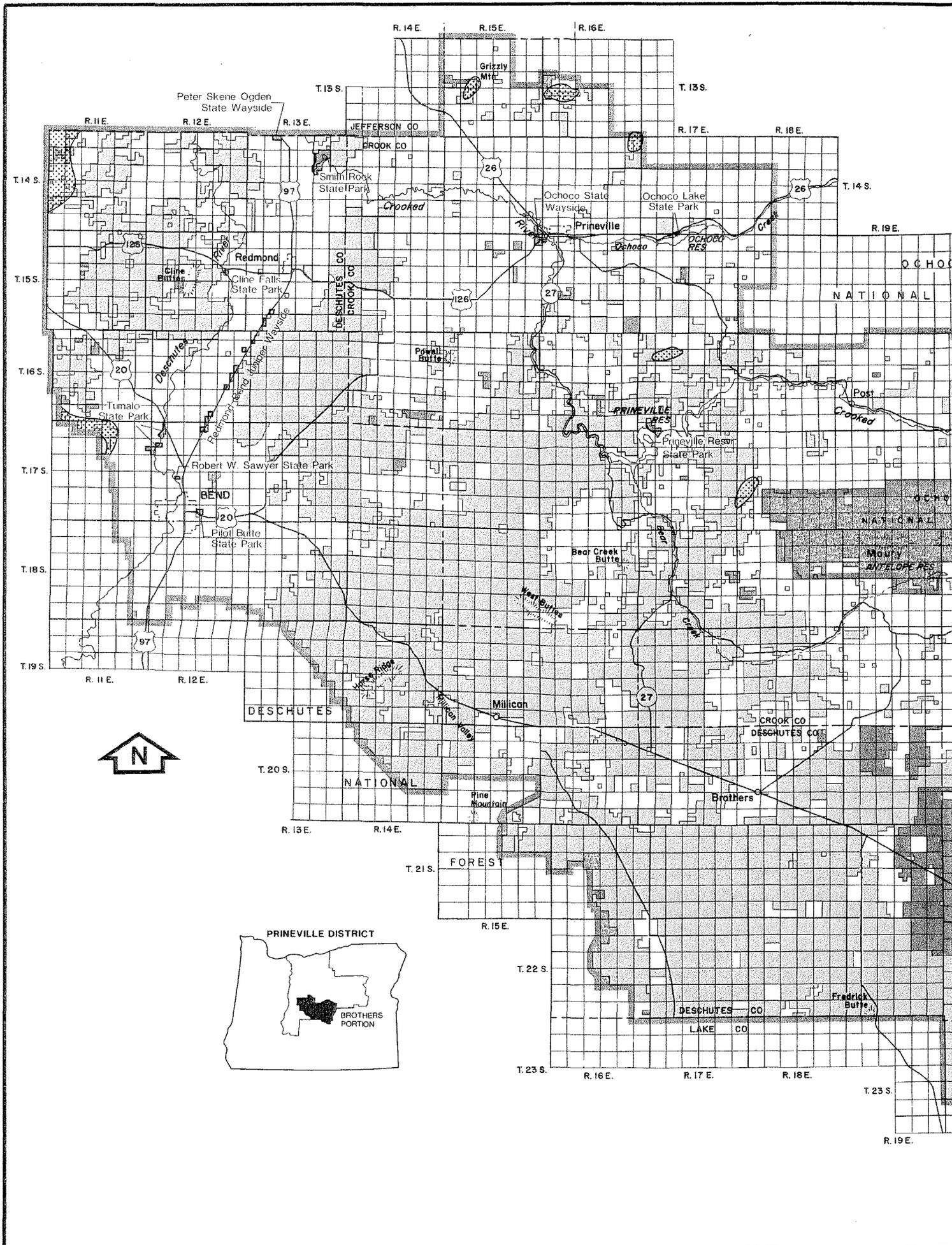
**Table 6. Forestland Management, LaPine Portion, Brothers/LaPine Planning Area**

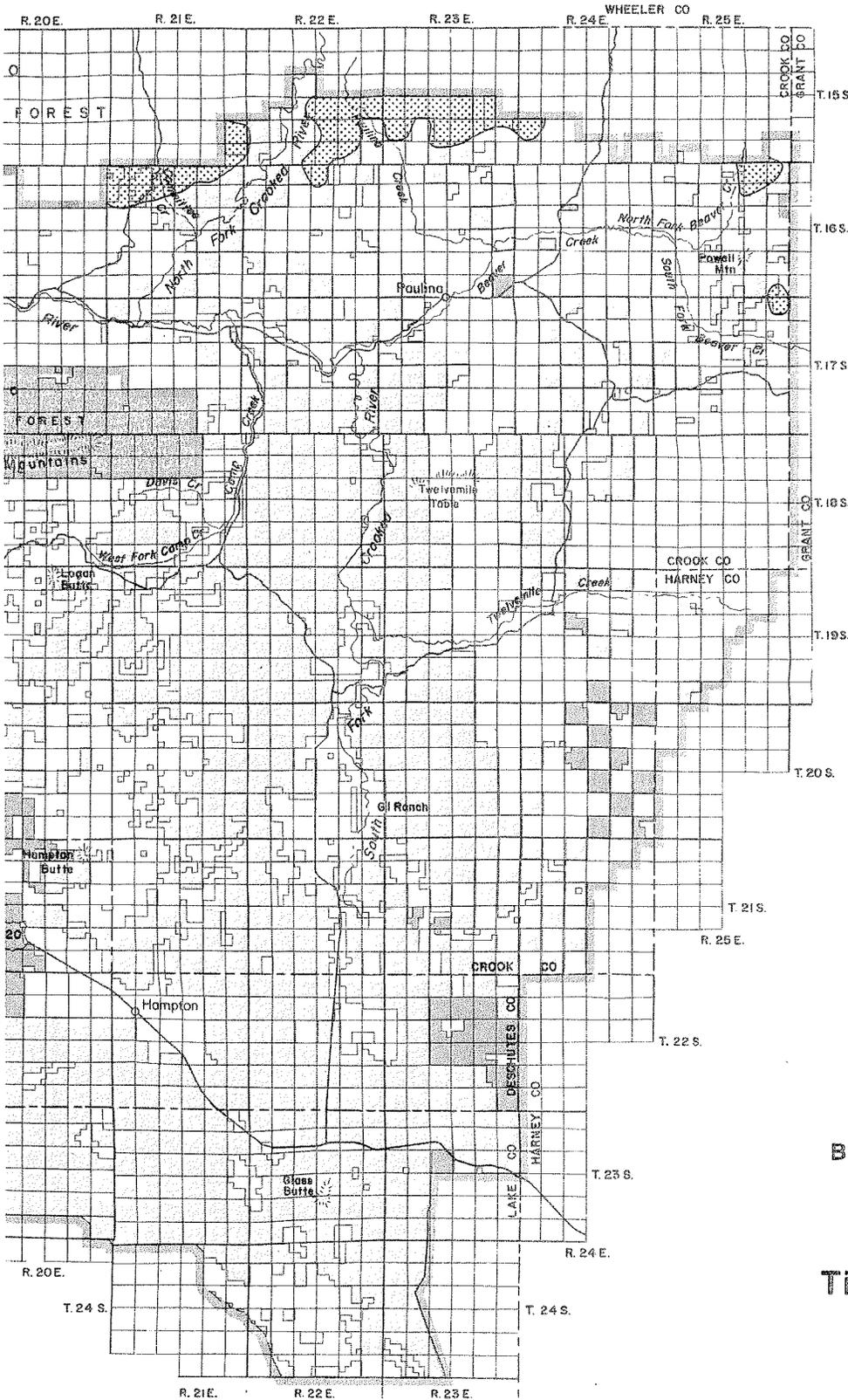
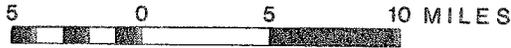
	Acres
Total Public Land	43,201
Nonforest	(1,110)
No Planned Timber Harvest	
Riparian/Wet Meadow	135
Wildlife	305
Subtotal	(440)
Forestland Available for Production of Forestland Products	41,651
Area Available for Accelerated Timber Harvest (Beetle-killed timber stands)	8,860
Area Constrained to Accommodate Other Resource Values <sup>1</sup>	
Visual (Highway Corridors)	4,621
Wildlife (Big Game Travel Corridors)	9,446

<sup>1</sup>Reductions in harvest volume will occur to accommodate other resource values.

**Table 7. Forestland and Woodland Harvest Levels Under the Plan, Brothers/LaPine Planning Area**

	LaPine Portion		Brothers Portion	
	Forestland	Woodland	Forestland	Woodland
Approximate annual harvest	less than 14 MMbf	2,500 cords	0-0.5 MMbf	2,000 cords
Approximate total harvest during the 15-year life of the plan	50 MMbf	37,500 cords	7.0 MMbf	30,000 cords
Harvest period (years)	4	15	15	15





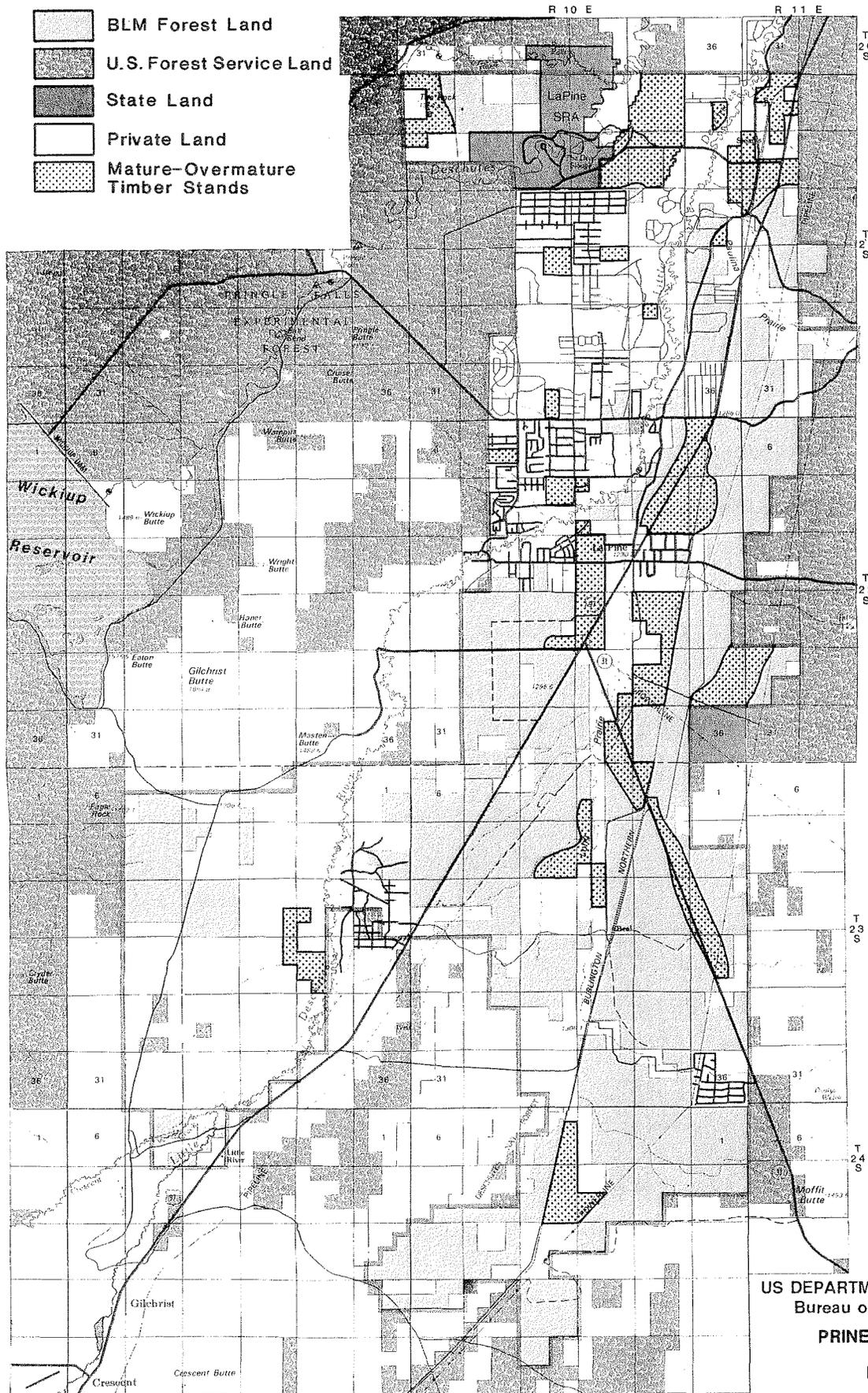
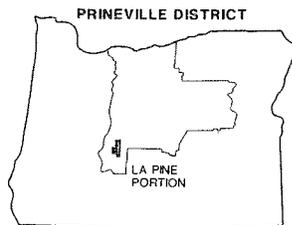
 Forestland Available for Intensive Production of Forest Products

US DEPARTMENT OF THE INTERIOR  
Bureau of Land Management

PRINEVILLE DISTRICT  
MAY 1989  
BROTHERS/LA PINE PLANNING AREA

**MAP 9**  
**Timber Mangement Areas**  
**Brothers Portion**

-  BLM Forest Land
-  U.S. Forest Service Land
-  State Land
-  Private Land
-  Mature-Overmature Timber Stands



US DEPARTMENT OF THE INTERIOR  
Bureau of Land Management  
PRINEVILLE DISTRICT

MAY 1989

**BROTHERS/LA PINE PLANNING AREA**  
**MAP 10**  
**Timber Management**  
**Areas**  
**La Pine Portion**

1 0 1 2 MILES





Timber harvesting in LaPine.

The actual volume offered may be less than the full timber harvest potential, depending upon the number of acres allocated to other uses and the operational constraints built into this land use plan in order to meet multiple use objectives. This includes year long wildlife forage and cover areas, streams identified as supporting fisheries, and areas of high visual sensitivity.

Forestland will be managed to minimize losses or damage to commercial tree species from insects and disease. Existing road systems would be utilized to the maximum extent possible. New road systems will be developed only where no other feasible means for management and harvest of commercial tree species exist.

Forestry practices will be guided by site-specific environmental analyses. Maintaining or improving site productivity will be a basic objective in all forestry practices. Harvesting minor forest products such as posts, poles or firewood will be guided by similar considerations.

## Implementation

Standard Operating Procedures for Forest Practices in the Brothers/LaPine Planning Area.

### Roads

Oregon Manual Supplement, Release 5-159 of October 1, 1984, or revisions will be used in preparing road construction requirements for timber sale contracts. Engineering terminology and types of construction equipment are defined in the manual supplement and specifications are provided for all aspects of construction, reconstruction and surfacing.

Slope protection methods to avoid collapse of cut and fill embankments are described. Specifications for rock pits and quarries include provisions for minimum visual intrusion, drainage and control of runoff and restoration after the activity ends.

One section of the manual supplement provides design features to control and minimize erosion during

road construction and throughout the design life of the road. Another section addresses soil stabilization practices, including planting, seedlings, mulching and fertilizing to establish soil binding vegetation.

Construction standards in areas such as stream crossings, subgrade width, cut and fill slope requirements and type of surfacing would be determined in the timber sale planning process. Basic construction operations are described in detail in the programmatic environmental impact statement the BLM prepared on timber management in the western United States, referred to as the BLM Timber Management FEIS. Road closures will occur where significant impacts to wildlife may result from uncontrolled vehicle access.

## Timber Harvest

Cutting areas will be shaped and designed to blend as closely as possible with natural terrain and landscape, minimizing the effect on total forest vistas. Consideration will be given to future harvesting, impacts of road construction and other relevant factors.

Silvicultural practices will be used which best meet forest management goals (particularly prompt reforestation) and multiple use considerations.

Two broad categories of silvicultural practices are intermediate and regeneration cutting. Intermediate cuttings, where the goal is to improve growth and composition of the existing forest, will include thinning, and salvage cutting to remove damaged, dying or dead trees. The goal of regeneration cutting is to facilitate the production of new trees within, or in place of, the mature forest. Regeneration cutting methods will include clearcutting, selection, seed tree and shelterwood systems. The primary regeneration cutting methods used will be the seed tree and selection systems.

Clearcutting will not be used as a cutting practice where:

1. Soil slope or other watershed conditions are fragile and subject to unacceptable damage;
2. There is no assurance that the area can be adequately restocked within five years of harvest;



Logging Ponderosa Pine in Ochoco Mountains.

### 3. Aesthetic values outweigh other considerations.

With all regeneration cutting, timber harvests will be made in a manner to improve the genetic composition of the reforested stand. Also, harvested sites will be artificially reforested when natural regeneration of commercial species cannot be reasonably expected in 5 to 15 years at acceptable stocking levels.

Logging activities will be timed to minimize adverse impacts to other resource values.

Logging systems which least disturb the soil surface and streamside buffer strips are preferred. Logging across any perennial stream will be avoided.

Tractor skid trails will be designed and located to avoid cross ridge and cross drainage operations. Tractor skidding will be avoided on slopes greater than 35 percent. Maximum acceptable soil compaction within a sale area will be 12 percent of the surface area. Waterbars will be installed on skid trails when logging is finished.

Landings will be the minimum size commensurate with safety and equipment requirements and located on stable areas to minimize the risk of material entering adjacent streams and waters. Landings will be on firm ground above the high water level of any stream. Landing locations will be avoided on unstable areas, steep side hill areas or areas which require excessive excavation.

Buffer strips along perennial streams, springs and wet meadows will be provided. Intermittent streams producing enough flow for trout or anadromous fish spawning areas or which carry heavy silt loads to perennial streams will receive the same considerations as a perennial stream.

Debris entering a stream will be removed while logging to avoid disturbing natural streambed conditions and streambank vegetation.

Trees will be left to provide for creatures that live in tree cavities if safety hazards are not created.

Slash disposal will be accomplished in a manner conducive to reforestation and advantageous to wildlife. Slash will be burned when necessary, in conformance with state fire protection and air pollution regulations.

## Contracts

Contracts, usually awarded on a competitive basis, is the way all timber harvest and many forest development practices are accomplished. Standard and special provisions (which include mitigating measures) in a contract describe performance standards for the contractor in carrying out the action in accordance with applicable laws, regulations and policies. The selection of special provisions is governed by the scope of the action to be undertaken and the physical characteristics of the specific site.

Standard provisions of the basic timber sale contract, Bureau Form 5450-3, are applicable for all timber sales. Limitations on timber harvesting and related activities, as identified in the Church Report (U.S. Congress, Senate 1973) and analyzed in the BLM Timber Management Final EIS 1975, have been adopted. BLM manuals and manual supplements provide a variety of approved special provisions for use, as appropriate, in individual contracts. The combination of selected special provisions constitutes Section 41 of the timber sale contract (Form 5450-3).

Additional specific timber management practices in the LaPine portion of the Brothers/LaPine Planning Area are:

- 1) No surfaced roads will be constructed. Access roads will be primitive, minimum-standard spur roads. Existing roads will be utilized to the maximum extent possible before new spur roads are constructed.
- 2) Only spur roads to provide basic access for protection and management will remain after timber harvesting is completed (2 miles of road per square mile of land). All other spur roads will be rehabilitated. Rubber-tired equipment will generally be used in commercial timber harvesting activities.
- 3) Approximately 135 acres will be set aside for protection of wet meadows or riparian areas. No timber harvest will occur within 100 feet of wet meadows or riparian areas.
- 4) Visual resources will receive strong consideration within a one-quarter mile corridor on each side of Highways 97 and 31 and the access road to LaPine State Park. Within Highway 97 and 31 corridors, primarily dead trees will be harvested. Cutting areas will be shaped and designed to blend as closely as possible with natural terrain and landscape.

- 5) Natural seed tree regeneration will occur in all areas.
- 6) No herbicides will be used to control competing vegetation. Livestock grazing for vegetation control will be used as much as possible to reduce competition between grass and tree seedlings.
- 7) During prescribed fire, use of best available technology may include: residue utilization, mass ignition and rapid mop up. Oregon's Smoke Management Plan will be followed.
- 8) Slash disposal will be whole-tree yarding. Trees will be limbed at the landing and slash will be disposed of by burning, in accordance with state fire protection and air pollution regulations.
- 9) The bulk of the average annual harvest level to be salvaged will be in one or two large sales (averaging 700-800 acres each) with the remainder to be salvaged in small sales (up to 40 acres) and personal use firewood cutting.

## Implementation Priority

### High

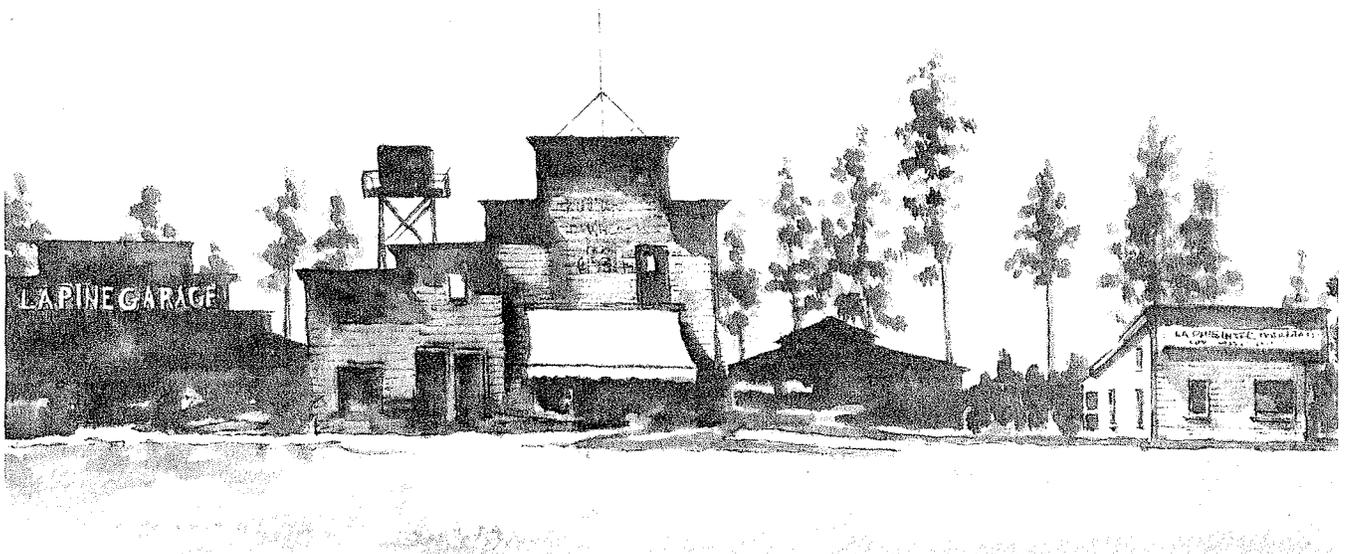
Revise and update existing timber management plan to reflect management direction of the resource management plan.

Offer commercial timber sales consistent with RMP objectives except where constrained by ongoing land exchanges or transfers.

### Medium

Prepare woodland management plan for large tracts of manageable woodland. Factors considered when determining the priority of management areas include:

- Accessibility to product and market;
- Demand for woodland products;
- Opportunities to complement other resources.



Early day LaPine.



Juniper firewood cutters near Powell Butte.

## Low

Designate selected areas for post, pole, and fuel wood permit areas in lieu of preparation of woodland management plan.

## Monitoring

Forest management practices will be monitored primarily through administration of contracts under which most actions are authorized and modified if necessary. Timber sale contracts are inspected at least once a week, when active, and more often if sensitive operations are in progress. Daily administrative visits are common when harvest is moving at a fast pace, slash disposal is occurring, or road construction involving critical work (such as stream crossing structures) is taking place. Service contracts for tree planting, thinning, pest control and the like are monitored at regular intervals to determine the quality and quantity of work completed. Visits to these operations range from once a week to the full-time presence of a Bureau contract administrator.

The success of management practices will be monitored through inventories and surveys performed at various times during a timber stand's life. Appropriate stocking surveys are performed both prior to and after treatment is accomplished. This information is documented and maintained in the operations and reforestation records systems.

## Support

Assistance from soil, water, wildlife, cultural, recreation and threatened or endangered species specialists as well as cadastral survey and some engineering support will be needed to aid in the design and layout of timber sales and access roads. Fire management support will be needed for management of natural fire in meeting forest management resource objectives. Acquisition of legal access to public land may occasionally be needed to open areas for commercial forest land management. Legal access to public land to open areas for fuel wood will be acquired only if the access also benefits other resource values.



Hunting on the High Desert.

## Recreation

The public lands within the planning area receive more than 500,000 recreation visits annually. This use is generally concentrated along the Crooked River, around Prineville Reservoir, in the Millican Valley Off-Road Vehicle Area, near Bend, Redmond and Prineville as well as in the identified rockhounding and wilderness study areas. Dispersed recreation activities such as driving for pleasure, hunting, off-road vehicle driving and hiking occurs throughout the planning area. Recreation activities and use areas requiring management attention are as follows:

### Off-Road Vehicles

The use of off-road vehicles on public lands will be regulated in accordance with the authority and requirements of Executive Orders 11644 and 11989 and regulations contained in 43 CFR 3809. They require that off-road vehicle use on public land not create significant adverse impacts to resource values, that conflicts between visitors to the public lands be minimized, that public hazards are identified and public safety occurs.

### Management Direction

Public lands which total 833,302 acres will be designated as open to off-road vehicle use since no significant impacts are occurring and off-road vehicle use is essential for conducting other authorized resource uses. All public lands in the LaPine portion are proposed to be designated as open. A total of 277,798 acres of public land where significant damage to soils, vegetation, wildlife, or visual qualities is resulting or will result from off-road vehicle use will either be limited or closed. Table 8 and Map 11 display those areas which are limited or closed to off-road vehicle use. Map 12 shows the boundary of the Millican Valley Off-Road Vehicle Area which is increased from 60,000 acres to 65,000 acres in size.

**Table 8. Areas Limited or Closed to Off-Road Vehicle Use Under the Plan <sup>1</sup>, Brothers/LaPine Planning Area.**

Area Name	Public Acres	
	Limited <sup>2</sup>	Closed
Badlands Wilderness Study Area	32,216	5
Barlow Cave	14,142	0
Barnes Butte	0	160
Benjamin	0	640
Cline Butte	23,000	0
Cline Falls	0	160
Cougar Well Wilderness Study Area	18,435	0
Forest Creeks	0	405 <sup>3</sup>
Fox Butte	11,003	0
Gerry Mountain Wilderness Study Area	20,700	0
Glass Buttes	17,460	0
Hampton Butte Wilderness Study Area	10,600	0
Horse Ridge	0	600
Logan Butte	0	802
Lower Crooked River	600	4,000
Millican Valley ORV Area	65,000	5
North Fork Wilderness Study Area	10,633	2
Peck's Milkvetch/Tumalo Winter Range	3,902	0
Powell Butte	0	520
Prineville Reservoir/Bear Creek	12,109	320
Sand Hollow Wilderness Study Area	8,791	0
Smith Rocks	1,477	0
South Fork Wilderness Study Area	16,488	3,143
Wagon Road	0	160
Winter Roost	0	320
<b>Total</b>	<b>266,556</b>	<b>11,242</b>

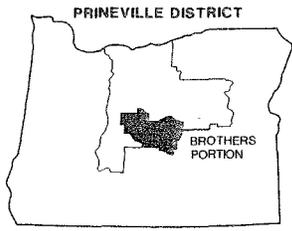
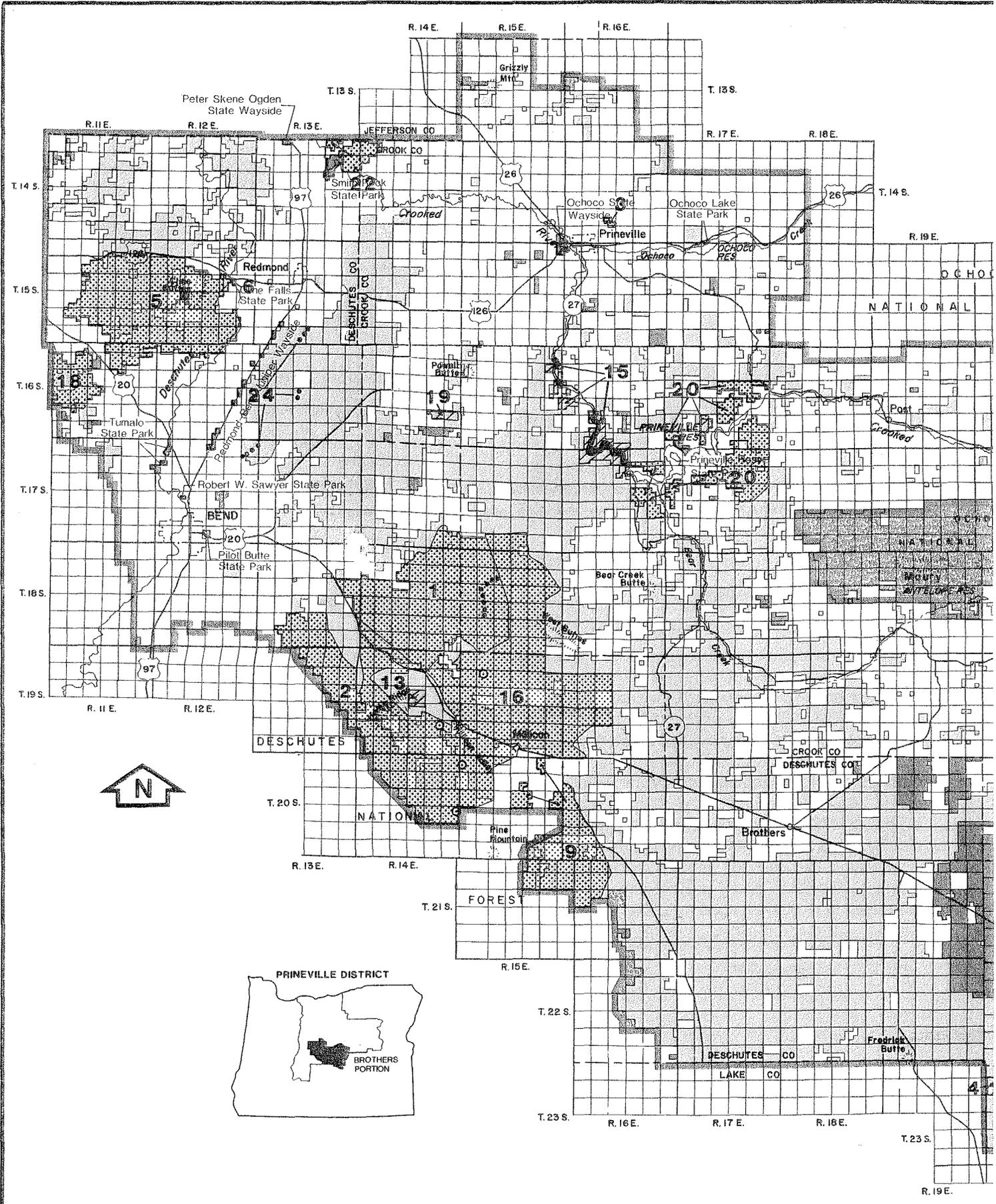
<sup>1</sup> Totals include 121,363 acres designated as WSAs.

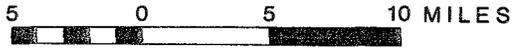
<sup>2</sup> In addition, a seasonal closure will be implemented, when appropriate, to prevent excessive damage to soil and vegetation. During this period, vehicle travel will be confined to designated roads and trails only.

<sup>3</sup> Includes public lands outside of wilderness study area boundary.

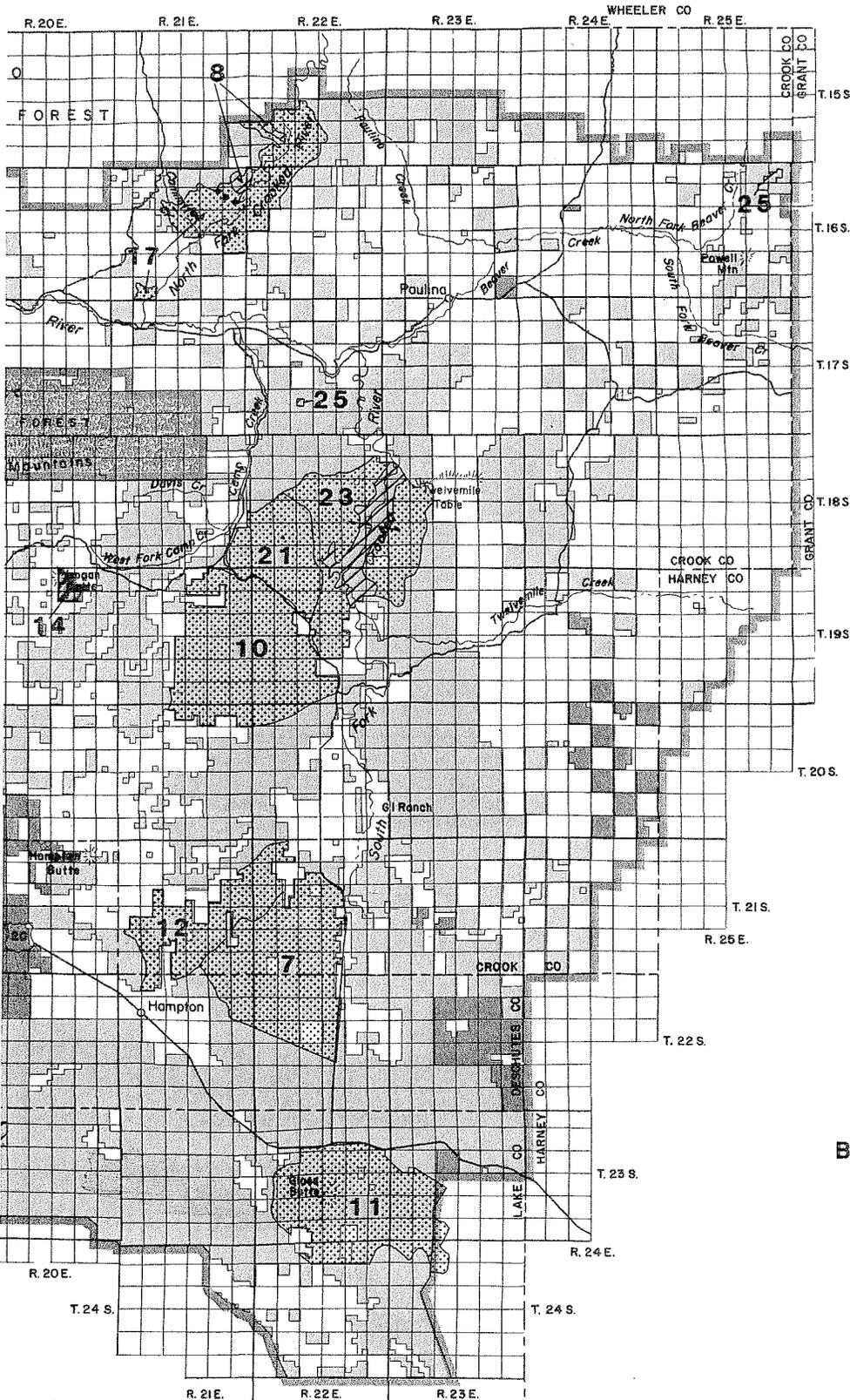


Motorcycle racers at Millican Valley.





Map Number	Area Name
1	Badlands Wilderness Study Area
2	Barlow Butte
3	Barnes Butte
4	Benjamin
5	Cline Butte
6	Cline Falls
7	Cougar Well Wilderness Study Area
8	Forest Creeks
9	Fox Butte
10	Gerry Mountain Wilderness Study Area
11	Glass Butte
12	Hampton Butte Wilderness Study Area
13	Horse Ridge
14	Logan Butte
15	Lower Crooked River
16	Millican Valley ORV Area
17	North Fork Wilderness Study Area
18	Peck's Milkvetch/Tumalo Winter Range
19	Powell Butte
20	Prineville Reservoir
21	Sand Hollow Wilderness Study Area
22	Smith Rocks
23	South Fork Wilderness Study Area
24	Wagon Road
25	Winter Roost



- Off Road Vehicle Use Is Limited to Existing, or Designated Roads and Trails, or Season of Use
- Area or Road Is Closed To Off Road Vehicle Use

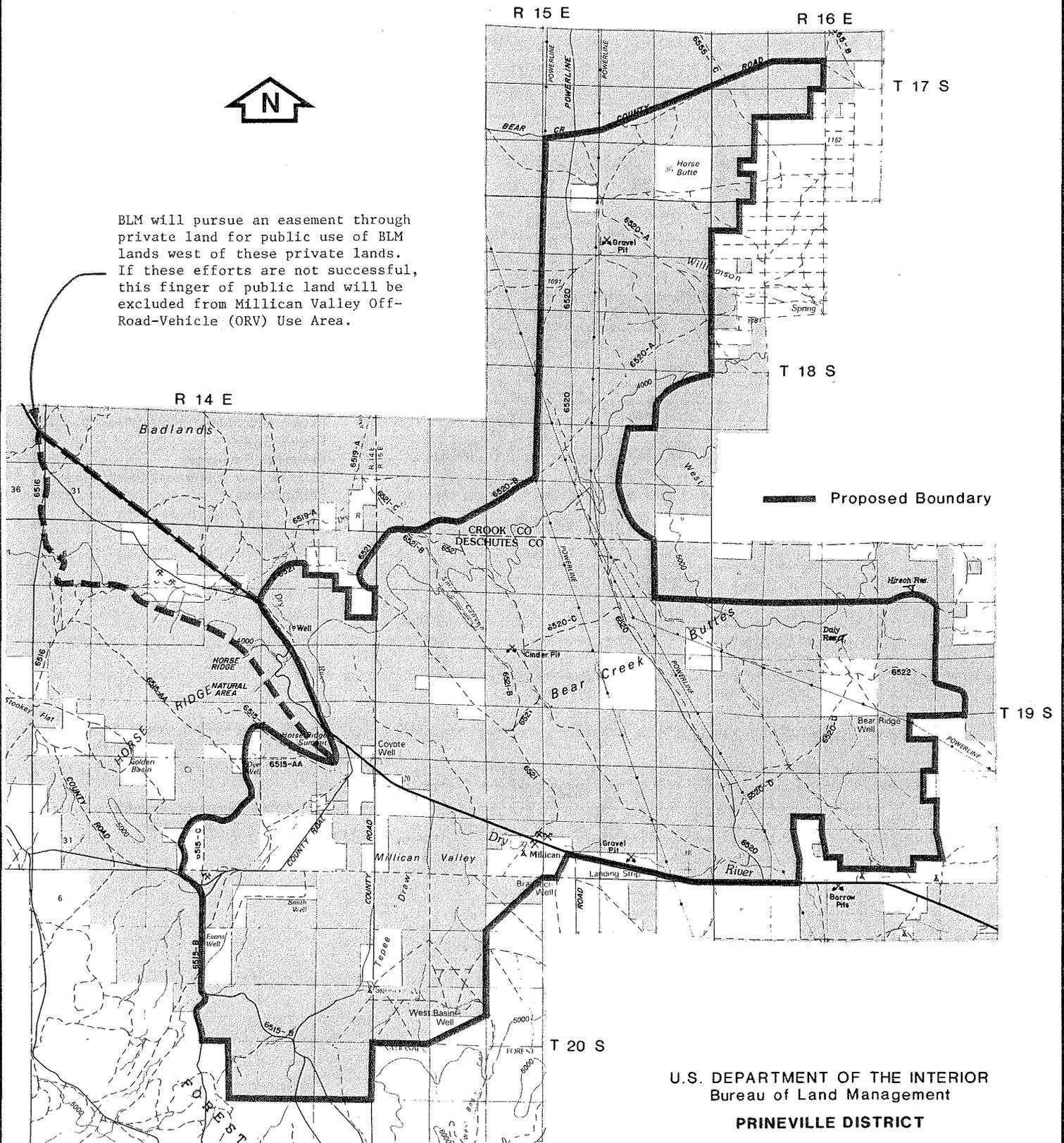
US DEPARTMENT OF THE INTERIOR  
Bureau of Land Management

PRINEVILLE DISTRICT  
MAY 1989  
BROTHERS/LA PINE PLANNING AREA

**MAP 11**  
**Off Road Vehicle**  
**Area Designation**  
**Brothers Portion**



BLM will pursue an easement through private land for public use of BLM lands west of these private lands. If these efforts are not successful, this finger of public land will be excluded from Millican Valley Off-Road-Vehicle (ORV) Use Area.



U.S. DEPARTMENT OF THE INTERIOR  
Bureau of Land Management

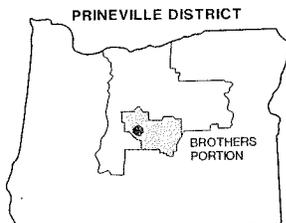
PRINEVILLE DISTRICT

MAY 1989

BROTHERS/LA PINE  
PLANNING AREA

MAP 12

Millican Valley  
Off Road Vehicle Area  
Brothers Portion



# Rockhounding

## Management Direction

The areas shown on Table 9 and Map 13 will be managed to provide for continued availability of rockhounding opportunities.

**Table 9. Management of Rockhounding Areas Under the Plan, Brothers Portion**

Area Name	Public Acres
North Ochoco Reservoir	640
Prineville Reservoir	1,300
Eagle Rock	400
Reservoir Heights	1,280
Fischer Canyon	1,920
Bear Creek	200
Smokey Mountain	700
Hampton Wood	2,240
Owens Water/South Pole Creek	
Glass Buttes	9,600
Congleton Hollow/ Liggett Table	33,000
<b>Total</b>	<b>51,280</b>

The proposal will be made to the Secretary of the Interior to withdraw 13,000 acres in the Congleton Hollow/Liggett Table area from entry under the 1872 mining law as amended for chalcedony type material to preserve public recreational rockhounding opportunities.

There are no known deposits of semi-precious stones in the LaPine portion of the planning area.

## Implementation and Monitoring

Off-road vehicle designations within the Brothers/LaPine Planning Area will be implemented consistent with funding availability and will be monitored at least once every 6 months for compliance with these designations. Specific actions such as fencing, barricading, patrols and issuance of citations will be taken to prevent significant adverse impacts from occurring on these lands.

Management actions will also be taken to ensure that public lands having high or sensitive visual qualities will be maintained or enhanced. A monitoring plan containing specific visual standards, guidelines and periodic field review of these areas will also be developed to ensure protection and maintenance of visual qualities.



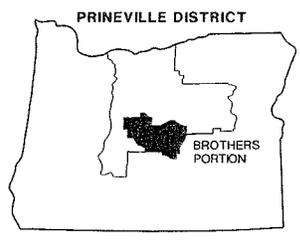
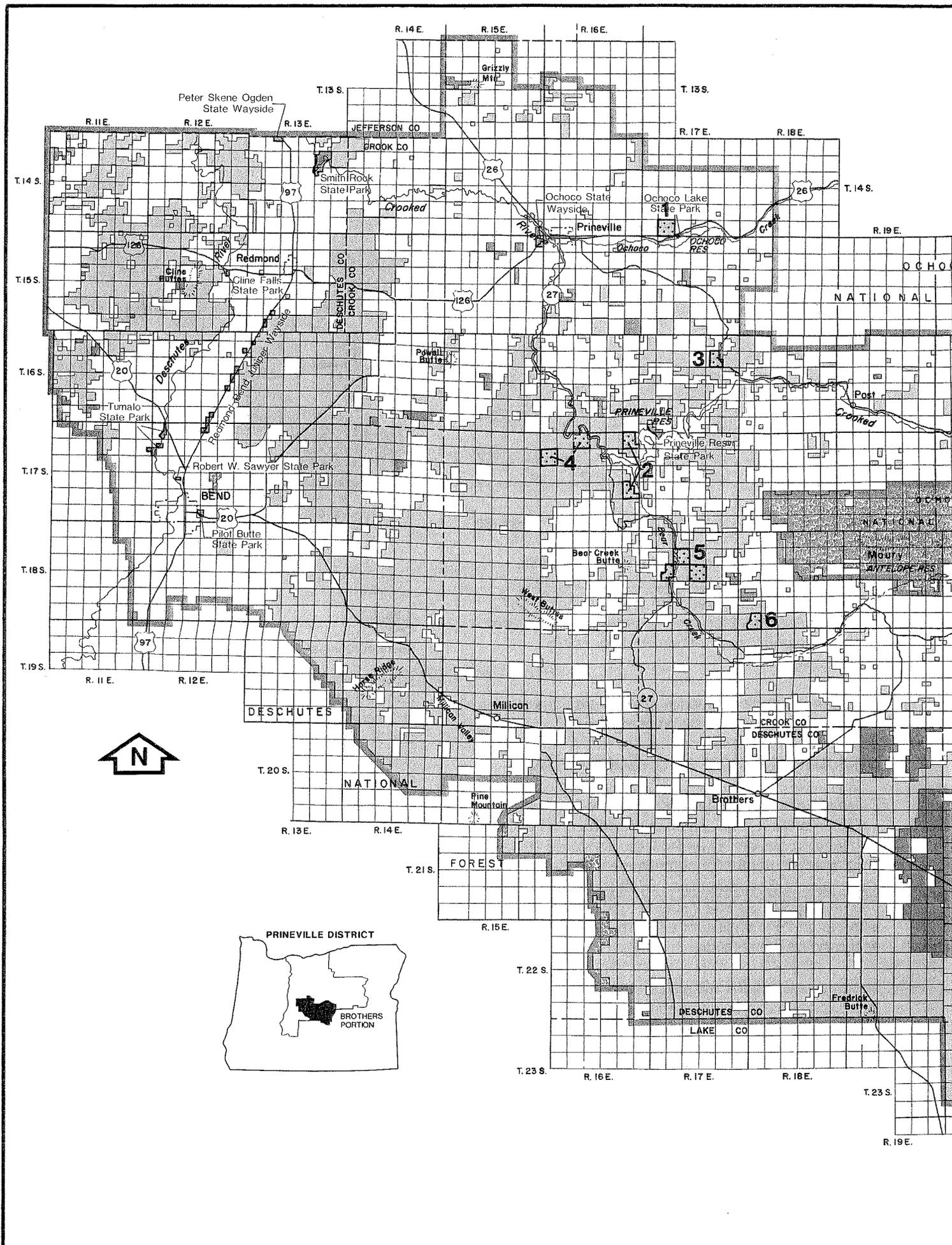
**Rockhounding at Congleton Hollow.**

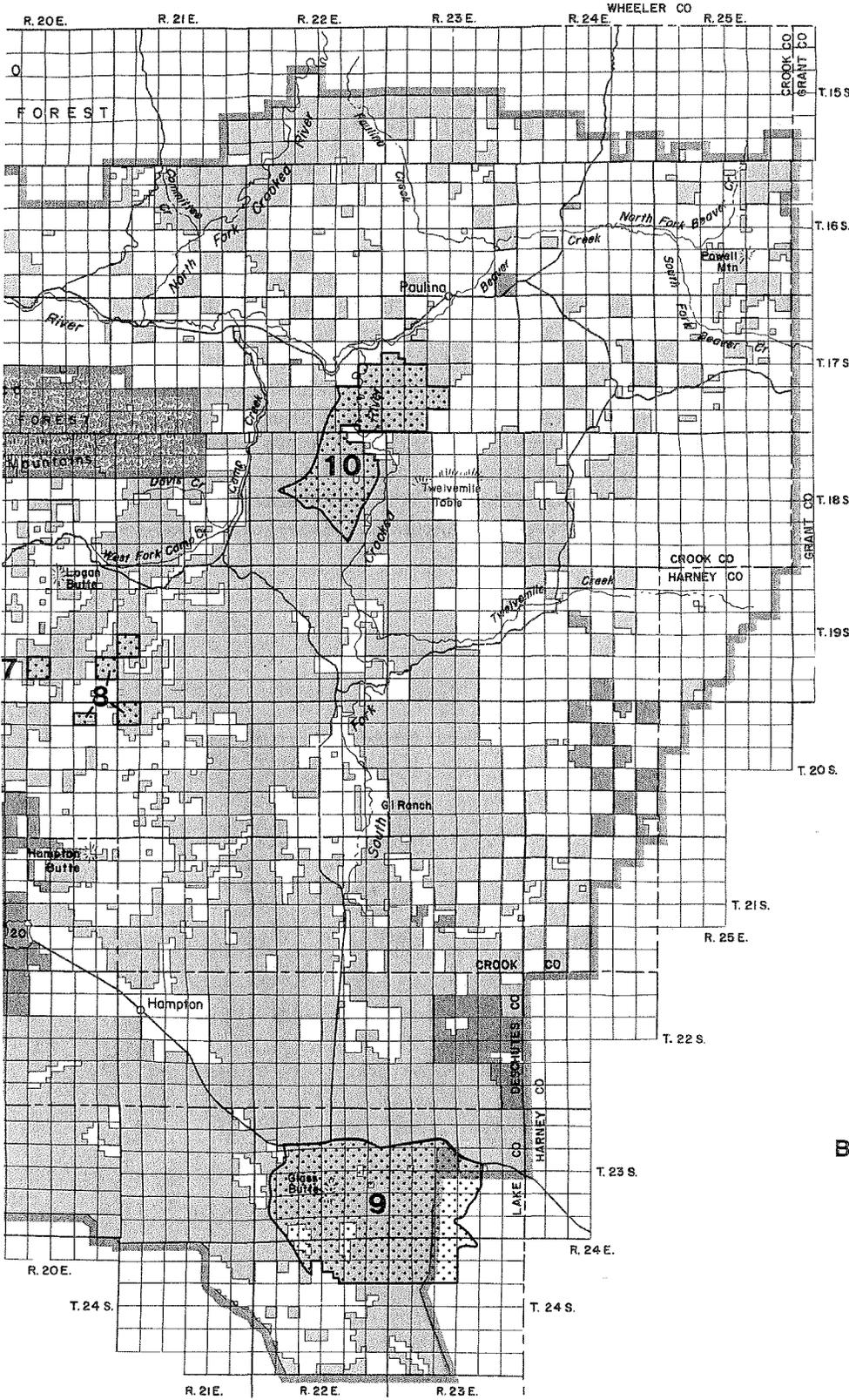
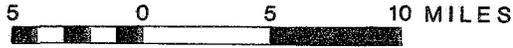
Recreational resources will be monitored to determine trends or changes in land use. The monitoring tools will include the use of visitor use surveys to determine use levels, photographs and periodic soil and vegetative condition inventories to determine surface disturbance attributed to recreation. This base line data will be used to determine the limits of acceptable change in areas with high recreation value.

## Implementation Priorities

### High

- Revise and implement Millican Valley Off-Road Vehicle Management Plan
- Develop and implement off-road vehicle management plan for the Cline Butte and Cline Falls areas.
- Implement off-road vehicle closures in all applicable areas.





**PUBLIC ROCKHOUDING AREAS**

Area Number/Name	Type of Mineral
1 North Ochoco Reservoir	Ochoco Jasper
2 Prineville Reservoir	Agate - Moss Agate
3 Eagle Rock	Agate, Angel Wing, Plume
4 Reservoir Heights	Agate
5 Fischer Canyon	Petrified Wood
6 Bear Creek	Petrified Wood
7 Smokey Mountain	Limb Cast
8 Hampton Wood	Petrified Wood
9 Glass Buttes	Obsidian
10 Congleton Hollow/ South Fork	Limb Casts, Agate, Petrified Wood, Stone Casts, Dendrites

US DEPARTMENT OF THE INTERIOR  
Bureau of Land Management

PRINEVILLE DISTRICT  
MAY 1989  
BROTHERS/LA PINE PLANNING AREA

**MAP 13**  
**Rockhounding Areas**  
**Brothers Portion**

- Implement off-road vehicle limitations in all wilderness study areas and areas of critical environmental concern.
- Develop rockhounding management plans for Congleton Hollow/Liggett Table, Glass Butte, Fischer Canyon and North Ochoco Reservoir.
- Propose withdrawal of chalcedony type material on 13,000 acres in Congleton Hollow/Liggett Table to the Secretary of the Interior to preserve public recreational rockhounding opportunities.
- Develop recreation area management plan for Prineville Reservoir in cooperation with other managing agencies and affected individuals.
- Maintain or improve existing recreation facilities adjacent to the Lower Crooked River at an acceptable standard.
- Identify all off-road vehicle restrictions in designated areas through the use of signs, brochures and maps.

## Moderate

- Implement off-road vehicle limitations in all remaining identified areas.
- Develop rockhounding management plan(s) for Bear Creek Mouth, Bear Creek, Eagle Rock, Hampton Wood/Owens Water/South Pole Creek, Reservoir Heights and Smokey Mountain.
- Develop a recreation area management plan for Tumalo area.
- Develop a trail management plan which provides corridors for travel across public lands in the planning area which is consistent with adjacent Federal, State and local trail plans.

All implementation and management plans will provide for planned public use, address public access needs, provide for public information/education, mitigate resource conflicts and promote public safety.

## Support

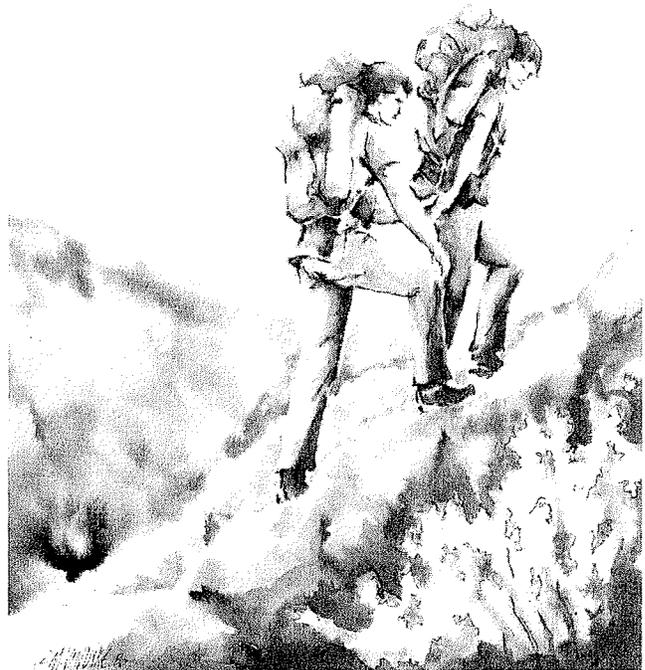
Engineering, operations and public affairs support will be needed to design and install appropriate signs, gates, fences or other barriers to facilitate implementation of ORV closures and restrictions. Volunteers from the public land users or interest

groups may be used to assist in construction and public education efforts. Maps, information brochures and interpretive facilities will also be needed to inform and educate public land users.

Support will also be needed to conduct cultural and threatened and endangered species resource evaluations in association with the issuance of special recreation permits. Acquisition of legal access to public land will be needed to assure public access for recreational purposes. Cadastral survey will be needed to delineate specific tracts of public land.

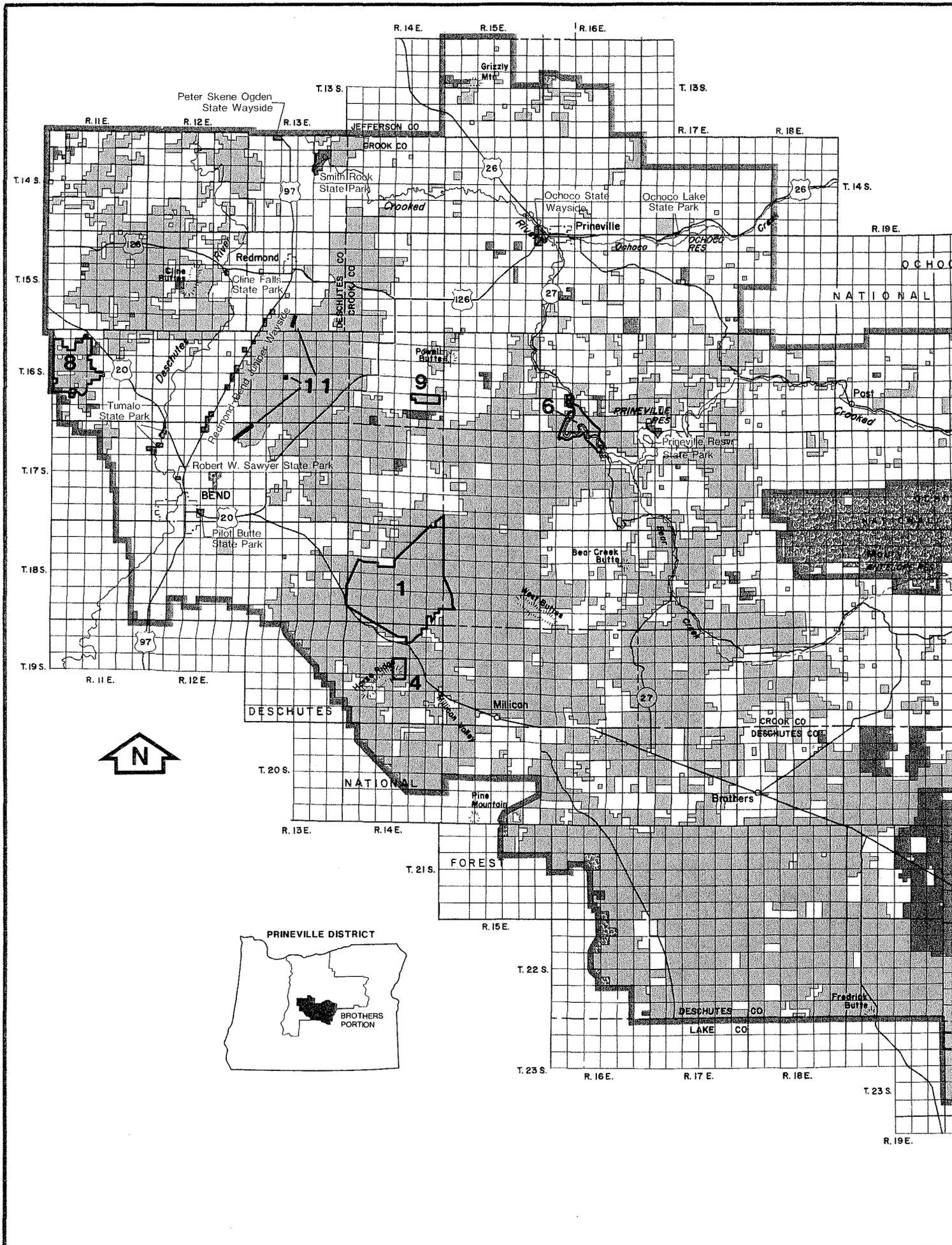
## Areas of Critical Environmental Concern

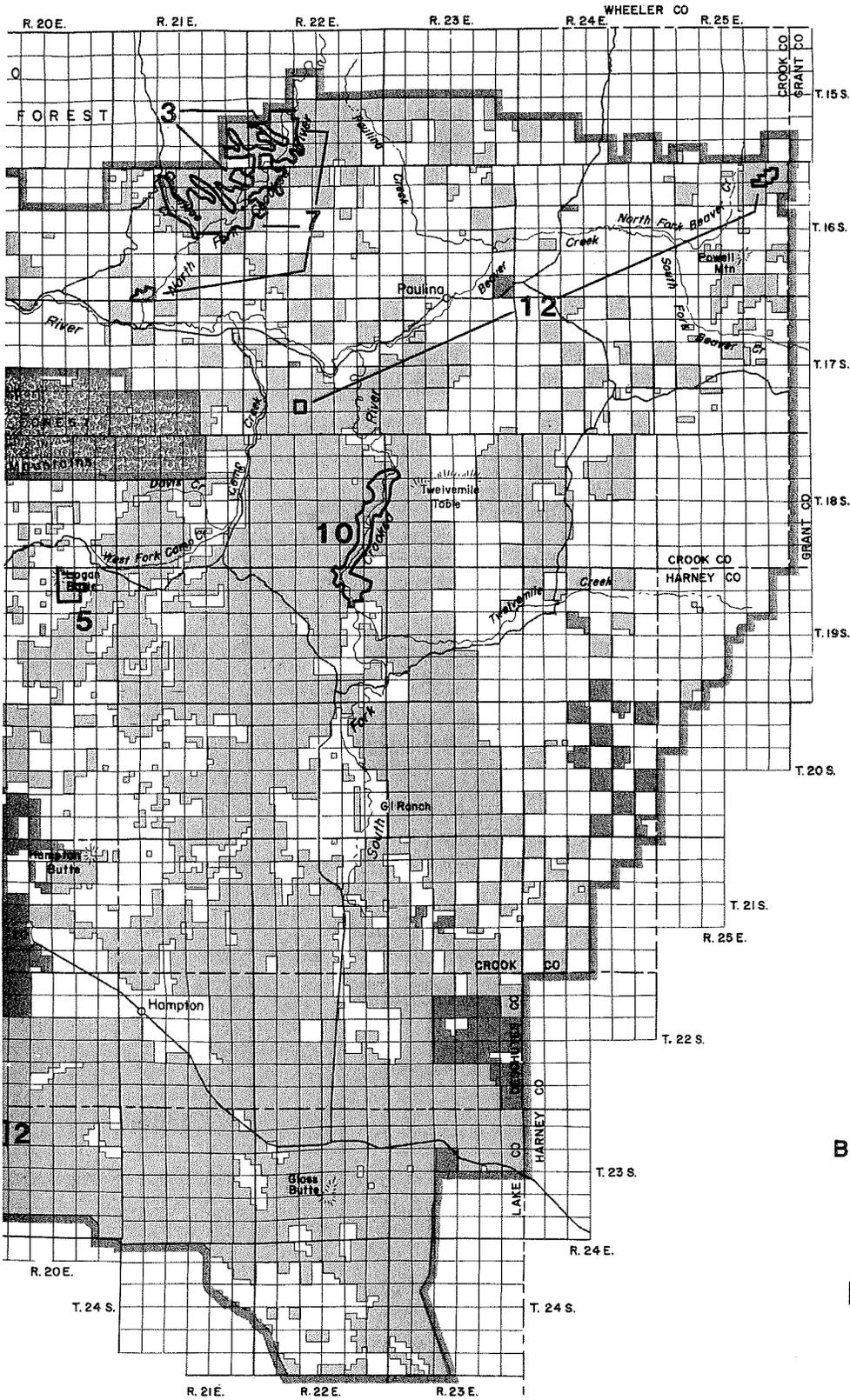
A total of 18 areas were nominated by the public and BLM staff for designation as areas of critical environmental concern. The recommendations for each area were reviewed by the Prineville District Manager, with assistance from the Resource Area Managers, the Assistant District Manager for Resources and the ACEC team leader. Six areas were found to lack relevance and/or significance and were summarized in the Draft Brothers/LaPine RMP/EIS. Twelve areas, all in the Brothers portion, were found to meet the criteria for designation as areas of critical environmental concern. Table 10 and Map 14 describes those areas.



Hikers in the South Fork of the Crooked River Canyon.







- AREAS PROPOSED FOR ACEC DESIGNATION IN THE PREFERRED ALTERNATIVE**
- 1 Badlands
  - 2 Benjamin
  - 3 Forest Creeks
  - 4 Horse Ridge
  - 5 Logan Butte
  - 6 Lower Crooked River
  - 7 North Fork Crooked River
  - 8 Peck's Milkvetch
  - 9 Powell Butte
  - 10 South Fork Crooked River
  - 11 Wagon Road
  - 12 Winter Roost

US DEPARTMENT OF THE INTERIOR  
Bureau of Land Management

PRINEVILLE DISTRICT  
MAY 1989  
BROTHERS/LA PINE PLANNING AREA

**MAP 14**  
**Areas of Critical Environmental Concern**  
**Brothers Portion**

**Table 10. Areas Designated as Areas of Critical Environmental Concern, Brothers/LaPine Planning Area**

Area Name	General Location	Special Value	Public Land <sup>1</sup> Acres
Badlands	12 mi east of Bend	Primitive recreation area, contains interesting basalt formations, juniper forest, pictographs	16,860
Benjamin <sup>3</sup>	7 mi SW of Hampton	Fills high priority RNA cell need for the High Lava Plains/Columbia Basin province (Terrestrial Cell No. 7 Western juniper/Idaho fescue community)	640
Forest Creeks <sup>2/3</sup>	12 mi NW of Paulina	Partial component of high priority RNA cell need for High Lava Plains/Columbia Basin province. (Aquatic Cell No. 2—First to third order stream originating in ponderosa pine zone and Terrestrial Cell No. 28—Willow communities in riparian area).	405
Horse Ridge <sup>4</sup>	15 mi SE of Bend	Existing RNA/NNL, prime example of western juniper/big sagebrush/threadleaf sedge plant community.	600
Logan Butte	W. end of Price Valley, 20 mi SW of Paulina	Vertebrate fossils, unusual in district.	802
Lower Crooked River	15 mi south of Prineville	Riparian values, important fishery, recreation use, State scenic highway.	2,830
North Fork Crooked River	10 mi NW of Paulina	Riparian values, important fishery, recreation use, scenery, bald eagle winter roost area.	6,737
Peck's Milkvetch	5 mi NW of Tumalo	Sensitive plant ( <i>Astragalus peckii</i> ) habitat, critical deer winter range	3,902
Powell Butte <sup>3</sup>	2 mi SW of the peak of Powell Butte	Fills RNA cell need for High Lava Plains/Columbia Basin Province (Terrestrial Cell No. 5—western juniper/big sagebrush/bluebunch wheatgrass community and No. 6—western juniper/bluebunch wheatgrass community both on steep slopes).	520
South Fork Crooked River	3 mi south of Paulina	Riparian values, fishery, recreation, scenery	3,140
Wagon Road	3 parcels between Redmond and Bend	Remaining segments of historic Huntington Road	160
Winter Roost	2 parcels near Paulina	Bald eagle winter roost areas	320
TOTAL			36,916

<sup>1</sup> Based on interdisciplinary team recommendation and district manager decision

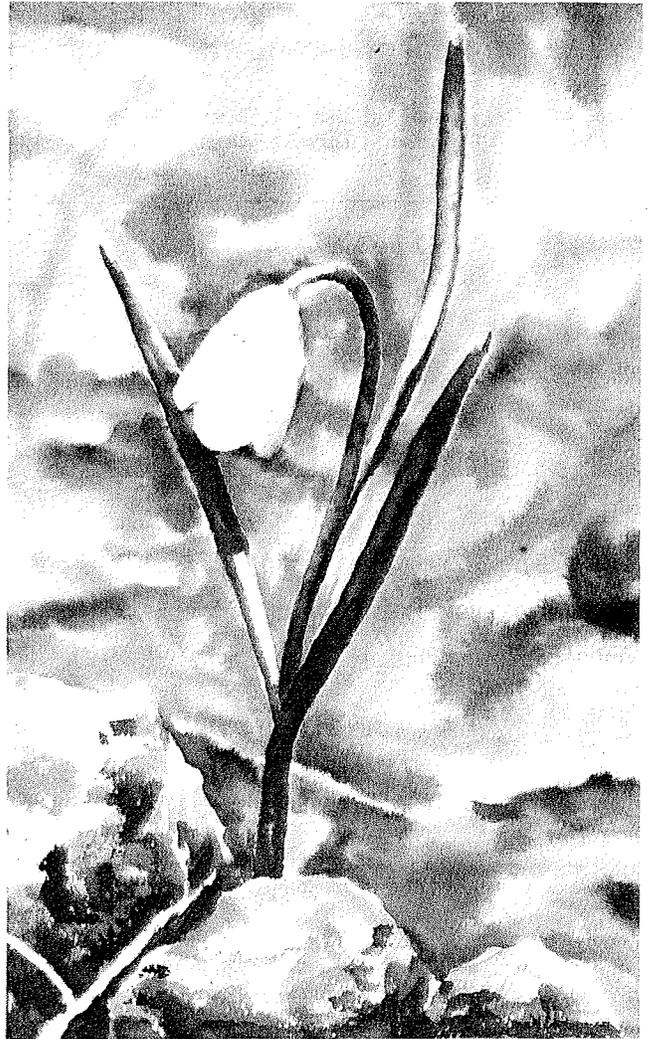
<sup>2</sup> Adjacent to but separate and distinct from North Fork Crooked River area

<sup>3</sup> Proposed as Research Natural Area

<sup>4</sup> Existing Research Natural Area/National Natural Landmark

## Management Direction

The following guidelines constitute the management plans for seven ACECs within the Brothers/LaPine Planning Area: Badlands, Logan Butte, Lower Crooked River, North Fork Crooked River, South Fork Crooked River, Wagon Road and Winter Roost. Separate, more comprehensive management plans will be written for the following four ACEC/RNAs: Benjamin, Forest Creeks, Horse Ridge and Powell Butte. A separate plan will also be written for the Peck's Milkvetch ACEC. These separate plans are targeted for completion within two years following publication of this Record of Decision and will generally be in conformance with general management direction shown on Table 11.



Yellow Bells.

**Table 11. General Management Direction for Areas of Critical Environmental Concern**

Area Name	Areas Designated	Land Tenure	Timber Harvest	Firewood Harvest	ORVs	Rock Hounding	Wild Horses	Livestock Grazing	Fire Suppression	Prescribed Fire	Mineral Development	Rights-of-Way
Benjamin	640	P	-	P	P	P	-	P	R	R	R	P
Forest Creeks	405	P	P	P	P	P	-	P	R	P	R	P
Horse Ridge	600	P	-	P	P	P	-	P	R	P	R	P
Peck's Milkvetch	3,902	P	-	P	R	R	-	R	R	R	R	P
Powell Butte	520	P	-	P	P	P	-	P	R	R	R	P

The symbols used here are:

R - use is allowed but with restrictions / stipulations designed to maintain or enhance special values

P - use of this nature is prohibited

- not applicable to this area



North Fork of the Crooked River.

## **Badlands ACEC**

### **General/Background Information:**

The ACEC consists of 16,860 acres and is located approximately 12 miles east of Bend, Oregon, north of U.S. Highway 20. Access is primarily from the north and south via primitive roads. The ACEC constitutes the central portion of the 32,000-acre Badlands Wilderness Study Area (WSA). Existing management is guided by the BLM Interim Management Policy for WSAs. The WSA has been recommended for formal designation as a Wilderness Area.

### **Primary Values:**

The ACEC contains special values as related to primitive recreation opportunities (camping, hiking, nature study), geologic formations (basalt pressure ridges), a prehistoric river canyon (Dry River), an old juniper forest and prehistoric pictographs. While not unique in and of themselves, the combination of these values coupled with their proximity to Bend make it desirable to identify and manage this area as an ACEC.

### **Existing Use Conflicts:**

The main conflicts are related to illegal off-road-vehicle (ORV) use, trash dumping, vandalism to cultural resources and firewood cutting. Since the ACEC is within a WSA, vehicle use is limited to existing roads and trails and firewood cutting is prohibited. However, close supervision is necessary to insure compliance. Livestock grazing would only become a conflict as related to associated rangeland development projects, currently restricted within a WSA. Some unauthorized, commercial collection of "floatstone", a flat basalt used for rockwork, has also occurred.

### **Management Goals:**

The primary goal is to maintain the values for which the area is designated an ACEC.

All uses of the area must contribute toward the attainment of this goal. In most cases existing uses will continue to occur.

### **Management/Use Guidelines:**

The following guidelines apply. Interim management or wilderness (subject to designation) guidelines will apply where more restrictive in character.

- Land tenure: The ACEC is completely public land within its boundaries and therefore acquisition of additional lands is not necessary. Public land within the ACEC has been classified within a "Z-1" area which retains land in public ownership due to high resource values. Therefore, land tenure adjustments within the ACEC will not be allowed.
- Rights-of-way: Other than four existing BLM road rights-of-way, there are no rights-of-way within the ACEC. No additional rights-of-way will be issued.
- Firewood harvest: Firewood cutting of any species will be prohibited.
- ORV use: Motorized vehicles will be permitted on existing roads and trails only.
- Rockhounding: Although not a major existing use, rockhounding for semi-precious stones will be permitted but limited to surface collection only. This does not apply to the collection of "floatstone", a flat basalt often used for rockwork. Collection of floatstone or similar materials will not be allowed.



Good condition riparian vegetation on Bear Creek.

- Other recreation: Non-consumptive use such as hiking, camping, nature study, horseback riding and photography will be encouraged.
- Livestock grazing: Grazing will continue as long as the amount and timing of use maintains or improves the natural values of the ACEC. Associated development projects will be allowed if implementation will maintain or enhance the existing special values of the ACEC and will include fences and water developments. The existing level of water hauling for livestock use will continue, however water hauling should eventually be replaced with pipelines. Vegetation manipulation will not be allowed.
- Wildlife management: Wildlife enhancement projects not including vegetation manipulation will be allowed as long as the existing special values are maintained or enhanced.
- Fire management: Wildfire will be allowed as a natural part of the ecological process as long as

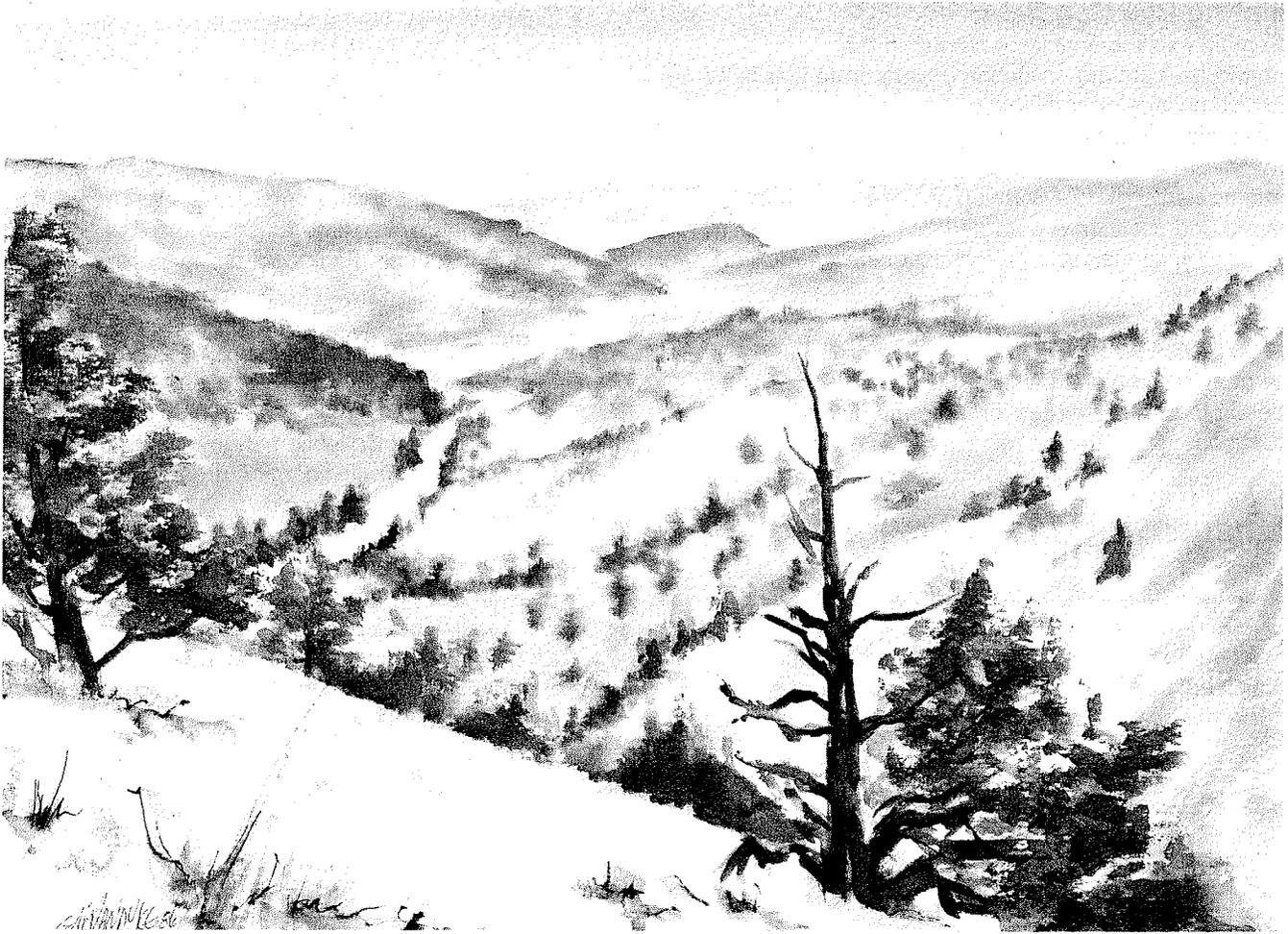
adjacent private land is not threatened, consistent with the District Fire Management Plan. This will enhance the primitive recreational values of the ACEC. Any necessary suppression actions will be the minimum necessary and will not include mechanical disturbance. Prescribed fire will not be allowed.

- Minerals: A plan of operation will be filed with the Prineville District office prior to any surface-disturbing activity. The plan will specify the actions necessary to preserve the special values within the ACEC. This applies to both leasable and locatable minerals and materials.

### **Monitoring:**

The following monitoring actions will help to insure that the integrity of the ACEC is maintained:

- Compliance/supervision: Field examinations of the ACEC will occur at least four times each year, with specific regard toward illegal ORV use, trash dumping, archaeological violations and woodcutting.



South Fork of the Crooked River Canyon.

These examinations will be coordinated with wilderness interim management patrols. Law enforcement and volunteers will be made aware of sensitive archaeological sites.

- Livestock grazing: Photo points and trend studies have been established at several locations within the ACEC in conjunction with grazing allotment management. These will be maintained on a scheduled basis.

### **Other Actions:**

If the Badlands WSA does not become a designated wilderness, the boundary of the ACEC will be identified on the ground with appropriate markers. Signs will be posted warning potential vandals to not disturb archaeological sites. Water hauling should eventually be replaced with pipelines.

## **Logan Butte ACEC**

### **General Background/Information:**

The ACEC consists of 802 acres of public land in the west end of Price Valley, near Camp Creek, approximately 20 miles north of Hampton and 20 miles southwest of Paulina. A county road provides access to within one-quarter mile of the ACEC. Permission from the adjacent private landowner is required for foot access across this remaining distance.

### **Primary Values:**

The ACEC has some value for hiking and sightseeing but the primary value is related to the presence of vertebrate fossils. Fossils of vertebrates such as the Oreodont (a pig-like creature) have been found in the ACEC which is similar in nature to the geology of the John Day Fossil Beds National Monument near Clarno and Mitchell, Oregon. Such fossil occurrences are uncommon in the District and are of international significance.

### **Existing Use Conflicts:**

The main existing conflict is related to the unauthorized private collection of vertebrate fossils by amateur collectors and by local high school classes on field trips. A potential conflict exists as related to bentonite mining. A large proportion of the ACEC contains bentonitic clays which are used for pond sealant and cat litter. A commercial bentonite operation is located four miles east of the ACEC in Price Valley.

### **Management Goals:**

The goal is to maintain and protect the paleontological resources for future study and education.

### **Management/Use Guidelines:**

- Land tenure: Public land within and around the ACEC has been classified as "Z-1" which retains land in public ownership due to high resource values. Designation of this ACEC precludes exchange of this land.

- Rights-of-way: No rights-of-way exist in the ACEC and none will be allowed.
- Firewood harvest: Except for the casual collection of limbwood and other material for campfires, firewood cutting will not be allowed. While such activity could be accommodated in the ACEC it is unlikely there would be any demand and given the extent of juniper in adjacent areas there is no need.
- ORV use: The ACEC will be closed to all forms of ORV use.
- Rockhounding: Collection of any material will be prohibited. This will aid in the preservation of the paleontological resource.
- Other recreation: Non-consumptive activities such as hiking, camping, photography and nature study will be allowed. BLM-led interpretive trips will be encouraged for local students and other interested groups. The acquisition of legal public foot access across private land will be pursued.



Upper Crooked River flowing through the Paulina Valley.

- Livestock grazing: Apart from developments which result in surface disturbance, livestock grazing is not a factor and therefore will continue as is. Fences will be the only development work allowed.
- Wildlife management: Habitat enhancement projects will be allowed if no surface disturbance is involved.
- Fire management: Fire suppression activities will occur as needed as long as surface disturbance is kept to a minimum.
- Paleontology: A survey will be initiated to inventory the probable extent of the paleontological resource. A decision will then be made to determine what area, if any, should be withdrawn from mineral leasing and location.
- Minerals: A plan of operation will be filed with the Prineville District office prior to any surface-disturbing activity. The plan will specify the actions necessary to preserve the special values within the ACEC. This applies to both leasable and locatable minerals and materials. The ACEC is presently under lease for oil and gas.

### **Monitoring:**

The following monitoring actions will help to insure that the integrity of the ACEC is maintained:

- Compliance/supervision: Field examinations of the ACEC will occur at least once each year, with specific regard toward illegal fossil collection.

Other Actions: Signs will be placed at major access points informing the public that the area is an ACEC and that collection of material is prohibited.

## **Lower Crooked River ACEC**

### **General/Background Information:**

The ACEC encompasses 2,830 acres of public land along approximately 7 miles of the Crooked River, approximately 15 air miles south of Prineville, Oregon. Access is via State Highway 27 from Prineville, a designated State Scenic Highway which traverses the entire length of the ACEC from north to south.

- This portion of the Crooked River was designated a National Wild and Scenic River by the Omnibus Oregon Wild And Scenic River Act of 1988

(P.L. 100-557). It was classified as a "recreational river" area.

Primary Values: The ACEC is known first and foremost for its scenic qualities and recreational values, primarily trout fishing and camping. Sightseeing and hiking are popular since the area occupies a river canyon with spectacular towering cliffs and interesting geologic formations. An estimated 65,000 visitor days occur annually. The area also contains important riparian resources. One developed and several semi-developed campsites are located within the ACEC.

### **Existing Use Conflicts:**

The main conflicts have been related to ORV use and its impact on the flat land adjacent to the river. A lack of visitor facilities has also contributed to resource degradation. Livestock grazing has also conflicted with recreation and this, plus the presence of water hemlock (a poisonous plant) along the river led to the removal of livestock several years ago.

### **Management Goals:**

Two main goals have been identified. The first goal is to manage the public lands in a manner that will ensure continued public use and enjoyment for a variety of recreation activities compatible with the protection and enhancement of the river's natural resources including scenic quality, and the second is to provide high quality visitor services, including access roads, camping and day-use facilities, signs and interpretive information.

### **Management Use/Guidelines:**

The following guidelines apply:

- Land tenure: Public land within the ACEC has been classified as "Z-1" which mandates retention in public ownership.
- Rights-of-way: Other than State Highway 27, there are no rights-of-way in the ACEC. No additional rights-of-way will be considered unless they are underground utility rights-of-way which can be located in suitable areas adjacent to State Highway 27.
- Firewood harvest: Firewood cutting will not be allowed.
- ORV use: Motorized vehicles will be restricted to designated access routes between State Highway 27 and the river. Elsewhere within the ACEC, vehicle use will be restricted to existing roads.

- Other recreation: All forms of non-destructive recreation will be encouraged, including fishing, camping, picnicking, photography and hiking.
- Livestock grazing: Although the ACEC is part of the River pasture of the Prineville Dam allotment (No. 5137), use has not occurred for several years. Future use would be allowed if it was designed to enhance the ecosystem and would be limited to a short period of grazing, primarily in the late winter/early spring before the significant visitor use begins.
- Wildlife/watershed/riparian management: Natural-appearing enhancement projects will be allowed. Prescribed fire is needed to return the ACEC to a natural fire-dependent ecosystem and to maintain the natural aspect with a stable, productive watershed. Fisheries projects will be encouraged.
- Fire management: Wildfire suppression will occur at whatever level necessary to protect public facilities (campgrounds, etc.) with minimal mechanical disturbance. Fires which would not

threaten or damage the primary values of the ACEC will be allowed to burn, thereby enhancing the natural ecosystem.

- Minerals: A plan of operation will be filed with the Prineville District office prior to any surface-disturbing activity. The plan will specify the actions necessary to preserve the special values within the ACEC. This applies to both leasable and locatable minerals and materials.

### **Monitoring:**

The following monitoring activities will help to insure that the integrity of the ACEC is maintained:

- Compliance/supervision: In addition to scheduled patrols by a BLM ranger and the Crook County Sheriff's Department, daily visits by the recreation maintenance worker during the peak visitor season should alert BLM to any existing or potential problems.
- Riparian values: The existing riparian studies will be maintained.



**Crooked River upstream from Prineville.**

- ORV use: A detailed map/photograph showing the location of all designated open and closed access routes will be prepared to be used as a baseline for future monitoring.

**Other Actions:**

The following actions are necessary to achieve the management goals:

1. Development of additional day-use and camping facilities and limiting "primitive" camping to designated areas.
2. Construction of facilities for the physically handicapped.
3. Control of vehicle access through access road improvements and by closing all non-designated roads.
4. Riverbank stabilization by juniper tree placement and other appropriate methods in areas actively eroding.

5. The recreation maintenance worker will receive basic training dealing with the natural and recreational values of the ACEC in order to facilitate visitor communication and education.

6. Prescribed fire will be judiciously used to maintain the ACEC in a natural appearance with a stable, productive watershed.

**North Fork Crooked River ACEC**

**General/Background Information:**

The 6,737-acre ACEC consists of the heart of the 12,110-acre North Fork WSA and an additional 330 acres southwest of the WSA. The ACEC is located approximately 30 miles east of Prineville, Oregon, adjacent to the Ochoco National Forest. Access is either from the south on BLM roads or from the north on Forest Service roads. The main feature of the ACEC is the canyon of the North Fork Crooked River and the boundary reflects the topographical break

between the steep canyon and tributary canyon slopes and the gentler topography above. Within the ACEC, the North Fork Crooked River was designated a National Wild and Scenic River by the Omnibus Oregon Wild and Scenic River Act of 1988 (P.L. 100-557). The southernmost one-half mile was classified as a "recreational river" and the upper 11.1 miles were classified as "wild". The Forest Creeks ACEC/RNA adjoins the North Fork Crooked River ACEC at two locations in the north and west. Existing management is guided by the BLM Interim Management Policy for Wilderness Study Areas. The North Fork WSA has been recommended unsuitable for wilderness designation.

### **Primary Values:**

The ACEC contains special values as related to scenery, recreation, vegetation and endangered species. Hunting, fishing, hiking and camping are the predominant recreation activities and center around the river. The native trout fishery is enhanced by the presence of a vital riparian ecosystem including woody as well as graminoid species. Two important bald eagle winter roost sites have been documented in the ACEC.

### **Existing Use Conflicts:**

The main conflict in the ACEC centers around unauthorized ORV use. A major BLM road crosses and borders the ACEC at several locations. Where the road is above the canyon on gentle topography, and in fact outside the ACEC, it is easy to drive off-road to find access points into the main canyon within the ACEC. This causes unsightly and erosive ruts on the hillsides near the river. A lesser problem is livestock use on the riparian vegetation. Use is generally limited due to the steep topography, but where use occurs it is often severe.

### **Management Goals:**

The primary goal is to maintain the values for which the area is designated an ACEC. All uses of the area must contribute toward the attainment of this goal. In most cases existing uses will continue to occur.

### **Management/Use Guidelines:**

The following guidelines apply. Interim management guidelines will apply where more restrictive in character.

- Land tenure: Public land within the ACEC has been classified within a "Z-1" area which retains land in public ownership due to the high resource values. Therefore, all public land in the ACEC will be retained in federal ownership. Two parcels of

private land, encompassing 480 acres, lie within or adjacent to the ACEC boundary and contain similar values. Acquisition of these parcels will be pursued by the BLM.

- Rights-of-way: There are two rights-of-way in the ACEC: a road right-of-way for the main BLM access road and a ditch right-of-way for an irrigation ditch in sections 14 and 22. These rights-of-way will be retained but no new right-of-way will be considered.
- Firewood harvest: Cutting of any vegetation for firewood will be prohibited except for the collection of limbwood, etc. for campfires.
- Timber harvest: Forestland within the ACEC has been previously withdrawn from the District's allowable harvest base and no future harvest is planned or will be permitted.
- ORV use: Vehicle use will continue on existing, designated roads within the ACEC. Trails leading into the canyon will be closed to all vehicle use.
- Other recreation: The ACEC will remain open for all forms of primitive recreation.
- Livestock grazing: Grazing will continue in the ACEC. Allotment management plans will be prepared for the affected allotments (North Fork No. 0053 and Rabbit Valley No. 0050) which will specify a grazing strategy designed to maintain the riparian and upland vegetation. Development projects including fences, reservoirs, springs and pipelines will be limited to those necessary to enhance the values of the ACEC.
- Wildlife management: Wildlife enhancement projects will be allowed as long as the existing special values are maintained or enhanced. Extensive vegetation manipulation other than by prescribed fire will not be allowed.
- Fire management: Due to forestry values adjacent to the WSA, wildfire will be suppressed as necessary using the minimum amount of equipment with the least amount of ground disturbance.
- Minerals: The entire ACEC is either leased or has been leased for oil and gas. A plan of operation will be filed with the Prineville District office prior to any surface-disturbing activity. The plan will specify the actions necessary to preserve the special values within the ACEC. This applies to both leasable and locatable minerals and materials.

## **Monitoring:**

The following monitoring actions will help to insure that the integrity of the ACEC is maintained:

1. Detailed maps will be prepared showing legal access roads and the extent of disturbance from ORV use. This will provide baseline data. Reinventory will occur every two years.
2. Field examinations of the ACEC will occur at least two times each year, with specific regard toward ORV use and livestock use supervision.
3. Photo points, vegetation frequency studies and riparian studies have been established at several locations within the ACEC. These will be maintained on a scheduled basis.
4. Identified bald eagle winter roost sites will be visited annually to determine the extent of use and to detect any unauthorized activity which may threaten this resource.

## **Other Actions:**

The ACEC boundary will be identified on the ground with appropriate markers at all major entrances.

## **South Fork Crooked River ACEC**

### **General/Background Information:**

The ACEC consists of 3,140 acres in the central portion of the 19,600-acre South Fork WSA, approximately 7 air miles south of Paulina, Oregon. Access is via primitive BLM roads. Existing management is guided by the BLM Interim Management Policy for WSAs. The WSA has been recommended for designation as a Wilderness Area.

### **Primary Values:**

The ACEC contains special values as related to riparian ecosystems, a fishery resource, recreation and scenery. The South Fork of the Crooked River and its scenic canyon is the main feature of the ACEC.

A recovering riparian ecosystem along the river and a popular trout fishery add to the public value of this area. Visitor use is increasing.

### **Existing Use Conflicts:**

The primary conflicts have been yearlong grazing of the riparian zone by wild horses and grazing by cattle drifting through fences during scheduled rest periods. The cattle grazing is partly caused by the difficulty in maintaining the boundary fences which are often ineffective. Although the riparian ecosystem is improving, progress is slowed.

### **Management Goals:**

The primary goal is to maintain the values for which the area is designated an ACEC. All uses of the area must contribute toward the attainment of this goal. In most cases existing uses will continue to occur.

### **Management/Use Guidelines:**

The following guidelines apply. Interim management or wilderness (subject to designation) guidelines will apply where more restrictive in character.

- Land tenure: The ACEC is within a "Z-1" land tenure area, meaning high-value public land is to be retained in federal ownership. One tract of private land totaling 80 acres is within the boundary of the ACEC. The BLM will attempt to acquire this land through purchase or exchange.
- Rights-of-way: No rights-of-way exist in the ACEC and none will be permitted.
- Recreation use: All forms of primitive, nonsurface disturbing recreation will be permitted as well as casual surface collection of rockhounding material. ORV use, including ATV use along the river bottom, will not be permitted.
- Firewood harvest: Except for the collection of limbwood, bark and other material for recreational campfires, removal of any material for firewood will not be permitted.
- Livestock grazing: Grazing by domestic livestock will continue with the objective of improving the condition of the riparian ecosystem. This will involve limited early spring use with controlled livestock numbers. Fences will be modified and upgraded as necessary to more adequately control livestock. Future developments will be limited to those necessary to enhance the values of the ACEC.
- Wild horses: The South Fork ACEC is not part of the designated Liggett Table wild horse herd

management area. Any horses within the ACEC will be removed.

- Wildlife management: Wildlife enhancement projects not including vegetation manipulation will be allowed as long as the existing special values are maintained or enhanced.
- Fire management: Fire suppression will be allowed with the minimum equipment and disturbance necessary to accomplish the job.
- Minerals: The entire ACEC is either leased or has been leased for oil and gas. A plan of operation will be filed with the Prineville District office prior to any surface-disturbing activity. The plan will specify the actions necessary to preserve the special values within the ACEC. This applies to both leasable and locatable minerals and materials.

### **Monitoring:**

The following monitoring actions will help to insure that the integrity of the ACEC is maintained:

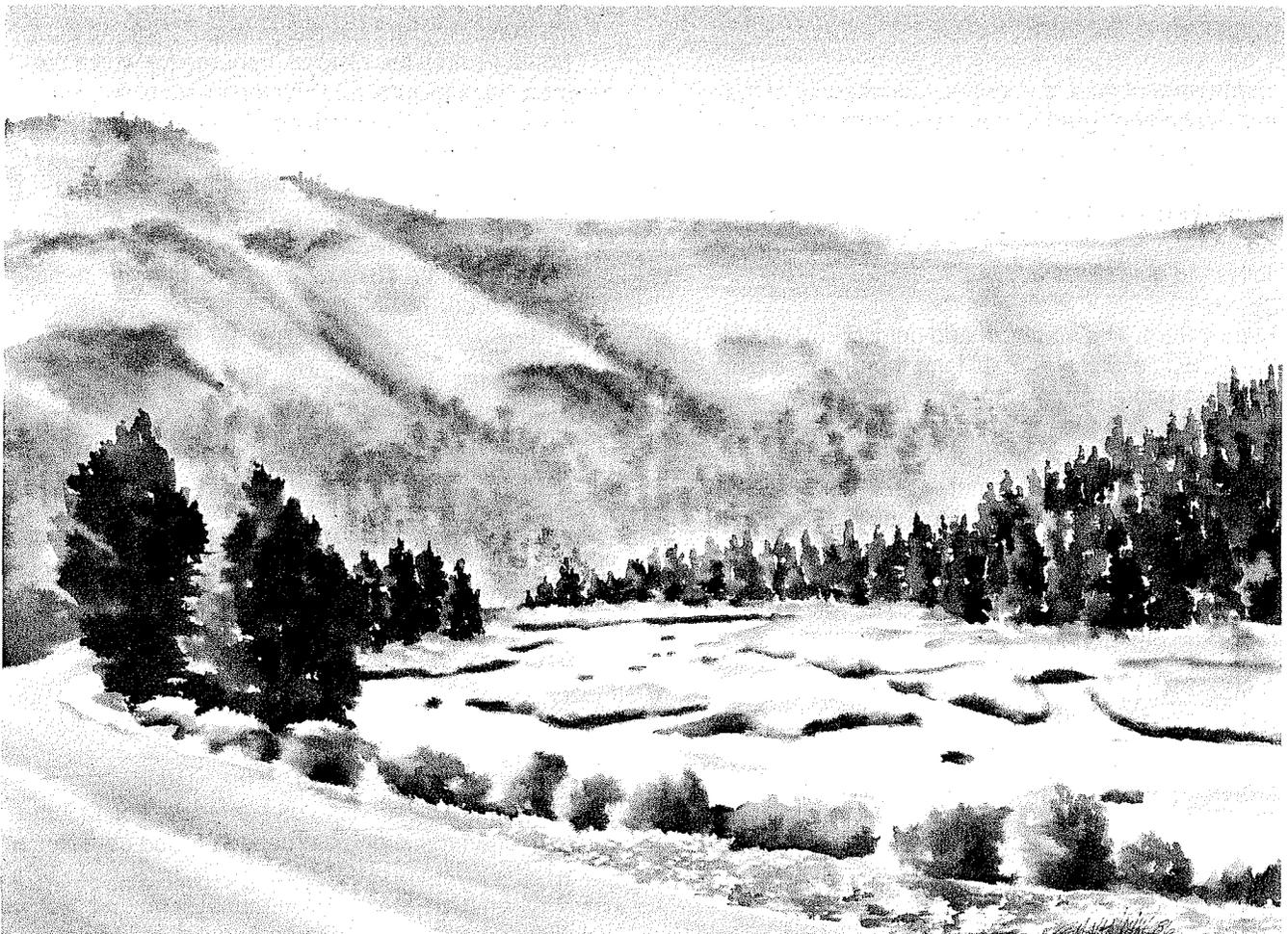
1. Field examinations of the ACEC will occur at least two times each year, with specific regard toward livestock use supervision and trespass abatement.
2. Photo points, vegetation frequency studies and riparian studies have been established at several locations within the ACEC. These will be maintained on a scheduled basis.

### **Other Actions:**

If the South Fork WSA is not designated as wilderness, the boundary of the ACEC will be identified on the ground with appropriate markers.



Fishing the Crooked River near Chimney Rock Recreation Site.



Crooked River downstream from Bowman Dam.

## Wagon Road ACEC

### General/Background Information:

The ACEC consists of three segments of a historic wagon road totaling almost 2 miles. Including a 300-foot buffer zone on either side of the road to protect associated historic features, the ACEC covers about 160 acres. The northernmost segment, about five-eighths mile long, is located 2 miles south of Redmond, Oregon. The middle segment, one-eighth mile long, is located 5 miles south of Redmond and the southernmost segment, about 1.25 mile long is located 8 miles southwest of Redmond. Access to all segments is via primitive BLM roads, or from county and private roads east of U.S. 97, between Redmond and Bend, Oregon.

### Primary Values:

The ACEC contains some of the remaining segments of Huntington Road, a mid 19th-century military route

between The Dalles and Fort Klamath (Klamath Falls), Oregon. This road may also have been used by the Meek party of emigrants in 1845. In places the road is obvious due to compacted soils, worn rock and differences in vegetation in the western juniper forest. In other places it is obscure. Associated features include blazed trees, campsites and other identifiable use areas.

### Existing Use Conflicts:

The main conflict is ORV use, primarily by all-terrain vehicles (ATVs). The proximity of the ACEC to suburban development lends itself to casual use by ATV enthusiasts. Such use destroys the integrity of the historic resource through surface disturbance and compaction, through the creation of new trails and by vandalism. Since the ACEC is in a juniper forest, illegal firewood cutting is a potential threat, particularly to the blazed trees. Livestock grazing is also a potential threat since any significant concentration of cattle could obliterate the wheel traces.

## Management Goals:

The management goal is to protect the integrity of the historic Huntington Road and at the same time provide for its use as an interpretive resource.

## Management Guidelines:

The following guidelines apply:

- Land tenure: The southern and central portions of the ACEC lie within a "Z-2" land tenure zone. The northern portion is within a zone where public lands have been identified for possible transfer or exchange to local governments for community expansion or other public purposes. The 160 acres of public land comprising the ACEC will be retained in federal ownership unless transfer or exchange of these small tracts could ensure retention and protection of the historic resources for public benefit.
- Rights-of-way: No rights-of-way exist and none will be permitted.
- Firewood harvest: Firewood cutting will not be permitted.
- Recreation: All forms of non-motorized, primitive recreation will be permitted with the exception of horseback riding and non-motorized vehicle use along the route. ORV use is prohibited.
- Livestock grazing: The ACEC is within portions of three grazing allotments. Livestock grazing will be permitted as long as livestock do not concentrate in the ACEC. No developments will be permitted within the ACEC. Any new water or fence developments and salting locations will be kept at least one-half mile from the ACEC boundary unless a fence separates the increased level of livestock use from the ACEC.
- Wildlife management: Enhancement projects will not be permitted.
- Fire management: Wildfire within or threatening the ACEC will be fought aggressively. Fire lines will not run through the ACEC and surface disturbance will be kept to a minimum. Prescribed fire will not be permitted.

- Minerals: Any surface disturbance of the ACEC would destroy the historic resource for which the area was designated. Development of leasable minerals could occur since disturbance could be offsite. While the potential of mineral development is not high in the ACEC, guaranteed protection from surface disturbance is important. For this reason a withdrawal of the ACEC from mineral entry under the 1872 mining laws as amended will be pursued.

## Monitoring:

The following actions will insure that the integrity of the ACEC is maintained:

- Compliance/supervision: Field examinations will occur twice annually for the southernmost portion of the ACEC and at least annually on the remaining two portions. Special attention will be directed toward illegal ORV activity, firewood cutting and vandalism.
- Photographic documentation: Baseline photographs will be taken of the road at established locations to give an indication of long-term changes in or disturbance of road conditions.
- Fence maintenance: If a segment is fenced or included within a fenced area to protect it from ORV use and/or livestock grazing, the entire fence will be inspected twice per year to insure its integrity. Minor maintenance needs will be taken care of promptly.
- Volunteer involvement: Assistance from local historical societies will be sought to provide casual supervision of the ACEC.

## Other Actions:

The ACEC will be promoted through the historical societies and field trips will be encouraged as a means to increase an awareness of historic resources on public land. An interpretive brochure will be published. Adjacent landowners will be educated regarding the value of this ACEC and will be encouraged to perform the function of a "neighborhood watch" to alert BLM of any existing or potential problems.

## Winter Roost ACEC

### General/Background Information:

The ACEC consists of two tracts of public land: one 40-acre parcel and one 280-acre parcel, for a total of 320 acres. The tracts are widely separated and are located southwest and northeast of Paulina, Oregon. Access is by foot from primitive BLM roads.

### Primary Values:

A significant bald eagle winter roost site is located on each tract. Due to the large number of wintering eagles in the Crooked River valley, an interagency study was initiated in 1985 to determine the location of winter roost sites in the Paulina area. Several roosts were located with the most notable on BLM-administered land. The northern bald eagle has been listed as federally threatened by the U.S. Fish and Wildlife Service.

### Existing Use Conflicts:

There are no apparent, existing conflicts. Potential conflicts include destruction of the roost trees through

fire, illegal firewood cutting or timber harvest, and disturbance of the eagles from adjacent activity. With excessive publicity, poaching of the eagles could become a problem.

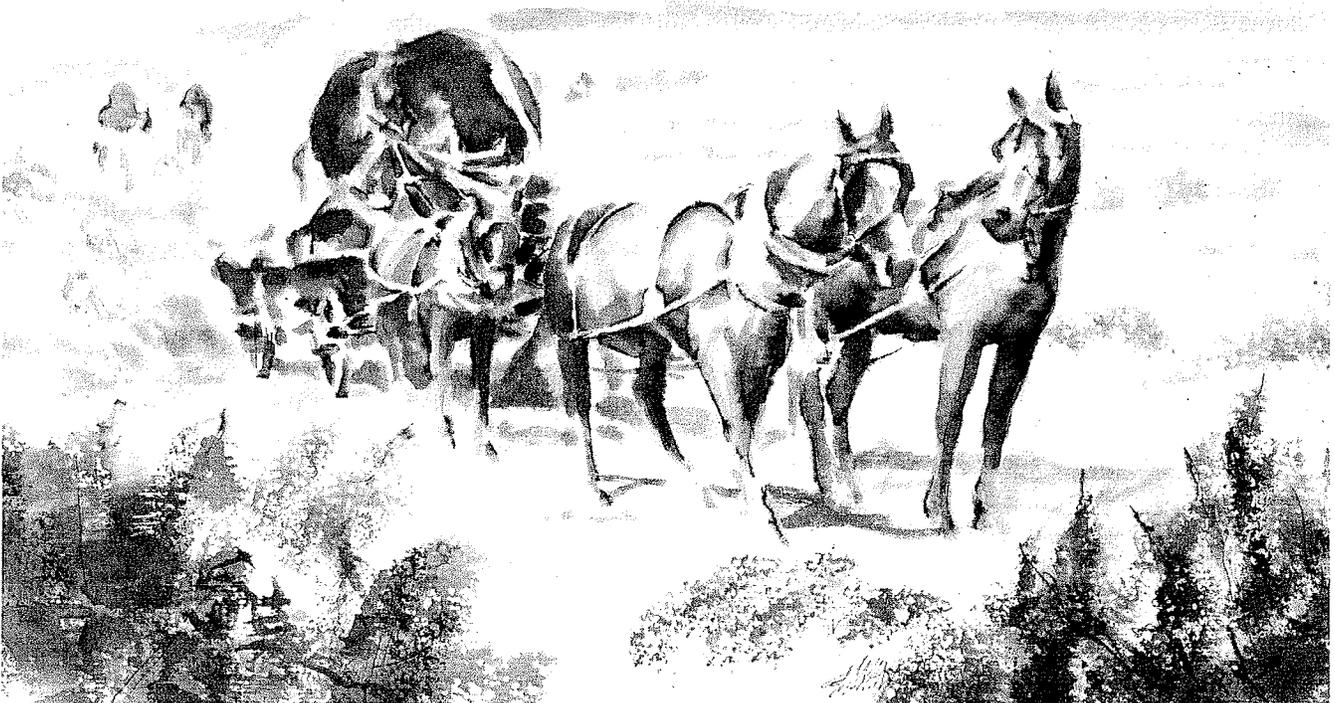
### Management Goals:

The primary goal is to preserve the roost sites in their present condition and to protect them from disturbance or destruction.

### Management Use/Guidelines:

The following guidelines apply:

- Land tenure: The ACEC is within a "Z-1" land tenure zone which specifies retention in federal ownership due to the presence of high public resource values.
- Rights-of-way: There are no rights-of-way in the ACEC and none will be permitted. Future rights-of-way outside the ACEC will be reviewed to insure they will not have an adverse effect on the roosting eagles.



Wagon train entering Crooked River Valley.

- Firewood harvest: Except for the casual gathering of limbwood and similar material for recreational campfires, firewood cutting will not be permitted within the ACEC. Firewood cutting adjacent to the area, if allowed, will be restricted to a time and a manner which will not disturb roosting eagles.
- Timber harvest: Logging will not be permitted within the ACEC, and as with firewood cutting, adjacent activities will be restricted to a time and a manner which will not disturb roosting eagles.
- Recreation: Non-motorized forms of recreation will be allowed and the ACEC will be closed to ORV use.
- Livestock grazing: Livestock grazing will have no effect on the values of the ACEC. Any development projects adjacent to or within the ACEC will be constructed during a time which will not disturb roosting eagles.
- Wildlife management: Habitat enhancement projects will be permitted if compatible with the needs of the bald eagle. Construction both within and adjacent to the ACEC will be timed to avoid disturbance to the birds.
- Fire management: Wildfire will be aggressively fought by whatever means necessary to protect the roost trees. Prescribed burning will be permitted if designed to enhance and improve roost conditions.
- Minerals: The entire ACEC has been leased for oil and gas. A plan of operation will be filed with the Prineville District office prior to any surface-disturbing activity. The plan will specify the actions necessary to preserve the special values within the ACEC. This applies to both leasable and locatable minerals and materials. To prevent disturbance, the timing as well as the location of mineral activities is crucial.

### **Monitoring:**

The following monitoring actions will help to insure that the integrity of the ACEC is maintained:

- Compliance/supervision: Each roost location within the ACEC will be visited at least once annually, during roost season, to document the extent of eagle activity at the site. In addition, notice and appropriate action will be taken if any activities threaten the ACEC.

### **Other actions:**

Publicity about the ACEC will be kept to a minimum. The boundaries will not be signed for the public.

## **Implementation Priorities**

### **High**

- Develop management plans for the Benjamin, Forest Creeks, Horse Ridge, Powell Butte and Peck's Milkvetch ACECs within two years of approval of the Record of Decision.

### **Support**

Engineering and operations support will be needed to design and install appropriate signs, gates, fences or other barriers to provide necessary protection to the designated ACECs.

Volunteers from the public land users or interest groups may be used to assist in monitoring, study and facility construction to maintain or enhance ACEC values.

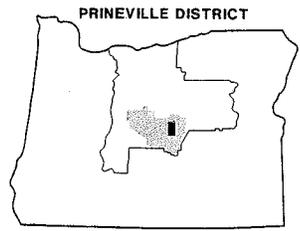
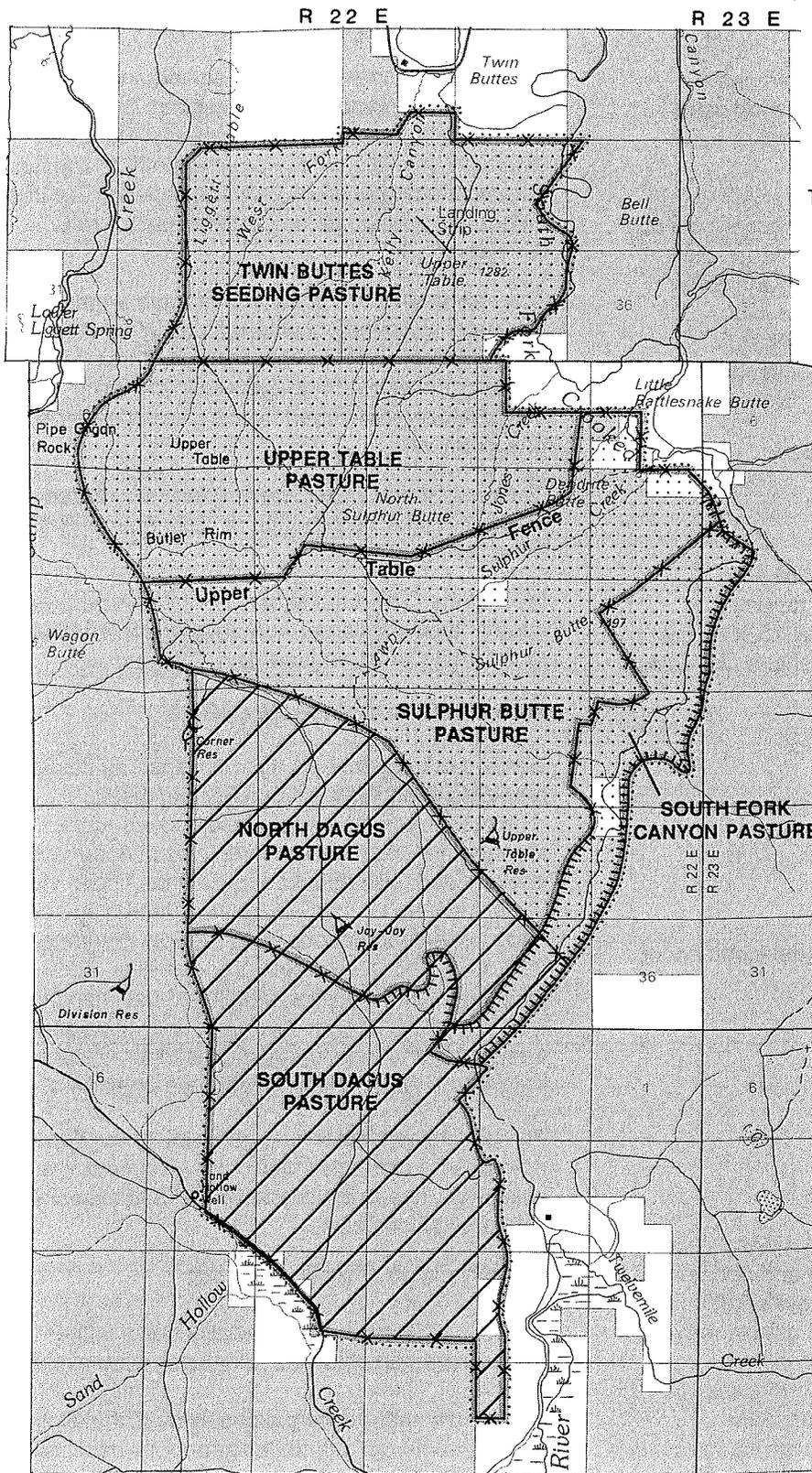
## **Wild Horses**

### **Management Direction**

Manage the Liggett Table Wild Horse Herd within limits of 10 to 25 animals (estimated current numbers are 14 horses). When herd numbers increase above 25 horses, gathering will reduce numbers into the herd size limits based on observed reproduction and replacement success ratios. At each gathering, all stallions will be removed and replaced with new bloodline stock from the BLM Burns Wild Horse facility.

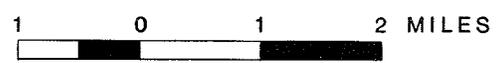
The proposed 25,000 acre herd management area will not include the 2,000 acre South Fork Canyon Pasture riparian area which is part of the proposed South Fork of the Crooked River ACEC. Wild horses will be excluded from this area to protect riparian values and enhance vegetative recovery. Map 15 shows the proposed wild horse range.

A permanent forage allocation of 300 AUMs will be made to wild horses (132 AUMs in the Dagus Lake Allotment and 168 AUMs in the Camp Creek Community Allotment).



- ..... 1971 Historic Herd Range
- ✕—✕ Existing Fence
- ⌒ Natural Rock Rims
- ▭ Pasture Boundary
- ▨ Camp Creek Community Allotment
- ▧ Dagus Lake Allotment

US DEPARTMENT OF THE INTERIOR  
 Bureau of Land Management  
 PRINEVILLE DISTRICT  
 MAY 1989  
 BROTHERS/LA PINE  
 PLANNING AREA



**MAP 15**  
**Wild Horses Range**  
**Brothers Portion**

## Implementation and Monitoring

Fence gates between pastures will remain open except when cattle are present, and to periodically control horse location for proper vegetative management.

Gathering, removal and adoption of wild horses will be coordinated with the Burns BLM Wild Horse Facility. Wild horse populations as well as forage and water requirements will be coordinated with the two allotment permittees within the proposed herd management area. Wild horse herd monitoring efforts will be continued.

## Implementation Priorities

### High

Develop a Liggett Table Wild Horse Herd Management Plan including provision for gate opening to facilitate horse use of the full 25,000 acre area. Modify North and South Dagus fences and gates to facilitate wild horse herd movement.

### Medium

Maintain or improve forage and water requirements within the proposed herd management area.

### Support

Coordinate with affected parties in the development of the herd management plan.

## Livestock Grazing

### Program Background

#### Introduction

This section is an update of the Brothers Rangeland Program Summary completed in 1983 and updated the first time in 1986. Anyone who believes that any of the future actions indicated in the RPS update may affect their interests, should contact the district manager in writing by August 30, 1989. The specific future actions which are of concern should be described, the allotment or allotments involved and the reason for believing that an interest could be affected by the proposed future actions. The district manager will provide those determined to be an affected interest with an opportunity to participate in the development of livestock grazing management plans in the identified allotments.

## Allotment Categorization

All grazing allotments in the planning area have been assigned to a management category. The categorization process is designed to establish allotment priorities so management efforts and funding can be directed to areas of greatest need. The three categories are I (Improve), M (Maintain), and C (Custodial).

The I allotments are usually areas with a potential for resource improvement where the BLM controls enough land to implement changes. Some I allotments are under intensive management planning cooperatively developed by the grazing permittees in the allotment.

The M allotments are usually where satisfactory management exists and major resource conflicts have been resolved.

Most of the C allotments are small, unfenced tracts intermingled with larger acreages of non-BLM lands, thus limiting BLM management opportunities.

## Allotment Management

Grazing management is accomplished by decision or agreement with affected parties. Allotment management plans and coordinated resource management plans are the vehicles to document and implement decisions and agreements. These plans are developed by inter-disciplinary teams and are action-oriented to accomplish multiple resource objectives and resolve resource conflicts. They include grazing systems, season-of-use, number and type of livestock, range developments or vegetative treatments and monitoring studies that measure progress in accomplishing resource objectives.

The particular system for a given allotment depends on resource characteristics of the allotment, resource objectives, needs of the operator(s) and associated implementation costs.

## Allotment Evaluations

In 1988, 47 Category I and M allotments in the Brothers portion of the planning area were evaluated by interdisciplinary teams. The forage allocation, the allotment category, the grazing system, the allotment goals and the rangeland developments necessary to meet these goals were all examined. Tables 12 and 13 are reproductions of the tables contained in the Brothers Rangeland Program Summary (RPS) Update published in September, 1986. Modifications to reflect changes as a result of the evaluation process are identified by a footnote.

## Management Direction

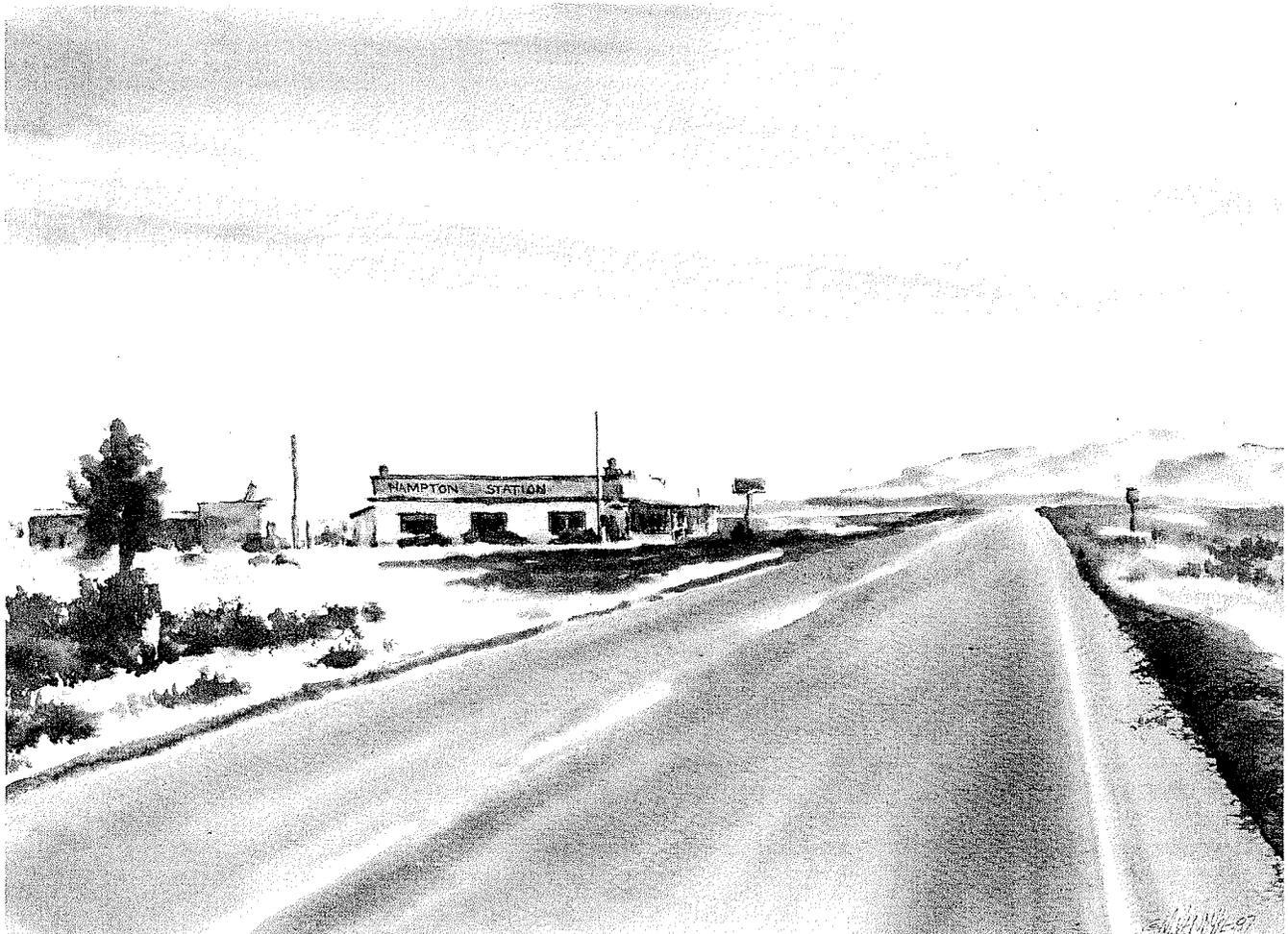
Grazing management in the Brothers portion will continue so as to maintain or improve ecological status on all grazing allotments as shown on Map 16. Vegetative condition is managed for a goal of mid-seral (40 percent of vegetative potential) to the lower end of late seral (60 percent of potential). This is accomplished by the amount of forage allocated for livestock grazing, the grazing management system utilized and the range treatments or developments implemented.

Tables 12 and 13 summarize the grazing management program in the Brothers portion.

Grazing management in the LaPine portion is best described as light, season-long grazing. Use levels on

the allotments are also light. Map 17 shows grazing allotments in the LaPine portion. Tables 14 and 15 summarize the grazing management program in the LaPine portion. Table 14 also lists the criteria used to determine which management category (I, M or C) each allotment will be placed.

Timber harvest in the past five years has significantly increased the amount of grass production in the LaPine portion. As a result, approximately 6,800 AUMs of forage are available on a temporary basis until the timber stand becomes re-established. This forage has not been allocated. Priority allocation of this additional vegetation will be to first meet wildlife and riparian area objectives and then the remaining surplus forage will be allocated to livestock.



Present day Hampton.

**Table 12. Grazing Management Program, Brothers Portion**

ALLOTMENT NO.	NAME	MANAGEMENT <sup>2</sup> GOALS	MGT. <sup>3</sup> CATEGORY	ACRES BLM	FORAGE ALLOCATION (AUMS)			GRAZING SYSTEM <sup>4</sup>		
					WILDLIFE	ACTIVE LIVESTOCK	PROPOSED	EXISTING	PROPOSED	AMP
0001	Alaska Pacific <sup>1</sup>	A	I	2172	30	123	123	S/S	DR	_____
0003	Hampton <sup>1</sup>	A;B;E;F;G	I <sup>11</sup>	57513	152	7084 <sup>13</sup>	7084 <sup>6</sup>	RR;DR	RR;DR	_____
0004	Miners Flat <sup>1</sup>	A;B;E;G	M	2908	52	201	291 <sup>12</sup>	RR;DR	RR;DR	AMP
0006	Post <sup>1</sup>	A	M	1720	22	98	118 <sup>5</sup>	S/S;DR	DR	_____
0007	River	D	C	170 <sup>7</sup>	2	0	0	Rest	Rest	_____
0009	Cold Springs <sup>1</sup>	A;B;C;D;G;H	I	37134	64	2142	2253	RR	RR;DR;E <sup>11</sup>	_____
0012	Windmill	B;E;F	C	920	4	70	70	DR	DR	_____
0013	Sheep Mtn. Comm. <sup>1</sup>	A;B;C;D	M	6332	37	383 <sup>13</sup>	383	RR;DR;EX	RR;DR;EX	_____
0014	Sheep Mtn. Indiv. <sup>1</sup>	A;B;C;D	I	1820	18	240 <sup>6</sup>	240 <sup>6</sup>	DR;FFR	DR	_____
0016	Indian Creek <sup>1</sup>	A;B;D	I	1831	41	81	93 <sup>12</sup>	DR	DR	_____
0017	Bonnieview	B	C	812	20	109	33 <sup>14</sup>	FFR	DR	_____
0018	Juniper Springs	A;B;C;E;G	I	1625	44	165	165	S/S	RR	_____
0019	Ibex Butte	A;B;C;E;G	I	12230	112	910	910	S/S	RR	_____
0020	Lower 12 Mile Table	A;B;C;E;F;G	I	9722	91	684	684	S/S	RR	_____
0021	Mid Fk Twelvemile Ck.	B	M	1795	14	193	193	D	DR	_____
0022	Laughlin 1 /	A;B;E;G	I	7222	18	452 <sup>7</sup>	600 <sup>12</sup>	E	DR	_____
0023	Angell	A;E;G	I	1517	11	141	141	E;FFR	DR	_____
0024	Upper Buck Creek <sup>1</sup>	A;B;E	I	6991	112	624	624	DR;R	DR	_____
0025	Buck Creek Flat <sup>1</sup>	A;B;F	I	5850	47	271	271	DR	W;RR <sup>11</sup>	_____
0026	Humphrey <sup>1</sup>	A;B;D;E	M	4936	103	635	635	DR;FFR;E	DR;FFR;E	_____
0027	Upper Pocket Comm. <sup>1</sup>	A	I <sup>6</sup>	4853	93	330 <sup>12</sup>	274	DR	DR	AMP
0028	Ferian	B	C	446	11	30	30	FFR	DR	_____
0029	Jimmy McCuen	B	C	865	19	0	83	D	D/R	_____
0033	Congleton	A	M	2128	79	197	197	RR	RR	AMP
0034	Lower Pocket Comm.	A	M	1968	31	160	160	RR	RR	AMP
0035	Bulger Creek	B;E;G	C	70	0	5	5	DR	DR	_____
0036	Delore	B	C	80	10	12	12	S/S;F	DR	_____
0037	Foster, V.	B	C	160	4	15	15	FFR	DR	_____
0038	Cave <sup>1</sup>	A;D	I	3731 <sup>7</sup>	23	227 <sup>13</sup>	227	S/S	DR	_____
0039	Paulina <sup>1</sup>	A	M	1403	18	57 <sup>7</sup>	57	DR;S/S;F	DR	_____
0041	Layton <sup>1</sup>	A	M	752	24	65 <sup>7</sup>	65	S/S;F;FFR	DR	_____
0042	Owens Water Comm. <sup>1</sup>	A;B;C	I	4389	15	241	241	S/S	DR	_____
0043	Barney Buck Creek <sup>1</sup>	A;B;E;F;L	I	5150	66	242	242	DR	W;RR <sup>11</sup>	_____
0044	G.I. <sup>1</sup>	A;B;C;E;F;G	I	136346	285	11166	11166	DR	DR;RR;EX;W <sup>11</sup>	_____
0045	East Maury <sup>1</sup>	A-E;G;L	I	5133	58	329	329	E;S/S;F	DR	_____
0047	Lister <sup>1</sup>	A;D	I	26853	92	2011 <sup>7</sup>	2011	RR;DR;EX;E	RR;EX;E	AMP
0049	McCullough	B	C	163	2	10	5	FFR	DR	_____
0050	Rabbit Valley <sup>1</sup>	A;B	I	15160	331	548	548	S/S;EX	DR;EX	_____
0051	Paulina Creek <sup>1</sup>	A;D;B	I	2622	65	125	125	S/S	DR	_____
0052	Miller	B	C	120	2	22	13	E	DR	_____
0053	North Fork	B-E;I-L	M	11846	244	811	811	DR;EX <sup>15</sup>	DR;EX <sup>15</sup>	_____
0054	Beaver Creek	A	M	880	19	82	82	E;S/S;F	DR	_____
0056	Dagis Lake <sup>1</sup>	A;B;D;E	M	11401	26	487	487	RR	DR;E <sup>11</sup>	_____
0058	Coyote Springs	A	M	4418	89	1404	404	E	DR	_____
0059	Dry Lake	A;B	M	610	4	33	33	E	DR	_____
0060	Flat Top Butte	A;C	I	1706	31	80	80	E	DR	_____
0062	Bennett Field	B;D	M	1314	38	68	68	S/S	DR	_____
0064	Camp Creek Comm.	A;C;D;E;G	I	17861	88	966	966	DR;E	RR;E	_____
0066	Butler	B	C	80	1	13	5	FFR	DR	_____
0069	Indian	A	C	160	1	11	11	FFR	DR	_____
0070	Clover Creek <sup>1</sup>	A;B;C;H	I	8770	25	617	617	RR	RR	_____
0071	Coffee Butte <sup>1</sup>	A	M	4266	27	468	468	S/S	S/S	_____
0072	Miltenberger	B	M	1690	0	82	82	E	S	_____
0073	Birdsong Butte <sup>8</sup>	B	C	240	10	15	15	S	DR	_____
0075	Weigand	B	C	160	2	15	15	FFR	DR	_____

**Table 12. Grazing Management Program, Brothers Portion (continued)**

ALLOTMENT NO.	NAME	MANAGEMENT GOALS <sup>2</sup>	MGT. CATEGORY <sup>3</sup>	ACRES BLM	FORAGE ALLOCATION (AUMS)			GRAZING SYSTEM <sup>4</sup>		AMP
					WILDLIFE	LIVESTOCK ACTIVE	PROPOSED	EXISTING	PROPOSED	
0076	West Pine Creek	B	C	481	3	45	45	FFR	DR	_____
5001	Whitaker	B	C	120	1	7	7	E	SD	_____
5002	Sanowski	B	C	40	1	10	10	E	SD	_____
5003	Broadus-Carter	B	C	15	5	2	2	E	SD	_____
5004	Lamb	B	C	63	5	6	6	E	SD	_____
5006	Emmrich	B	C	107	5	0	20	E	SD	_____
5007	Harsch	B	M	506	6	19	19	S/S	SD	_____
5010	Harrington	B	C	80	0	2	2	S/S	SD	_____
5018	Wierleske	B	M	892	5	49	49	S/F	SD	_____
5022	Airport	B	M	597	4	49	49	E	SD	_____
5024	Couch	B	C	768	7	02	30	E	SD	_____
5029	Claypool	B	C	80	1	4	4	FFR	SD	_____
5030	Keystone	B	C	296	4	30	30	FFR	SD	_____
5031	Mayfield-Harris	B	C	1509	5	124	124	S/F	DR	_____
5032	Barrett	B	C	238	4	24	24	FFR	SD	_____
5050	Grey Butte	B	M	809	3	28	28	S/S	SD	_____
5051	Sherwood Canyon	B	M	1117	5	51	51	S/S	SD	_____
5052	Smith Rock	B	C	174	3	9	9	S/S	SD	_____
5061	McWeizz	B	C	6065	0	0	348	E	SD	_____
5064	Williams	B	C	763	26	44	44	S/S	DR	_____
5065	Lower Bridge	B	C	5521	107	310	310	D	DR	_____
5066	Pine Ridge	B	C	358	5	34	34	S/S	SD	_____
5067	Fisher	B	C	389	4	0	14	E	SD	_____
5068	Stevens-Fremont	B	C	285	5	0	46	E	SD	_____
5069	Squaw Creek	B	C	192	4	0	17	E	SD	_____
5070	Lafollette Butte	B	C	3875	54	0	258	E	DR	_____
5071	Odin Falls	B	C	3869	40	0	252	E	SD	_____
45072	Struss	B	C	2294	10	143	143	E	DR	_____
5073	Cline Butte/Fryrear <sup>1 9</sup>	G,H,J	M	11416	35	700	700	R	R <sup>10</sup>	_____
5075	Desert Springs	B,J <sup>11</sup>	M	1947	10	112	112	S/S	DR	_____
5078	Home Ranch	G,J <sup>11</sup>	I	4147 <sup>7</sup>	0	193	193	E	DR	_____
5079	Whiskey Still	B,J <sup>11</sup>	M	1327 <sup>7</sup>	4	111	111	E	DR	_____
5080	Maston	B,J <sup>11</sup>	M	3382	13	209	209	S/S	DR	_____
5081	Paulus	B	C	152	4	14	14	E	SD	_____
5082	Bull Flat	B,E <sup>11</sup>	C	116	1	0	7	E	SD	_____
5086	Lone Pine Canyon	B	C	120	1	5	5	E	SD	_____
5088	Burns-Montgomery	B	C	160	3	17	17	E	SD	_____
5089	Knoche	B	C	185	1	6	6	S/S	SD	_____
5090	Zemlicka	B	C	344	2	18	18	E	SD	_____
5092	Red Cloud	B	M	717	4	33	33	E	SD	_____
5093	Cronin	B	M	321	4	19	19	E	DR	_____
5094	Brown	B	C	493	8	40	40	S/S	SD	_____
5096	Foster	B	C	200	2	24	24	S/S	SD	_____
5097	Russell	B	C	277	7	16	16	S/S	SD	_____
5107	Cain Fields	B	C	114	3	36	36	E	SD	_____
5108	Zell Pond	B	M	1228	4	75	75	E	SD	_____
5109	Hohnstein-Tatti	B	M	5096	17	262	262	S/F	DR	_____
5110	Bruckert	B	C	126	4	35	35	S/F	SD	_____
55111	Cook	B	C	1860	8	0	49	E	SD	_____
5112	Driveway <sup>1</sup>	B	M	3058	10	240 <sup>6</sup>	240 <sup>6</sup>	R,W	R,W	_____
5113	Hacker-Hassing	B	M	4019	13	99	99	R	DR	_____
5114	Weigand, N.	N	M	2651	9	177	177	S/S	DR	_____
5115	Allen	B	M	3554	8	110	110	S/S	DR	_____
5116	Redmond Airport	B	M	5467	17	228	228	R	DR	_____
5117	Pipeline	B	M	8227	21	513	513	RR	DR	AMP

**Table 12. Grazing Management Program, Brothers Portion (continued)**

ALLOTMENT NO.	NAME	MANAGEMENT GOALS <sup>2</sup>	MGT. CATEGORY <sup>3</sup>	ACRES BLM	FORAGE ALLOCATION (AUMS)			GRAZING SYSTEM <sup>4</sup>		AMP
					WILDLIFE	LIVESTOCK ACTIVE	PROPOSED	EXISTING	PROPOSED	
5118	Crenshaw <sup>1</sup>	B;G	M	7267	21	392	428	DR	R	_____
5119	Blackrock	B	C	254	0	0	24	E	DR	_____
5120	Hutton	B	M	4818	13	254	254	R	DR	_____
5121	Oerle	B	C	2629	9	120	120	DR	DR	_____
5122	Howard	B	C	1394	4	68	68	R	DR	_____
5124	Smead	B	C	755	2	23	23	R	DR	_____
5125	Mayfield Pond	B	M	4549	13	305	305	DR	DR	_____
5127	Powell Butte	B	M	13598	31	700	700	DR	DR	_____
5130	Pilot Butte	B	M	1394	726	84	84	S/S	SD	_____
5131	McClellan	B	M	861	15	75	75	E	SD	_____
5133	Long Hollow	B	C	820 <sup>7</sup>	2	17	17	FFR	SD	_____
5134	Stearns	E;G	I	18407	106	852	852	DR	DR	_____
5135	Dry Creek	B	M	6218 <sup>7</sup>	67	334	334	DR	DR	_____
5136	Davis	B	M	3584	34	213	234	DR	DR;EX	_____
5137	Prineville Dam	C;D	I	3925	0	139	139	DR;EX	DR	_____
5138	Plateau <sup>1</sup>	A;G;J	I	5477	15	252	252	DR	DR	_____
5139	Dunham <sup>1</sup>	A;C;I	I	6128	37	323	323	DR	DR	_____
5140	Salt Ck.-Alkali Butte <sup>1</sup>	A;C;D;E <sup>11</sup>	I	9783 <sup>7</sup>	31	688 <sup>7</sup>	1035	DR;E	R;E	_____
5141	Sanford Creek	A;C;D;E <sup>11</sup>	I	7690 <sup>7</sup>	6	152	152	DR	DR	_____
5142	Carey	A;C	I	1129	20	46	46	S/S	DR	_____
5145	Eagle Rock-Bailey	A;C;D;E <sup>11</sup>	I	4766	45	262	262	RR	RR	_____
5149	Bedletto	B	M	968	24	55	55	S/S/F	DR	_____
5176	McCabe	B	C	350	0	10	22	S/S/F	E	_____
5177	Reynolds	B	M	1838	15	101	101	E	SD	_____
5178	Grizzly Mtn.	B	C	701	3	69	69	E	SD	_____
5179	Lytte Creek	B	C	120	1	8	8	S/S	SD	_____
5180	Golden Horseshoe	B	C	197	3	14	14	S/S	SD	_____
5182	F. Jones	B	M	1027	25	77	77	E	SD	_____
5183	Rail Hollow	B	C	115	2	10	10	E	SD	_____
5198	Laier-Gov8e	B	C	529	3	15	15	FFR	SD	_____
5201	Alfalfa Mkt.	B	M	2436	8	141	141	S/S	DR	_____
5203	Wiltze	B	C	335	1	31	31	DR	DR	_____
5204	Sinclair	B	M	630	3	38	38	R	SD	_____
5205	Dodds Road	B	M	2287	8	75	75	DR	DR	_____
5206	Arnold Canal	B;E <sup>11</sup>	C	2791	16	0	87	S/S	DR	_____
5207	Michaels	B;E <sup>11</sup>	M	4066	14	179	179	R	SD	_____
5208	Barlow Cave	A;E	I	9101	84	600	600	DR	DR	_____
5209	Lava Beds Comm.	B;E <sup>11</sup>	M	16354	80	729	508	S/S	DR	_____
5210	Horse Ridge	A;G;E;F <sup>11</sup>	I	22152	107	1624	1843	DR	DR	_____
5211	Pine Mountain	B;E;F <sup>11</sup>	M	5323	21	320	320	DR	DR	CRMP
5212	Millican <sup>1</sup>	A;G;J	I	32560	128	2400 <sup>6</sup>	2890	DR	DR	_____
5213	Rambo <sup>1</sup>	B;H;J <sup>11</sup>	M	15997	59	670 <sup>6</sup>	670	DR	DR <sup>10</sup>	_____
5214	Williamson Creek <sup>1</sup>	A;G;I	I	12905	44	1007	1007	DR	DR	_____
5215	Coats <sup>1</sup>	B;I;F <sup>11</sup>	M	10514 <sup>7</sup>	32	975 <sup>7</sup>	975	DR	DR	_____
5216	Grieve	B	C	84	1	4	4	S/S	SD	_____
5229	Kloutchman	B	C	210	0	26	26	FFR	SD	_____
5230	Birch Creek <sup>1</sup>	A;C;D;E	I	2966	17	137	380	DR;E	W	_____
5231	West Butte <sup>1</sup>	A;C;F;I;J	I	11386	50	806	806	DR	DR	_____
5232	Nye	A;C	I	8627	34	422	422	DR;E	DR	AMP
5233	Scott	A;C	I	4625	5	255	255	DR	DR	_____
5234	Haughton <sup>1</sup>	A;C;G;F <sup>11</sup>	I	18437	44	1061	1552	DR	DR	AMP
5235	Moffitt	A;G;E;F <sup>11</sup>	I	30506	107	2334	2830	RR	DR	CRMP
5236	Bear Creek <sup>1</sup>	A;C;J	I	1750	8	98	200	E	SD	_____
5237	Brothers <sup>1</sup>	A;F;G;J	I	28465	107	2429	4014	DR;W	DR;W	AMP
5238	ZX <sup>1</sup>	A;F;G;E <sup>11</sup>	I	76498	223	7100	7100	RR	DR	AMP

**Table 12. Grazing Management Program, Brothers Portion (continued)**

ALLOTMENT NO.	NAME	MANAGEMENT GOALS <sup>2</sup>	MGT. CATEGORY <sup>3</sup>	ACRES BLM	FORAGE ALLOCATION (AUMS)			GRAZING SYSTEM <sup>4</sup>		AMP
					WILDLIFE	LIVESTOCK ACTIVE	PROPOSED	EXISTING	PROPOSED	
5239	Grassy Butte <sup>1</sup>	B;F;J	M	25701	68	3018	4100	DR	DR	AMP
5240	Fehrenbacher <sup>1</sup>	B;F;J	M	6605	7	492	492	DR	DR <sup>10</sup>	_____
5241	Rickman-McCormack <sup>1</sup>	A;C;D;E;F	I	7991	51	398	880	DR	R	_____
5242	Spring Creek	A;C;E;J <sup>11</sup>	I	6245	28	401	401	DR	DR	_____
5243	Bright <sup>1</sup>	B;F;J	M	6269	22	643	643	S/S	S/S	_____
5245	Ram Lake <sup>1</sup>	A;F;G;J;K	I	12796	57	724	812	DR	DR	_____
5246	Hatfield	B	C	122	0	5	5	DR	DR	_____
5247	Lizard Creek	B	M	3263	7	280	280	R	DR	_____
5248	Poohook	B	C	2454	15	140	140	DR	DR	_____
5249	McCormack Home Ranch	B	C	1274	13	54	68	DR	DR	_____
5250	Coffelt	A;C	M	440	2	20	20	R	DR	_____
5251	96 Ranch	A;C	I	6771	19	482	482	DR	DR	_____
5252	Meisner	B	C	124	4	34	34	E	SD	_____
5254	Barbwire	B	C	100	0	10	10	FFR	DR	_____
TOTALS				1043022	5429	73811	80875			

<sup>1</sup> Allotment evaluated in 1988. The proposed livestock allocation and grazing system(s) will be implemented in 1989. Any changes in management category or goals are also a result of this interdisciplinary evaluation process.

<sup>2</sup> Management Goals

- A Improve ecological condition
- B Maintain ecological condition
- C Stabilize or improve watershed condition
- D Improve riparian habitat
- E Maintain or improve winter range for mule deer and/or antelope
- F Maintain or improve sagegrouse habitat
- G Increase availability of livestock forage
- H Maintain scenic/natural values
- I Improve forage quality for livestock and wildlife
- J Maintain or improve habitat for mule deer and/or antelope
- K Maintain or improve waterfowl habitat
- L Maintain riparian habitat

<sup>3</sup> Mgt Category

- I Improve
- M Maintain
- C Custodial

<sup>4</sup> Grazing System

- RR Rest rotation S/S/F Spring/summer/fall
- DR Deferred rotation S/F Spring/fall
- R Rotation W Winter
- D Deferred SD Short duration
- E Early EX Exclusion
- S/S Spring/summer FFR Fenced federal range

<sup>5</sup> Miscalculation in original EIS. Existing preference is 118 AUMs

<sup>6</sup> Original EIS and/or previous RPS were in error

<sup>7</sup> Change in allotment land base

<sup>8</sup> Newly created allotment from Paulina Allotment No. 0039

<sup>9</sup> New allotment combination

<sup>10</sup> While allotment evaluation recommended change in management, it is recognized these are low priority 'M' allotments and the Bureau is not prepared to invest money for development work at this time. Since conditions are adequate for the time being, no change in the grazing system will occur.

<sup>11</sup> Additional changes subsequent to the evaluation based on staff recommendation and interdisciplinary analysis

<sup>12</sup> This allocation is recommended but will be granted on a non-renewable three-year basis until substantiated by additional monitoring.

<sup>13</sup> New preference allocated

<sup>14</sup> Change in allotment land base. Proposed decision has been issued to reduce active preference.

<sup>15</sup> Interim management in cooperation with permittee and U.S. Forest Service. Evaluation scheduled 1990.

**Table 13. Status of Rangeland Development Implementation, Brothers Portion**

ALLOTMENT NO.	NAME	FENCE (MILES)		SPRING P C	PIPELINE (MILES)		WELLS P C	RESER-VOIRS P C		WATER-HOLES P C		BURN/SEED (ACRES)		BURN ONLY (ACRES)		JUNIP. CTRL. (ACRES)		
		P	C		P	C		P	C	P	C	P	C	P	C	P	C	
0001	Alaska Pacific <sup>1</sup>	1.00	6	0.00	0	0	0.00	0.00	0	0	2 <sup>6</sup>	0	0	0	0	0	3 <sup>6</sup>	0
0003	Hampton <sup>1</sup>	0.00	2.00	0	0	3.00	3.00	0	0	3	0	8 <sup>6</sup>	0	1469	1469	1500	0	0
0004	Miners Flat <sup>1</sup>	0.00	0.00	0	0	0.00	0.00	0	0	1	0	0	0	0	0	200	0	0
0009	Cold Springs <sup>1</sup>	0.00	0.60	0	0	0.00	0.00	0	0	4	0	0	0	0	0	800	-	600
0013	Sheep Mtn. Comm. <sup>1</sup>	1.00	6	1.50	1	2	0.00	0.00	0	0	2 <sup>6</sup>	0	0	0	0	0	0	1000
0014	Sheep Mountain Individual <sup>1</sup>	0.00	0.00	0	0	0.00	0.00	0	0	0	0	0	0	0	0	0	0	600
0016	Indian Creek <sup>1</sup>	0.00	2.00	1	0	0.00	0.00	0	0	1	0	0	0	0	0	0	0	0
0019	IBEX Butte	3.20	3.30	0	0	6.00	5.50	0	0	0	0	0	0	3000	2400	2100	0	0
0020	Lower 12 Mile Table	0.00	0.00	0	0	3.50	2.00	0	0	0	0	0	0	0	0	2815	0	0
0022	Laughlin <sup>1</sup>	1.20	1.20	0	0	0.00	0.00	0	0	3	1	0	0	0	0	880	0	0
0023	Angell	0.00	0.00	0	0	0.00	0.00	0	0	1	0	0	0	0	0	265	0	0
0025	Buck Creek Flat <sup>1</sup>	0.00	0.00	0	0	3.00	0.00	0	0	0	0	1	0	0	0	2550	0	0
0026	Humphrey <sup>6</sup>	0.00	0.00	0	0	0.00	0.00	0	0	0	0	0	0	0	0	400	0	0
0027	Upper Pocket Comm. <sup>1</sup>	0.00	0.00	0	0	0.00	0.00	0	0	1	0	0	0	0	0	0	0	0
0038	Cave <sup>1</sup>	3.00	2.25	0	0	0.00	0.00	0	0	1	0	0	0	0	0	500	0	440
0042	Owens Water Comm. <sup>1</sup>	0.00	0.00	1	1	0.00	0.00	0	0	1	0	0	0	0	0	0	0	1050
0043	Barney Buck Creek <sup>1</sup>	0.00	0.00	0	0	1.00	0.00	0	0	1	0	0	0	0	0	0	0	0
0044	G.I. <sup>1</sup>	31.50	12.50	0	0	30.00	0.00	1	0	4	0	10 <sup>6</sup>	0	5400	3800	11600	800	100
0045	East Maury <sup>1</sup>	0.00	0.00	0	0	0.00	0.00	0	0	0	0	0	0	0	0	873	00	150
0047	Lister <sup>1</sup>	3.50	0.00	1	0	0.00	0.00	0	0	3	0	0	0	0	0	400	0	600
0050	Rabbit Valley <sup>1</sup>	0.00	0.00	0	0	0.00	0.00	0	0	2	0	0	0	0	0	0	0	0
0051	Paulina Creek <sup>1</sup>	0.00	0.00	0	0	0.00	0.00	0	0	1	0	0	0	0	0	0	0	0
0053	North Fork	0.00	0.00	1	0	0.00	0.00	0	0	1	0	0	0	0	0	0	0	0
0054	Beaver Creek	0.00	0.00	0	0	0.00	0.00	0	0	1	0	0	0	0	0	0	0	0
0056	Dagis Lake <sup>1</sup>	0.00	0.50	0	0	0.00	0.00	0	0	0	0	0	0	0	0	0	0	80
0058	Coyote Springs	0.00	0.00	0	0	0.00	0.00	0	0	2	0	0	0	0	0	893	0	0
0064	Camp Creek Comm.	7.35	7.75	1	0	3.00	0.00	0	1	2	0	0	0	0	0	1600	0	3900
0069	Indian	0.00	2.00	0	0	0.00	0.00	0	0	0	0	0	0	0	0	0	0	0
0070	Clover Creek <sup>1</sup>	4.70	2.20	0	0	0.00	0.00	0	0	1 <sup>6</sup>	0	0	0	60	0	0	0	780
0071	Coffee Butte <sup>1</sup>	0.00	0 <sup>6</sup>	0	0	0.00	0.00	0	0	0	0	0	0	0	0	0	0	0
0072	Miltenberger	0.00	0.00	0	0	0.00	0.00	0	0	0	0	0	0	0	0	0	0	170
5007	Harsch	0.00	0.00	0	0	0.00	0.00	0	0	0	0	0	0	50	0	0	0	280
5010	Harrington	0.00	0.00	0	0	0.00	0.00	0	0	0	0	0	0	20	0	0	0	20
5018	Wierleske	0.00	0.00	0	0	0.00	0.00	0	0	0	0	0	0	100	0	0	0	150
5022	Airport	0.00	0.00	0	0	0.00	0.00	0	0	0	0	0	0	40	0	0	0	100
5031	Mayfield-Harris	0.00	0.00	0	0	0.00	0.00	0	0	0	0	0	0	0	0	0	0	250
5050	Grey Butte	0.00	0.00	0	0	0.00	0.00	0	0	0	0	0	0	175	0	0	0	200
5051	Sherwood Canyon	0.00	0.00	0	0	0.00	0.00	0	0	0	0	0	0	100	0	0	0	300
5052	Smith Rock	0.00	0.00	0	0	0.00	0.00	0	0	0	0	0	0	25	0	0	0	75
5064	Williams	0.00	0.00	0	0	2.00	0.00	0	0	0	0	0	0	0	0	0	0	100
5065	Lower Bridge	6.00	0.00	0	0	6.00	0.00	0	0	0	0	0	0	400	0	0	0	1200
5066	Pine Ridge	0.00	0.00	0	0	0.00	0.00	0	0	0	0	0	0	0	0	0	0	80
5070	Lafollette Butte	7.00	0.00	0	0	4.00	0.00	0	0	0	0	0	0	225	0	0	0	700
5071	Odin Falls	10.00	0.00	0	0	0.00	0.00	0	0	0	0	0	0	0	0	0	0	0
5072	Struss	5.00	0.00	0	0	2.00	0.00	0	0	0	0	0	0	40	0	0	0	300
5073	Cline Butte/Fryrear <sup>1 2</sup>	11.00	0.00	0	0	4.00	0.00	0	0	0	0	0	0	675	0	0	0	3900
5075	Desert Springs	0.00	0.00	0	0	0.00	0.00	0	0	0	0	0	0	250	0	0	0	400
5078	Home Ranch	0.00	0.00	0	0	3.00	0.00	0	0	0	0	0	0	200	0	0	0	750
5079	Whiskey Still	0.00	0.00	0	0	2.00	0.00	0	0	0	0	0	0	200	0	0	0	200
5080	Maston	2.00	0.00	0	0	3.00	0.00	0	0	0	0	0	0	260	0	0	0	500
5089	Knoche	0.00	0.00	0	0	0.00	0.00	0	0	0	0	0	0	0	0	0	0	90
5092	Red Cloud	0.00	0.00	0	0	0.00	0.00	0	0	0	0	0	0	0	0	0	0	175
5093	Cronin	0.00	0.00	0	0	0.00	0.00	0	0	0	0	0	0	30	0	0	0	60
5096	Foster	0.00	0.00	0	0	0.00	0.00	0	0	0	0	0	0	25	0	0	0	25
5097	Russell	0.00	0.00	0	0	0.00	0.00	0	0	0	0	0	0	0	0	0	0	100
5108	Zell Pond	0.00	0.00	0	0	0.00	0.00	0	0	0	0	0	0	0	0	0	0	300
5109	Hohnstein-Tatti	2.00	0.00	0	0	5.00	0.00	0	0	0	0	0	0	350	0	0	0	700
5112	Driveway <sup>1</sup>	0.00	4.50	0	0	0.00	0.00	0	0	0	0	0	0	1500	0	0	0	2000
5113	Hacker-Hassing	2.00	0.00	0	0	4.00	0.00	0	0	0	0	0	0	150	0	0	0	700
5114	Weigand, N.	1.50	0.00	0	0	3.00	0.00	0	0	0	0	0	0	100	0	0	0	250
5115	Allen	1.50	0.00	0	0	3.00	0.00	0	0	0	0	0	0	250	0	0	0	500
5116	Redmond Airport	0.00	0.00	0	0	5.00	0.00	0	0	0	0	0	0	200	0	0	0	700
5117	Pipeline	0.00	0.00	0	0	8.00	0.00	0	0	0	0	0	0	300	0	0	0	500
5118	Crenshaw <sup>1</sup>	1.50	1.50	0	0	6.00	3.50	0	0	0	0	0	0	3000	0	0	0	4000

**Table 13. Status of Rangeland Development Implementation, Brothers Portion (continued)**

ALLOTMENT NO.	NAME	FENCE (MILES)		SPRING P C	PIPELINE (MILES)		WELLS P C	RESER-VOIRS P C		WATER-HOLES P C		BURN/SEED (ACRES)		BURN ONLY (ACRES)		JUNIP. CTRL. (ACRES)			
		P	C		P	C		P	C	P	C	P	C	P	C	P	C		
5120	Hutton	0.00	0.00	0	0	3.00	0.00	0	0	0	0	250	0	0	0	500	0		
5121	Oertle	0.00	0.00	0	0	2.00	0.00	0	0	0	0	100	0	0	0	250	0		
5122	Howard	0.00	0.00	0	0	0.00	0.00	0	0	0	0	150	0	0	0	200	0		
5124	Smead	0.00	0.00	0	0	0.00	0.00	0	0	0	0	0	0	0	0	500	0		
5125	Mayfield Pond	0.00	0.00	0	0	2.00	1.00	0	0	0	0	200	0	0	0	500	300		
5127	Powell Butte	3.00	0.00	0	0	11.00	0.00	0	0	0	0	500	0	0	0	1600	0		
5130	Pilot Butte	0.00	0.00	0	0	0.00	0.00	0	0	0	0	150	0	0	0	800	0		
5131	McClellan	0.00	0.00	0	0	0.00	0.00	0	0	0	0	0	0	0	0	350	0		
5133	Long Hollow	0.00	0.00	0	0	0.00	0.00	0	0	0	0	0	0	0	0	300	0		
5134	Stearns	6.00	3.00	0	0	9.00	0.00	0	0	0	0	1000	0	0	0	3000	0		
5135	Dry Creek	0.00	0.00	0	0	0.00	0.00	0	0	0	0	300	0	0	0	4000	0		
5136	Davis	5.50	0.00	0	0	0.00	0.00	0	0	0	0	250	0	0	0	2000	40		
5137	Prineville Dam	0.00	0.00	0	0	0.00	0.00	0	0	0	0	120	0	0	0	1000	0		
5138	Plateau <sup>1</sup>	5.00	0.00	0	0	6.00	3.00	0	0	0	0	200	0	0	0	1550	50		
5139	Dunham <sup>1</sup>	6.00	3.00	0	0	5.00	0.00	0	0	0	0	2300	0	0	0	1800	300		
5140	Salt Ck.-Alkali Butte <sup>1</sup>	18.00	17.00	1	1	7.00	4.00	0	0	0	0	4000	1500	0	0	1500	500		
5141	Sanford Creek	7.00	6.00	0	0	1.00	0.00	0	0	0	0	600	0	0	0	1700	1200		
5142	Carey	2.50	0.00	0	0	0.00	0.00	0	0	0	0	400	0	0	0	120	120		
5145	Eagle Rock-Bailey	6.00	3.00	0	0	3.00	0.00	0	0	0	0	1000	0	0	0	1000	100		
5149	Beoletto	0.00	0.00	0	0	0.00	0.00	0	0	0	0	0	0	0	0	300	0		
5177	Reynolds	0.00	0.00	0	0	0.00	0.00	0	0	0	0	0	0	0	0	300	0		
5178	Grizzly Mtn.	0.00	0.00	0	0	0.00	0.00	0	0	0	0	0	0	0	0	325	0		
5179	Lytle Creek	2.00	0.00	0	0	0.00	0.00	0	0	0	0	0	0	0	0	30	0		
5180	Golden Horseshoe	0.00	0.00	0	0	0.00	0.00	0	0	0	0	60	0	0	0	80	0		
5182	F. Jones	0.00	0.00	0	0	0.00	0.00	0	0	0	0	160	0	0	0	300	0		
5201	Alfalfa Mkt.	1.50	0.00	0	0	3.00	0.00	0	0	0	0	150	0	0	0	350	0		
5204	Sinclair	0.00	0.00	0	0	0.00	0.00	0	0	0	0	100	0	0	0	400	0		
5205	Dodds Road	0.00	0.00	0	0	0.00	0.00	0	0	0	0	100	100	0	0	200	0		
5206	Arnold Canal	0.00	0.00	0	0	0.00	0.00	0	0	0	0	200	0	0	0	400	0		
5207	Michaels	3.00	0.00	0	0	1.00	0.00	0	0	0	0	150	0	0	0	550	0		
5208	Barlow Cave	5.00	0.00	0	0	10.00	3.00	0	0	0	0	700	0	300	0	500	0		
5209	Lava Beds Comm.	7.00	0.00	0	0	9.00	0.00	0	0	0	0	600	0	400	0	1000	0		
5210	Horse Ridge <sup>3</sup>	1.00	0.00	0	0	16.00	8.00	0	0	0	0	3500	0	0	0	500	0		
5211	Pine Mountain <sup>4</sup>	0.00	0.00	0	0	3.00	0.00	0	0	0	0	500	0	0	0	0	0		
5212	Millican <sup>1</sup>	6.00	0.00	0	0	35.00	25.00	0	0	0	0	2300	0	500	100	3000	200		
5213	Rambo <sup>1</sup>	6.00	0.00	0	0	8.00	0.00	0	0	0	0	500	0	0	0	1000	0		
5214	Williamson Creek <sup>1</sup>	0.00	0.00	0	0	9.00	0.00	0	0	0	0	1000	0	0	0	1600	100		
5215	Coats <sup>1</sup>	0.00	0.00	0	0	12.00	0.00	0	0	0	0	580	0	2100	0	400	0		
5229	Klootchman	0.00	0.00	0	0	0.00	0.00	0	0	0	0	0	0	0	0	140	0		
5230	Birch Creek <sup>1</sup>	0.00	4.00	0	0	0.00	0.00	0	0	0	0	150	0	0	0	1440	840		
5231	West Butte <sup>1</sup>	5.00	0.00	0	0	13.00	5.00	0	0	0	0	0	0	2000	100	6000	0		
5232	Nye	4.00	0.00	0	0	4.00	0.00	0	0	0	0	1000	0	0	0	2500	0		
5233	Scott <sup>5</sup>	3.50	0.00	0	0	2.00	0.00	0	0	0	0	300	0	0	0	2500	0		
5234	Haughton <sup>1</sup>	7.00	5.00	0	0	10.00	4.00	0	0	0	0	0	0	3500	0	3000	0		
5235	Moffitt	17.00	10.00	0	0	19.00	16.00	0	0	0	0	3000	0	3000	0	0	0		
5236	Bear Creek <sup>1</sup>	0.00	0.00	0	0	3.00	0.00	0	0	0	0	1000	950	0	0	50	50		
5237	Brothers <sup>1</sup>	21.00	10.00	0	0	27.00	22.00	0	0	0	0	350	0	0	0	0	0		
5238	ZX <sup>1</sup>	22.00	16.00	0	0	74.00	0.00	0	0	0	0	200	0	10000	0	1000	0		
5239	Grassy Butte <sup>1</sup>	5.00	2.00	0	0	5.00	3.00	0	0	0	0	1250	0	4750	0	0	0		
5240	Fehrenbacher <sup>1</sup>	4.50	0.00	0	0	2.00	0.00	0	0	0	0	700	0	300	0	300	0		
5241	Rickman-McCormack <sup>1</sup>	3.00	0.00	0	0	2.50	0.00	0	0	0	0	2000	400	0	0	1200	200		
5242	Spring Creek	6.00	3.00	0	0	4.00	0.00	0	0	0	0	400	400	0	0	1000	100		
5243	Bright <sup>1</sup>	2.00	0.00	0	0	3.00	0.00	0	0	0	0	500	0	1500	0	0	0		
5245	Ram Lake <sup>1</sup>	6.50	4.50	0	0	6.00	0.00	0	0	0	0	200	0	2000	0	1000	0		
5246	Hatfield	0.00	0.00	0	0	0.00	0.00	0	0	0	0	0	0	0	0	60	0		
5247	Lizard Creek	2.00	0.00	0	0	2.00	0.00	0	0	0	0	300	0	600	0	1500	0		
5248	PoTHOOK	0.00	0.00	0	0	0.00	0.00	0	0	0	0	400	0	0	0	2200	0		
5249	McCormack Home Ranch	0.00	0.00	0	0	0.00	0.00	0	0	0	0	250	0	0	0	1000	0		
5250	Coffelt	0.00	0.00	0	0	1.00	0.00	0	0	0	0	120	0	0	0	400	0		
5251	96 Ranch	2.00	3.00	0	0	5.00	1.00	0	0	0	0	700	0	0	0	5000	1500		
<b>Totals</b>		<b>304.95</b>	<b>133.3</b>	<b>7</b>	<b>4</b>	<b>447</b>	<b>109</b>	<b>1</b>	<b>1</b>	<b>36</b>	<b>1</b>	<b>3</b>	<b>0</b>	<b>53534</b>	<b>11019</b>	<b>57926</b>	<b>1000</b>	<b>93270</b>	<b>6050</b>

P - Proposed C - Completed

<sup>1</sup> Allotment evaluated in 1988 by interdisciplinary teams

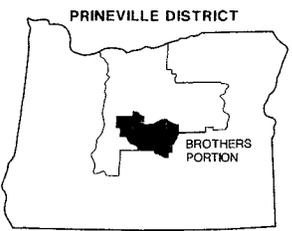
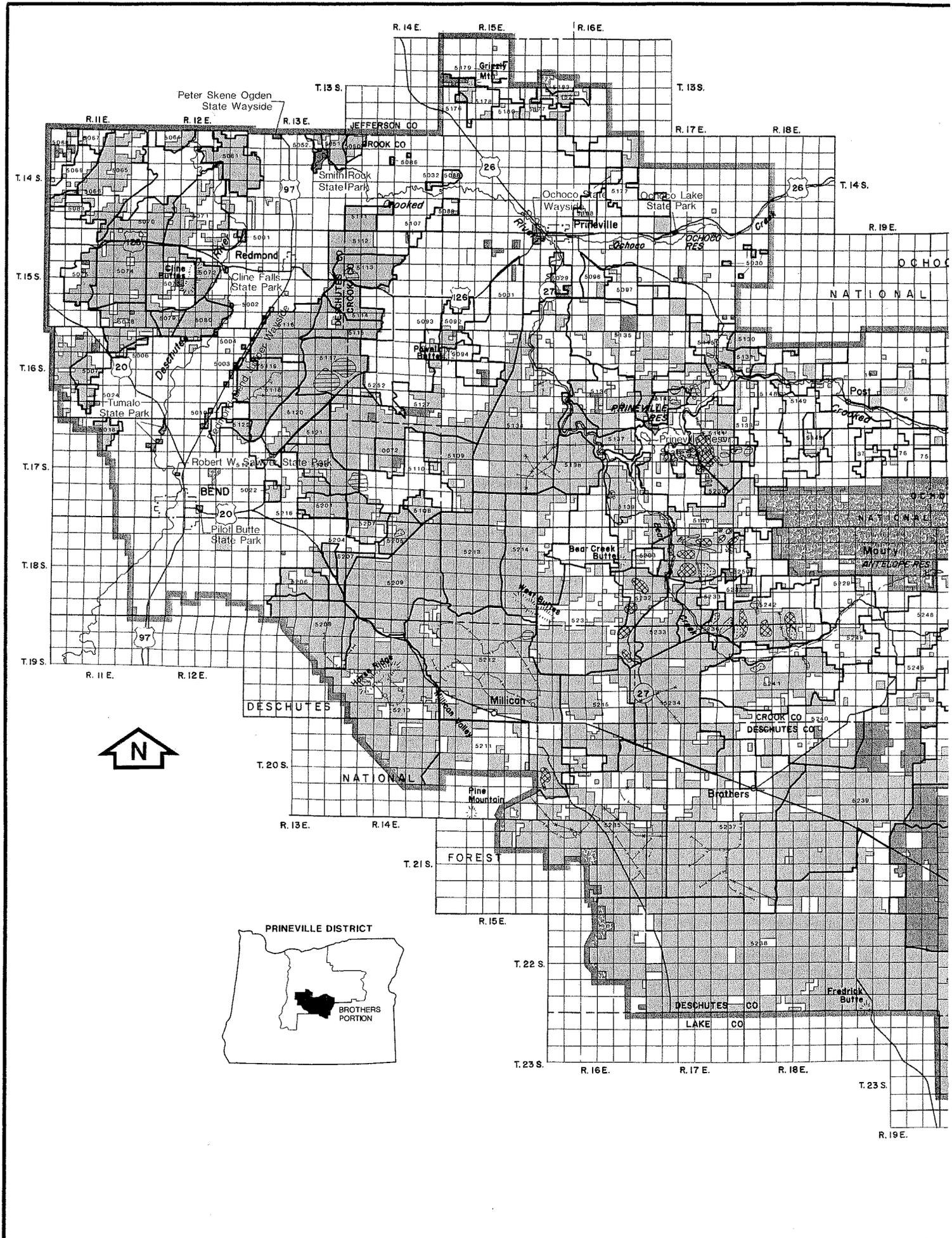
<sup>2</sup> New Allotment combination.

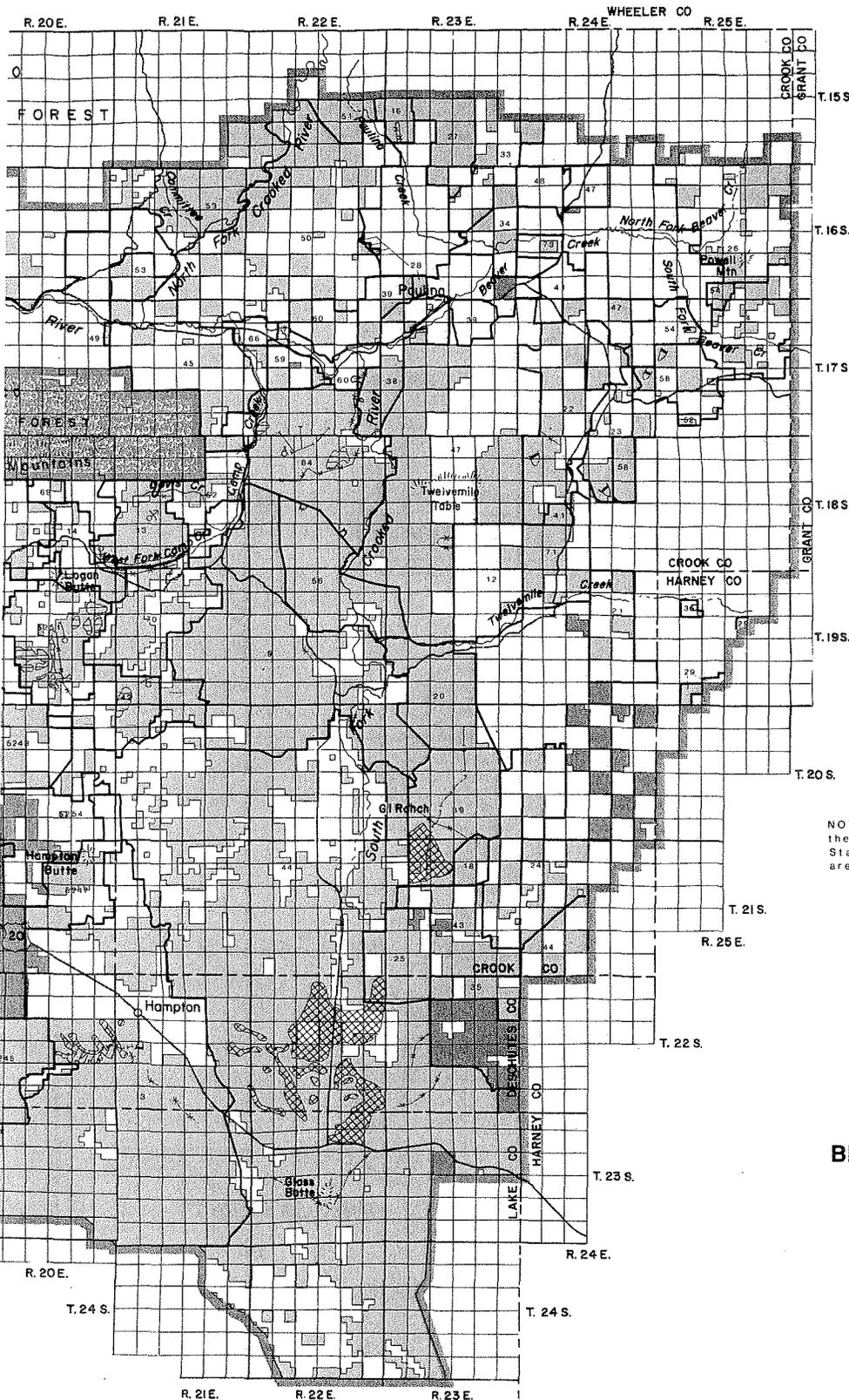
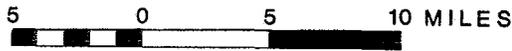
<sup>3</sup> In addition, 2000 acres of spray and seeding proposed.

<sup>4</sup> In addition, 1,000 acres of spray and seeding, and 500 acres of spray only proposed.

<sup>5</sup> In addition, 200 acres of spray only proposed.

<sup>6</sup> Change in proposed projects resulting from additional consultation and interdisciplinary coordination subsequent to the evaluation.





- Allotment Boundary and Number
- Fence
- Spring
- Pipeline
- Well
- Burn/Seed
- Burn
- Juniper Control
- Chain and Seed
- Reservoir

NOTE: Only rangeland developments completed since the Brothers Grazing Management Environmental Impact Statement and Record of Decision were finalized in 1983 are shown on this map

US DEPARTMENT OF THE INTERIOR  
Bureau of Land Management

PRINEVILLE DISTRICT  
MAY 1989  
BROTHERS/LA PINE PLANNING AREA

**MAP 16**  
**Livestock Grazing**  
**Allotments**  
**Brothers Portion**



**Table 14. Grazing Allotments by Category, LaPine Portion, Brothers/LaPine Planning Area**

<b>Allotment Name</b>	<b>Allotment Number System</b>	<b>Allotment Category</b>	<b>Public Land Acres <sup>3</sup> Short-Term</b>	<b>Allocated Forage-AUMs</b>	<b>Peak Long-Term</b>
A&L Sheep	7592	Maintain	6,260	1,012	2,127
Brown	7504	Maintain	525	93	183
Cliff	7509	Maintain	4,448	343	1,532
Finley	7595	Maintain	2,405	272	837
Helliwell	7536	Custodial	360	60	126
Kellems	7574	Maintain	170	34	85
Lebeau	7594	Custodial	23	6	10
Long Prairie	7597	Maintain	690	210	300
Miltenberger	7552	Maintain	4,693	656	1,635
Morgart	7554	Custodial	80	11	28
Poole	7559	Maintain	1,358	180	471
Stearns	7575	Maintain	518	97	179
Yager	7586	Maintain	700	57	244
Unalloted			20,971	6,800	Up to 8,223
<b>TOTAL</b>			<b>43,201</b>	<b>9,831</b>	<b>16,000</b>

<sup>1</sup> In "maintain" category allotments, grazing systems would be used which encourage increased density of ground cover vegetation (early spring, deferred, deferred rotation and rest rotation).

<sup>2</sup> In "custodial" category allotments, grazing systems would be used which maintain existing trends in ecological condition (moderate season-long, continual non-use).

<sup>3</sup> Additional acres of presently unallotted and ungrazed land would be added to existing allotments or used to create new allotments as livestock operators are willing to construct needed projects and provide required grazing management.

"Maintain" Category Criteria

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

"Improve" Category Criteria

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

"Custodial" Category Criteria

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

**Table 15. Grazing Management Program Under the Plan, LaPine Portion, Brothers/ LaPine Planning Area**

Forage Allocation (AUMs)	16,000
Range Developments	
Fences (miles)	98
Water holes (each)	31

Initial increases to livestock above base preference levels will be through temporary non-renewable permits pending confirmation by monitoring studies. First priority for this additional forage will be given to operators facing adjustments in other areas.

## Riparian Areas

### Management Direction

Stream riparian areas will continue to be protected and managed to provide full vegetative potential. This is accomplished by grazing management and fence construction and maintenance if warranted by multiple-use benefits. Where fencing is not feasible, livestock use is managed to achieve 60 percent of vegetative potential within 20 years.

In the Brothers portion, livestock exclusion or restricted use along 46 miles of stream, 55 miles of stream stabilization, 620 stream structures and 15 acres of debris removal will maintain or improve water quality and fish habitat. New water development and fencing is expected to improve livestock distribution, providing better forage utilization and reducing the impact of livestock concentration areas. Riparian vegetation is expected to improve on 75 percent of the stream riparian habitats. The remaining acres are expected to be maintained in current good to excellent ecological status.

Reservoir riparian areas are expected to improve through fencing on 7 percent of the area and to be maintained or slightly improved through grazing management on the remaining 93 percent. Reservoir riparian habitat was created with the establishment of livestock waters. It is not a naturally occurring situation and generally does not have high habitat potential. Where exceptional riparian habitat potential does exist, measures have been or will be taken to provide both livestock water and riparian improvement.

In the LaPine portion, management techniques will maintain or improve current good to excellent streambank stability and vegetative condition on the 10 acres of riparian vegetation along 1.5 stream miles on public land.

## Discussion of Grazing Treatments and Proposed Systems

### Treatments

A grazing treatment is livestock grazing on a pasture at a specific intensity with specific timing in relation to the annual growth cycle of key plant species. General descriptions of grazing treatments are:

**Early Grazing:** Grazing occurs for one to two months before the start of the critical growth period (April 15 to May 1). Livestock are utilizing primarily the previous year's growth although there is some use of early green growth.

**Growing Season Grazing:** Grazing occurs during the critical growing period, generally between April 15 and seed-ripe for key grass species (July 15 to August 1).

**Deferred Grazing:** Grazing occurs after seed-ripe and may include any part of the period until growth begins in the spring.

**Winter:** Grazing occurs in late fall and winter months while plants are dormant.

**Rest:** No grazing in the grazing season excluding any of the listed treatments.

### Grazing System

A grazing system may be one or more planned livestock grazing treatments which generate changes in, or maintain composition of, key plant species. Key species are plants which serve as indicators of objective accomplishment in vegetation communities. Grazing systems which allow key species to complete the growth stages generally result in increases or maintenance of key species. In the planning area, the critical part of the growing season normally occurs from April 15 to August 1, depending on the elevation.

**Early Spring Grazing System:** Grazing occurs for one to two months before the start of the critical growing period. Early spring grazing utilizes early maturing grasses that are not as palatable later in the season, such as cheatgrass and Sandberg's bluegrass and utilizes the previous year's growth of perennial plants. Because grazing ceases while adequate soil moisture is available, most perennial plants are able to produce seed and replenish their carbohydrate reserves. Early spring grazing permits seedling establishment. An increase in key upland herbaceous species composition is expected under this system.

Light utilization on key upland woody species is expected with early spring grazing. Consequently, a long-term increase in composition of these species would occur in areas where potential for increase exists because plant vigor and reproduction would be maintained.

Key woody and herbaceous riparian vegetation would increase with this system. Better distribution of livestock because of cool weather, abundant green upland forage and more water sources would reduce use on riparian vegetation. Regrowth after grazing would occur because of adequate soil moisture in the riparian areas.

Spring/Summer Grazing System: Grazing occurs every year in the critical part of the growing season under this system. A decrease in native, key upland herbaceous and woody species is expected on areas within an allotment that receive heavy utilization-- primarily areas adjacent to water developments, riparian areas and flat valley bottoms.

Livestock prefer green forage. As upland herbaceous species become dry in late summer, livestock start grazing green herbaceous and woody species in accessible riparian areas. Heavy utilization generally occurs.

Deferred Grazing System: The deferred system allows grazing after most of the upland herbaceous key species have reached seed ripe stage and have replenished carbohydrate reserves. The composition of key upland herbaceous species, such as Idaho fescue and bluebunch wheatgrass, is expected to increase.

Moderate utilization of upland woody species encourages growth of additional twigs and therefore increases forage production. Reproductive capacity decreases slightly over time because increased twig growth reduces development of flowers and fruits. Long-term composition is not expected to change.

Livestock concentrate in accessible riparian areas because of the availability of green forage and water and the hot late summer temperatures. This concentration results in heavy utilization of riparian herbaceous and woody species. The composition of key woody riparian species would decrease under this system because grazing would occur during the majority of the critical growth period for these species, particularly willow. Herbaceous riparian species composition would not change because deferred grazing would allow sufficient plant growth to sustain root reserves.

Season Long Grazing System: Grazing occurs throughout the growing season every year.

## **Design Standards and Standard Operating Procedures for Range Developments**

### **Range Developments**

The following is a discussion of typical design features and construction practices for range developments and treatments planned for in this RMP/EIS. They may also include many special features that can be a part of a project's design which are not discussed specifically in this section. One example of a special design feature is the use of a specific fence post color to blend with the surrounding environment, mitigating some visual impact of the fence. These design features could be developed for individual projects at the time an environmental analysis is completed.

### **Structural Developments**

#### **Fences**

Fences are constructed to provide exterior allotment boundaries, divide allotments into pastures, protect streams and riparian zones and control livestock. Most fences are three or four-wire strands strung between steel posts with intermediate wire stays. Fence lines are not bladed or scraped. Gates or cattleguards are installed where fences cross existing roads. All fences are designed to mitigate wildlife movement problems.

For any fences in wildlife migration areas, the need for let down fences to allow passage of wildlife would be analyzed. These fences would be let down when livestock are not present.

#### **Spring Developments**

Where natural springs exist, standard operating procedure calls for development to provide a more dependable source of water for livestock and wildlife while protecting the source from trampling. These developments will permit grazing systems which would allow periods of rest or deferment of livestock grazing.

Springs are developed by hand labor or backhoe to install a buried collection system. A short pipeline may be installed to deliver water to a trough. Ramps, rocks or flatboards are installed in all water troughs to allow small birds and mammals to gain access to and/or

escape from the water. Normally the spring area and the overflow is fenced after development to exclude livestock.

Some spring developments cause a permanent change in ecological condition on five to 10 acres surrounding the water source because of heavy utilization and trampling by livestock concentrating in the area. As springs are developed, water will be diverted to livestock water troughs, and fencing will protect riparian vegetation where significant overflow occurs. An increase in both woody and herbaceous riparian key species will occur in the long term at the springs.

## **Water Impoundments**

Reservoirs, including dugouts and waterholes and catchments will be constructed with earth moving machinery. The essential steps in constructing a dam for a reservoir are the excavation of a keyway, backfilling a core of non-permeable material and placing other fill to a prescribed height and slope. Generally, all fill material is excavated on-site. Dugouts are very small reservoirs whose dams do not have a keyway and core. Depending upon feasibility, some reservoirs with a fill of over 15 feet would be fenced and water piped to a trough or waterhole. Waterholes are excavated holes in non-permeable material with the soil placed adjacent to the hole. Catchments are rainfall catching projects consisting of a fenced watershed apron and an impermeable waterhole, bag, tank or trough. Catchments may have large aprons for livestock or very small ones for wildlife guzzlers.

## **Pipelines**

Wherever possible, water pipelines will be buried. Most pipelines will have water troughs and sometimes storage tanks so as to provide water for wildlife during the summer and fall months. All pipelines, troughs and storage tanks will be located and/or painted so as to blend with the surrounding landscape as much as possible.

## **Wells**

Well sites will be selected based on geologic reports that predict the depth to reliable aquifers. All applicable State laws and regulations that apply to the development of ground water will be observed.

## **Nonstructural Developments (Land Treatment)**

### **Vegetation Manipulation**

Vegetation manipulation (sagebrush control and sagebrush control with seeding) is used in the big sagebrush vegetation type where significant improvement in ecological condition as a result of grazing management will require more than 20 years. Generally all areas where vegetative manipulations occur will be totally rested from grazing during at least two growing seasons following treatment.

Sagebrush control projects are designed using irregular patterns and untreated patches to provide for optimum edge effect for visual and wildlife considerations. Layout and designs are coordinated with the Oregon Department of Fish and Wildlife.

Burning to achieve sagebrush control reduces big sagebrush and increases shrubs such as rabbitbrush and snakeweed. The effect of burning on perennial bunchgrasses varies with the intensity of the fire, season of the burn and the species of grass in the burn area. In general, the composition of bunchgrasses will increase on areas proposed for burning and a change of at least one ecological condition class will be expected.

### **Seeding**

Seeding is done with a rangeland drill. The planting mix is generally crested wheatgrass with other species added as a benefit to wildlife. Burning prepares land for seeding. Species composition after seeding varies according to the success of the brush control, the survival of other species in the seed mixture, and the amount of precipitation in the year after seeding.

The existing road and trail system provides access for range developments and normal maintenance such as replacement of fence posts, and retreatment of vegetation manipulations.

### **Juniper and Shrub Control**

Guidelines for juniper and shrub control projects are as follows:

1. Shrub control methods to be considered are spraying, burning, chaining, beating and other new methods that may be developed.

2. Brush control projects will be considered only after a detailed allotment management plan or grazing system has been developed and implemented.
3. No shrub control projects will be conducted on range sites when 50 percent or more of the area is in excellent ecological condition. Control projects will be conducted to achieve a mosaic pattern of approximately 60 percent control and 40 percent leave. This does not apply to winter range areas.
4. Project layout and methods of control used will be such that the projects will blend into the natural environment as much as possible.
5. Mosaic patterns will be incorporated into all control projects. Shrubs are considered to be a desirable part of the vegetation makeup of any given block of land: on most of the areas to be treated about 15-20 percent of the vegetative cover in shrub would be desirable. This does not apply to wildlife winter range areas.
6. Forb composition (measures as percent of cover) of 20 to 25 percent for John Day range sites and of 10 to 15 percent for High Desert and South Cascade range sites is the optimum wildlife recommendation for the District. This goal puts additional constraints on spraying of sagebrush with chemicals which also reduce forbs. It may be that some reduction could be accepted for the short term, if long term benefits in forb production could be attained. Another possible mitigating measure might be to seed some forbs following a sagebrush spray project.
7. Juniper control projects will be restricted to no more than 60 percent removal of juniper trees with leave areas concentrated on sites providing optimum thermal cover. Areas within the 40 percent leave zone should constitute a minimum of 5 acres each and be evenly distributed.
3. Sage Grouse Habitat (2-Mile Radius of Strutting Grounds): Projects within the 2-mile radius of strutting grounds will be planned for selective control in a manner that will not adversely impact present and future nesting sage grouse populations. Within the 1-mile radius zone shrub reduction projects will be highly selective.
4. Sage Grouse - Spring-Summer-Fall Range: Projects will be limited to no more than 60 percent of the area in any 10 year period with emphasis on mosaic patterns, creation of edge and retention of important cover.
5. Sage Grouse Wintering Areas: These areas can only be considered for treatment after adequate consideration and planning has been given to the present and future wintering sage grouse populations found in each specific areas.
6. Deer Winter Range - Sagebrush and juniper control within the critical deer winter range will be restricted by habitat and forage requirements for the wintering deer populations, present and future, for each critical area.

A brush control plan, consisting of project layout and an implementation plan will be developed for each critical deer winter range prior to starting any brush control work.

In pastures that are less than 50 percent public lands and the ecological range condition is fair to better, no brush control will be allowed on the public lands.

## Brush Control

The proposed methods of brush control are burning, brushbeating, herbicide spraying, or plowing of big sagebrush outside of important deer wintering areas. Chemical treatments will not be authorized without appropriate environmental analysis and clearance. Burning temporarily reduces big sagebrush because big sagebrush does not resprout following fire. The effect of burning on perennial bunchgrasses varies with the intensity of the fire, season of the burn, and the species of grass in the burn area. The composition of Sandberg's bluegrass, bluebunch wheatgrass and cheatgrass, where present, as increases on areas after successful burning. Several studies in Idaho indicate that fall burning does not harm most perennial herbaceous species. Sites with Idaho fescue or bitterbrush will not be burned since these species are easily damaged by fire.

## Specific Guidelines

1. Antelope Summer Range: General guidelines apply to these areas plus the identified need to leave some 2 to 5 acre patches of shrubs for antelope fawning.
2. Deer and Antelope Winter Range: No shrub control work will be initiated on low sage sites where soil depth is 15 inches or less.

## Standard Operating Procedures

These procedures will be followed in construction of all management facilities and for vegetation manipulations:

1. All actions will be consistent with the BLM's Visual Resource Management criteria. The management criteria for the specific visual class will be followed.
2. In crucial wildlife habitat (winter ranges, fawning/calving areas, sagegrouse nest areas and so forth), construction work will be scheduled during the appropriate season to avoid or minimize disturbances. In addition, wildlife needs will govern the size and design of the projects.
3. Surface disturbance at all project sites will be held to a minimum. Disturbed soil will be rehabilitated to blend with surrounding soil surface and will be reseeded as needed with a mixture of grasses, forbs, and browse to replace ground cover and reduce soil loss from wind and water erosion.
4. Analysis of cost effectiveness will be finished on an allotment basis before installation of any management facility or land treatment.
5. All areas where vegetative manipulation occurs will be totally rested from grazing for at least two growing seasons after treatment.
6. No BLM action will be taken that could jeopardize the continued existence of any Federally listed threatened or endangered plant or animal species. An endangered species clearance with the U.S. Fish and Wildlife Service (FWS) will be required before any planned actions that could affect an endangered species or its habitat will be implemented.

In situations where data are insufficient to make an assessment of proposed actions, surveys of potential habitats will be made before a decision is made to take any action that could affect threatened or endangered species. Should the BLM determine there could be an effect on a Federally listed species, formal consultation with the U.S. Fish and Wildlife Service will be initiated before taking any action. If the FWS opinion indicates the action will likely jeopardize continued existence of a listed species or result in destruction or adverse modification of critical habitat, the action will be abandoned or altered as necessary.

## Implementation Priority

### High

- Implement AMPs on allotments with partially completed AMPs.
- Implement AMPs on Improve (I) category allotments.
- Monitor Improve (I) and Maintain (M) category allotments to establish or substantiate stocking rates and evaluate the effects of intensive management.
- Issue grazing agreements or decisions for allotments where adjustments in stocking rates are agreed upon with the permittee or where no agreement can be reached.

### Medium

- Monitor the effects of livestock grazing on Custodial (C) category allotments.

## Range Monitoring

A Manual Supplement, entitled "Rangeland Monitoring in Oregon and Washington," has been developed and adopted by BLM as a guidance document. A district monitoring plan was also developed by the Prineville District in 1988. These documents provide a framework and minimum standards for choosing the timing and study methods to collect information needed to issue decisions which affect grazing management as well as watershed, wildlife and threatened or endangered species. Copies of these documents are available on request from the Prineville BLM District.

Highest priority for monitoring the grazing management program will be focused on the Improve (I) category allotments. Vegetative trend studies will be recorded at least every five years after initial establishment to detect changes in the vegetal community. Monitoring studies will be conducted annually for forage utilization, actual use (livestock numbers and periods of use), and climate. After five years of data collection, results will be analyzed and evaluated for each of the Improve (I) category allotments. Where adjustments in stocking rates, seasons of use, and/or grazing systems are needed to achieve the objectives of the RMP and/or allotment management plans, the needed adjustments will be

made through agreements with the grazing lessees or by decisions where necessary. The allotments will also be monitored beyond these five years to make further adjustments as necessary. If it becomes apparent that objectives are being achieved, the Improve (I) category allotments may be reclassified to the Maintain (M) category.

Maintain (M) category allotments will receive monitoring sufficient to insure that management continues to be satisfactory. Levels of monitoring will include: annual collection of actual use and climatic data, collection of utilization data every three years, and reading of trend studies every ten years. If monitoring indicates that unexpected adverse impacts are occurring, the allotment(s) may be reclassified to the Improve (I) category and corrective management actions taken.

Custodial (C) category allotments will receive less intensive monitoring. At a minimum, monitoring will include annual collection of climatic data and completion of trend studies on a ten-year schedule. If the analysis of monitoring data indicate a potential for improved management and/or critical resource values which are being threatened by livestock grazing, BLM will reclassify the allotment into the Improve (I) category and intensify its management.

The type(s) of monitoring study(ies) will vary depending on the resource objectives. The following is a brief description of the more common studies used for rangeland monitoring in the Prineville District.

### **1. Utilization**

A livestock use area is examined after grazing to determine the amount of use, expressed as a percent of current year's growth incurred on plants normally grazed by livestock. The examination can be for a single species or for several species, depending on resource objectives. The study area may consist of one or more transects in the use area or could involve mapping the entire use area to determine livestock grazing patterns.

### **2. Actual Use**

The livestock operator submits a detailed record at the close of the grazing period showing how the allotment was used. Actual use may not correspond exactly to authorized use because of factors such as late turnout, removal of sick animals, fewer total numbers than authorized and stray animals either in or out of the allotments.

### **3. Climate**

An index based on crop year precipitation has been developed by the Squaw Butte Field Station and provides a good indicator of forage growth. Records from NOAA weather reporting stations provide adequate coverage for most areas, but site-specific studies (i.e., a recording hydrothermography installed in an allotment) may be used as needed.

These three studies, conducted on a regular basis, monitor major causative agents of change in vegetation and can also be indicative of trends in ecological condition. Three other kinds of studies are also used.

### **4. Photographic**

Color photographs are taken at three to five year intervals at permanently established locations representative of the allotment. General change in vegetative composition and/or vigor can be observed. Aerial photography will also be used and can be particularly valuable in monitoring riparian areas.

### **5. Population Studies**

Methods of sampling plant populations have been developed which result in data of varying statistical reliability. Studies such as nested frequency give an indication of the occurrence of a species at a location. Line intercept and belt transect studies may be used to determine the relative composition and/or cover percentage of each species in a given population. Although they are time consuming and costly, these studies can be used to detect subtle changes in ecological condition of an allotment and to provide a statistical basis for future analysis.

### **6. Reinventory**

Allotments may be reinventoried for ecological condition (seral stage) using the Ecological Site Inventory (BLM Handbook H-4410-1). Ecological condition is normally estimated by comparing an ocular estimate of the relative plant species composition with the standard provided by the appropriate site guide, but detailed measurements are taken as needed. This is a long-term study which, normally will be conducted only when other studies indicate that a full condition class of change may have occurred or when a long enough period of time (perhaps 15 years) has elapsed that it is considered desirable to update the ecological condition data base.

## Support

Fire management support will be required for project layout, design and implementation for vegetative manipulation through prescribed fire. There will be a support need for survey and design features for range improvement and vegetative manipulation projects, and benefit/cost analyses for those range improvements. Water rights will be secured for water developments. Coordination will occur with lessees and affected parties on livestock manipulation and development or refinement of management plans.

## Wildlife Habitat

### Management Direction

Wildlife populations are managed by the Oregon Department of Fish and Wildlife (ODFW). In 1982, management objective numbers were established for big game populations in the Brothers portion of the planning area. These figures are shown in Table 16. Sufficient forage and cover is being provided for existing big game populations or ODFW objectives, whichever is higher. Wildlife habitat areas in the Brothers portion are shown on Map 18.



Deer hunters near LaPine.

Wildlife habitat and estimated populations for big game species in the LaPine portion are shown in Table 17. In the LaPine portion of the planning area, sufficient forage and cover is being provided for existing big game populations or ODFW objectives, whichever is higher. The most important wildlife habitat needs in the LaPine portion are deer migration routes which are shown on Map 19.

**Table 16. Wildlife Habitat and Populations, Brothers Portion, Brothers/LaPine Planning Area**

Species	Habitat (Public Acres) <sup>1</sup>	Present Population
Mule Deer		
Crucial winter range	142,914	13,800 <sup>2</sup>
Summer range	1,067,577	11,200 <sup>2</sup>
Antelope		
Crucial winter range	64,312	1,600 <sup>2</sup>
Summer range	739,968	1,640 <sup>2</sup>
Elk		
Winter range	38,912	70 <sup>2</sup>
Summer range	35,200	45 <sup>2</sup>
Water Associated Birds (includes surface water acres)	1,218	Moderate to abundant <sup>3</sup>
Upland Game Birds		Low to moderate <sup>3</sup>
Stream riparian habitat	407	
Nongame Species		Moderate to abundant <sup>3</sup>
Yearlong range	1,067,577	

<sup>1</sup>Based on 1982 data, acreage differs slightly from current Brothers portion total due to land tenure adjustments made since 1982.

<sup>2</sup>Based on ODFW, 1982 data

<sup>3</sup>Based on historical populations

Source: Brothers Grazing Draft Environmental Impact Statement, 1982.

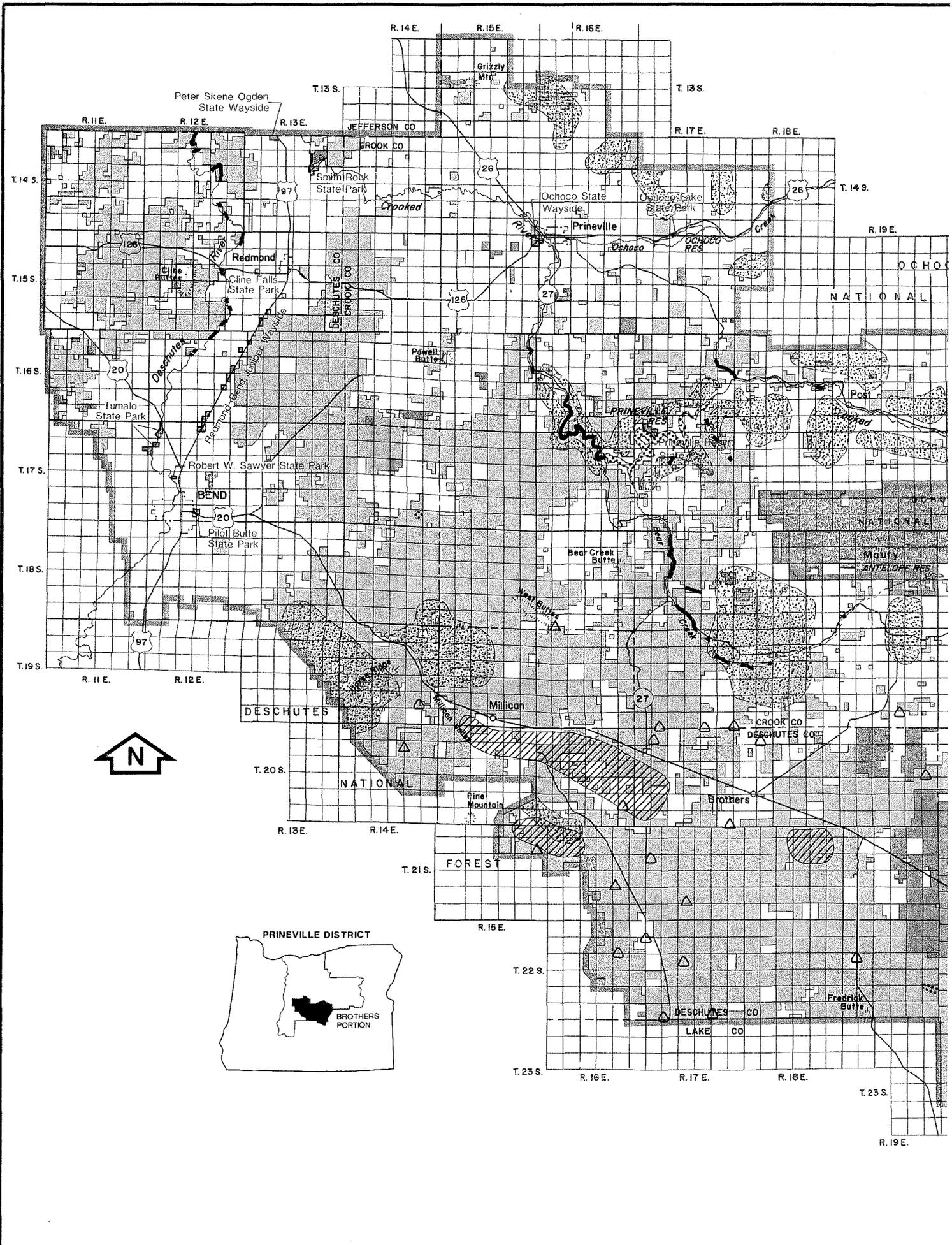
**Table 17. Wildlife Habitat and Populations, LaPine Portion, Brothers/LaPine Planning Area.**

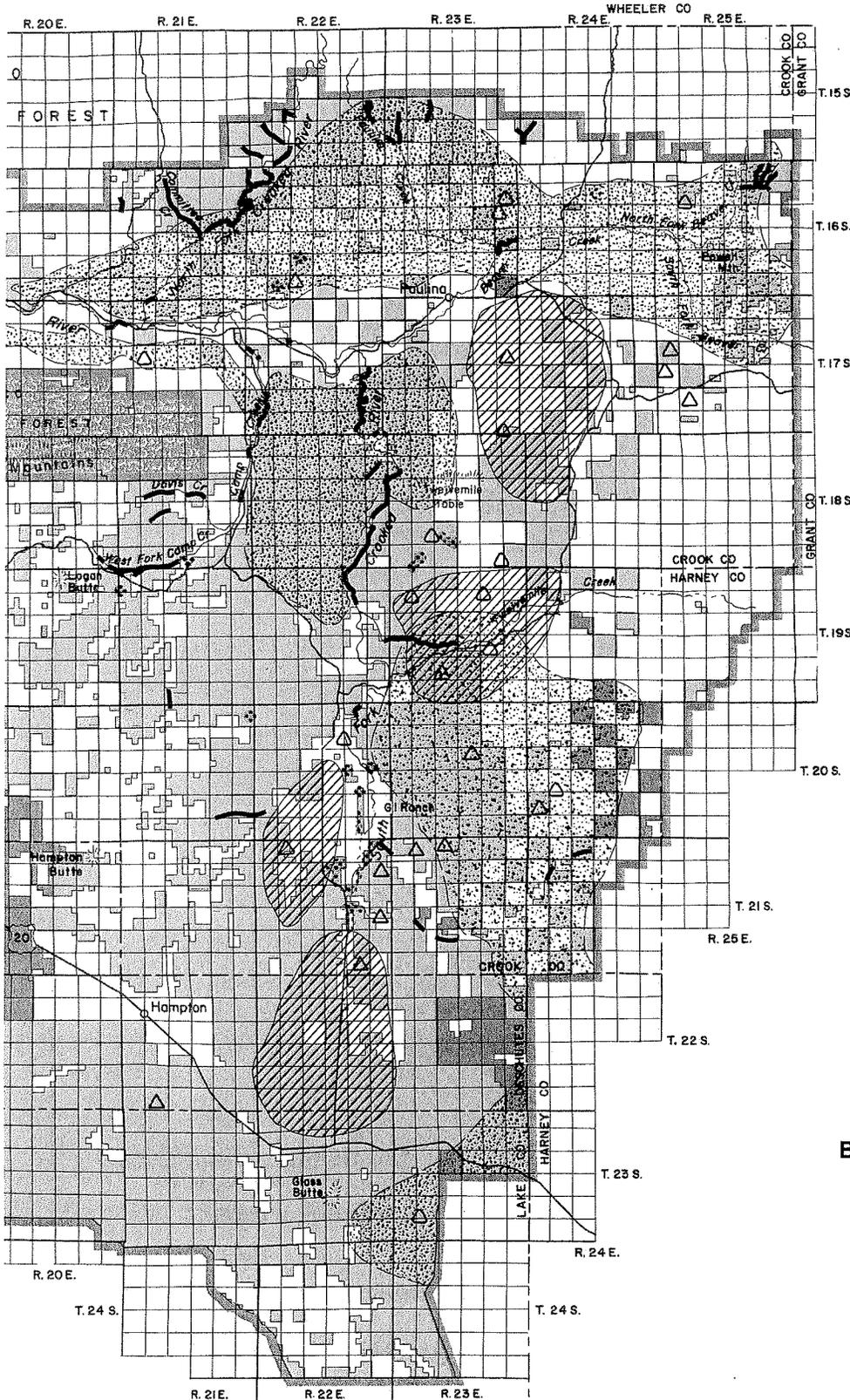
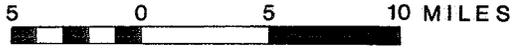
Species	Habitat (Public Acres) <sup>1</sup>	Present Population
Mule Deer		
Winter	43,201	360 <sup>1</sup>
Summer	43,201	720
Migration	43,201	18,000
Elk		
Summer	43,201	25
Antelope		
Summer	9,500	200

<sup>1</sup> Use varies greatly depending on winter conditions.



Wall Street in Bend about 1913.





**RIPARIAN AND WETLAND AREAS**

-  Wetland at Lake, Reservoir or Meadow
-  Riparian Area along Stream or Drainage

**WILDLIFE HABITAT**

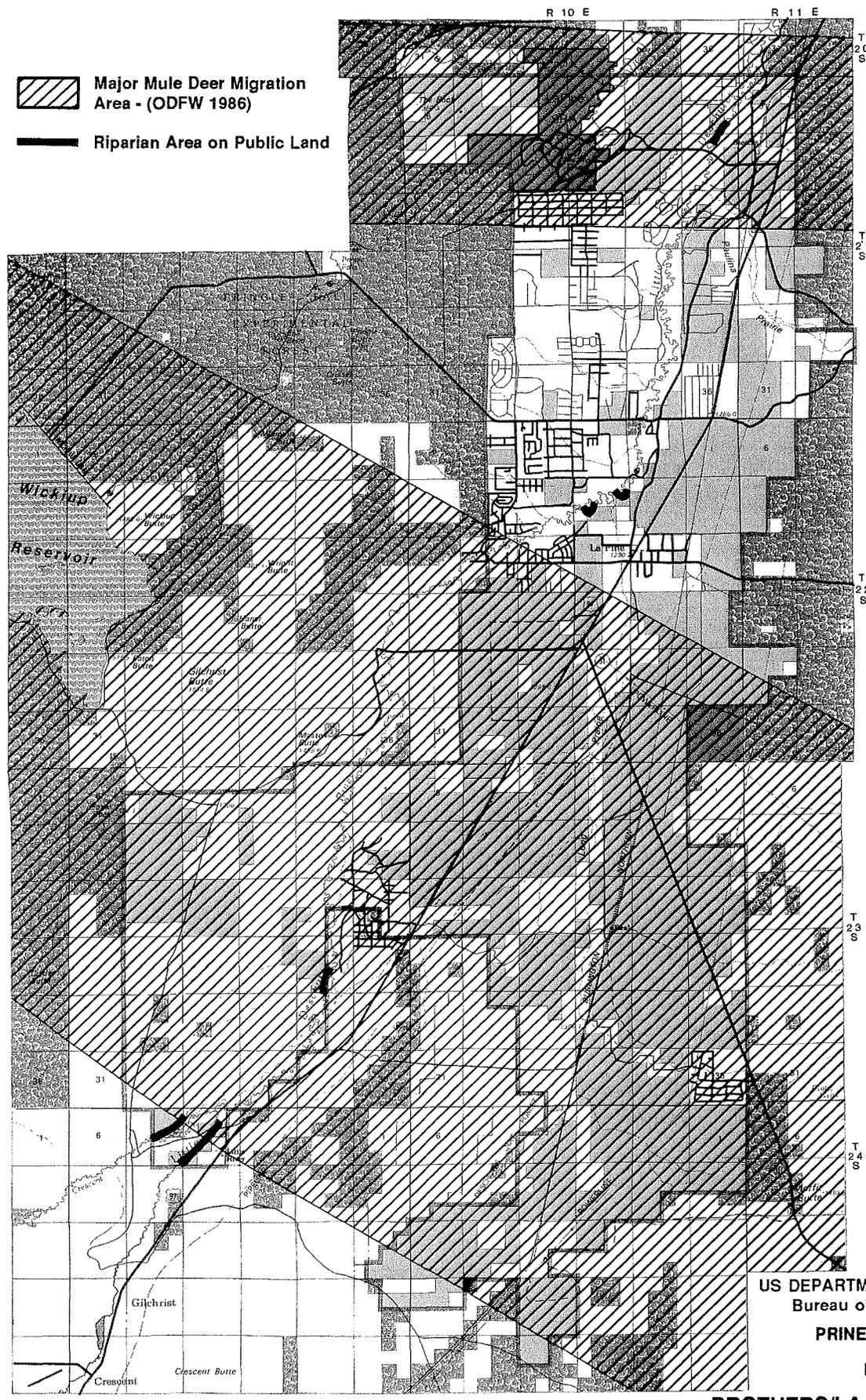
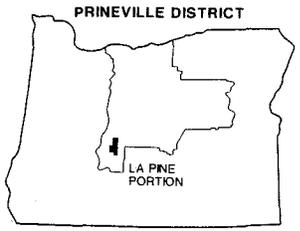
-  Crucial Deer Winter Range
-  Crucial Antelope Winter Range
-  Sage Grouse Strutting Grounds

US DEPARTMENT OF THE INTERIOR  
Bureau of Land Management

PRINEVILLE DISTRICT  
MAY 1989  
BROTHERS/LA PINE PLANNING AREA

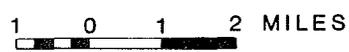
**MAP 18**  
**Riparian/Wetland Areas**  
**and**  
**Wildlife Habitat**  
**Brothers Portion**

 Major Mule Deer Migration Area - (ODFW 1986)  
 Riparian Area on Public Land



US DEPARTMENT OF THE INTERIOR  
 Bureau of Land Management  
 PRINEVILLE DISTRICT  
 MAY 1989

**BROTHERS/LA PINE PLANNING AREA**  
**MAP 19**  
**Deer Migration Routes/  
 Riparian Areas**  
**La Pine Portion**



In both Brothers and LaPine, non-game species habitat management will be accomplished by maintenance or enhancement of vegetative structure and diversity. Wildlife species differ widely in their habitat requirements. Decisions made through the Brothers/LaPine RMP will provide a variety of vegetative successional stages and a corresponding variety of habitats for wildlife.

The anticipated long-term forage available to wildlife in the Brothers area will accommodate ODFW proposed population increases of 27 percent for deer, 23 percent for antelope and 71 percent for elk based on 1982 populations.

The grazing systems implemented in deer and antelope winter range are expected to improve or maintain habitat conditions on 97 percent of the crucial deer winter range and 95 percent of the crucial antelope winter range based on 1982 conditions.

Management direction for threatened, endangered and sensitive species is discussed in the Ongoing Management Section.

## **Implementation**

Range developments will be designed to achieve both wildlife and livestock grazing management objectives. New fences will be constructed to allow wildlife passage and existing fences will be modified as appropriate. Where natural springs exist and are developed, the development will provide a more dependable water source for wildlife as well as livestock. Water troughs will accommodate use by wildlife and livestock. Where pipelines are developed to deliver water more than 2 miles from an existing water source, the water system will be designed to provide water for wildlife from July through October. Wildlife escape devices will be installed and maintained in water troughs. The spring area and the overflow will be fenced to exclude livestock trampling.

Vegetation manipulation and revegetation projects in crucial wildlife areas will be done in irregular shapes so as to create a vegetation mosaic.

All areas where major vegetation manipulation or conversion occurs will be totally rested from livestock grazing for at least two growing seasons following treatment.

In crucial wildlife habitats, major construction and maintenance work will be scheduled to avoid or minimize disturbance to wildlife. Areas disturbed

during project construction will be reseeded with a mixture of grasses, forbs, and shrubs to meet site specific needs or habitat requirements. All new fences will be built to standard Bureau wildlife specifications.

Fish and wildlife habitat management objectives will continue to be evaluated on a case-by-case basis as a part of project level planning (for example: timber sale plans, grazing management plans, recreation management plans, rights-of-way applications, and so forth). Note the standard design features and operation procedures in these program narratives. Evaluations will consider the significance of the proposed projects and the sensitivity of fish and wildlife habitats in the affected areas. Stipulations will be attached as appropriate to assure compatibility of projects with management objectives for fish and wildlife habitat. Protective fences will be constructed in riparian areas, and other habitat improvement projects will be implemented where necessary to stabilize and/or improve unsatisfactory or declining wildlife habitat condition. Such projects will be identified through habitat management plans or coordinated resource management activity plans.

Seasonal restrictions will be applied to mitigate the impacts of human activities on important seasonal wildlife habitat. Examples of the major types of important seasonal wildlife habitat are crucial deer winter range, sagegrouse nesting habitat and raptor nesting habitat.

The diversity and population level of species is a function of the diversity and type of habitats available. The present situation in the LaPine portion is such that the diversity of wildlife species will be different in the future due to the changing of the vegetative composition from the Mountain Pine Beetle infestation. As the dying mature lodgepole stands are replaced with forage areas and young lodgepole stands, the mix of wildlife species will also change.

Timber sales will be designed to provide sufficient cover to maintain the existing mule deer migration corridors through the LaPine portion. This will involve providing leave areas, and designing sales in the migration corridor so that cover is maintained.

Habitat management plans will be written for high priority wildlife habitats. These plans will detail how those habitats will be improved or maintained. Plans for sage grouse and bald eagles are expected to be written during this planning cycle.

## **Riparian and Aquatic Habitat**

### **Management Direction**

Management actions within riparian areas will include measures to protect or restore natural functions, as defined by Executive Orders 11988 and 11990 and the Oregon-Washington Riparian Enhancement Plan (1987).

The Oregon/Washington Riparian Enhancement Plan 1987 provides overall guidance and direction for management of riparian areas within the planning area. The overall goal of this plan is to maintain, restore or improve riparian areas to achieve a healthy and productive ecological condition for maximum long-term multiple use benefits and values. The plan details several goals and objectives for the planning area including management and implementation strategies, proposed projects and monitoring. The plan meets or exceeds all goals and decisions set forth in this document as well as the Brothers Management Framework Plan and the Bothers Grazing Management EIS/RPS.

### **Implementation**

Stream riparian areas in the Brothers portion as shown on Map 18 will continue to be protected and managed to provide full vegetative potential. This is accomplished by grazing management and fence construction and maintenance if multiple-use benefits warrant. Where fencing is not feasible, livestock use is managed to achieve 60 percent of vegetative potential within 20 years.

Livestock exclusion or restricted use along 46 miles of stream, 55 miles of stream stabilization, 620 stream structures and 15 acres of debris removal in the Brothers portion will maintain or improve water quality and fish habitat. New water development and fencing is expected to improve livestock distribution, providing better forage utilization and reducing the impact of concentration areas. Riparian vegetation in the Brothers portion is expected to improve on 75 percent of the stream riparian habitats. The remaining acres are expected to be maintained in current good to excellent ecological status.

Reservoir riparian habitats are expected to improve through fencing on 7 percent of the Brothers portion and to be maintained or slightly improved through grazing management on the remaining 93 percent.

Reservoir riparian was created with the establishment of livestock waters. It is not a naturally occurring situation and generally does not have high habitat potential. Where exceptional riparian potential does exist, measures have been taken to provide both livestock water and riparian improvement for wildlife species.

Streamside riparian habitat in the LaPine portion consists of 10 acres along 1.5 stream miles on public land as shown on Map 19. These are used during all seasons of the year by nearly 80 percent of the 340 wildlife species in the area.

Under the plan, riparian habitat condition in the LaPine portion, which is good to excellent, will be maintained or enhanced through constraints on other program elements.

## **Fish Habitat**

### **Management Direction**

There are about 96 miles of stream on public lands in the Brothers portion that have fish or the potential to support fish. Eighty-eight miles presently contain fish populations. A summary of fish habitat condition and trend in the Brothers portion is shown in Table 18. Fish habitat is being improved through existing grazing management or livestock exclusion along 46 miles of stream, 55 miles of stream stabilization, 620 stream structures and 15 acres of debris removal.

The LaPine portion of the planning area includes fish habitat along the Little Deschutes River and Crescent Creek. Fish habitat condition for the 1.5 miles of stream on public land in the LaPine portion is good to excellent.

### **Implementation**

Fish habitat will be improved by a combination of projects and management. Whenever possible livestock grazing management will be used instead of projects to improve fish habitat conditions. This will be accomplished by seasonal changes in livestock grazing to protect banks and vegetation, and by developing grazing systems to reduce soil erosion. Additional vegetative manipulations will be conducted to improve watershed conditions which will increase late season water availability in streams.

**Table 18. Fish Habitat Condition and Estimated Trend <sup>1</sup>, Brothers Portion, Brothers/LaPine Planning Area**

Stream	Public Stream Miles	Present Stream Channel Condition	Present Fish Habitat Condition	Est. Trend <sup>2</sup>	Species Present <sup>3</sup>	Comments
Alkali Creek	.75	Poor	Poor	D	no fish	Low flows, high water temperature.
Bear Creek	9.10	Fair	Poor	1	Rb,LpD,Bsu SpD,LnD	Low flow, siltation, high water temperature, enclosure improving habitat.
Bear Creek, Little	1.35	Poor	Poor	D	no fish	Low flow, siltation, high water temperature.
Beaver Creek	1.70	Good	Fair	S	Bsu,Sq,LpD, Cch,SpD	Siltation, limited gravel, high wa*ter temp., irrigation withdrawal.
Beaver Creek (N. Fork)	2.04	Fair	Good	S	Rb,Sq,Bsu, LpD	Good stream shade, low flow, good gravel.
Beaver Creek (S. Fork)	.25	Fair	Fair	S	Rb,LpD,Bsu	Irrigation withdrawal, limited gravel, poor structure.
Beaverdam Creek	1.50	Fair	Fair	S	Rb,LpD,Bsu	Low flow to intermittent, siltation, logging debris.
Bronco Creek & tributary	1.50	Good	Fair	S	Rb,LpD,Bsu	Low flow, limited poolarea, high water temp.
Burnt Log Cr. (E & W Fk.)	1.08	Fair	Fair	S	Rb,Sc,LpD	Low flows, good spawning gravel, debris jams.
Camp Creek (main stem)	3.40	Poor	Poor	D	LpD,UmD	Low flow, siltation, irrigation withdrawal, high water temperature.
Camp Creek (middle fork)	.30	Poor	Poor	D	no fish	Intermittent, siltation, poor bank and channel condition.
Camp Creek (south fork)	.50	Poor	Poor	S	no fish	Very low flow, poor bank and channel condition, siltation.
Camp Creek (west fork)	4.80	Poor	Poor	I	UmD	Siltation, low flow, limited structure, high water temperature.
Committee Creek	3.50	Fair	Fair	1	Rb	Low flow, logging damage, siltation, enclosure improving habitat.
Crooked River (lower)	8.75	Excellent	Good	S	Rb,Bt,Wf, Brb, R	Siltation from Prineville Reservoir.
Crooked River (upper)	1.60	Fair	Fair	S	Rb,Sb,Csu, Sq,LnD,LpD, SpD,Chc,Brb Bsu	Irrigation withdrawal, low flow, high water temperature, siltation.
Crooked River (N. Fork)	10.70	Good	Fair	S	Rb, Sq,LpD, Bsu,Sc	High water temperature, limited spawning gravel, stable banks.
Crooked River (S. Fork)	13.75	Good	Fair	D	Sq,LpD,Bsu, Chc,SpD,LnD	Streamside cover scarce, abundant aquatic vege- tation, siltation.
Davis Creek	2.34	Fair	Fair	S	no fish	Low water temperature, siltation, logging damage.
Deschutes River	7.05	Excellent	Good	S	Rb,Bt,Wf, Brb,R	Good streamside cover, irrigation withdrawal, good water quality.
Eagle Creek	2.20	Fair	Poor	S	Rb- spawning	Low flow, limited stream cover, siltation.
Fox Canyon Creek	1.75	Good	Fair	S	Rb,LpD	Intergravel flow, bed-rock falls, good canopy.
Hail Creek	.50	Fair	Poor	S	Rb,LpD	Low flow, logging debris, poor stream cover, 30' falls.

**Table 18. Fish Habitat Condition and Estimated Trend <sup>1</sup>, Brothers Portion, Brothers/LaPine Planning Area (continued)**

Stream	Public Stream Miles	Present Stream Channel Condition	Present Fish Habitat Condition	Est. Trend <sup>2</sup>	Species Present <sup>3</sup>	Comments
Heisler Creek	1.48	Good	Poor	S	Rb,LpD	Low flow and intermittency, good stream cover, high water temperature.
Higgins Creek	.54	Fair	Poor	S	Rb,LpD	Intermittent flow, limited gravel, good shade cover.
Indian Creek	1.75	Fair	Poor	S	Rb,Bsu,LpD	Intermittent flow, siltation, limited gravel.
Meadow Reservoir Creek	1.16	Good	Poor	D	no fish	Intermittent flow, poor stream structure and habitat.
O'Neil Creek	.25	Poor	Poor	S	no fish	Low flow, siltation, poor bank condition, no structure.
Paulina Creek	1.70	Fair	Poor	S	Rb,Sc,Cch, Sq,LpD,Bsu	Low flow, limited gravel.
Pole Creek	.50	Poor	Poor	D	no fish	Siltation, low flow, poor bank condition, no structure.
Roba Creek	1.60	Fair	Poor	S	Rb	Intermittent low flow, siltation.
Rough Canyon Creek	.75	Fair	Poor	S	no fish	Intergravel flows, series of bedrock falls, 40' falls.
Sheep Rock Creek	.62	Fair	Poor	S	Rb	Steep gradient, limited gravel, algae blooms.
Twelvemile Creek	3.75	Fair	Poor	S	Sq,LpD	Intermittent flow, high water temperature.
Wolf Creek (mouth)	.14	Poor	Poor	S	Bsu,LpD	Low flow, siltation, poor banks, no shade cover.
Wolf Creek (north fork)	1.26	Fair	Poor	D	Rb,LpD	Low flow, limited gravel limited pool area.

<sup>1</sup> Survey represents 100% of BLM perennial stream miles and 98% of intermittent stream miles.

<sup>2</sup> I-Improving D-Declining S-Stable

<sup>3</sup> Rb-Rainbow trout, Bt-Brown trout, Wt-Mountain Whitefish, Sq-Northern squawfish,

Bsu-Bridgelip sucker, Sb-Smallmouth bass, Csu-Coarsescale sucker, SpD-Speckled dace, Lnd-Longnose dace, LpD-Leopard dace, Cch-Chiselmouth chub, UmD-Umatilla dace, Sc-Sculpin, Brb-Brown Bullhead, R-Roach, Ct-Cutthroat trout, Lb-Largemouth bass.

## Implementation Priority

### High

Continue to implement the Oregon/Washington Riparian Enhancement Plan. Assess actions affecting wildlife habitat. Protect threatened, endangered or sensitive species habitat. Monitor important habitat of other species such as mule deer, elk, and other game and non-game species.

### Medium

Manage non-critical habitats with significant values.

### Monitoring

Allotment management plans will be updated and revised and habitat management plans will be prepared prior to implementation of specific activities for habitat improvement. AMPs and HMPs will contain sections on monitoring techniques for various activities. These will evaluate habitat condition and trend against resource objectives.

Wildlife habitat monitoring will consist largely of recording repeated observations of the habitat conditions which is being changed by a particular action. This may be as simple as using photo stations or as complicated as a complete ecological study. Each action will be monitored to assess the degree of success or failure measured against management objectives.

Monitoring priorities will be established by the general management priorities discussed previously. Each habitat management plan will discuss and rank monitoring efforts as part of the management scenario for a particular geographic area.

### Support

Support and cooperation from the ODFW, private sportsmen's groups and others will be an integral part of the habitat management program.

Internal support from BLM specialists (i.e., lands, forestry, recreation and range management) will also be required.

Extensive coordination with other Federal, and State agencies, as well as groups and individuals will be needed during day-to-day program operation.

## Fire Management

The planning area has been evaluated for damage to resource values by fire. Values at risk classes have been established and range from Class 1 (lowest values at risk) through Class 6 (highest, special consideration values at risk) and are shown on Maps 20 and 21. Values at risk are the basis for determining suppression action.

Fire is a natural part of the ecosystem in the Brothers/LaPine Planning Area; fire return intervals for similar fuel types is about 16 years (Martin, 1982). The predominant fuel types in the Brothers portion are sagebrush/grass and juniper/sagebrush. In the LaPine portion, it is lodgepole pine.

### Management Direction

Aggressive suppression of wildfires will be provided on 506,000 acres (values at risk Classes 4 through 6). This will not preclude the use of prescribed fire (both planned and unplanned ignitions) to reduce fuel loads, manage habitat and forage or control vegetation in rights-of-way, weed infestation areas etc. A total of 605,000 acres is designated as conditional suppression and fire use areas (values at risk Classes 1 through 3). Note: "conditional suppression" does not mean "let burn". Depending on circumstances, any or all of the 605,000 acres may receive full, aggressive suppression. Table 19 displays the conditional fire suppression parameters to be considered in determining the suppression approach.

**Table 19. Conditional Fire Suppression Parameters, Under the Plan, Brothers/LaPine Planning Area**

---

Fire Size	Less than 1,500 ac
Air Temperature	Less than 90° F
Windspeed at 20' above ground	Less than 18 mph
Fine fuel moisture content	More than 5 percent
Flame length	Less than 10 ft
Rate of forward spread	Less than 2,500 ft/hr
Amount of fire suppression forces available	At least 50 percent of existing crews and equipment

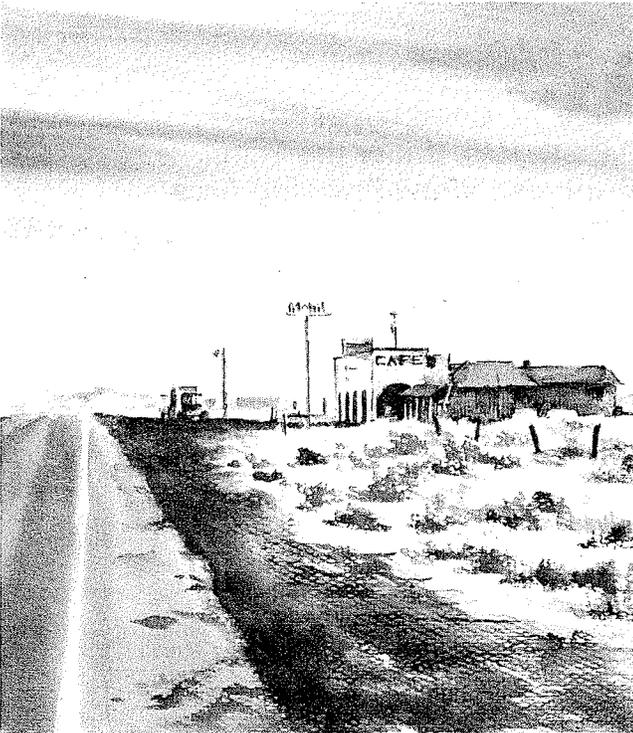
## Implementation

When prescribed fire is considered, it will be coordinated with the Oregon Department of Forestry and adjacent landowners and carried out in accordance with approved fire management plans and appropriate smoke management and visibility goals and objectives. All provisions of the Oregon Smoke Management Plan will be followed.

The Bear Creek Fire Use Plan, published in 1983, will be followed for 107,000 acres in the Bear Creek watershed. Copies are available through the Prineville District Office. Natural ignition fires will be allowed to burn under prescribed conditions on 605,000 acres (values at risk Classes 1 through 3) provided District suppression forces are available to monitor and implement control actions as needed. Range developments will be protected. No more than four fires in excess of 150 acres will be allowed to burn at any one time.

The seven wilderness study areas in the planning area require conditional fire suppression action. A special advance interim management plan has been completed for these areas. Copies are available through the Prineville District Office.

Rural or urban areas between high value public or private lands and other BLM lands will be managed as top priority suppression areas. These areas are primarily in the LaPine, Bend, Redmond and Prineville



Present day Brothers.

areas. The interface areas are of special concern because of housing developments and adjacent high resource values.

All unplanned ignitions (wildfires) will have a timely post burn review and evaluation in order to define appropriate rehabilitation and/or monitoring needs.

All planned ignitions (prescribed fires) will have a written and approved burn plan listing specific, measurable objectives and techniques and will be conducted in accordance with BLM fire management policy.

The Brothers Management Framework Plan and Brothers Grazing Management EIS/RPS identified approximately 114,000 acres for prescribed burning to improve ecological status. Approximately 10,000 acres of this prescribed burning has been completed.

## Implementation Priorities

### High

Modify and implement the District Fire Suppression Plan to reflect approved RMP allocations and management direction. Coordinate fire suppression efforts with other Federal, State and local agencies and affected land users, especially in the conditional suppression areas. Coordinate with the Oregon Department of Forestry on conformance with the State Smoke Management Plan.

### Moderate

Use planned and natural ignition fires to meet other resource objectives in the approved RMP.

### Low

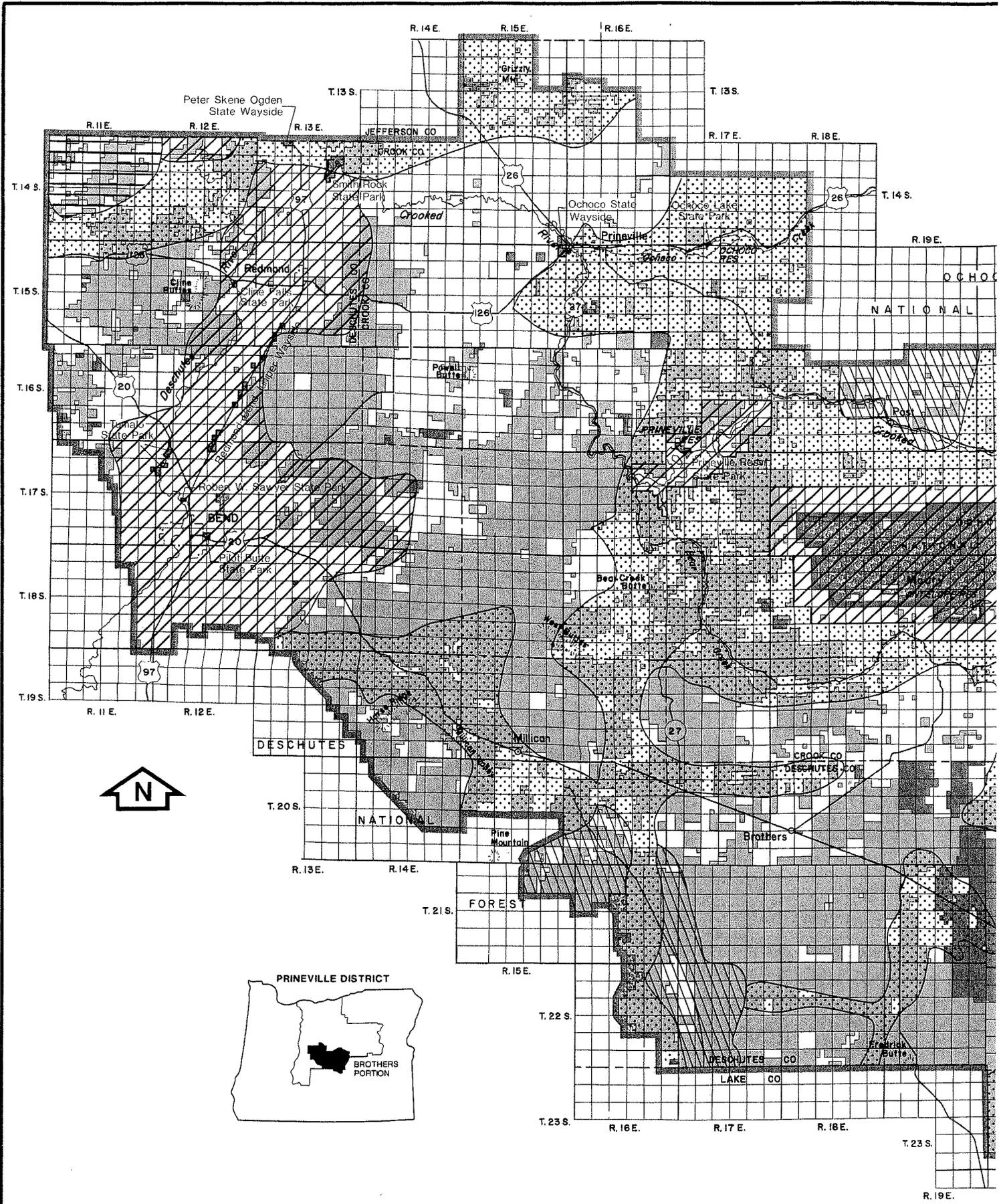
Improve fire monitoring techniques to reduce costs, improve overall fire program efficiency from implementing the conditional suppression program. Conduct public information programs on the use and benefits of conditional fire suppression.

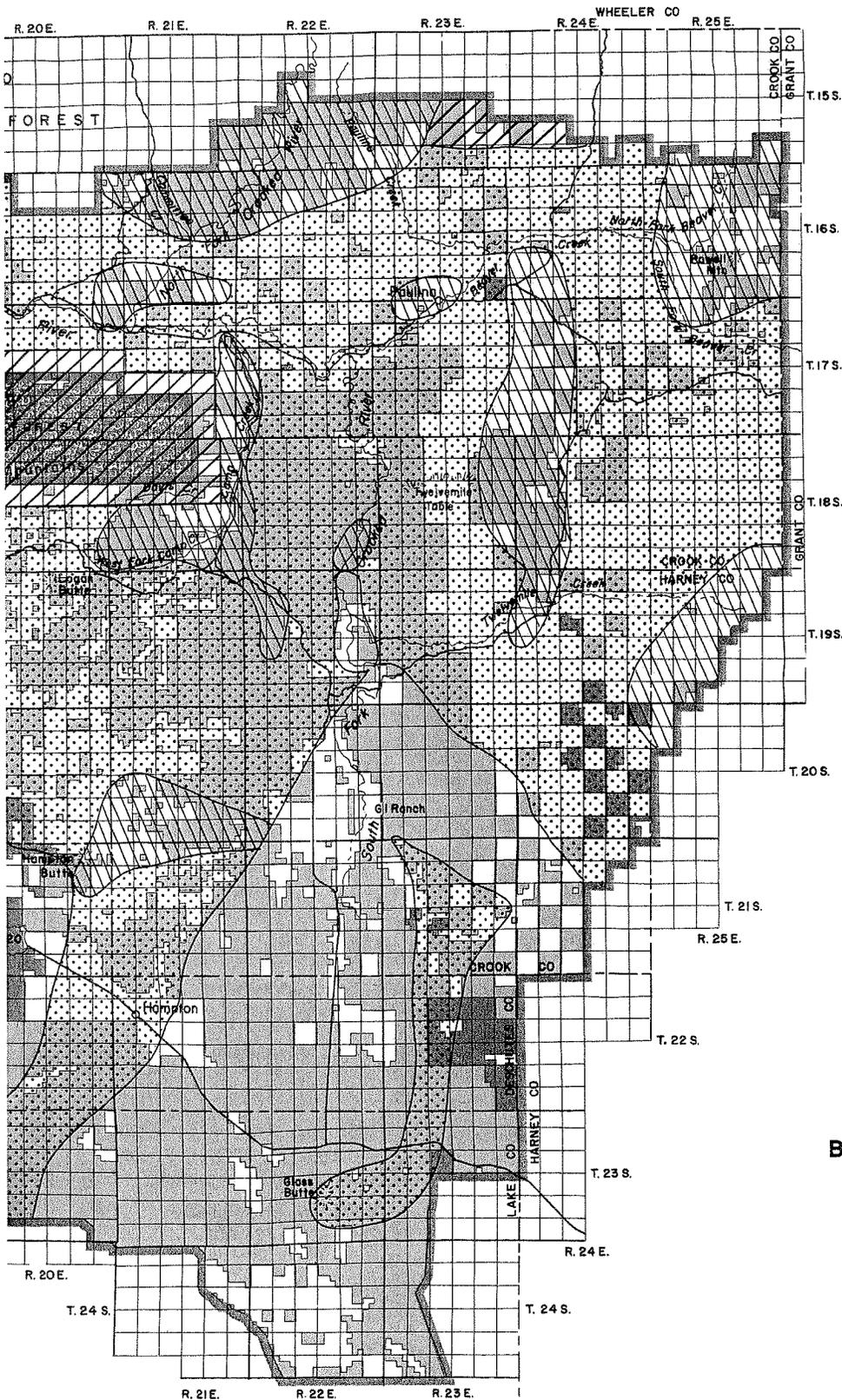
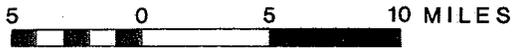
## Monitoring

Monitor implementation of the use of the risk class approach and amend the risk class map as needed. Monitor the use, accuracy and sensitivity of the conditional fire suppression parameters in the approved RMP. Monitor compliance with the State Smoke Management Plan. Assist other programs in monitoring and evaluating the success of use of prescribed fire.



LaPine prior to 1935 when the store burned down.





RESOURCE VALUE AT RISK

- Class 1 & 2 (Low Value)
- Class 3
- Class 4
- Class 5
- Class 6 (High Value)

US DEPARTMENT OF THE INTERIOR  
Bureau of Land Management

PRINEVILLE DISTRICT

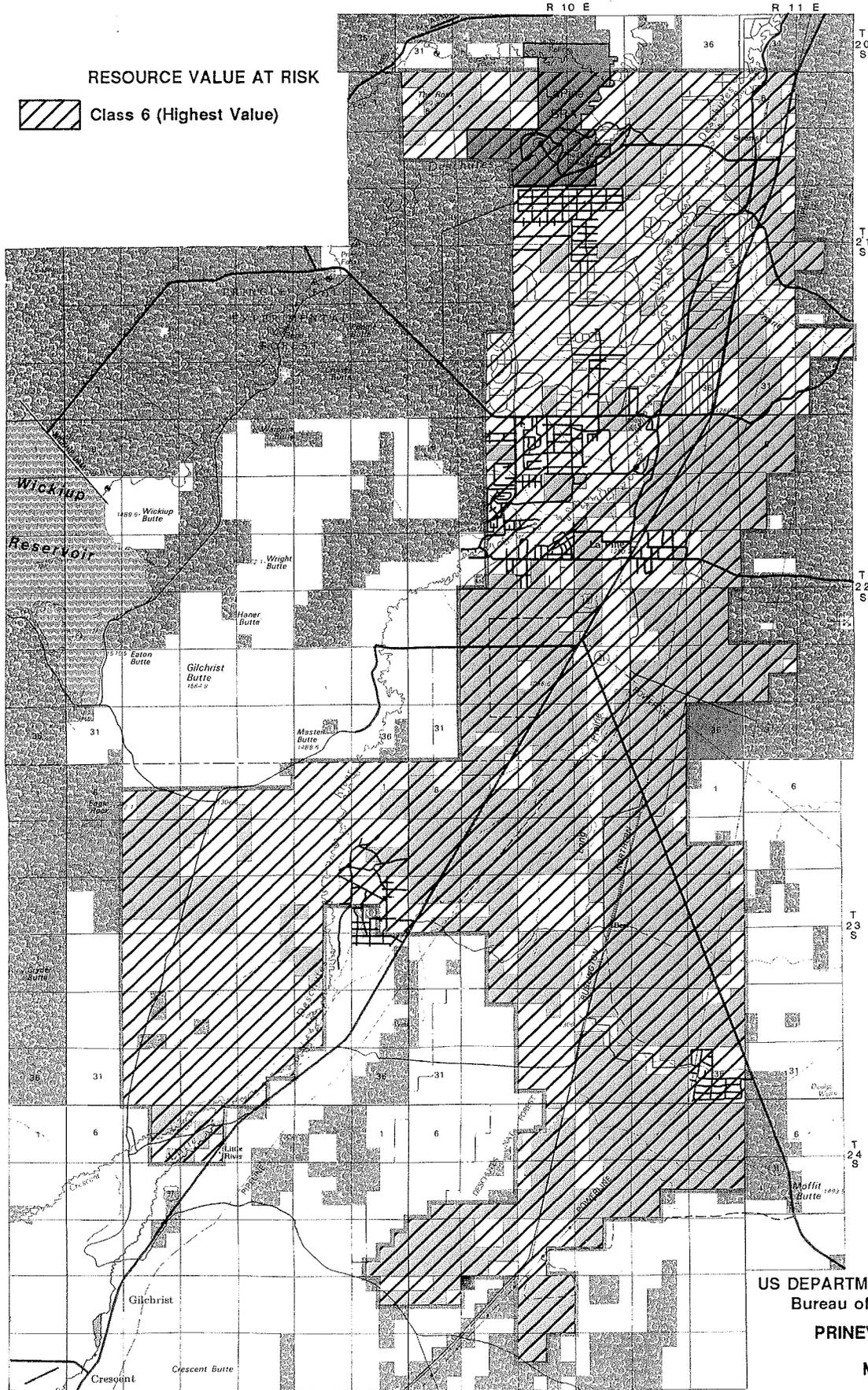
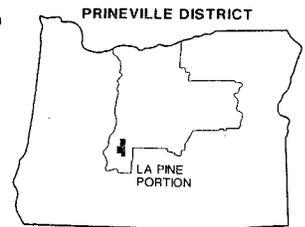
MAY 1989

BROTHERS/LA PINE PLANNING AREA

**MAP 20**  
**Fire Management**  
**Brothers Portion**

RESOURCE VALUE AT RISK

 Class 6 (Highest Value)



US DEPARTMENT OF THE INTERIOR  
Bureau of Land Management  
PRINEVILLE DISTRICT

MAY 1989

BROTHERS/LA PINE PLANNING AREA

**MAP 21**  
**Fire Management**  
**La Pine Portion**

1 0 1 2 MILES  


## Support

Staff specialist support will be needed in determining the success in meeting resource management objectives in the conditional suppression and prescribed fire use areas.

## Energy and Minerals

### Leasable Minerals

It is projected that the next 10 to 15 years will see periodic oil and gas as well as some geothermal exploration on BLM managed lands within the planning area. For purposes of analysis it is assumed that a total of three exploratory wells for oil and gas and geothermal will be drilled. The surface disturbance associated with drilling for oil and gas and geothermal are similar with each well requiring approximately 3 acres for a well pad and an estimated average of 2 miles of moderate duty access road. Existing roads will be used whenever possible. The cumulative effect of this activity is expected to be a total of 9 acres of surface disturbance and 6 miles of new road. The well pads and possibly the roads (if they would not be needed for other uses) will be rehabilitated. The average duration of this activity would be approximately 6 months at each well site. Unless production is found, all impacts associated with exploration and drilling will be short-term and insignificant. If oil, gas or geothermal production is

pursued, an amendment of this plan and separate environmental impact statement, with public involvement, will be prepared.

### Management Direction

Leasable minerals will continue to be made available on most land where the surface is also publicly owned. Approximately 910,000 acres of public land will be open to exploration subject to standard lease requirements and stipulations. A restrictive "no surface occupancy" stipulation for fluid minerals exploration and development will be maintained on 16,000 acres of public land around Prineville Reservoir and seasonal restrictions will continue on 44,580 acres of deer wintering areas and 3,560 acres of sage grouse strutting grounds. A no-surface occupancy stipulation for fluid minerals exploration and development will be imposed on 36,000 acres designated as Areas of Critical Environmental Concern. A 600-acre area around the Horse Ridge Research Natural Area will continue to be closed to mineral leasing. A total of 3,552 acres along 11.1 miles of the North Fork of the Crooked River was classified as "wild" under the National Wild and Scenic Rivers Act. This area has been withdrawn from mineral entry, thus it is closed to mineral leasing. Restrictions to protect 100,000 acres of land that are visually sensitive or of high scenic quality will also be continued. Table 20 and Maps 22 and 23 show leasable mineral potential in the Brothers Portion.

**Table 20. Acres Potentially Valuable for Oil and Gas and Geothermal, Brothers/LaPine Planning Area**

Management Categories	Not Potentially Valuable	Low Value Potential	Moderate Value Potential	High Value Potential	Total	% Public Mineral Acres
Oil and Gas						
Open	41,000	463,000	172,000	234,000	910,000	82
Open-No Surface Occupancy	0	29,000	8,000	11,000	48,000	4
Open-Visual Restrictions	10,000	20,000	40,000	30,000	100,000	9
Open-Seasonal Restrictions	0	5,000	20,000	23,000	48,000	4
Closed-Non Discretionary	0	1,000	0	4,000	5,000	1
<b>Total</b>	<b>51,000</b>	<b>518,000</b>	<b>240,000</b>	<b>302,000</b>	<b>1,111,000</b>	<b>100</b>
Geothermal						
Open	815,000	215,000	6,000	0	1,036,000	93
Open-No Surface Occupancy	26,000	7,000	0	0	33,000	3
Open-Visual Impact	0	10,000	15,000	0	25,000	2
Open-Seasonal Restrictions	0	12,000	0	0	12,000	1
Closed-Non-Discretionary	4,000	1,000	0	0	5,000	1
<b>Total</b>	<b>849,000</b>	<b>245,000</b>	<b>21,000</b>	<b>0</b>	<b>1,111,000</b>	<b>100</b>

Map 24 shows minerals management areas for the Brothers Portion. There are no oil and gas or geothermal leases in the LaPine Portion and overall leasable mineral potential is low. There are no known deposits of coal, tar sands, oil shale or other leasable minerals in the Brothers/LaPine Planning Area. Leasing of any minerals other than oil and gas as geothermal will require an RMP amendment or revision.

## Implementation

Exceptions to the no surface occupancy stipulation will be evaluated using the following criteria:

- 1) Any proposed drilling pad or road construction will be located to avoid steep slopes and areas of highly erosive soils. Surface disturbance will have to be restored to original contours when operations were completed.
- 2) Activities could not dominate the landscape or leave long-term visual impacts. The evidence of exploration or development activities will be substantially unnoticeable after reclamation has been completed.
- 3) All activities will use existing roads to the fullest extent possible.

## Oil and Gas and Geothermal Leasing Standard Stipulations

Standard stipulations are listed in Section 6 of "Offer to Lease and Lease for Oil and Gas" Form 3100-11. They are:

Lessee shall conduct operations in a manner that minimizes adverse impacts to the land, air and water, to cultural, biological, visual and other resources, and to other land uses or users. Lessee shall take reasonable measures deemed necessary by lessor to accomplish the intent of this section. To the extent consistent with lease rights granted, such measures may include, but are not limited to, modification to siting or design of facilities, timing of operations, and specification of interim and final reclamation measures. Lessor reserves the right to continue existing uses and to authorize future uses upon or in the leased lands, including the approval of easements or rights-of-way. Such uses shall be conditioned so as to prevent unnecessary or unreasonable interference with rights of lessee.

Prior to disturbing the surface of the leased lands, lessee shall contact BLM to be apprised of procedures to be followed and modifications or reclamation measures that may be necessary.

Areas to be disturbed may require inventories or special studies to determine the extent of impacts to other resources. Lessee may be required to complete minor inventories or short-term special studies under guidelines provided by lessor. If in the conduct of operations, threatened or endangered species, objects of historic or scientific interest, or substantial unanticipated environmental effects are observed, lessee shall immediately contact lessor. Lessee shall cease any operations that would result in the destruction of such species or objects until appropriate steps have been taken to protect the site or recover the resources as determined by BLM in consultation with other appropriate agencies.

## Special Stipulations

Special stipulations are attached to oil and gas leases to provide additional protection for fragile areas or critical resource values. The special stipulations are seasonal restrictions for critical wildlife habitat and no surface occupancy to protect special values or fragile areas. In the case of acquired lands, it is intended to protect the resource values for which the land was acquired. Figures 1, 2 and 3 are examples of special stipulations currently in effect on oil and gas leases within the planning area.

## Locatable Minerals

Exploration for locatable minerals is expected to remain minimal during the next 10 to 15 years with minor economic production.

## Management Direction

Areas not specifically withdrawn from mineral entry will continue to be open under the mining laws. Mineral exploration and development will continue to be regulated under 43 CFR 3809 to prevent unnecessary or undue land degradation. The 600 acre withdrawal on the Horse Ridge Research Natural Area, the 3,552 acre withdrawal along the "wild" section of the North Fork of the Crooked River and the 36,511 acre mineral segregations for chalcedony and obsidian at Glass Butte will be retained. An additional withdrawal of 13,000 acres in the Congleton Hollow/Liggett Table area will be proposed to the Secretary of the Interior. This withdrawal will apply only to chalcedony type material in order to protect public recreational rockhounding opportunities in this area.

There are 12 separate areas designated as ACECs which total 36,916 acres. A withdrawal from entry under the 1872 mining law as amended will be sought for four ACECs totaling 2,165 acres designated as Research Natural Areas. They are Benjamin, Forest

### **Figure 1. Sample Notice of Restrictions for Sensitive Visual Resources.**

United States  
Department of the Interior  
Bureau of Land Management  
Prineville District

Notice to Lessee

The area listed below is classified as a sensitive visual resource area and restrictions may be imposed to prevent undue visual intrusion during exploration and production activities. Proposed plans submitted to BLM should take this classification into account.

Willamette Meridian, Oregon  
T. 17 S., R. 18 E.  
Sec. 1: Lots 2, 3, 4, SW $\frac{1}{4}$ NE $\frac{1}{4}$ , S $\frac{1}{2}$ NW $\frac{1}{4}$ , S $\frac{1}{2}$   
Sec. 2: Lots 1, 2, 3, S $\frac{1}{2}$ NE $\frac{1}{4}$ , SE $\frac{1}{4}$ NW $\frac{1}{4}$ , E $\frac{1}{2}$ SW $\frac{1}{4}$   
Sec. 3: W $\frac{1}{2}$ SW $\frac{1}{4}$ , SW $\frac{1}{4}$ SW $\frac{1}{4}$   
Sec. 4: Lot 2, S $\frac{1}{2}$ NE $\frac{1}{4}$ , N $\frac{1}{2}$ SE $\frac{1}{4}$   
Sec. 7: E $\frac{1}{2}$ , NE $\frac{1}{4}$ NW $\frac{1}{4}$ , E $\frac{1}{2}$ SW $\frac{1}{4}$   
Sec. 8: NW $\frac{1}{4}$ NE $\frac{1}{4}$ , W $\frac{1}{2}$   
Sec. 9: SE $\frac{1}{4}$ NE $\frac{1}{4}$ , NEE $\frac{1}{4}$ SE $\frac{1}{4}$ , S $\frac{1}{2}$ SE $\frac{1}{4}$   
Sec. 11: NE $\frac{1}{4}$

---

### **Figure 2. Sample Notice of Special Stipulations.**

United States  
Department of the Interior  
Bureau of Land Management

Special Stipulation - Prineville District

The following described lands lie in the vicinity of Prineville Reservoir. Due to watershed, soil, wildlife, vegetation, recreation and other values, stringent mitigating measures will be applied by BLM at the time the operating plan is reviewed.

Willamette Meridian, Oregon  
T. 17 S., R. 18 E.,  
Sec. 6: S $\frac{1}{2}$ SE $\frac{1}{4}$   
Sec. 7: E $\frac{1}{2}$ , NE $\frac{1}{4}$ NW $\frac{1}{4}$ , E $\frac{1}{2}$ SW $\frac{1}{4}$   
Sec. 8: NW $\frac{1}{4}$ NE $\frac{1}{4}$ , W $\frac{1}{2}$

---

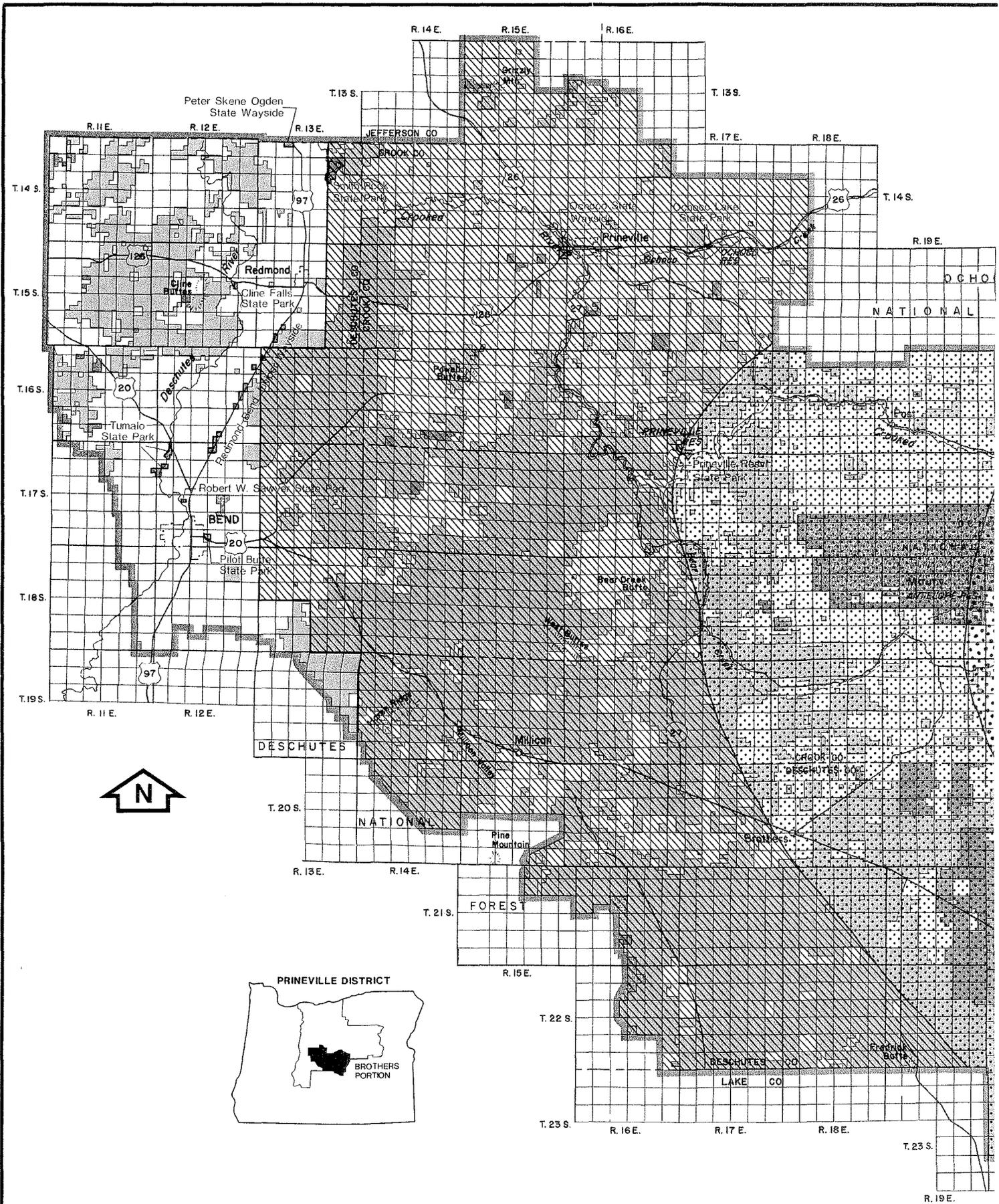
### **Figure 3. Sample Notice of Restrictions for Wildlife**

United States  
Department of the Interior  
Bureau of Land Management  
Prineville District

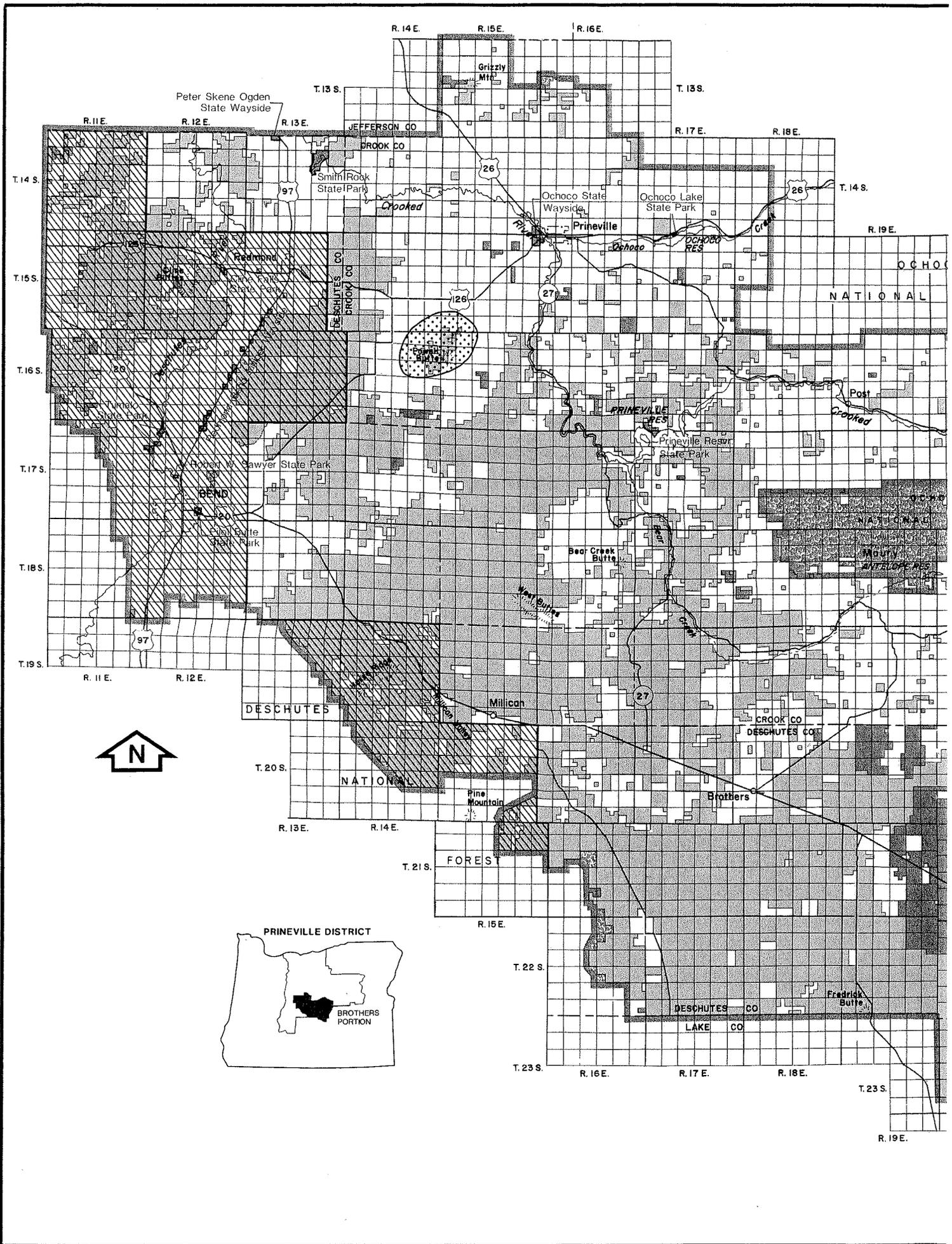
Notice to Lessee

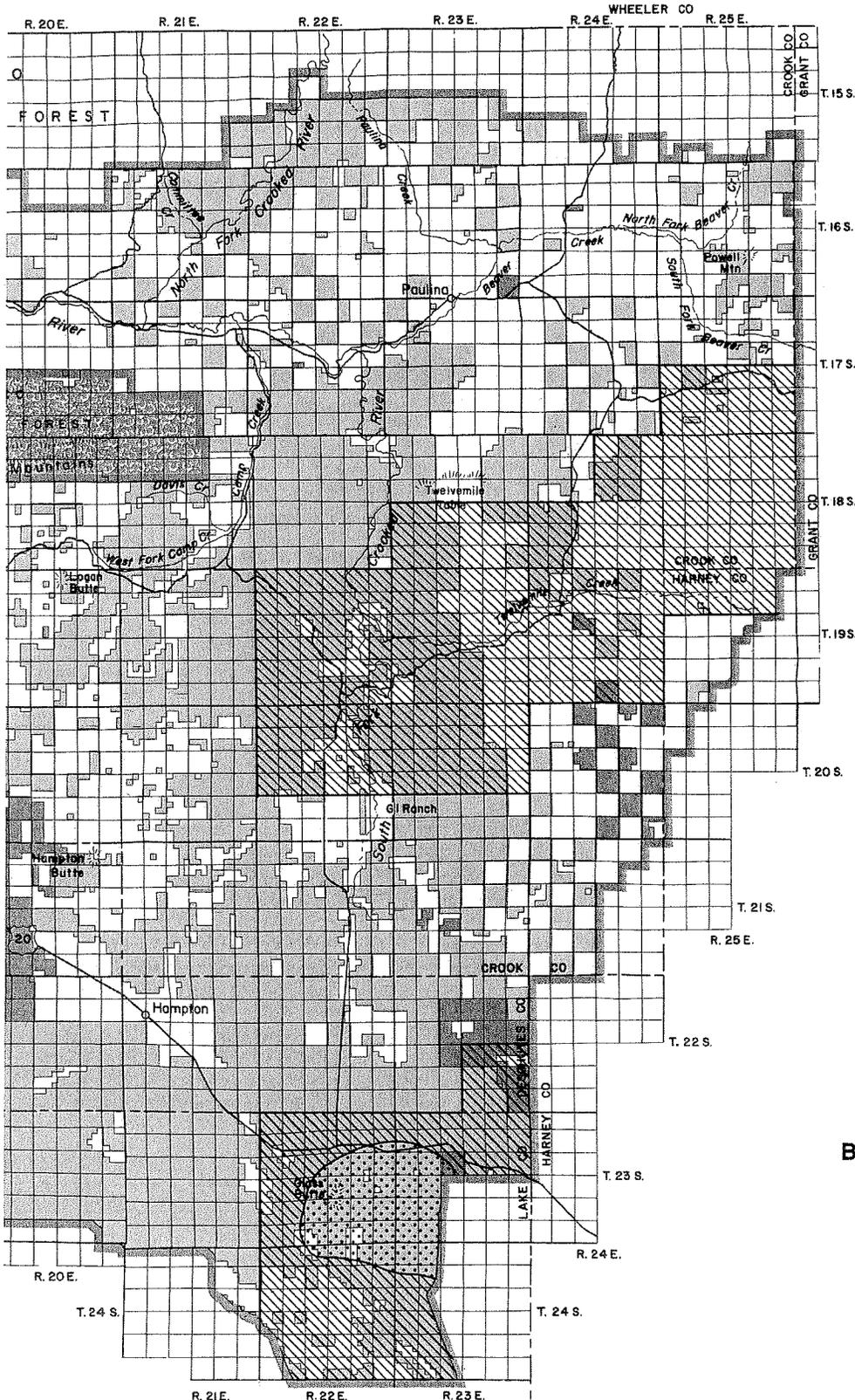
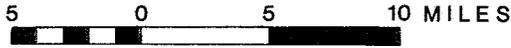
The area described below is in a critical deer winter range and restrictions on use may be imposed from December 1 through March 15.

Willamette Meridian, Oregon  
T. 18 S., R. 18 E.,  
Sec. 18: E $\frac{1}{2}$ SE $\frac{1}{4}$ , SW $\frac{1}{4}$ SE $\frac{1}{4}$   
Sec. 19: N $\frac{1}{2}$ SW $\frac{1}{4}$ , NW $\frac{1}{4}$ SE $\frac{1}{4}$







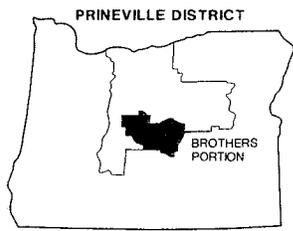
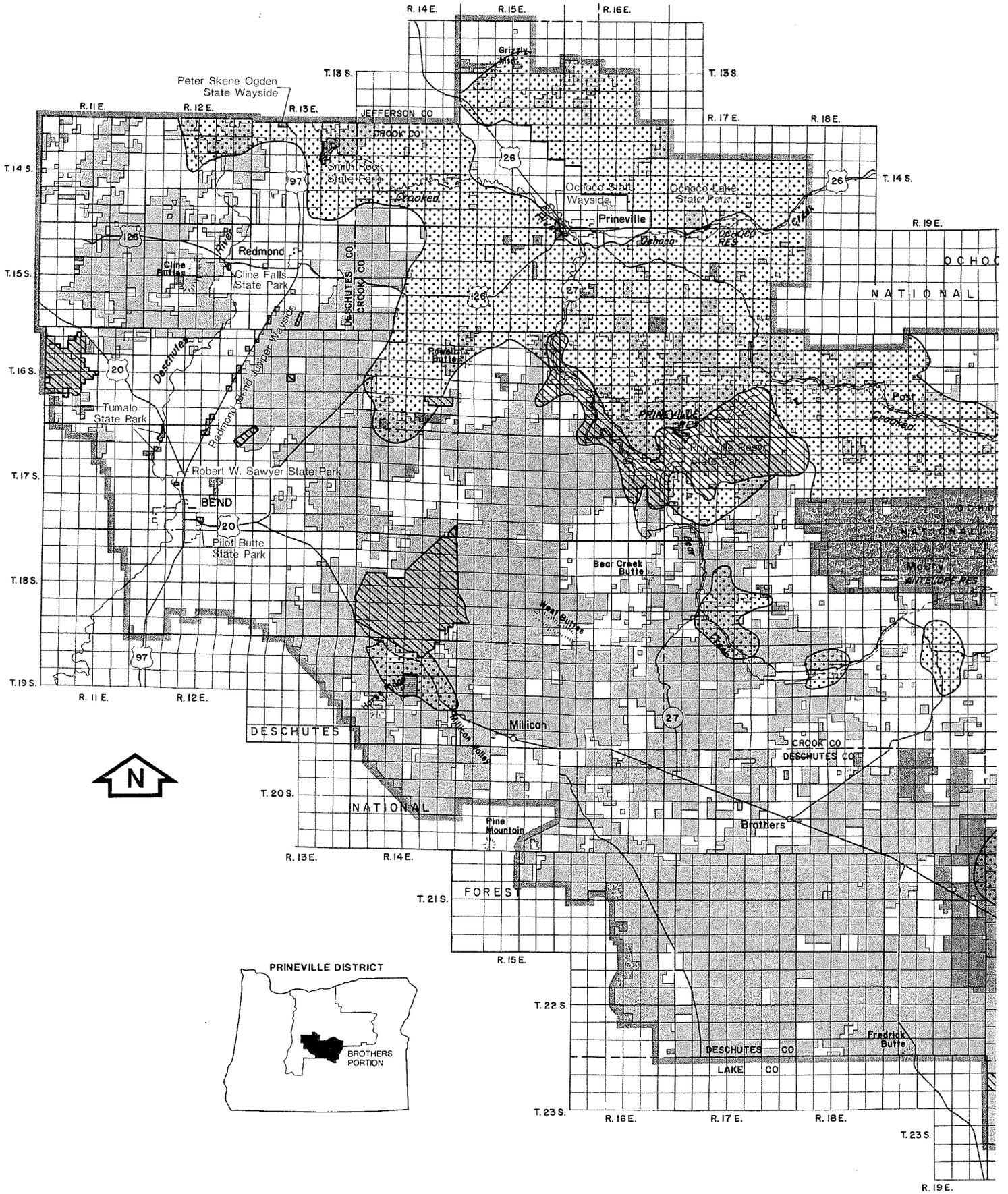


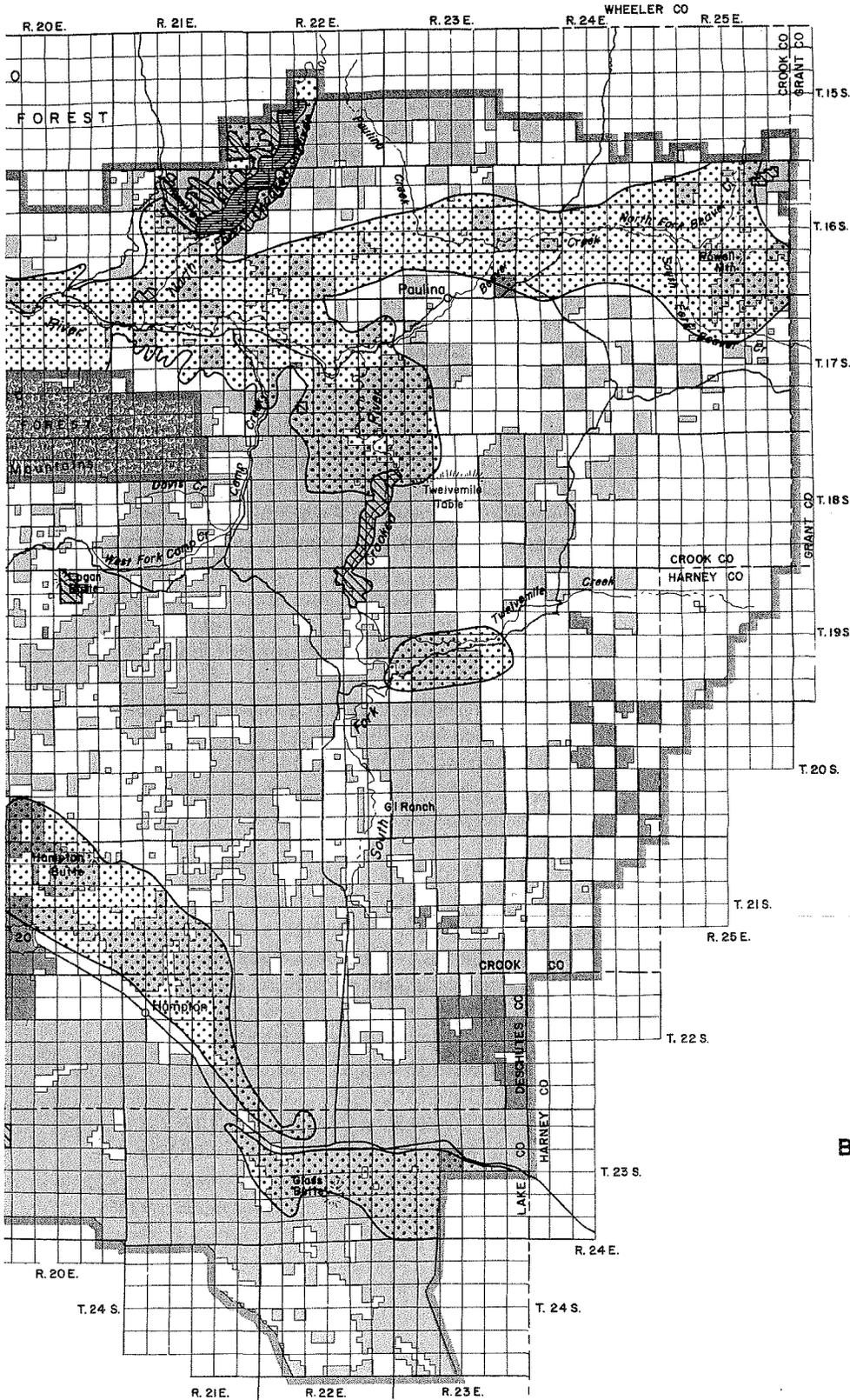
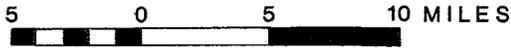
-  Moderate Potential
-  Low Potential

US DEPARTMENT OF THE INTERIOR  
 Bureau of Land Management

PRINEVILLE DISTRICT  
 MAY 1989  
 BROTHERS/LA PINE PLANNING AREA

**MAP 23**  
**Geothermal Potential**  
**Brothers Portion**





-  Open subject to standard terms and conditions
-  Open subject to seasonal or minor constraints
-  Open subject to no surface occupancy stipulation
-  Withdrawn from mineral entry

**Note:**  
 There are several areas of less than 200 acres which are severely restricted for sagegrouse habitat that are not identified on this map.

US DEPARTMENT OF THE INTERIOR  
 Bureau of Land Management

PRINEVILLE DISTRICT  
 MAY 1989  
 BROTHERS/LA PINE PLANNING AREA

**MAP 24**  
**Minerals**  
**Management Areas**  
**Brothers Portion**

Creeks, Horse Ridge and Powell Butte. The remaining areas will not be withdrawn from mineral entry, however, restrictions on mining operations will likely be included in any approved plans of operation under 43 CFR 3809. Table 21 shows locatable mineral potential for the entire planning area. Map 25 shows locatable mineral occurrence potential for the Brothers Portion. Mineral commodities considered in evaluating potential include gold, silver, mercury, uranium, bentonite and diatomite. Locatable mineral occurrence potential in the LaPine Portion is low.

## Implementation and Standard Operating Procedures

No "unnecessary or undue degradation" of Federal lands will be allowed. "Unnecessary or undue degradation" means surface disturbance greater than what would normally result when an activity is being accomplished by a prudent operator in usual, customary and proficient operations of similar character and taking into consideration the effects of operations on other resources and land uses, outside the area of operations. Failure to initiate and complete reasonable mitigation measures, including reclamation of disturbed areas or creation of a nuisance may constitute unnecessary or undue degradation. Failure to comply with applicable environmental protection statutes and regulations thereunder will constitute unnecessary or undue degradation.

## All Operations

1. All operations, whether casual, under a notice, or by a plan of operations, shall be reclaimed.
2. All operations, including casual use and operations under either a notice or a plan of operations, shall be conducted to prevent unnecessary or undue degradation of the Federal lands and shall comply with all pertinent Federal and State laws, including but not limited to the following:
  - a. Air Quality. All operators shall comply with applicable standards, including the Clean Air Act (42 U.S.C. 1857 et seq.).
  - b. Water Quality. All operators shall comply with applicable Federal and State water quality standards, including the Federal and State Water Pollution Control Act, as amended (30 U.S.C. 1151 et seq.).

- c. Solid Wastes. All operators shall comply with applicable Federal and State standards for the disposal of solid wastes, including regulations issued pursuant to the Solid Waste Disposal Act as amended by the Resource Conservation and Recovery Act (42 U.S.C. 6901 et seq.). All garbage, refuse, or waste shall either be removed from the affected lands or disposed of or treated to minimize, so far as is practicable, its impact on the lands.
- d. Fisheries, Wildlife and Plant Habitat. The operator shall take such action as may be needed to prevent adverse impacts to threatened or endangered species and their habitat which may be affected by operations.
- e. Cultural and Paleontological Resources. Operators shall not knowingly disturb, alter, injure or destroy any scientifically important paleontological remains, or any historical or archaeological site, structure, building, or object on Federal lands.

Operators shall immediately bring to the attention of the authorized officer any cultural and/or paleontological resources that might be altered or destroyed on Federal lands by his/her operations and shall leave such discovery intact until told to proceed by the authorized officer. The authorized officer shall evaluate the discoveries brought to his/her attention, take action to protect or remove the resource, and allow operations to proceed within 10 working days after notification to the authorized officer of such discovery. The Federal government shall have the responsibility and bear the cost of investigations and salvage of cultural and paleontological values discovered.

3. Maintenance and Public Safety. During all operations, the operator shall maintain his/her structures, equipment, and other facilities in a safe and orderly manner. Hazardous sites or conditions resulting from operations shall be marked by signs, fenced or otherwise identified to alert the public in accordance with applicable Federal and State laws and regulations.
4. Applicability of State Law. Nothing shall be construed to effect a pre-emption of State laws and regulations relating to the conduct of operations or reclamation on Federal lands under the mining laws.

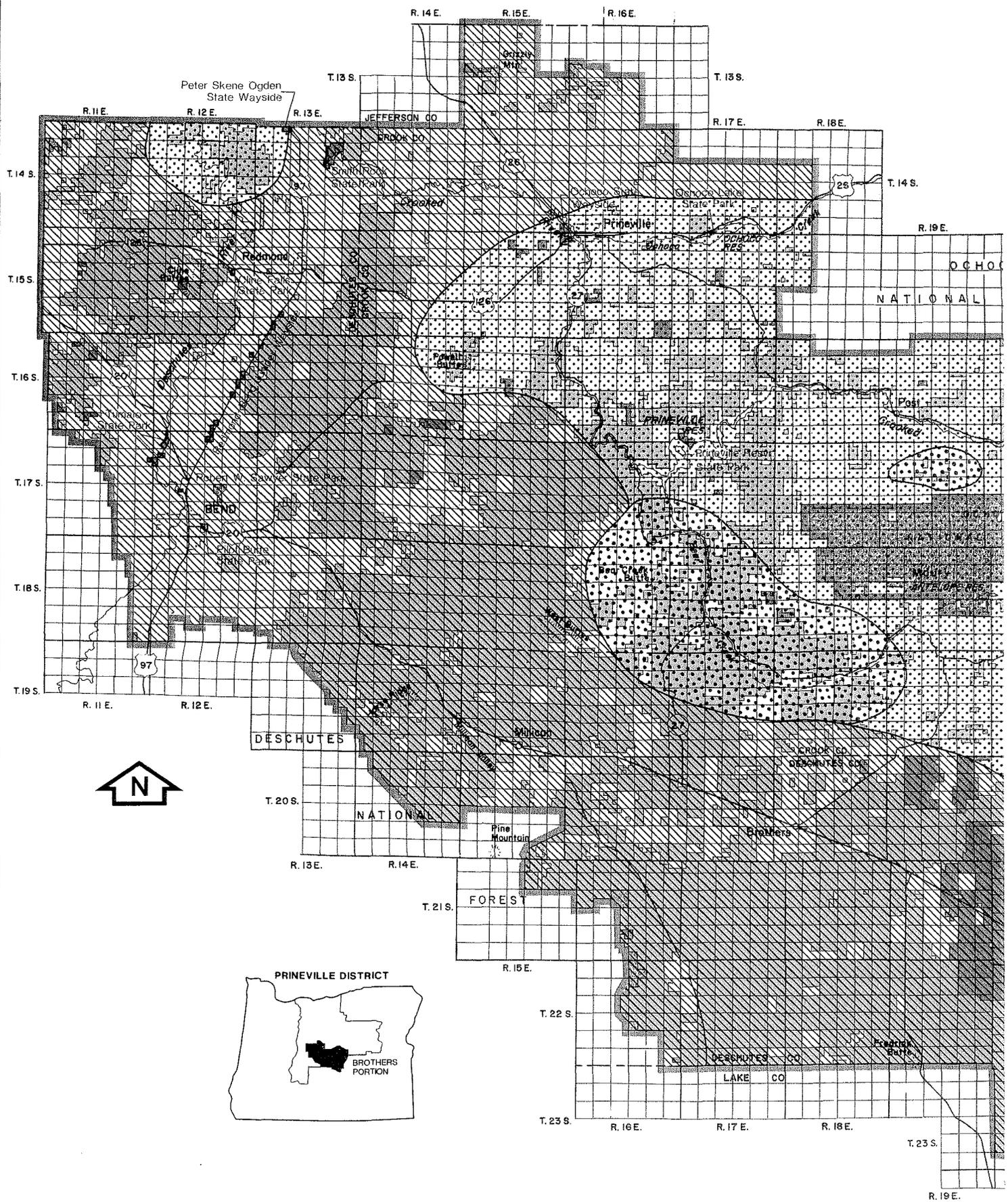
**Table 21. Acres Potentially Valuable for Locatable Minerals, Brothers/LaPine Planning Area**

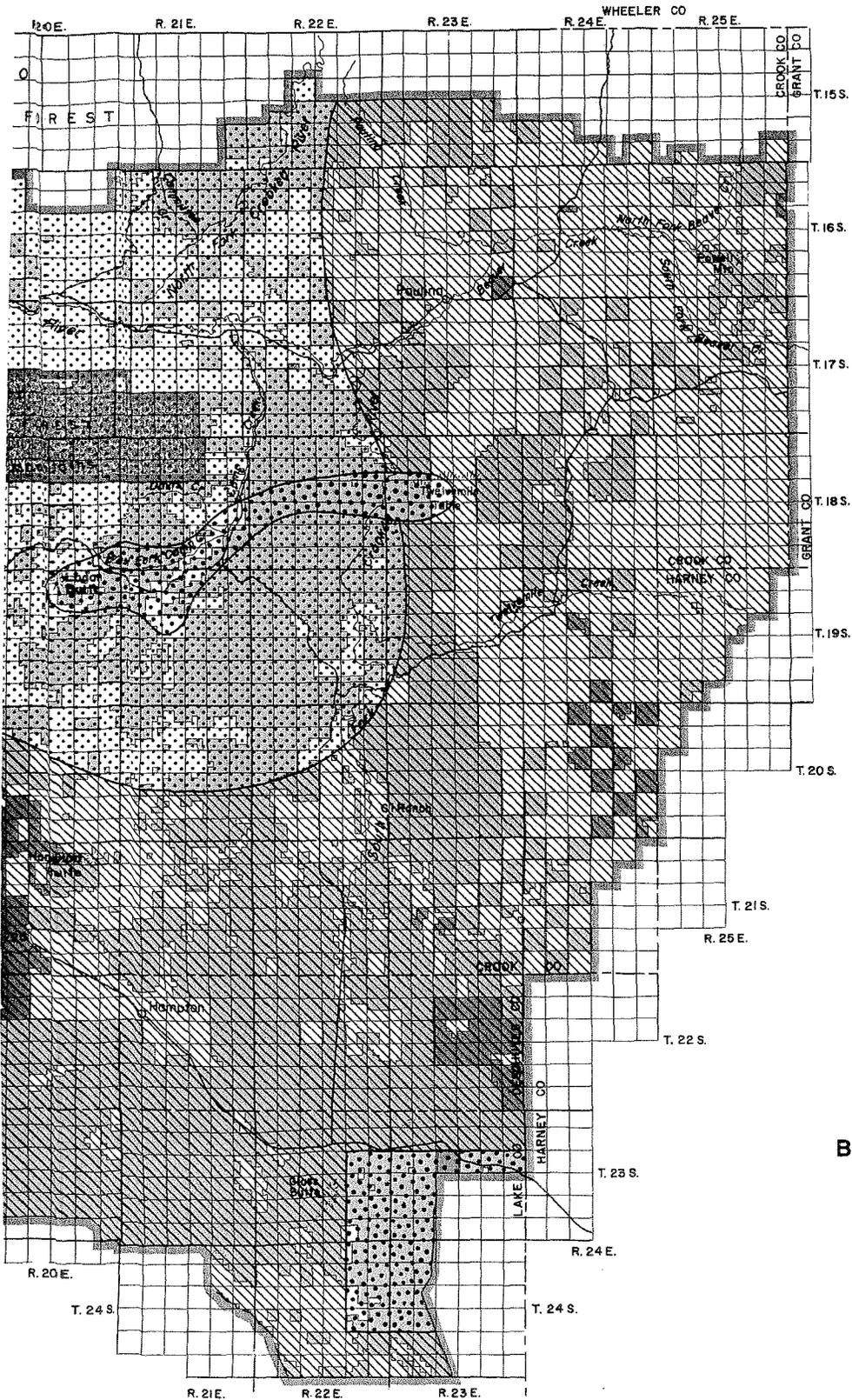
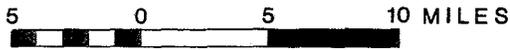
<b>Management Categories</b>	<b>Low Potential</b>	<b>Moderate Potential</b>	<b>High Potential</b>	<b>Total</b>	<b>Percent of Total Public Mineral Acres</b>
Open	781,000	101,000	66,000	948,000	85
Open-WSA (43CFR 3802)	61,000	53,000	7,000	121,000	11
Open - ACECs	22,000	12,000	2,000	36,000	3
Prop. Withdrawal-ACECs	1,000	0	0	1,000	-
Closed - Non Discret.	1,000	0	4,000	5,000	1
<b>Total</b>	<b>866,000</b>	<b>166,000</b>	<b>79,000</b>	<b>1,111,000</b>	<b>100</b>

## **Notice of Operations, 5 Acres or Less**

The following standards govern activities conducted under a notice:

1. Access routes shall be planned for only the minimum width needed for operations and shall follow the natural contour, where practicable, to minimize the size of cuts and fills.
2. All tailings, dumps, deleterious materials or substances, and other waste produced by the operations shall be disposed of so as to prevent unnecessary or undue degradation in accordance with applicable Federal and State laws.
3. At the earliest feasible time, the operator shall reclaim the area disturbed, except to the extent necessary to preserve evidence of mineralization, by taking reasonable measures to prevent or control on-site and off-site damage to the Federal lands.
4. Reclamation shall include, but shall not be limited to:
  - a. Saving of topsoil for final application after reshaping of disturbed areas has been completed;
  - b. Measures to control erosion, landslides and water runoff;
  - c. Measures to isolate, remove or control toxic materials;
  - d. Reshaping the area disturbed, application of the topsoil and revegetation of disturbed areas, where reasonably practicable; and
5. Rehabilitation of fisheries and wildlife habitat.





- High Potential
- Moderate Potential
- Low Potential

US DEPARTMENT OF THE INTERIOR  
 Bureau of Land Management  
 PRINEVILLE DISTRICT  
 MAY 1989  
 BROTHERS/LA PINE PLANNING AREA

**MAP 25**  
**Locatable Minerals**  
**Potential**  
**Brothers Portion**

## **Plan of Operations-Prevention of Unnecessary or Undue Degradation**

1. When an operator files a plan of operations or a significant modification, which encompasses land not previously covered by an approved plan, the authorized officer shall make an environmental assessment or a supplement thereto to identify the impacts of the proposed operations on the lands and to determine whether an environmental impact statement is required.
2. In conjunction with the operator, the authorized officer shall use the environmental assessment to determine the adequacy of mitigating measures and reclamation procedures included in the plan to insure the prevention of unnecessary or undue degradation of land. If an operator advises he/she is unable to prepare mitigating measures, the authorized officer, in conjunction with the operator, shall use the environmental assessment as a basis for assisting the operator in developing such measures.
3. If, as a result of the environmental assessment, the authorized officer determines that there is "substantial public interest" in the plan, the authorized officer shall notify the operator, in writing, that an additional period of time, not to exceed the additional 60 days provided for approval of a plan, is required to consider public comments on the environmental assessment.

## **Salable Minerals**

No major construction projects are projected within the planning area in the next 10 to 15 years and therefore no large increase in demand for salable minerals is expected for these construction materials.

### **Management Direction**

Salable minerals will continue to be made available for sale to the public and under free use permits to State and local governments. New mineral material sites may be developed as needed if their development is consistent with the long term protection and management of other resource values. The two community pits, one for cinders and one for clay, will remain open for public use.

Nearly all BLM administered land in the planning area have some potential for production of salable minerals. These include clay, cinders, sand and gravel, crushable rock and common variety facing stone. If demand were present, the entire planning area would rate as moderate potential. Demand for salable minerals only exists near population centers and along major roadways and in these areas salable minerals potential is rated as moderate. All public lands are open to recreational mineral collection, unless specific minerals are subject to prior rights, such as mining claims.

### **Implementation**

Restrictions on the sale of mineral material will be the same as those restricted areas discussed under locatable minerals. In addition, in areas classified as visually sensitive, mineral material development activity will be restricted so as to prevent undue visual changes to the landscape.

## **Reserved Federal Mineral Estate**

### **Management Direction**

The reserved Federal mineral estate will continue to be open for mineral exploration and development. Conveyances of mineral interest owned by the United States, where the surface is, or will be, in non-Federal ownership, may be completed after a determination is made under Section 209(b) of FLPMA finding:

- 1) That there are no known mineral values in the land, or
- 2) That the reservation of mineral rights in the United States would interfere with or preclude non-mineral development of the land and that such development is a more beneficial use of the land than mineral development.

All land tenure adjustments will consider the effect on the mineral estate. If the lands are not known to have mineral potential, the mineral interest will normally be transferred simultaneously with the surface.

### **Implementation Priorities**

#### **High**

Process energy and mineral lessee applications, preliminary permits to drill and development plans on a "pipeline" basis to avoid backlogs and unwarranted delays.

Process salable mineral proposals to meet State and local government as well as public needs.

#### **Moderate**

Reclaim salable mineral (community use) areas that are no longer needed or exhausted. Review existing lease stipulation effectiveness and need and modify as appropriate to ensure the required level of protection.

#### **Low**

Identify and promote additional rockhounding opportunities. Conduct additional mineral inventories.

Monitor mining plan compliance for locatable minerals.

## **Monitoring**

Monitor ongoing mineral lease exploration, development and reclamation efforts. Monitor salable mineral development extraction and reclamation projects.

## **Support**

Review of salable mineral proposals, proposed leases, exploration and development and reclamation plans will require interdisciplinary team support as well as consultation with appropriate State and Federal regulatory agencies.

## **Ongoing Management Programs**

The Brothers/LaPine RMP focuses on nine significant resource management issues. Other ongoing BLM management programs and actions discussed in the plan will continue. This section briefly describes these programs and management actions, including standard operating procedures to eliminate confusion regarding their status relevant to the proposed RMP.

### **Soil, Water and Air**

The inventory and evaluation of soil, water and air resources on public lands will continue. Soils will be managed to maintain productivity and to minimize erosion. Corrective actions will take place, where practicable, to resolve erosive conditions. Water sources necessary to meet BLM program objectives will be developed and filed on according to applicable State and Federal laws and regulations. Water quality of perennial streams will continue to be monitored, and climatological data will continue to be gathered.

Surface disturbance at all project sites will continue to be held to a minimum. Disturbed soil will be rehabilitated to blend into the surrounding soil surface and reseeded as needed with a mixture of grasses, forbs, and browse as applicable to replace ground cover and reduce soil loss from wind and water erosion.

### **Threatened, Endangered or Sensitive Species Habitat**

Management activities in the habitat of listed or candidate threatened or endangered and sensitive species will be designed specifically to benefit those species through habitat improvement. No land tenure adjustments, programs or other activities will be

permitted in the habitat of listed or candidate threatened or endangered species that would jeopardize the continued existence of such species.

The Oregon Department of Fish and Wildlife and the U.S. Fish and Wildlife Service would be consulted before implementing projects that may affect habitat for threatened or endangered animal species. If an adverse situation for threatened or endangered species is identified through the BLM biological assessment process, then formal consultation with the U.S. Fish and Wildlife Service would be initiated under Section 7 of the Endangered Species Act of 1973, as amended. The BLM will implement actions identified in the Pacific Bald Eagle Recovery Plan as opportunity arises and funding is available.

Prior to any land tenure adjustments or vegetative manipulation a survey of the project site for plants listed or proposed for listing as threatened or endangered species, or its critical habitat will continue to be required. Every effort will be made to modify, relocate, or abandon the project so as to obtain a "no effect" determination. If the BLM determines that a project cannot be altered or abandoned, consultation with the U.S. Fish and Wildlife Service will be initiated (50 CFR 402; Endangered Species Act of 1973, as amended).

In situations where data are insufficient to make an assessment of proposed actions, surveys of potential habitats would be made before a decision is made to take any action that could affect threatened or endangered species. Should the BLM determine that there could be an effect on a Federally listed species, formal consultation with the FWS would be initiated. In the interim period, before formal consultation, the BLM would not take any action that would foreclose other options to the proposal.

When the FWS opinion is received, if it should indicate the action would be likely to jeopardize the continued existence of a listed species or result in the destruction or adverse modification of critical habitat, the action would be abandoned or altered as necessary.

## **Wilderness**

The wilderness study process is being conducted on a statewide basis and has continued since 1979. It has progressed beyond the level of detail contained in this RMP/EIS process. Seven areas located in the planning area totalling 121,363 acres are being considered for designation as wilderness. No analysis

of these areas for wilderness is included in this document, however, portions of some wilderness study areas are considered for designation as ACECs.

A separate final wilderness EIS is scheduled for completion in the fall of 1989. Recommendations regarding the suitability or nonsuitability of these areas as wilderness will be forwarded to Congress by 1991. Only Congress can designate an area as wilderness. Possible designation of these areas as wilderness will be recognized in the decisions resulting from this planning process.

The BLM Wilderness Interim Management Policy, as it relates to the seven areas being considered for wilderness designation, will be followed. Copies of the Interim Management Policy are available from the Prineville District and other BLM offices.

## **Wild and Scenic Rivers**

The National Wild and Scenic Rivers System was created by Congress in 1968 (PL 90-542) to preserve selected rivers in natural, free-flowing conditions.

The Omnibus Oregon Wild and Scenic Rivers Act of 1988 designated portions of the Deschutes, Crooked and North Fork of the Crooked Rivers as components of the National Wild and Scenic Rivers System. Table 22 and Map 26 show those rivers within the planning area which have been designated as National Wild and Scenic Rivers or have been found to be eligible for further study as possible additions to the National Wild and Scenic Rivers system. Management plans for each of the designated rivers will be completed no later than 1992.

Public lands adjacent to these river segments will be managed so as to protect the outstanding remarkable values which resulted in their designation. The first phase in the management planning process will be to define proposed river corridor boundaries within one year from the date of designation. The second phase is to develop management plans, including the establishment of final river corridor boundaries, that recognize and protect the values for which the river was designated. The management plans will be completed within three full fiscal years of designation. Areas found to be eligible for further study as wild and scenic rivers will be managed on an interim basis to protect recreational, visual, riparian, fish, wildlife and other values pending resolution of the suitability and wild and scenic river designation issue. Several of these areas are also designated as areas of critical environmental concern in this document (see Areas of Critical Environmental Concern section).

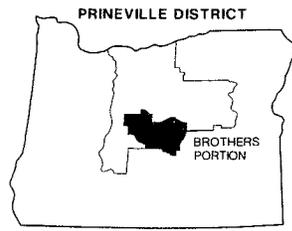
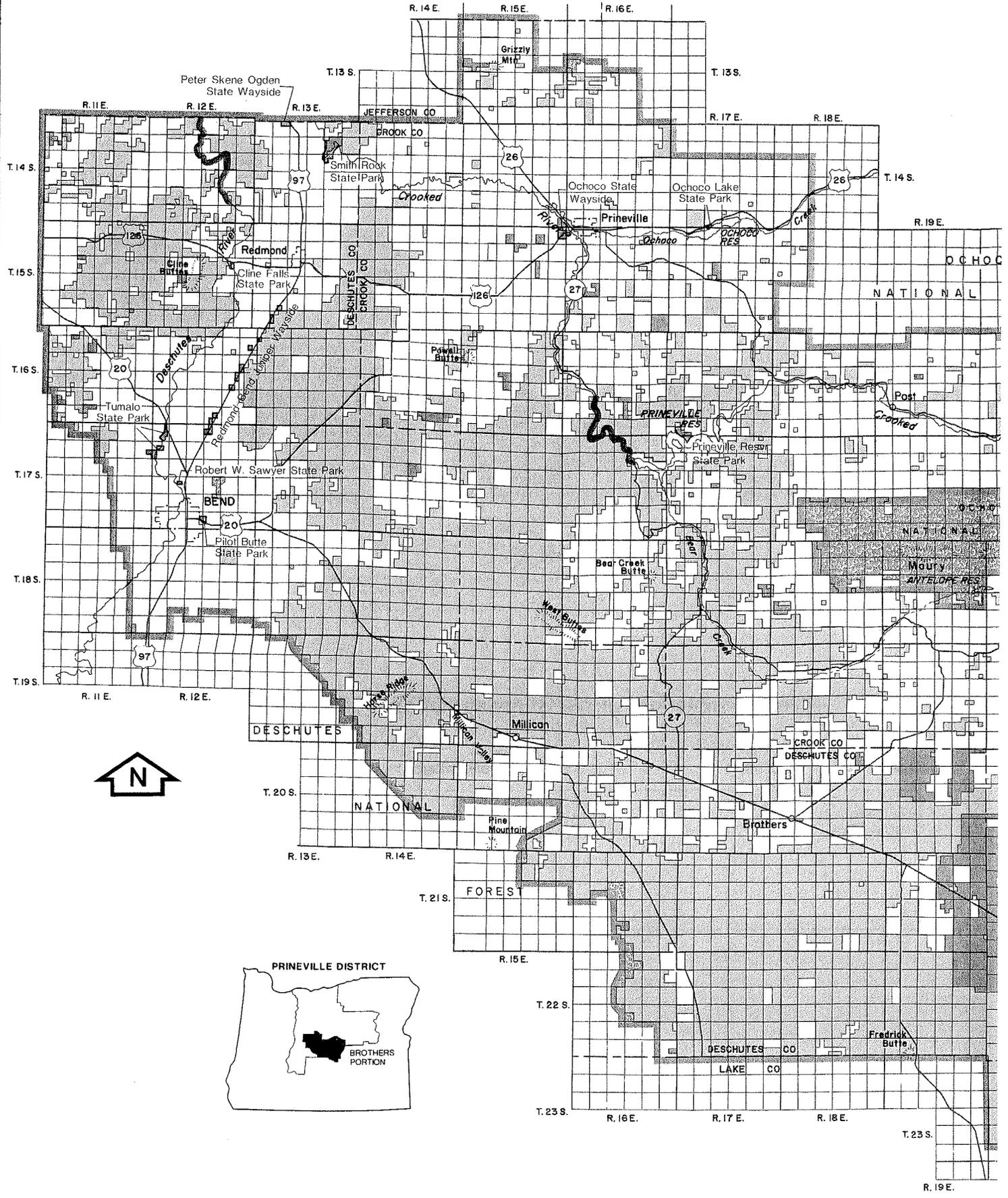
**Table 22. Rivers Designated or Eligible for Further Study as National Wild and Scenic Rivers**

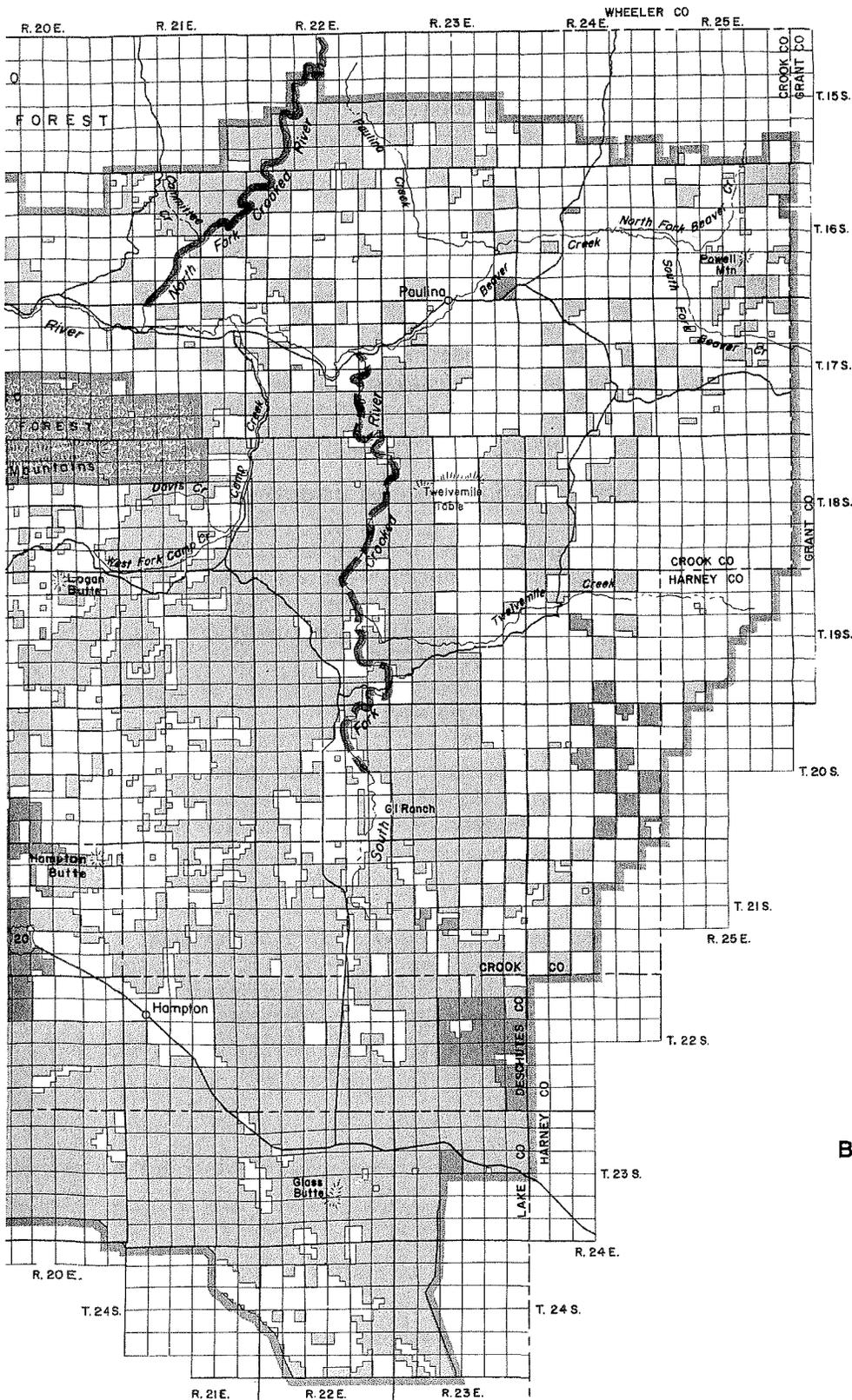
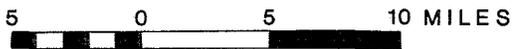
**Rivers Designated as National Wild and Scenic Rivers**

Name	Termini	Classification	Mileage	Comments
North Fork Crooked	Ochoco NF boundary to Upper Falls	Scenic	1.5	An additional 14.7 miles of the North Fork of the Crooked River upstream on the Ochoco National Forest were also designated. The 3,552 acres within the segment classified as wild was withdrawn from mineral entry.
	Upper Falls to Committee Ck.	Wild	11.1	
	Committee Ck. to one mi. from confluence w/Crooked River	Recreational	5	
Crooked	Nat'l Grassland boundary to River mi. 8 S. of Opal Spring	Recreational	7	Total miles includes 2.0 miles of USFS land within Crooked River National Grasslands and 1.0 mile of Bureau of Reclamation land near Bowman Dam.
	Bowman Dam to E/W centerline of SE¼ of sec. 20, T. 16 S., R. 16 E.	Recreational	8	Total miles include 1.0 mile of land administered by the Bureau of Reclamation near Bowman Dam.
Deschutes	Oden Falls to upper end of Lk. Billy Chinook	Scenic	19	An additional 100 miles of the Deschutes River downstream and 54.4 miles upstream and outside the planning area were also designated.

**Rivers Eligible for Further Study as National Wild and Scenic Rivers**

River	Total Miles Eligible	Total Miles of Public Land Frontage	Potential Designation By River Segment
South Fork Crooked River	25.0	10.0	Logan Reservoir to Twelvemile Creek (10 miles) - Recreational Twelvemile Creek to Bill Jake Hollow (7 miles) - Wild Bill Jake Hollow to confluence with Crooked River (8 miles) - Scenic





- River Segments Designated as Wild and Scenic
- River Segments Eligible for Further Study

US DEPARTMENT OF THE INTERIOR  
Bureau of Land Management

PRINEVILLE DISTRICT  
MAY 1989  
BROTHERS/LA PINE PLANNING AREA

**MAP 26**  
**National Wild and Scenic Rivers**  
**Brothers Portion**

## Visual Resources

Before BLM initiates or permits any major surface-disturbing activity on public lands, an analysis will be completed to determine adverse effects on visual qualities.

Activities within areas of high or sensitive visual quality as shown on Maps 27 and 28 may be permitted if they would not attract attention or leave long term adverse visual changes on the land. Activities in other areas may change the landscape, but will be designed to minimize adverse effects on visual quality.

## Cultural Resources

The BLM will continue to identify cultural resource sites. They will be managed for information potential, public values and conservation. The BLM will insure that authorized land use actions do not inadvertently harm or destroy Federal or non-Federal cultural resources. Periodic patrols of known cultural resource areas will be carried out to discourage vandalism.

Sites will also be evaluated to determine if they are eligible for addition to the National Register of Historic Places. Cultural resource management plans will be written for areas with high cultural resource values such as Glass Buttes.

To comply with the National Historic Preservation Act of 1966, 36 CFR 800, and Executive Order 11593, all areas where ground is to be disturbed by range, watershed, or wildlife developments or timber harvest activities will be inventoried for prehistoric and historic features. Where feasible, all sites found by this inventory will be avoided.

If sites are found to be eligible for the National Register and cannot be avoided, a determination of the effect of the project on the site(s), including appropriate mitigating measures if necessary, will be done in consultation with the State Historic Preservation Officer (SHPO) and the Advisory Council on Historic Preservation. No action affecting the site would be taken until the Advisory Council and SHPO have had the opportunity to make comments.

If buried cultural remains are encountered during construction, the operator will discontinue construction until the BLM evaluates the discovery and determines the appropriate action.

## Noxious Weed Control

Infestations of noxious weeds are known to occur on some public lands in the planning area. Control methods including grazing management as well as chemical/mechanical, thermal and biological methods will be proposed and subject to site-specific environmental analysis. Control methods will not be considered unless weeds are confined to public lands or control efforts are coordinated with owners of adjoining infested lands. Proper grazing management will be emphasized to minimize new invasions of weeds and after control to minimize possible reinfestation.

A multi-state BLM environmental impact statement on noxious weed control has been completed for Oregon, Washington, Idaho, Montana and Wyoming. A district-wide environmental assessment has also been completed by the Prineville BLM to assess specific noxious weed control sites throughout the district. Copies of these documents and the related State Director decisions for Oregon and Washington are available for public review at the Prineville District Office during normal working hours.

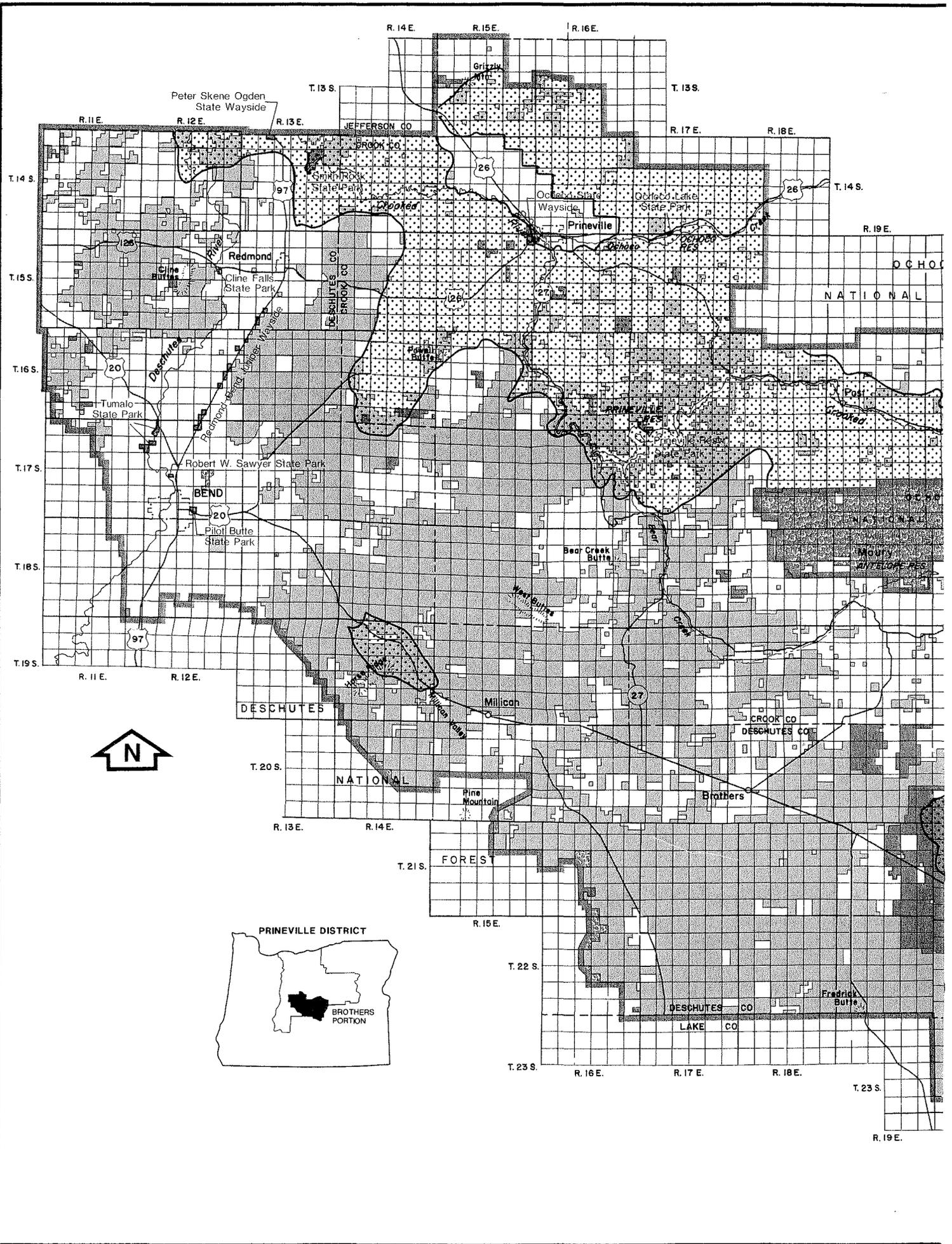
## Cadastral Survey and Engineering

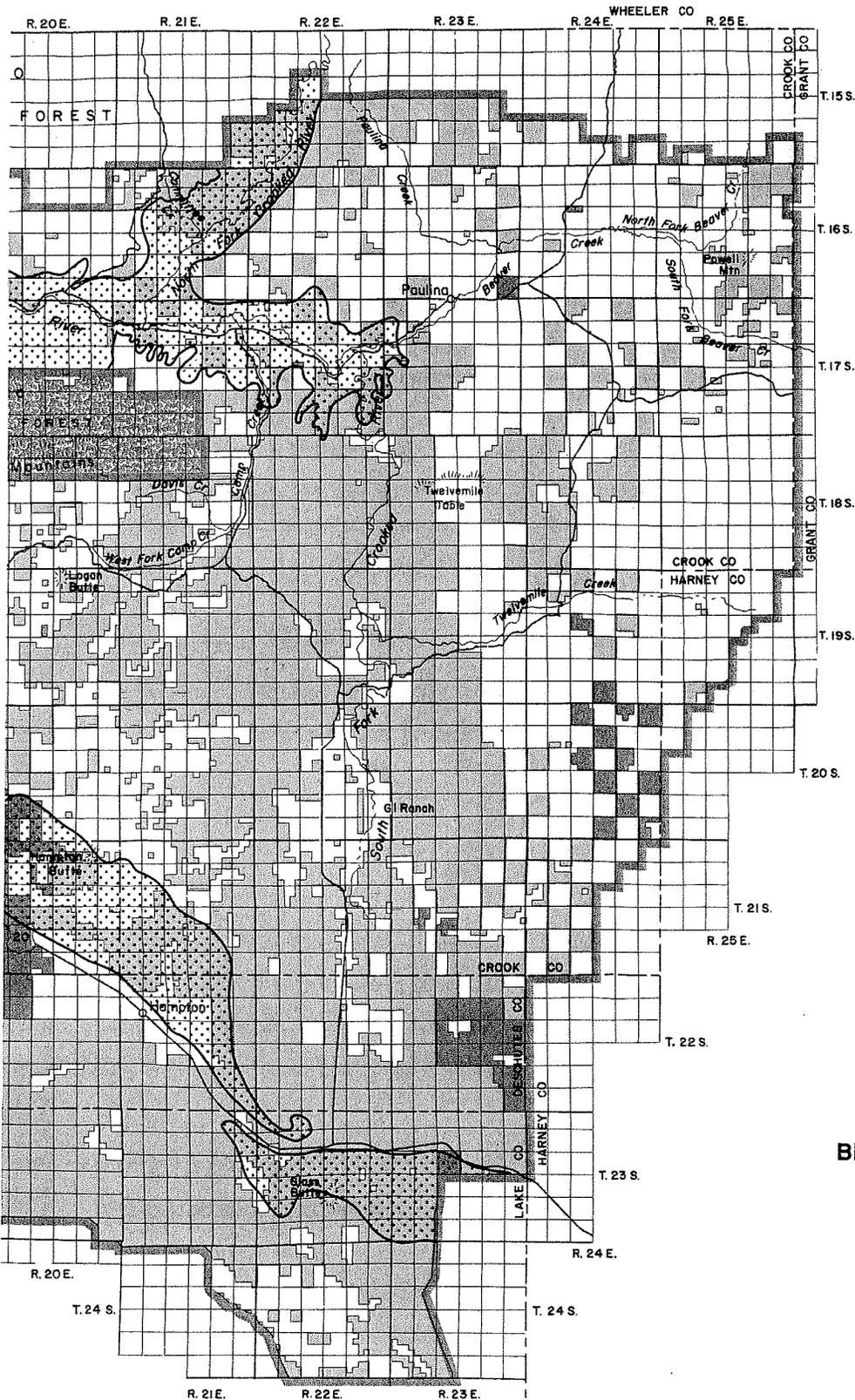
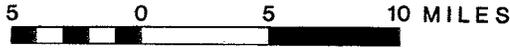
Cadastral surveys and engineering activities will continue to be conducted in support of resource management programs. The road maintenance program will continue. Existing approved contracts will not be affected by the RMP.

## Withdrawal Review

Review of other agency withdrawals are scheduled for completion by 1991. These withdrawals may be continued, modified, or revoked. Revocation of withdrawals will be recommended by BLM where they are no longer needed or where they are in conflict with the RMP if the withdrawal review process determines they are no longer needed. Their revocation and opening to applicable public laws would be consistent with the plan. Upon revocation or modification, part or all of the withdrawn land may revert to BLM management.







 Areas Having High or Sensitive Visual Qualities

US DEPARTMENT OF THE INTERIOR  
Bureau of Land Management

PRINEVILLE DISTRICT

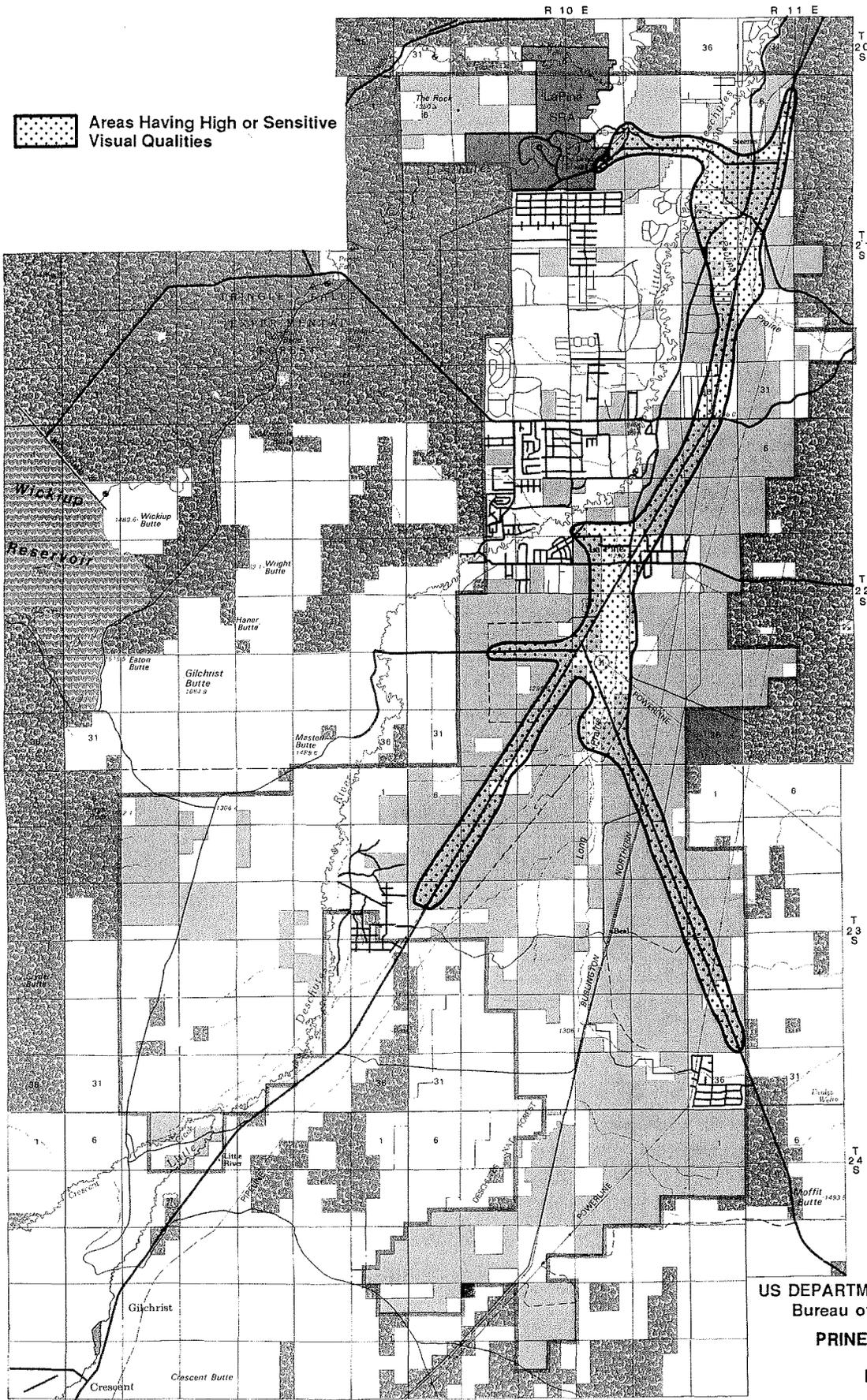
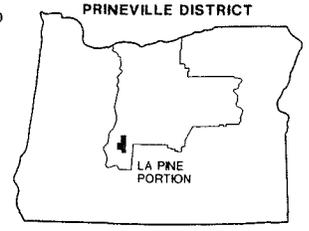
MAY 1989

BROTHERS/LA PINE PLANNING AREA

**MAP 27**

**Visual Resources  
Brothers Portion**

 Areas Having High or Sensitive Visual Qualities



US DEPARTMENT OF THE INTERIOR  
Bureau of Land Management  
PRINEVILLE DISTRICT

MAY 1989

BROTHERS/LA PINE PLANNING AREA

**MAP 28**  
**Visual Resources**  
**La Pine Portion**



## Plan Monitoring, Maintenance and Evaluation

The implementation of the Brothers/LaPine RMP will be monitored during the life of the plan to ensure that management actions are meeting their intended purposes. Specific management actions arising from proposed activity plan decisions will be compared with the RMP objectives to ensure consistency with the intent of the plan. Formal plan evaluations will take place at intervals not to exceed 5 years. These evaluations will assess the progress of plan implementation and determine if:

- management actions are resulting in satisfactory progress toward achieving objectives,
- actions are consistent with current policy,
- original assumptions were correctly applied and impacts correctly predicted,
- mitigation measures are satisfactory,
- it is still consistent with the plans and policies of State or local government, other Federal agencies, and Indian tribes,
- new data are available that would require alteration of the plan.

As part of plan evaluations the government entities mentioned above will be requested to review the plan and advise the District Manager of its continued consistency with their officially approved resource management related plans, programs and policies. Advisory groups will also be consulted during evaluations in order to secure their input.

Upon completion of a periodic evaluation or in the event that modifying the plan becomes necessary, the Prineville District Manager will determine what, if any, changes are necessary to ensure that the management actions of the plan are consistent with its objectives. If the District Manager finds that a plan amendment is necessary, an environmental analysis of the proposed change will be conducted and a recommendation on the amendment will be made to the State Director. If the amendment is approved, it may be implemented 30 days after public notice.

Potential minor changes, refinements or clarifications in the plan may take the form of maintenance actions. Maintenance actions respond to minor data changes and incorporation of activity plans. Such maintenance

is limited to further refining or documenting a previously approved decision incorporated in the plan. Plan maintenance will not result in expansion in the scope of resource uses or restrictions or change the terms, conditions, and decisions of the approved RMP. Maintenance actions are not considered a plan amendment and do not require the formal public involvement and interagency coordination process undertaken for plan amendments. A plan amendment may be initiated because of the need to consider monitoring findings, new data, new or revised policy, a change in circumstances, or a proposed action that may result in a change in the scope of resource uses or a change in the terms, conditions and decisions of the approved plan.

### Activity Plan Monitoring

On-site inspection of activity plans and associated projects will be made periodically to determine if the objectives of the activity plan or project are being achieved or, if unacceptable, unanticipated impacts are occurring.

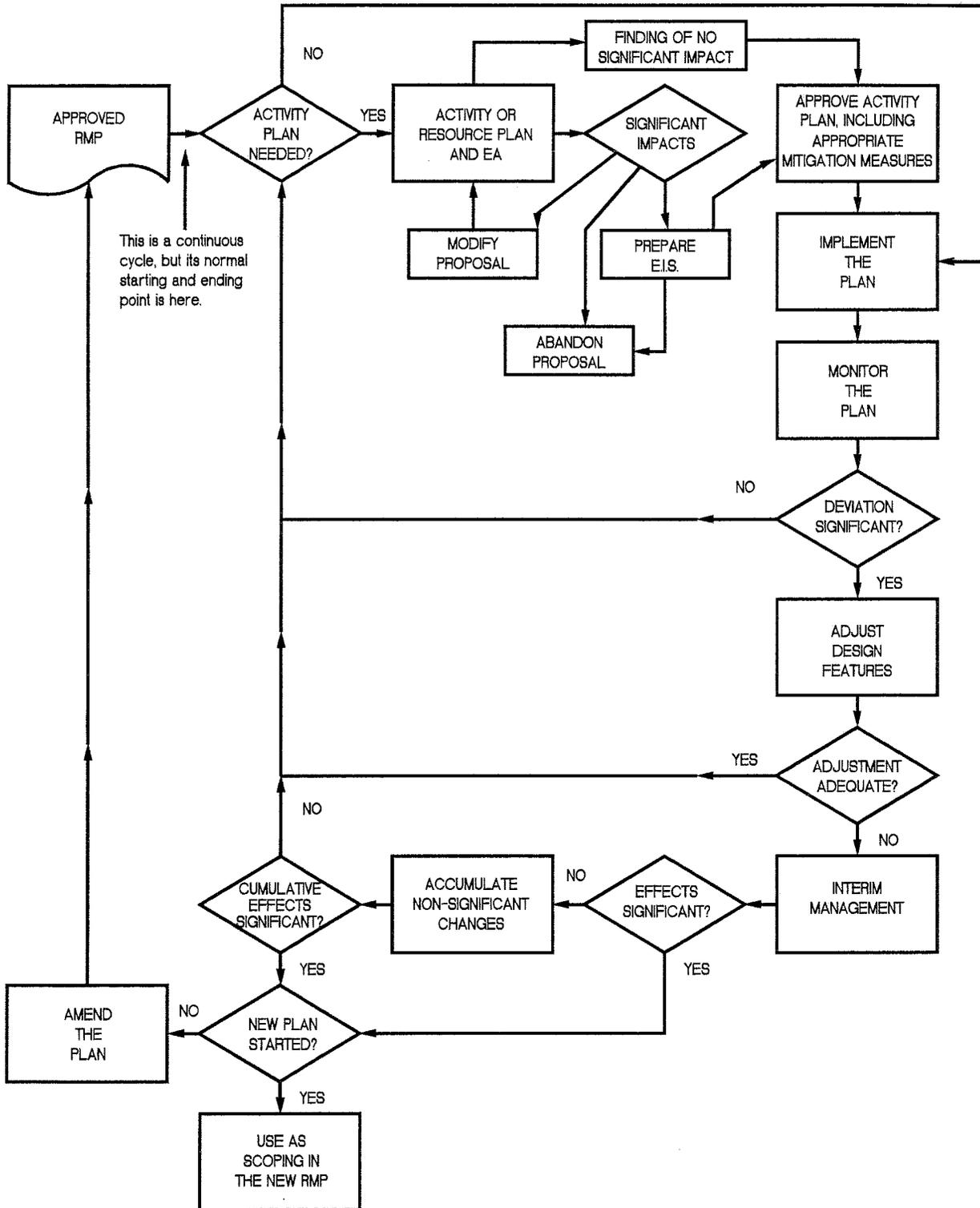
A key indicator concept of monitoring will be utilized to determine what change agents are to be monitored for each action plan. An interdisciplinary team of resource specialists will identify the change agents to be monitored and the required inspection frequency.

A district-wide implementation record of all ongoing activities and associated monitoring activities will be maintained in the Prineville District Office. This record will help to determine monitoring obligations and annual work plan commitments.

Water quality monitoring will be carried out in accordance with executive orders, specific laws, BLM policy and the existing Memorandum of Understanding with the Oregon Department of Environmental Quality. Water quality and vegetation monitoring will be in accordance with the Rangeland Monitoring in Oregon and Washington Handbook, and the Prineville District Monitoring Plan. Copies of both are available from the Prineville District Office.

Potential new management actions which are identified after approval of the RMP would be reviewed before BLM takes any actions. For example, if a new ACEC proposal meets BLM criteria for consideration, the District Manager would prescribe interim management and protection measures until the RMP could be revised or amended. Such interim management would follow the objectives of the existing RMP and would become subject to analysis in the next RMP amendment or revision process.

**Figure 4**  
**Process for Changing the Resource**  
**Management Plan**



## Management of Newly Acquired Lands

Lands may come under BLM administration after this RMP is approved. This could occur through exchange, donation, purchase, revocation of withdrawals to other Federal agencies, or relinquishment of Recreation and Public Purpose leases. Discretionary acquisitions (such as exchanges) would be guided by approved RMP "lands acquisition criteria" based on resource values of high public interest. Newly acquired lands would be managed for the highest potential purpose for which they were acquired. For example, lands acquired within special management areas with specific Congressional mandates (i.e., wild and scenic rivers) would be managed in conformance with established guidelines for those areas. If lands with

unique or fragile resource values are acquired, those values would be protected and managed on an interim basis until the next plan amendment or revision was completed.

Lands acquired without identified special values or management goals will be managed in the same manner as comparable BLM lands. This implies typical livestock grazing, recreation management or timber harvest opportunities, and related management practices, management of the mineral estate, standard operating procedures and pre-committed mitigation measures. Exchanges of lands resulting in net adjustments in the livestock grazing program will be reported to the public in periodic Rangeland Program Summary Updates or RMP evaluation or progress reports.



Early day Prineville.



**U.S. DEPARTMENT OF THE INTERIOR**  
**BUREAU OF LAND MANAGEMENT**  
Prineville District  
P.O. Box 550  
Prineville, Oregon 97754

---

OFFICIAL BUSINESS  
PENALTY FOR PRIVATE USE

Forwarding and Address  
Correction Requested



POSTAGE AND FEES PAID  
U.S. DEPARTMENT  
OF THE INTERIOR  
INT 415