



ONRC Action v. Bureau of Land Management
Civil Case No. 96-00422-HA
Administrative Record 310

U.S. Department of the Interior
Bureau of Land Management

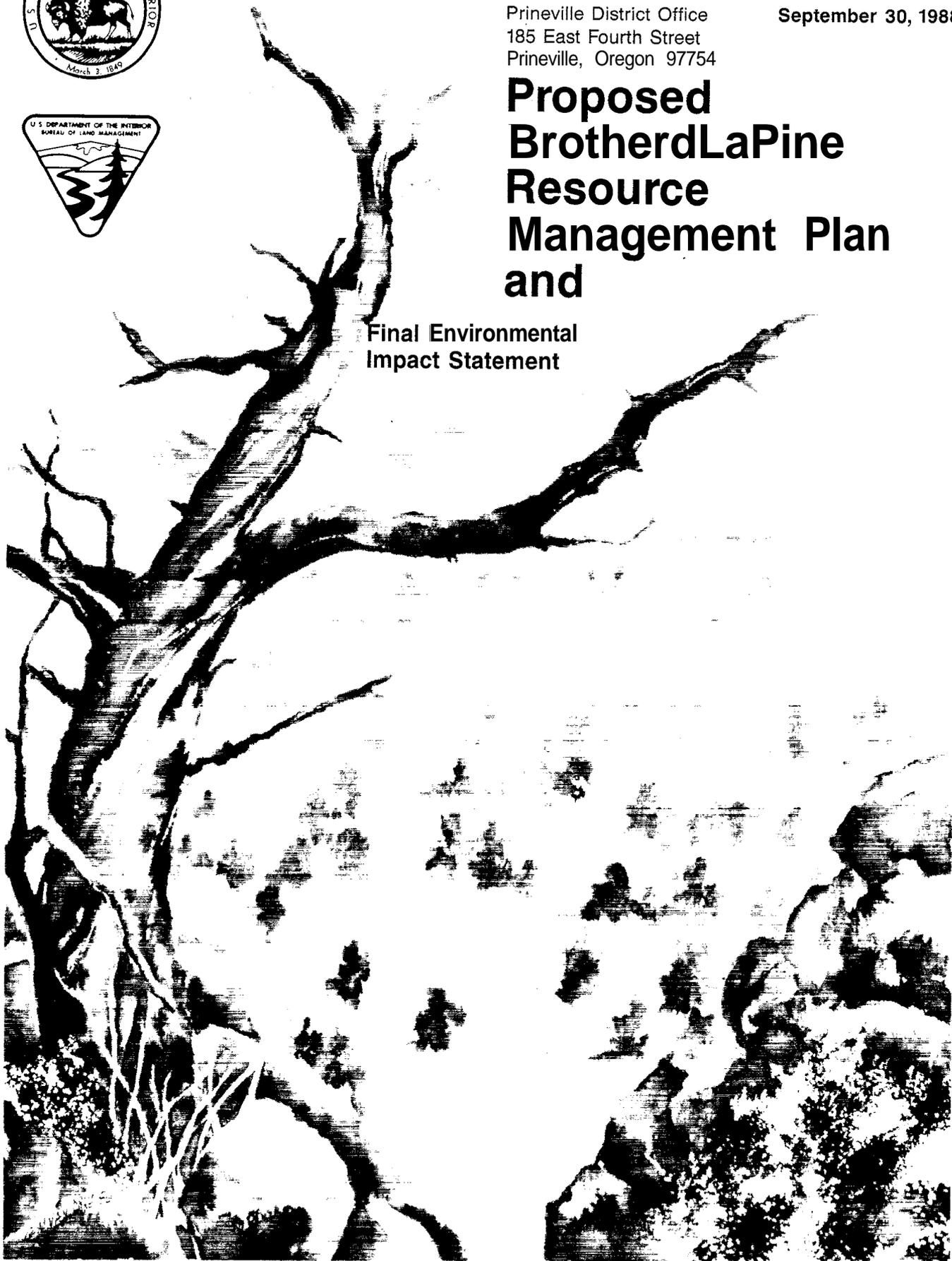
Prineville District Office
185 East Fourth Street
Prineville, Oregon 97754

September 30, 1988



Proposed BrotherdLaPine Resource Management Plan and

Final Environmental
Impact Statement



United States Department of the Interior

Bureau of Land Management
Prineville District Office
PO. Box 550 (185 E. 4th Street)
Prineville, Oregon 97754

Dear Public Land User:

Enclosed for your review and comment is the Brothers/LaPine Proposed Resource Management Plan (RMP) and Final Environmental Impact Statement (EIS) for the Brothers/LaPine Planning Area, Prineville District, Oregon. The Bureau of Land Management has prepared this document in partial fulfillment of its responsibilities under the Federal Land Policy and Management Act of 1976 and the National Environmental Policy Act of 1969.

The Proposed RMP and Final EIS is designed to be used with the Draft RMP/EIS published in October 1987. Additional copies of the Draft RMP/EIS are available upon request from Bureau of Land Management, 185 East Fourth Street, Prineville, OR 97754 Phone (503) 447-4115.

This Proposed RMP and Final EIS contains a summary from the Draft RMP/EIS, an introduction, the proposed plan, text revisions to the Draft RMP/EIS, public comments received on the draft, and the Bureau's response to these comments. The preferred alternative in the Draft RMP/EIS has been revised as a result of public comment and additional resource data becoming available. The proposed plan reflects these changes in the management direction for wild horses and forest and woodland management in the LaPine portion of the planning area. The total public land acreage within the planning area has also changed by 3,987 acres from 1,115,087 to 1,111,100 acres as a result of land exchanges which have occurred since publication of the Draft RMP/EIS.

If you would like to have your interests/concerns considered by the District Manager as he makes the final decisions which will guide the management of the public lands in the Brothers/LaPine Planning Area for the next 10-15 years, please do so in writing prior to the close of the public comment period on December 1, 1988. Comments should be sent to:

District Manager
Bureau of Land Management
P.O. Box 550
Prineville, Oregon 97754

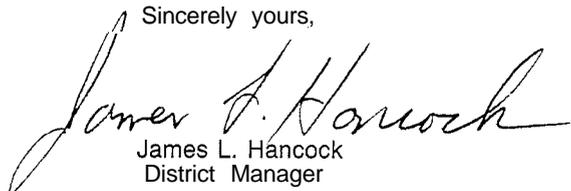
The plan decisions will be based on the analysis contained in the EIS, any additional data available, public opinion, management feasibility, policy and legal constraints. The approval of the plan will be documented in a record of decision, which will be completed later and will be available to the public.

The proposed plan cannot be approved until the Governor of Oregon has had an opportunity to review it. Approval of the plan will also be subject to the final action on any protests that may be filed. Any person who participated in the planning process and has an interest which is or may be adversely affected by the approval of this RMP may protest such approval. A protest may raise only those issues which were submitted for the record during the planning process and should be filed with the Director (760), Bureau of Land Management, 1800 C Street, N.W., Washington, DC. 20240 within the official protest period ending December 1, 1988. Protests must contain the following information:

- The name, mailing address, telephone number, and interest of the person filing the protest.
- A statement of the issue or issues being protested.
- A statement of the part or parts of the plan being protested.
- A copy of all documents addressing the issue or issues that were submitted during the planning process by the protesting party, or an indication of the date and the issue or issues which were discussed.
- A concise statement explaining why you feel the decision is wrong.

Thank you for your continued interest in our land use planning process.

Sincerely yours,

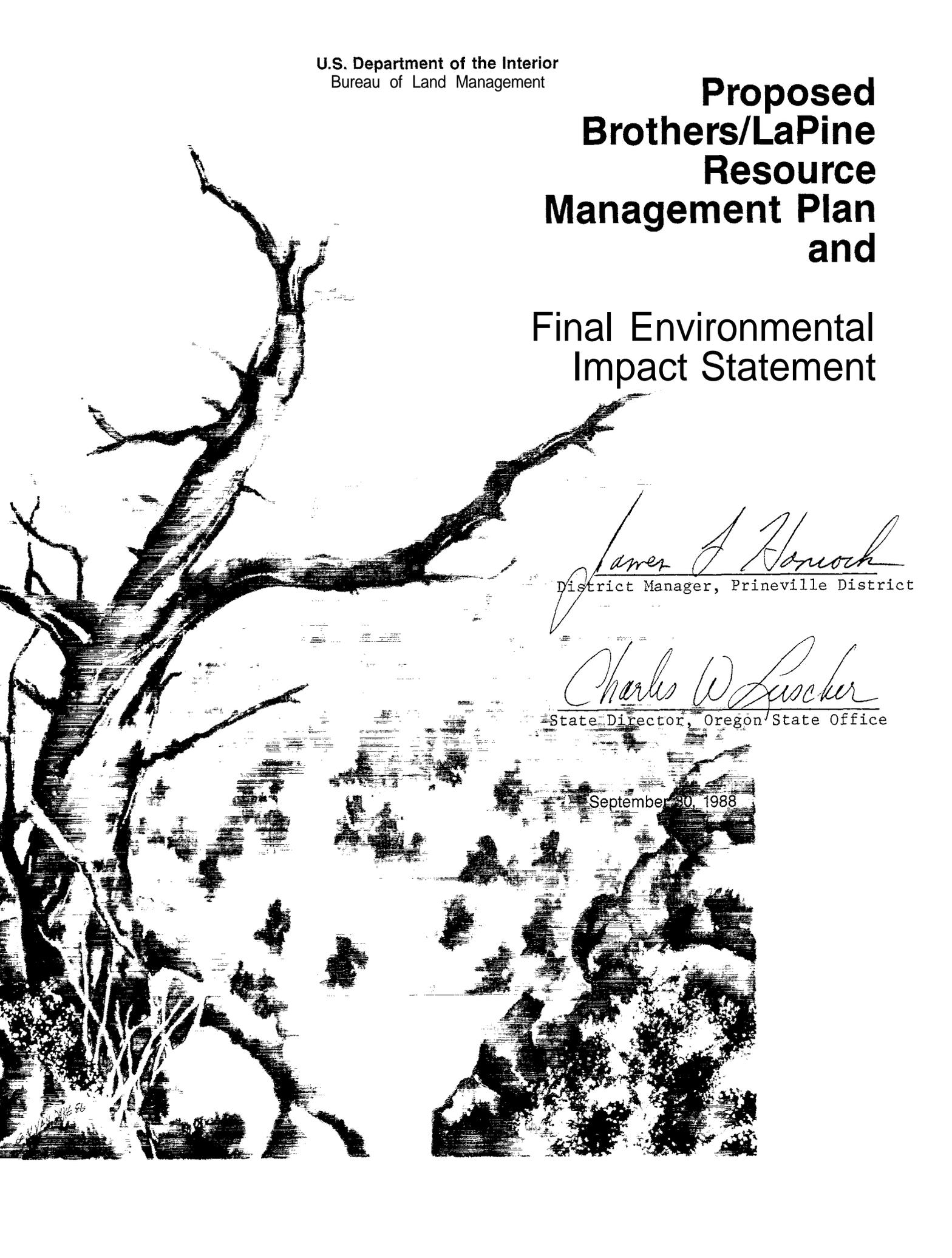


James L. Hancock
District Manager

U.S. Department of the Interior
Bureau of Land Management

Proposed Brothers/LaPine Resource Management Plan and

Final Environmental Impact Statement



James J. Hornock
District Manager, Prineville District

Charles W. Luscher
State Director, Oregon State Office

September 30, 1988

Brothers/LaPine Resource Management Plan and Environmental Impact Statement

Final RMP/EIS Department of the Interior Bureau of Land Management Prineville District

1. **Type of Action: Administrative (X)**
Legislative ()
2. **Abstract:** This Proposed Resource Management Plan/Environmental Impact Statement, when combined with the Draft RMP/EIS, discusses resource management on 1,111,100 acres of public land administered by the Bureau of Land Management in the Prineville District. Implementation of the Proposed Plan 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 would be considered for sale or exchange over the planning period, approximately 1,000,000 acres would be open to mineral leasing; and cultural, soil, water, botanical, visual, and recreational resources including wild and scenic rivers would be protected.
3. **Six alternatives for management of the public lands in the Brothers/LaPine Planning Area were analyzed in the Draft RMP/EIS:**
 - Alternative A. Emphasize Commodity Production and Enhancement of Economic Benefits
 - Alternative B. Emphasize Commodity Production while Accommodating Natural Values
 - Alternative C. Continue Existing Management (No Action)
 - Alternative D. Preferred Alternative
 - Alternative E. Emphasize Natural Values While Accommodating Commodity Production
 - Alternative F. Emphasize Natural Values
4. **The comment period will end December 1, 1988.**
5. **For further information contact:**
 - Brian Cunninghame
 - RMP/EIS Team Leader
 - Bureau of Land Management,
 - Prineville District Office
 - 185 East Fourth Street
 - P.O. Box 550
 - Prineville, OR 97754
 - Telephone (503) 447-4115

Table of Contents

	Page
Summary	i
Chapter 1 Purpose and Need for Action	1
Introduction: The Planning Area	2
Purpose and Need for Action	2
Planning Process and Criteria	7
Issues	7
Chapter 2 The Proposed Plan	9
Introduction	10
Goal and Objectives of the Proposed Plan	10
Criteria Used in the Selection of the Proposed Plan	11
Planned Management Actions Under the Proposed Plan	14
Lands	14
Land Tenure	14
Public Access	19
Land Sales	25
Land Exchanges	28
Agricultural Use of Public Land	28
Rights-of-Way and Utility and Transportation Corridors	29
Forestland and Woodlands	34
Recreation	45
Off-Road Vehicles	45
Rockhounding	49
Areas of Critical Environmental Concern	54
Wild Horses	59
Livestock Grazing	61
Wildlife Habitat	80
Riparian and Aquatic Habitat	86
Fish Habitat	87
Fire Management	90
Energy and Minerals	95
Leasable Minerals	95
Locatable Minerals	105
Salable Minerals	109
Federal Reserved Mineral Estate	110
Ongoing Management Programs	111
Soil, Water and Air	111
Threatened, Endangered or Sensitive Species Habitat	111
Wilderness	111
Wild and Scenic Rivers	112
Visual Resources	113
Cultural Resources	113
Noxious Weed Control	117
Cadastral Survey and Engineering	117

Withdrawal Review	117
Plan Monitoring, Maintenance and Evaluation.	117
Management of Newly Acquired Lands	118
Chapter 3 Text Revisions	121
Introduction	122
Chapter 4 Consultation and Distribution	127
Introduction	128
Public Involvement	128
Agencies and Organizations Contacted or Consulted.	128
List of Agencies, Organizations and Individuals to Whom Copies of the RMP/EIS Have Been Sent.	129
Consistency Review	130
Comment and Protest Procedures	130
Analysis of Public Comment on the Draft Brothers/LaPine RMP/EIS	130

**List of
Maps**

	Page
1 General Location	3
2 Land Status - Brothers Portion	4
3 Land Status - LaPine Portion.	6
4 Land Tenure - Brothers Portion	16
5 Land Tenure - LaPine Portion	18
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	52
14 Areas of Critical Environmental Concern - Brothers Portion	56
15 Wild Horse Range - Brothers Portion	60
16 Livestock Grazing Allotments - Brothers Portion	68
17 Livestock Grazing Allotments - LaPine Portion.	70
18 Riparian/Wetland Areas and Wildlife Habitat - Brothers Portion	82
19 Deer Migration Routes/Riparian Areas - LaPine Portion	84
20 Fire Management - Brothers Portion	92
21 Fire Management - LaPine Portion	94
22 Oil and Gas Potential - Brothers Portion.	98
23 Geothermal Potential - Brothers Portion	100
24 Minerals Management Areas - Brothers Portion.	102
25 Locatable Minerals Potential - Brothers Portion	106
26 Visual Resources - Brothers Portion	114
27 Visual Resources - LaPine Portion	116

**List of
Tables**

	Page
1 Summary, Goals and Objectives for Land Use Alternatives Analyzed	ii
2 Summary, Long-Term Environmental Consequences: Comparison of Alternatives..	vii
3 Public Land Acreage	2
4 Land Tenure Zone Acreages by County	15
5 Public Lands Potentially Suitable for Disposal	20
6 Forestland Management - Brothers Portion	34
7 Forestland Management - LaPine Portion.	35
8 Forestland and Woodland Harvest Levels Under the Proposed Plan	35
9 Areas Limited or Closed to Off-Road Vehicle Use Under the Proposed Plan	45
10 Management of Rockhounding Areas Under the Proposed Plan	46
11 Areas Proposed for Designation as Areas of Critical Environmental Concern	55
12 Management Direction for Areas of Critical Environmental Concern Under the Proposed Plan	58
13 Grazing Management Program - Brothers Portion	62
14 Status of Rangeland Development Implementation - Brothers Portion..	66
15 Grazing Allotments by Category - LaPine Portion	71
16 Grazing Management Program Under the Proposed Plan - LaPine Portion.....	71
17 Wildlife Habitat and Populations - Brothers Portion	80
18 Wildlife Habitat and Populations - LaPine Portion	80
19 Fish Habitat Conditions and Estimated Trend - Brothers Portion	88
20 Conditional Fire Suppression Parameters Under the Proposed Plan..	90
21 Acres Potentially Valuable for Oil and Gas and Geothermal	96
22 Acres Potentially Valuable for Locatable Minerals	105
23 Rivers Under Consideration for Wild and Scenic River Designation..	112

**List of
Figures**

	Page
1 Sample Notice of Restrictions for Sensitive Visual Resources	104
2 Sample Notice of Special Stipulations	104
3 Sample Notice of Restrictions for Wildlife	104
4 Process for Changing the RMP.	119

Summary

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.

Each alternative was a master plan that provided guidelines for future, more site specific decisions, such as defining the intensity of management for various resources, developing more site specific activity plans or issuing rights-of-way, leases or permits.

The goal and objectives of the six different public land management alternatives considered in this RMP/EIS are shown in Table 1.



Wall Street - Bend, 1913

Table 1 Summary, Goals and Objectives for Land Use Alternatives Analyzed

Alternative A -

Goal: Emphasize Commodity Production and Enhancement of Economic Benefits

Objectives:

1. Harvest 16 to 18 MMbf of timber from 2,000 to 3,500 acres annually for 6 years in the LaPine portion.
2. Allocate up to 19,697 AUMs of forage to livestock in the LaPine portion.
3. Remove wild horses from the area in which they now roam.
4. Meet minimum wildlife habitat requirements in accordance with existing BLM policy.
5. Provide aggressive fire suppression for 806,000 acres. Designate 305,000 acres as conditional suppression areas.
6. Limit off-road vehicle (ORV) use on 7,000 acres; close 1,740 acres to ORV use. Remaining 1,102,360 acres open to ORV use. Expand Millican Valley ORV Area to 85,000 acres. Manage 51,280 acres (10 high-to-moderate quality areas) for rockhounding.
7. Designate Horse Ridge Research Natural Area (RNA) and four additional areas totalling 1,560 acres as Areas of Critical Environmental Concern (ACECs).
8. Maintain or increase public land holdings in Zone 1 (areas having national or statewide significance). Sell public land in agricultural use or within the LaPine core area. Transfer or exchange public land near Send, LaPine, Redmond and Prineville to local governments to accommodate community expansion and other public purposes.
9. Public lands would remain open for exploration (including geophysical) and development of mineral resources and related rights-of-way. Fluid mineral leasing would continue with the entire Federal reserved mineral estate and 1,110,500 acres of public land open to exploration, subject to standard lease requirements and stipulations. The restrictive no surface occupancy (NSO) stipulation for fluid minerals exploration and development would be removed.

Alternative B -

Goal: Emphasize Commodity Production While Accommodating Natural Values

Objectives:

1. Harvest 12 to 14 MMbf of timber from 1,500 to 2,500 acres annually for 7 years in the LaPine portion.
2. Allocate up to 16,000 AUMs of forage to livestock in the LaPine portion.
3. Manage wild horses for an average herd size of 15. Allow wild horses to roam a 25,000 acre area.
4. Manage for 50 percent of optimum wildlife habitat diversity.
5. Provide aggressive fire suppression on 706,000 acres. Designate 405,000 acres as conditional suppression areas.
6. Limit off-road vehicle (ORV) use on 39,899 acres; close 5,240 acres. Remaining acres open for ORV use. Expand Millican Valley ORV area to 61,000 acres, Manage 47,180 acres (6 high to moderate quality areas) for rockhounding.
7. Designate Horse Ridge Research Natural Area and eight areas as ACEC's (35,556 acres).
8. Maintain or increase public land holdings in Zone 1. Consider exchanges in Zone 1 if lands with even higher public value could be acquired. Authorize existing agricultural use. Sell or lease public land in the LaPine core area. Transfer or exchange public land near Bend, LaPine, Redmond and Prineville to local governments as needed to accommodate community expansion and other public purposes.
9. Public lands would remain open for exploration (including geophysical) and development of mineral resources and related rights-of-way. Fluid mineral leasing would continue with the entire Federal reserved mineral estate and 1,110,500 acres of public land open to exploration, subject to standard lease requirements and stipulations. The restrictive no surface occupancy (NSO) stipulation for fluid minerals exploration and development would be removed.

Alternative C -

Goal: Continue Existing Management • No Action

Objectives:

1. Harvest 7 to 9 MMbf of timber from 1,000 to 1,400 acres annually for 10 years in the LaPine portion.
2. Allocate 3,301 AUMs of forage to livestock in the LaPine portion.
3. Allow the wild horse herd size to be controlled by natural events. Allow wild horses to roam a 17,000 acre area.
4. Manage for 50 percent of optimum wildlife habitat diversity.
5. Provide aggressive fire suppression for approximately 1,000,000 acres. Manage 111,000 acres as conditional suppression areas.
6. Limit off-road vehicle (ORV) use on 204,858 acres; close 4,615 acres to ORV use. Remaining acres open for ORV use. Millican Valley ORV area remains at 60,000 acres. Manage 45,160 acres (4 high quality areas) for rockhounding.
7. Designate Horse Ridge Research Natural Area totalling 600 acres as an ACEC. Designate no other ACEC's.
8. Retain Zone 1 lands. Consider exchange of Zone 2 and 3 lands for land with higher public values. Authorize agricultural use where no significant resource conflicts occur. Sell or lease public land within the LaPine core. Transfer to local governments or exchange public land near Bend, LaPine, Redmond and Prineville as needed for community expansion.
9. Public lands would remain open for exploration (including geophysical) and development of mineral resources and related rights-of-way. Fluid mineral leasing would continue with the entire Federal reserved mineral estate and 946,000 acres of public land open to exploration subject to standard lease requirements and stipulations. A 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. Restrictions to protect 100,000 acres of land that are visually sensitive or of high scenic quality would be continued.

Alternative D - (Preferred Alternative and Proposed Plan)

Objectives:

1. Harvest up to 14 MMbf of timber from 1,500 to 2,000 acres annually for 4 years in the LaPine portion.
2. Allocate up to 16,000 AUMs of forage to livestock in the LaPine portion.
3. Manage the Liggett Table Wild Horse Herd to maintain up to 25 head on 25,000 acres.
4. Provide optimum habitat diversity for wildlife.
5. Provide aggressive fire suppression for 506,000 acres. Designate 605,000 as conditional suppression areas.
6. Limit off-road vehicle use on 267,076 acres: close 10,722 acres to ORV use. Remaining 833,302 acres open to ORV use. Expand Millican Valley ORV area to 65,000 acres. Manage 51,280 acres (10 high to moderate quality areas) for rockhounding.
7. Designate Horse Ridge Research Natural Area and 11 areas totalling 36,916 acres as ACEC's. Also designate three of these areas totalling 1,565 acres as RNAs.
8. Maintain or increase public land holdings in Zone 1 and 2. Exchange or sell Zone 3 lands if they meet FLPMA criteria. Authorize agricultural use of public land if no conflict with public values exists. Exchange, lease or sell land in the LaPine core area. Transfer or exchange public land near Bend, LaPine, Redmond, and Prineville to local governments as needed to accommodate community expansion and other public purposes.
9. Public lands would remain open for exploration (including geophysical) and development of mineral resources and related rights-of-way. Fluid mineral leasing would continue with the entire Federal reserved mineral estate and 946,000 acres of public land open to exploration subject to standard lease requirements and stipulations. A 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. 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 would be evaluated using the following criteria:
 - (1) Evidence of exploration or similar activities would not be visible from the surface of Prineville Reservoir or other high public use areas such as county roads, State and Federal highways, recreation areas or communities within the planning area.
 - (2) All activities involving exploration would use existing roads to the fullest extent possible.
 - (3) Any proposed exploratory drilling pad or road construction for access to a drilling site would be located to avoid canyon slopes, areas with highly erosive soils and areas of high visibility. In these areas roads and drilling sites would be fully rehabilitated when operations have been completed.
 - (4) All activities would be carried out so as to maintain or enhance soil stability.

Alternative E -

Goal: Emphasize Natural Values While Accommodating Commodity Production

Objectives:

1. Harvest 7 to 9 MMbf of timber from approximately 1,000 to 1,400 acres annually for 8 years in the LaPine portion.
2. Allocate 2,996 AUMs of forage to livestock in the LaPine portion.
3. Manage for a wild horse herd size of 50. Allow horses to roam a 25,000-acre area.
4. Provide optimum wildlife habitat diversity.
5. Provide aggressive fire suppression on 506,000 acres. Designate 605,000 acres as conditional suppression areas.
6. Limit off-road vehicle (ORV) use on 276,996 acres; close 12,102 acres to ORV use. Remaining acres open to ORV use. Millican Valley ORV area reduced to 53,000 acres. Manage 42,600 acres (2 high quality areas) for rockhounding.
7. Designate Horse Ridge Research Natural Area and 11 additional areas as ACEC's totalling 36,916 acres. Also designate three of these areas totalling 1,565 acres as RNAs.
8. Maintain or increase public land holdings in Zone 1 and 2. Exchange Zone 3 lands for higher public value lands. Authorize agricultural use only where no significant conflicts with other uses of the public land occur. Some tracts of public land would be available for lease or sale in the LaPine core. Exchange public land near Bend, LaPine, Redmond and Prineville as needed to accommodate community expansion and other public purposes.
9. Public lands would remain open for exploration (including geophysical) and development of mineral resources and related rights-of-way. Fluid mineral leasing would continue with the entire Federal reserved mineral estate and 746,500 acres of public land open to exploration subject to standard lease requirements and stipulations. A 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. Restrictions to protect 300,000 acres of land that are visually sensitive or of high or moderate scenic quality would be implemented. No exceptions to the protective stipulations would be allowed.

Alternative F -

Goal: Emphasize Natural Values

Objectives:

1. No commercial timber harvest would occur on the public lands in the LaPine portion.
2. No livestock grazing would be allowed on the public lands in the LaPine portion.
3. Remove all wild horses.
4. Manage wildlife habitat diversity at optimum condition for migrating deer and at slightly less than that for other species.
5. Provide aggressive fire suppression on 206,000 acres. Designate 905,000 acres as conditional suppression areas.
6. Limit off-road vehicle (ORV) use on 302,634 acres; close 15,144 acres to ORV use. Remaining acres open to ORV use. Millican Valley would be closed to organized ORV use. No land would be managed for rockhounding. Existing disturbed areas would be reclaimed.
7. Designate Horse Ridge Research Natural Area and 11 additional areas totalling 42,329 acres as ACECs. Also designate three of these areas totalling 1,565 acres as RNAs.
8. No land would be offered for sale. No agricultural use would be authorized. Areas used for agricultural purposes would be reclaimed. No public land within the LaPine core area or near Bend, LaPine, Redmond or Prineville would be disposed of. Acquire public access for primitive and unconfined recreation use through exchange.
9. Public lands would remain open for exploration (including geophysical) and development of mineral resources and related rights-of-way where no significant conflicts with visual, watershed and wildlife values exist. Fluid mineral leasing would continue with the entire Federal reserved mineral estate and 704,771 acres of public land open to exploration subject to standard lease requirements and stipulations. Leases on a total of 42,329 acres would not be renewed as they expired to protect areas of critical environmental concern. The no surface occupancy stipulation on 16,480 acres around Prineville Reservoir, along with seasonal restrictions on 44,580 acres of deer wintering areas and 3,560 acres of sage grouse strutting grounds would be continued. Restrictions to protect 300,000 acres of land that are visually sensitive or of high or moderate scenic quality would be implemented. No exceptions to the protective stipulations would be allowed.

Summary of Environmental Consequences

The consequences of implementing each of the land use alternatives was analyzed in the RMP/EIS and is summarized below and on Table 2.

Air - None of the alternatives would significantly affect air quality.

Soil - Over the long term, soil stability would improve under Alternatives D, E and F, remain unchanged under C and decline slightly under Alternatives A and B.

Water - Over the long term, water quality and quantity would improve under Alternatives D, E and F, remain unchanged under C and decline slightly under Alternatives A and B.

Forestland - Annual harvest levels of timber and woodland products would be the greatest under Alternative A, and somewhat less under Alternatives B and D. There would be no change under Alternative C. Annual harvest levels would not change significantly under Alternative E, however, less total volume would be harvested. Commercial timber harvest in the LaPine portion would not occur under Alternative F.

Land Ownership and Use Patterns - improved BLM ownership patterns resulting from land sales, land exchanges and other land tenure actions would be the greatest under alternatives A, B and D and gradually increase management efficiency and effectiveness as well as public access and use. Disposal of Federal lands would serve public purposes including industrial expansion. Changes in land use on former BLM lands are expected to be relatively slow and would be in conformance with State and local plans, programs, ordinances, etc. Potential industrial lands are not likely to be developed so quickly that it would create problems for local communities in providing public and educational services.

Livestock Grazing - Forage allocations would be the greatest under Alternative A. Increases would also occur under Alternatives B and D. Forage levels would remain the same under Alternative C and decrease slightly under Alternative E. Under Alternative F, no livestock grazing would occur on the public lands in the LaPine portion.

Wild Horses - Wild horses would be removed under Alternatives A and F. There would be no change under Alternative C. Horse numbers and management would increase under Alternatives B and D with the greatest increases occurring under Alternative E.

Wildlife - Wildlife habitat diversity would decrease under Alternatives A, B and F. There would be no change under Alternative C and increased habitat diversity would occur under Alternatives D and E.

Fire Management - The greatest amount of land would receive aggressive fire suppression under Alternatives A and C. Decreasing amounts of aggressive suppression would occur under Alternatives B, D and E with the least amount of protection occurring under Alternative F.

Recreation - Overall use levels would increase the most under Alternative A. Lesser increases would occur under Alternatives B and D. There would be no change under Alternative C. Slight decreases in use would occur under Alternatives E and F.

Areas of Critical Environmental Concern - All alternatives would provide some protection to special values. The greatest protection would occur under Alternative F. Alternatives D and E would provide protection for more areas than would be designated under Alternatives A and B. Alternative C would provide the least amount of protection.

Visual - Alternatives A and B would adversely effect visual quality. There would be no change under Alternative C. Beneficial effects would occur under Alternatives D and E with the greatest protection of visual resources occurring under Alternative F.

Minerals - Alternatives A and B would significantly benefit the availability of minerals. There would be essentially no change under Alternatives C and D. Minerals availability would decrease under Alternative E and be significantly reduced under Alternative F. The proposed mineral withdrawal for the Congieton Hollow/Liggett Table area would decrease commercial chalcedony minerals availability, but would enhance recreational rockhounding.

Socioeconomics - Alternatives A, B and D would raise economic values in the planning area. Alternative C would have no change. Alternatives E and F would reduce economic values slightly.

As a result of public comment and additional data becoming available, revisions of the preferred alternative have occurred since the Draft Brothers/LaPine RMP/EIS was published in October, 1987. The preferred alternative which is the proposed plan in this document has been modified in the following ways:

- 1) 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 4 years.
- 2) The wild horse herd is now proposed to be managed for a herd size of 10-25 animals, rather than completely removing them as was proposed in the Draft RMP/EIS.

Table 2. Summary, Long-term Environmental Consequences: Comparison of Alternatives

	Alternative A (Commodity Production)	Alternative B (Commodities with Natural Values)	Alternative C (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
+ Enhanced H High - Degraded M Moderate NC No Change L Low						

Chapter 1. Purpose and Need for Action



Wall Street • Bend, about 1910

Introduction: The Planning Area

This Resource Management Plan/Environmental Impact Statement (RMP/EIS) provides a comprehensive framework for managing public lands in the Brothers/LaPine Planning Area and for allocating resources in that area for the next 10 to 15 years. The document analyzes impacts associated with managing 1,067,899 acres of public land in the high desert area around the community of Brothers, plus 43,201 acres in the vicinity of LaPine as shown on Map 1. In the Draft Brothers/LaPine RMP/EIS it was indicated that there were 1,115,087 acres of public land in the planning area. Since that time a land exchange has reduced the public land acreage in this area by 3,987 acres to 1,111,100 acres. Within the planning area, there are also 130,570 acres of private land with Federal subsurface mineral estate where the BLM is the administering agency.

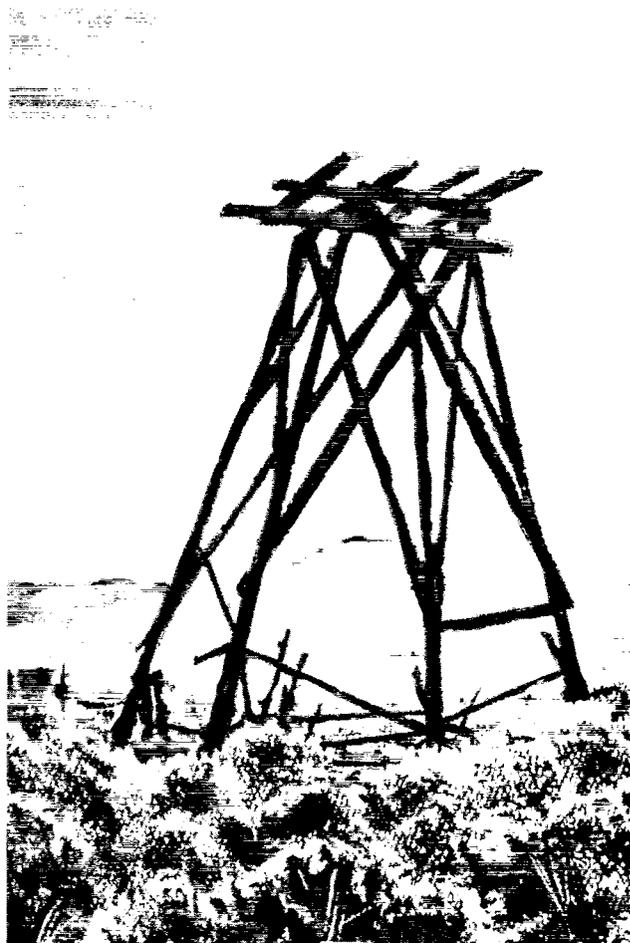
Table 3 summarizes public land in the five counties located within the Brothers/LaPine Planning Area.

Table 3. 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
Hamey	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.



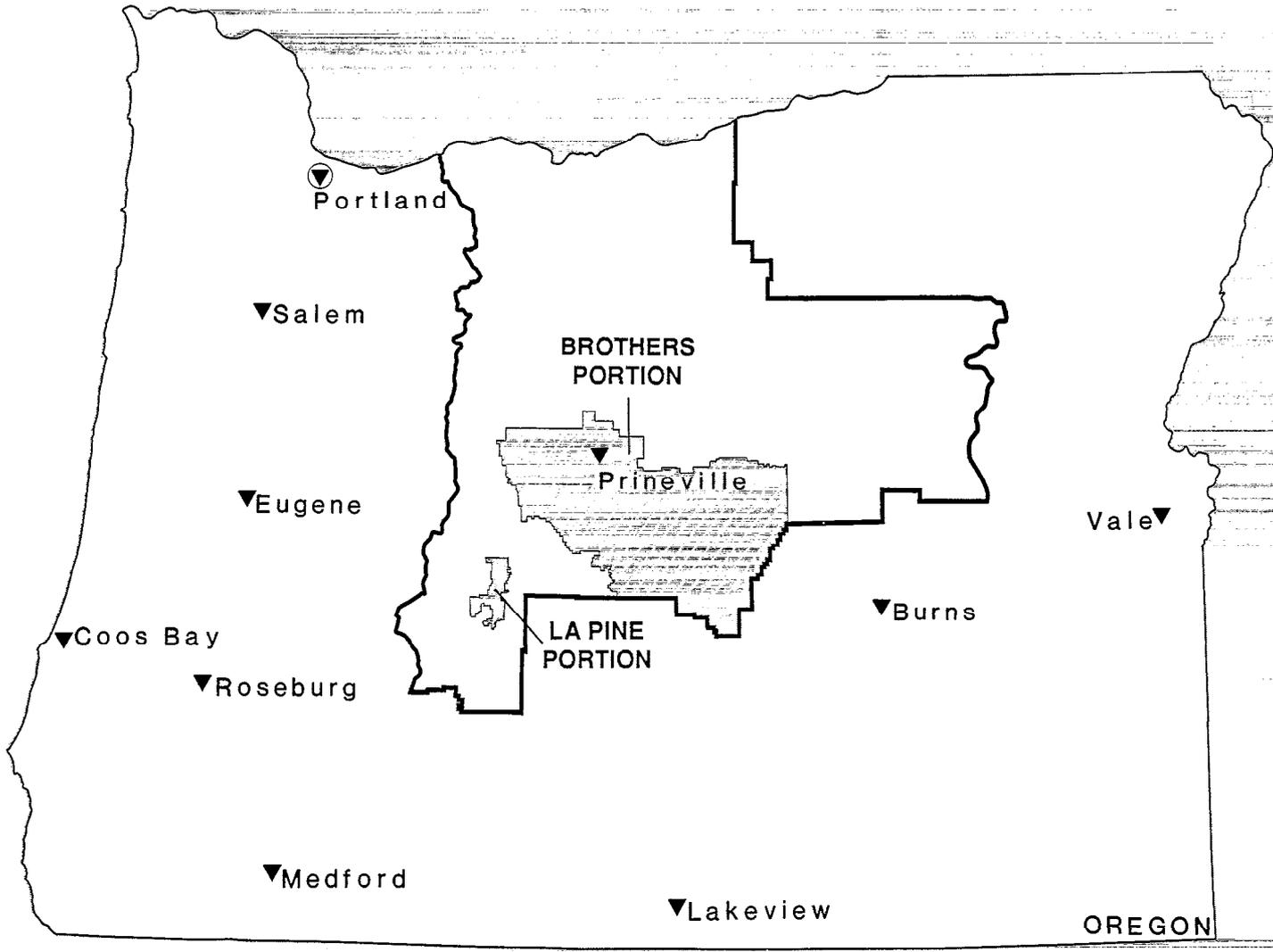
Old Millican Well

This Brothers/LaPine RMP/EIS 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 for Action

The resource management plan establishes guidelines for the management of public lands in the Brothers/LaPine Planning Area. It also provides a platform for management of all resources and uses within the principles of multiple use and sustained resource yield.

The proposed plan identified in this document was selected on the basis of input from public meetings and comments made through correspondence, contacts with local governments, suggestions from



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

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

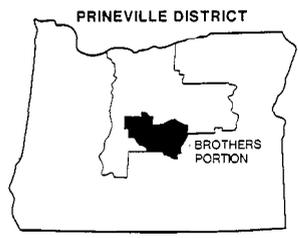
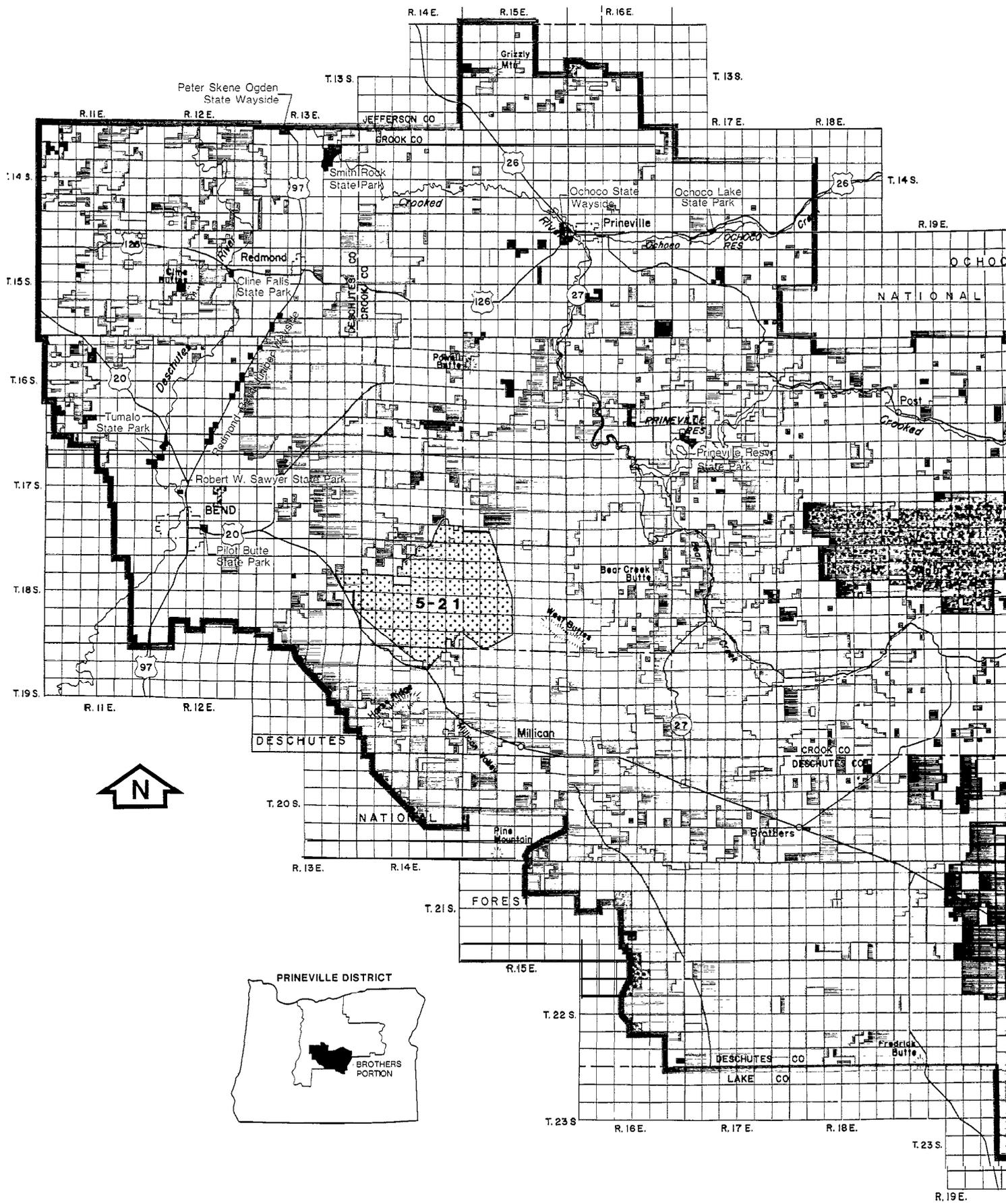
PRINEVILLE DISTRICT

BROTHERS/LA PINE PLANNING AREA

September 1988

MAP 1

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



R. 14 E. R. 15 E. R. 16 E.

T. 13 S. T. 138.

Peter Skene Ogden State Wayside

R. 11 E. R. 12 E. R. 13 E. JEFFERSON CO. BROOK CO. R. 17 E. R. 18 E.

T. 14 S. 97 Smith Rock State Park Crooked River Ochocho State Wayside Ochocho Lake State Park 26 T. 14 S. R. 19 E. OCHOCHO NATIONAL

T. 15 S. Redmond Cline Falls State Park Deschutes CO. BROOK CO. 126 27 25

T. 16 S. Tumalo State Park Deschutes 20 T. 16 S. PRINEVILLE RES. Prineville Res. State Park Post Crooked

T. 17 S. Robert W. Sawyer State Park BEND 20 Pilot Butte State Park Bear Creek Butte PRINEVILLE RES.

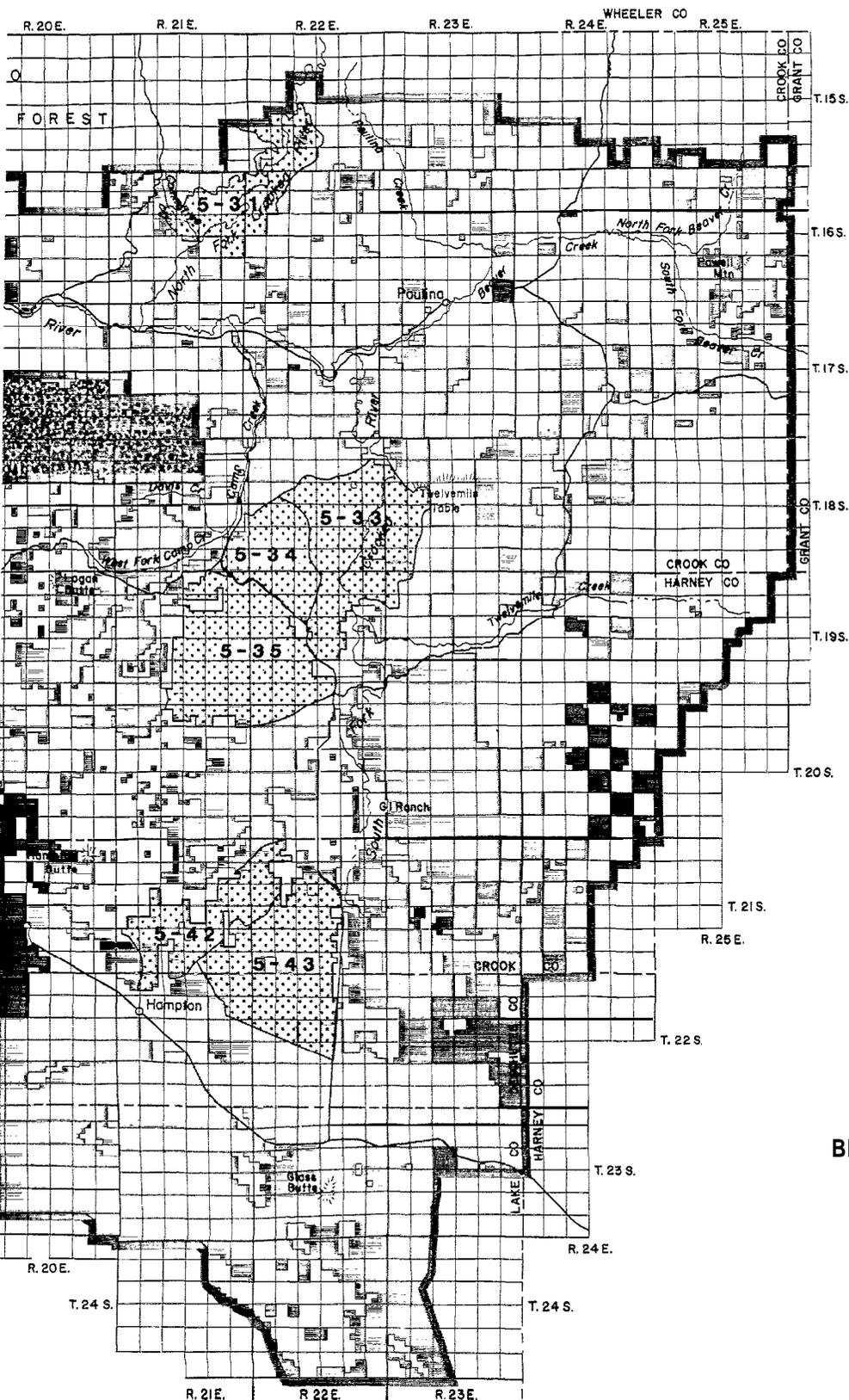
T. 18 S. 5-21 Millican 27

T. 19 S. R. 11 E. R. 12 E. DESCHUTES NATIONAL FOREST CROR CO. DESCHUTES CO. Brothers

T. 20 S. R. 13 E. R. 14 E. T. 21 S. FORES

R. 15 E. T. 22 S. DESCHUTES CO. LAKE CO. Prineville Butte

T. 23 S. R. 16 E. R. 17 E. R. 18 E. T. 23 S. R. 19 E.



-  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

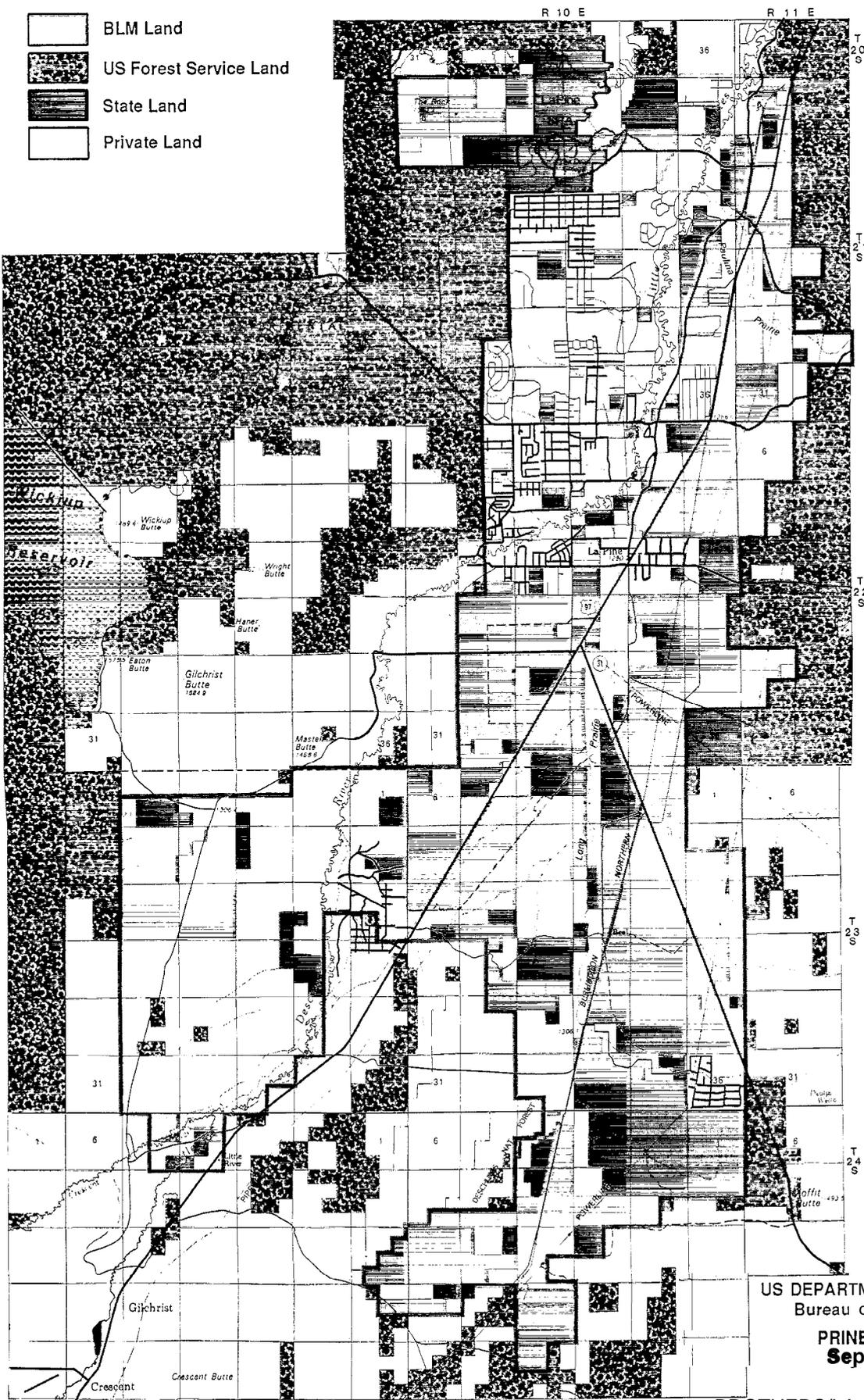
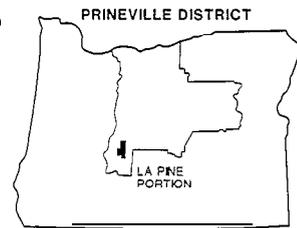
US DEPARTMENT OF THE INTERIOR
Bureau of Land Management

PRINEVILLE DISTRICT
September 1988

BROTHERS/LA PINE PLANNING AREA

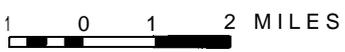
MAP 2
Land Status
Brothers Portion

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



US DEPARTMENT OF THE INTERIOR
 Bureau of Land Management
 PRINEVILLE DISTRICT
 September 1988

BROTHERS/LA PINE PLANNING AREA



MAP 3
 Land Status
 La Pine Portion

user groups, and staff discussion as explained in Chapter 4. The plan was developed under the requirements of the Federal Land Policy and Management Act (FLPMA) and involved interdisciplinary planning processes applicable to multiple use and sustained resource yield.

This RMP/EIS is written in compliance with the National Environmental Policy Act of 1969 (NEPA) and the Council on Environmental Quality regulations.

Planning Process and Criteria

BLMs planning process includes public involvement at various stages. Six public meetings have been held on the Brothers/LaPine RMP/EIS process—two in Prineville, two in Bend and two in LaPine (one each during the scoping process and one during the review period of the Draft RMP/EIS). The resulting responses have been incorporated in the preparation of this proposal.

The planning process is designed to enable the BLM to accommodate the uses the public wants to make of public lands while complying with laws established by Congress and policies implemented by the executive branch of the Federal government regarding management of the public lands.

Issues

A number of specific issues were developed from comments at public meetings in response to the Preliminary Issues and Alternative Brochure Issues and Alternative Brochure developed for the planning area.

Issues common to the entire planning area include: land tenure and access, recreation management, areas of critical environmental concern, woodland management, wild horses and fire management. Issues related to livestock grazing management, riparian management, wildlife habitat and forestland management in the Brothers portion of the planning area were addressed and resolved in the Brothers Management Framework Plan completed in 1982 and the Brothers Grazing Management Rangeland Program Summary completed in 1983. Livestock grazing management, riparian management,

forestland management and wildlife habitat management in the LaPine portion have been analyzed in this document.

Public comment plus input from user groups or governmental agencies were utilized in developing the following issues

Land Tenure and Access

Is there a need to consolidate public land through exchange into areas with high public value? If so, what areas are most important? What lands, if any, should be identified for disposal by public sale, exchange or transfer to another agency? What should the BLMs policy be in regard to public access and utility transportation corridors? What types of access, if any, should be acquired and for what purposes and to which areas? The BLM will continue to resolve unauthorized use of public lands. What considerations should be made in deciding whether to authorize the use (lease or sale), or to allow the land to revert back to a natural condition?

Forestland

What should the BLMs forestry program be in the LaPine area as a result of the Mountain Pine Beetle infestation? What should the harvest method and level be to adequately protect industrial and residential areas from fire hazard, as well as other resources such as scenic qualities, wildlife habitat and deer migration corridors?

What should the BLMs woodland products program be? Which areas should be open to woodcutting and in which areas should woodcutting not be permitted? Should the volume of firewood and other woodland products made available each year be changed?

Recreation Management

Are there areas where off-road vehicle use should be limited? Should off-road vehicle use on certain areas be prohibited altogether? If so, which areas should be limited or closed? Should the designated boundary of the Millican Valley ORV area be modified or the management emphasis in this area changed?

Should certain areas containing deposits of semi-precious stones be set aside and managed specifically for public recreation use?

Areas of Critical Environmental Concern

Which areas, if any, are suitable for formal designation as Areas of Critical Environmental Concern (ACECs), Research Natural Areas (RNAs), etc; to preserve outstanding or unique scenic, botanic, geologic, zoologic, cultural, or other resource values?

Wild Horses

How many wild horses, if any, should be maintained and how should they be managed?

Livestock Grazing

What should the BLMs grazing management program be in the LaPine area? Should the BLM maintain the existing management program, eliminate it or provide more intensive management?

Wildlife Habitat Management

What actions should be taken to protect and manage deer migration corridors in the LaPine area? What management practices, or habitat improvements projects are appropriate to provide a more diverse range of habitats in the LaPine area for wildlife?

Fire Management

What should the BLM fire management strategy be in considering multiple use resource values and goals? How should conditional suppression be used? What should the BLMs smoke management policy be? What interagency considerations are necessary for implementing fire management strategies.

Minerals

What public lands should remain open for fluid mineral leasing? In what areas should exploration and development be restricted or precluded?



Antelope running free on high desert near Brothers.

Chapter 2

The Proposed Plan



Main Street — Redmond, in 1915

Introduction

Chapter 2 describes the proposed plan, which provides a mid 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 proposed plan (proposed action) 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 have 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 is now proposed to 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 will mark 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 Proposed Plan

Forestland

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 would 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, would be expected to occur in the LaPine portion for 30 to 40 years.

Livestock Grazing

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.

Wild Horses

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.

Wildlife Habitat Management

Provide optimum habitat diversity for game and non-game wildlife species. Meet ODFW management objective numbers for deer and elk.

Fire Management

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.

Recreation

Limit ORV use on 267,076 acres; close 10,722 acres to ORV use. Remaining 833,302 acres open to ORV use. Expand Millican Valley ORV use area to 65,000 acres.

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 mining laws for chalcedony type material.

Redmond and Prineville to local governments as needed to accommodate community expansion and other public purposes.

Minerals

Public lands would remain open for exploration (including geophysical) and development of mineral resources and related rights-of-way. Fluid mineral leasing would continue with the entire 130,570 acres of Federal reserved mineral estate and 946,500 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. 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 Proposed 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



Off road vehicle in Millican Valley

Areas of Critical Environmental Concern

Designate Horse Ridge Research Natural Area and 11 additional areas totalling 36,916 acres as ACEC's. Also designate three of these areas totalling 1,565 acres as RNAs.

Land Tenure and Access

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.

Authorize agricultural use of public land if no conflict with public values exist.

Exchange or sell land in the LaPine core area. Exchange, transfer or sell public land near Bend,

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.



Peck's long-bearded mariposa lily

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 BLMs minerals policy while protecting other significant resource values.

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.



Logan Butte.

Planned Management Actions Under the Proposed 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.

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 4.

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."

FLPMA also includes specific criteria for use in categorizing public land 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 adjacent to rivers 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.

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

Transfer to other public agencies will be considered where consistent with public land management policy and when 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

Table 4. 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	338,696	143,005	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	750,653	324,993	35,454	1,111,100

- 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.

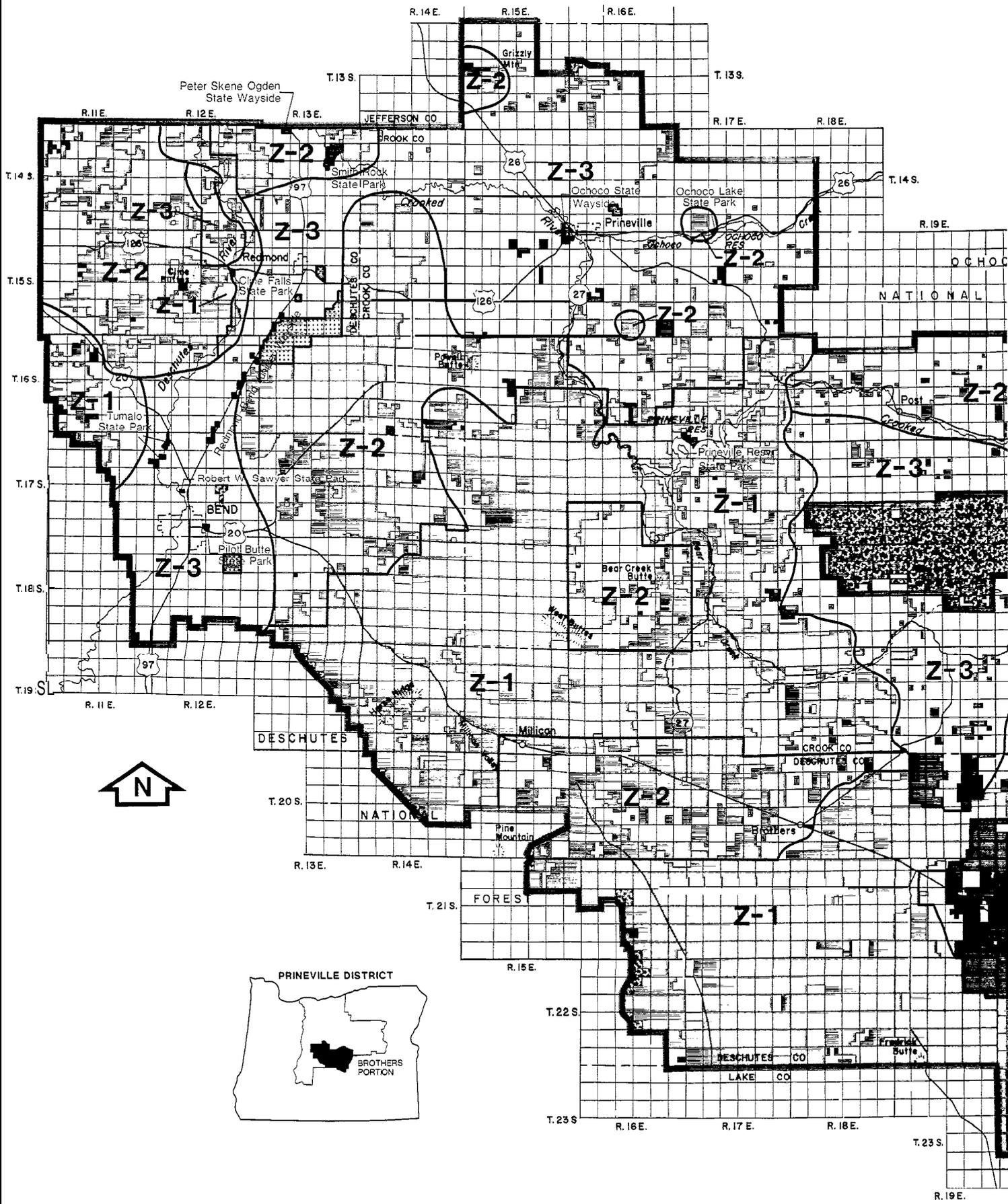
Zone 1 delineates lands which have been identified as having national or statewide significance; they are identified for retention in public ownership. They are also areas where emphasis will be placed on increasing public land holdings through donation, exchange or sale. These lands possess significant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

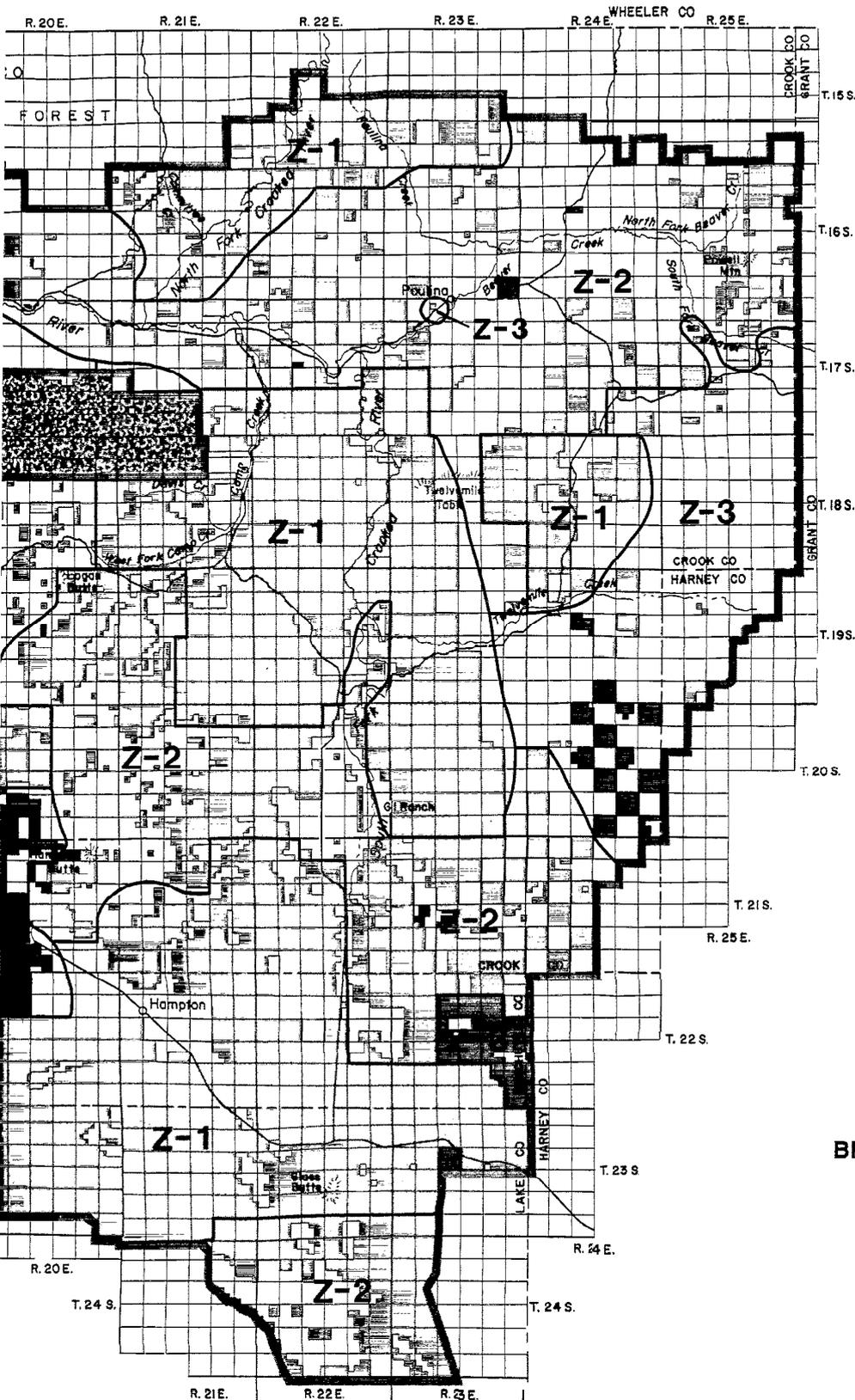
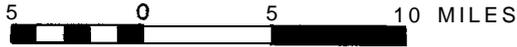
Public lands in Zone 2 have potentially high resource values for timber, recreation, riparian, watershed, special status species, cultural and/or wildlife. They are identified for retention or possible exchange for land with higher resource values or transfer through the Recreation and Public Purposes 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 5.

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.





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
September 1988

BROTHERS/LA PINE PLANNING AREA

MAP 4 Land Tenure Brothers Portion

Z-2

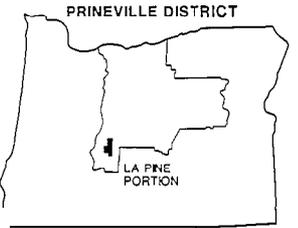
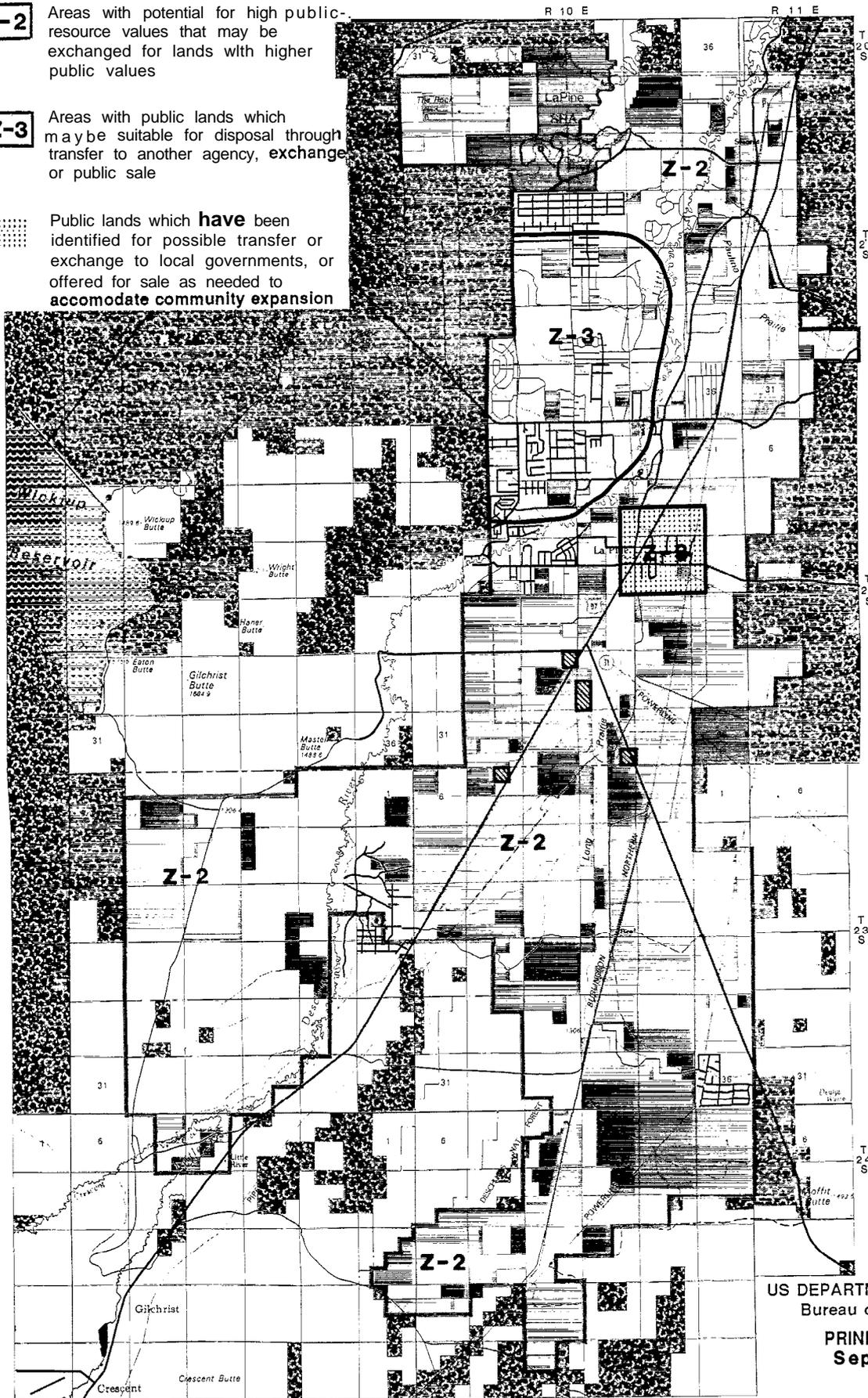
Areas with potential for high public-resource values that may be exchanged for lands with higher public values

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 INTER
Bureau of Land Management
PRINEVILLE DISTRICT
September 1988

BROTHERS/LA PINE PLANNING AREA

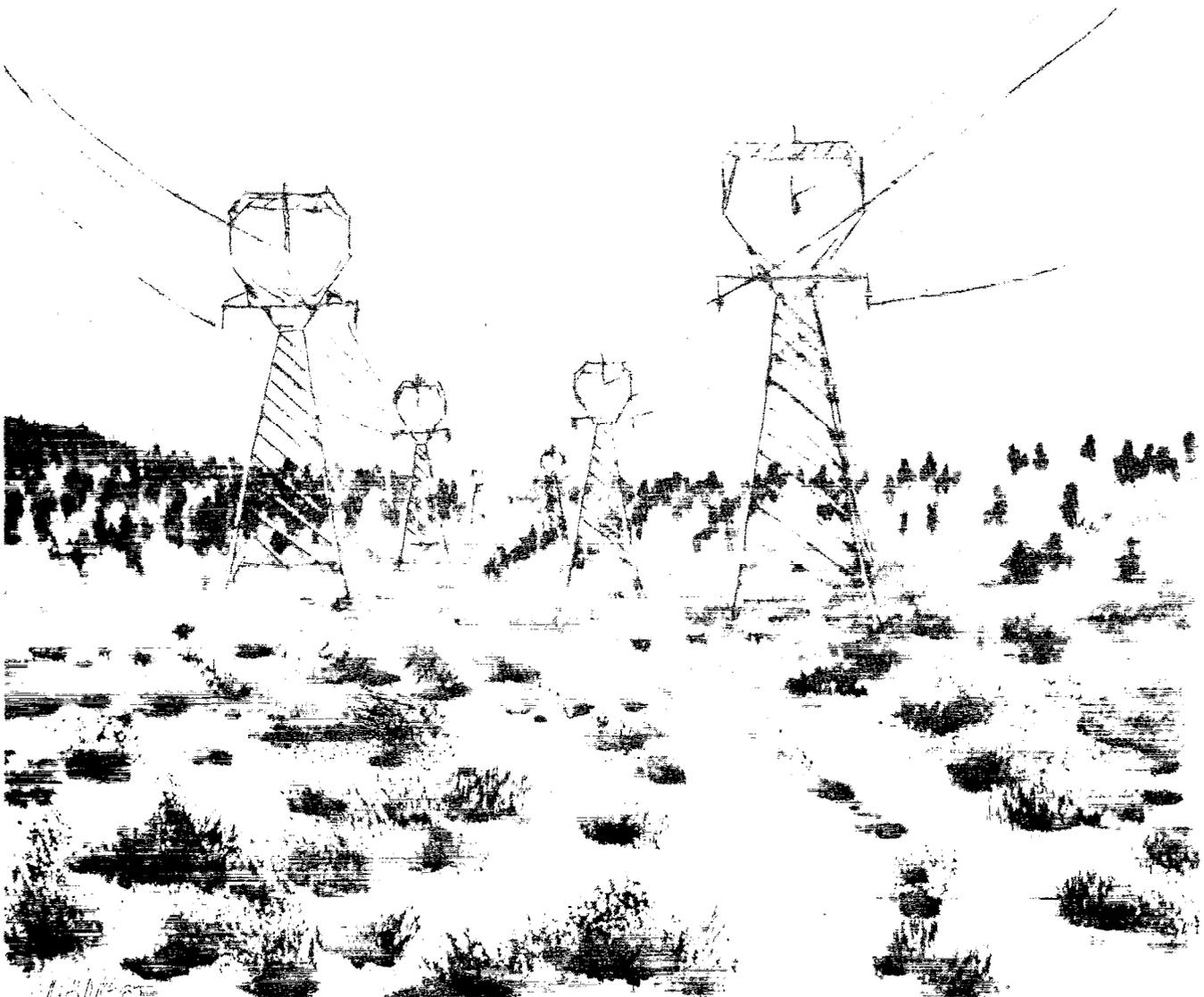


MAP 5
Land Tenure
La Pine Portion

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.



Utility corridor near Brothers.

Table 5. 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	LI-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	LI-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

Table 5. Public Lands Potentially Suitable for Disposal (continued)

Lands in Crook County

Township	Range	Section	Subdivision	Public Acres
16S	16E	22	SWSW	40.00
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

Table 5. Public Lands Potentially Suitable for Disposal (continued)

Lands in Crook County

Township	Range	Section	Subdivision	Public Acres
18S	20E	17	NWNW	40.00
18S	20E	18	L1	37.73
18S	20E	19	NENW WNE NWSE	160.00
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	LI-4 SN S	636.26
19s	24E	14	N NS SESE	520.00
19s	24E	22	All	640.00
20s	22E	14	sww	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 5. Public Lands Potentially Suitable for Disposal (continued)

Lands in Deschutes County

Township	Range	Section	Subdivision	Public Acres
14s	12E	22	NENE SWNE W-W 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 WSENEW WNESEW SESW	110.00
14s	13E	31	EW	160.00
15s	12E	1	SENEW	40.00
15s	12E	2	SWNE NSW SWSW	160.00
15s	12E	3	SENEW NSE	120.00
15s	12E	10	s w s w	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	s w s w	40.00
21s	20E	24	NNE	80.00
22s	10E	3	LI-2	80.83
22s	10E	5	NSE	80.00
22s	10E	9	NE	160.00
22s	10E	10	NWNW	40.00
22s	10E	11	LI-4 L6-7 ENWSWSW WNESESW SENESESW NNESESW SWNESESW NESWSESW SSESESW	46.25

Table 5. Public Lands Potentially Suitable for Disposal (continued)

Lands in Deschutes County

Township	Range	Section	Subdivision	Public Acres
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 144154 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

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

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.

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

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

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:

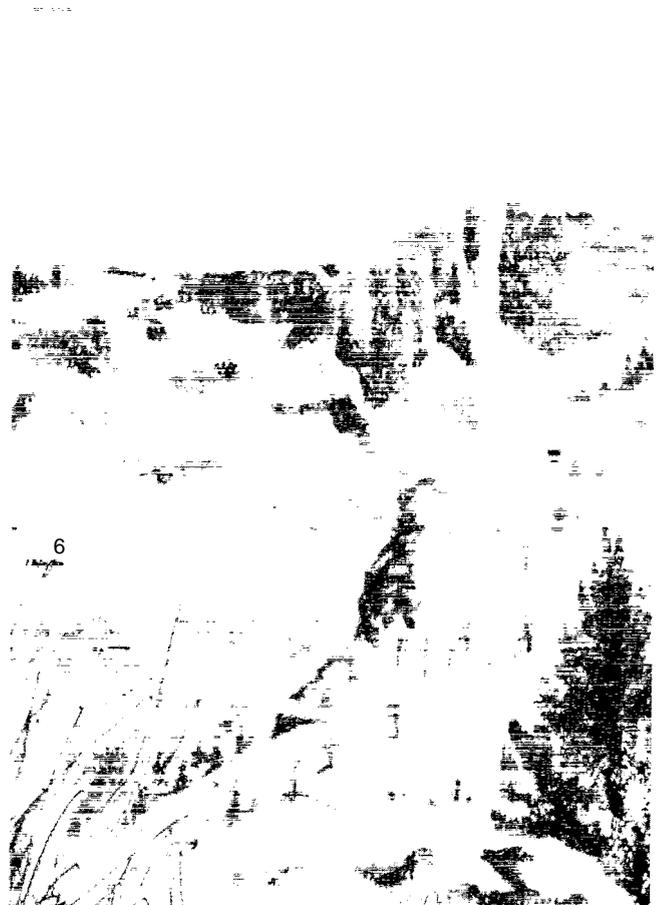
- 1) Such tract, because of its location or other characteristics, is difficult or uneconomical to manage as part of the public lands and is not suitable for management by another Federal department or agency; or
- 2) Such tract was acquired for a specific purpose and the tract is no longer required 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:

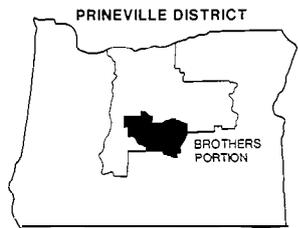
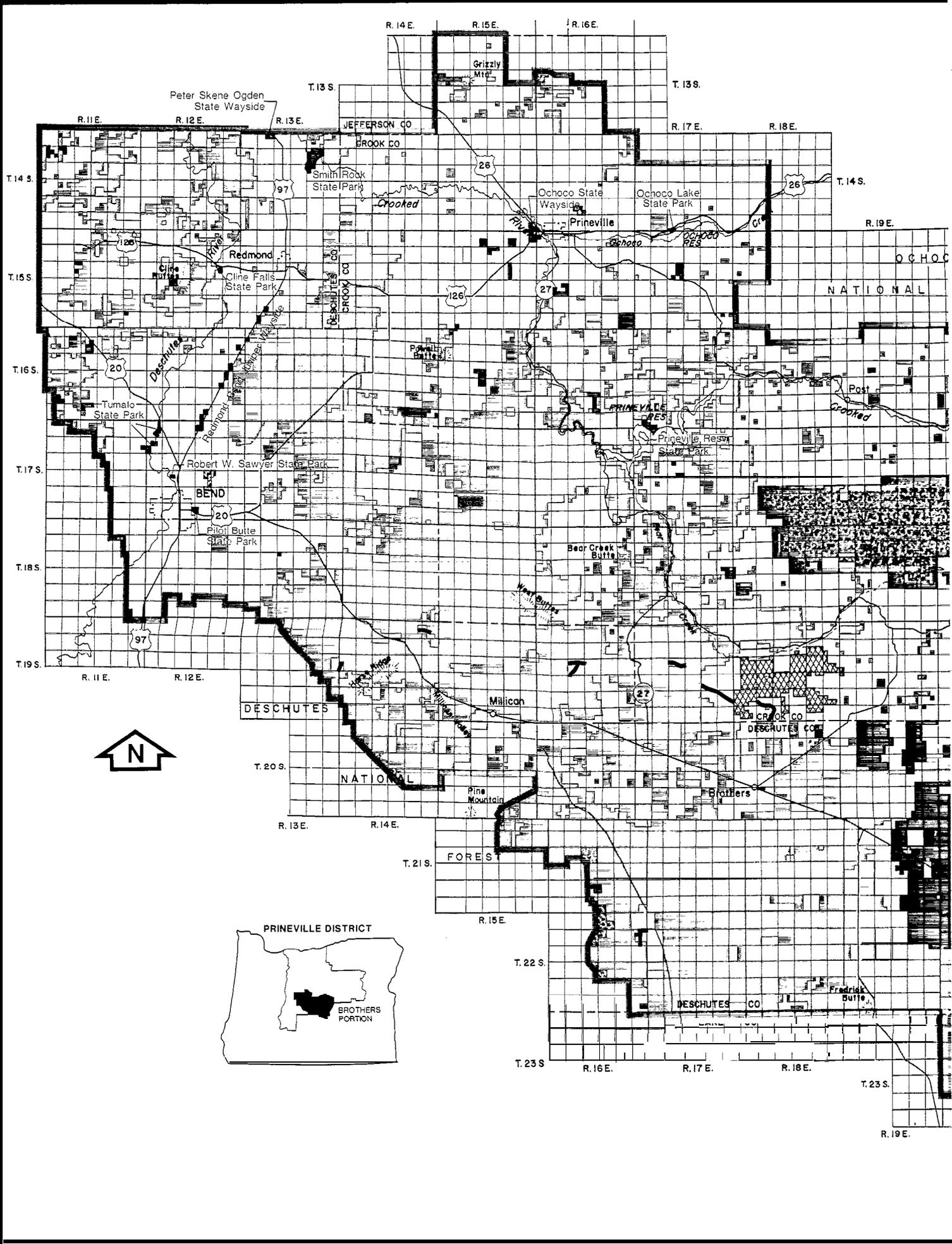
- it is required to achieve disposal objectives on a timely basis, and where disposal through exchange would cause unacceptable delays; or
- the level of interest in a specific tract indicates that competitive bidding is desirable for reasons of fairness; or
- disposal through exchange is not feasible

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.

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.



Dry River Gorge at Horse Ridge.



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 not to exceed 25 percent of the total value of the lands transferred out of Federal ownership.

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.

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.
- (2) The use is compatible with historical use on adjacent private lands.
- (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 would be continued. This would total 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:

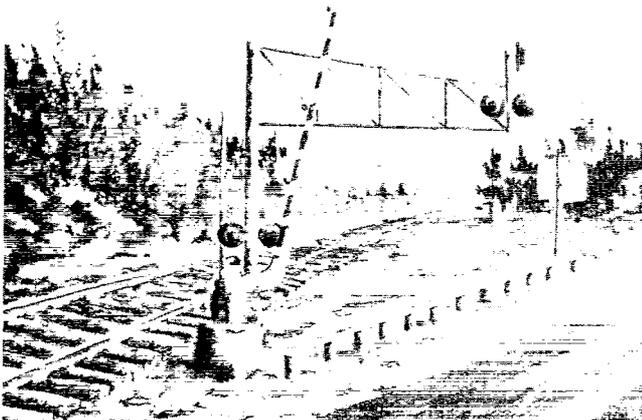
1. BLM/Other Federal Jurisdictional Transfers;
2. Transfers to State and Local Agencies (R&PP and other actions);
3. State Exchanges
4. Private Exchanges;
5. Sales and Agricultural Leases
6. Desert Land Entries

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.



Railroad Crossing of US. Highway 97 at Wickiup Junction near LaPine.

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.

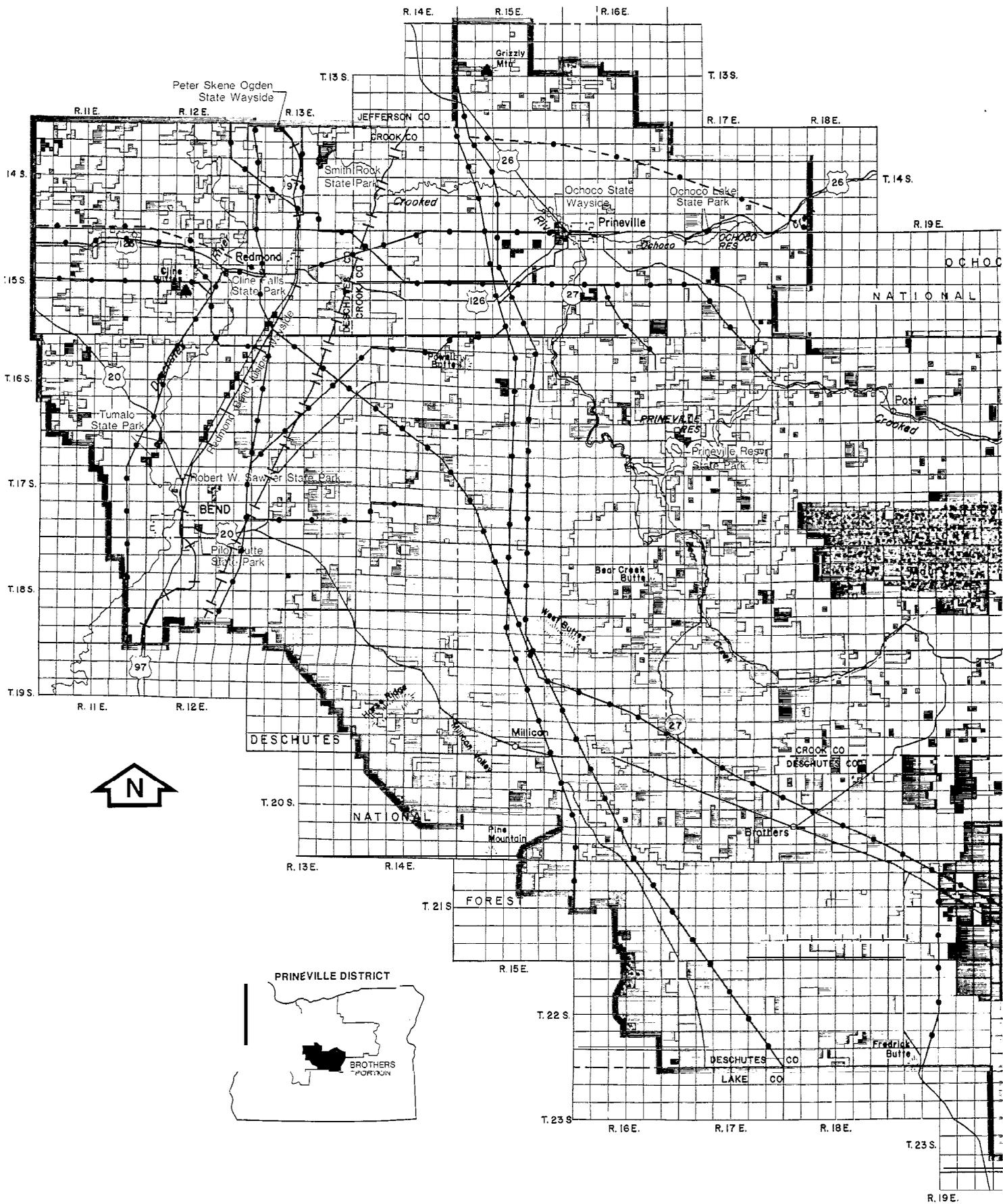
All utility/transportation corridors identified by the Western Regional Corridor Study are currently occupied and will be designated without further review. The corridors are displayed on Maps 7 and 8.

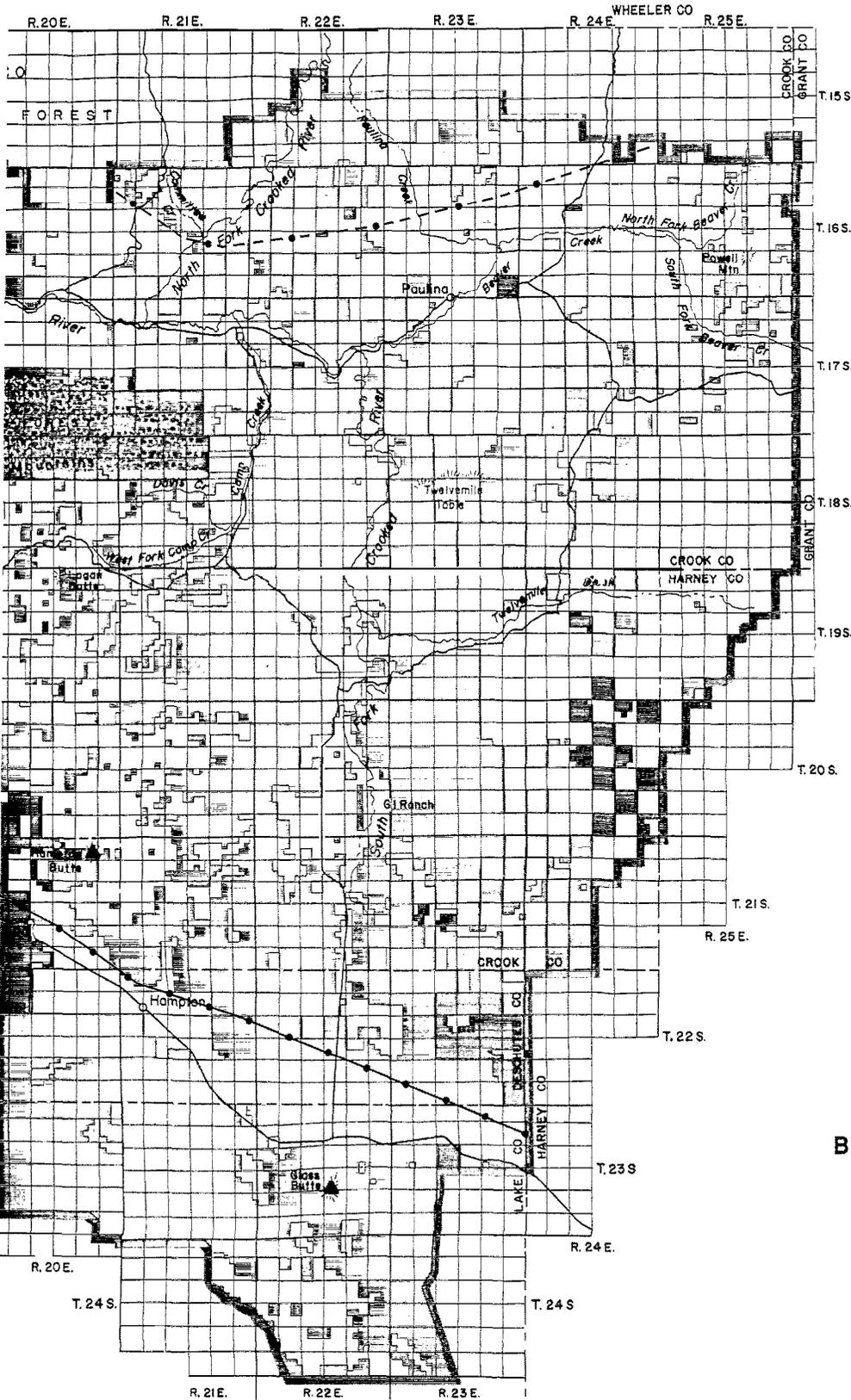
Corridor widths vary depending on the number of parallel facilities, but are a minimum of 2,000 feet (1,000 feet either side of existing centerlines) unless adjacent to exclusion areas described below. Applicants will be encouraged to locate new facilities (including communication sites) adjacent to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

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. Inventoried wild and scenic river segments will also be considered exclusion areas unless released by the Secretary. 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.





- H — Pipeline
- + — Railroad
- Powerline
- - - - Proposed Powerline
- A Developed Communication Sites

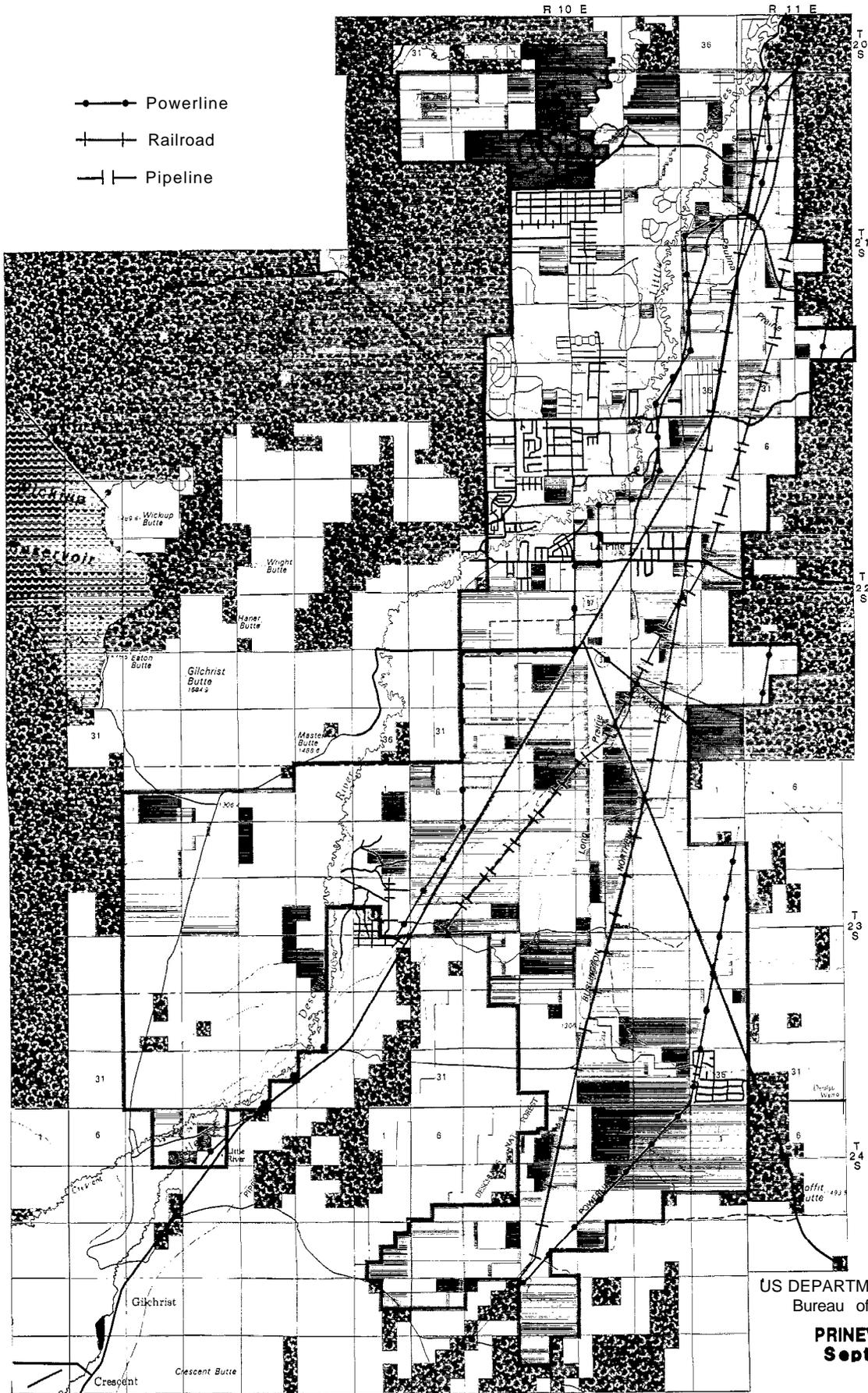
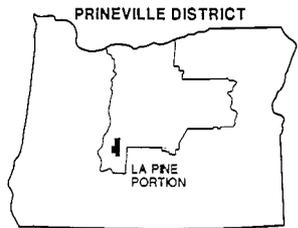
US DEPARTMENT OF THE INTERIOR
Bureau of Land Management

PRINEVILLE DISTRICT
September 1988

BROTHERS/LA PINE PLANNING AREA

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

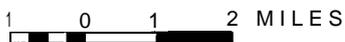
-  Powerline
-  Railroad
-  Pipeline



US DEPARTMENT OF THE INTERIOR
Bureau of Land Management

PRINEVILLE DISTRICT
September 1988

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



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.

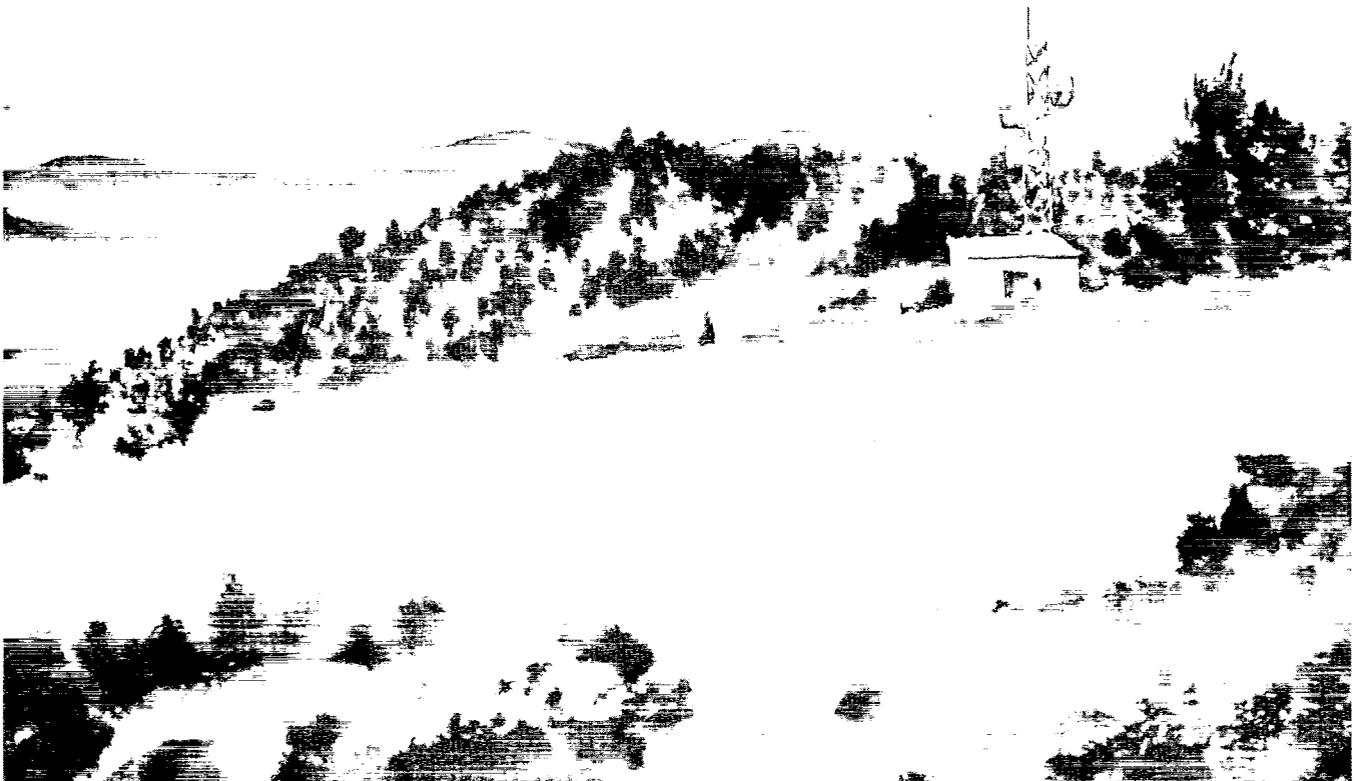
Each right-of-way or permit shall reserve to the BLM District Manager the right to issue additional rights for compatible uses on or adjacent to the subject permit.

Implementation Priorities

Right-of-way applications will be processed on 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.



Communication Site on Griuley Mountain.

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 6 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.

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 would 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 would 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, would be expected to occur in the LaPine portion for 30 to 40 years. (Note to reader: Table 22 in the Draft RMP/EIS (page 57) has been revised and reprinted as Table 7 in this document. It 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 would be managed for posts, poles and commercial firewood. Woodlands totaling 156,000 acres in the Brothers portion would 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 8 summarizes the proposed forestland and woodland harvest levels for the entire planning area.

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.

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

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

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

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

³Other values include wildlife habitat, riparian areas and visual quality.

Table 7. 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 ¹	
Visual (Highway Corridors)	4,621
Wildlife (Big Game Travel Corridors)	9,446

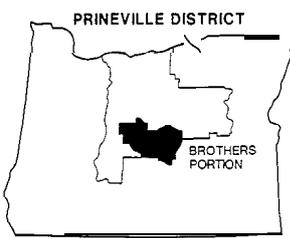
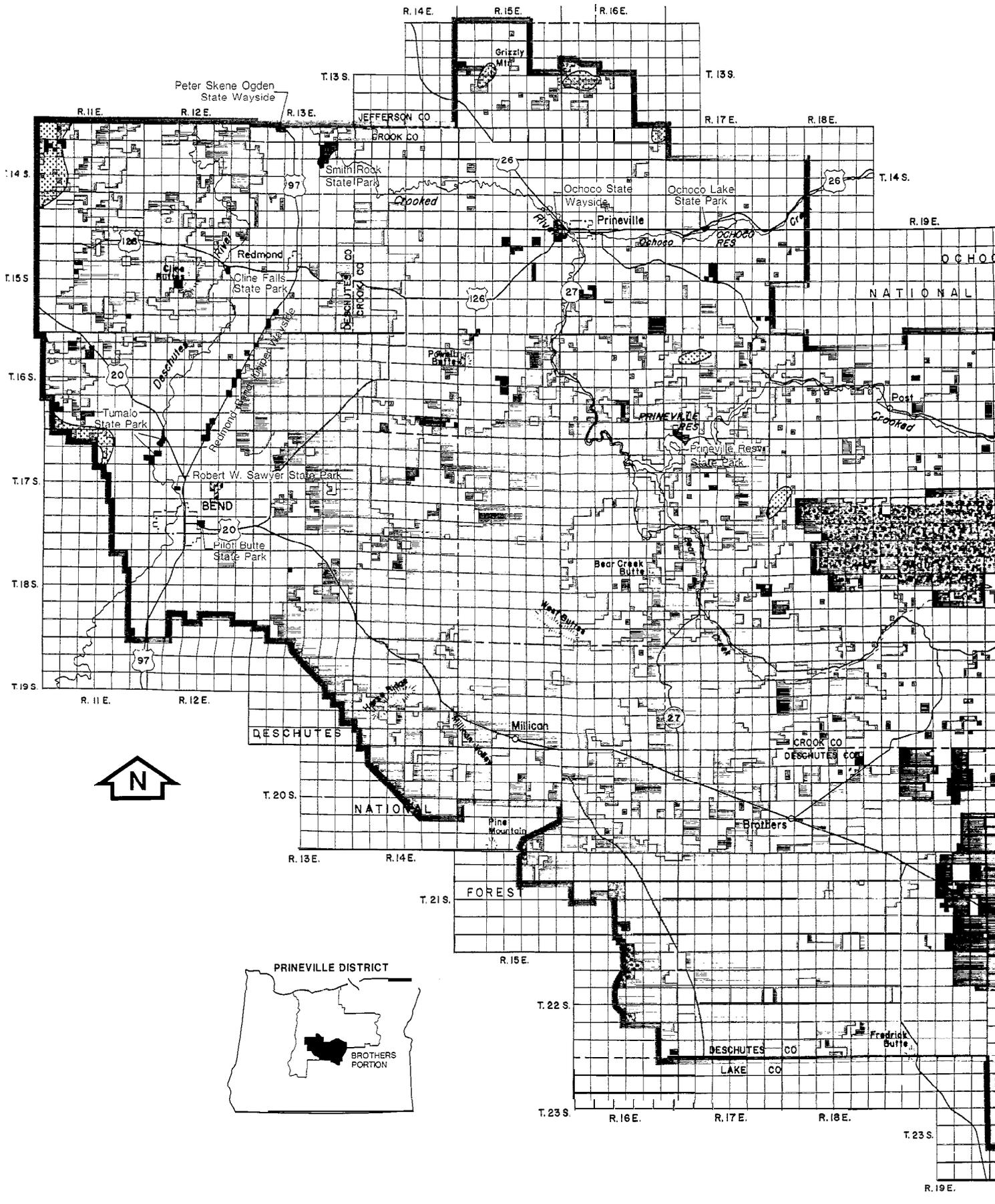
¹Reductions in harvest volume will occur to accommodate other resource values.

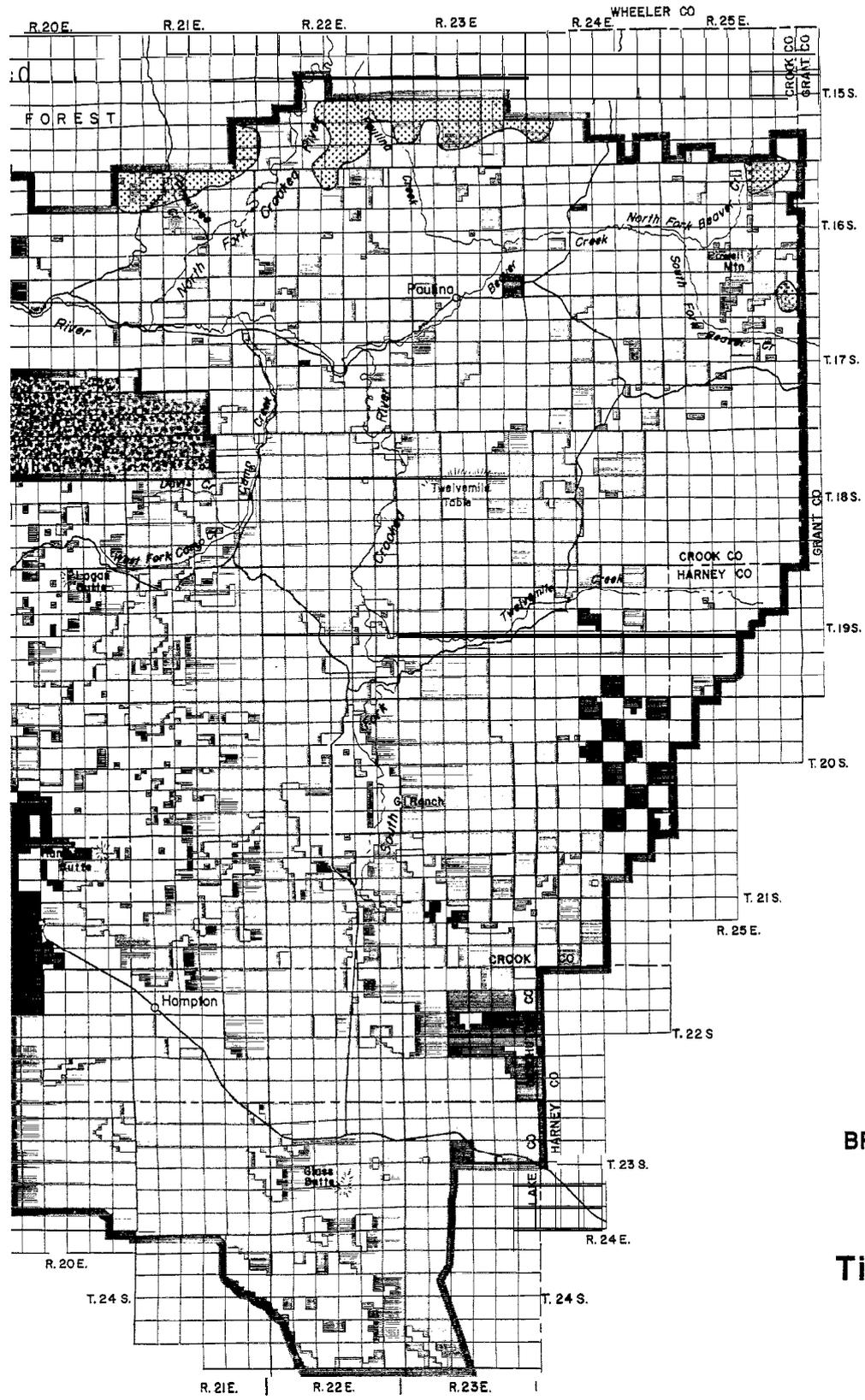
Table 8. Forestland and Woodland Harvest Levels Under the Proposed Plan, Brothers/LaPine Planning Area

	LaPine Portion		Brothers Portion	
	Forestland	Woodland	Forestland	Woodland
Approximate annual harvest	up to 14 MMbf	2,500 cords	00.5 MMbf	2,000 cords
Approximate total harvest during the 15-year life of the plan	30,000	50 MMbf	37,500 cords	7.0 MMbf
Harvest period (years)	15	4	15	15



Woodcutting in LaPine.





 Forestland Available for Intensive Production of Forest Products

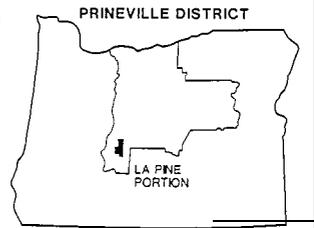
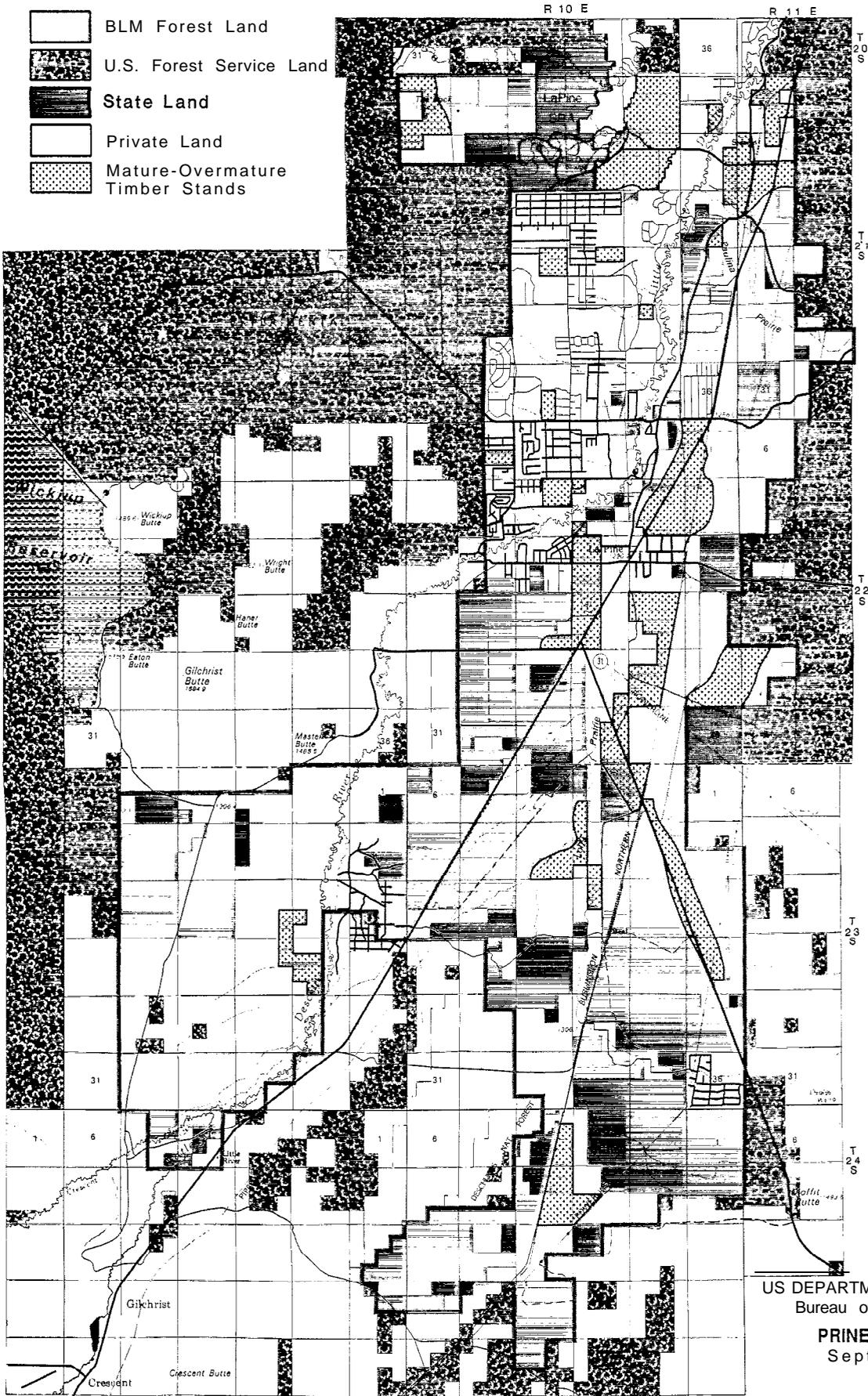
US DEPARTMENT OF THE INTERIOR
Bureau of Land Management

PRINEVILLE DISTRICT
September 1988

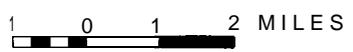
BROTHERS/LA PINE PLANNING AREA

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
September 1988



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



Timber Harvesting in LaPine.

Forestland would 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 would 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 would 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, seedings, 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 would occur where significant impacts to wildlife may result from uncontrolled vehicle access.

Timber Harvest

Cutting areas would 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 would 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, would 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 would include clearcutting, selection, seed tree and shelterwood systems. The primary regeneration cutting methods used would be the seed tree and selection systems.

Clearcutting would 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;
3. Aesthetic values outweigh other considerations.



Logging Ponderosa Pine in Ochoco Mountains.

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

Logging activities would 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 would be avoided.

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

Landings would 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 would be on firm ground above the high water level of any stream. Landing locations would be avoided on unstable areas, steep side hill areas or areas which require excessive excavation.

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

Debris entering a stream would 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 would be accomplished in a manner conducive to reforestation and advantageous to wildlife. Slash would 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

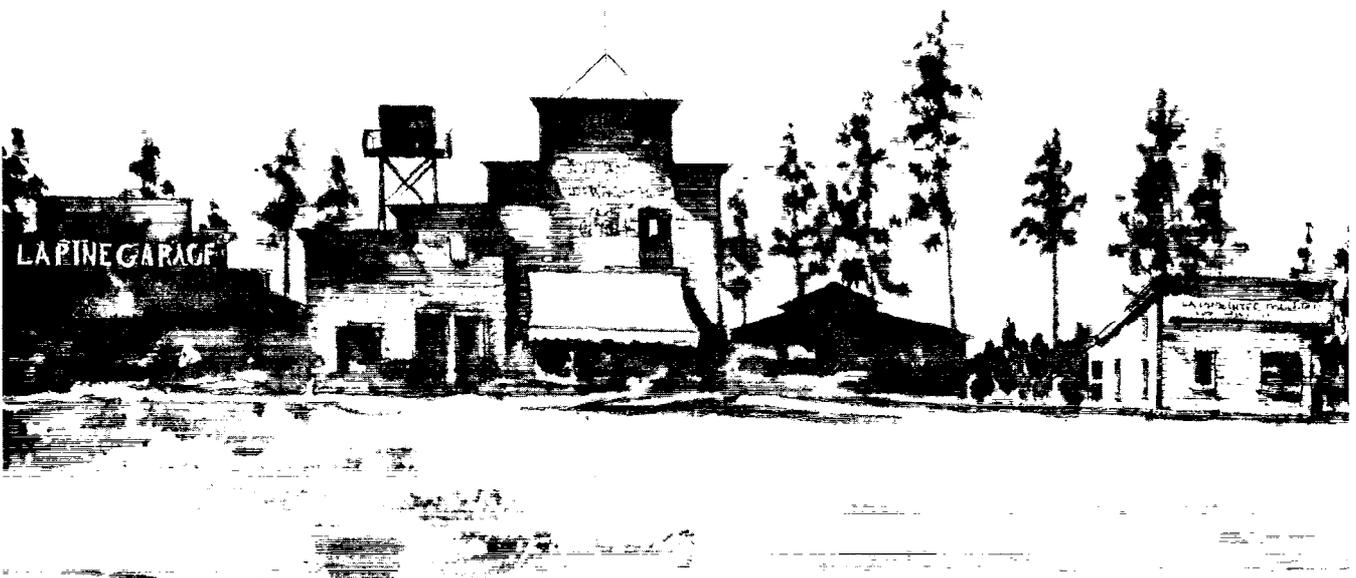
Revise and update existing timber management plan to reflect management direction of the resource management plan.

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

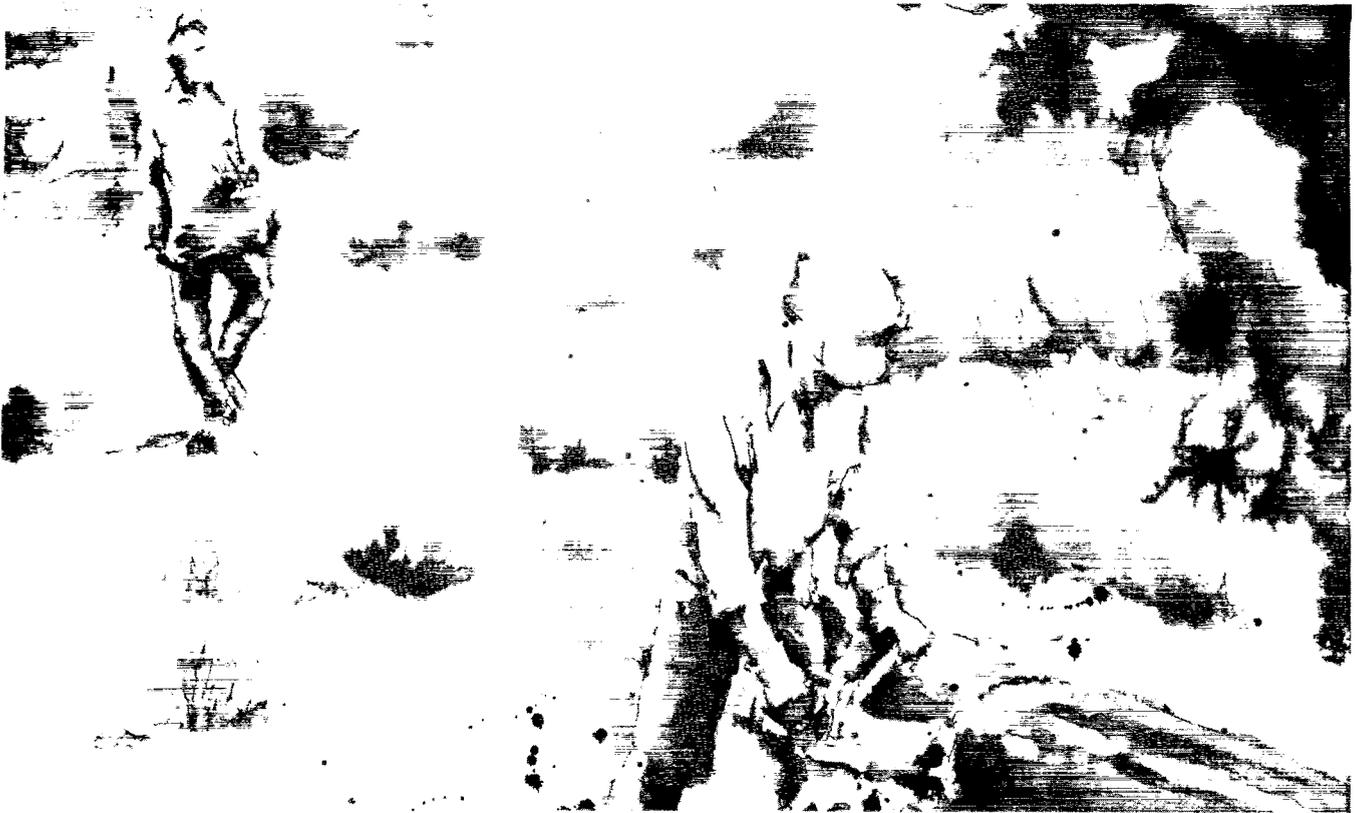
Medium

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 would 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 would 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 approximately 250,000 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 8340. 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 would 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 would result from off-road vehicle use would either be limited or closed. Table 9 and Map 11 display those areas to be limited or closed to off-road vehicle use under the proposed plan. Map 12 shows the proposed boundary of the Millican Valley Off-Road Vehicle Area which would be increased from 60,000 acres to 65,000 acres in size.

Table 9. Areas Limited or Closed to Off-Road Vehicle Use Under the Proposed Plan¹, Brothers/LaPine Planning Area.

Area Name	Public Acres	
	Limited ²	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	4053
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	520	0
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
Total	267,076	10,722

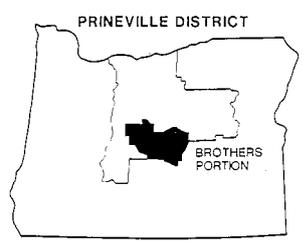
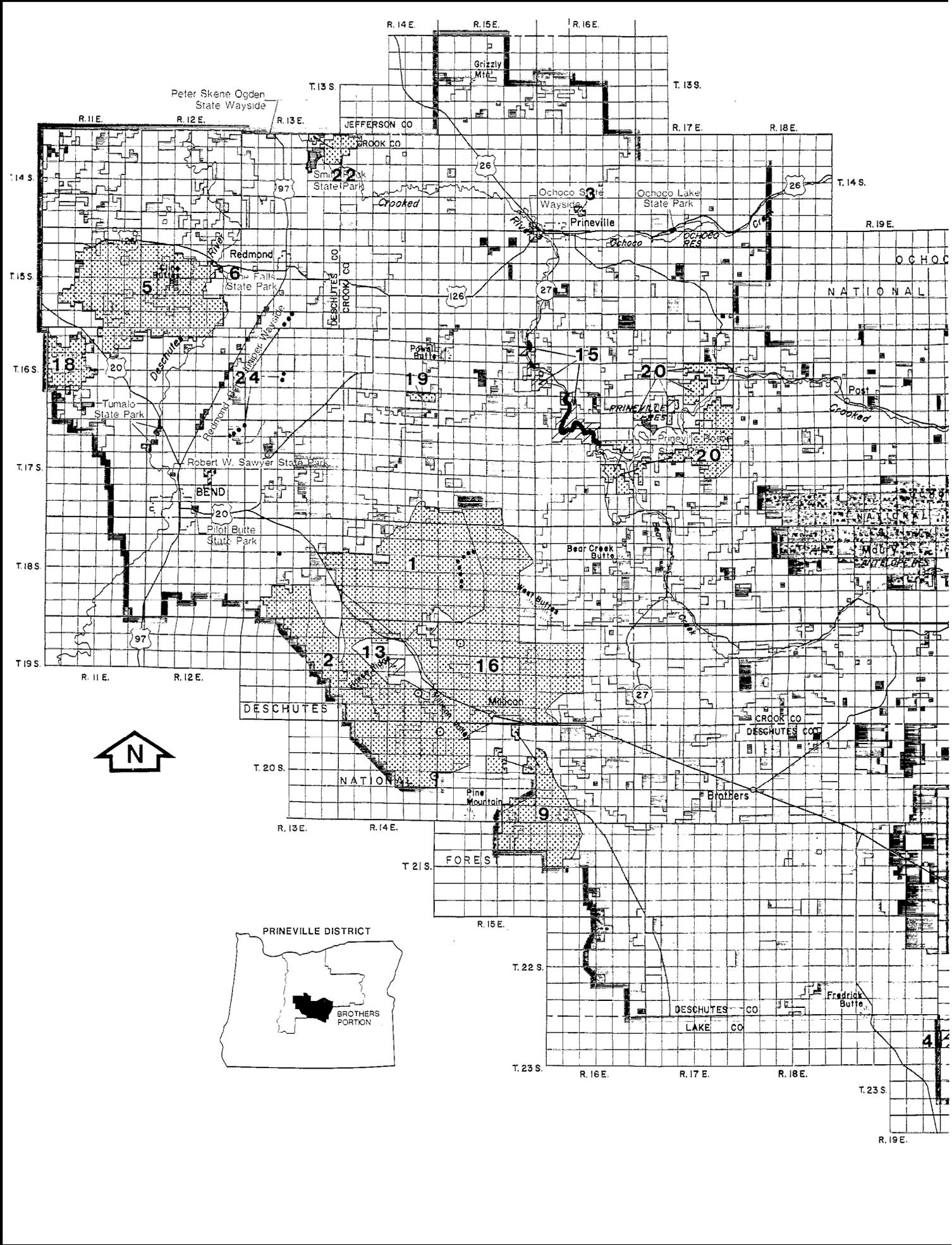
¹Totals include 121,363 acres designated as WSAs.

²In 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.

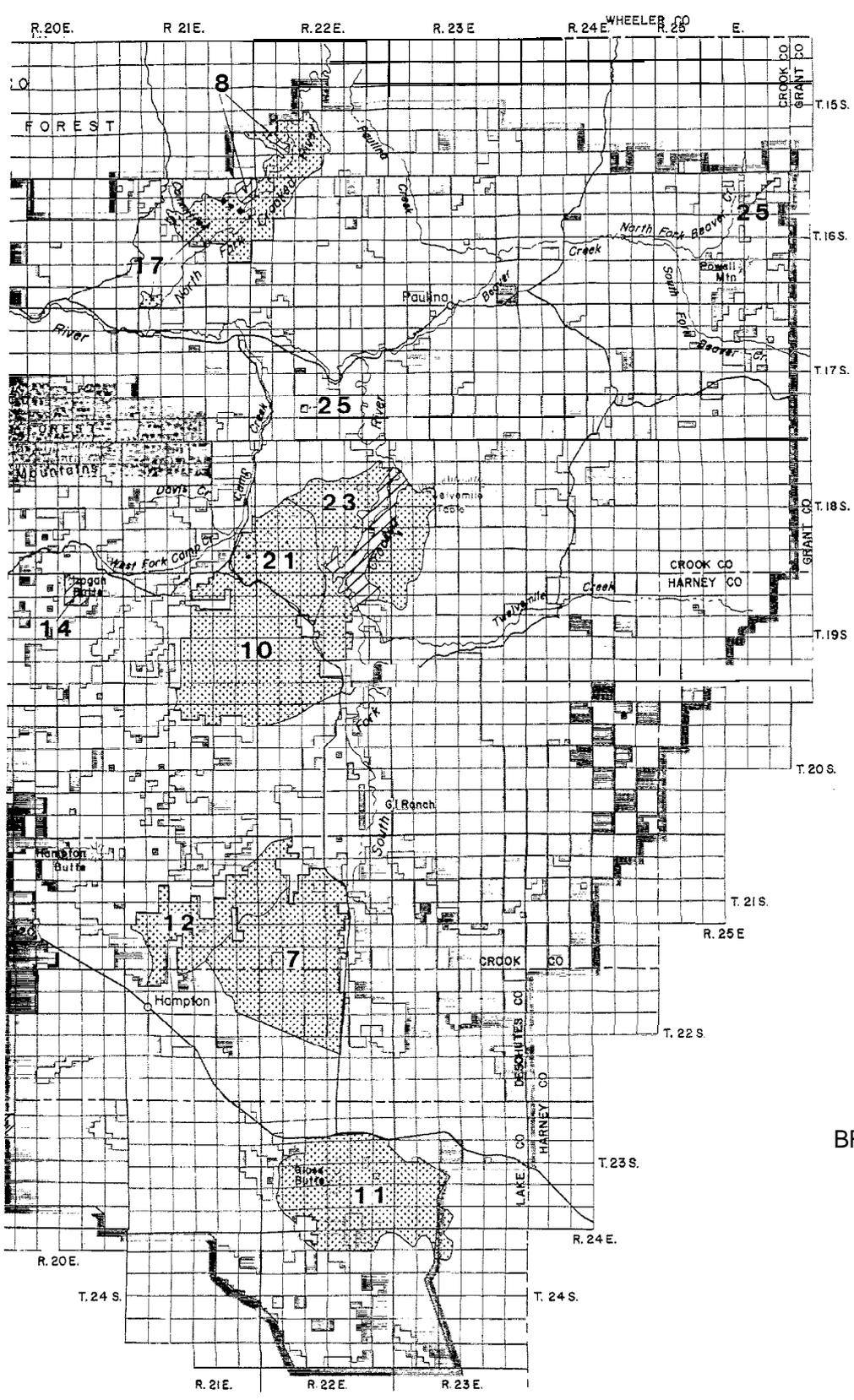
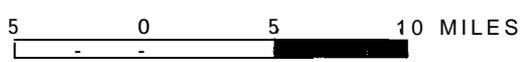
³Includes public lands outside of wilderness study area boundary.



Motorcycle Racers at Millican Valley.



Map Number	Area Name
1	Badlands Wilderness Study Area
2	Barlow Cave
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
September 1988

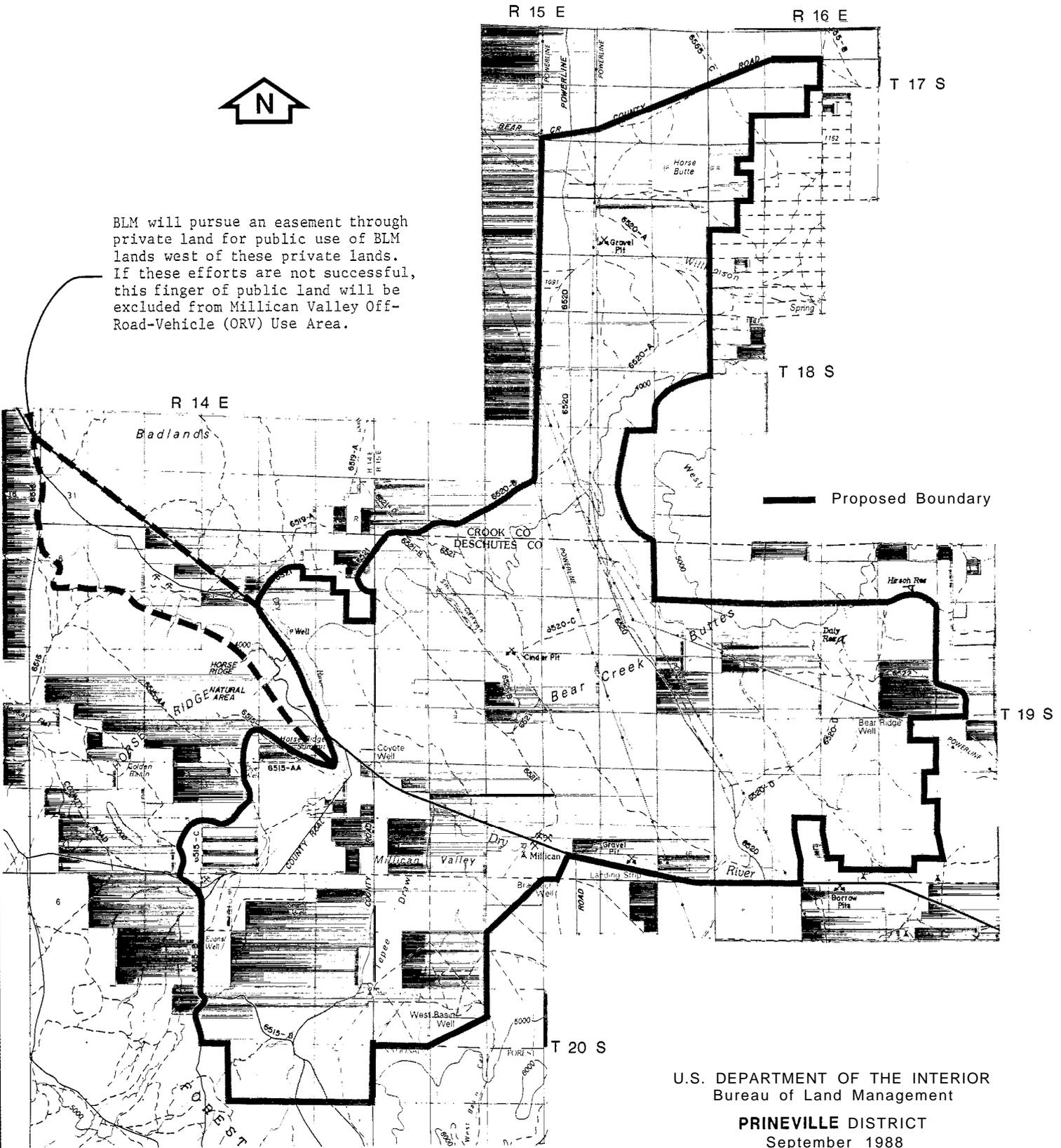
BROTHERS/LA PINE PLANNING AREA

MAP 11

Off Road Vehicle Area Designation Brothers Portion



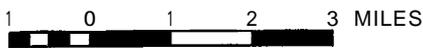
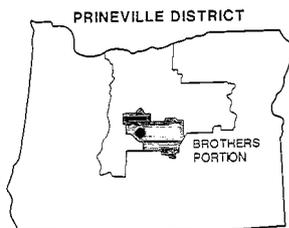
BLM will pursue an easement through private land for public use of BLM lands west of these private lands. If these efforts are not successful, this finger of public land will be excluded from Millican Valley Off-Road-Vehicle (ORV) Use Area.



U.S. DEPARTMENT OF THE INTERIOR
Bureau of Land Management
PRINEVILLE DISTRICT
September 1988

**BROTHERS/LA PINE
PLANNING AREA**

**MAP 12
Millican Valley
Off Road Vehicle Area
Brothers Portion**



Rockhounding

Management Direction

The areas shown on Table 10 and Map 13 would be managed to provide for continued availability of rockhounding opportunities.

Table 10. Management of Rockhounding Areas Under the Proposed 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
Total	51,280

The proposal would be made to the Secretary of the Interior to withdraw 13,000 acres in the Congleton Hollow/Liggett Table area from entry under the mining laws for chalcedony type material.

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 would be implemented consistent with funding availability and would be monitored at least once every 6 months for compliance with these designations. Specific actions such as fencing, barricading, patrols and issuance of citations would be taken to prevent significant adverse impacts from occurring on these lands.

Management actions would also be taken to ensure that public lands having high or sensitive visual qualities would be maintained or enhanced. A monitoring plan containing specific visual standards,



Rockhounding at Congleton Hollow.

guidelines and periodic field review of these areas would also be developed to ensure protection and maintenance of visual qualities.

Recreational resources would be monitored to determine trends or changes in land use. The monitoring tools would 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 would 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.
- 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.
- Develop recreation area management plan for Prineville Reservoir/Lower Crooked River 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.

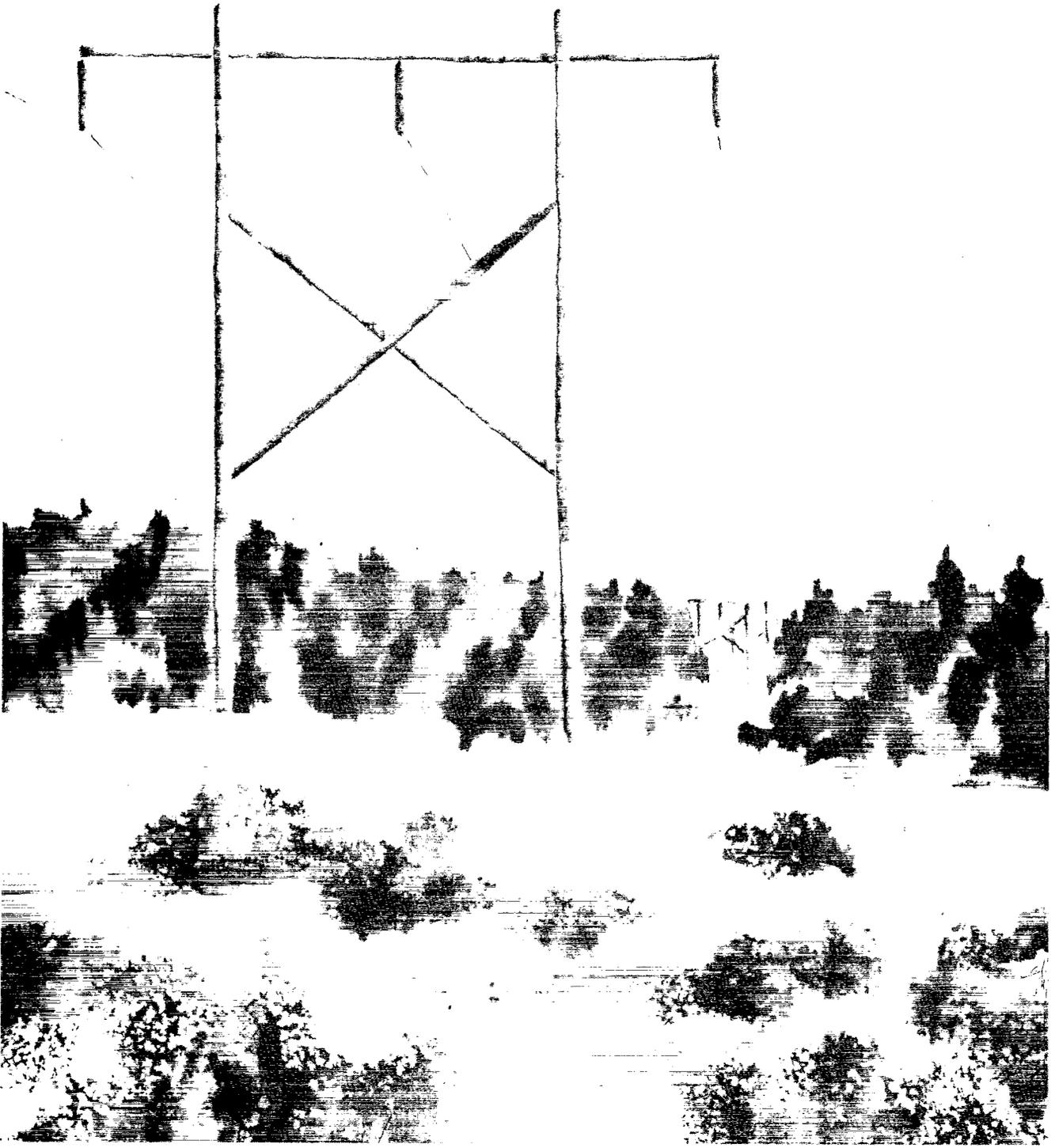
Support

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.

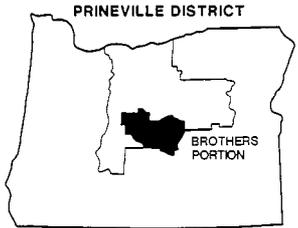
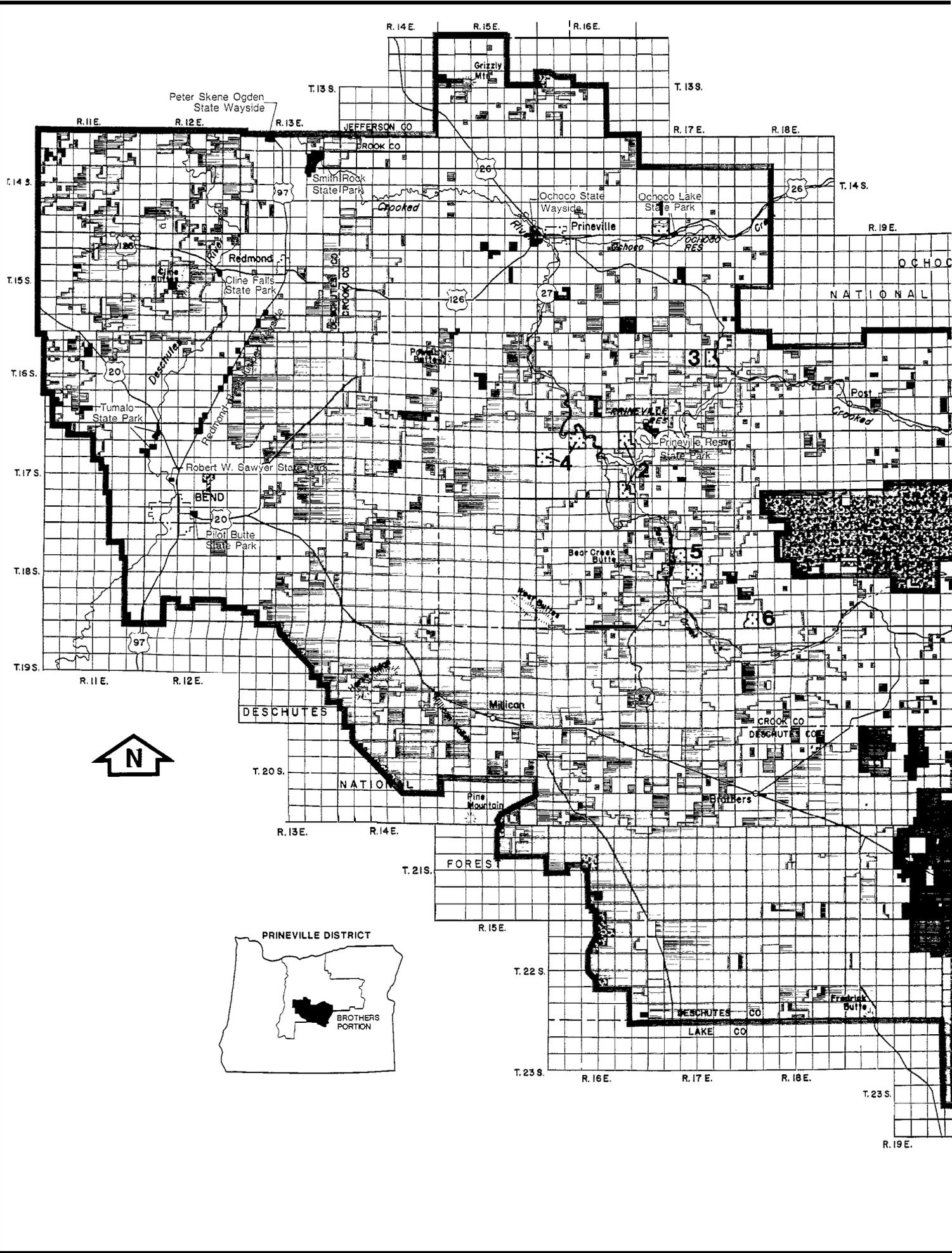
Support will also be needed to conduct cultural and threatened and endangered species resource evaluations in association with the issuance of special recreation permits. Acquisition of legal access to public land will be needed to assure public access for recreational purposes. Cadastral survey would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

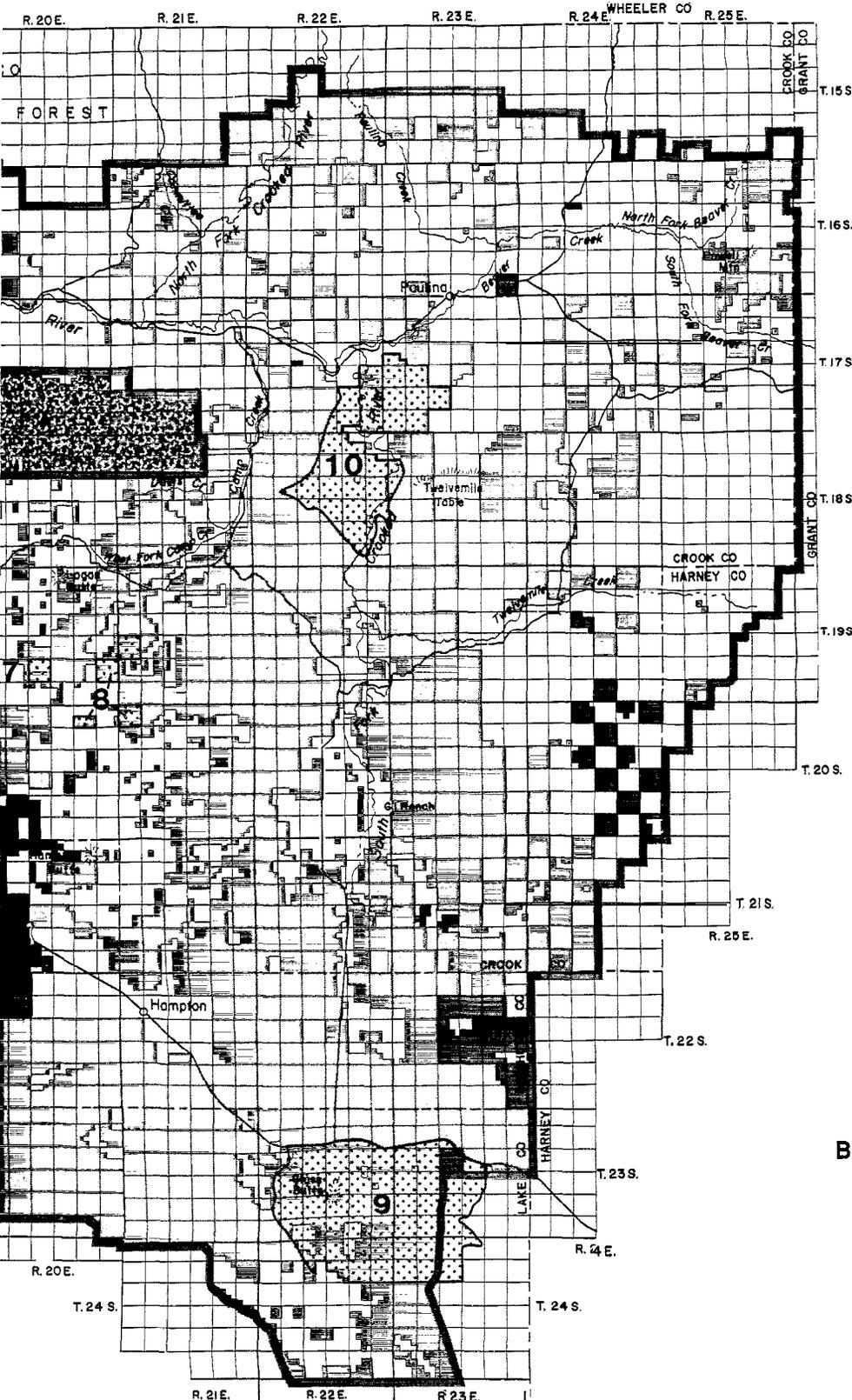
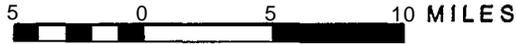


Hikers in the South Fork of the Crooked River Canyon.



Powerline Right-of-way near Prineville.





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
September 1988

BROTHERS/LA PINE PLANNING AREA

MAP 13
Rockhounding Areas
Brothers Portion

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 11 and Map 14 describes those areas.

Management Direction

Table 12 summarizes management direction for each area of critical environmental concern under the proposed plan.

Implementation and Monitoring

Monitoring will be implemented to ensure that the values which caused the areas to be designated are protected from any form of degradation. Specific monitoring plans will be developed as a part of each individual ACEC management plan.

Implementation Priorities

High

- Develop ACEC management plans for all designated 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.



Yellow Bells.

Table 11. Areas Proposed for Designation as Areas of Critical Environmental Concern, Brothers/LaPine Planning Area

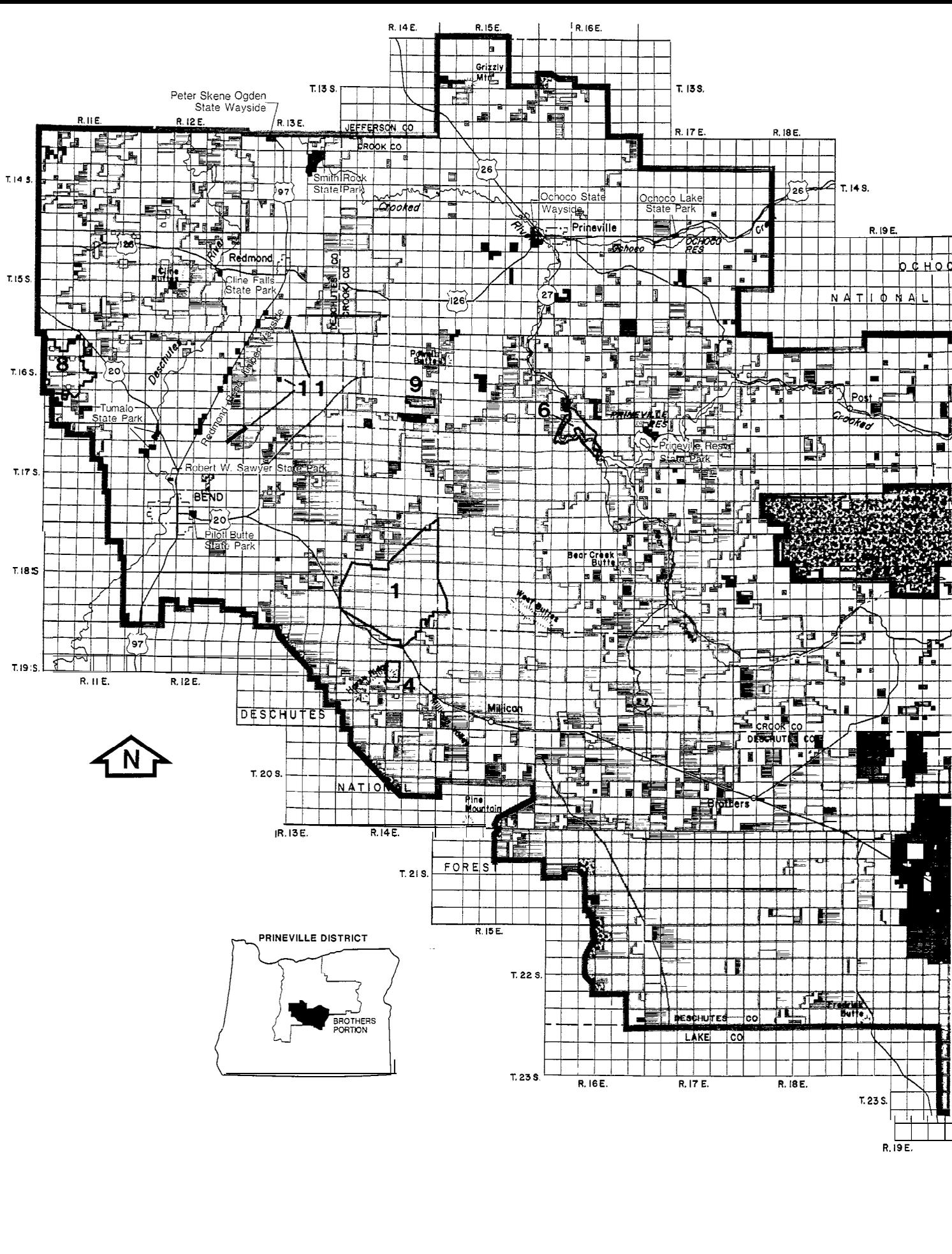
Area Name	General Location	Special Value	Public Land ¹ Acres
Badlands	12 mi east of Bend	Primitive recreation area, contains interesting basalt formations, juniper forest, pictographs	16,860
Benjamin ³	7 mi SW of Hampton	Fills high priority RNA cell need for the High Lava Plains/Columbia Basin province (Terrestrial Cell No. 7 Western juniper/Idaho fescue community)	640
Forest Creeks ^{2/3}	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 ⁴	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*	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

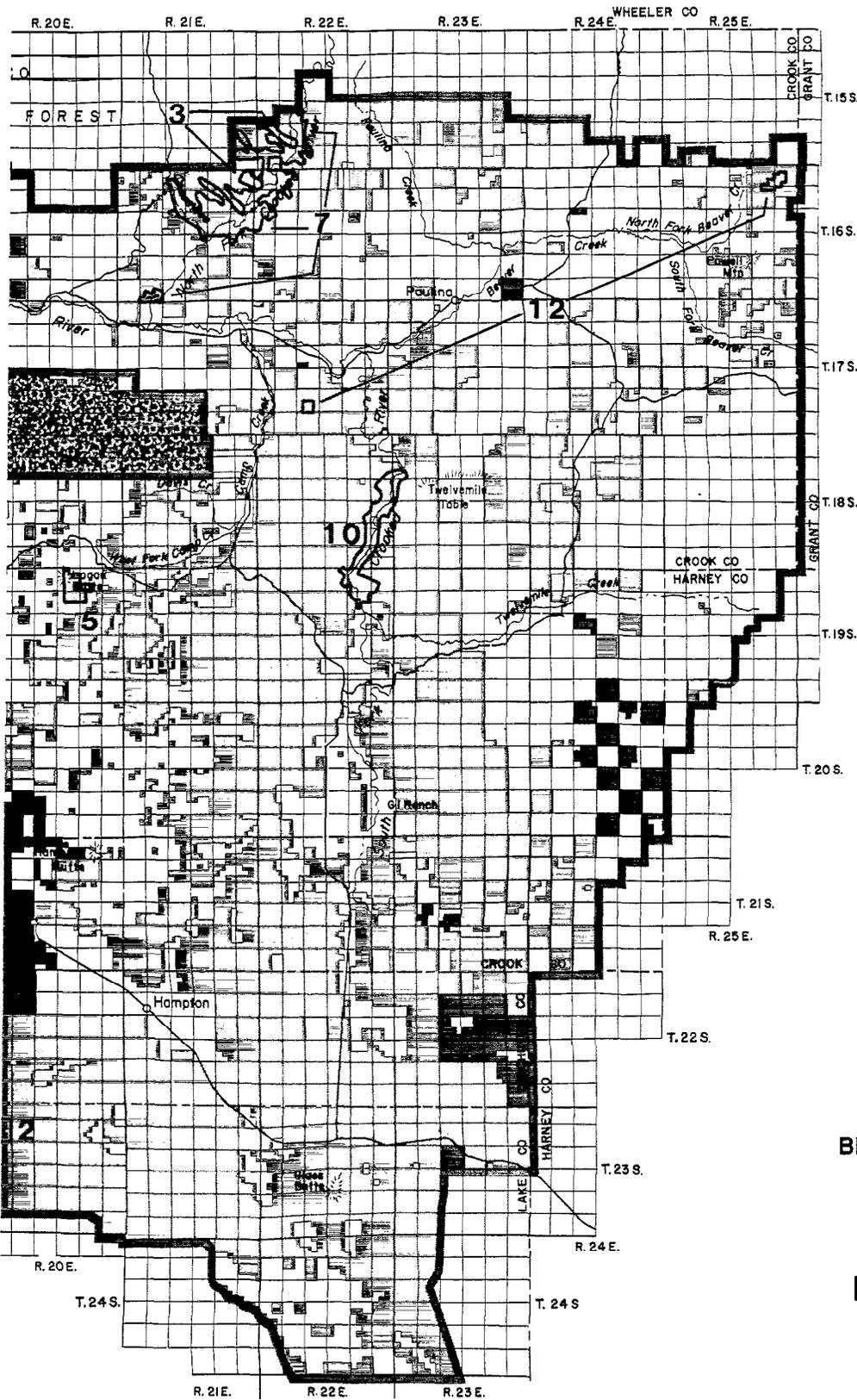
¹Based on interdisciplinary team recommendation and district manager decision

*Adjacent to but separate and distinct from North Fork Crooked River area

³Proposed as Research Natural Area

⁴Existing Research Natural Area/National Natural Landmark






 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
 September 1988

BROTHERS/LA PINE PLANNING AREA

MAP 14
Areas of Critical Environmental Concern
Brothers Portion

Table 12. Management Direction for Areas of Critical Environmental Concern Under the Proposed Plan.¹

Area Name	Acres Designated	Land Tenure	Timber Harvest	Firewood Harvest	ORVs	Rock Hounding	Wild Horses	Livestock Grazing	Fire Suppression	Prescribed Fire	Mineral Development	Rights-of-Ways
Badlands	16,680	P		P	R	R	-	R	R	R	R	P
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	P	P
Logan Butte	802	P		R	P	P	-	NC	NC	R	R	P
L. Crooked River	2,830	P		P	P	R	-	R	NC	R	R	P
N. Fork Crooked River	6,737	P	P	P	R ²	R	-	R	R	R	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
S. Fork Crooked River	3,140	P		P	P	P	P	R	R	P	R	P
Wagon Road	160	P		P	P	NC	-	R	NC	P	R	P
Winter Roost	320	P	P	P	P	NC	-	NC	NC	P	R	P

¹For purposes of analysis only. Specific management guidelines will be included in the forthcoming Brothers/LaPine RMP Record of Decision, based on more detailed analysis and public comment. The symbols used here are:

NC- no change from existing situation

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

22,522 acres R and 1,380 acres P



North Fork of the Crooked River.

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 would reduce numbers into the herd size limits based on observed reproduction and replacement success ratios. At each gathering, all stallions would be removed and replaced with new bloodline stock from the BLM Burns Wild Horse facility.

The proposed 25,000 acre herd management area would 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 would 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 would be made to wild horses (132 AUMs in the Dagus Lake Allotment and 168 AUMs in the Camp Creek Community Allotment).

(Note to reader: the proposal to retain and manage the herd area differs from the preferred alternative in the Draft RMP/EIS which would have removed all horses. It was determined that if the horses were excluded from the South Fork Canyon Pasture to protect riparian values and allowed to roam throughout their historic herd range, that forage could be allocated to support a herd of 10 to 25 animals and impacts of the horses could be reduced to an acceptable level).

Implementation and Monitoring

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

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

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

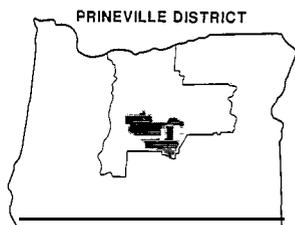
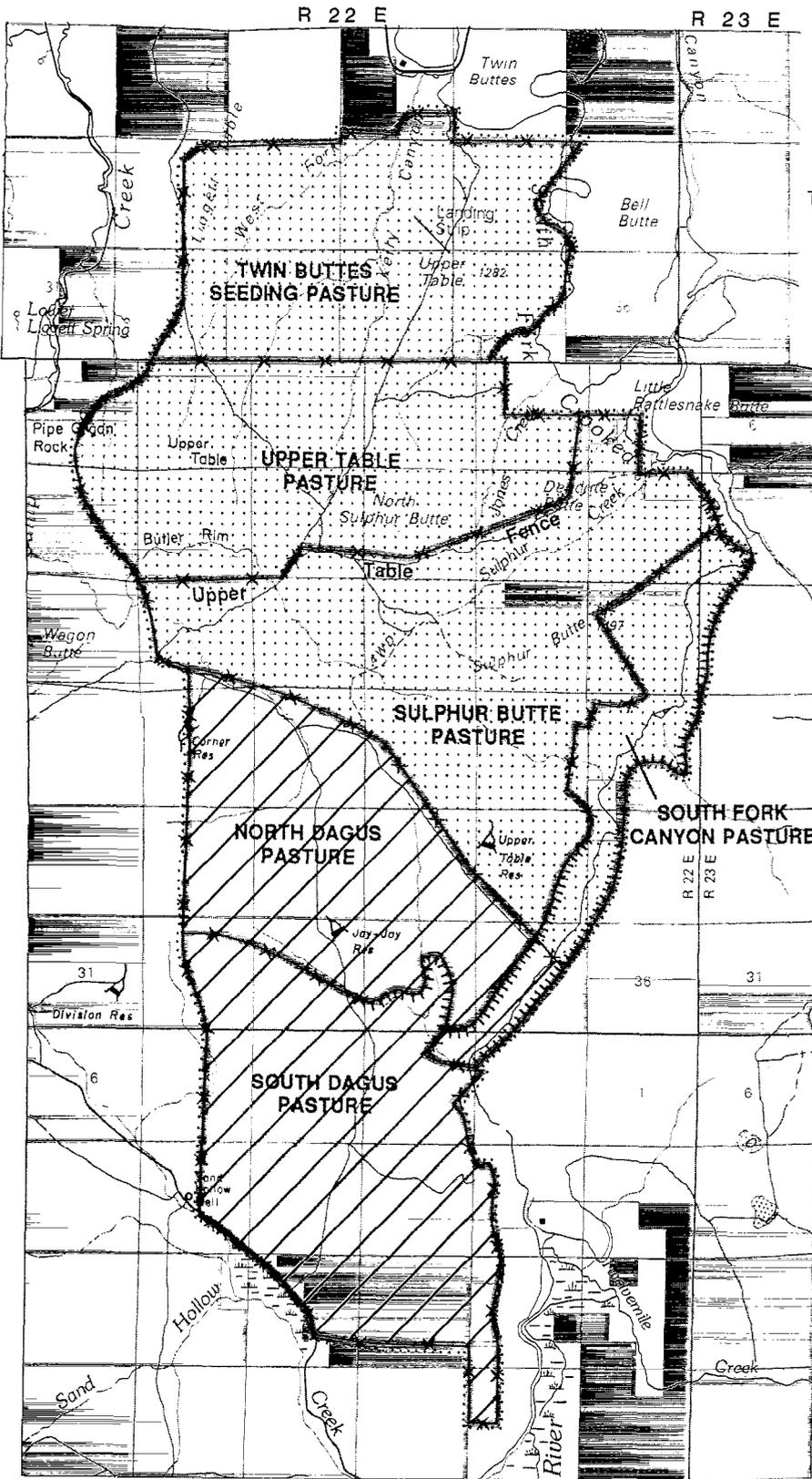
Maintain or improve forage and water requirements within the proposed herd management area.

Support

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



Wild Horses near Sulphur Butte.



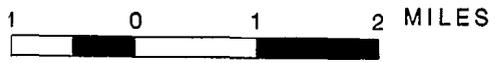
T 17 S

T 18 S

T 19 S

- 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
 September 1988
 BROTHERS/LA PINE
 PLANNING AREA



MAP 15
Wild Horse Range
Brothers Portion

Table 13 Grazing Management Program, Brothers Portion

ALLOTMENT NO.	NAME	MANAGEMENT2 GOALS	MGT. ³ CATEGORY	ACRES		LIVESTOCK		GRAZING SYSTEM ⁴	
				BLM	WILDLIFE	ACTIVE	PROPOSED	EXISTING	PROPOSED
0001	Alaska Pacific ¹	A	I	2172	30	123	123	S/S	D R
0003	Hampton ¹	A,B,E,F;G	M	57513	152	6648	6684 ⁷	RR;DR	RR;DR
0004	Miners Flat ¹	A,B,E;G	M	2908	52	201	201	RR;DR	RR;DR AMP
0006	Post ¹	A	M	1720	22	98	1185	S/S;DR	D R
0007	River	D	C	1707	2	0	0	Rest	Rest
0009	Cold Springs ¹	A,B;C;D;G;H	I	37134	84	2142	2253	RR	RR;DR
0012	Windmill	B,E;F	C	920	4	70	70	DR	D R
0013	Sheep Mtn. Comm. ¹	A,B;C;D	M	8332	37	288	383	RR;DR;EX	RR;DR;EX
0014	Sheep Mtn. Indiv. ¹	A,B;C;D	I	1820	18	254	254	DR;FFR	D R
0016	Indian Creek ¹	A,B;D	I	1831	41	81	81	DR	D R
0017	Bonnieview	B	C	812	20	109	60	FFR	D R
0018	Juniper Springs	A,B;C;E;G	I	1825	44	185	185	S/S	R R
0019	Ibex Butte	A,B;C;E;G	I	12230	112	910	910	S/S	R R
0020	tower 12 Mile Table	A,B;C;E;F;G	I	9722	91	884	684	S/S	R R
0021	Mid Fk Twelvemile Ck.	B	M	1795	14	193	193	D	D R
0022	Laughlin ¹	A,B;E;G	I	7222	18	4527	452	E	D R
0023	Angell	A;E;G	I	1517	11	141	141	E;FFR	D R
0024	Upper Buck Creek ¹	A,B;E	I	8991	112	624	824	DR;R	D R
0025	Buck Creek Flat ¹	A,B;E;F	I	5850	47	271	271	DR	W
0026	Humphrey ¹	A,B;D;E	M	4936	103	635	8%	DR;FFR;E	DR;FFR;E
0027	Upper Pocket Comm. ¹	A	M	4853	93	274	274	DR	DR AMP
0028	Ferian	B	C	446	11	30	30	FFR	D R
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	Butler Creek	B;E;G	C	70	0	5	5	DR	D R
0036	Delore	B	C	80	10	12	12	S/S;F	D R
0037	Foster, V.	B	C	160	4	15	15	FFR	D R
0038	Cave ¹	A;D	I	3035	23	198 ¹	227	S/S	D R
0039	Paulina ¹		M	1403	18	577	57	DR;S/S;F	D R
0041	Layton ¹	A	M	752	24	657	85	S/S;F;FFR	D R
0042	Owens Water Comm. ¹	A,B;C	I	4389	15	241	241	S/S	D R
0043	Barney Buck Creek ¹	A,B;E;F;L	I	5150	86	242	242	DR	W
0044	G.I. ¹	A,B;C;E;F;G	I	136346	285	11166	11166	DR	DR;RR;EX
0045	East Maury ¹	A;H	I	5133	58	295	295	E;S/S;F	DR
0047	Lister ¹	A;D	I	28853	92	2011 ⁷	2011	RR;DR;EX;E	RR;EX;E AMP
0049	McCullough	B	C	183	2	10	5	FFR	D R
0050	Rabbit Valley ¹	A	I	15160	331	548	548	S/S;EX	DR;EX
0051	Paulina Creek ¹	A;D	I	2822	85	125	125	S/S	D R
K-152	Miller	B	C	120	2	22	13	E	D R
0053	North Fork	A;D	M	11848	244	811	811	RR;DR;EX;FFR	DR;RR;EX
0054	Beaver Creek	A	M	880	19	82	82	E;S/S;F	D R
0056	Dag's Lake ¹	A,B;D;E	M	11401	26	487	487	RR	D R
0058	Coyote Springs	A	M	4418	89	404	404	E	D R
0059	Dry take	A;B	M	610	4	33	33	E	D R
0060	Flat Top Butte	A;C	I	1708	31	80	80	E	D R
0062	Bennett Field	B;D	M	1314	38	88	88	S/S	D R
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	D R
0069	Indian	A	C	160	1	11	11	FFR	D R
0070	Clover Creek ¹	A,B;C;H	I	8770	25	817	817	RR	R R
0071	Coffee Butte ¹	A	M	4288	27	468	468	S/S	S/S
0072	Miltenberger	B	M	1690	0	82	82	E	S D
0073	Birdsong Butte ⁸	B	C	240	10	15	15	S	DR

Livestock

Program Background

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 13 and 14 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 13 and 14 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 15 and 16 summarize the proposed grazing management program in the LaPine portion. Table 15 also lists the criteria used to determine which management category (I, M or C) each allotment would 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 reestablished. This forage has not been allocated. Priority allocation of this additional vegetation would be to first meet wildlife and riparian area objectives and then the remaining surplus forage would be allocated to livestock.

Table 13 Grazing Management Program, Brothers Portion (continued)

ALLOTMENT NO,	NAME	MANAGEMENT2 GOALS	MGT.3 A C R E S CATEGORY	FORAGE ALLOCATION (AUMS)			GRAZING SYSTEM4			
				BLM	WILDLIFE	LIVESTOCK ACTIVE PROPOSED	EXISTING	PROPOSED AMP		
0075	Weigand	B	C	160	2	15	15	FFR	DR	___
0076	West Pine Creek	B	C	481	3	45	45	FFR	DR	___
5001	Whitaker	B	C	120	1	7	7	E	S D	___
5002	Sanowski	B	C	40	1	10	10	E	S D	___
5003	Broadus-Carter	B	C	15	5	2	2	E	S D	___
5004	Lamb	B	C	63	5	6	6	E	S D	___
5006	Emmrich	B	C	107	5	0	20	E	S D	___
5007	Harsch	B	M	506	6	19	19	S/S	S D	___
5010	Harrington	B	C	80	0	2	2	S/S	S D	___
5018	Wierleske	B	M	892	5	49	49	S/F	S D	___
5022	Airport	B	M	597	4	49	49	E	S D	___
5624	Couch	B	C	768	7	0	30	E	S D	___
5029	Claypool	B	C	80	1	4	4	FFR	S D	___
5030	Keystone	B	C	296	4	30	30	FFR	S D	___
5031	Mayfield-Harris	B	C	1509	5	124	124	S/F	D R	___
5032	Barrett	B	C	238	4	24	24	FFR	S D	___
5050	Grey Butte	B	M	009	3	28	28	S/S	S D	___
5051	Sherwood Canyon	B	M	1117	5	51	51	S/S	S D	___
5052	Smith Rock	B	C	174	3	9	9	S/S	S D	___
5061	McWeizz	B	C	6065	0	0	348	E	S D	___
5064	Williams	B	C	763	26	44	44	S/S	D R	___
5065	Lower Bridge	B	C	5521	107	310	310	D	D R	___
5066	Pine Ridge	B	C	358	5	34	34	S/S	S D	___
5067	Fisher	B	C	389	4	0	14	E	S D	___
5068	Stevens-Fremont	B	C	285	5	0	46	E	S D	___
5069	Squaw Creek	B	C	192	4	0	17	E	S D	___
5070	Lafollette Butte	B	C	3875	54	0	258	E	D R	___
5071	Odin Falls	B	C	3869	40	0	252	E	S D	___
5072	Struss	B	C	2294	10	143	143	E	DR	___
5073	Cline Butte/Fryrear	G;H;J	M	11416	35	700	700	R	D R	___
5075	Desert Springs	B	M	1947	10	112	112	S/S	D R	___
5078	Home Ranch	G	I	3831	0	193	193	E	D R	___
5079	Whiskey Still	B	M	1034	4	111	111	E	D R	___
5080	Maston	B	M	3382	13	209	209	S/S	D R	___
5081	Paulus	B	C	152	4	14	14	E	S D	___
5082	Bull Flat	B	C	116	1	0	7	E	S D	___
5086	Lone Pine Canyon	B	C	120	1	5	5	E	S D	___
5088	Burns-Montgomery	B	C	160	3	17	17	E	S D	___
5089	Knoche	B	C	185	1	6	6	S/S	S D	___
5090	Zemlicka	B	C	344	2	18	18	E	S D	___
5092	Red Cloud	B	M	717	4	33	33	E	S D	___
5093	Cronin	B	M	321	4	19	19	E	D R	___
5094	Brown	B	C	493	a	40	40	S/S	S D	___
5096	Foster	B	C	200	2	24	24	S/S	S D	___
5097	Russell	B	C	277	7	16	16	S/S	S D	___
5107	Cain Fields	B	C	114	3	36	36	E	S D	___
5108	Zell Pond	B	M	1228	4	75	75	E	S D	___
5109	Hohnstein-Tatti	B	M	5096	17	262	262	S/F	D A	___
5110	Bruckert	B	C	126	4	35	35	S/F	S D	___
5111	Cook	B	C	1860	8	0	49	E	S D	___
5112	Driveway	B	M	3058	10	100	138	R;W	R;W	___
5113	Hacker-Hassing	B	M	4019	13	99	99	R	D R	___
5114	Weigand, N.	N	M	2651	9	177	177	S/S	DR	___
5115	Allen	B	M	3554	8	110	110	S/S	D R	___

Table 13 Grazing Management Program, Brothers Portion (continued)

ALLOTMENT NO.	NAME	MANAGEMENT GOALS	MGT. ³ CATEGORY	FORAGE ALLOCATION (AUMS)			GRAZING SYSTEM ⁴		
				ACRES	LIVESTOCK	PROPOSED	EXISTING	PROPOSED	AMP
			BLM	WILDLIFE	ACTIVE				
5118	Redmond Airport	B	M	5487	17	228	228	R	D R ___
5117	Pipeline	B	M	8227	21	513	513	RR	DR AMP
5118	Crenshaw ¹	B;G	M	7287	21	392	428	DR	R ___
5119	Blackrock	B	C	254	0	0	24	E	D R ___
5120	Hutton	B	M	4818	13	254	254	R	D R ___
5121	Oertle	B	C	2629	9	120	120	DR	DR ___
5122	Howard	B	C	1394	4	68	68	R	D R ___
5124	Smead	B	C	755	2	23	23	R	D R ___
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	26	84	84	S/S	S D ___
5131	McClellan	B	M	861	15	75	75	E	S D ___
5133	Long Hollow	B	C	300	2	17	17	FFR	S D ___
5134	Steams	E;G	I	18407	106	852	852	DR	DR ___
5135	Dry Creek	B	M	7055	67	334	334	DR	D R ___
51%	Davis	B	M	3584	34	213	234	DR	DR;EX ___
5137	Prineville Dam	C;D	I	3925	0	139	139	DR;EX	D R ___
5138	Plateau ¹	A;G;J	I	5477	15	252	252	DR	DR ___
5139	Dunham ¹	A;C;I	I	8128	37	323	323	DR	DR ___
5140	Salt Ck.-Alkali Butte ¹	A;C;D	I	9783 ¹	31	688 ¹	1035	DR;E	R;E ___
5141	Sanford Creek	A;C;D	I	39%	6	152	152	DR	D R ___
5142	Carey	A;C	I	1129	20	48	48	S/S	D R ___
5145	Eagle Rock-Bailey	A;C;D	I	4788	45	262	282	RR	R R ___
5149	Bedetto	B	M	968	24	55	55	S/S/F	D R ___
5178	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	89	89	E	S D ___
5179	Lytie Creek	B	C	120	1	8	8	S/S	S D ___
5180	Golden Horseshoe	B	C	197	3	14	14	S/S	S D ___
5182	F. Jones	B	M	1027	25	77	77	E	S D ___
5183	Rail Hollow	B	C	115	2	10	10	E	S D ___
5198	Laier-Gove	B	C	529	3	15	15	FFR	S D ___
5291	Alfalfa Mkt.	B	M	2438	8	141	141	S/S	D R ___
5203	Wiltze	B	C	335	1	31	31	DR	D R ___
5204	Sinclair	B	M	830	3	38	38	R	S D ___
5205	Dcdds Road	B	M	2287	8	75	75	DR	DR ___
5206	Arnold Canal	B	C	2791	16	0	87	S/S	D R ___
5207	Michaels	B	M	4066	14	179	179	R	S D ___
5208	Barlow Cave	A;E	I	9101	84	600	600	DR	D R ___
5209	Lava Beds Comm.	B	M	16354	80	729	508	S/S	D R ___
5210	Home Ridge	A;G	I	22152	107	1824	1843	DR	DR ___
5211	Pine Mountain	B	M	5323	21	320	320	DR	DR CRMP
5212	Millican ¹	A;G;J	I	32580	128	2400 ⁸	2890	DR	DR ___
5213	Rambo ¹	B;H	M	15997	59	605	670	DR	R ___
5214	Williamson Creek ¹	A;G;I	I	12905	44	1007	1007	DR	D R ___
5215	Coats ¹	B;I	M	10514 ¹	32	975 ¹	975	DR	D R ___
5215	Grieve	B	C	84	1	4	4	S/S	S D ___
5228	Kiotochman	B	C	210	0	28	28	FFR	S D ___
5230	Birch Creek ¹	A;C;D;E	I	2966	17	137	380	DR;E	W ___
5231	West Butte ¹	A;C;F;J	I	11386	50	806	806	DR	D R ___
5232	Nye	A;C	I	8827	34	422	422	DR;E	DR AMP
5233	Scott	A;C	I	4825	5	255	255	DR	D R ___
5234	Haughton ¹	A;C;G	I	18437	44	1061	1552	DR	DR AMP
5235	Moffitt	A;G	I	30506	107	2334	2830	RR	DR CRMP

Table 13 Grazing Management Program, Brothers Portion (continued)

ALLOTMENT NO.	NAME	MANAGEMENT GOALS	MGT. ³ CATEGORY	ACRES		FORAGE ALLOCATION (AUMS)		GRAZING SYSTEM ⁴	EXISTING	PROPOSED AMP
				BLM	WILDLIFE	LIVESTOCK ACTIVE	PROPOSED			
5238	Bear Creek ¹	A,C;J	I	1750	8	98	200	E		S D
5237	Brothers ¹	A;F;G;J	I	28485	107	2429	4014	DR;W		DR;W AMP
5238	ZX ¹	A;F;G	I	78498	223	7100	7100	RR		DR AMP
5239	GrassyButte ¹	B;F;J	M	25701	68	3018	4100	DR		DR AMP
5240	Fehrenbacher ¹	B;F;J	M	6605	51	492	492	DR		R -
5241	Rickman-McCormack ¹	A;C;D;E;F	I	7991	28	398	880	DR		R -
5242	Spring Creek	A;C	I	8245		401	401	DR		D R
5243	Bright ¹	B;F;J	M	8289	22	643	843	S/S		S/S
5245	Ram Lake ¹	A;F;G;J;K	I	12798	57	724	812	DR		D R
5248	Hatfield	B	C	122	0	5	5	DR		D R
5247	Lizard Creek	B	M	3283	7	280	280	R		D R
5248	Pothook	B	C	2454	15	140	140	DR		D R
5249	McCormack Home Ranch	B	C	1274	13	54	68	DR		D R
5250	Coffelt	A;C	M	440	2	20	20	R		D R
5251	98 Ranch	A;C	I	8771	19	482	482	DR		D R
5252	Meisner	B	C	124	4	34	34	E		S D
5254	Barbwire	B	C	100	0	10	10	FFR		DR
TOTALS				1043022	5429	73811	80875			

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

²Management 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

³Mgt Category

- I Improve
- M Maintain
- C Custodial

⁴Grazing 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

⁵Miscalculation in original EIS. Existing preference is 118 AUMs

⁶Original EIS and RPS were in error.

⁷Change in allotment land base

⁸Newly created allotment from Paulina Allotment No. 0039

⁹New allotment combination

Table 14. Status of Rangeland Development Implementation, Brothers Portion

ALLOTMENT NO.	NAME	FENCE (MILES)		PIPELINE SPRING (MILES)		WELLS PC	RESER- VOIRS PC	WATER- HOLES PC	BURN/SEED (ACRES)		BURN ONLY (ACRES)		JUNIP. CTRL. (ACRES)		
		P	C	PC	P				C	P	C	P	C		
0001	Alaska Pacificl	0.00	0.00	0 0	0.00	0.00	0 0	1 0	0 0	0	0	0	0	0	0
0003	Hampton'	0.00	2.00	0 0	3.00	3.00	0 0	3 0	2 0	1469	1469	1500	0	0	0
0004	Miners Flat'	0.00	0.00	0 0	0.00	0.00	0 0	1 0	0 0	0	0	200	0	0	0
0009	Cold Springs'	0.00	0.60	0 0	0.00	0.00	0 0	4 0	0 0	0	0	800	-	600	0
0013	Sheep Mtn. Comm.1	0.00	1.50	1 2	0.00	0.00	0 0	0 0	0 0	0	0	0	0	1000	0
0014	Sheeo Mountain Individual'	0.00	0.00	0 0	0.00	0.00	0 0	0 0	0 0	0	0	0	0	600	0
0016	IndianCreek'	0.00	2.00	1 0	0.00	0.00	0 0	1 0	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	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	0
0022	Laughlin'	1.20	1.20	0 0	0.00	0.00	0 0	3 1	0 0	0	0	880	0	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	0
0025	Buck Creek Flat'	0.00	0.00	0 0	3.00	0.00	0 0	0 0	1 0	0	0	2550	0	0	0
0027	Upper Pocket Comm.1	0.00	0.00	0 0	0.00	0.00	0 0	1 0	0 0	0	0	0	0	0	0
0038	Cave'	3.00	2.25	0 0	0.00	0.00	0 0	1 0	0 0	0	0	500	0	440	0
0042	Owens WaterComm.1	0.00	0.00	1 1	0.00	0.00	0 0	1 0	0 0	0	0	0	0	1050	0
0043	Barney Buck Creek'	0.00	0.00	00	1.00	0.00	00	1 0	0 0	0	0	0	0	0	0
0044	G.I.1	31.50	12.50	0 0	30.00	0.00	1 0	4 0	0 0	5400	3800	11600	800	100	0
0045	EastMaury'	0.00	0.00	0 0	0.00	0.00	0 0	0 0	0 0	0	0	873	00	150	0
0047	Lister'	3.50	0.00	1 0	0.00	0.00	0 0	3 0	0 0	0	0	400	0	600	0
0050	RabbitValley'	0.00	0.00	0 0	0.00	0.00	0 0	2 0	0 0	0	0	0	0	0	0
0051	Paulina Creek'	0.00	0.00	0 0	0.00	0.00	0 0	1 0	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	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	0
0056	DagisLake'	0.00	0.50	0 0	0.00	0.00	0 0	0 0	0 0	0	0	0	0	80	0
0058	Coyote Springs	0.00	0.00	0 0	0.00	0.00	0 0	2 0	0 0	0	0	893	0	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	0
0069	Indian	0.00	2.00	0 0	0.00	0.00	0 0	0 0	0 0	0	0	0	0	0	0
0070	CloverCreek'	4.70	2.20	0 0	0.00	0.00	0 0	2 0	0 0	60	0	0	0	780	0
0071	Coffee Butte'	0.00	0.00	0 0	0.00	0.00	0 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	0
5007	Harsch	0.00	0.00	0 0	0.00	0.00	0 0	0 0	0 0	50	0	0	0	280	0
5010	Harrington	0.00	0.00	0 0	0.00	0.00	0 0	0 0	0 0	20	0	0	0	20	0
5018	Werleske	0.00	0.00	0 0	0.00	0.00	0 0	0 0	0 0	100	0	0	0	150	0
5022	Airport	0.00	0.00	0 0	0.00	0.00	0 0	0 0	0 0	40	0	0	0	100	0
5031	Mayfield-Harris	0.00	0.00	0 0	0.00	0.00	0 0	0 0	0 0	0	0	0	0	250	0
5050	Grey Butte	0.00	0.00	0 0	0.00	0.00	0 0	0 0	0 0	175	0	0	0	200	0
5051	Sherwood Canyon	0.00	0.00	0 0	0.00	0.00	0 0	0 0	0 0	100	0	0	0	300	0
5052	Smith Rock	0.00	0.00	0 0	0.00	0.00	0 0	0 0	0 0	25	0	0	0	75	0
5064	Williams	0.00	0.00	0 0	2.00	0.00	0 0	0 0	0 0	0	0	0	0	100	0
5065	Lower Bridge	6.00	0.00	0 0	6.00	0.00	0 0	0 0	0 0	400	0	0	0	1200	0
5066	Pine Ridge	0.00	0.00	0 0	0.00	0.00	0 0	0 0	0 0	0	0	0	0	80	0
5070	Lafollette Butte	7.00	0.00	0 0	4.00	0.00	0 0	0 0	0 0	225	0	0	0	700	0
5071	Odin Falls	10.00	0.00	0 0	0.00	0.00	0 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	0
5073	ClineButte/Fryrear12	11.00	0.00	0 0	4.00	0.00	0 0	0 0	0 0	675	0	0	0	3900	0
5075	Desert Springs	0.00	0.00	0 0	0.00	0.00	0 0	0 0	0 0	250	0	0	0	400	0
5078	Home Ranch	0.00	0.00	0 0	3.00	0.00	0 0	0 0	0 0	200	0	0	0	750	0
5079	Whiskey Still	0.00	0.00	0 0	2.00	0.00	0 0	0 0	0 0	200	0	0	0	200	0
5080	Maston	2.00	0.00	0 0	3.00	0.00	0 0	0 0	0 0	260	0	0	0	500	0
5089	Knoche	0.00	0.00	0 0	0.00	0.00	0 0	0 0	0 0	0	0	0	0	90	0
5092	Red Cloud	0.00	0.00	0 0	0.00	0.00	0 0	0 0	0 0	0	0	0	0	175	0
5093	Cronin	0.00	0.00	0 0	0.00	0.00	0 0	0 0	0 0	30	0	0	0	60	0
5096	Foster	0.00	0.00	0 0	0.00	0.00	0 0	0 0	0 0	25	0	0	0	25	0
5097	Russell	0.00	0.00	0 0	0.00	0.00	0 0	0 0	0 0	0	0	0	0	100	0
5108	Zell Pond	0.00	0.00	0 0	0.00	0.00	0 0	0 0	0 0	0	0	0	0	300	0
5109	Hohnstein-Tatti	2.00	0.00	0 0	5.00	0.00	0 0	0 0	0 0	350	0	0	0	700	0
5112	Driveway'	0.00	4.50	0 0	0.00	0.00	0 0	0 0	0 0	1500	0	0	0	2000	0
5113	Hacker-Hassing	2.00	0.00	0 0	4.00	0.00	0 0	0 0	0 0	150	0	0	0	700	150
5114	Weigand, N.	1.50	0.00	0 0	3.00	0.00	0 0	0 0	0 0	100	0	0	0	250	0
5115	Allen	1.50	0.00	0 0	3.00	0.00	0 0	0 0	0 0	250	0	0	0	500	0
5116	Redmond Airport	0.00	0.00	0 0	5.00	0.00	0 0	0 0	0 0	200	0	0	0	700	0
5117	Pipeline	0.00	0.00	0 0	8.00	0.00	0 0	0 0	0 0	300	0	0	0	500	300
5118	Crenshaw1	1.50	1.50	0 0	6.00	3.50	0 0	0 0	0 0	3000	0	0	0	4000	0
5120	Hutton	0.00	0.00	0 0	3.00	0.00	0 0	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	0 0	100	0	0	0	250	0
5122	Howard	0.00	0.00	0 0	0.00	0.00	0 0	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	0	0	500	0
5125	MayfieldPond	0.00	0.00	0 0	2.00	1.00	0 0	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	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	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	0	0	350	0

Table 14. Status of Rangeland Development Implementation, Brothers Portion (continued)

ALLOTMENT NO.	NAME	FENCE (MILES)		PIPELINE (MILES)				RESER- VOIRS		WATER- HOLES		BURN/SEED (ACRES)		BURN ONLY (ACRES)		JUNIP. CTRL. (ACRES)	
		P	C	PC	P	C	PC	P	C	P	C	P	C	P	C	P	C
5133	Long Hollow	0.00	0.00	0 0	0.00	0.00	0 0	0 0	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	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	0 0	0 0	0	0	0	0	4000	0	
5136	Davis	5.50	0.00	0 0	0.00	0.00	0 0	0 0	0 0	0 0	300	0	0	0	2000	40	
5137	Prineville Dam	0.00	0.00	0 0	0.00	0.00	0 0	0 0	0 0	0 0	120	0	0	0	1000	0	
5138	Plateaul	5.00	0.00	0 0	6.00	3.00	0 0	0 0	0 0	0 0	200	0	0	0	1550	50	
5139	Dunham ¹	6.00	3.00	0 0	5.00	0.00	0 0	0 0	0 0	0 0	2300	0	0	0	1800	300	
5140	Salt Ck.-Alkali Butte'	18.00	17.00	1 1	7.00	4.00	0 0	0 0	0 0	0 0	0	0	0	0	1500	500	
5141	Sanford Creek	7.00	6.00	0 0	1.00	0.00	0 0	0 0	0 0	0 0	400	1500	0	0	1700	1200	
5142	Carey	2.50	0.00	0 0	0.00	0.00	0 0	0 0	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	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	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	0	0	0	0	0	0	
5178	GrizzlyMtn.	0.00	0.00	0 0	0.00	0.00	0 0	0 0	0 0	0 0	0	0	0	0	300	35	
5179	Lytle Creek	2.00	0.00	0 0	0.00	0.00	0 0	0 0	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	0 0	0 0	60	0	0	0	0	0	
5182	F. Jones	0.00	0.00	0 0	0.00	0.00	0 0	0 0	0 0	0 0	160	0	0	0	80	0	
5201	Alfalfa Mt.	1.50	0.00	0 0	3.00	0.00	0 0	0 0	0 0	0 0	0	0	0	0	300	0	
5204	Sinclair	0.00	0.00	0 0	0.00	0.00	0 0	0 0	0 0	0 0	150	0	0	0	400	0	
5205	Dodds Road	0.00	0.00	0 0	0.00	0.00	0 0	0 0	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	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	0 0	0 0	150	0	0	0	500	300	
5208	Barlow Cave	5.00	0.00	0 0	10.00	3.00	0 0	0 0	0 0	0 0	700	0	300	0	0	0	
5209	Lava Beds Comm.	7.00	0.00	0 0	9.00	0.00	0 0	0 0	0 0	0 0	600	0	400	0	1000	0	
5210	HorseRidge ³	1.00	0.00	0 0	16.00	8.00	0 0	0 0	0 0	0 0	3500	0	0	0	0	0	
5211	Pine Mountain ⁴	0.00	0.00	0 0	3.00	0.00	0 0	0 0	0 0	0 0	500	0	0	0	500	0	
5212	Millican ¹	6.00	0.00	0 0	35.00	25.00	0 0	0 0	0 0	0 0	2300	0	500	100	3000	200	
5213	Rambo ¹	6.00	0.00	0 0	8.00	0.00	0 0	0 0	0 0	0 0	500	0	0	0	1000	0	
5214	Williamson Creek ¹	0.00	0.00	0 0	9.00	0.00	0 0	0 0	0 0	0 0	1000	0	0	0	1600	100	
5215	Coats ¹	0.00	0.00	0 0	12.00	0.00	0 0	0 0	0 0	0 0	580	0	2100	0	400	0	
5229	Klutchman	0.00	0.00	0 0	0.00	0.00	0 0	0 0	0 0	0 0	0	0	0	0	140	0	
5230	Birch Creek ¹	0.00	4.00	0 0	0.00	0.00	0 0	0 0	0 0	0 0	150	0	0	0	1440	840	
5231	West Butte ¹	5.00	0.00	0 0	13.00	5.00	0 0	0 0	0 0	0 0	0	0	0	0	0	0	
5232	Nye	4.00	0.00	0 0	4.00	0.00	0 0	0 0	0 0	0 0	1000	0	2000	100	8000	0	
5233	Scott ⁵	3.50	0.00	0 0	2.00	0.00	0 0	0 0	0 0	0 0	0	0	0	0	2500	0	
5234	Haughton ¹	7.00	5.00	0 0	10.00	4.00	0 0	0 0	0 0	0 0	300	0	3500	0	3000	0	
5235	Moffitt	17.00	10.00	0 0	19.00	16.00	0 0	0 0	0 0	0 0	3000	0	3000	0	0	0	
5236	Bear Creek ¹	0.00	0.00	0 0	3.00	0.00	0 0	0 0	0 0	0 0	0	0	0	0	50	50	
5237	Brothers ¹	21.00	10.00	0 0	27.00	22.00	0 0	0 0	0 0	0 0	1800	950	0	0	0	0	
5238	ZX ¹	22.00	16.00	0 0	74.00	0.00	0 0	0 0	0 0	0 0	200	0	10000	0	1000	0	
5239	GrassyButte ¹	5.00	2.00	0 0	5.00	3.00	0 0	0 0	0 0	0 0	1250	0	4750	0	0	0	
5240	Fehrenbacher ¹	4.50	0.00	0 0	2.00	0.00	0 0	0 0	0 0	0 0	700	0	300	0	300	0	
5241	Rickman-McCormack ¹	3.00	0.00	0 0	2.50	0.00	0 0	0 0	0 0	0 0	0	0	0	0	1200	200	
5242	Spring Creek	6.00	3.00	0 0	4.00	0.00	0 0	0 0	0 0	0 0	2000	400	0	0	1000	100	
5243	Bright ¹	2.00	0.00	0 0	3.00	0.00	0 0	0 0	0 0	0 0	500	0	1500	0	0	0	
5245	Ram Lake ¹	6.50	4.50	0 0	6.00	0.00	0 0	0 0	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	0	0	0	0	60	0	
5247	Lizard Creek	2.00	0.00	0 0	2.00	0.00	0 0	0 0	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	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	0 0	0 0	0	0	0	0	1000	0	
5250	Coffelt	0.00	0.00	0 0	1.00	0.00	0 0	0 0	0 0	0 0	230	0	0	0	400	0	
5251	96 Ranch	2.00	3.00	0 0	5.00	1.00	0 0	0 0	0 0	0 0	700	0	0	0	5000	1500	
Totals		304.95	133.3	7 4	447	109	1 1	36 1	3 0	53534	11019	57926	1000	93270	6050		

P - Proposed
C - Completed

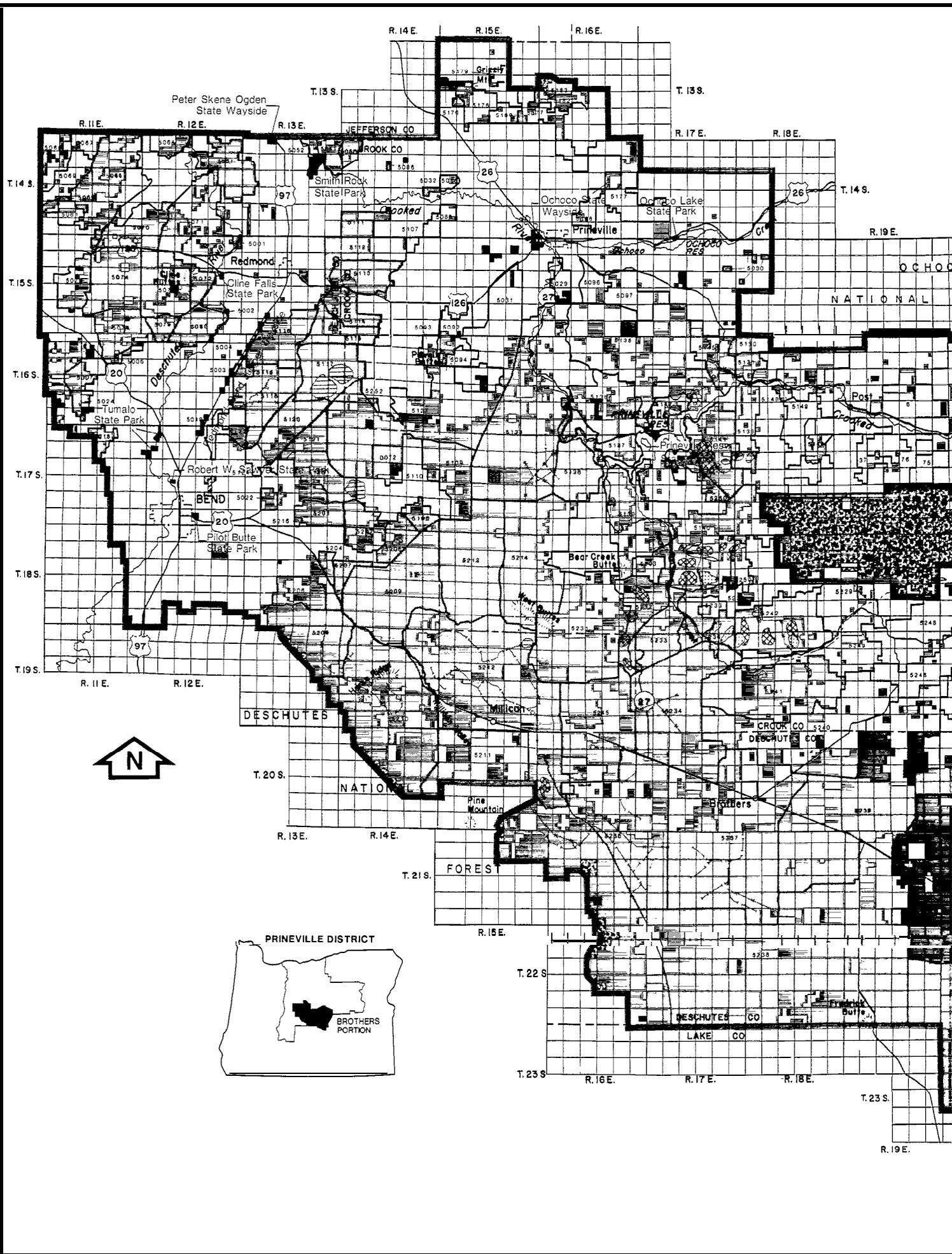
¹Allotment evaluated in 1988 by interdisciplinary teams.

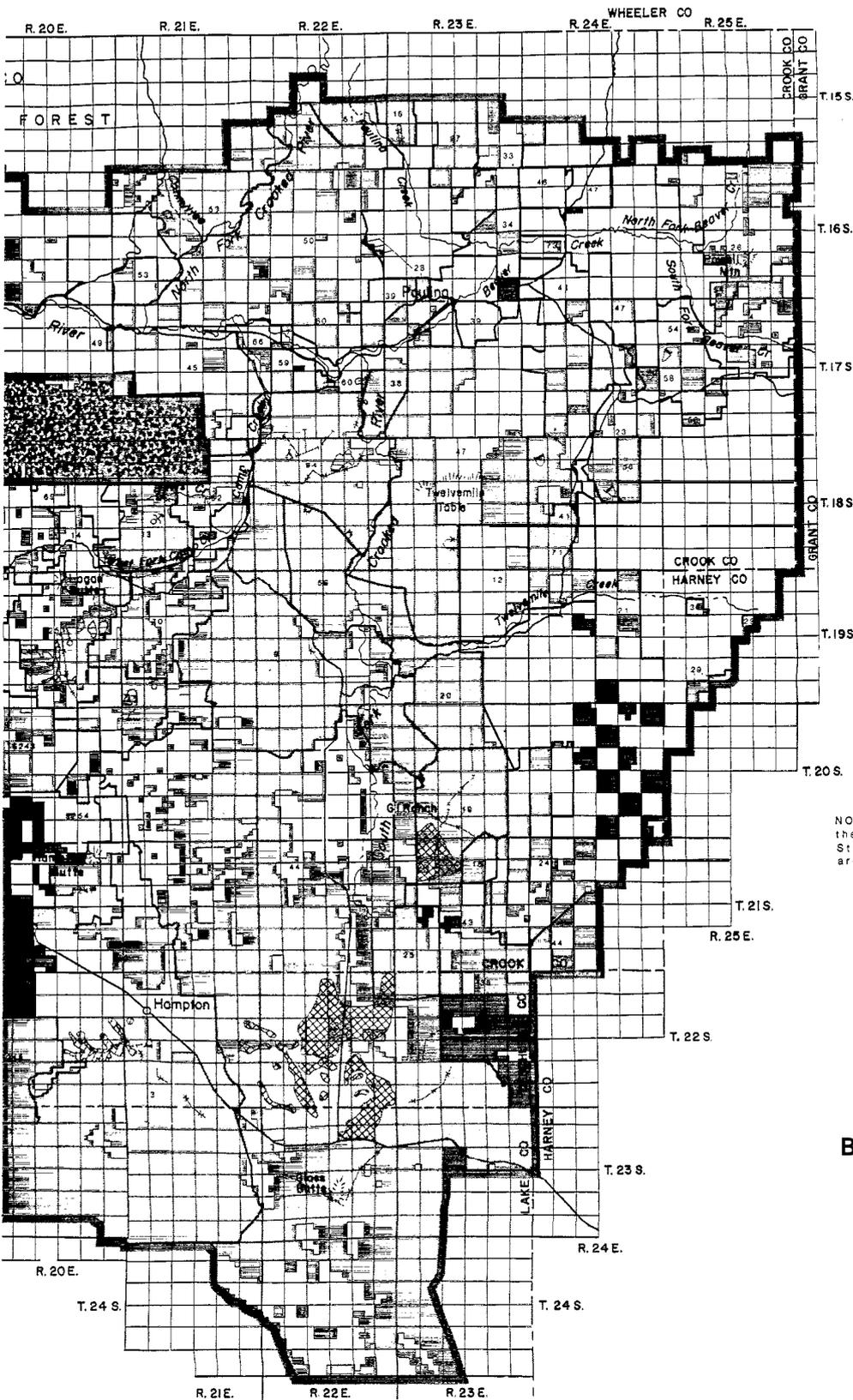
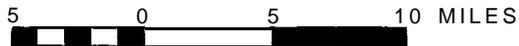
²New allotment combination.

³In addition, 2,000 acres of spray and seeding proposed.

⁴In addition, 1,000 acres of spray and seeding, and 500 acres of spray only proposed.

⁵In addition, 200 acres of spray only proposed.





- 5018 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
September 1988

BROTHERS/LA PINE PLANNING AREA

MAP 16
Livestock Grazing
Allotments
Brothers Portion

Table 15. Grazing Allotments by Category, LaPine Portion, Brothers/LaPine Planning Area

Allotment Name	Allotment Number	Allotment Category System	Public Land Acres ³	Allocated Forage-AUMs Short-Term	Peak Long-Term
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
Moraart	7554	Custodial	80	11	28
Poole	7559	Maintain	1,358	180	471
Stearns	7575	Maintain	518	97	179
Yager	7586	Maintain	700	57	244
Unallotted			20,971	6,800	Up to 8,223
TOTAL			43,201	9,831	16,000

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

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

³Additional 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 16. Grazing Management Program Under the Proposed 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.



Good condition riparian vegetation on Bear Creek.

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. Light utilization is not expected to change plant composition.

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 proposed 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 would 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 would be diverted to livestock water troughs, and fencing would protect riparian vegetation where significant overflow occurs. An increase in both woody and herbaceous riparian key species would occur in the long term at the springs.

Water Impoundments

Reservoirs, including dugouts and waterholes and catchments would 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.



South Fork of the Crooked River Canyon.

Pipelines

Wherever possible, water pipelines would be buried. Most pipelines would 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 would 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 would 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 would require more than 20 years. Generally all areas where vegetative manipulations occur would 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 would increase on areas proposed for burning and a change of at least one ecological condition class would 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 would vary 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.

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 would not be authorized without appropriate environmental analysis and lifting of the current court injunction on herbicide use in Oregon. Burning would temporarily reduce 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, would increase 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 would not be burned since these species are easily damaged by fire.

Standard Operating Procedures

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

1. All actions would be consistent with the BLM's Visual Resource Management criteria. The management criteria for the specific visual class would be followed.
2. In crucial wildlife habitat (winter ranges, fawning/calving areas, curlew nest areas and so forth), construction work would be scheduled during the appropriate season to avoid or minimize disturbances. In addition, wildlife needs would govern the size and design of the projects.
3. Surface disturbance at all project sites would be held to a minimum. Disturbed soil would be rehabilitated to blend with surrounding soil surface and would 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 would be finished on an allotment basis before installation of any management facility or land treatment.
5. All areas where vegetative manipulation occurs would be totally rested from grazing for at least two growing seasons after treatment.
6. No BLM action would 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) would be required before any planned actions that could affect an endangered species or its habitat would be implemented.

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 there could be an effect on a Federally listed species, formal consultation with the U.S. Fish and Wildlife Service would be initiated before taking any action. If the FWS opinion indicates the action would be likely to jeopardize continued existence of a listed species or result in destruction or adverse

modification of critical habitat, the action would 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 stocking rates and evaluate the effects of intensive management.
- Issue grazing decisions or agreements for allotments where adjustments in stocking rates are negotiated with the permitted lessee.

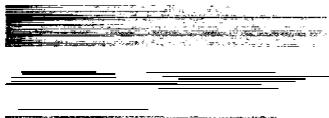
Medium

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

Range Monitoring

A document, 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



Upper Crooked River flowing through the Paulina Valley.

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 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 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 less intensive monitoring to insure that management continues to be satisfactory. Minimum 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 the least 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 also may 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.

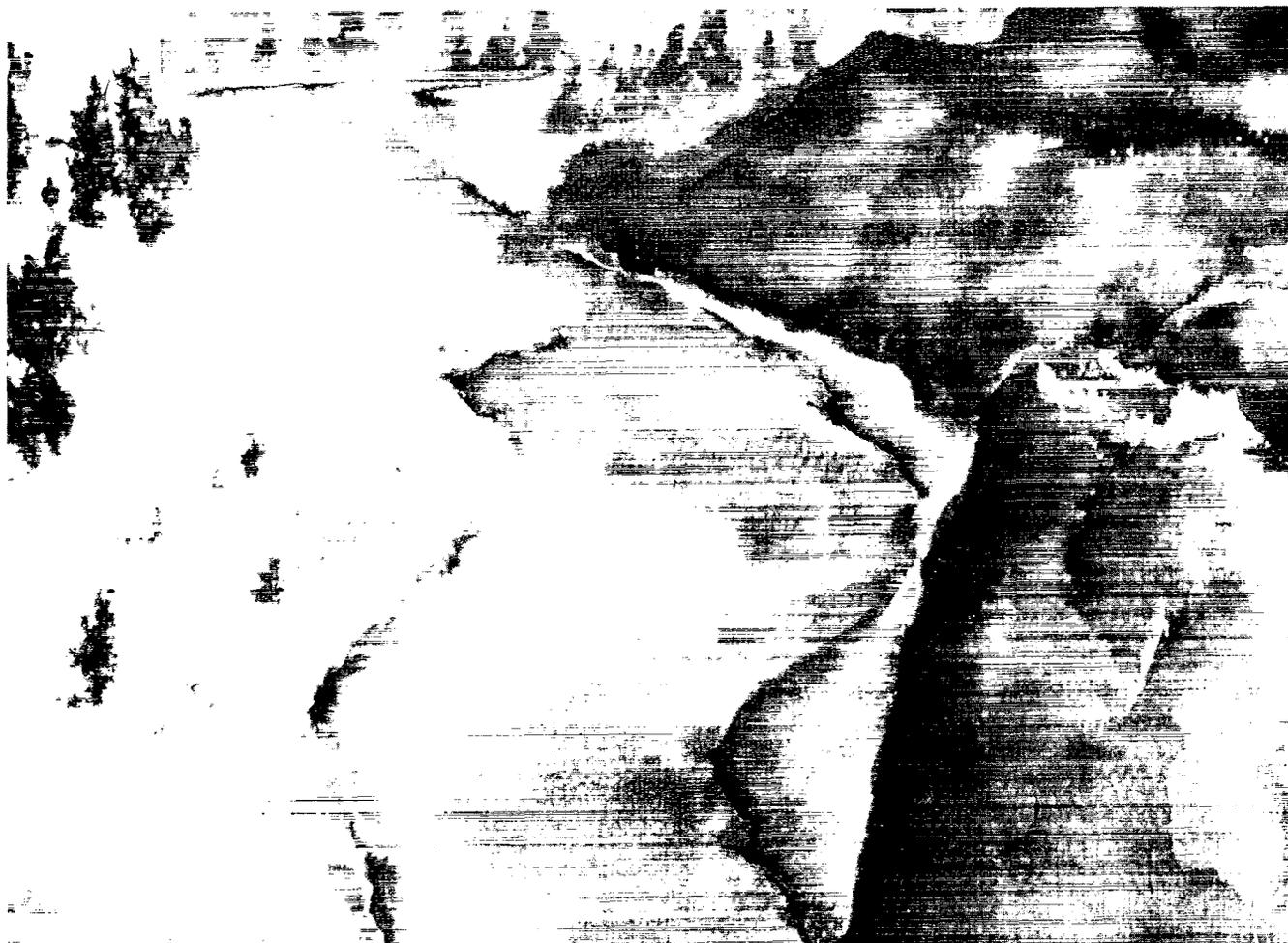
6. Reinventory

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 would 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 would occur with lessees and affected parties on livestock manipulation and development or refinement of management plans.



Crooked River upstream from Prineville.

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 17. 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.

Wildlife habitat and estimated populations for big game species in the LaPine portion are shown in Table 18. 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.

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 would 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.

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

Species	Habitat (Public Acres) ¹	Present Population
Mule Deer		
Crucial winter range	142,914	13,800 ²
Summer range	1,067,577	11,200 ³
Antelope		
Crucial winter range	64,312	1,600 ²
Summer range	739,968	1,640 ²
Elk		
Winter range	38,912	70 ²
Summer range	35,200	452
Water Associated Birds (includes surface water acres)	1,218	Moderate to abundant ³
Upland Game Birds Stream riparian habitat	407	Low to moderate ³
Nongame Species Yearlong range	1,067,577	Moderate to abundant ³

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

²Based on ODFW, 1982 data

³Based on historical populations

Source: Brothers Grazing Draft Environmental Impact Statement, 1982.

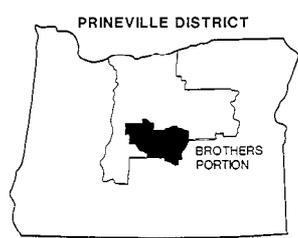
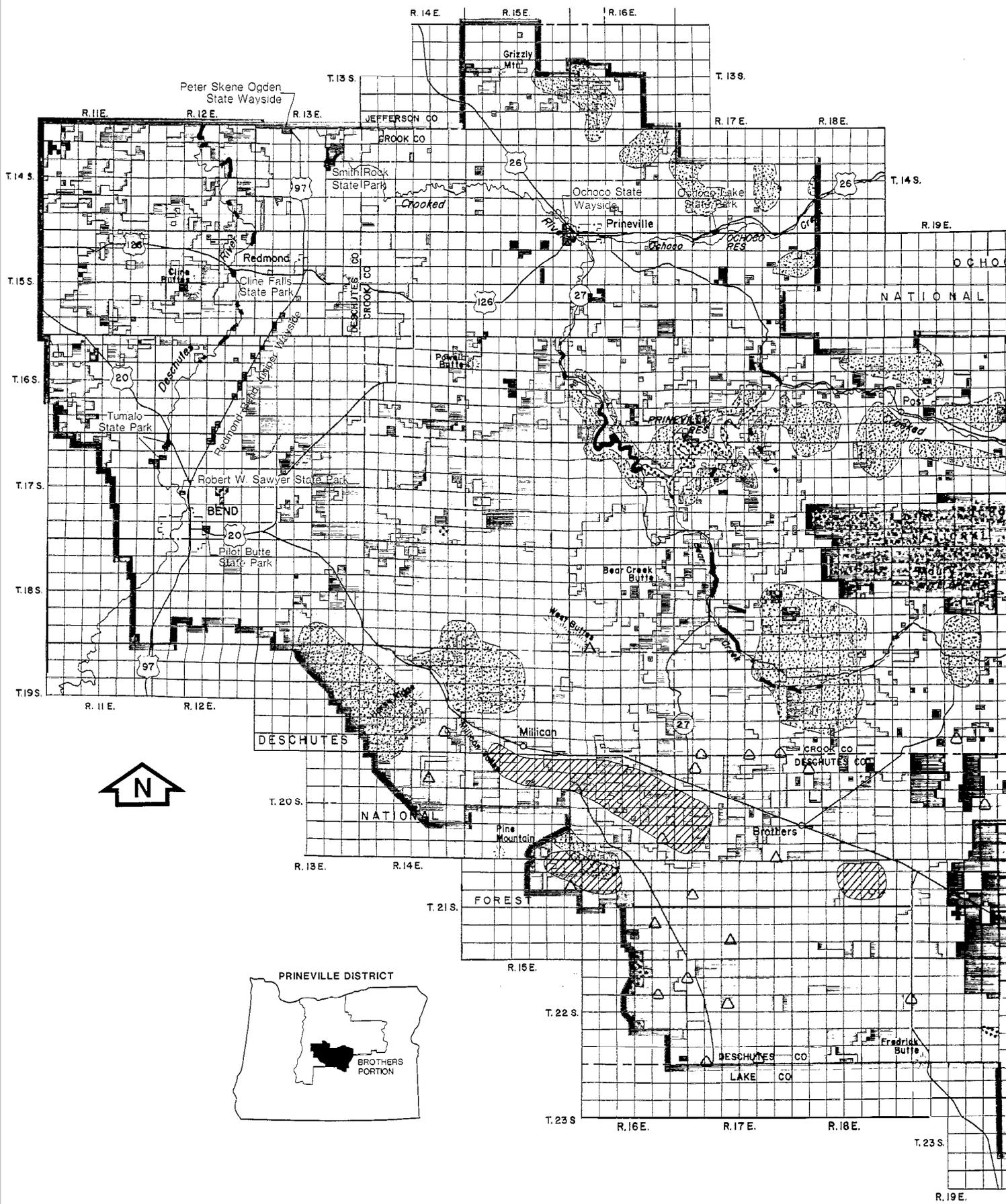
Table 18. Wildlife Habitat and Populations, LaPine Portion, Brothers/LaPine Planning Area.

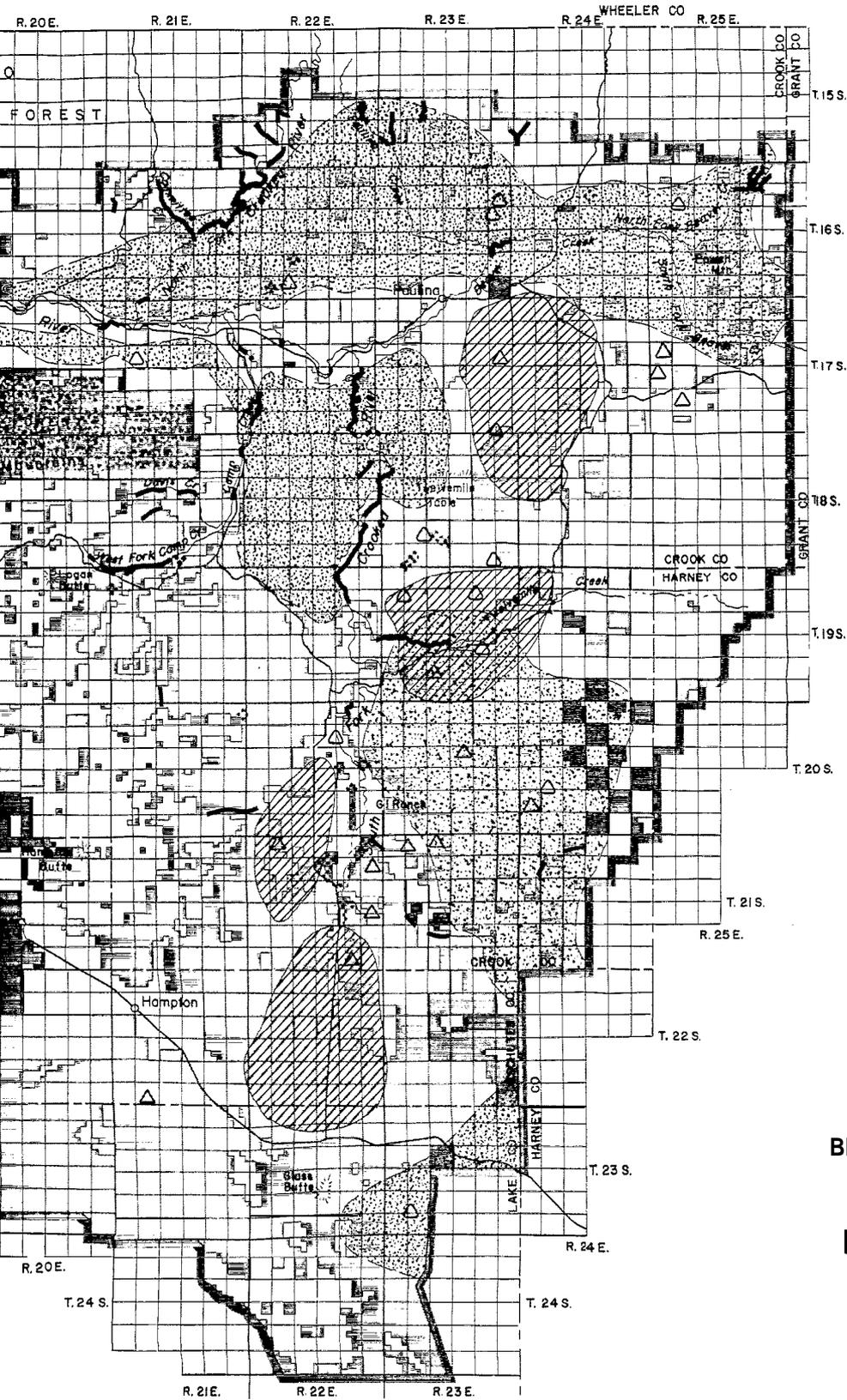
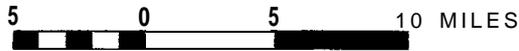
Species	Habitat (Public Acres)	Present Population
Mule deer		
Winter	43,201	360 ¹
Summer	43,201	720
Migration	43,201	18,000
Elk		
Summer	43,201	25
Antelope		
Summer	9,500	200

¹Use varies greatly depending on winter conditions.



Railroad Construction in the Deschutes River Canyon, 1910





- 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

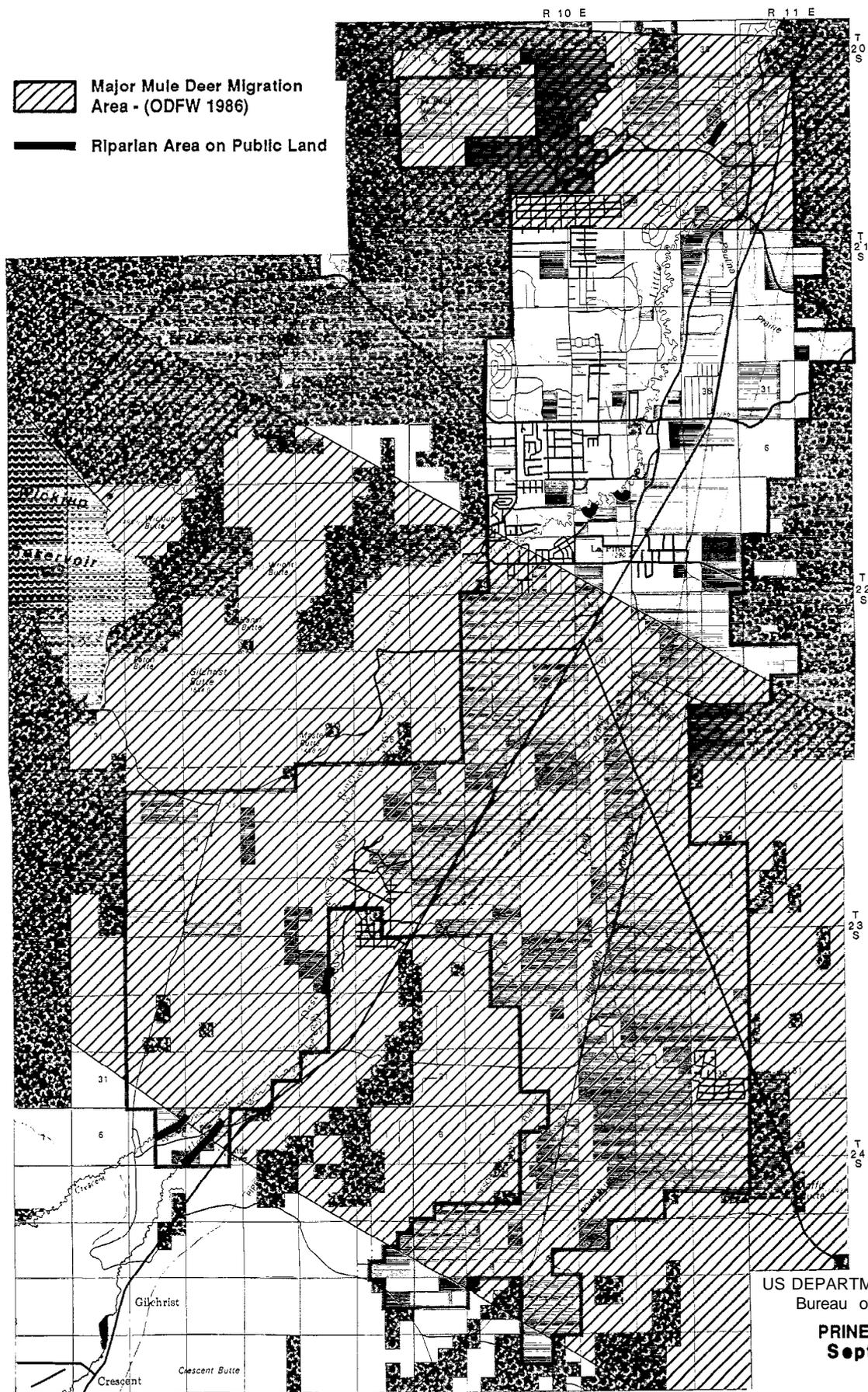
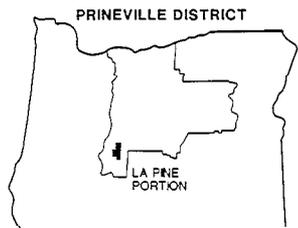
PRINEVILLE DISTRICT
September 1988

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
September 1988



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

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 would 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



Mule Deer attempting to cross U.S. Highway 97 near LaPine.

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 Brothers 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, 5.5 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 proposed plan, riparian habitat condition in the LaPine portion, which is good to excellent, would 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 19. 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.

Implementation Priority

High - Continue to implement the Oregon/Washington Riparian Enhancement Plan. Assess actions affecting wildlife habitat. Protect threatened, endangered or sensitive species habitat.

Medium - Monitor important habitat of other species such as mule deer, elk, and other game and non-game species.

Low - 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.



Fishing the Crooked River near Chimney Rock Recreation Site.

Table 19. Fish Habitat Condition and Estimated Trend¹, Brothers Portion, Brothers/LaPine Planning Area

Stream	Public Stream Miles	Present Stream Channel Condition	Present Fish Habitat Condition	Est. Trend*	Species Presents	Comments
Alkali Creek	.75	Poor	Poor	D	no fish	Low flows, high water temperature.
Bear Creek	9.10	Fair	Poor	I	Rb,LPD,Bsu SpD,LnD	Low flow, siltation, high water temperature, exclosure 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 water 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 pool area, 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	I	Rb	Low flow, logging damage, siltation, exclosure 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 vegetation, siltation.

Table 19. Fish Habitat Condition and Estimated Trend¹, Brothers Portion, Brothers/LaPine Planning Area (continued)

Stream	Public Stream Miles	Present Stream Channel Condition	Present Fish Habitat Condition	Est. Trend*	Species Present ³	Comments
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.
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.

¹Survey represents 100% of BLM perennial stream miles and 98% of intermittent stream miles.

²I-Improving D-Declining S-Stable

³Rb-Rainbow trout, Bt-Brown trout, Wt-Mountain Whitefish, Sq-Northern squawfish, Bsu-Bridgelip sucker, Sb-Smallmouth bass, Csu-Coarcescale 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.

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 would be provided on 506,000 acres (values at risk Classes 4 through 6). This would 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 would be 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 20 displays the conditional fire suppression parameters to be considered in determining the suppression approach.

Table 20. Conditional Fire Suppression Parameters, Under the Proposed Plan, Brothers/LaPine Planning Area¹

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



Crooked River downstream from Bowman Dam.

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, would be followed for 107,000 acres in the Bear Creek watershed. Copies are available through the Prineville District Office. Natural ignition fires would 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 improvements would be protected. No more than four fires in excess of 150 acres would 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 would be managed as top priority suppression areas. These areas are primarily in the LaPine, Bend, Redmond and Prineville 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.

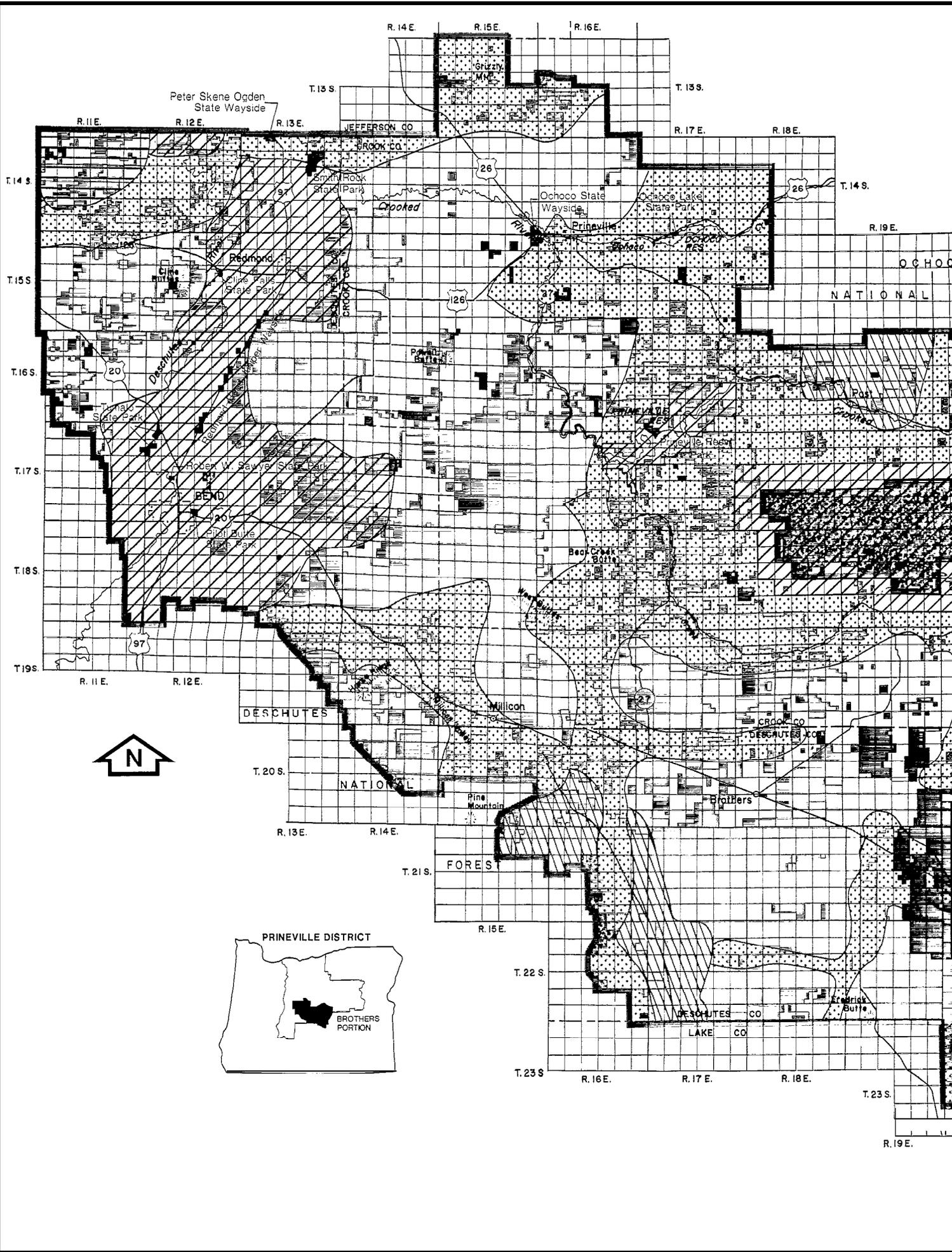
Low - Improve fire monitoring techniques to reduce costs, improve overall fire program efficiency from implementing the conditional suppression program. Conduct public information programs on the use and benefits of conditional fire suppression.

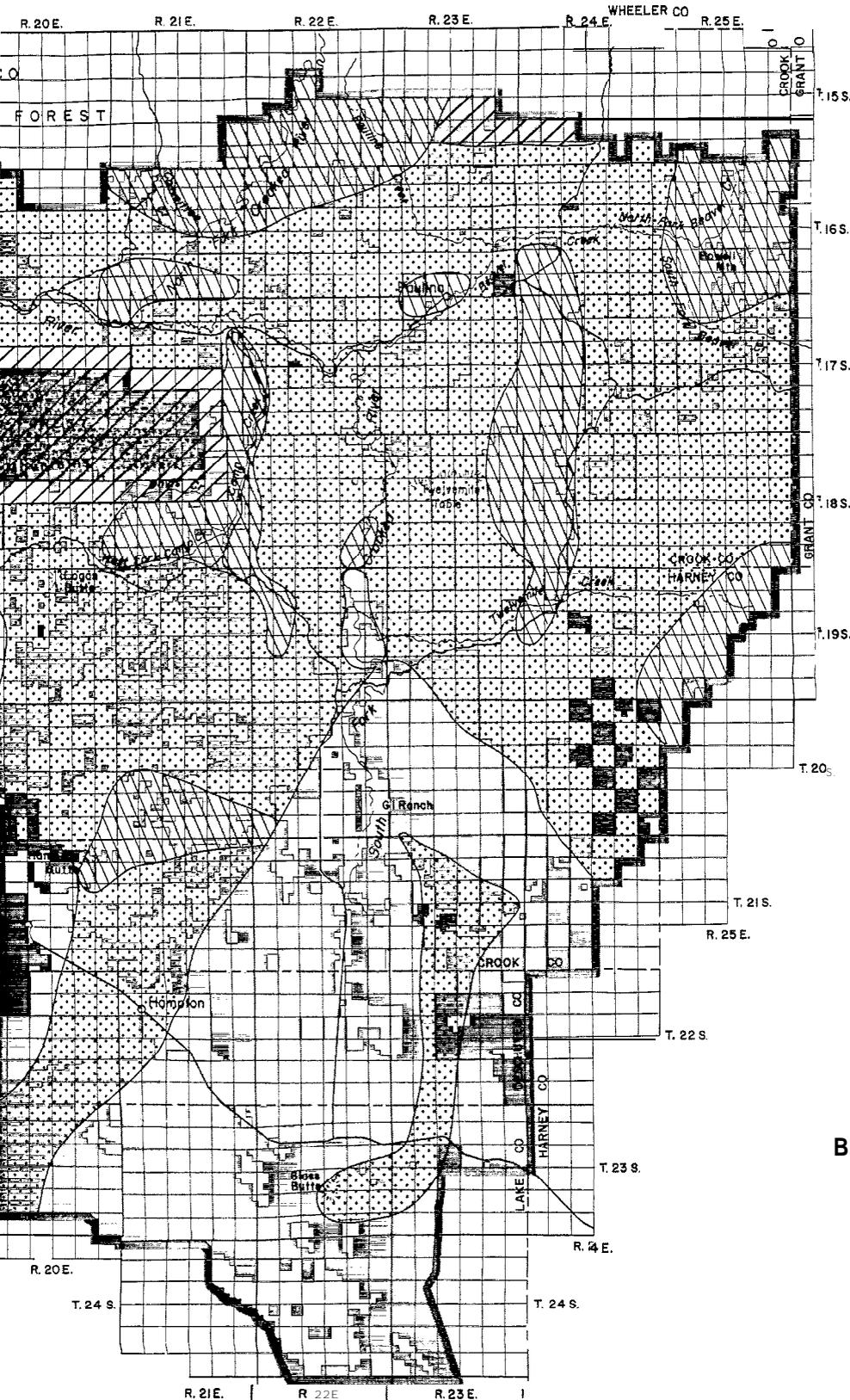
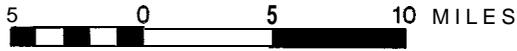
Monitoring

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.

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.





RESOURCE VALUE AT RISK

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

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

PRINEVILLE DISTRICT
September 1988

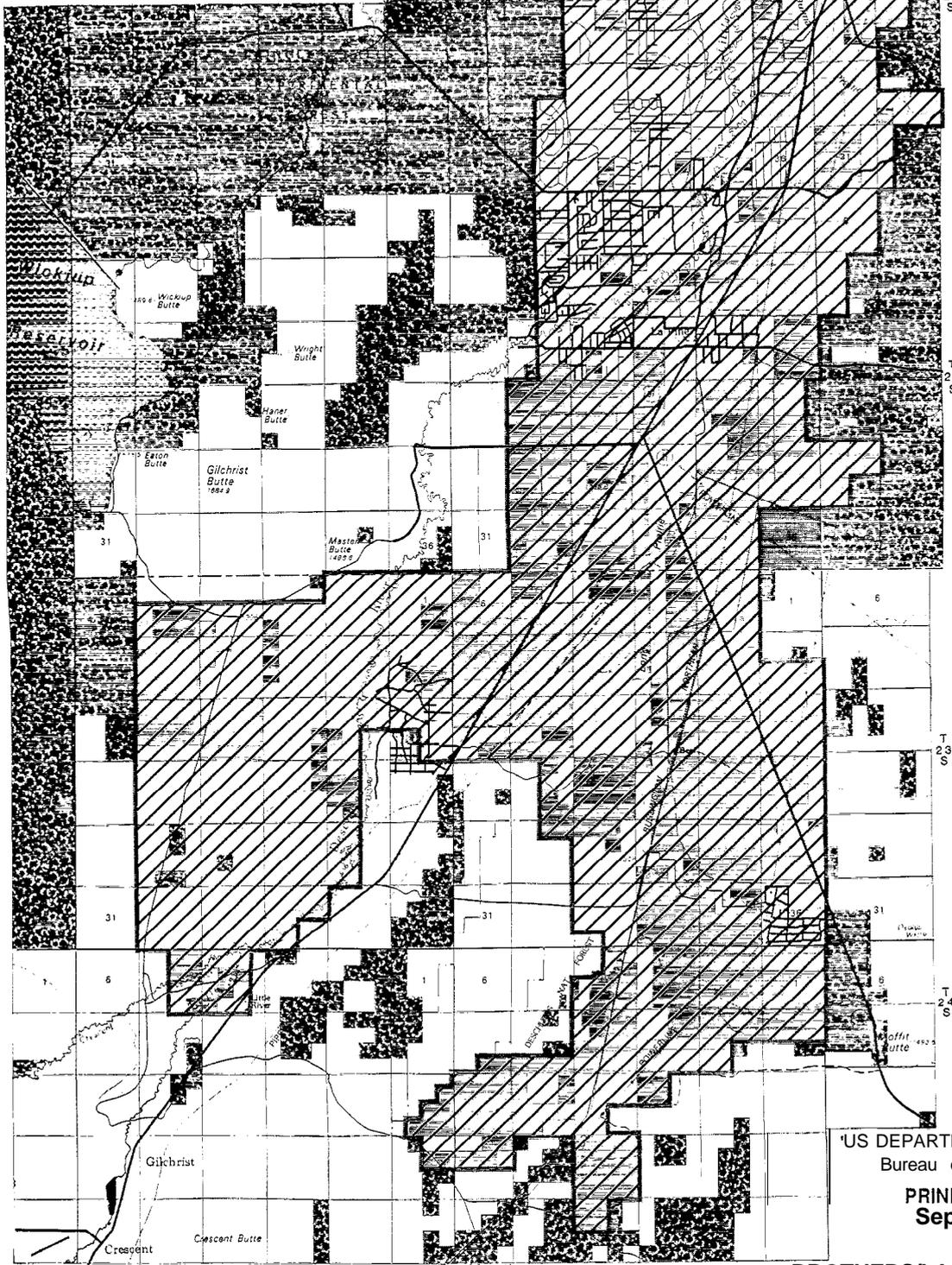
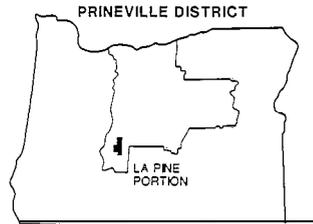
BROTHERS/LA PINE PLANNING AREA

MAP 20
Fire Management
Brothers Portion

R 10 E R 11 E

RESOURCE VALUE AT RISK

 Class 6 (Highest Value)



US DEPARTMENT OF THE INTERIOR
Bureau of Land Management
PRINEVILLE DISTRICT
September 1988

BROTHERS/LA PINE PLANNING AREA

1 0 1 2 MILES

MAP 21
Fire Management
La Pine Portion

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 would be used whenever possible. The cumulative effect of this activity would 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) would be rehabilitated. The average duration of this activity would be 6 months at each well site. Unless production is found, all impacts associated with exploration and drilling would 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, would be prepared.

Management Direction

Leasable minerals would continue to be made available on most land where the surface is also publicly owned. Approximately 946,000 acres of public land would be open to exploration subject to standard lease requirements and stipulations. A restrictive "no surface occupancy" stipulation for fluid minerals exploration and development would be maintained on 16,000 acres of public land around Prineville Reservoir and seasonal restrictions would continue on 44,580 acres of deer wintering areas and 3,560 acres of sage grouse strutting growls. Restrictions to protect 100,000 acres of land that are visually sensitive or of high scenic quality would also be continued. Table 21 and Maps 22 and 23 show leasable mineral potential in the Brothers Portion. 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 would require an RMP amendment or revision.

Implementation

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

- 1) Any proposed drilling pad or road construction would be located to avoid steep slopes and areas of highly erosive soils. Surface disturbance would 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 would be substantially unnoticeable after reclamation has been completed.
- 3) All activities would 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

Table 21. 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
<i>Oil and Gas</i>						
<i>Open</i>	37,000	484,000	172,000	253,000	946,000	85
<i>Open - No Surface Occupancy</i>	0	8,000	8,000	0	16,000	2
<i>Open - Visual Restrictions</i>	10,000	20,000	40,000	30,000	100,000	9
<i>Open - Seasonal Restrictions</i>	0	5,000	20,000	23,000	48,000	4
<i>Closed-Non Discretionary</i>	0	1,000	0	0	1,000	
<i>Total</i>	47,000	518,000	240,000	306,000	1,111,000	100
<i>Geothermal</i>						
<i>Open</i>	845,000	222,000	6,000	0	1,073,000	97
<i>Open - Visual Impact</i>	0	10,000	15,000	0	25,000	2
<i>Open - Seasonal Restrictions</i>	0	12,000	0	0	12,000	1
<i>Closed - Non-Discretionary</i>	0	1,000	0	0	1,000	
<i>Total</i>	845,000	245,000	21,000	0	1,111,000	100

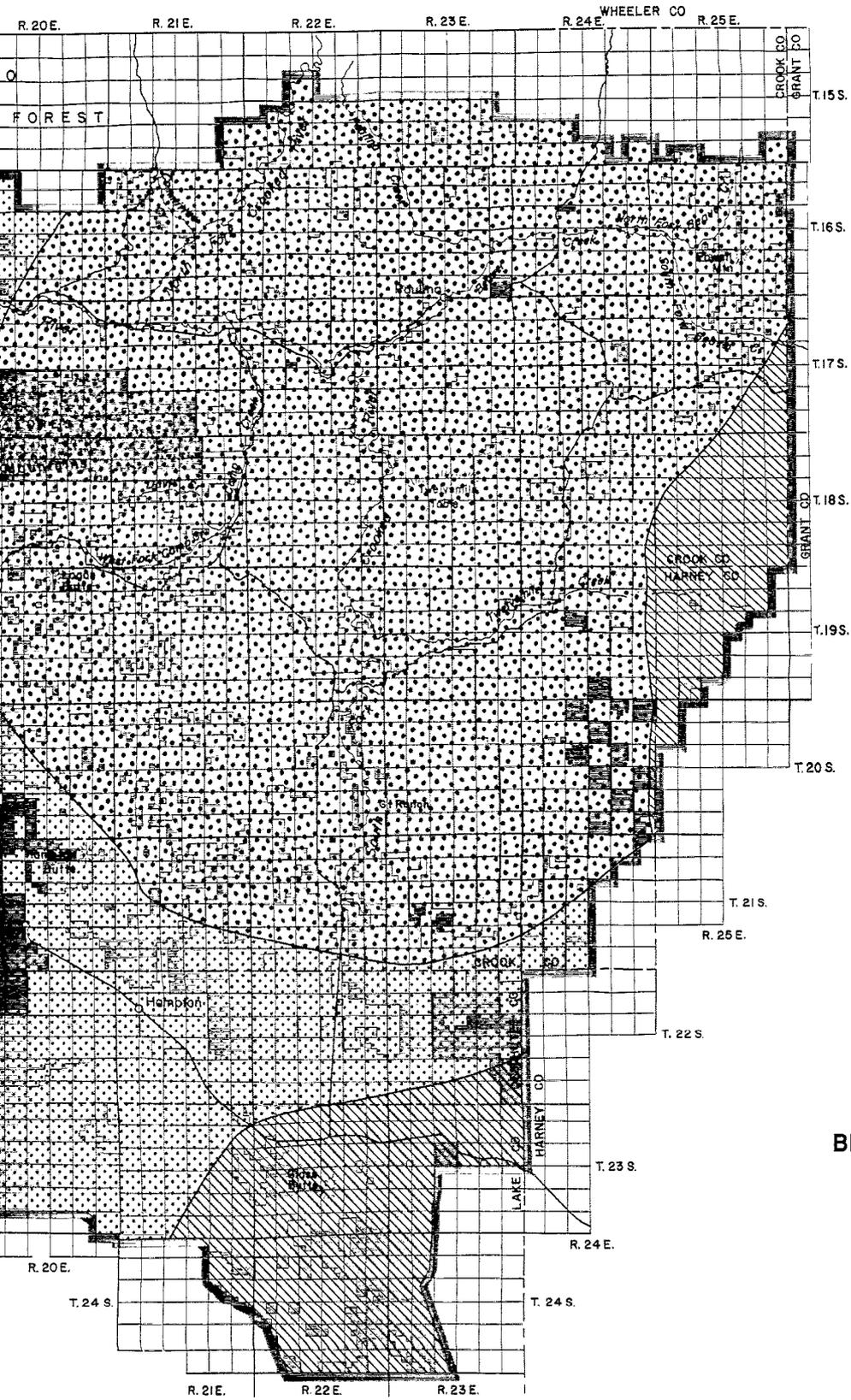


Present Day Hampton.

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.



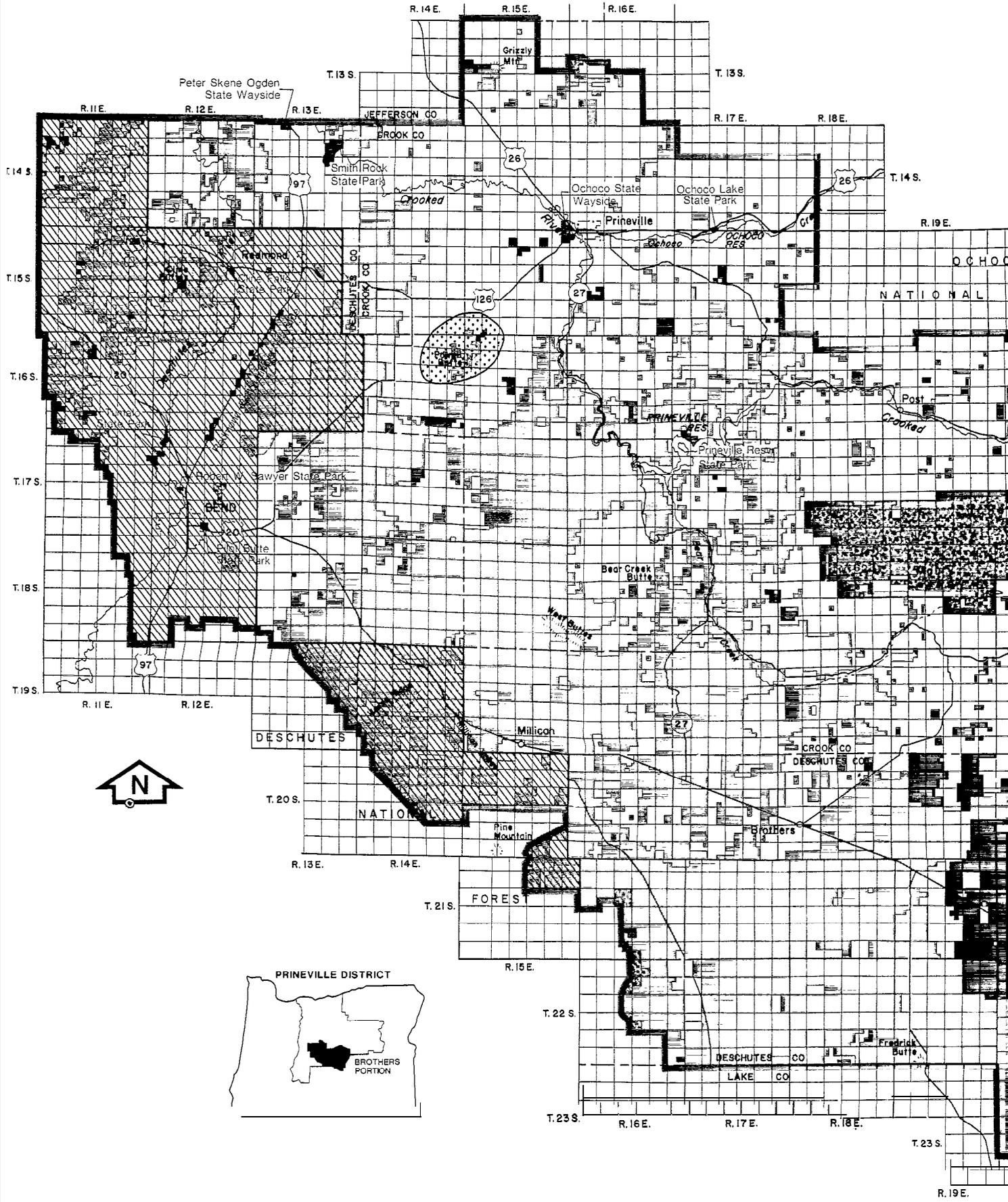
-  High Potential
-  Moderate Potential
-  Low Potential
-  Unknown Potential

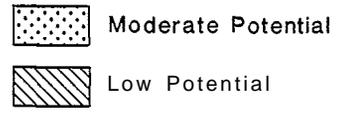
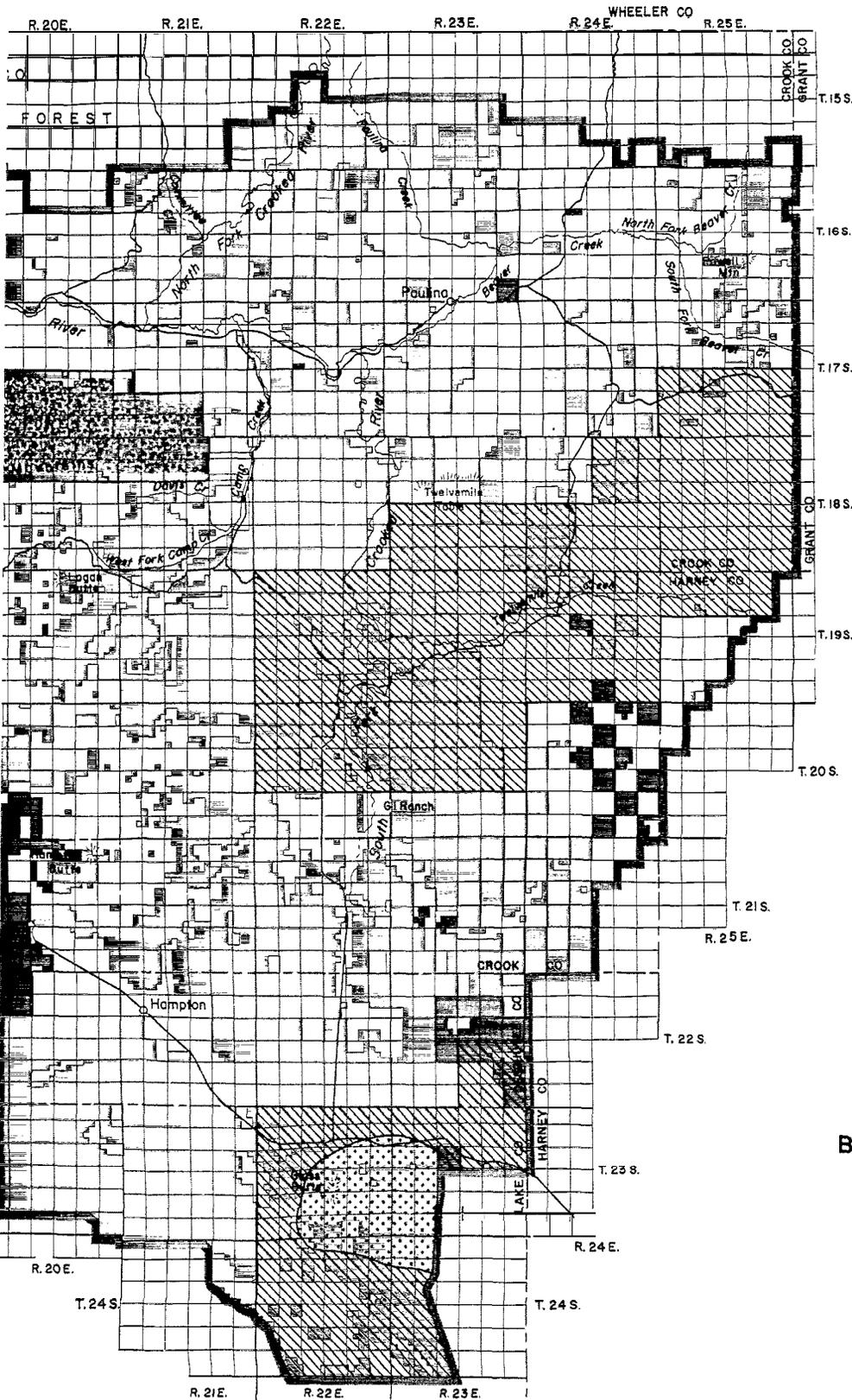
US DEPARTMENT OF THE INTERIOR
Bureau of Land Management

PRINEVILLE DISTRICT
September 1988

BROTHERS/LA PINE PLANNING AREA

**MAP 22
Oil and Gas Potential
Brothers Portion**



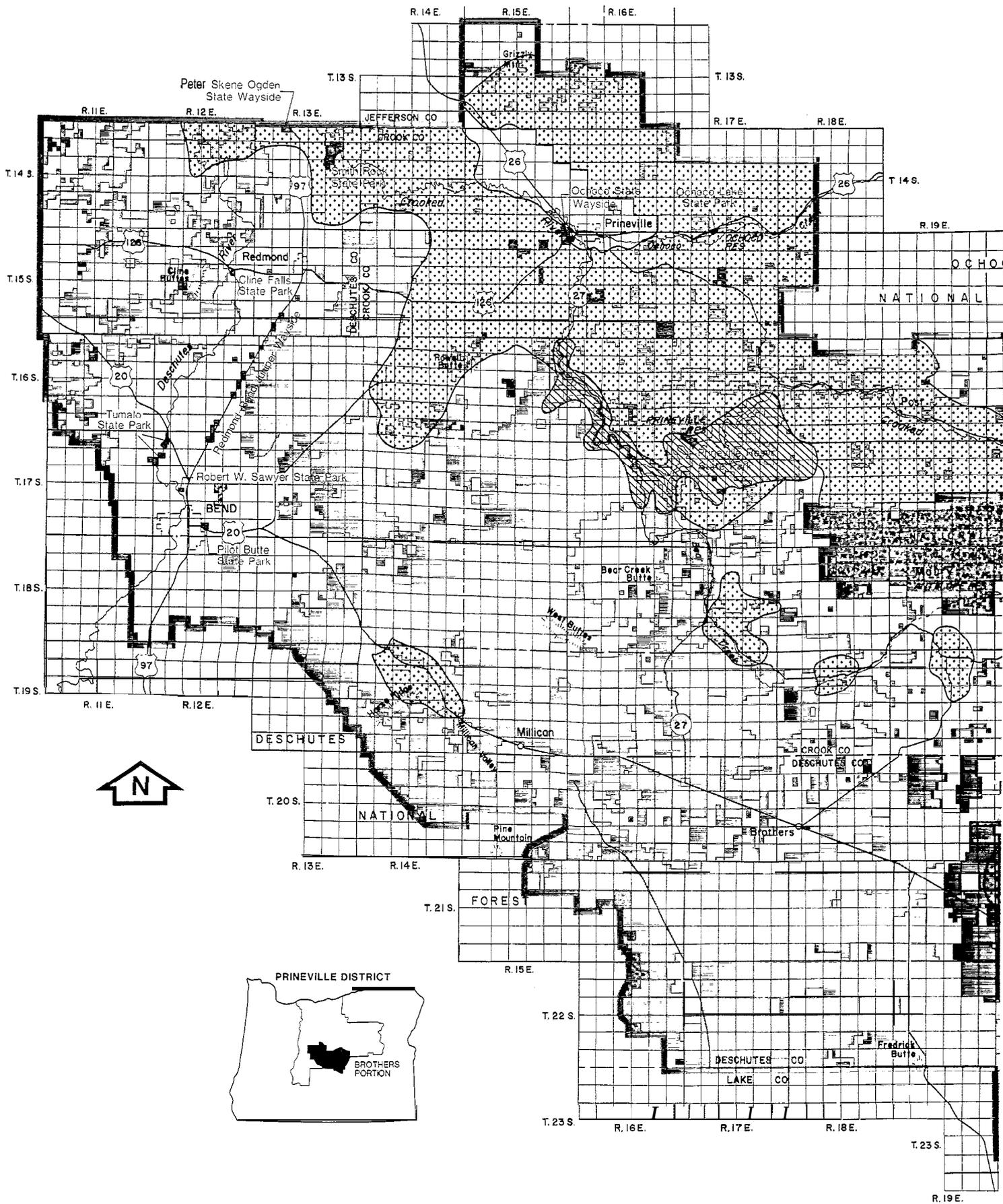


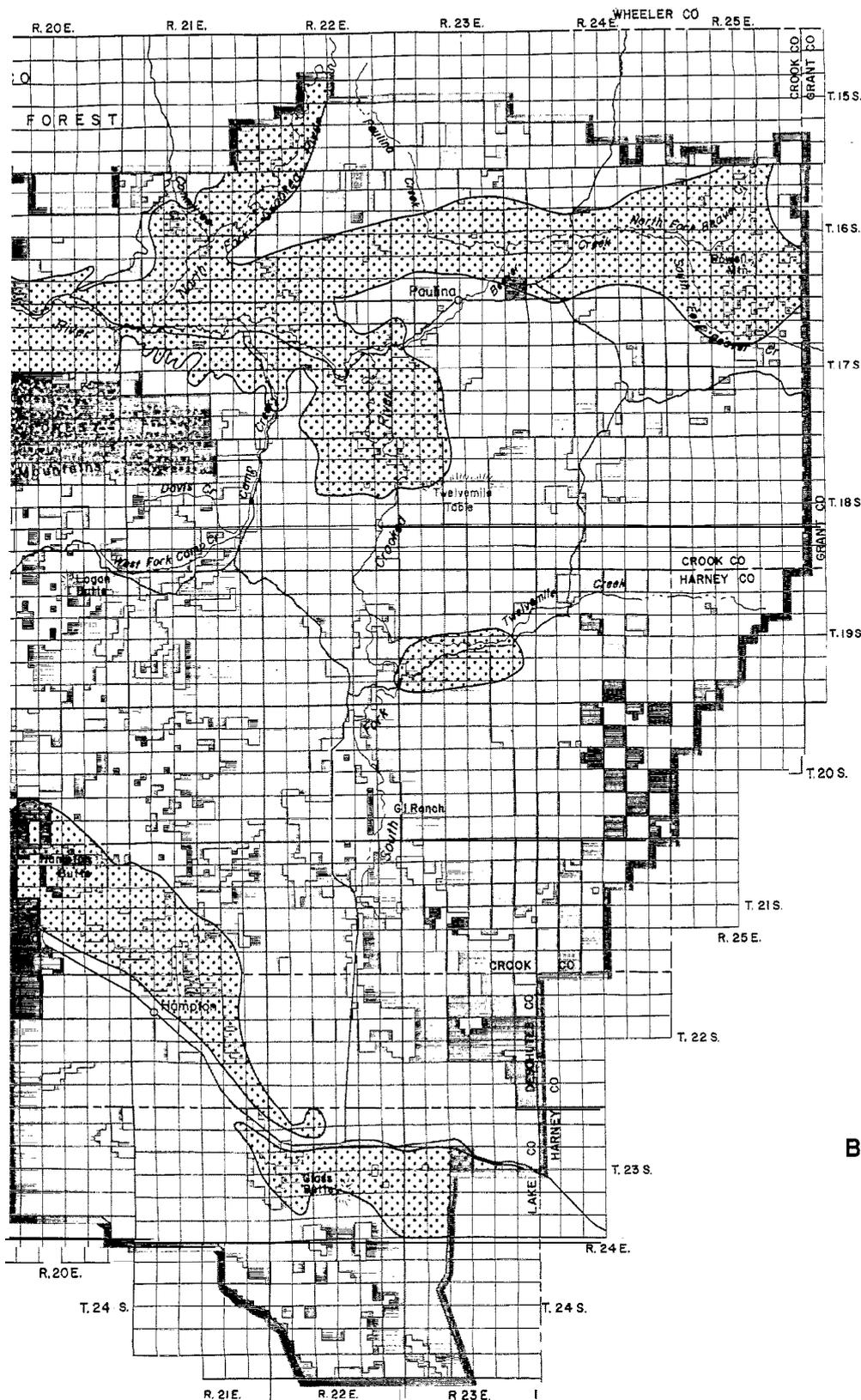
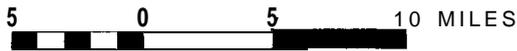
US DEPARTMENT OF THE INTERIOR
Bureau of Land Management

PRINEVILLE DISTRICT
September 1988

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

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
 September 1988

BROTHERS/LA PINE PLANNING AREA

MAP 24
Minerals
Management Areas
Brothers Portion

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 $\frac{1}{4}$

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 would 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 and the 36,511 acre mineral segregations for chalcedony and obsidian at Glass Butte would be retained. An additional withdrawal of 13,000 acres in the Congleton Hollow/Liggett Table area would be proposed to the Secretary of the Interior. This withdrawal would apply only to chalcedony type material in order to protect public recreational rockhounding opportunities in this area.

There are 12 separate areas recommended for ACEC designation which total 36,916 acres. These areas would not be withdrawn from mineral entry, however, restrictions on mining operations would likely be included in any approved plans of operation under 43 CFR 3809. Table 22 shows locatable mineral potential for the entire planning area. Map 25 shows locatable mineral occurrence potential for the Brothers Portion. Locatable mineral occurrence potential in the LaPine Portion is low.

Implementation and Standard Operating Procedures

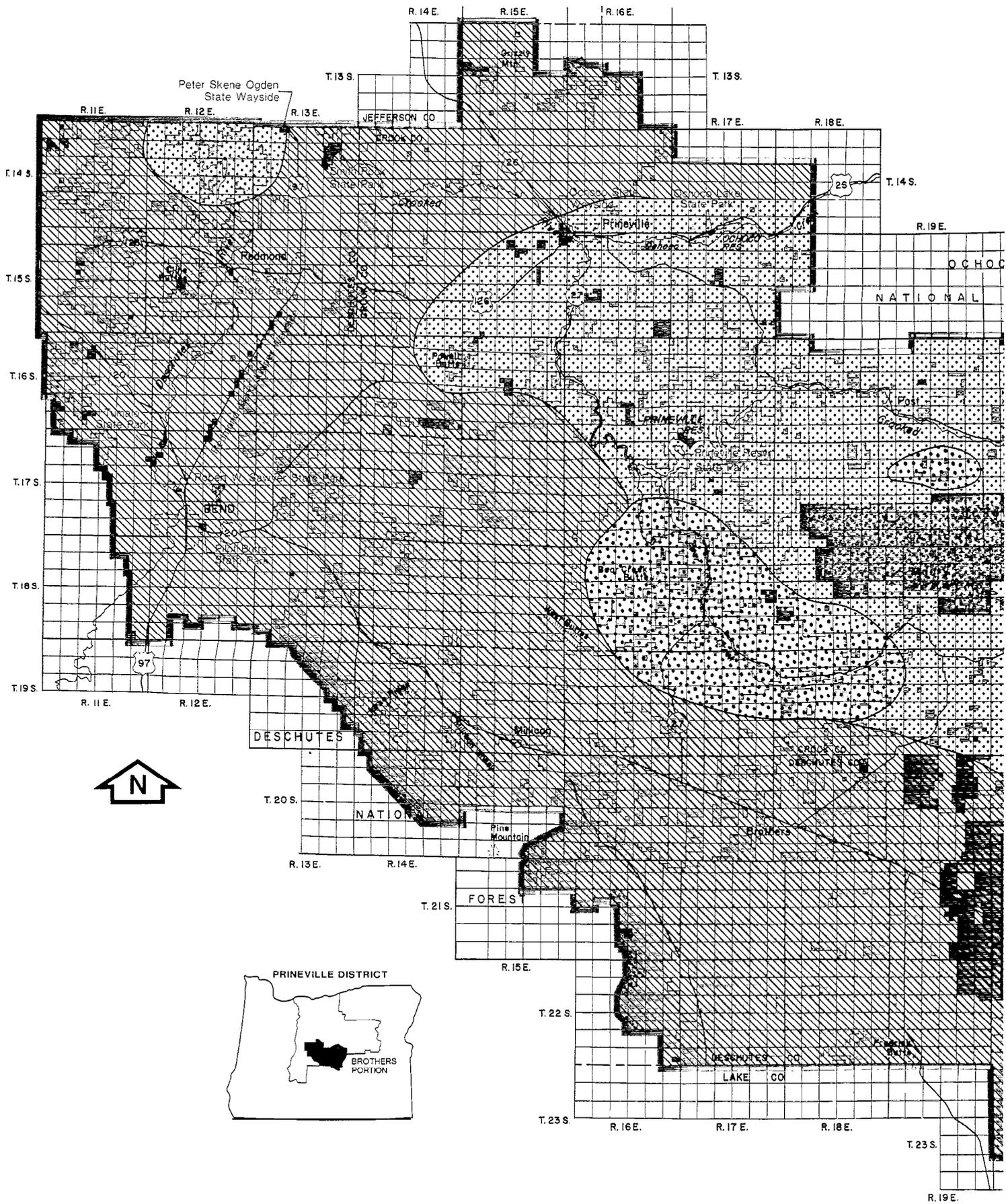
No “unnecessary or undue degradation” of Federal lands will be allowed. “Unnecessary or undue degradation” means surface disturbance greater than what would normally result when an activity is being accomplished by a prudent operator in usual, customary and proficient operations of similar character 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.

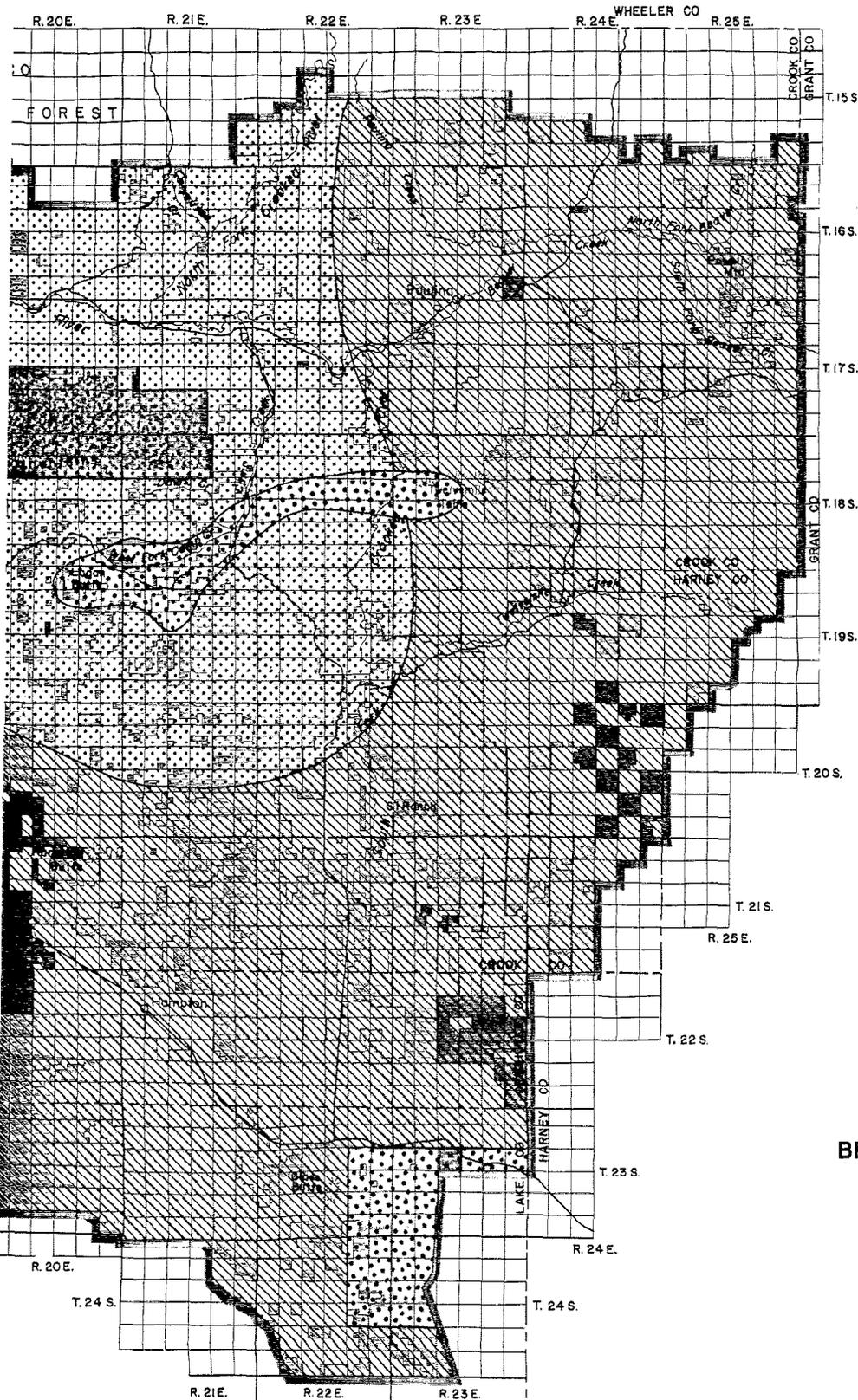
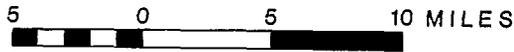
All Operations

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

Table 22. Acres Potentially Valuable for Locatable Minerals, Brothers/LaPine Planning Area

Management Categories	Low Potential	Moderate Potential	High Potential	Total	Percent of Total Public Mineral Acres
Open	781,000	101,000	70,000	952,000	86
Open-WSA (43CFR 3802)	61,000	53,000	7,000	121,000	11
Open - ACECs	23,000	12,000	2,000	37,000	3
Closed - Non Discret.	1,000	0	0	1,000	—
Total	866,000	166,000	79,000	1,111,000	100





-  High Potential
-  Moderate Potential
-  Low Potential

US DEPARTMENT OF THE INTERIOR
Bureau of Land Management

PRINEVILLE DISTRICT
September 1988

BROTHERS/LA PINE PLANNING AREA

MAP 25
Locatable Minerals
Potential
Brothers Portion

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.

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.

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 would 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, would 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 would be the same as those restricted areas discussed under locatable minerals. In addition, in areas classified as visually sensitive, mineral material development activity would 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.



Present Day Brothers,

Ongoing Management Programs

The Brothers/LaPine RMP focuses on nine significant resource management issues. Other ongoing BLM management programs and actions discussed in the proposed 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 further analysis of these areas for wilderness will be 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 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 (PL 90-542) to preserve selected rivers in natural, free-flowing conditions. Segments of the Crooked, Deschutes and Little Deschutes rivers are included in the Nationwide Rivers Inventory, compiled by the National Park Service.

Legislation has been drafted which would designate the several river segments within the

Brothers/LaPine Planning Area as components of the National Wild and Scenic Rivers System. Table 23 summarizes those rivers currently under consideration for designation.

Public lands adjacent to these river segments will continue to be managed so as to protect the outstandingly remarkable values which qualified them for consideration until such time as they are designated or released from further study. For those rivers designated as components of the national system, specific management plans will be developed to implement the mandates of the National Wild and Scenic Rivers Act. Areas not designated as wild and scenic rivers would be managed to protect recreational, visual, riparian, fish and wildlife values as proposed in this plan. Several of these areas are also proposed for designation as areas of critical environmental concern.

Table 23. Rivers Under Consideration for Wild and Scenic River Designation, Brothers/LaPine Planning Area

River	Total Miles in Planning Area	Total Miles Eligible	Total Miles of Public Land Frontage	Potential Designation by River Segment
South Fork Crooked River	25.0	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
North Fork Crooked River	17.6	17.6	10.8 ¹	Ochoco National Forest Boundary to Fox Canyon Creek (3.0 miles) - Recreational Fox Canyon Creek to Committee Creek (9.6 miles) - Wild Committee Creek to 1 mile from confluence with the Crooked River (0.5 miles) - Recreational
Crooked River (2 segments)	23.1	23.1	13.7 ²	Bowman Dam to Dry Creek (13.8 miles) - Recreational National Grassland Boundary to Lake Billy Chinook (9.3 miles) - Recreational
Deschutes River	19.0	19.0	9.0 ³	Odin Falls to Lake Billy Chinook (19 miles) - Scenic
Little Deschutes River	79.5	79.5	1.9 ⁴	Deschutes National Forest Boundary to its confluence with the Deschutes River (79.5 miles) - Recreational
Crescent Creek	20.9	20.9	1.2 ⁵	Deschutes National Forest Boundary to its confluence with the Little Deschutes River (20.9 miles) - Recreational

¹An additional 14.7 miles of the North Fork of the Crooked River upstream on the Ochoco National Forest is also under consideration.

²Total 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.

³An additional 100.0 miles of the Deschutes River downstream and 54.4 miles upstream and outside the planning area are also under consideration.

⁴An additional 17.5 miles of the Little Deschutes River upstream on the Deschutes National Forest is also under consideration.

⁵An additional 20.1 miles of Crescent Creek upstream on the Deschutes National Forest is also under consideration.

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 26 and 27 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

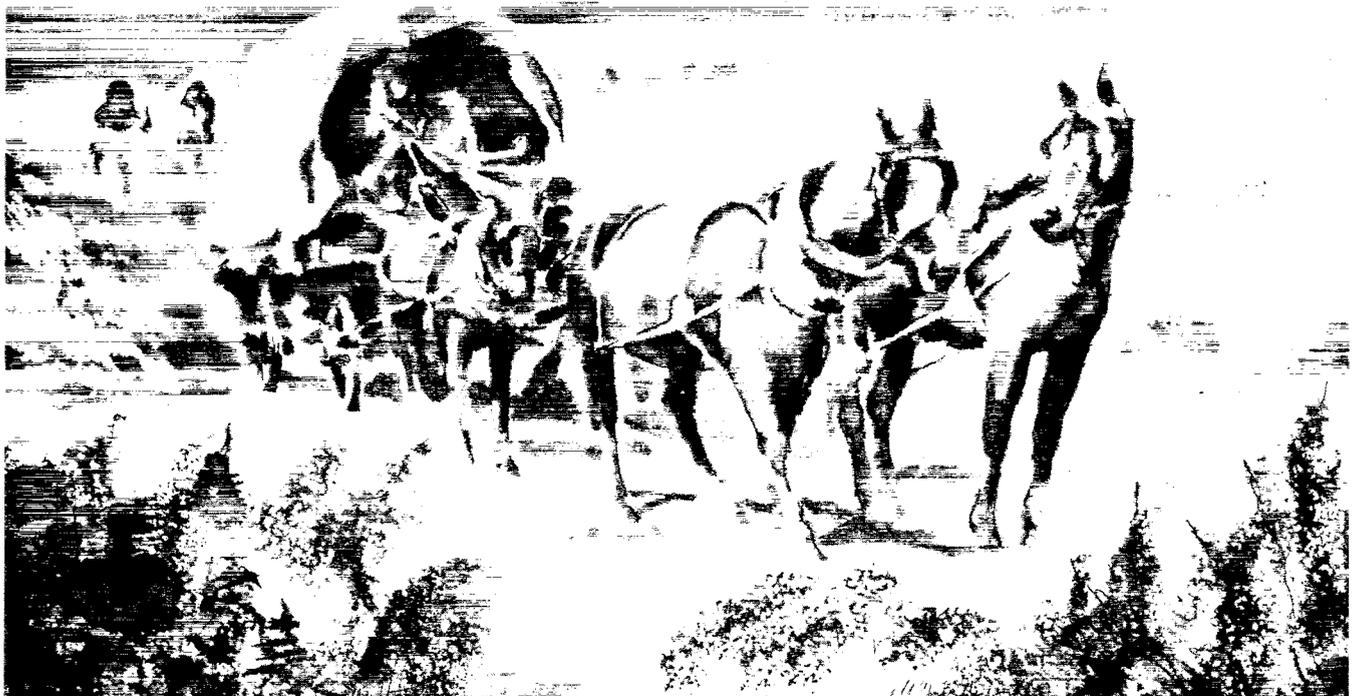
The BLM will continue to identify cultural resource sites. They will be managed for information potential, public values and conservation. The BLM will insure that authorized land use actions do not inadvertently harm or destroy Federal or non-Federal cultural resources. Periodic patrols of

known cultural resource areas will be carried out to discourage vandalism.

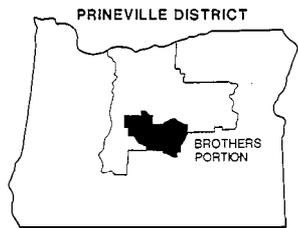
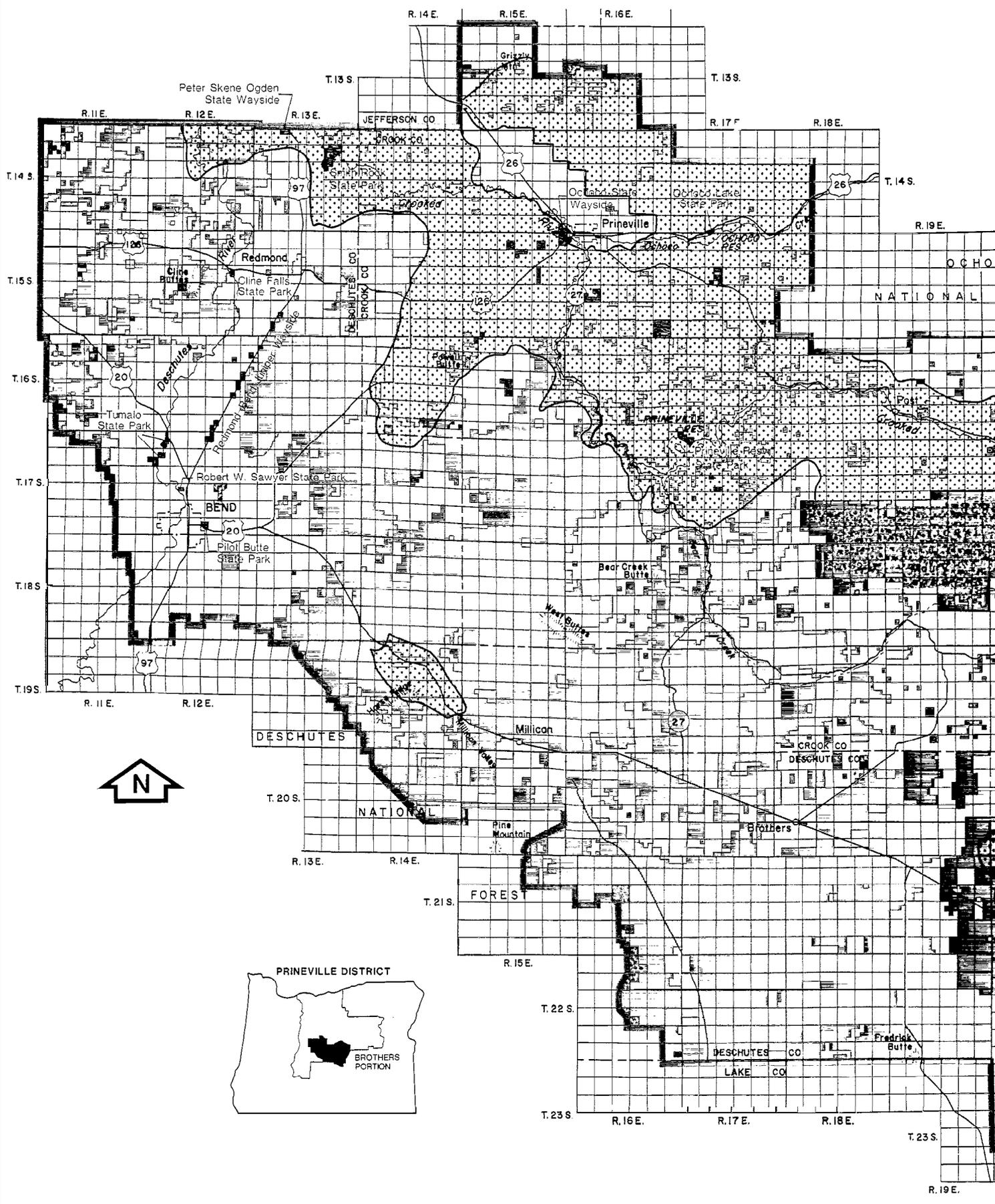
Sites will also be evaluated to determine if they are eligible for addition to the National Register of Historic Places. Cultural resource management plans will be written for areas with high cultural resource values such as Glass Buttes.

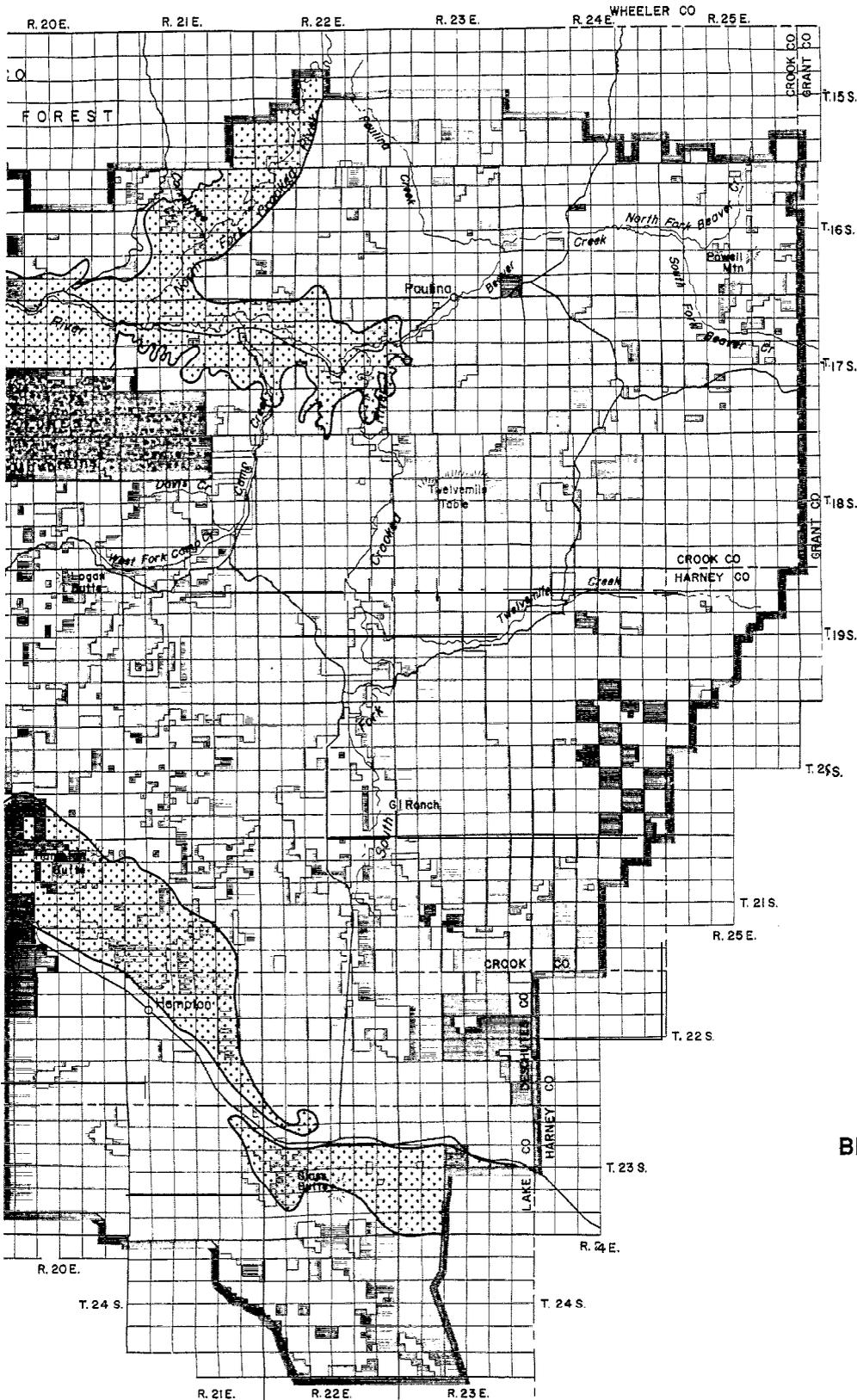
To comply with the National Historic Preservation Act of 1966, 36 CFR 800, and Executive Order 11593, all areas where ground is to be disturbed by range, watershed, or wildlife developments or timber harvest activities would be inventoried for prehistoric and historic features. Where feasible, all sites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



Wagon train entering Crooked River Valley.





 Areas Having High or Sensitive Visual Qualities

US DEPARTMENT OF THE INTERIOR
Bureau of Land Management

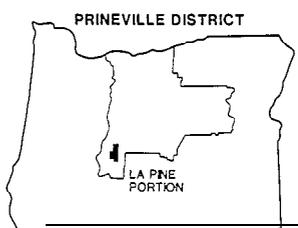
PRINEVILLE DISTRICT
September 1988

BROTHERS/LA PINE PLANNING AREA

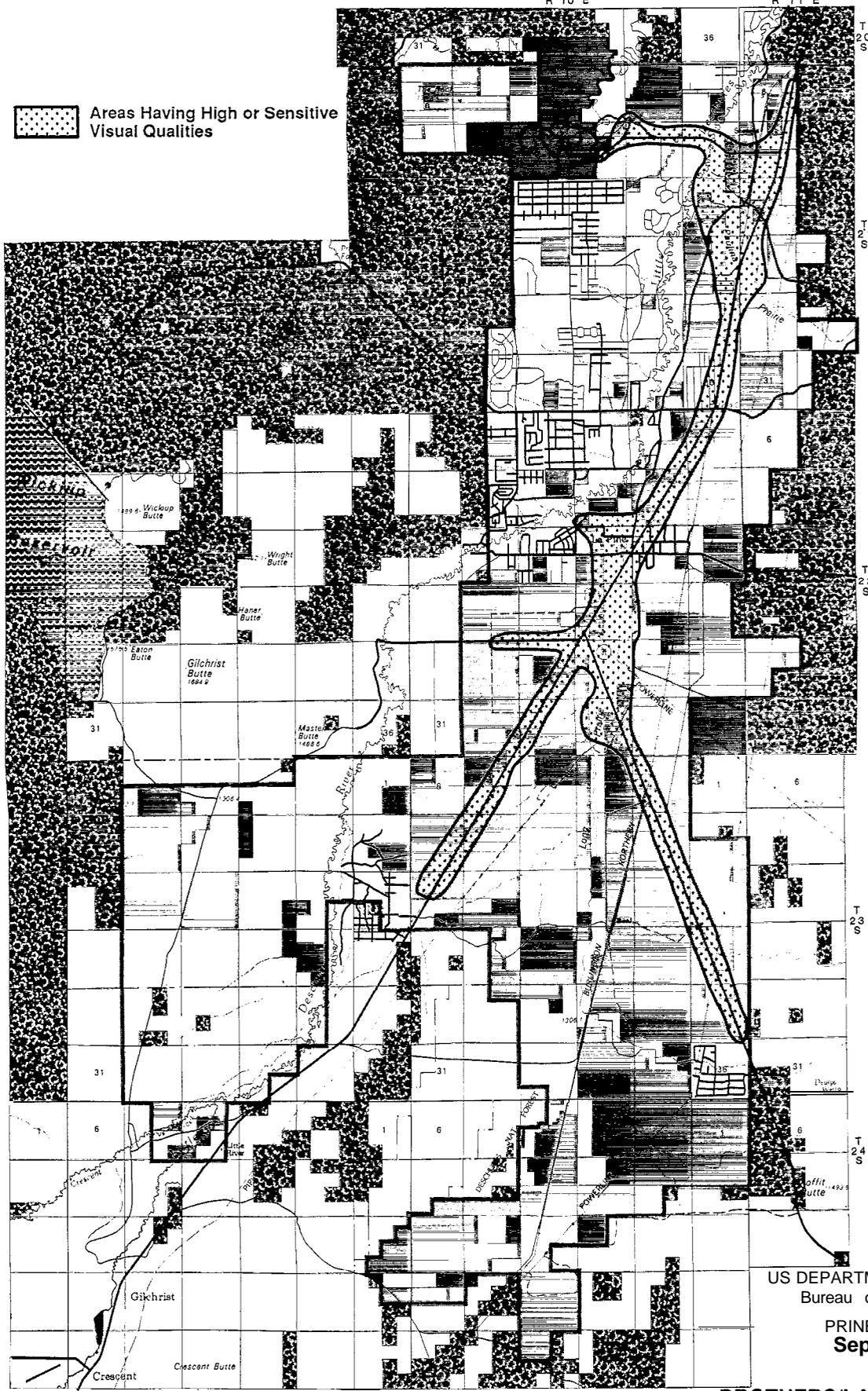
MAP 26
Visual Resources
Brothers Portion

R 10 E R 11 E

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



 Areas Having High or Sensitive Visual Qualities



US DEPARTMENT OF THE INTERIOR
Bureau of Land Management
PRINEVILLE DISTRICT
September 1988

BROTHERS/LA PINE PLANNING AREA

1 0 1 2 MILES


MAP 27

Visual Resources La Pine Portion

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.

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.

Figure 4, Process for Changing the RMP, shows how monitoring could lead to a revision in design features or to other changes to the RMP

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.

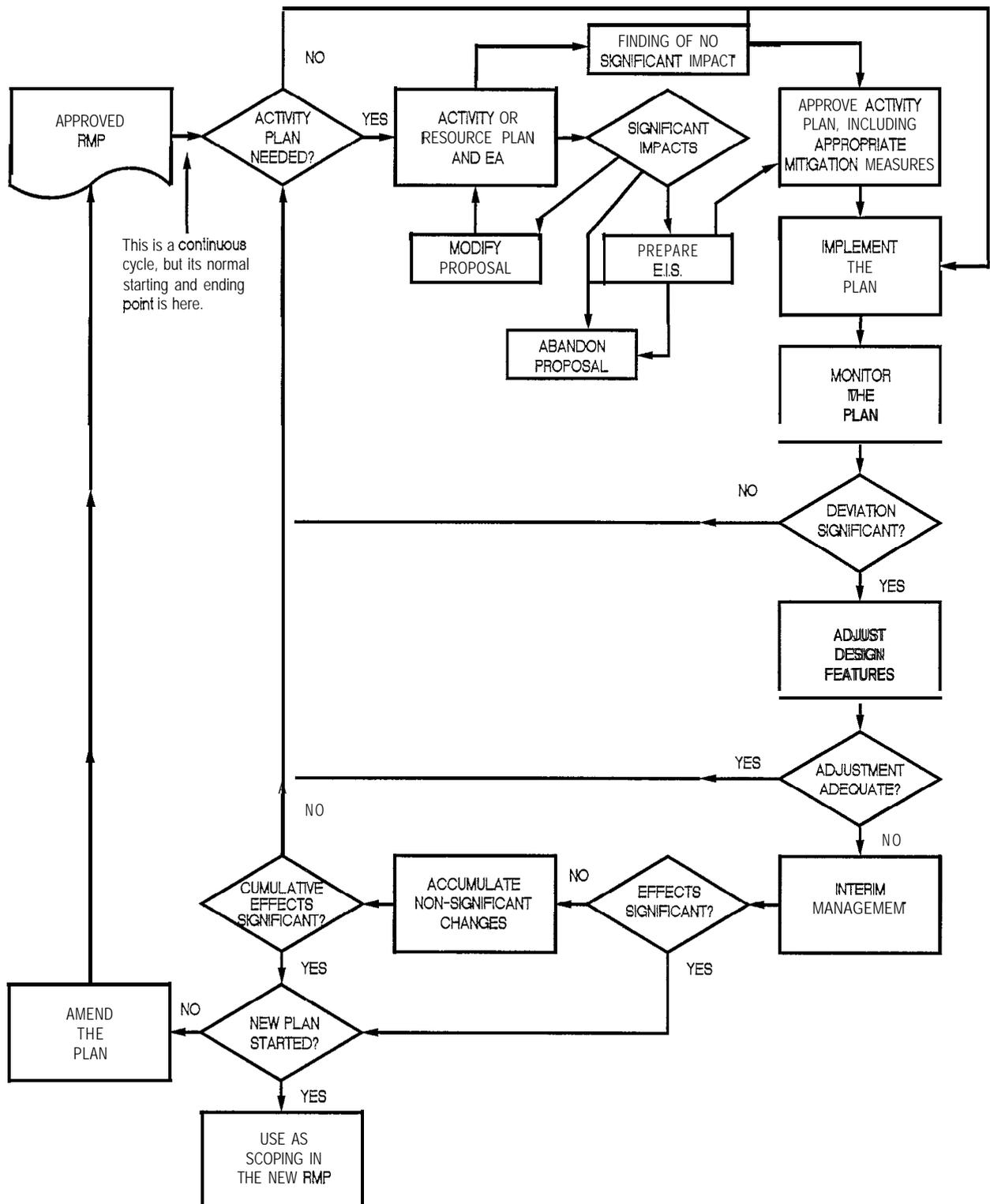
Potential new management actions which are identified after approval of the RMP would be reviewed before BLM takes any actions. For example, if a new ACEC proposal meets BLM criteria for consideration, the District Manager would prescribe interim management and protection measures until the RMP could 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.

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 would 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.

FIGURE 4
PROCESS FOR CHANGING THE RMP





Main Street Redmond, about 1905.

Chapter 3. Text Revisions



LaPine prior to 1935 when the store burned down.

Introduction

Significant revisions and corrections to the Draft Brothers/LaPine Resource Management Plan and Environmental Impact Statement (RMP/EIS) are presented in this chapter. The page numbers that appear in bold print throughout this chapter indicate the page of the Draft RMP/EIS on which the addition or correction would appear if the entire draft were being reprinted.

Page vi Issue 9 under Alternatives C (last sentence) and D (next to the last sentence) should read:

“Restrictions to protect 100,000 acres of public land that are visually sensitive or of high scenic quality would be continued.”

Page vii Issue 9 (next to the last sentence) under Alternatives E and F should read:

“Restrictions to protect 300,000 acres of public land that are visually sensitive, or of high or moderate scenic quality would be implemented.”

Page 14. Forestland. Item 6 should read:

“The primary regeneration cutting method used will be the seed tree system.”

Page 17. Energy and Minerals. First paragraph should read:

“Mineral exploration and development on public land will be regulated under 43 CFR 3802 and 3809 to prevent unnecessary or undue degradation.”

Salable Minerals. First paragraph should read:

“Salable minerals, including common varieties of sand, gravel and stone will continue to be made available for local governments and the public. The salable mineral program involves several sites where State and county road departments obtain rock for road surfacing material. New material sites may be developed as needed if they are consistent with the protection of other resource values. Two community pits, one for clay and one for cinders will remain open for public use.”

Page 31. Minerals. Last sentence under Alternatives C and D should read:

“Restrictions to protect 100,000 acres of public land that are visually sensitive or of high scenic quality would be continued.”

Page 32. Minerals. Next to the last sentence under Alternatives E and F should read:

“Restrictions to protect 300,000 acres of public land that are visually sensitive or of high or moderate scenic quality would be implemented.”

Page 56. Forestland. Commercial Forestland - LaPine Portion. The first paragraph should read:

“There are about 42,000 acres of forestland in the LaPine portion of the planning area as shown on Map 14 and Table 22. The harvest level under the preferred alternative is based on the 27,584 acres noted under Forestland Available for Intensive Production of Forestland Products.” (Also see text revision for Table 22 below).

Page 57. Table 22 in the Draft RMP/EIS has been revised to reflect a decrease of 2,680 acres in the total number of acres of public land, resulting from a land exchange. A change in these figures also results from noting multiple use set aside and constrained acres separately; and by adding the acres recently harvested, or under contract back into the total. Recently harvested acres, or acres under contract are still an integral part of the total intensive production base. It is now shown as Table 7 in this document.

Page 84. Energy and Minerals. The next to the last sentence of the fourth paragraph should read:

“Restrictions to protect visual qualities also exist on 100,000 acres of public land near primary travel corridors and communities within the planning area.”

Page 102. Impacts to Energy and Minerals. The third paragraph should read:

“There would be no change in impacts to locatable minerals or to leasable or salable minerals under Alternatives C or D. The withdrawal of approximately 13,000 acres of the Congleton Hollow/Liggett Table rockhounding area from location of chalcedony minerals under Alternative D, if approved by the Secretary of the Interior, would preclude commercial entry and reserve those deposits for recreational rockhounding.”

Page 111. References Cited. Insert the following references:

“Thomas, J. W. et al. 1979 Wildlife Habitats in Managed Forests. USDA. Ag. Handbook No. 553.
Thomas, J. W. and Chris Maser. 1986. Wildlife Habitats in Managed Rangelands - The Great Basin of Southeastern Oregon. USDA, USDI”

Page 112. Glossary

Definition of Active Grazing Preference should be added:

“Active Grazing Preference. That portion of the total grazing preference for which grazing use may be authorized.”

Definition of Clearcutting should read:

“A regeneration cutting method in which all trees, merchantable or unmerchantable, are cut from an area.”

Page 114. Glossary. Definition of locatable minerals should read:

“Whatever is recognized as mineral by the standard authorities and found on the public domain lands of the United States must be treated as coming within the purview of the mining laws, except as modified by the Act of February 25, 1920, as amended (30 U.S.C. 181, et seq.) and the Act of July 23, 1955 (30 U.S.C. 601).”

Page 115 Glossary. Definition of salable minerals should be added:

“Salable Minerals. Generally those minerals of low unit value, used in high volumes which in this area includes common varieties of rock, clay, decorative stone, sand, gravel and cinders.”

Definitions of seed tree system, selection system and shelterwood system should be added:

“Seed Tree System. A regeneration cutting method in which nearly all merchantable trees on an area are harvested in one cut. Approximately 10-20 trees per acre are left for seed production. After establishment of the new stand, the seed trees may be harvested.”

‘Selection System. A regeneration cutting method in which individual trees, or small groups of trees are selected for cutting. The objective is to provide small



Dear Hunters near LaPine.

openings in the forest canopy in which seedlings would become established.”

“Shelterwood System. A regeneration cutting method similar to the seed tree system, except more trees per acre (over 20) are left for seed production and shade. The shelterwood system necessitates two or more cuttings to harvest the mature stand.”

Definitions of stocked, 10 percent should read:

“Tree seedlings and saplings 0 to 5 inches in diameter 4.5 feet above the ground that are well distributed over the land and are more than 30 per acre in number. Or, they are trees larger than 5 inches in diameter with foliage that covers at least 10 percent of the land surface area.”

Appendix D. Relationship of Alternatives to County Comprehensive Plans as they Incorporate and Reflect Statewide Land Conservation and Development Goals¹

LCDC Statewide Goal

Number and Description

1. To develop a citizen involvement program that ensures the opportunity for citizens to be involved in all phases of the planning process.
2. To establish a land use planning process and policy framework as a basis for all decisions and actions related to use of land and to assure an adequate factual base for such decisions and actions.
3. To preserve and maintain agricultural lands,

Discussion

BLM's land use planning process provides for public input at various stages. Public input was specifically requested in developing issues and planning criteria, the preferred alternative, other alternatives, and analysis techniques described in the RMP/EIS. Public input will continue to be utilized in the environmental analysis process and development of the final RMP.

The preferred alternative and other alternatives have been developed in accordance with the land use planning process authorized by the Federal Land Policy and Management Act of 1976 which provides a policy framework for all decisions and actions.

The vast majority of public lands in the planning area are not suitable for intensive agriculture. Alternatives A, B, C, D and E provide for continued use of small tracts of public lands for intensive agriculture either through lease or land sales. The sale of small parcels in Zone 3 and exchanges in zones 2 and 3 could lead to new owner requests for non-agricultural (non-grazing) use of lands previously in public ownership. Since the new owner would be subject to county plan, ordinances and building permit requirements, it is assumed that the sale of public land and exchanges would not, in themselves, violate county plans. Alternative F would not be consistent with this goal.

4. To conserve forestlands for forest use.

The planning area has significant commercial forestland and juniper woodlands. Alternatives A, B and D would increase wood products production in short term. Alternative C would retain current management direction with no change in timber harvest levels. The other alternatives could cause a reduction in timber harvest levels but would protect other forest values.
5. To conserve open space and protect natural and scenic resources.

Natural and visual resources were considered in the development of the preferred alternative and other alternatives. Forest management, under the preferred alternative and other alternatives would impact open space as well as natural and visual resources. Adverse impacts to visual resources, wildlife habitat and unique natural areas are greatest under Alternatives A and B and least under Alternatives E and F where natural values are emphasized.
6. To maintain and improve the quality of the air, water and land resources of the State.

The Federal and State water quality standards would be met and water quality would be maintained and/or improved under all alternatives. Burning of logging slash under all alternatives would have a slight temporary effect on air quality at upper atmospheric levels. All alternatives would comply with the statewide Smoke Management Plan.
7. To protect life and property from natural disasters and hazards.

Natural hazard areas, particularly floodplains and areas with highly erosive soils have been identified. All alternatives provide for appropriate management of natural hazard areas. BLM authorized developments within natural hazard areas will be minimal under each alternative, with project construction and engineering reflecting local conditions.
8. To satisfy the recreational needs of the citizens of the State and visitors and where appropriate, to provide for the siting of necessary recreational facilities including destination resorts.

The BLM actively coordinates its outdoor recreation and land use planning efforts with those of other agencies to establish integrated management objectives on a regional basis. Under the preferred alternative and all other alternatives, opportunities would be provided to meet recreation needs. The quantity of recreational opportunities would be greatest under Alternatives A,B,D and E. The quality of certain types of recreational opportunities would be greatest under Alternatives D, E and F.

9. To diversify and improve the economy of the State.

Alternatives A, B, C and D would induce economic stability or gains in the long term through livestock forage production, mineral exploration and/or timber harvesting. This would result in a slightly improved local and State economy. Alternatives E and F would provide lesser benefits through primitive recreation opportunities, but diminished commodity resource production. When needed the transfer of lands near the Redmond Municipal Airport will allow the City of Redmond to expand the Redmond Airport and to provide sufficient lands and in particular large sites for industries to locate and expand.

11. To plan and develop a timely, orderly and efficient arrangement of public facilities and services to serve as a framework for urban and rural development.

Public lands may be available for rural or urban development following a BLM land sale or exchange, if the action would be permitted under the local government comprehensive plan and ordinances.

12. To provide and encourage a safe, convenient and economical transportation system.

All alternatives provide for continuation of, or some expansion of linear and aerial rights-of-way for powerlines, pipelines, communications facilities, roads and other public purposes. The availability of BLM lands is greatest for these potential uses in Alternative A and decreases through Alternative F.

13. To conserve energy.

Conservation and efficient use of energy sources are objectives in all BLM activities. Sale and harvest of minor forest products (e.g., posts, poles, firewood) from woodlands and noncommercial forest areas is permitted in most areas.

14. To provide for an orderly and efficient transition from rural to urban land use.

The sale, transfer or exchange of lands adjacent to the communities of Bend, LaPine, Redmond, and Prineville will provide for a logical growth pattern for those communities in areas which will not have adverse affects on competing land uses

Statewide goal 10, Housing, is not applicable to any alternatives. Goals 15-19 address the Willamette River Greenway and various ocean, coastal or estuarine resources. They are not applicable to the counties within the Brothers/LaPine Planning Area.

Chapter 4 Consultation and Distribution



Early day Prineville.

Introduction

The Brothers/LaPine RMP/EIS was prepared by an interdisciplinary team of specialists from the Prineville District Office. Writing of the RMP/EIS began in the spring of 1987; however, a complex process that began in August 1986 preceded the writing phase. The planning process included resource inventory, public participation, interagency coordination and preparation of a management situation analysis (on file at the Prineville District Office). Consultation and coordination with agencies, organizations and individuals has occurred throughout the planning process.

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.

Agencies and Organizations Contacted or Consulted

The RMP/EIS team contacted or received input from the following organizations during the development of the RMP/EIS:

Federal Agencies

U.S.D.E. Bonneville Power Administration
U.S.D.I. Fish and Wildlife Service
U.S.D.A. Forest Service
U.S.D.A. Soil Conservation Service

State and Local Governments

Fish and Wildlife Department
Department of Forestry
Department of Lands
Historic Preservation Officer
Department of Geology and Mineral Industries
Oregon State Parks and Recreation,
Division of the Department of Transportation
Crook County Commissioners
Deschutes County Commissioners
City of Redmond

Organizations

Cascade Studs, Inc.
Native Plant Society of Oregon
Northwest Federation of Mineralogical Societies
Oregon Natural Resources Council
Sand Fleas 4 X 4 Club
The Nature Conservancy

List of Agencies, Organizations and Individuals to Whom Copies of the RMP/EIS Have Been Sent

Federal Agencies

U.S. Environmental Protection Agency
U.S.D.A. Forest Service
U.S.D.A. Soil Conservation Service
U.S.D.E. Bonneville Power Administration
U.S.D.I. Bureau of Indian Affairs
U.S.D.I. Fish and Wildlife Service
U.S.D.I. Geological Survey
U.S.D.I. National Park Service
U.S.D.I. Bureau of Mines
U.S.D.I. Bureau of Reclamation

State and Local Government

Crook County Court
Crook County Planning Commission
Central Oregon Intergovernmental Council
Deschutes County Planning Department
Lake County Commissioners
Oregon State University Extension Service
Department of Environmental Quality
Department of Fish and Wildlife
Department of Geology and Mineral Industries
Division of State Lands
Department of Land Conservation and Development
Department of Forestry
Parks and Recreation, Division of the
Department of Transportation
Department of Agriculture
Historic Preservation Officer
Clearinghouse, Executive Department A-95,
Intergovernmental Relations Division
State Library
National Association of Conservation Districts
Tribal Council of the Confederated
Tribes of the Warm Springs Indian Reservation

Interest Groups and Organizations

1000 Friends of Oregon
American Fisheries Society
AMOCO Production Company
Association of Oregon Archaeologists
Atlantic Richfield Company
Audubon Society
Brooks Resources Corporation
Cascade Holistic Economic Consultants
Cascade Motorcycle Club

Desert Trail Association
Izaak Walton League
League of Women Voters
National Mustang Association
Natural Resources Defense Council
National Wildlife Federation
Native Plant Society of Oregon
Northwest Environmental Defense Center
Northwest Federation of Mineralogical Societies
Northwest Mineral Prospectors Club
Northwest Mining Association
Northwest Petroleum Association
Northwest Power Planning Council
Northwest Timber Association
Oregon Cattlemen's Association
Oregon Council of Rock and Mineral Clubs
Oregon Environmental Council
Oregon Hunter's Association
Oregon Natural Heritage Program
Oregon Natural Resources Council
Oregon Sportsman and Conservationist
Oregon Trout
Oregon Wildlife Federation
Pacific Gas Transmission Company
PNW Research Natural Area Forestry Science Lab
Pacific NW 4 Wheel Drive Association
Public Lands Restoration Task Force
Shell Western F&P Inc.
Sierra Club
Society of American Foresters
Society for Range Management
Sunriver Anglers Club
The Nature Conservancy
The Wilderness Society
The Wildlife Society
Western Council; Lumber, Production and Industrial
Workers
Western Forest Industries Association
Western Forestry and Conservation Association
Western Wood Products Association
Wild Horse Organized Assistance
Wildlife Management Institute

Approximately 375 additional individuals and organizations who have expressed an interest in use and management of public lands in the planning area were also sent copies of the draft RMP/EIS. Included in this group are all grazing lessees within the planning area, members of the Oregon legislature, U.S. Congressional delegation and various educational institutions.

Consistency Review

Prior to approval of the proposed RMP, the State Director will submit the plan to the Governor of Oregon and request that he identify any known inconsistencies with State or local plans, policies or programs. The Governor will have 60 days in which to identify inconsistencies and provide recommendations in writing to the State Director. The consistency of the plan with the resource related plans, programs and policies of other Federal agencies, State and local government and Indian tribes will be re-evaluated in the future as part of the formal monitoring and periodic evaluations of the plan.

Comment and Protest Procedures

If you wish to make comments for the District Manager's consideration in the development of the decision, please submit your comments by December 1, 1988, to the District Manager, Prineville BLM District Office located at 185 East 4th Street (PO Box 550) in Prineville, Oregon 97754. The plan decisions will be based on the analysis contained in the EIS, additional data that may become available, public opinion, management feasibility, policy and legal constraints.

Any person who participated in the planning process and has an interest that is or may be adversely affected by approval of the proposed RMP may file a written protest with the Director of the BLM within 30 days of the date the EPA publishes the notice of receipt of the proposed RMP and final EIS in the Federal Register. Protests should be sent to the Director (760), Bureau of Land Management, 18th and C Streets NW, Washington DC. 20240 by December 1, 1988. The protest shall contain the name, mailing address, telephone number, and interest of the person filing the protest; a statement of the issues being protested (raising only those issues that were submitted for the record during the planning process); a statement of the parts of the plan being protested; copies of all documents addressing the issues submitted during the planning process by the protesting party, or an indication of the date the issues were discussed for the record; and a concise statement explaining why the decision is believed to be wrong.

The Director shall render a prompt written decision on the protest setting forth the reasons for the decision. The decision shall be sent to the protesting party by certified mail and shall be the final decision of the Department of Interior.

Analysis of Public Comment on the Draft Brothers/LaPine RMP/EIS

Changes or additions to the Draft RMP/EIS arising from public comments are included in Chapter 3 of this Proposed RMP and Final EIS. The letters which were received have been reproduced in this chapter with each substantive comment identified and numbered. BLM responses immediately follow each of the letters.

The agencies, organizations and individuals who commented on the Draft Brothers/LaPine RMP/EIS are as follows:

1. City of Redmond
2. Wild Horse Organized Assistance
3. Jim Myron
4. Robert Shotwell
5. Bureau of Mines
6. PNW Region U.S. Forest Service
7. Alice Elshoff
8. Bonneville Power Administration
9. Northwest Forestry Association
10. Evelyn Huntington
11. Central Oregon Audubon Chapter
12. PNW Research Station
13. State Parks and Recreation Division
14. Trout Unlimited of Oregon
15. Coalition for the Deschutes
16. U.S. Fish and Wildlife Service
17. Bureau of Reclamation
18. The Nature Conservancy
19. U.S. Geological Survey
20. Oregon Hunter's Association
21. U.S. Environmental Protection Agency
22. Oregon Council of Rock and Mineral Clubs
23. Phoebe Hargreaves
24. Suzanne Johannsen
25. Mari Hoffman Nelson
26. R.J. Weiss
27. Mae Weiss

Form letter related to off road vehicle management in Millican Valley-105 copies

Form letter related to off road vehicle management in the Brothers/LaPine Planning Area-26 copies



BRYANT, EMERSON & FITCH

ATTORNEYS AT LAW
100 WEST EYENOWEN AVENUE
P.O. BOX 457
REDMOND, OREGON 97756-0457
TELEPHONE (503) 548-2151

CLARENCE & BOGHESTER
1022-115
COPPERHILL LAKES & BRYANT
100-146
BRYANT, EMERSON & FITCH
BRYANT & ERICSSON
BRYANT, FITCH & FIER
104-182

BRYANT, EMERSON & FITCH

Mr. Brian Cunningham
Bureau of Land Management
Page Two

November 30, 1987

Mr. Brian Cunningham
Bureau of Land Management
185 East Fourth
Prineville, Oregon 97754

Re: BLM Plan/City of Redmond

Dear Brian:

As you know, the City of Redmond is extremely pleased with the manner in which the BLM has responded to our request. We believe that the identification of lands near the Redmond Airport for community expansion and the transfer of an initial 8,000 acres (approximately) is in the best interest not only of the City of Redmond but all of Central Oregon. With this transfer, these lands will be available for Airport and industrial development in the near future. However, we do not anticipate any large industry moving in right away which could create problems not only the City but also surrounding areas in terms of providing essential public and educational services. Instead, we envision a number of smaller to medium size industries being attracted to Redmond with a view toward later expansion.

Regarding the plan itself, the City would anticipate that the most feasible method for transferring these lands would be by direct sale as authorized under BLM regulations (Part 2710.0-6(c)(iii) and 2711.3-3(a)(2)). However, to insure that maximum flexibility is made available to both the BLM and the City on this issue, we would recommend that the words "sale, transfer and exchange" be utilized whenever there is discussion in the Plan about these lands. That would include the discussion on Pages 4, 18, 21, 31, 85, 102 and 127.

On Pages 18 and 19, Brian, we would ask that these lands which have been identified by dotted areas have a 2-4 designation if that is possible. That would clearly distinguish those lands from the 2-1, 2-2 and 2-3 areas. Furthermore, we would ask that on Page 19, the language read as follows:

1-1

1-2

1-2

"Public Lands which have been identified for transfer, sale or exchange to local governments as needed to accommodate community expansion and other public purposes."

On Page 21, since the additional 25,000 acres is identified in a Zone 2 designation, we would recommend that the discussion there on the Zone 2 public lands be revised to read as follows:

"Public lands in Zone 2 have potentially high resource values for timber, recreation, riparian, watershed, cultural, wildlife or community expansion. These lands have been identified for retention or possible exchange for land with higher resource values or sale or transfer to local government. The sale or transfer of lands to local government would be limited to a block of public land containing approximately 25,000 acres described below."

1-3

On the second paragraph dealing with this 25,000 acres, we would recommend that it read as follows:

"A block of public land containing approximately 25,000 acres located east of U.S. Highway 97 between Bend and Redmond possesses high public values because of its potential need for community expansion. This is due to its proximity to the communities of Bend and Redmond as well as having excellent access to major highways, the Burlington Northern Railroad and the Redmond Municipal Airport. These lands also provide open space and recreational opportunities. This land will be retained as undeveloped open space until such time as it may be sold, transferred or exchanged to other public entities to accommodate community expansion needs or to be used for other public purposes."

BRYANT, EMERSON & FITCH

Mr. Brian Cunningham
Bureau of Land Management
Page Three

1-3

Further, regarding the 25,000 acres, would it be possible to delineate those acreages on the maps on Pages 18 and 19 so as to avoid uncertainty after the Plan is adopted?

Finally, regarding the discussion of the statewide planning goals on Pages 126 and 127, I recommend adding the following language to goal number 9 to diversify and improve the economy of the State in an additional sentence:

1-4

The transfer of lands near the Redmond Municipal Airport will allow the City of Redmond to expand the Redmond Airport and to provide sufficient lands and in particular large sites for industries to locate and expand in.

This will address the need in the State of Oregon for large acreage industrial sites. In addition to this, Brian, I recommend we add discussion under paragraph 14 Urbanization as follows:

The sale, transfer or exchange of lands adjacent to the communities of Bend, Redmond and Prineville will provide for a logical growth pattern for those communities in areas which will not have adverse affects on competing land uses.

Brian, I hope this information is helpful to you. I would be happy to sit down with you and review this at any time that would be mutually convenient. In the meantime, if you have any questions, please feel free to call.

Very truly yours,

BRYANT, EMERSON & FITCH

Edward P. Fitch
EPF:rel
cc: Rob DeLong
Bob Riggs
Jerry Zimmer

1-1

The subject lands have been identified as Zone 3 and would therefore be available to local governments through (direct) sale, transfer or exchange. The Zone 3 disposal criteria gives the BLM maximum flexibility in selecting both the means of land disposal and the timing of the action.

1-2

The three zone concept for land tenure adjustment is being adopted by all Oregon BLM Districts. Map 4, "Land Tenure, Brothers Portion" in Chapter 2 does distinguish the subject lands from other Zone 3 areas with a symbol to recognize opportunities to accommodate community expansion and other public purposes.

1-3

We recognize the long-term potential that the 25,000 acres has for community expansion. It would be available through exchange or transfer, but not sale, under the proposed plan when sufficient need can be demonstrated. If it would be more appropriate to sell lands currently shown as Zone 2 at some time in the future, the BLM could prepare a plan amendment to consider the action.

1-4

We agree. Appendix D (from the Draft RMP/EIS) has been expanded to reflect your concerns (see Chapter 3 of this document). This includes changes or additional language for statewide planning goals 9, 11, 12 and 14.

W.H.O.A!

BOARD OF TRUSTEES
 DAVID R. BELDING
 JACK C. MELWISSE
 GORDON W. HARRIS
 BELTON P. MOURAS
 GERTRUDE BRONN, Honorary
 In Memoriam
 LOUISE C. HARRISON
 VELMA B. JOHNSTON, "Wild Horse Annie"

WILD HORSE ORGANIZED ASSISTANCE
 INC.
 A Foundation for the Welfare of
 Wild Free-Roaming Horses and Burros

P.O. Box 555
 Reno, Nevada 89504
 Telephone 323-5904
 Area Code 702

Kathryn M. Cushman
 Box 26
 Canterbury, New Hampshire 03224
 November 12, 1987

James L. Hancock
 United States Department of the Interior
 Bureau of Land Management
 Prineville District Office
 P.O. Box 550
 Prineville, Oregon 97754

Dear Mr. Hancock:

Thank you for the opportunity to comment on the Draft Brothers/LaPine Resource Management Plan.

2-1 Alternatives A, D and F are totally unacceptable in reference to wild horses. There is no justification (possibly the reason none is provided) for removal of the 14 wild horses from this historical herd range. As it is the horses must contend with fences and with being prevented from using 10,000 acres of that range. What is the reasoning behind the idea of total removal of so few horses?

2-2 Alternative E is the preferred alternative as far as WHOA is concerned. Managing for a herd size of 50 animals on 25,000 acres is not unreasonable. A herd of 50 animals is better prepared to survive periods of stress than a smaller herd. Management techniques will not have to be applied for several years. The horses should have the freedom to roam the entire 25,000 acres.

2-1 Reference is made to page 122 under the heading WILD HORSES "Meets the requirements of the Wild Horse and Burro Act, Federal Land Policy and Management Act and Public Rangelands Improvement Act." The stated intent of Congress, that wild horses be considered equally with other users of public land does not lend credence to the fact that the above statement is used to try to justify removal of the 14 horses. Please explain the rationale.

2-3 Alternative D, the preferred alternative, indicates removal of horses and a dramatic increase in livestock allocation. Again please explain the rationale.

2-4 Alternative A proposes an ORV area in the wild horse herd area. WHOA opposes this action as it could easily lead to harassment of the animals. The proposed ORV area is also in a riparian zone.

2-5 Alternatives B and E propose excluding 2,000 acres from horse herd area to protect riparian areas yet no mention is made of same when allocating



2-6 livestock forage. Is there any reason for this? What source will the horses have for water if the 2,000 acres are protected as riparian area? Are the sources available year round? When fence gates are closed, do horses have access to water? Are the fence gates left open November through March?

2-7 Has any research been done as to why this herd has remained static? What is the sex ratio of the herd and what are the approximate ages of the animals?

In conclusion, WHOA is vehemently opposed to removal of the wild horse herd. We advocate managing for a herd of 50 animals on 25,000 acres.

2-8 If total removal is decided upon, as in Alternative D, the preferred alternative, WHOA will file an appeal. Please send a copy of the citations in the Federal Code that allow for an appeal.

Sincerely,

Kathryn M. Cushman

Kathryn M. Cushman
 Eastern States Representative
 Wild Horse Organized Assistance

cc: Dawn Lappin, Director Wild Horse Organized Assistance, Reno, Nevada

2-1 Section 3 of the Wild Horse and Burro Act directs the Bureau to protect and manage wild and free-roaming horses that were present in 1971 as components of the public lands. Our final preferred alternative and proposed decision is changed to manage for a herd of horses on 25,000 acres (modified Alternative B) with a lower limit of 10 and an upper limit of 25 animals. This decision is based on public comment and the minimal adverse impact of 10 to 25 wild horses on other resource values within this 25,000 acre area.

2-2 All of the 25,000 acre herd management area is historical crucial mule deer winter and spring range for 500 deer. Year-round use by a herd of 50 horses with an upper management limit of 70 animals would conflict with deer during severe winters when both deer and horses congregate in the same small area (Oregon Department Fish and Wildlife personal communication). Grass is clearly the dietary preference for horses. Winter time green grass shoots of cheatgrass and Sandberg's bluegrass provide a critical energy source to deer for digestion of shrubby material and for body maintenance. Horses have the ability to graze plants very close to the ground and out-compete deer for the short green grass shoots.

This spatial and dietary overlap of the horses and mule deer during severe winters is the basis for our selection of the modified Alternative B, 10-25 horse herd instead of the Alternative E, 50 horse herd.

2-3 The wild horse herd area is not in the LaPine portion of the Brothers/LaPine Planning Area where the increase in potential livestock forage allocations is proposed. Small livestock increases in a portion of the wild horse herd area were proposed in 1983, however, this livestock increase is not being implemented at this time because of potential impacts to wilderness study areas and forage needs for wild horses.

2-4 Alternative A leaves the wild horse herd area open to ORV use, but does not propose a formal ORV area within the herd area. In addition, ORV use in the majority of the wild horse herd area was formally restricted to existing roads and trails in February 1988, as an interim measure to protect wilderness values in the South Fork WSA.

2-5 The 2,000 acre South Fork of the Crooked River riparian area is fenced and managed specifically for the riparian resource. Cattle grazing is strictly controlled and is limited to a three week use period in the early spring. No such restricted use could occur if horses were allowed to graze the area. Total regrowth of all plants would occur without the impact of horses. Year-long horse use in the small, narrow river canyon hinders riparian recovery, thus the proposed plan includes horse exclusion in this area.

- 2-6 One spring, seven good reservoirs, and Jones and Sulfur creeks will provide water to wild horses after their exclusion from the riparian area in the South Fork of the Crooked River canyon. All five pasture units in the 25,000 acre herd area have reliable spring, summer and fall water when fence gates are closed from April to mid-November. Two of the 5-pasture units only have reservoir water that normally freezes in the winter season. Open gates in fences between all pastures in the herd area from mid-November to March insure that horses have access to reliable winter water sources (creeks and spring).
- 2-7 No research has been conducted to verify reasons for the herd's lack of growth. Several foals are observed each year, but most do not survive. Harassment is not suspected or known to occur. Reliable sightings of cougar in this area were reported in 1979 and 1987, and they may account for the static population number. Two stallions and 12 mares comprise the herd. Seventy-five percent are thought to be more than ten years old with the remainder being from five to ten years of age.
- 2-8 Proposed decisions contained in this document may be protested to the Director of the Bureau. Protest procedures are described in the cover letter and the comment and protest procedures in this chapter.

3

11-5-87

James Hancock
District Manager
Bureau of Land Management
P. O. Box 550
Prineville, OR 97754

Mr. Hancock,

Re: Brothers/LaPine RMP EIS

After reviewing the planning document I would say that your preferred alternative does a pretty good job of balancing all of the conflicting demands into a workable program for the future of this area. I'm especially pleased at your recommendations for ACEC's. Areas such as the North Fork and South Fork of the Crooked River definitely need to be managed in such a way as to enhance their natural values. Designation of these areas as ACEC's will do much to preserve them in their natural condition.

3-1

3-2

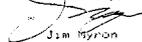
3-3

I would also like to see the idea of wild and scenic river classification pursued for the North and South Fork Crooked River. Water is such a precious natural resource in this area that it seems imperative to me that protection should be afforded to these streams.

With regard to the wild horses, I don't have a problem with letting the horses remain in the Sulphur Suite area, but I do think that the horses in the South Fork riparian pasture should be removed.

I'm pleased to see that wildlife habitat protection and enhancement is such a high priority to the district. With this planning document the future should look well for the fish & wildlife species of the area.

Sincerely,


Jim Myron
158 S. W. 11th Av.
Candy, OR 97013

- 3-1 The designation of the North and South Forks of the Crooked River as Areas of Critical Environmental Concern would be made as part of the approval of the proposed plan in this document. See the ACEC section of Chapter 2.
- 3-2 The Omnibus Wild and Scenic Rivers legislation currently under consideration includes portions of the North and South Forks of the Crooked River as potential additions to the National Wild and Scenic Rivers System. See the Wild and Scenic Rivers, section of Chapter 2.
- 3-3 The revised proposed plan provides for retention and management of the wild horse herd, but would exclude horses from the South Fork riparian pasture. See responses to comments 1-1 and 1-5 and the wild horse section of Chapter 2.

RS Robert Shotwell
Freelance Writer
P.O. Box 938
LaPine, OR 97739
503-836-3735

11-12-87

U.S. Department of the Interior
Bureau of Land Management
Prineville District Office
P. O. Box 550
Prineville, OR 97754

RE: Brothers/La Pine
Resource Management Plan

Gentlemen:

After reading the draft of the environmental impact statement prepared for the Brothers/La Pine Resource Management Plan, I would like to suggest adoption of Alternative D -- the preferred alternative.

4-1 There is one exception in my recommendation, however: I would like to see the herd of wild horses maintained at its present level.

In addition, I would like to recommend that the BLM consider harvesting all trees within 50 feet of each side of all major roadways that traverse BLM land where speeds of up to 55 mph are allowed.

Because of my job, I travel those highways on a regular basis. I feel that removing all the trees for that distance would provide greater visibility for drivers who must constantly be alert for wildlife adjacent to the highway -- particularly deer. The tree removal would be most effective for drivers traveling at night, when the potential for deer/car collisions increases.

4-2 The tree removal would also reduce the potential for injury or death to drivers who become hypnotized by the divider stripe, or who have pushed themselves to the limits of physical endurance and fall asleep while driving. The conditions that presently exist put those drivers into the trees before they become alert enough to recover from the potentially dangerous situation.

Also involved in that tree removal program should be a practice of cutting the stumps of the removed trees to a height no greater than four to six inches from the ground. Low stumps would not catch the undercarriage of vehicles that happen to leave the highway.

The practice, if adopted, may not be as aesthetically appealing to conservationists, but would preserve wildlife and reduce damages to vehicles while also reducing the potential for injury or death to the drivers of those vehicles.

Thank you for your consideration.

Robert E. Shotwell
Robert E. Shotwell
Freelance Writer

4-1 The revised proposed plan provides for the retention and management of the wild horse herd. See the response to comment 1-1 and the wild horse section of chapter 2.

4-2 Currently two separate activities are occurring in regards to tree removal on public lands adjacent to major roadways in the LaPine area. First, BLM is actively removing the dead and dying trees within the road right-of-way along Highway 31 and 97. This work will continue on other major roadways as soon as possible. Due to the high mortality rate among the mature trees within these rights-of-way (from the Mountain Pine Beetle), most, but not all trees that could be considered "immovable objectives" will be eliminated. The stumps from these trees must be no taller than 12 inches, and are, generally, no more than six (6) inches high. In stretches along roadways where dense stands of young, pole size, trees occur, efforts will be made to thin the trees; for increased visibility (of wildlife) and possible protection from the Mountain Pine Beetle.

Also at this time, the Oregon Department of Transportation has authorized their Regional Office in Bend to develop a plan for Highway 97 in regards to "highway clear zones." Clear zones would consist of areas 25-50 feet on each side of the pavement that would be maintained in "low growth" and free of immovable objectives (like mature trees). During the formalization of the plan, it is anticipated the BLM will be consulted, and we look forward to cooperating on this program.



United States Department of the Interior

BUREAU OF MINES
WESTERN FIELD OPERATIONS CENTER
EAST 300 3RD AVENUE
SPOKANE, WASHINGTON 99202

December 4, 1987

Memorandum

To: Brian Cunningham, RMP/EIS Team Leader--Prineville District Office, Bureau of Land Management, Prineville, Oregon
From: Supervisor--Minerals Involvement Section, Branch of Engineering and Economic Analysis
Subject: Review of Draft Brothers/LaPine Resource Management Plan/Environmental Impact Statement (RMP/EIS)

5-1 The forest plan should emphasize special management for minerals development in areas where known resources and activity indicate major mining may occur in the future. According to the RMP/EIS, on page 84, there are approximately 325 mining claims in the area. A minerals map would be helpful in showing presently active gold exploration areas, where mercury was produced in Crook County, geothermal resources, bentonite producing areas, diatomite deposits, etc.

Thank you for the opportunity to comment.

D'Arcy Banister
D'Arcy Banister

5-1 The Mineral Resources section of the proposed plan (Chapter 2) has been expanded and maps added to display areas with potentially valuable oil and gas or geothermal resources. Mining claim activity is ongoing with new claim information updated or filed annually in the respective county courthouses and the BLM offices. Historic mineral production areas were described in the Affected Environment Chapter (pg. 84) of the Draft RMP/EIS.

United States Forest Service Pacific Northwest Region
 Department of Agriculture 319 S.W. Pine Street
 P.O. Box 3623 Portland, OR 97208-3623

Caring for the Land and Serving People

Reply To: 1950
 Date: JAN 1988

Bureau of Land Management
 James Hancock, District Manager
 P.O. Box 950
 Prineville, OR 97758-0550



James Hancock, District Manager

The designation of the ACEC's described, and the stipulations proposed for leasable minerals, appear appropriate from our viewpoint.

Thank you for the opportunity to review this Resource Management Plan/DEIS.

Sincerely,

[Signature]
 JAMES F. FORRENE
 Regional Forester

cc: Deschutes NF
Gchoco NF

Dear Mr. Hancock:

The Prineville District Office is to be complimented on the draft Brothers/La Pine Resource Management Plan. The document is well written with excellent graphics and detailed content that is, for the most part, very understandable.

Some general comments:

6-1 | Soils appeared to lack standards and guidelines, although they may be in a separate document.

The timber emphasis was directed to beetle-killed lodgepole pine, and stands with potential for infestation, which is most appropriate considering the current situation.

6-2 | There was a question raised that herbicides were to be applied in rangeland nexicus weed control, but not for controlling competing vegetation in forestland situations. The reason for this, in one and not the other, was not explained.

6-3 | One of the thrusts of the plan is an increase in ANM's to be allocated in the La Pine portion over the next 20 years. An environmental consequence of this activity not discussed is the potential impacts on the reestablishment of productive forest on transitory ranges being intensively managed for domestic stock grazing. These impacts can affect, for example, rate of succession, stocking levels, and growth and quality of stands which develop.

While it may be possible to allocate an additional 12,000-13,000 ANM's on transitory range in the La Pine area, it was not clear whether economics, riparian condition, and demand, supported this proposal.



FS-6200-28(7-82)



FS-6200-28(7-82)

6-1 Bureau planning and resource manuals do not require "standards and guidelines" for resource programs. Protection of soil productivity is one of the criteria used in the selection of the preferred alternative. Soil resources are protected through program-specific standard operating procedures and design standards for range developments, forest practices, mineral leasing, ecc.

(5) years following timber harvest. Although the proposed plan would allow a dramatic increase in grazing, it is not certain that additional livestock grazing will actually be requested or granted.

6-2 Herbicide use is not proposed for controlling competing vegetation in forestland situations in the Brothers/LaPine Planning Area. It has not been needed in the past, and there is no anticipated need for it in the future. On sites where grass is determined to be an interfering condition, in regards to seedling survival and establishment, livestock grazing would be used as much as possible to reduce unacceptable grass competition.

6-3 Range management practices in the LaPine portion of the planning area would be designed so as not to conflict with the four primary objectives of forestry practices: reduction of fire hazard, salvage of dead and dying timber, successful reforestation and increasing subsequent growth of commercial tree species. Range management practices will be monitored to determine if all resource objectives are being met. If monitoring shows objectives are not being met, range activity plans will be modified as needed. Potential negative impacts on tree seedling survival, establishment, stocking levels and growth are anticipated to be negligible. On sites where grass may actually be an interfering condition to reforestation, proper use of available forage can be beneficial; particularly within the first five

Jan. 4, 1988

Jim Hancock, District Manager
Bureau of Land Management
P.O. Box 550
Prineville, Oregon 97754

In response to Trait FIS Brothers/Lapine Resource Management Plan, I wish to make the following comments.

7-1 I am absolutely opposed to any increases in the Millican Valley ORV area. We must begin now planning for a future in which public lands are seen as community, not a commodity to be used and abused by a destructive group of recreationists. These machines are going to proliferate with the potential for serious future problems.

7-2 I was pleased to see the proposals to designate several ACECs, but cannot imagine why Glass Buttes was not recommended. Several of us camped and hiked the area recently and found it an extremely interesting area. Saw some sage grouse high on the Buttes as well as enjoyed the views and the geologic wonders. I'm not as familiar with Barnes Butte and Cline Butte, but would definitely support the others with the addition of Glass Buttes, Prineville Reservoir, and Smith Rocks.

7-3 I would like to see specific and meaningful standards and guidelines to control management actions. These clearly defined practices need to be shown for all areas, such as logging, roads, watershed integrity, soil disturbance, etc. These chapters should include monitoring plans and tell us how changes will be made if monitoring indicates problems in resource degradation.

7-4 Since all decisions affect plant and wildlife species, we need to know the current condition and also best estimates of trends of species and their habitats. We need to see these species numbers, analysis of current habitat conditions and trend estimates based on this data presented for each alternative. Only with this kind of clearly presented material, can the public respond intelligently on matters of such far reaching importance.

7-5 Gavity nesting wildlife species comprise some of our more interesting critters and their survival at 100% of present levels is mandatory. I also wish to see plans for guaranteeing the same level of replacement snags.

7-6 I had the pleasure of watching a Goshawk feed her young in an old lodgepole stand near LaPine, and this encounter with one of our more elusive symbols of wildness was the highlight of my day. I don't want to see that habitat destroyed. I'm asking that at least half the stands be maintained in cover at any given time, with no more than one mile of open road per section as a standard.

7-7 In closing, this plan doesn't seem to fulfill the intent by Congress to do comprehensive planning for an entire area. I would like to see the results of species and habitat inventories and analysis requested above applied to the Brothers Section also.

Respectfully,
Alice Elshoff
Alice Elshoff
28245 Nelson Rd.
Hend, Oregon 97701

The 420 acre Glass Butte Ecological Area was "nominated" for ACEC status, however, an interdisciplinary team determined the area lacked both relevance and significance as a potential ACEC. (See page 160, Appendix P of the Draft RMP/EIS.

7-3 Chapter 2 provides the equivalent of standards and guidelines by including management direction, standard operating procedures and, where appropriate, standard design features. For example, management actions involving surface disturbances, i.e., mineral development, range development, rights-of-way, and/or timber harvest are subject to prescribed stipulations which are intended to mitigate adverse impacts. Standard operating procedures, mitigating measures and methods of monitoring are summarized in the respective program sections of Chapter 2 in this document. More specific guidelines are contained in BLM manuals which are available for inspection in the Prineville District Office during normal working hours.

7-4 The BLM is responsible for managing wildlife habitat while the Oregon Department of Fish and Wildlife is responsible for managing wildlife numbers and populations. It is not the responsibility of BLM to maintain data on population levels, however, BLM does have an extensive habitat inventory based on the potential of an area to produce vegetation. The vegetative condition (seral stage) of that area then determines what species would be expected to be present. Population trends can be predicted based on the vegetative trends in large areas. This form of planning relies on the life form concept

7-1 The use of off-road vehicles on public land has been recognized as a legitimate use by Congress through various laws and BLM programs. Our objective is to provide opportunities for all public land users, however, not all uses are compatible with one another at the same time on every acre. While ORV use in the Millican Valley area may make it unattractive to non-ORV users, it does provide a means of attracting ORV users away from more sensitive areas so that protection or enhancement of other resources will be more effective while still accommodating a recognized use of public lands.

The proposed plan does provide for an increase in the Millican Valley ORV area, however, the boundaries have been modified to protect sensitive resources and improve efficiency of management, particularly for competitive events. Millican Valley is the only large ORV area available to the public in central Oregon. Continued management of the area for ORV use is widely supported by the public.

7-2 Glass Butte was not nominated and was therefore not analyzed to determine if it met the criteria for ACEC designation. The BLM recognizes that within the general area there are significant scenic, cultural and recreational values. However, as with the Cline Buttes area, data is not available which would enable these values to be precisely mapped. Obviously the entire area does not contain these values and the boundary(ies) of an ACEC need to be specific rather than general. More work on this is anticipated in the future.

(Thomas, et. al. 1979) due to the need for BLM to address management impacts on a large scale. Impacts on an individual species basis are addressed in individual activity plans such as timber sale plans. It is not reasonable to present all the data on file or to present all the possible combinations of results given the number of species involved and the varied impacts possible from all activities on public land.

7-5 Managing for 70 percent of optimum population of snag dependent species is the goal of the proposed plan. Management will attempt, however, to maintain greater than that level. Methods to achieve this will be identified in individual timber sale plans.

7-6 The goshawk is similar to many of the species you would expect to find in LaPine. Nesting for this species occurs in mature or over-mature trees and feeding occurs in a variety of forest stages from shrub to old growth. Our management is intended to provide those mixes of age classes, but the Mountain Pine Beetle infestation, with or without our management, will be eliminating over 80 percent of the mature and over-mature forest. Management is designed to protect existing non-beetle infested stands to maintain that vegetative component.

7-7 Open roads will be kept to a minimum within BLM managed timber stands. Due to public safety in the immediate vicinity, however, it is unlikely that the desired level of one mile of road for each square mile of land will be achieved.



Department of Energy
Bonneville Power Administration
PO Box 3621
Portland, Oregon 97209-3621

January 4, 1988

***** AJ

Mr. James L. Hancock, District Manager
Prineville District Office
Bureau of Land Management
U.S. Department of the Interior
P.O. Box 550
Prineville, Oregon 97754

Dear Mr. Hancock:

Bonneville Power Administration has reviewed the Draft Environmental Impact Statement (EIS) on the Brothers/La Pine Resource Management Plan. Our comments follow.

1. First, Bonneville would like to express its appreciation for the thorough manner in which you have addressed energy transmission corridors in the EIS. We are quite satisfied with your response to our earlier comments on transmission corridors during the EIS scoping process. There are just a couple of points needing further clarification:

- a. On page 85 of the EIS, where it is stated that eleven utility corridors have been designated, we recommend that you also state specifically which resource areas are considered avoidance or exclusion areas.
- b. The Resource Management Plan addresses renewable energy resources but does not mention potential hydroelectric and wind resources. The location, description, and impact of management alternatives on known resources should be discussed. If viable resources are not known to exist in the planning area, that should be indicated. We suggest that management guidance for renewable energy resources, as well as mineral resources, be addressed more clearly in Chapter 2 of the EIS.

2. Although Bonneville currently has no fish or wildlife projects within the Brothers/La Pine Resource Management Area, the Northwest Power Planning Council's Columbia River Basin Fish and Wildlife Program calls for development of a subbasin plan which will evaluate future actions to increase salmon and/or steelhead in the Deschutes River basin. We urge you to recognize the future potential for fish enhancement activities in the Deschutes River basin and to protect these interests in your EIS and Resource Management Plan. To accomplish this, we'd suggest that you protect vegetation along stream banks from proposed logging and associated road building activities to reduce possible sedimentation into the streams, and take into consideration other actions that could affect future fisheries enhancement activities and increase costs of future improvements.

3. Since Bonneville must have access to its facilities at all times for maintenance and for emergency situations, we request that you contact the Operations and Maintenance Manager to discuss any actions the District may take that could affect access or operations:

Mr. Truman Conn, Operations and Maintenance Manager
Snake River Area, Bonneville Power Administration
West 101 Poplar, Walla Walla, WA 99362
Telephone: (509) 522-6238, FRS 434-6238

Thank you for the opportunity to review the EIS. If you have any questions or need further information, please call me at 503-230-5136 (PSS 429-5136).

Sincerely,

Anthony R. McCrell
Assistant to the Administrator for
Environment

cc:
John Cheek - PPSL, Portland
Eric Stone - BLM, Portland

8-3

8-4

8-1

8-2



Celebrating the U.S. Constitution Bicentennial - 1787-1987

8-1 The Utility and Transportation Corridor section of Chapter 2 specifies avoidance and exclusion areas. The necessity of avoiding specific areas will depend on project specifications, potential mitigation measures, resource values at risk, etc. These factors will be considered in project specific environmental analyses. Some areas are subject to interim protective management that requires total avoidance by new rights-of-way until Congressional action determines suitability for wilderness or wild and scenic river designations.

8-2 Potential hydroelectric and wind opportunities are generally well known by interested parties, however, much of the resource potential coincides with potential wilderness areas, Federal wild and scenic rivers, or State designated scenic waterways. In addition, the Northwest Power Planning Council has proposed "protected" status for many of the same streams and rivers. BLM prefers to analyze each project upon application rather than speculate on projects which lack active proponents and detailed feasibility studies.

The Forestland and Woodland section of Chapter 2 provides estimates of fuelwood production. There are no known current proposals or feasibility studies for biomass electric generation projects, except for co-generation, within the planning area. The Minerals Section of Chapter 2 describes geothermal potential from BLM managed lands and Federal reserved mineral estate. Geothermal resource exploration and production from the Newberry Crater area is the subject of a separate BLM, USDA Forest Service environmental impact statement.

8-3 The standard operating procedures for forest practices outlined on page 128 of the Draft RMP/EIS and the Forestland and Woodland section of Chapter 2 of this document set overall objectives. Specific objectives and restrictions will be incorporated into individual project plans where water quality is a concern. In addition, BLM is committed to meeting the State of Oregon Forest Practices Act requirements, many of which relate to stream protection and fish habitat protection or enhancement.

8-4 BLM will contact appropriate BPA staff whenever BLM permitted actions might affect BPA project access or operations.



January 4, 1988

Mr. James L. Hancock, District Manager
Bureau of Land Management, Prineville District Office
185 East Fourth Street
Prineville, OR 97754

Dear Mr. Hancock:

Please accept this letter as the Northwest Forestry Association's comments on the Draft Brothers/LaPine Resource Management Plan. The Northwest Forestry Association is an organization of wood products manufacturing companies which operate manufacturing facilities throughout Oregon and Washington. Our members are heavily dependent on timber from public lands. The welfare of our member companies, their vendors and employees and the timber-dependent communities we support will be significantly affected by land management planning on the national forests and BLM lands in our region.

The Brothers/LaPine DEIS indicates that your preferred alternative would harvest approximately 7-9 MMBF of timber annually over the next 7 years, a level essentially equivalent to recent historic harvest levels. By comparison, Alternative A would harvest 16-18 MMBF annually over the next 6 years. The difference between these two alternatives clearly indicates that an opportunity exists to roughly double the District's timber sale program over the next 6-7 years.

The DEIS states that the Area's current timber sale program generates less than one percent of the wood products industry employment in Crook and Deschutes counties. Presumably, even if the Area's timber sale program were doubled, timber from the Brothers/LaPine Planning Area would still generate less than 2 percent of the area's timber-related employment. This contribution may seem insignificant. Nevertheless, our members are concerned about the potentially significant adverse social and economic "cumulative effects" that could result from significant program reductions proposed by the Deschutes and Crook National Forests in their Draft Forest Plans. We need to assure that the total timber supply available to our local

sawmills from all sources, including BLM lands, are adequate to at least maintain current production and employment levels. Even though the Brothers/LaPine Planning Area's contribution may appear small, it could play a significant part in maintaining the total supply of timber needed to keep our mills running.

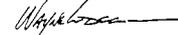
We found no indication in the DEIS that the District has considered the implications of national forest planning in its assessment of potential demand for timber from BLM lands. We suggest: (1) that the final EIS include an analysis of the cumulative timber supply situation in Deschutes and Crook counties; and (2) that the final plan include a higher harvest level if necessary to help mitigate the adverse social and economic effects of reduced timber supplies from other sources.

We believe that it should be possible to increase the District's timber harvest level without significant environmental tradeoffs. We have found no documentable reason in the scientific literature to assume that a well-designed timber management program adversely affect big game populations or other environmental values. We also believe that timber management can be made compatible with most forms of outdoor recreation through: (1) greater use of uneven-aged timber management where appropriate; (2) emphasis on construction of low standard, low impact roads where roads are needed; and (3) use of road closures to provide a broader range of dispersed recreation opportunities in a relatively "semiprimitive" environment.

In summary, we believe that the BLM's planning process must recognize: (1) that local communities have an existing timber industry in place; (2) that this industry will require a certain minimum volume of logs from all sources, including BLM lands, to maintain historic production and employment levels; and (3) that failure to supply this critical timber volume will result in reduced production, possible mill closures, increased unemployment and potentially significant adverse impact on the area's timber-dependent communities. The District's analysis, its planning documents and its final decisions must recognize this basic fact.

We appreciate the opportunity to comment. Please let us know if we can provide further information or input.

Sincerely,


Wayne W. Ludeman
District Forester

62065 Arnold Market Loop • Bend, Oregon 97702 • (503) 338-2306

9-1 The Draft RMP/EIS contains no indications of national forest planning and its potential impact on demand for timber from BLM lands because of the minor influence of the BLM timber harvest in the local job market. The current (1986 figures) estimated wood products industry employment resulting from BLM timber harvest is approximately 1 percent. If national forest planning caused a reduction of 50 percent of the current total wood products industry employment in Deschutes and Crook counties over the next four (4) years, BLM's influence on employment would increase to approximately two percent. Also, approximately four (4) years from now, under the proposed plan in Chapter 2 of this document, the BLM annual timber harvest would drop from nearly 14 MMBF on 1,500 to 2,000 acres to only occasional salvage sales over the next 30 to 40 years. Increasing the annual harvest level above the proposed level while meeting the multiple use objectives of the preferred alternative would further reduce the number of years timber harvesting could occur. Regardless of national forest planning impacts on the local economy, the BLM's capability to significantly mitigate a reduction in timber supplies is extremely limited and would be very short lived at best.

9-2 The Mountain Pine Beetle infestation in the BLM lodgepole pine forests in the LaPine area necessitated a departure from historical annual harvest levels beginning in 1981. The plan for an accelerated harvest to capture timber values threatened by the beetle increased the annual allowable harvest of 3.4 MMBF to more than 10 MMBF. It is anticipated this harvest level will occur for the next four years, at which time most BLM forestland available for intensive forest management

which is beetle infested will have been harvested. Future timber harvest of sawlog material near historical levels of 3 MMBF will recur in 30 to 40 years. The effects of the beetle infestation has dictated current and future harvest activity, and will out last the 10-15 year period of the proposed RMP. Timber harvest from BLM lands is not significant in the local economy, and historic production and employment will not be significantly influenced regardless of BLM planning or management activities.

Jan 2, 1978

Jim Hamsch, District Manager
Bureau of Land Management
P.O. Box 550
Prineville, OR 97754

Dear Mr. Hamsch:

Please send me a copy of the Crater/La Pine Resource Management Plan.

10-1

It is my understanding that this Plan needs additional, current planning, especially for the broader portion, with specific standards and monitoring plans for the logging, grazing, and wildlife management activities.

10-2

I am opposed to the increase in the ORV area proposed for the Mullica Valley. The soil, plant, and wildlife destruction and slow recovery after such use makes it too environmentally costly.

Thank you,

Ernie Huntington
68736 W. Meadow Pkwy,
Lester, OR 97759

10-1 The purpose of a Resource Management Plan (RMP) according to the Federal Land Policy and Management Act (FLPMA) is to establish land areas for limited, restricted or exclusive use; designation; or transfer from BLM administration. FLPMA requires the use of an interdisciplinary planning process to apply principles of multiple-use and sustained yield. An RMP is a land and resource allocation plan. The purpose of an RMP is to analyze and determine how the total land and resource base will be divided. Once the general resource allocation is made in an RMP, more detailed activity plans such as recreation activity plans, wildlife habitat management plans, livestock grazing allotment plans, etc., will be developed for those individual resources within the site specific areas. (Also see response to comment 7-3.)

10-2 See response to comment 7-1.



CENTRAL OREGON
AUDUBON CHAPTER
P. O. BOX 565
BEND, OREGON 97709 January 4, 1988

Hancock
BLM
P.O. Box 550
Prineville, Oregon 97754

Dear Jim:

I am writing as a representative of the 450 members of Central Oregon Audubon Society. We have recently read the Brothers/LaPine Resource Management Plan and feel that a number of major improvements need to be made.

- 11-1** One of our biggest concerns is the management of wildlife. We read Appendix N which listed wildlife species according to life form and interrelationships of habitats and species. HOWEVER, THERE IS NOT ANY ANALYSIS OF CURRENT HABITAT CONDITIONS OR SPECIES NUMBERS. Please add these analyses and also show trend directions for each alternative.
- 11-2** Central Oregon Audubon feels that there is a significant population of cavity nesters around Lapine. Therefore we strongly support protection of snags at the 100% level for cavity nesters. In addition we support 100% protection of replacement snags.
- 11-3** We feel that open roads should be limited to one mile per section to protect wildlife. We would like 50% of the lodgepole stands to be maintained in cover at any given time.
- 11-4** Central Oregon Audubon feels it is very confusing to the public for the BLM to issue a number of different management plans covering various resources over a period of years. We are very concerned that this plan does not allow the public to comment on grazing, logging, and wildlife for most of the planning area. WE STRONGLY SUPPORT the idea that one comprehensive plan be issued covering a period of 10-15 years.
- 11-5** Central Oregon Audubon strongly supports the plan's proposed ACEC designations. We are particularly supportive of the North Fork of the Crooked River, Glass Butte, and Cline Buttes.
- 11-6** WE are strongly opposed to any increases to the ORV area in Millican Valley. We feel that if this area is increased important wildlife, vegetation and recreational resources will be destroyed.
- 11-7** Central Oregon Audubon is supportive of land acquisition of critical environmental areas. We do not feel that the

11-7 plan's land section meets the intent of the law and therefore needs to be beefed up.

11-8 We would like to see a standard and guidelines chapter for each type of management action. In addition the BLM needs to include a monitoring plan for each resource. In that plan we would like to see actions dictated if resource damage is occurring.

Sincerely,

Glenn Van Clise

Glenn Van Clise
Conservation Chairman

11-1 See response to comment 7-4.

11-2 See response to comment 7-5 and 7-6.

11-3 See response to comment 7-7.

11-4 See response to comment 10-1.

11-5 See response to comment 7-2 for the status of the Glass Butte area.

11-6 See response to comment 7-1.

11-7 The land tenure management direction in Chapter 2 has been clarified and consolidated. The land tenure zone map has been revised to reflect public and staff concerns on lands disposal and retention zones. The revised lands section meets BLM national and State Office standards required by law and applicable Bureau manuals.

11-8 See response to comment 7-3.

Reply To: 4060

Date: December 15, 1987

John Hancock, District Manager
 Bureau of Land Management
 Box 550
 185 East 4th Street
 Prineville, OR 97754

I am very pleased to see that Benjamin pasture has been fenced. I hope the district will plan to fence Powell Buttes as well.

I appreciate the opportunity to comment on the plan. If there are any questions pertaining to my comments please do not hesitate to call me.

Sarah E. Greene
 SARAH E. GREENE
 Research Natural Area Scientist
 Pacific Northwest Region

Dear Mr. Hancock:

I have finished reviewing the Draft Brothers/LaPine Resource Management Plan and would like to make some comments. My comments will pertain only to ACEC/RNAs. To begin with I would like to support the plan's Preferred Alternative D.

cc:
 Ron Halvorsen
 Richard Hanes, State Office

12- On p. 158 the plan discusses areas containing high or unusual recreational values. Powell Buttes is listed for hiking, horseback riding, scenic vistas and hunting. I cannot tell from the description whether the proposed ACEC/RNA for Powell Buttes is included in this recreation area. My concern is that the ACEC/RNA not turn into a recreation use area. Light recreation use can be compatible with RNAs, but I feel it should be discouraged. The problem lies in the fact that once recreation patterns are established, they are generally very hard to change, especially if they have become detrimental. Horseback riding can sometimes bring in introduced plants, as well as creating permanent trails. On the one hand permission from private landowners may discourage use of an area; on the other it may make it harder to monitor use. When the management plan for the Powell Buttes RNA is written, I hope the relation of the RNA to the recreation area will be carefully considered.

12- Pages 161-162 list management direction for the ACEC/RNAs in all alternatives. The management direction for Benjamin, Forest Creeks and Horse Ridge appears acceptable. I am concerned about Powell Buttes, though. In the preferred alternative D ORV use and livestock grazing is rated R. In all the other ACEC/RNAs these uses are prohibited. Why not for Powell Buttes? The basic management direction should be the same as the others. ORV use is completely incompatible with an RNA and should be prohibited. In most cases cattle grazing is also incompatible. Grazing at Powell Buttes is minor at this time, but removal of grazing entirely is preferable. Without removal of grazing it will not truly serve as a baseline area for comparison with similar managed areas, an important objective of RNAs. Thus I would like to see both grazing and ORV use prohibited in Powell Buttes ACEC/RNA.

The State Office is currently working on a BLM manual supplement which addresses management of ACEC/RNAs. This will hopefully be final by the time management plans are being written for the Brothers/LaPine ACEC/RNAs. I would be glad to assist in the writing of these plans. I have been involved in numerous other BLM RNA management plans as well as Forest Service RNA management plans and feel I can provide some constructive suggestions.

12-1 The areas discussed on page 158 of the Draft RMP/EIS do not include the proposed ACEC/RNA. The area listed as "Powell Buttes" consists of the buttes proper, located approximately two miles north of the proposed ACEC/RNA. Recreation would not be encouraged in the Powell Butte ACEC/RNA. Also see the Draft RMP/EIS footnote for Appendix O, page 158 and the ACEC section in Chapter 2 of this document.

12-2 The management direction for livestock grazing was erroneously listed as "R", or restricted. For the proposed action, livestock grazing would be prohibited in this ACEC/RNA. For ORV use, the management direction was also listed as "R", which means ORV use would be restricted to existing roads and trails. This was based on the existence of a road through the center of the ACEC/RNA. New information indicates that this road is no longer necessary and the management direction under the proposed action (see Chapter 2) would be to close this road and declare the area off-limits to ORV use.



13

Department of Transportation
PARKS AND RECREATION DIVISION

1215 TRADE STREET, SE, SALEM, OREGON 97310
DEC 2 1987

Phil Ward
Resource Coordinator
Oregon Dept. of Agriculture
635 Capitol St. NE
Salem, OR 97310-0110

Dear Phil:

We appreciate the opportunity to comment on the Draft Brothers/LaPine Management Plan. Many areas in the Brothers/LaPine planning area offer recreational opportunities not only to Oregon residents but to an increasing number of out-of-state tourists. Oregon State Parks currently operates 11 parks and waysides in the planning area, totalling 4,742 acres.

Our concerns are as follows:

1. WILD AND SCENIC RIVERS

Major portions of the Deschutes River in the planning area have been designated by the 1987 Legislature as a state scenic waterway. (See attachment)

We have been in contact with BLM staff as the state's management rules have been developed. It may be appropriate to include a policy statement on the plan supporting management of Bureau lands consistent with the state's plan and calling for the formulation of a coordinated recreation plan for the river.

The Little Deschutes River and other segments of the Crooked and N. Fk. Crooked Rivers were determined to be ineligible. These rivers are on both Federal and State inventories as potential rivers. Segments of these rivers are on private land and/or are under the jurisdiction of other public agencies. We suggest coordination of planning with these agencies to determine potential eligibility before any irrevocable disposition of these resource areas is made.

2. VISUAL RESOURCES

We are supportive of visual quality objectives especially with regards to the Highways 20, 126, 97 and

Phil Ward
December 2, 1987
Page 2

31. These in varying degrees are major recreational and tourist corridors and comprise an important ingredient to the quality of recreational experience in the area. More detailed comments about visual qualities pertinent to State Parks follow.

3. LAND OWNERSHIP

The Parks and Recreation Division has 11 parks and waysides in the planning area, totalling 4,742 acres.

See the enclosed chart for basic information about them. Only a portion of these properties are indicated on the Land Status Maps (Maps 2 and 3) in the plan. Current boundary maps for all of these properties are enclosed, so that your Land Status Maps can be corrected. LaPine, Cline Falls and Redmond-Bend Juniper Wayside show incorrect ownership of Parks property. Only 1 of the 10 parcels in Redmond-Bend Wayside is shown. Six parks are not shown at all: Ochoco Lake, Pilot Butte, Prineville Reservoir, Peter Skene Ogden, and Robert Sawyer.

LaPine, Prineville Reservoir, Cline Falls, Redmond-Bend Wayside, and Smith Rock all adjoin BLM land.

Portions of 4 parks were acquired from the BLM by recreation patent. These include:

- o LaPine. Patents on 1,826 acres.
- o Peter S. Ogden. Patents on 86 acres (46 in Deschutes Co. and 40 in Jefferson Co.).
- o Smith Rock. Patent on 120 acres.
- o Tumalo. Patents on 187 acres.

At LaPine State Recreation Area, we have an interest in acquiring the vegetative rights that are reserved in the patent. We believe it would be advantageous to both State Parks and BLM if the rights were relinquished to Parks. For both agencies, administrative and management costs of cutting timber exceed the stumpage value of the timber.

Also at La Pine, we have an interest in acquiring additional lands around the park, i.e., a triangle

Phil Ward
December 2, 1987
Page 3

Phil Ward
December 2, 1987
Page 4

-shaped parcel of BLM property at the point where the access road enters the park, i.e., the northwest corner of NW 1/4 SE 1/4 Sec.10 T.21S. R.10E. W.M.

4. OFF-ROAD VEHICLES

We concur with ORV management of 65,000 acres in the Hillman Valley area described in the preferred alternative. ORV use is generally inconsistent with recreation in State Parks. Several parks may potentially be affected by off-road vehicle use on adjacent BLM property. Aerial photos also show evidence of ORV use on BLM land to the north of Prineville Reservoir State Park and to the north and northeast of Smith Rock State Park. We recommend that BLM confine ORV's to their land in these areas.

ORV damage on BLM land which lies west of Cline Falls State Park, across the Deschutes River, is clearly visible from the park. Closure of this area to ORV use would improve the viewshed from the park.

The forest in LaPine SRA is apparently dense enough to hinder ORV use.

5. NATURAL RESOURCES

Our natural resource comments are limited to concerns about sensitive species, viewsheds, deer migration areas, and cells for natural plant communities and stream systems identified by the Oregon Natural Heritage Data Base (ONHDB).

An extremely endangered plant, Estes wormwood (*Artemisia ludoviciana* ssp. *estesii*), occurs on BLM property in the SW 1/4 NE 1/4 Sec.14 T.15S. R.12E. W.M. and across the Deschutes River on Cline Falls State Park. This valuable resource should be carefully preserved. Adjacent upland areas on the BLM side have been heavily used by ORV's. They may pose a threat to the plants.

Ochoco Lake, Prineville, and LaPine are all used by bald eagles and adjacent BLM management should be compatible. A nest in LaPine SRA has been very productive over the years. Nine Natural Heritage Cells were identified by ONHDB at LaPine and four at Smith Rock. LaPine has important deer migration areas.

Harvesting of healthy, mature ponderosa pine trees on the BLM properties adjacent to the LaPine access road and on part of the NW 1/4 of Section 4 may be detrimental to the viewshed from the park. Highly visible mining operations might also damage visual resources. We have the same concerns about the views from the Smith Rock property to the north and east and on Gray Butte to the north, especially in those areas which can be seen from the many trail throughout the park.

Highly visible mining operations on adjacent BLM land might also diminish the visual resources at Cline Falls, Prineville Reservoir, and Redmond-Bend Wayside. In most cases, mining operations in parks with BLM mineral reservations would reduce recreational and visual values.

Very truly yours,
John E. Lilly
John E. Lilly
Assistant Administrator

JEL:jn
WARD:LTR

cc: Gerry Lucas, Bend
Dave Talbot
Larry Jacobson
Joe Paiva

bc: Ron VanDomeien, BLM, Prineville ✓
Steve Lewis, ODFW, Bend
Nancy Growski
Don Eixenberger
Al Cook

13-1 BLM has and will continue to coordinate wild and scenic eligibility and suitability studies with landowners, local, State, other Federal agencies and also continue to work with State congressional delegates regarding eligibility and suitability studies and management of the Deschutes, Little Deschutes and Crooked rivers. BLM public lands along these rivers are recognized for having high resource and public values such as recreation, wildlife, riparian, etc.

13-2 Corrected land status will be shown during revisions and reprinting of the BLM "Central Oregon Public Lands" and other maps.

13-3 The Bureau has been working with State agency staff members to consider additional land exchanges or transfers which could include both land and vegetative rights. Under the proposed plan, the BLM would consider an exchange or transfer to the State of lands in Zone 2 or 3 (see Land Tenure section of Chapter 2). An exchange of State-owned land for BLM timber values within the LaPine State Recreation Area is underway and could be completed in the near future.

13-4 BLM is aware that ORV use occurs on its public lands north of Prineville Reservoir State Park and is working with the Oregon Department of Fish and Wildlife, State Parks, the Bureau of Reclamation and private landowners toward the development of a management plan for the Prineville Reservoir area.

13-7 BLM timber harvesting operations near State listed properties will consider visual resource impacts. The specific State interest areas are shown as areas having high or sensitive visual qualities on Maps 22 and 23 in the Draft RMP/EIS (pg 80-83). Future BLM actions will continue to consider potential adverse effects on scenic quality.

Mining operations on BLM lands will continue as authorized by Federal mining laws that allow this type of use to occur on public land. However, BLM regulations (43 CFR 3809) require rehabilitation of these areas after mining operations cease. BLM will continue to require mining operators to minimize the area of surface disturbance and minimize disturbance to vegetation. BLM will also continue to work with mining operators to minimize disturbance to visual and other resource values.

ORV use in the Prineville Reservoir area is currently restricted to existing roads and trails. BLM has and will continue to work to ensure ORV use in this area will be consistent with resource and wildlife concerns as well as minimize conflicts between visitors.

ORV use on public lands will also be monitored to ensure visual qualities are maintained. Public lands west of Cline Falls State Park and beyond the paved road by Eagle Crest is proposed to be closed to all ORV use to protect this area from further erosion and improve the view from the Cline Falls State Park and the Cline Falls road.

13-5 Estes' wormwood (Artemisia ludoviciana ssp. estesi) is presently a candidate for Federal listing as endangered or threatened and receives full protection on BLM-administered land. A recent inventory has documented its occurrence along the Deschutes River from Tumalo to Steelhead Falls. The key to its survival is apparently tied to maintaining a healthy riparian ecosystem. An interagency management plan for this plant will likely be prepared in the near future.

13-6 Management of habitat for bald eagles or any other threatened or endangered or candidate species is a top priority. In any area where these species occur, management is required to consider their specific needs.



Trout Unlimited of Oregon

BRIAN CUNNINGHAM
RMP/EIS TEAM LEADER
BLM, PRINEVILLE DIST.
185 E. 4TH ST
PRINEVILLE, OR 97754

1/13/88
RE/ BROTHERS LAPINE
DRAFT RMP

DEAR MR CUNNINGHAM,

PLEASE FIND ENCLOSED THE COMMENTS OF THE OREGON COUNCIL OF TROUT UNLIMITED ON THE PROPOSED BROTHERS/LA PINE RESOURCE MANAGEMENT PLAN.

14-1 WE FIND SOME INCONSISTENCY BETWEEN YOUR DESIRE TO INCREASE LIVESTOCK AUMS FROM PRESENT 2,019 AUM TO 16,000 AUM AND YOUR DESIRE TO INCREASE THE HEALTH OF YOUR RIPARIAN SYSTEMS. ALTHOUGH CATTLE ARE NOT THE ONLY RIPARIAN DEGRADERS, THEY ARE THE GREATEST IN THE 11 WESTERN STATES.

14-2 WE ALSO HAVE CONCERN WITH THE STATE OF COMPLETION OF THIS PLAN. THE MONITORING SYSTEMS AND SCHEDULES ARE MISSING FROM THIS DOCUMENT. WE BELIEVE THAT THEY MUST BE CIRCULATED BEFORE COMMENT CAN TRULY BE SOLICITED.

14-3 WE BELIEVE THAT THERE ARE WATER QUALITY PROBLEMS OF A TRANSCIENT NATURE IN THE LAPINE PORTION OF YOUR DISTRICT WHICH SHOULD BE ADDRESSED.

THANK YOU FOR THIS OPPORTUNITY TO COMMENT ON THIS DRAFT.

SINCERELY,

ERIC E. SCHULZ
CONSERVATION DIRECTOR
OREGON COUNCIL TROUT UNLIMITED
939 NW. BOND
BEND, OR 97701

PAGE 8

WE SUPPORT THE IDENTIFICATION OF ALL RIPARIAN AREAS AS AREAS OF CRITICAL ENVIRONMENTAL CONCERN.

14-4 9 WE WONDER WHY GRAZING IN THE BROTHERS PORTION WILL NOT BE RE-ANALYZED.

14-5 13 WE WOULD LIKE TO BE APPRISED OF THE METHOD BY WHICH WATER QUALITY WILL BE ENHANCED TO MEET STATE STANDARDS.

14-6 14 ITEM 4 IS CONFUSING. YOU INDICATE ON PG 27 THAT THERE ARE 743 A. OF RIPARIAN ECOTONES. THIS STATES THAT YOU WILL SET ASIDE 135 A FOR PROTECTION. HOW WILL YOU ADDRESS THE REMAINING ACRAGE?

ITEM 7. WE ARE IN FAVOR OF USING LIVESTOCK FOR MANAGING COMPETING SPECIES ONLY WITH VERY STRICT AND RESTRICTIVE STANDARDS.

14-7 15 IT IS NOT NECESSARILY TRUE THAT GRAZING MANAGEMENT IS "ACCOMPLISHED BY DECISION OR AGREEMENT WITH AFFECTED PARTIES." GRAZING MANAGEMENT/ALLOTMENT PLANS ARE NOT NORMALLY SUBJECT TO PUBLIC INPUT. THIS DOCUMENT SHOULD DIRECT ALLOTMENT MANAGEMENT GOALS, OBJECTIVES, STANDARDS, ETC.

16 IT WOULD BE BETTER IF RIPARIAN HABITAT NEEDS WERE NOT ONLY CONSIDERED IN DEVELOPING LIVESTOCK GRAZING SYSTEMS AND PASTURE DESIGNS, BUT PLACED HIGHEST IN PRIORITY.

WE WOULD LIKE TO SEE RIPARIAN AREAS PLACED OFF LIMITS TO ORV USE.

17 WE WOULD LIKE TO SEE SOME MINERAL WITHDRAWAL CONSTRAINTS PLACED ON RIPARIAN ZONES AND STREAMS.

14-8 23 WE ARE NOT IN FAVOR OF PLACEMENT OF UTILITY CORRIDORS IN THE NORTH FORK WSA NOR IN THE DESCHUTES CANYON/ STEELHEAD FALLS WSA.

25 WE DESIRE GREATER SPECIFICITY IN ACTIVITY PLAN MONITORING. THE PRESENT EXPRESSION IS VAGUE.

14-9 26 THIS DOCUMENT MUST SPECIFY MONITORING SYSTEMS AND IMPLEMENTATION SCHEDULES FOR IT TO BE ACCEPTABLE. WE RESERVE THE RIGHT TO COMMENT ON YOUR PLANNED SYSTEMS WHEN THEY ARE DRAFTED AND REQUEST THAT YOU DO NOT FINALIZE THIS RMP UNTIL YOU HAVE RECEIVED FEEDBACK REGARDING THESE SYSTEMS.

REFERENCE TO 99% USE OF GRAZING SYSTEMS WHICH ENCOURAGE

Protecting and Improving Your Fishing Future

Post Office Box 6223
Bend, Oregon 97708

OCTU COMMENTS ON BROTHERS/LAPINE DRMP P.3

UPWARD CHANGE IN ECOLOGICAL STATUS DOES NOT CORRESPOND TO 99% IMPROVEMENT OF RANGE CONDITIONS IN APPENDIX K.

27 WE ARE ENCOURAGED TO SEE THAT THE ANTICIPATED CONDITION OF STREAM RIPARIAN IS PROJECTED TO HAVE OVER HALF THE ACRAGE GOOD TO EXCELLENT. HOWEVER, YOUR ANTICIPATED INCREASE OF LIVESTOCK AUMS CAUSES US CONCERNS REGARDING THE METHOD BY WHICH YOU WILL ACHIEVE THE DESIRED RESULTS.

14-10 WE WONDER WHY THERE IS NO CHANGE IN RESERVOIR RIPARIAN CONDITIONS.

DUE TO THE DROUGHTY CONDITIONS ENCOUNTERED ON YOUR DISTRICT, WE WOULD SUGGEST THAT YOU MANAGE TO ACHIEVE NO ACRAGE IN FAIR OR POOR CONDITION.

28 "NONE OF THE STREAMS WERE RATED IN EXCELLENT CONDITION."

14-11 WE WOULD LIKE TO HAVE MORE INFORMATION REGARDING GRAZING MANAGEMENT ANTICIPATED TO RECTIFY THE ABOVE STATEMENT. WE QUESTION THE UTILITY OF EXPENDING ANY FUNDS ON INSTREAM HABITAT IMPROVEMENT IF GRAZING MANAGEMENT IS NOT CHANGED AS WELL. IN MOST CASES, WE BELIEVE THAT A DOLLAR SPENT TO EXCLUDE COWS IS A BETTER SPENT DOLLAR THAN THAT SPENT TO MAKE FISH HABITAT WHERE IT WILL CONTINUE TO BE DEGRADED.

14-12 29 WE TAKE EXCEPTION TO A PARAGRAPH CONTAINING THE STATEMENT THAT "STREAM RIPARIAN AREAS ARE PROTECTED AND MANAGED TO PROVIDE FULL VEGETATIVE POTENTIAL" AND "LIVESTOCK USE IS MANAGED TO ACHIEVE 60 % VEGETATIVE POTENTIAL."

14-13 REFERENCE TO THE OREGON/WASHINGTON RIPARIAN ENHANCEMENT PLAN IS NOT SUFFICIENT TO ADDRESS THIS ISSUE IN THIS RMP. IT IS NOT TRUE THAT THE REFERENCED PLAN CONTAINS SPECIFIC ELEMENTS WHICH ARE THE PURVIEW OF THIS MORE SPECIFIC PLAN.

14-14 YOUR DISCUSSION OF THE PERCENTAGE OF IMPROVED RIPARIAN AREAS SEEMS TO DEFY THE INFORMATION YOU PRESENT IN TABLE 6.

YOUR TREATMENT OF RIPARIAN MANAGEMENT ON THIS PAGE DOES NOTHING TO CONVINC US THAT YOU WILL ENHANCE RIPARIAN MANAGEMENT IN THE DISTRICT.

14-15 31 "CONSTRUCT 98 MILES FENCE AND 14 WATERHOLES (IF OPERATORS ASSUME DEVELOPMENT EXPENSE.)" (PREFERRED

OCTU COMMENTS ON BROTHERS/LAPINE DRMP P.4

ALTERNATIVE). WHILE WE RECOGNIZE A CLOSE CONNECTION BETWEEN CATTLEMEN AND BLM, THIS STATEMENT APPEARS TO ABROGATE YOUR MANAGEMENT RESPONSIBILITY.

14-15 WE ARE OF THE OPINION THAT FENCING AND WATER DEVELOPMENT ARE COSTS OF DOING BUSINESS AND SHOULD BE APPLIED TO THE BENEFACTORS OF THE FORAGE.

IF THEY DO NOT ASSUME DEVELOPMENT EXPENSE, YOU WOULD BE WISE TO SIMPLY DENY THE LEASE.

32 WE PREFER TO SEE NO GRAZING IN RIPARIAN ZONES.

34 WE WOULD PREFER TO SEE YOU PLAN TO ACHIEVE EXCELLENT PNC IN ALL RIPARIAN ECOTONES.

14-16 55 WE DOUBT THE TRUTH OF YOUR STATEMENT "GENERALLY, WATER QUALITY IN THE PLANNING AREA MEETS STANDARDS ESTABLISHED BY THE DEQ..."

14-17 57 INCLUDED UNDER THE EXPRESSION "FORESTLAND AVAILABLE FOR INTENSIVE PRODUCTION OF FORESTLAND PRODUCTS" ON TABLE 22 IS 135 A. OF WET MEADOW AND RIPARIAN. THIS INCLUSION CAUSES EXTREME CONCERN FOR THE CONSISTENCY OF THIS PLAN. VIZ.P. 14 " APPROXIMATELY 135 A. WILL BE SET ASIDE FOR PROTECTION OF WET MEADOWS OR RIPARIAN AREAS. NO TIMBER HARVEST WILL OCCUR ADJACENT TO WET MEADOWS OR RIPARIAN AREAS."

14-18 WE WOULD PREFER TO SEE EARLY SPRING LATE FALL GRAZING IN RIPARIAN AREAS ONLY. YEARLONG GRAZING, EVEN IF LIGHT IS INJURIOUS TO RIPARIAN ECOTONES.

14-19 65 IF 65,000 VISITORS SOUGHT THE EIGHT MILE STRETCH OF CROOKED RIVER DOWNSTREAM OF BOWMAN DAM, WHY DOES TABLE 26 INDICATE THAT THERE WERE ONLY 33,000 FISHING USER VISITS IN THE ENTIRE DISTRICT?

76 WE ARE UNHAPPY THAT YOU FOUND ONLY 28 MILES OUT OF A POTENTIAL 191 MILES OF WILD, SCENIC OR RECREATION RIVERS WORTHY OF YOUR SUPPORT.

14-20 77 WE ARE PLEASED TO SEE THAT FOREST CREEKS, LOWER CROOKED RIVER, NORTH FORK CROOKED RIVER AND THE S. FY. OF CROOKED RIVER ARE AMONGS WE WOULD LIKE TO HAVE ALL RIPARIAN ECOTONES PLACED IN THE CATEGORY OF AREAS OF CRITICAL ENVIRONMENTAL CONCERN AND MANAGED FOR THEIR ECOLOGICAL ENHANCEMENT.

14-21 128 STANDARDS FOR ROADS SHOULD BE CONTAINED IN THIS DOCUMENT. WE HEREBY REQUEST TO BE PARTY TO TO

- 14-10 As noted on page 29 of the Draft RMP/EIS, reservoir related riparian areas were created with the establishment of livestock watering areas. They are not a naturally occurring situation and generally do not have high wildlife habitat potential.
- 14-11 Livestock grazing management that allows riparian vegetation to attain full vigorous growth and then have that growth when peak flows occur improves the condition of streams. Implementing this type of management is almost always a prerequisite before funds are spent on stream structures. Within the planning area, there are presently over 100 miles of streams in livestock exclusion or unallotted status.
- 14-12 We agree. The Draft RMP/EIS statement was misleading and confusing. Our intention in all management prescriptions is to attain the best ecological condition in the shortest timeframe. Our reference to 60 percent of potential in grazed areas means we feel we can reach a "good" ecological rating within the life of the plan. This will be possible on most systems, however, on some, even with exclusion, it will not.
- 14-13 We disagree. The Washington/Oregon Riparian Enhancement Plan is a very detailed plan outlining the proposed strategies to improve riparian condition on over 650 miles of stream.
- 14-14 The discussion refers to improvement of the riparian vegetation on 75 percent of the stream riparian habitats. This doesn't necessarily mean there will be a change in condition class. A stream can improve significantly and appear very stable and still not have changed condition class.
- 14-15 We agree. As noted in the Draft RMP/EIS and Chapter 2 of this document, we would not authorize the livestock grazing increase unless the livestock operator assumed the development expense.
- 14-16 Although there are water quality problems throughout the Deschutes and Crooked River watersheds, macroinvertebrate sampling and riparian inventories on the district show an overall improvement in water quality and watershed condition. Water quality on Bureau administered lands does meet State water quality standards required for identified beneficial uses. Water quality will continue to improve through our riparian management program which includes treatment and management of uplands.
- 14-17 Table 22 and the accompanying text has been revised to clarify our intentions (see Table 7 in Chapter 2). No harvests are planned within 100 feet of wet meadows or riparian areas. See the Forestland and Woodland section of Chapter 2.
- 14-18 We disagree. There are few stream systems for which early spring/late fall grazing works effectively in the Prineville District. Streams typically look good during the summer months, but the fall use in low elevation systems removes too much vegetative cover to handle the next year's runoff. Spring grazing alone has proven to be beneficial in most systems, however, it is not practical everywhere. Other grazing strategies that work well in the planning area are late spring, early spring rotation, rotation, three pasture rest rotation (only on low gradient, low stress, sedge-rush-grass sites) and limited utilization (40 percent or less) during summer months.
- 14-19 Camping, sightseeing, fishing, day-use and driving for pleasure are the primary recreation activities on public lands along the lower Crooked River downstream from Prineville Reservoir. Fishing in this area is only one of several recreation activities totaling an estimated 65,000 recreation visits to this area annually. BLM estimates indicate that approximately 33,000 recreation visits occur annually on public lands primarily for fishing purposes. The Deschutes, lower and upper Crooked River and its south and north fork tributaries are all recipients of this use.
- 14-20 Riparian areas are important elements of BLM resource management plans and generally justify special management attention and direction. They do not automatically qualify for consideration as potential Areas of Critical Environmental Concern. Appendix F of the Draft RMP/EIS described the ACEC determination procedures.
- 14-21 Documents containing construction standards for roads are available for public review at the Prineville District Office. In addition to the standard operating procedures for forest practices described in Chapter 2, a detailed environmental assessment (as noted on page 14 of the Draft RMP/EIS) would be made prior to each timber sale. These assessments would detail the specific standards for roads in each timber sale. These assessments are available for public review and comment.
- 14-22 It is anticipated that a typical streamside buffer would be approximately 100 feet wide. Natural variation in streams, springs, and wet meadows require variation in how best to protect them. All "buffer strips" will meet or exceed State Forest Practices Act requirements through site specific environmental analysis, prior to implementing forestry practices. Mitigation measures for protecting water sources and riparian areas will be developed.

14-21

ALL YOUR TIMBER SALES IN ORDER TO DETERMINE IF THE SCHEDULING AND STANDARDS OF ROAD CROSSINGS AND PLACEMENTS NEAR STREAMS ARE SATISFACTORY.

WE ARE NOT PLEASED WITH YOUR RELIANCE ON SEED TREE REGENERATION METHODS OF HARVESTING TIMBER.

14-22

WE ARE PLEASED THAT YOU WILL USE STREAMSIDE BUFFER STRIPS. WHAT STANDARDS WILL THEY CONFORM TO?

14-1 Under the proposed plan, maintaining or increasing the health of riparian systems in the LaPine portion would serve as an overriding objective before increased livestock AUM allocations would be authorized. Increased livestock use would be conditional on appropriate measures to protect riparian areas and water quality. See Chapter 2 for the proposed livestock grazing and riparian management programs in the LaPine portion.

14-2 See Livestock Grazing section of Chapter 2 and response to comment 7-3.

14-3 We are unaware of the nature, direction, location and sources of the water quality problems you refer to in your comment. If the public has evidence of water quality problems arising from ELM permitted activities, we would appreciate the information.

14-4 Issues related to livestock grazing management, riparian area management, wildlife habitat and forestland management in the Brothers portion of the planning area were addressed and resolved in the Brothers Management Framework Plan (completed in 1982) and the Brothers Grazing Management Rangeland Program Summary and Record of Decision (completed in 1983). The Bureau's intention to continue existing management direction for these programs was clearly identified in the RMP scoping notice package, draft alternatives summary, and the Draft RMP/EIS. Chapter 2, of this document includes all proposed actions for the Brothers/LaPine Planning Area including those decisions to be carried forward in the Brothers portion.

14-5 Water quality will be maintained or enhanced by implementation of best management practices as prepared in cooperation with Oregon Department of Environmental Quality and through implementation of the Oregon/Washington Riparian Enhancement Plan.

14-6 Table 7 on page 27 of the Draft RMP/EIS notes 743 acres of riparian vegetation type in the Brothers portion of the planning area. The narrative on page 14 and Table 22 on page 57 of the Draft RMP/EIS notes there are 135 acres of riparian/wet meadow area in the LaPine portion of the planning area. The two acreage figures are not overlapping. Proposed riparian area management direction is shown in the Riparian and Aquatic Habitat section of Chapter 2.

14-7 The Livestock Grazing section of Chapter 2 provides management goals, objectives and standards for the entire planning area, however, detailed specific decisions must be developed through allotment management and other activity plans. Also, see response to comment 10-1.

14-8 Wilderness study areas are considered total avoidance areas for utility and transportation corridors until reviewed by Congress. Even if an area is not designated wilderness or given other special status by Congress, new rights-of-way will be subject to environmental analysis with appropriate public involvement and review opportunities.

14-9 See response to comment 7-3. Your comments on monitoring systems and implementation schedules contained in Chapter 2 of this document should be sent to the District Manager to assist in the development of the final (approved) Record of Decision and Resource Management Plan.

15-3 We do not believe inconsistencies or a major oversight exists because one river segment is determined to be eligible for further study and another river segment is not. Eligibility studies are based on the resource attributes of the river segment. However, as stated, further studies on this portion of the Deschutes will be carried out. They will be coordinated with private landowners, as well as the city, county and State as well as the Deschutes and Ochoco National Forests.

15-4 Significant changes in grazing management have occurred on public lands adjacent to the Crooked River, including changes in season and duration of use. Although there are significant water quality problems in the Crooked River watershed, macroinvertebrate sampling and riparian inventories show a significant improvement of watershed condition. Riparian enhancement work conducted in this watershed over the past 10-15 years, including cooperative efforts by some local private landowners, has significantly improved watershed conditions.

15-5 In June 1987 the Oregon/Washington Riparian Enhancement Plan was released. This plan set goals and objectives for restoring or maintaining the rangeland riparian areas of the two States. Inventoried areas identified for enhancement on the Prineville District included a continued effort and emphasis in the Crooked River watershed.

15-9 Appendix P on page 159 of the Draft RMP/EIS explains the procedure used to determine if a nominated ACEC was or was not qualified for proposed designation. Page 160 of the Draft RMP/EIS lists those areas determined to not qualify for ACEC designation, shows why they did not qualify and portrays alternative management strategies needed to protect recognized values within these areas.

Riparian values do not automatically qualify an area for ACEC designation. ACECs are designated based on certain resource values and the subsequent management direction is tailored to maintain or enhance these values. Rockhounding may not be appropriate in an ACEC managed to protect sensitive plants or other ecological values, but may be acceptable in an ACEC designated for bald eagle roost site protection. A given activity may be allowed with certain restrictions or completely prohibited depending on the values.

Management plans for individual ACECs, including Research Natural Areas, are usually developed within one or two years after the RMP is approved. Management objectives and constraints are drawn from the approved RMP, such as limitations on ORV use, livestock grazing, firewood cutting, etc. The proposed direction for ACECs was presented in the Draft RMP/EIS in Appendix P. Proposed ACEC management direction is shown in the ACEC section of Chapter 2 in this document.

15-6 Alternative F's land tenure objective of not selling any land and using exchanges primarily to improve access was in reaction to public comments. The public has asked BLM for this land tenure option and we felt Alternative F was the appropriate place for it.

The land tenure objectives of the proposed plan (in Chapter 2) emphasize natural value acquisition and are very similar to the acquisition criteria used in the Two Rivers RMP which led to the Sutton Mountain exchange. The Land Tenure section of Chapter 2 and the revised land tenure maps provide more information on proposed retention, acquisition and exchange areas.

While the BLM can identify areas of private land which possess high public value and which may be suitable for acquisition, we cannot consider private lands as part of the planning process.

15-7 The Division of State Parks has not requested additional public land west of the Deschutes River. Most of the lands along the Deschutes are now in Zone 1, implying public ownership retention or interest in acquisition.

15-8 We believe the proposed plan is consistent with and supportive of the State Scenic Waterways Program. BLM will continue to work closely with all State agencies to develop and implement memorandum of understanding when needed.

15-10 An update of the Brothers Grazing Management Program was included in the RMP scoping package which was mailed to interested parties when the preliminary planning issues were identified in August, 1986. There was limited written response or oral testimony at public meetings that suggested a need to totally reexamine the rangeland management program in the Brothers portion of the planning area. Most of the ongoing management information was reprinted in the Draft RMP/EIS and is again included in this document. Minor adjustments to the rangeland program will be made through this RMP where monitoring results require adjustments in livestock management or range developments or treatments.

Decisions regarding livestock grazing, wildlife habitat and watershed values in the Brothers portion were analyzed in the Brothers Grazing Management EIS which was done in a multiple use context and with extensive public involvement. We are confident these decisions are balanced with other public values and it is our intent to proceed with implementation.

15-11 The Brothers Grazing Management EIS included an analysis of the economic impacts of the grazing program in that portion of the planning area. Since there are no significant changes proposed in this plan, a reanalysis is not required.

COALITION FOR THE DESCHUTES
 P.O. BOX 6013 BEND, OR 97705



James Hancock
 Bureau of Land Management
 PO Box 650
 Prineville, OR
 97754

Dear Mr. Hancock, January 2, 1988

RE: Draft Brothers/Lapine Resource Management Plan

In general, we support the management direction outlined in Alternative F. Alternative F, however, falls far short of an alternative emphasizing natural values. We also question whether some of the management options under Alternative F, specifically under timber, forage and agriculture, would ever be carried out since they appear to deviate significantly from past practice. Practically speaking, it may not represent a true alternative that would be seriously considered by the BLM. Exclusion of certain commodity or related resource management activities from alternative F almost guarantees that the BLM will reject this alternative.

The areas of most concern in this plan are in regards to potential federal wild and scenic river designations, restoration of water quality and quantity, and riparian and fish habitat.

- 15-1 Wild and scenic river eligibility determinations should extend to all potential wild and scenic rivers in the planning area, including the South Fork Crooked River, regardless of land ownership status. The amount of private land on these rivers can then be discussed under the suitability determination for each river. Given that the state has already designated the Deschutes River through the planning area as a state scenic waterway is sufficient justification for Federal designation. That both the Crooked River and the Deschutes River immediately north of the planning area have already been determined to be eligible for Federal designation in the draft (Seneca National Forest Plan reflects a major oversight in maintaining consistency between adjoining Federal land managing agency plans.
- 15-2
- 15-3
- 15-4 Water quality in the Crooked River is one of the worst in the state. Many of the water quality problems are a direct result of overzealous grazing practices and degradation of riparian areas on upper watershed lands under BLM management. The fact that this major problem is not mentioned in this Plan shows an inability or unwillingness to address a concern of statewide significance.
- 15-5 Directly related to the issue of water quality is the issue of riparian and fish habitat restoration. The plan does not go far enough in addressing this problem and cannot be dealt with in terms of a statewide policy or in terms of mitigating actions under livestock grazing. A 10 year program to completely restore 95% of all riparian areas should be your highest priority.

Protecting Our Economic, Recreational and Environmental Future

- 15-9 mineral development should be allowed in any designated ACEC. All areas considered for ACEC designation should be included unless specific documentation is included in the plan as to why these areas should not be designated and what alternative management will be in effect that will protect the values that led to the areas consideration as an ACEC. The riparian wetlands along the Little Deschutes and the canyon areas of the Deschutes River have outstanding natural values of statewide significance and should be designated RINAs/ACECs.

WILD HORSES

Preferred alternative is adequate provided that all available forage is allocated to wildlife and watershed.

LIVESTOCK GRAZING

Existing levels of livestock grazing could be allowed in the Lapine portion excluding lands along the Deschutes and Little Deschutes Rivers. Livestock watering facilities and fencing (including maintenance) along these waterways should be at the expense of the allottee.

- 15-10 The Brothers grazing management program is over zealous and out of balance with other public values. Excluding any review of livestock grazing in the Brothers portion of the planning area in this document is very poor planning. As a result, this document is not comprehensive in its scope, especially as it applies to the discussion of wildlife habitat, riparian areas and fisheries. The decision to render all discussion of these public values within the context of livestock grazing reflects a historic bias towards livestock grazing as the central resource management issue. As a consequence, many groups oriented towards issues affecting wildlife, riparian and fisheries management are effectively precluded from participating in this planning process. Either the Brothers Grazing RMP should be simultaneously opened for review or its contents should be incorporated into the draft Brothers/Lapine RMP to allow public review and comment.

- 15-11 A complete discussion of the economic impacts of the grazing program should be included.

WILDLIFE HABITAT MANAGEMENT

- 15-12 No alternative is acceptable without more specifics on habitat management for non-game, riparian, and fish species. The plan must spend considerable more time discussing efforts to restore habitat, in particular riparian and fish habitat. The objective level for conditions of these areas should be 95% excellent within ten years.

Livestock should be excluded from all riparian areas except at crossings, watering facilities should be required for domestic livestock at the expense of allottees.

MINERALS

Alternative F is acceptable, however, exceptions should be allowed in specific cases. Specific criteria should be included for review.

Thank you for the opportunity to comment. If you have questions please call me at 369-0613.

Sincerely,


 Bill Merrill

LAND TENURE AND ACCESS

Alternative E is more oriented to maintaining natural values than Alternative F. One of the most important tools available to the BLM for maintaining natural values is the ability to make exchanges or acquisitions when the opportunity presents itself. The recent Sutton Mountain land exchange is a good example where natural values will be enhanced upon completion of that exchange. Alternative F should be modified accordingly.

- 15-6 All public and private land along rivers and streams within the planning area should be identified as areas having high public resource value (see Maps 4 and 5). The private lands, including those within or immediately adjacent to wilderness study areas, should be labeled as areas suitable for acquisition. High priority acquisitions should include lands along the Deschutes, Little Deschutes, the North and South Fork Crooked Rivers and the Crooked River between the reservoir and Prineville.

Private lands within the planning area should be considered part of the planning process. Whether it is public or private is irrelevant as far as developing a comprehensive planning document. The issue of public versus private should be discussed under implementation, i.e., your ability to carry out specific management goals.

Land along highway 97 should be kept in open space.

- 15-7 All land west of the Deschutes River in the vicinity of the Lapine State Park should be turned over to the Division of State Parks for inclusion into Lapine State Park.

Dry-land agriculture should be allowed to continue, no irrigated land permits should be issued.

Easements should be acquired to all isolated tracts of public land.

FORESTLAND

All wildlife trees and areas of significant old growth should be retained.

Harvest should not be accelerated unless it can be economically justified, no below cost timber sales should be allowed. Exceptions should be granted for the harvest of high hazard trees in the Lapine planning area.

RECREATION MANAGEMENT

Additional permanent ORV closures are needed to protect natural values.

- 15-8 The BLM should enter into a memorandum of understanding, similar to the one in effect with the state Department of Forestry, regarding management of state scenic waterways.

Rock hounding should be restricted or eliminated from any proposed wilderness study area or existing or proposed ACEC/PhA.

ACEC

- 15-9 The North and South Forks of the Crooked River should both be designated ACECs and their boundaries adjusted to incorporate adjacent lands that have similar ecologic and scientific value. The boundaries should include the entire river corridor within the planning area and tributary canyons. Specific management plans, including lands to be acquired, should be made available for public review as part of this planning process. No ORV use, livestock grazing, timber harvest or

- 15-1 Rivers inventoried for eligibility under the National Wild and Scenic Rivers Act were identified from the Nationwide Rivers Inventory conducted by the National Park Service. After development of the Omnibus Wild and Scenic Rivers legislation and re-evaluating public comments and staff recommendations, BLM conducted an eligibility determination for the Crooked River and several other rivers in the planning area. See the Wild and Scenic Rivers section of Chapter 2. BLM has authority to study a river segment if it is determined to qualify for further study, (suitability study). The BLM will continue to conduct joint wild and scenic eligibility studies with other Federal agencies. BLM does not, however, have authority to conduct wild and scenic eligibility determinations on private land.

- 15-2 The criteria used by the State for determining if a river qualifies as a potential State scenic waterway is different from the criteria used for determining if a river segment on BLM managed land qualifies as a potential Federal wild, scenic or recreational river. We also recognize that there is local and State support for protecting scenic, recreational and other resource values along the Deschutes River.

Based on local, State and national interest in studying the Deschutes River for possible Federal recreation or scenic designation, further consideration will be given to this portion of the Deschutes to determine its potential for Federal designation.

The overall economic impacts of the grazing program in the LaPine portion of the planning area is not significant in a regional context. Although substantial temporary forage is currently available and will be during the next 10-15 years, there will probably be limited demand for it. Therefore, no significant economic changes or impacts are predicted.

15-12 Multiple use management dictates managing for an ecological condition that provides the most long-term benefits for all concerns. Areas in good condition (50-75 percent of potential) normally provide more diverse benefits than when in excellent condition.

Improving
favorable
processes
excellent

December 28, 1987

To: District Manager, Bureau of Land Management
Prineville District Office
From: Field Supervisor, Portland Field Office, Portland, Oregon

Subject: Review of BLM Brothers/LaPine Resource Management Plan and Draft
Environmental Impact Statement (EO #87/79)

GENERAL COMMENTS

The Fish and Wildlife Service (Service) believes that some areas of the draft document lack adequate supportive information for statements made. A narrative description of how some of the habitat management goals and objectives will be achieved should be provided. The riparian habitat discussion should be expanded to further define the basis for rating the habitat's condition. Further discussion is also necessary to explain how a 385 percent increase in grazing activity is expected to have the greatest beneficial effect on wildlife under the preferred alternative.

SPECIFIC COMMENTS

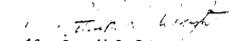
- 16-1 Page 15, Wildlife Habitat, Second Paragraph. Further detail is necessary to explain what is meant by "sufficient wildlife forage and cover will be provided to maintain existing wildlife population levels or ODFW management objective levels." What is the existing cover/forage ratio? What is "sufficient wildlife forage and cover" and what cover/forage ratio will be maintained? The management practices which will be utilized to achieve the selected ratio should be described. The last paragraph refers to fences and water sources for wildlife and livestock. However, the Table 10 summary on page 31 (Alternative D) indicates fences and waterholes will be constructed only if operators assume the development expense. The operators are not likely to voluntarily assume the expense. Issuance of grazing permits should be subject to agreement by the permittees to provide these funds. Therefore, necessary funding would be assured.
- 16-2 Page 16, Riparian and Aquatic Habitat. The primary management techniques that "will maintain or improve current good to excellent streambank stability and riparian vegetative condition" should be outlined.
- 16-3 Page 25, Monitoring the Brothers/LaPine RMP. The proposed Resource Management Plan (RMP) does not adequately address fish and wildlife concerns. Additional details should be provided which explain how fish and wildlife and their habitat conditions will be monitored. For example, wildlife populations and conditions of some of their key habitats (e.g. big game winter range) should be evaluated in a monitoring program.
- 16-4 Page 26, Existing management direction for Brothers portion of Brothers/LaPine Planning Area. Where is the management direction for the LaPine portion?

16-1 under the preferred Alternative. That is a 385 percent increase in existing grazing allotments for that area (existing allocation is 3,301 AUM's). The document claims that this intensive grazing would reduce competition between big game and livestock. It must be explained how a 385 percent increase in grazing activity can provide the greatest beneficial impact to wildlife. Such competition for forage could create adverse, not beneficial, impacts to wildlife resources.

SUMMARY COMMENTS

The final EIS and Resource Management Plan should include supportive data for statements made in the draft concerning the existing value of fish and wildlife habitat conditions and anticipated improved values with the preferred alternative. The final document should also describe the habitat management that will achieve various improvement and diversity objectives for fish and wildlife.

We appreciate the opportunity to comment on the subject drafts. If you have any questions concerning our comments, please contact Larry Rasmussen of my staff at (503) 231-6179 or FTS 429-6179.


Russell D. Peterson

LR/lg

16-5 Page 28, Wildlife Habitat Management, Paragraphs 2 and 3. These paragraphs indicate that forage conditions for deer, antelope, and elk will be improved and result in considerable population increases. It also indicates that grazing systems implemented will improve or maintain habitat conditions on most deer and antelope winter ranges. Such statements require supportive information concerning what improvements will actually be accomplished and when they will occur.

16-6 Page 29, Fish Habitat Management. It is stated that there are "19 miles of fish habitat rated in good condition, 40 miles in fair condition and 28 miles in poor condition. None of the streams were rated in excellent condition." This statement needs definitive support for the basis of the "excellent", "good", "fair", and "poor" ratings. A definition of each fish habitat category (i.e. good, fair, etc.) should be provided. Following the definition of the habitat types, there should be a reference to the report or study that was conducted to determine the amount of each habitat in the Brother/LaPine area.

Page 30, Table 10. Summary of Alternatives.

16-7 Alternative C, Wildlife Management. It is stated that this alternative would "manage to maintain 50 percent of optimum habitat diversity" and "meet ODFW management objective numbers for deer and elk." Considerably more detail must be provided which explains specifically how the management will maintain the 50 percent diversity and how this alternative will meet ODFW management objective numbers for deer and elk. (It is understood that this Table is a summary, however, there is very little additional information in the text).

16-8 Alternative D, Livestock Grazing. This indicates 98 miles of fence and 14 waterholes will be constructed if operators assume development expense. Fencing and waterhole development can contribute significantly to protecting the public's fish and wildlife resources (which are impacted by grazing). Accordingly, such development should be a condition of the grazing permits and not a voluntary action by the operators.

16 Alternative D, Wildlife Habitat Management. This states that the plan will "provide optimum habitat diversity for wildlife" and "meet ODFW management objective numbers for deer and elk." How this habitat diversity will be accomplished should be explained. In addition, how the management objective numbers will be met should be described. Although including these additional details in the summary may not be appropriate, they should be included somewhere in this chapter. Presently they are omitted.

16-10 Page 61, Riparian and Fish Habitat. Reference is made here to "good to excellent" riparian and fish habitats. The standards which these ratings are based upon should be provided. In addition, the survey which evaluated the habitat conditions in the Brothers/LaPine Planning Area should be referenced.

16-1 Page 97, Impacts to Wildlife. This section indicates that the preferred Alternative (D) and Alternative E would have the greatest beneficial impact on wildlife. It is stated in Table 10 (page 31) that the LaPine portion of the planning area would have an allocation of 16,000 AUMs for livestock grazing

16-1 Management of the different forage and cover requirements for each of the approximately 340 species occurring in the planning area is impractical, so we use the life form concept to put species into groups which have similar life requirements (Thomas et. al. 1979). For non-game wildlife, our management is guided by maintenance of habitats necessary to maintain certain percentages of expected populations as laid out in that reference. Since we do not have actual population level data, the management of habitat for potential populations is the best alternative. Management for game populations is accomplished more at the level of use area by use area. Guidelines for forage/cover ratios are derived from either Thomas 1979, Thomas and Maser, 1986, or other appropriate references. Again, since each species has different requirements (i.e. sagegrouse vs elk) and since the same species often occur in areas with different forage/cover ratios, it is impractical to give a complete listing of what the existing forage/cover ratio is, what is sufficient and what will be maintained.

16-2 Each stream is site specific and requires its own unique management scheme. Our management is based on the sensitivity of each stream system and how different management techniques will affect the stream functions.

16-3 Chapter 2 of this document includes monitoring guidelines for major programs which may result in vegetation change, surface disturbing activities or land use changes that may adversely affect other resources. While wildlife habitat management is an important program, it is not BLM's responsibility to monitor populations. See response to comment 7-4. Also see Appendices E, H and L of the Draft RMP/EIS.

16-4 As noted in all previous planning documents, management direction for the LaPine portion will be established by this RMP, whereas the Brothers Grazing Management EIS and portions of the Brothers MFP have been found acceptable and are common to all RMP alternatives. The existing management section, beginning on page 26 of the Draft RMP/EIS, described these programs and decisions since they would not be evaluated further. Chapter 2 of this document provides a consolidated proposed plan for the entire planning area.

16-5 Improvement will occur over the period covered by the RMP. Improvement is based on ecological trend. In this case, we would be improving ecological trend on areas of early seral to mid-seral and mid-seral to late seral status. Grazing systems are designed to bring about those trend changes.

16-6 During the period from 1976 to 1982 ninety-six miles of streams thought to have fisheries were inventoried for various fisheries and riparian qualities (see the list of studies below). Studies 1, 2 and 3 were conducted at every 1/4 mile interval on each of those streams while 4 and 5 were completed once or twice on streams depending on significance of stream. This provided data from which the summary ratings were derived. Appendix K from the Draft Brothers Grazing Management EIS published in 1982 has been reproduced as Table 19 in this document. It lists the summaries. The complete study files are available in the Prineville Office and may be reviewed during normal business hours.

16-8 We agree. Operator assumption of development expense was part of the Draft RMP/EIS preferred alternative design and is also incorporated into the proposed plan.

16-9 See response to comment 16-7, above.

16-10 See response 16-6 for a list of the studies which were conducted on all streams in the Brothers portion of the planning area during the period 1976-1982. Each of these studies consists of a number of different parameters which lead to a summary rating. Listing all the parameters in this document would be excessive. Study files on each stream are kept in the Prineville Office and may be reviewed by the public during normal business hours.

16-11 The reduction of competition is due to the fact that cattle grazing reduces the old grass, thereby increasing the availability of the green, current growth. Since LaPine is used primarily by mule deer during spring and fall, the need for that forage is greatest during these heavy use periods. The availability of green grass is very important to mule deer due to its increased nutrition and digestibility. Competition for total available forage between livestock and wildlife is not a problem in the LaPine portion. Allocation of forage for optimum big game numbers is determined by the Oregon Department of Fish and Wildlife and is made prior to any allocation of forage for livestock.

None of the streams were rated in excellent condition because of outside influences over which we have no control. These include siltation, and irrigation withdrawal.

Intensive studies and inventories were done on each stream that included the following information:

1. riparian habitat quality
2. bank stability
3. instream aquatic habitat
4. water quality and chemistry
5. macroinvertebrate analysis

The Glossary in the Draft RMP/EIS provided definitions for each seral stage and related each stage to habitat value.

16-7 Optimum habitat diversity varies from species to species. This reference to 50 percent is a general reference point. Management after completion of this general resource allocation plan will become more specific as to how individual habitats are to be managed. Management objective levels for elk and mule deer are met by allocating forage at those levels prior to allocating for any other resource, such as livestock, and by providing forage/cover ratios at levels recommended in Thomas (1979) and other appropriate literature.

17



United States Department of the Interior

BUREAU OF RECLAMATION
PACIFIC NORTHWEST REGION
FEDERAL BUILDING & U.S. COURTHOUSE
BOX 943-550 WEST FORT STREET
BOISE, IDAHO 83724-0943

U.S. DEPT. OF THE INTERIOR
BOISE, IDAHO 83724-0943
PN 150

NOV 20 1997

Memorandum

To: District Manager, Bureau of Land Management, Prineville District Office, P.O. Box 850, Prineville, Oregon 97754
ACW:7
From: Regional Environmental Officer, Bureau of Reclamation, Boise, Idaho
Subject: Review of Draft Environmental Statement for Brothers/LaPine Resource Management Plan, Oregon (DES 87/31)

The subject document has been reviewed by appropriate personnel within our region, and we have no objection to the contents. Please let us know if we can be of further assistance in the review process.

Douglas F. James

cc: Commissioner, Washington, D.C.
Attention: WQ-150



Oregon Field Office
1205 N.W. 25th Avenue
Portland, Oregon 97210
503 228-9561

December 23, 1987

Jim Hancock, District Manager
Bureau of Land Management
P.O. Box 550
Prineville, Oregon 97754

Dear Jim,

The Nature Conservancy would like to take this opportunity to respond to the Draft Brothers/LaPine Resource Management Plan and EIS. The Nature Conservancy is a private, non-profit conservation organization that is dedicated to the protection of biological diversity. We have worked with the staff of the Prineville BLM in the formulation of some of the special management areas proposed in this plan and have a continuing interest in the management of public lands in Oregon. Our concerns with the Brothers/LaPine Resource Plan are focused on the protection of sensitive, threatened and endangered species, the designation of special management areas--namely Research Natural Areas and Areas of Critical Environmental Concern, and in the conservation of natural diversity.

Sensitive, Threatened and Endangered Species
The Brothers/LaPine Resource Management Plan adequately addresses the concerns of The Nature Conservancy with regards to rare plant and animal species protection. The Prineville District has an excellent track record in conducting inventories of rare plants and has made good progress towards protecting critical habitat of its most rare and endangered species. The proposed Peck's Milkvetch ACEC site near Tumalo will protect a significant portion of the range of the *Astragalus peckii* and will make the species more secure from extinction.

We would like to see the District continue to conduct intensive surveys for its most rare plant species including *Aikmania ludoviciana* ssp. *gussii*, *Astragalus leucostictus*, and *Lupinus cuspidatus* which are all considered Threatened or Endangered Throughout Range by the Oregon Natural Heritage Data Base (1997). There is a desperate need for additional information on sites and habitat requirements for these species which are mostly restricted to public lands. Field studies of these species will greatly assist in their management and protection.

National Office 1800 North Kent Street Arlington Virginia 22209 703 841-5300

Conservation of Natural Diversity

Although the management plan for the Brothers/LaPine Resource Area does not directly address conservation of natural diversity there are several aspects in the plan that affect diversity. The designation of ACECs and RNAs will be a major positive step for maintenance of natural diversity on the Prineville District. This is especially truly for riparian areas as the three ACECs proposed for the Crooked River will direct management attention to this important resource.

One of the areas of concern with regards to maintaining natural diversity is in the proposed timber program for the LaPine area. The large scale conversion of lodgepole pine forests to younger stands with a transitional phase of increased grazing on the grasses and sedges that result from the timber harvest may have some significant effects on diversity for this restricted area. As mentioned earlier the wet meadows and riparian zones in the LaPine area will need special attention in timber sale planning and care should be taken to leave forested buffers around these sites even though there may be significant mortality projected for the overstory trees. In other words, some areas may require a two entry program for timber harvest at the expense of efficiency and costs related to sale layout. Also there is concern that adequate numbers of snags will be preserved in such an ambitious timber program. The "leave" areas will have to be sufficiently large to account for windthrow events, again at the expense of efficiency in terms of full harvest of the timber. A final concern in the LaPine timber sale area is the dramatic five-fold increase that is being projected in grazing use. As is stated on p. 57 there is currently no demand for transitional forage in the area, thus proposing such a huge increase in ADUs seems a bit unjustified and questionable. More rationale for this increase in grazing is in order in the management plan.

This concludes The Nature Conservancy's comments on the Brothers/LaPine management plan. We have followed the progress of the plan from its inception and are quite pleased with the results that are displayed in this document. The substantial contribution the District has proposed to the ACEC program is noteworthy and the sites selected have been long overdue the recognition that the ACEC designation provides. We appreciate the opportunity to work with the District on these important aspects of resource planning and look forward to future interactions.

Sincerely,

Dick Vander Schaaf
Dick Vander Schaaf
Public Lands Coordinator

With regards to sensitive animal species there is also a continuing concern for great grey owls which are known to occur in the east slopes of the Cascades and may be found in the LaPine portion of the planning area. Great grey owls utilize stringer meadows for hunting and the surrounding pine forests for nesting. There has been mention of small wet meadows contained within the lodgepole forestlands that are targeted for harvest in the draft plan. These meadows should be protected with adequate buffers of timber to insure that habitat for the owl and other raptors is maintained. The meadows obviously have benefits to other wildlife species as well so they need careful identification during timber planning activities.

Special Management Areas

The management plan proposes a number of sites for ACEC designation and RNA status that The Nature Conservancy heartily endorses. All of the sites listed in Table 30 are excellent ACEC candidates and display outstanding natural values for a variety of resources. The proposed Benjamin Pasture RNA and Powell Butte RNA have been long standing proposals which represent plant communities that have been difficult to locate in good ecological condition. The Forest Creeks proposed RNA was inventoried this past year and represents an example of high gradient stream reaches in the High Lava Plains and lower elevations of the Ochoco Mountains. Because of difficult access the riparian vegetation in the drainages is in good condition and will provide high quality baseline sites for the willow and shrub communities present.

Management of the proposed RNAs is mostly in line with recommendations from the RNA Committee with Benjamin Pasture RNA already fenced to exclude livestock and Forest Creeks RNA being naturally protected and not requiring fencing. We would like to recommend, however, that the Powell Butte RNA also be fenced to protect the communities present there as there is a possibility that trespass grazing or strays could damage the communities the RNA is designed to represent.

The varied ACECs proposed in the management plan are designed to protect some of most threatened natural areas and important natural values in the planning area. The management of these areas will be critical to the protection of the values inherent in each area and, in some cases, management will be required to enhance values that have been compromised in the past. As mentioned above, fencing should be constructed on the Powell Butte RNA as soon as feasible. There should also be some restriction of ORV use in the Peck's Milkvetch ACEC site as this activity would certainly constitute a threat to the species in most instances. Of particular interest to us is the management of livestock grazing in the Lower Crooked River, North Fork Crooked River, and South Fork Crooked River ACECs as riparian attributes at these sites may be severely damaged without careful regulation of livestock use.

18-1

18-2

18-3

18-4

18-5

18-1 The standard operating procedures for forest practices, Appendix E in the Draft RMP/EIS and Chapter 2 of this document, provide for buffers along perennial streams, springs and wet meadows. Timber sale design will consider Wildlife habitat values in the timing, location and type of harvesting. See Chapter 2 of this document for proposed management decisions.

18-2 See response to comment 12-2. The Powell Butte ACEC/RNA would need to be fenced if livestock use were prohibited, as anticipated in the proposed plan.

18-3 Under the proposed plan, ORV use would be restricted to existing roads and trails in the ACEC. It is anticipated that once a management plan for the area is developed and monitoring is in place, the effects of the existing vehicle use in the area could be determined and further restrictions would be implemented if necessary. Management of livestock grazing to improve riparian condition in all areas is discussed in Chapter 2 of this document.

18-4 Riparian ecosystems in these areas are one of the major values for which the ACEC designation is being proposed.

18-5 The proposed plan provides for the availability of the forage for livestock grazing under certain conditions and constraints designed to protect other resource values. As noted on page 57 of the Draft RMP/EIS, no demand currently exists for this forage. However, BLM can offer the forage during the period when it is physically available, before forest regeneration eliminates most of it.



United States Department of the Interior

GEOLOGICAL SURVEY
RESTON, VA 22091

19-1 See Response 21-7.

In Reply Refer To:
WGS-Mail Stop 423
DES 87-31

JFC 3 0 11

Memorandum

To: Director, Bureau of Land Management,
Prineville, Oregon
From: Assistant Director for Engineering Geology
Subject: Review of draft environmental statement for Brothers/LaPine
Resource Management Plan, Prineville, Oregon

We have reviewed the statement as requested in your letter dated October 5 included in the document.

19-1

The discussion of potential impacts on water resources mentions contamination of shallow aquifers as the major water quality concern. The statement's discussion of the affected environment should summarize the occurrence and use of ground water and should address sources and paths by which aquifers may be contaminated. Solid waste management practices should also be discussed.

James F. Devine

Copy to: District Chief, PNR, Tacoma, Washington

20

January 2, 1988

Mr. James L. Hancock
District Manager
Bureau of Land Management
P.O. Box 550
Prineville, OR 97754

RE: Draft Brothers/LaPine Resource Management Plan

Dear Mr. Hancock:

The following comments represent the views of the statewide Oregon Hunter's Association on the Draft Brothers/LaPine Resource Management Plan.

First of all, we found it confusing and unfortunate that the draft plan covered some aspects of both the Brothers and LaPine sections of the planning area, but some aspects of just the LaPine section. It would have been much more valuable to evaluate management alternatives for the entire area at the same time, so that potentially conflicting staffing requirements and financial and equipment resources could be assessed. For example, quite a bit of information on grazing in the Brothers section was included, but is apparently not open to discussion. We recommend that the two sections be considered together in planning and evaluating alternatives. In addition statements made in several appendices and in the main text were not supported by the limited information that was contained in the document. We would have been better able to respond to the plan if more detailed information had been included.

20-1

Several portions of the Brothers/LaPine Resource Area contain important habitat for wildlife such as deer, elk, antelope, sage grouse, and non-game species. These areas include critical winter range, migration routes, hiding and thermal cover, water sources, and fawning and mating grounds. The major BLM-controlled activities that influence wildlife habitat are timber harvest and associated roading, livestock grazing, and off-road vehicle (ORV) use. These activities are discussed below.

Timber Harvest. We support sustained-yield timber harvest with uneven-age management to maintain habitat diversity. Harvest of insect-damaged or insect-susceptible trees should be undertaken over an 8-to-10-year period with careful planning to maintain sufficient levels of cover for wildlife. All wildlife

20

20-2 trees should be retained, rather than the 70% recommended in the preferred alternative. All roads built should be permanently closed immediately following timber harvest operations on each sale.

20-3

20-4 **Livestock Grazing.** Livestock grazing has seriously damaged much of the wildlife habitat in this and other districts. We are opposed to any increase in grazing allotments in the district. Since less than two-thirds of the current AUMs are used, there seems to be no rationale for increasing allocated AUMs by over 500%, as in the preferred alternative. Any increase in forage resulting from timber harvest should be allocated to wildlife. If excess forage, beyond what wildlife can utilize, is truly available in the LaPine area, it might be feasible to use it to relieve overgrazing in the Brothers area, which is in generally worse condition and contains more critical deer winter range.

ORV Use. ORV use is not compatible with protection and maintenance of wildlife habitat. It should not be allowed in deer wintering areas during winter, nor in fawning areas during spring and early summer nor in sage grouse strutting areas in early spring. We recommend a reduction in the size of the Millican ORV area, as well as restrictions on ORV use when it conflicts with wildlife.

Based on the above concerns, we believe Alternative B most closely approaches responsible management of the lands in question.

Thank you for the opportunity to comment on the draft plan.

Sincerely,

Kelly L. Smith
Secretary

cc: Roger Borine
Larry Sowa



BLM-ND-136

JAN 16 1993

- 20-1 Chapter 2 of this document consolidates proposed management direction for the entire planning area. As noted in our response to comments 15-4 and 15-10, much of the existing management direction for the Brothers portion of the planning area was considered acceptable as a result of public response during the scoping of issues. The Draft RMP/EIS format required a splitting of program descriptions since management common to all alternatives did not require further analysis.
- 20-2 See response to comment 7-5.
- 20-3 See response to comment 7-7
- 20-4 See response to comment 18-5.

James L. Hancock, District Manager
Bureau of Land Management
Prineville District Office
P.O. Box 550
Prineville, Oregon 97754

Dear Mr. Hancock:

The Environmental Protection Agency (EPA) has reviewed the draft Brothers/LaPine Resource Management Plan Environmental Impact Statement (RMP/EIS) prepared by your office.

The draft RMP/EIS analyzes six alternatives for multiple use management of 1,115,087 acres of public land and 130,570 acres of private surface/federal sub-surface mineral estate administered by the Bureau of Land Management (BLM) in central Oregon. Our review was conducted in accordance with the National Environmental Policy Act (NEPA), and our responsibilities under Section 309 of the Clean Air Act to determine whether impacts of proposed federal actions are acceptable in terms of environmental quality, public health, and welfare.

Our detailed review report is enclosed, divided into general and specific comments. Based on our review, we have rated the draft RMP/EIS EC-2 (Environmental Concerns--Insufficient Information). The basis for our rating is summarized below with details included in the review report. Also enclosed is an explanation of our rating system.

The primary reasons we have environmental concerns are as follows:

21-1

- The project-specific evaluation process that will occur after the RMP is finalized is not sufficiently explained so as to assure that adverse environmental effects, particularly to water quality, will be prevented. We suggest more fully describing this process in the planning area.

21-2

- The potential for nonpoint source degradation of water quality and impacts to beneficial uses is difficult to ascertain.

- The potential cumulative effects are not adequately discussed.

We intend our comments to be constructive, and we are confident that by addressing our concerns and comments a final RMP/EIS can be presented which more clearly shows that important resources will be adequately protected, while providing BLM staff with the necessary flexibility to manage the planning area on a day-to-day basis.

Thank you for the opportunity to review the draft RMP/EIS. If you have any questions about our review, please contact Ann Uhrich of our environmental review section at FTS 399-8516.

Sincerely,

Robert S. Burd
Robert S. Burd
Director, Water Division

Enclosures

- cc: ODEQ
- ODFW
- USFS, R-6
- USFWS, field office
- BLM (state director)
- P. Kalajian, A-104

U.S. ENVIRONMENTAL PROTECTION AGENCY

Detailed Review Report for the
Draft Brothers/LaPine RMP/EIS, Oregon

General Comments

Project-Specific Evaluation:

We recognize the nature of RMPs as being a tier in advance of project-specific planning. We believe, however, that more information is needed that describes the project-specific evaluation process that will occur after the RMP is finalized. This is important because final decisions on specific projects will, to a significant extent, determine the adequacy of the level of protection provided for water quality and other resources.

Other BLM RMPs that we have reviewed have included Standard Operating Procedures (SOP) and Standard Design Features (SDF). SDFs are a key aspect of a RMP. They provide the basic goals, objectives, and guidelines for project-specific planning that may occur in the future. This draft RMP/EIS does not include SOP/SDFs.

21-3

For example, it is stated that forestry practices will be guided by site specific environmental analyses (p. 14), and that standard and special provisions (which include mitigating measures) are included in timber harvest contracts to describe performance standards (p. 129). Are similar environmental analyses planned during the development of grazing allotment management plans? Are management or operation plans and/or environmental analyses planned for oil, gas, or minerals leasing, off road vehicle (ORV) use, or prescribed burning?

The final EIS for the RMP should provide the EIS reviewer with a more detailed discussion and specific guidance on the project-specific evaluation process. Discussion of the management decisions and opportunities for public involvement are needed. What criteria will be used to determine when categorical exclusions, environmental assessments, and EISs will be used in RMP implementation? The final RMP/EIS should also describe the type of data needed to assure compliance with environmental standards and the criteria used by BLM staff to prevent adverse effects and improve existing environmental conditions.

21-4

We believe that there are several important components of a management plan project-specific evaluation process. These components include:

- A data base for existing conditions from which technical experts and the public can judge the expected effects.
- Thorough on-site inspection and administration during an activity, verifying that a particular activity is occurring as prescribed in contracts, leases, or permits.

21-4 - Environmental monitoring before, during, and after the completion of an activity to determine whether impacts are accurately predicted and whether changes to the RMP are needed to reduce effects from that activity or future projects.

21-5 - A feedback mechanism that is built into the process such that activities causing a problem will be modified before they are allowed to continue.
- SOP/SDF development and upgrading if needed to correct inaccurate predictions.

21-5 - The use of NEPA and opportunities for public involvement in project implementation.

21-6 These questions include the following. When must Plans of Operation be filed and what must they contain? Will these receive review by other agencies or the public? What requirements can BLM attach to right-of-way permits and Plans of Operation (including reclamation bonding)? What "standard stipulations" exist for oil and gas leasing and mineral entry and location? Are there provisions for waivers from stipulations and special restrictions? If there are provisions for waivers, would such a waiver be coordinated with appropriate state and federal agencies and the public?

Water Quality:

21-7 The draft RMP/EIS does a good job of describing the various types of activities that have the potential to adversely affect water quality, including forest land harvest, livestock grazing, wild horse grazing, ORV use, and oil and gas exploration and development. Further discussion on the location and extent of existing or potential problems should be provided, however. For example, in the La Pine portion "problems with contamination of shallow aquifers is the major water quality concern" (p. 55). Does this refer to potential contamination from grazing use in the area after timber is harvested? How extensive are the shallow aquifers? Where are they located? (e.g., Do they intercept surface waters?)

21-8 High water temperatures are mentioned as a problem in the Brothers portion (p. 55). How will the presently good to excellent riparian habitat in the La Pine portion (p. 63) be protected during timber harvest to assure that evaluated temperatures do not become a problem there as well?

21-9 Sediment deposition is also cited as a problem in the Brothers portion, particularly flows entering Prineville Reservoir (p. 55). If there are no municipal watersheds in the planning area, why is Prineville Reservoir described as a "sensitive watershed" (p. 73). Is it part of waters used by an anadromous fishery, such as steelhead? This needs to be clarified in the final RMP/EIS.

21-10 Without the above types of information, it is difficult for us to determine whether any alternative is adequately protective of water quality and designated beneficial uses. While there may be no designated municipal watersheds in the planning area, are there no domestic supplies in watersheds which include BLM land? Domestic supplies, for the purposes of applicability of the Interim Primary Drinking Water Standards, are generally defined as serving 25 or more persons for 60 or more days per year and are considered beneficial users, as are fisheries. Compliance with Oregon Water Quality Standards (WQS) must be assured for specific stream segments.

21-11 The final RMP/EIS should address compliance with the state's anti-degradation policy. This policy states that "where the existing quality of the water is better than the standards set, that such existing high quality will be maintained until it has been demonstrated to the state that any change will be consistent with maximum benefit to the people of the state, will not unreasonably affect present and anticipated beneficial uses of such water and will not result in water quality less than that prescribed in the standard." This policy is reiterated in Federal regulations (40 CFR 131.13(a.2)).

21-12 The status of Outstanding National Resource Waters is conferred to rivers designated as wild and scenic. For these waters, the anti-degradation policy of the Water Quality Standards Regulations explicitly prohibits any lowering of water quality (40 CFR Section 130.12). The RMP/EIS should discuss in detail how degradation of potential wild and scenic rivers will be prevented, given the mining, timber harvest, and grazing activities which may occur in some of the drainage basins containing or tributary to potential wild and scenic rivers.

Air Quality:

21-13 Approximately 4,500 cords of firewood are harvested annually in the planning area (p. 57). Will this continue under the RMP? The RMP/EIS indicates that violations of total suspended particulate standards in Bend have occurred during winter months, and are attributed in part to woodstove emissions (p. 54). The effects of wood smoke appear to be viewed primarily as a visibility issue.

Smoke particles emitted from incomplete combustion of wood are small enough to penetrate deep into the lower respiratory tract when inhaled; these particles may have relatively high concentrations of compounds that are known and suspected carcinogens. The RMP/EIS should identify the health impacts of wood smoke.

Land managers that provide firewood have a unique opportunity to educate the public regarding fuelwood use and air pollution through the permit process. Pamphlets discussing the association between wood stoves, air pollution, and health concerns, or providing tips on efficient wood stove operation, for example, could be distributed with fuelwood permits. If appropriate literature is not readily available, we would be happy to provide examples that are being used elsewhere.

Monitoring:

We are pleased to see that the RMP will be monitored on a continual basis, as well as formally evaluated at intervals not to exceed 5 years. We particularly commend the development of monitoring systems for specific resource management programs and publishing of the implementation schedule in the record of decision (p. 26). Overall RMP monitoring will be important, though, to determine cumulative effects from all management programs. Water quality monitoring, as described on page 26, will be an important part of this.

We note that range monitoring studies will be conducted (p. 133) but see no similar commitment to monitoring timber management. Since the La Pine Pine portion is totally surrounded by the Deschutes National Forest, cumulative effects from management activities on these lands could be assessed via a monitoring plan. We would endorse BLM/USFS coordination in this regard.

The final RMP/EIS should expand upon the overall plan monitoring to be conducted. This discussion should specify the resource components to be monitored, frequency, and intensity. Monitoring and evaluation can also provide an important feedback mechanism. The final RMP/EIS should describe the process for modifying management practices if monitoring shows that important RMP objectives are not being met. The monitoring plan together with the SOPs, Operation Plans, and Grazing Allotment Plans should serve to highlight how the RMP will be implemented.

SPECIFIC COMMENTS

Page	Comments
21-21	8 Is this the Oregon Wilderness EIS and SEIS (April '85 and January '87 respectively)?
21-22	9 It is stated that "Grazing Management in the Brothers portion will not be re-analyzed in this document." We believe that to the extent that grazing management, forest or woodland management, minerals management, and ORV use all contribute to cumulative impacts, grazing in the Brothers portion should be re-analyzed.
21-23	10 We endorse BLM coordination with the USFS in adjacent national forests, particularly the Deschutes, because of the beetle infestations which presently affect the national forest and the La Pine portion of BLM's planning area.
21-23	13 Regarding the discussion under Water, please describe by what means consistency with WQS will be assured (e.g., SOPs).
21-24	14 We commend the commitment to survey project sites for special status species and to "modify, relocate, or abandon" the project to obtain a "no effect" determination.
21-24	14 What types of forestry practices (treatments) will be considered? (e.g., clearcut or other methods).
21-25	14 We commend the commitment that "no timber harvest will occur adjacent to wet meadows or riparian areas." Is this the case for non-commercial woodlands as well as commercial timber?
21-26	15 Are any allotment management plans presently in place in the La Pine portion? After harvest of timber, in what timeframe will such plans be developed? We note that only 12% of the plans have been completed on the Brothers portion, in the 5-year time span since completion of the Brothers Grazing Management Rangeland Program Summary (per Appendix K).
21-27	31 Given the multiple-use concept of BLM management, and the management option of fencing riparian areas, we are unclear as to why wild horses are to be eliminated in the preferred alternative. Please clarify in the final RMP/EIS.
21-28	54 Surface watersheds are mentioned under Water, but not ground water aquifers. Major aquifers, or smaller locally significant ones, in the planning area should be mentioned in the final RMP/EIS.
21-29	55 It is stated that "generally, water quality in the planning area meets standards" established by DEQ. In the instances where it does not, what types of violations have occurred (e.g., temperature, bacteria levels, etc.)?
21-30	57 Of the 450,000 acres of non-commercial woodland, how many include riparian areas?

21-31	63 Regarding fish habitat, are any in-stream projects planned? If so, these should be described in the final RMP/EIS.
21-32	84 In paragraph 4, the fifth sentence is unclear. It reads as though there are no stipulations to protect visual qualities. Please clarify.
21-33	91 Paragraph 4 implies that the 14 horses are causing measurable erosion hazards on the 17,000 acres they now roam. How can this impact be separated from that caused by other grazing animals? It would seem that the density of horses is very small, even if there are currently no other grazing animals.
21-34	93 It is stated that Alternatives D and E would have a beneficial impact on water due to restrictions placed on ORV use in sensitive areas. Is this beneficial impact relative to existing water quality? To what extent is existing water quality affected by current ORV levels?
21-35	97 What, if any, are impacts to fisheries in the La Pine portion? Please discuss in the final RMP/EIS.
21-36	128 The term "seed tree methods" is used here, but not defined in the glossary. Does this term refer to clearcutting? Please clarify.
21-36	141 The term "active preference" is used here, but not defined in the glossary. Does this term refer to livestock, as opposed to wildlife? Please clarify.

SUMMARY OF THE EPA REVIEW SYSTEM FOR GREAT ENVIRONMENTAL IMPACT STATEMENTS: DEFINITIONS AND FOLLOW-UP ACTION *

Environmental Impact of the Action

LO--Lack of Objections

The EPA review has not identified any potential environmental impacts requiring substantive changes to the proposal. The review may have disclosed opportunities for application of mitigation measures that could be accomplished with no more than minor changes to the proposal.

EO--Environmental Concerns

The EPA review has identified environmental impacts that should be avoided in order to fully protect the environment. Corrective measures may require changes to the preferred alternative or application of mitigation measures that can reduce the environmental impacts. EPA intends to work with the lead agency to reduce these impacts.

EJ--Environmental Objections

The EPA review has identified significant environmental impacts that should be avoided in order to provide adequate protection for the environment. Corrective measures may require substantial changes to the preferred alternative or consideration of some other project alternative (including the no-action alternative or a new alternative). EPA intends to work with the lead agency to reduce these impacts.

EU--Environmentally Unsatisfactory

The EPA review has identified adverse environmental impacts that are of sufficient magnitude that they are unsatisfactory from the standpoint of public health or welfare or environmental quality. EPA intends to work with the lead agency to reduce these impacts. If the potential unsatisfactory impacts are not corrected at the final EIS stage, this proposal will be recommended for referral to the CEO.

Adequacy of the Impact Statement

Category 1--Adequate

EPA believes the draft EIS adequately sets forth the environmental impact(s) of the preferred alternative and those of the alternatives reasonably available to the project or action. No further analysis of data collection is necessary, but the reviewer may suggest the addition of clarifying language or information.

Category 2--Insufficient Information

The draft EIS does not contain sufficient information for EPA to fully assess environmental impacts that should be avoided in order to fully protect the environment, or the EPA reviewer has identified new reasonably available alternatives that are outside of the spectrum of alternatives analyzed in the draft EIS, which should be analyzed in order to reduce the potentially significant environmental impacts. EPA believes that the identified additional information, data, analyses, or discussions are of such a magnitude that they should have full public review at a draft stage. EPA does not believe that the draft EIS is adequate for the purposes of the NEPA and/or Section 309 review, and thus should be formally revised and made available for public comment in a supplemental or revised draft EIS. On the basis of the potential significant impacts involved, this proposal could be a candidate for referral to the CEO.

Category 3--Inadequate

EPA does not believe that the draft EIS adequately assesses potentially significant environmental impacts of the action, or the EPA reviewer has identified new, reasonably available alternatives that are outside of the spectrum of alternatives analyzed in the draft EIS, which should be analyzed in order to reduce the potentially significant environmental impacts. EPA believes that the identified additional information, data, analyses, or discussions are of such a magnitude that they should have full public review at a draft stage. EPA does not believe that the draft EIS is adequate for the purposes of the NEPA and/or Section 309 review, and thus should be formally revised and made available for public comment in a supplemental or revised draft EIS. On the basis of the potential significant impacts involved, this proposal could be a candidate for referral to the CEO.

* From EPA Manual 1640 Policy and Procedures for the Review of Federal Actions Impacting the Environment

February, 1997

21-1 Chapter 2 includes program descriptions, implementation priorities and monitoring program elements designed to link the overall land and resource allocations of the RMP to the project evaluation process in subsequent environmental assessments.

21-2 We agree. Impacts are difficult to ascertain until project implementation and monitoring. Since impacts may also arise from actions on intermingled non-BLM lands or by actions beyond our control, it is not possible to identify cumulative effects beyond those noted in the EIS. If EPA has information or methodologies to make these determinations in the Brothers/LaPine Planning Area, we would be willing to work with EPA to incorporate them into activity planning and related environmental analysis.

21-3 Standard operating procedures were included in the Draft RMP/EIS as Appendices E, G and H. These and additional elements are included in Chapter 2 of this document. Also, see response to comment 21-1.

The public involvement process does not stop with publication of the final EIS. It is an ongoing, dynamic process as specific management decisions are carried out. Project specific evaluations will be done prior to every action. NEPA guidelines, Departmental Manuals and State/District instruction memoranda are utilized in assessing specific impacts and necessitate further public involvement in most actions.

The purposes of these site/action specific EAs are to:

1. Provide the manager with pertinent, unbiased information so their decision will be based on a full understanding of the environmental/social consequences (positive and/or negative) anticipated.
2. Identify measures needed to protect, enhance and/or restore the environment.
3. Determine if an EIS is needed.

Categorical exclusions are only used when the action qualifies as an exemption under 516 Departmental Manual 2.3A(3). The impacts are generally non-existent or so minor that they are deemed negligible.

Environmental assessments will be completed on most actions stemming from the Final Resource Management Plan/Record of Decision. EISs are only prepared on major actions such as a Resource Management Plan, major activity plan, large scale mining operation, etc. within the District confines. The District maintains a register of ongoing and anticipated environmental analysis which is mailed to interested publics on a periodic basis to encourage public review and comment.

Standard and special stipulations for oil and gas leasing within the planning area are included in the Minerals section of Chapter 2, along with the provisions for waivers from these stipulations.

BLM may attach any reasonable requirements to right-of-way permits and plans of operation.

21-7 Shallow aquifers exist throughout the LaPine portion of the planning area. The depth to water varies from near surface adjacent to the Little Deschutes River to 30 feet within the valley fill areas. Present sources of contamination include septic tank drainfields and domestic wells. The greatest potential for additional contamination would be chemical spills along Highway 97 and the existing railroad right-of-way.

21-8 See response to comment 18-1 and the Forestland and Woodland section of Chapter 2.

21-9 Prineville Reservoir is a high use public recreation and irrigation reservoir. Water released from the reservoir into the Lower Crooked River supports a significant resident trout fishery.

21-10 There are no identified domestic suppliers in watersheds administered by BLM as defined and regulated by the Safe Drinking Water Act.

Environmental standards and mitigating measures are incorporated into all contracts and non-contract type actions. BLM's internal review/monitoring process and contract supervision ensures that the potential for occurrence of adverse effects is minimized, if not eliminated.

21-4 Environmental monitoring occurs on the public lands as a matter of course on all resources. Our District Monitoring Plan outlines measures to be taken to assess the condition of resources in the planning area throughout the life of the RMP. Impacts from major actions are determined from this monitoring and adjustments made if necessary to reduce negative impacts.

The RMP is considered a dynamic, flexible plan that can be modified or amended if major changes warrant. Activities determined to be causing a problem to the environment are modified or stopped as a result of monitoring.

21-5 See response to comment 21-3.

21-6 Plans of operation for mining claims are required when surface disturbance will exceed five acres. The required contents of the plans are given in 43 CFR 3809. These normally do not receive other agency or public review except in special consideration areas (e.g. threatened or endangered species habitat) and for special conditions such as operations within riverbanks or use of cyanide. Bonding is permissible on plans of operation. There are no "standard" stipulations for hardrock mining operations; each permit is site specific.

21-11 Though the State's anti-degradation policy was not specifically cited in the Draft RMP/EIS, it was stated that existing water quality will be maintained. This is consistent with policy as cited (40 CFR 131.13 (a.2.)). See page 13 of the Draft Brothers/LaPine RMP/EIS.

21-12 Protection of Outstanding Natural Resource Waters on BLM managed land will be accomplished, in part, by implementation of Best Management Practices. These are documented by Oregon Department of Environmental Quality Practice Rules. Further activities are monitored and management prescriptions modified where they are not meeting management objectives. Mineral development operations are required (under CFR 3800) to meet State Water Quality Standards.

21-13 BLM estimates that the annual harvest of 4,500 cords of firewood would continue throughout the life of the plan. However, the BLM has no knowledge or control of the destination or use of the firewood after it is removed from public lands. Similarly, even if we assumed that 4,500 cords were used for home heating in the immediate area, we have no way of determining whether the burning occurred in approved or unapproved stoves, open fireplaces, or other devices with varying combustion efficiencies and emission factors. Further, we have no control over, or method of estimating, the moisture content of the fuel, or the conditions under which it was burned.

- Therefore, we have no method of estimating the impacts of the subsequent use of firewood on either visibility or human health. Further, any such estimates would be suspect, and no reasonable estimate of accuracy could be provided.
- 21-14 Standard operating procedures and other elements of the energy and Mineral programs have been included in the Energy and Mineral Resources section of Chapter 2 of this document.
- 21-15 See the Forestland and Woodland section of Chapter 2.
- 21-16 Appendix G in the Draft RMP/EIS described grazing treatments and proposed systems for the entire planning area. Also see the Livestock Grazing section of Chapter 2 of this document.
- 21-17 See the Livestock Grazing section of Chapter 2.
- 21-18 See response to comment 21-2.
- 21-19 See response to comment 21-3.
- 21-20 See the monitoring section of Chapter 2 program direction.
- 21-21 You are correct.
- 21-22 Cumulative impacts from all programs in the Brothers portion of the planning area are not expected to exceed those identified in the Brothers/LaPine RMP/EIS. The forest and woodland program in the Brothers portion currently involves no commercial harvests except for individual firewood permits. The minerals program does not anticipate any significant surface disturbing activities on BLM managed land. The majority of the ORV use in the planning area is in the Millican Valley which is a closed basin with no perennial streams and no negative off-site impacts to water quality. Also see response to comment 21-2.
- 21-23 See the program specific standard operating procedure in Chapter 2 of this document.
- 21-24 The primary forestry practice planned is regeneration cutting using a seed tree system. Selection and clearcut systems would be considered when these types of regeneration harvests would best meet reforestation goals and enhance subsequent growth. Some overstory removal would occur in stands partial cut 20-30 years ago that are now adequately reforested.
- 21-25 As noted under Forestland on page 14 of the Draft RMP/EIS, activities on commercial forestland and woodlands would receive similar considerations to protect or enhance soil, wildlife and fish habitat, riparian vegetation, water quality, cultural and visual resources. However, in the case of juniper woodlands, it should be noted that the removal of juniper (under controlled conditions) from riparian areas can definitely be enhancing in nature.
- 21-26 No. Allotment management plans will be done as demand for forage on the harvested areas arise.
- 21-27 The Wild Horse section of Chapter 2 outlines management direction for continuation of the wild horse herd.
- 21-28 See response to comment 21-7
- 21-29 See page 55 of the Draft RMP/EIS.
- 21-30 None of the 743 acres of riparian areas or 100 acres of wet meadows in the Brothers portion of the planning area is in a non-commercial woodland area. See Table 7 on page 27 of the Draft RMP/EIS and Table 7 in Chapter 2 of this document.
- 21-31 No instream projects are planned at this time. Projects could be planned and jointly funded with other State or Federal agencies provided they are consistent with management objectives.
- 21-32 The no surface occupancy stipulations protect visual and other resources by not allowing the lease holder to occupy, or otherwise disturb, the surface of the subject 16,480 acres around Prineville Reservoir.
- 21-33 See the entire response to comment letter 2, especially comment 2-5.
- 21-34 The existing water quality would be benefitted by Alternatives D and E. ORV use adjacent to Prineville Reservoir is causing accelerated erosion.
- 21-35 No impacts to fisheries are anticipated. No timber harvesting or livestock grazing is planned within 100 feet of BLM riparian or wet meadow areas in the LaPine portion of the planning area.
- 21-36 The glossary has been expanded to explain these terms, see Chapter 3.

24-1

I was recently made aware of the "Brothers/LaPine RMP/Plan". It seems that there are areas not addressed in the plan. What about analysis of wildlife in the area. There is no analysis of current conditions or trends for habitat or species composition. What levels of logging and grazing will be allowed?

24-2

Also I am very opposed to any increases in the Millie Valley ORV area. The forest isn't recovering from the vehicles and is hazardous. Please don't encourage them! Also they are very disturbing to wildlife and to humans who do not choose to engage in such destructive activities there. I do congratulate you on your ACEC's. I support all areas proposed. Thank you. Sixame Johnson

24-1 The Draft RMP/EIS contains information on ecological status and projected condition for the Brothers portion on page 27. Table 7 of that document provides information on vegetative type (i.e. habitat types) while Table 9 in the Draft RMP/EIS and the accompanying text describes wildlife habitat and populations for the Brothers portion. There is currently no commercial timber harvest, except firewood cutting, in the Brothers portion of the planning area, however, timber sales may be resumed after the LaPine area salvage operations are completed. Table 5 and Appendix K in the Draft RMP/EIS provides specific details on current and projected levels of livestock grazing in the Brothers portion. See the Livestock Grazing section of Chapter 2 for the complete proposed program levels.

24-2 See response to comment 7-1. While some ORVs have been found hazardous, not all types of ORVs are unsafe, or used in an unsafe or destructive manner. ORV safety and licensing are not within the statutory authority of the ELM, except for area designations and wildfire protection (i.e., spark-proof mufflers, etc.). ORV use, while possibly disturbing and disruptive to wildlife, is accepted as a valid use on public lands under proper conditions. In order to minimize the impacts on wildlife, any organized events are scheduled so they do not conflict with key wildlife use periods. Similarly, if any ORV use is occurring in any area and directly conflicts with wildlife needs, use of ORVs in those areas can be limited or excluded.

25-1

1-7-88
Dear Planning team,
I hope much of the Management plan for The Brothers/LaPine area is for wilderness and all good. Protection of wildlife habitat and native plants shall be considered first. I think ranchers should pay more for grazing and when should be given permits. Max Hoffman, 1000 N. 2nd St. 97000, WA. 91626

25-1 As noted on page 8 of the Draft RMP/EIS, wilderness designation potential within the Brothers/LaPine Planning Area is the subject of a separate ongoing statewide study.

The vegetation section of the Draft RMP/EIS, beginning on page 55, describes the condition of the forest and woodlands of the LaPine portion. There are no "old growth" stands in the area comparable to those in western Oregon and Washington. Due to the Mountain Pine Beetle infestation, nearly all of the mature and over-mature forest stands are dying or will die and are scheduled for salvage harvesting. See the Forestland and Woodland section of Chapter 2 for management direction and standard operating procedures.

Dear Mr. [unclear] 1-8-88
 Regarding the Bismack Lapis
 Resource Management Plan
 I have the following suggestions -
 Estimate the current number of deer
 will be species and the total with
 each alternative.
 In multiple pastures under Lapis -
 maintain 100% of current habitat
 species.
 Maintain 50% of the free stand
 in each of all areas.
 Allow at least 1 mi. of
 open road per section on Buffalo
 Do not expand the Millican Valley
 ORV Area because of negative
 effects upon wildlife and
 aesthetic.
 I support all of your proposed
 ACEC's.
 Do comprehensive planning
 on this draft to take care of
 logging, grazing and wildlife.
 There does need planning in the
 current information and ideas

John W. G.
 P. O. Box 104
 5245 Loma Linda Road, Ok. 77756

- 26-1 See response to comment 7-4.
- 26-2 See response to comment 7-5.
- 26-3 See response to comment 7-7.
- 26-4 See response to comments 7-1 and 24-2
- 26-5 See Chapter 2 management directions in this document.

Dear Sir 1-10-88
 re: regards to the Brothers -
 Lapis Management Plan
 Please consider the following:
 Estimate the current number
 for each wildlife species and
 the trend with each alternative.
 maintain sufficient grazes
 of Lodgepole Pine, in the
 Lapis area, to protect 100%
 of cavity nesting species
 of cavity nesting species
 Allow no more than 1 mi.
 of open road per section on
 BLA lands.
 Do not expand the Millican
 Valley ORV Area because of
 negative effects upon wildlife
 and aesthetics.
 I support your proposed ACEC's
 and need planning with
 current information and ideas.
 Please plan carefully on this
 draft to take care of logging,
 grazing and wildlife. Thank
 you - Mrs. Max W. [unclear]
 5245 Loma Linda Dr., Ok. 77756

- 27-1 See response to comment 7-4.
- 27-2 See response to comment 7-5.
- 27-3 See response to comment 7-7.
- 27-4 See response to comments 7-1 and 24-2.
- 27-5 See Chapter 2 management directions in this document.

28-1 | Select alternative D for implementation in Millican Valley OAV Area as set forth in the draft of Brothers/LaPine Resource Management Plan.

Signed _____ PLEASE PRINT
 Address _____
 City, State, Zip _____

FOO

28-1 We appreciate your interest and input on the ORV use issue.

29-1 We appreciate your interest and input on the ORV use issue.

Bureau of Land Management
 Prineville District Office
 185 E Fourth St.
 Prineville, OR 97704

Dear BLM:

29-1

As a user of off-road-vehicles, I am concerned about the trend towards more restrictions on public lands. I believe enough public land is already being protected. I support "Alternative A" in the Brothers/ La Pine environmental impact statement.

**UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT**

Prineville District Office
185 East Fourth Street
Prineville, OR 97754

**OFFICIAL BUSINESS
PENALTY FOR PRIVATE USE, \$300**

Forwarding and Address
Correction Requested.

FIRST CLASS MAIL
POSTAGE & FEES PAID
U.S. DEPARTMENT OF THE INTERIOR
PERMIT NO. G-76