CHAPTER IV

FOREST MANAGEMENT DIRECTION

INTRODUCTION

This chapter presents the management goals, objectives, standards and guidelines that constitute direction for resource management covered by the plan. Included in this chapter are

Forest Management Goals - Multiple use and other goals established in the planning process and used to develop this Plan.

Forest Management Objectives - The levels of goods and services which are anticipated as this Plan is fully implemented Included is a narrative summary of the various resource management objectives of this Plan

Forest-wide Standards and Guidelines - The standards and guidelines direct all resource management activities and uses on the Forest, provide standards for performance, and establish bounds and constraints for these activities and uses.

Desired Future Condition of the Forest - A description of what the Forest should look like at the end of ten years, and at the end of fifty years, if the management direction is implemented.

Management Prescriptions - The prescriptions identify the management activities that are applicable to each management area and the standards and guidelines that apply to each management area.

FOREST MANAGEMENT GOALS

Forest management goals are concise statements describing a desired condition to be achieved in the future. The management goals for the Fremont National Forest are.

To provide responsive, courteous public service in all management activities

To identify, design, and achieve a high level of multiple-use coordination in all resource management activities.

To maintain or improve the productivity of the soil in all resource management activities

To re-establish all degraded land to a productive state by the year 2000.

To increase public awareness of, involvement in, and support for Forest Service resource management objectives

To produce thrifty stands of commercial timber within the requirements provided by law, policy, regulations, and fiscal restrictions while providing for other resource uses.

To maintain or improve vegetative condition of rangelands through the use of available silvicultural practices and livestock management while providing for other resource uses.

To provide sufficient habitat quantity, quality, and diversity to maintain self-sustaining populations of all vertebrate native fish and wildlife species.

To provide for increases in or maintain habitat quantity or quality of those species which: 1) are officially listed as endangered or threatened at the state or federal level to insure population recovery and/or 2) are management indicator species

To reintroduce extirpated species that will have a minimal effect on other resource programs in coordination with ODF&W.

To maintain air quality at a level that meets or exceeds applicable federal and state standards and regulations.

To re-establish channel stability (by re-establishing a good or better riparian ecological condition) and to improve water quality (decrease in sediment and late season water temperature) on class I and II stream courses.

To meet or exceed state water quality standards and protect identified beneficial uses.

To maintain water quantity consistent with downstream needs and resource protection

To restore and maintain all riparian areas in a condition which enhances riparian dependent resource values.

To improve and maintain trout habitat to support self-sustaining trout populations.

To promote cooperation and coordination with individuals, corporate landowners, and state and federal agencies on matters of mutual interest.

To provide a natural-appearing forest character that is attractive to the sensitive highway, forest road, trail, or developed site user.

To maintain the Gearhart Mountain Wilderness to enhance natural ecosystems and to provide for a Wilderness recreation experience in south central Oregon.

To provide opportunities for a nonmotorized recreation experience, with a high degree of isolation from sights and sounds of human activities, in a natural setting which may have very subtle alterations.

To provide opportunities for a moderate degree of isolation from sights and sounds of humans in a natural setting with subtle alterations to the motorized user.

To provide for developed recreation opportunities in a natural-appearing forest setting.

To provide for a variety of recreational opportunities within all levels of the recreation opportunity spectrum (ROS).

To meet the goals and objectives of the National Recreation Strategy

To provide visitor information and interpretive services that explain management programs.

To provide timely responses to Mineral Exploration/Development Plans of Operation, Special Use Applications and Land Exchange Proposals.

To provide areas for research purposes which are typical of unique natural ecosystems and which are in undisturbed or nearly undisturbed condition.

To protect the Wild and Scenic river qualities of the study river corridor and waterway.

To provide a winter sports area for snow play and skiing

To manage for the protection of community water supplies

To provide environmentally acceptable corridors for power transmission lines while minimizing competition with natural resource production.

To provide communications sites for administrative, industrial, and safety needs within the Fremont National Forest and to provide intermediate locations for cross-state communications networks.

To plan, design, operate, and maintain a safe and economical transportation system providing efficient access for the movement of people and materials involved in the use and protection of the National Forest lands.

To provide for minor utility corridors for pipelines, railroads, irrigation canals, local low voltage power distribution lines, etc.

To provide land areas, when private lands are not available, for single uses such as work camps, reloads, quarry sites and storage areas, while removing as little land as possible from the productive land base.

To provide the most efficient level of fire/fuels management that is commensurate with resource management objectives.

To achieve a landownership pattern which will best meet resource needs and minimize administrative costs

To protect, preserve the significant values of, and interpret, when appropriate, for public enjoyment and education the cultural resources found on the Forest.

FOREST MANAGEMENT OBJECTIVES

Tables 11-15 display the outputs and activities which can be anticipated if this Forest Plan is fully implemented. Actual achievement of the levels of outputs and activities is dependent, to a large extent, on the level of funding received for implementation. If the funding is significantly different from that called for in this Plan, the output levels are likely to vary accordingly.

A narrative description of the various resource objectives follows Tables 11-15.

Table 11. Resource Outputs and Activities for Timber

OUTPUT/ACTIVITY	UNIT	DECADES 1st	2nd	3rd	4th	5th
Tentatively Suitable for Timber Production	MAcres	816 3	816.3	816.3	816.3	816.3
Acres Suitable for Timber Harvest	MAcres	705 0	705.0	705.0	705.0	705.0
Timber Harvested by:						
Clearcut	MAcres	8.9	4 3	6.3	5.1	4.6
Shelterwood	MAcres	0 0	0.0	0.0	0 0	0.0
Selection	MAcres	12.5	12.1	12.7	10.0	12.7
Overstory Removal	MAcres	0.0	1.3	.2	0 0	0.0
Commercial Thinning and Partial Cutting	MAcres	7.5	7.5	7.5	6.9	7.6
Allowable Sale Quantity (1)	MMCF/Year	24.7	24.7	24.2	24.6	24.4
	MMBF/Year	135.9				
Ponderosa Pine	MMCF/Year	12 3	9.9	18.4	8.8	10.2
Pine-Associated	MMCF/Year	9 7	13.7	5.2	15.1	13 4
Lodgepole Pine	MMCF/Year	2.7	1 1	0.6	0.7	0.8
Pure Ponderosa Pine (2)	MMCF/Year	16 8	17.2	19.9	16 7	16 6
Nonchargeable Volume	MMCF/Year	3 3	3.3	2.8	2 6	2 6
	MMBF/Year	18.9				
Total Timber Sale Program	MMCF/Year	28 0	28.0	27.0	27 2	27 0
	MMBF/Year	154.8				
Fuelwood	MCords/Year	12.4	12.4	12 4	12.0	11.9
Reforestation by:						
Planting	MAcres/Year	4.0	3 5	3.0	3.0	3.0
Natural Regeneration	MAcres/Year	2.5	2.8	3.0	3.0	3.0
Timber Stand Improvements by:						
Precommercial Thinning	MAcres/Year		8.0	10.0	9 0	9 0

(1) Long term sustained yield forest-wide is equal to 32 9 MMCF/Year and is achieved by FORPLAN in Decade 14
(1) This is the unmixed Ponderosa Pine component harvested from both the Ponderosa Pine and Pine-Associated timber types

Table 12. Resource Outputs and Activities for Recreation

OUTPUT/ACTIVITY	UNIT	DECADES 1st	2nd	3rd	4th	5th
Developed Recreation Use	MRVD's/Year MPAOT Days	68 2 493 2	88.9 493.2	130 3 493 2	109 6 493.2	143 6 493 2
Developed Site Construction and Reconstruction	Campground Units	10.0	0 0	0 0	0.0	0 0
Dispersed Recreation Use.						
Semiprimitive Nonmotorized	MRVD's/Year	7.2	6 1	6 0	5.9	5.9
Semiprimitive Motorized	MRVD's/Year	2.4	2.7	3.0	3.4	3.9
Scenic						
Roaded Natural (1)	MRVD's/Year	113.5	116.2	121.5	128.4	149.1
Roaded Modified (2)	MRVD's/Year	46.0	52.0	58.5	65.5	74.1
Total Dispersed Recreation Use	MRVD's/Year	169 1	177 0	189 0	2.3.2	233 0
Roadless Areas.						
Allocated to Semiprimitive Nonmotorized	MAcres	23 5	23 5	23 5	23.5	23.5
Allocated to Semiprimitive Motorized	MAcres	21 9	21 9	21 9	21 9	21 9
Visual Quality Conditions: (3)						
Preservation	MAcres	70 8	70 8	70 8	70.8	70 8
Foreground Retention	MAcres	72 4	56 2	32 0	7.7	7 7
Foreground Partial Retention	MAcres	128 7	100 8	73 0	45 1	45 1
Middleground Partial Retention	MAcres	97 2	80 3	52.5	24.7	24.7
Modification/Maximum Modification	MAcres	656 6	721 5	786 3	851 2	851 2
Trail Construction and Reconstruction	Miles/Year	14.7	0.0	0.0	0.0	0 0
Wilderness Use	MRVD's/Year	3 4	3 4	3.4	3 4	3 4
Trail Maintenance	Miles	321	321	321	321	321
Cultural Resources·						
Field Inventories	MAcres	500	25	25	10	10
Site Evaluations	Sites	100	150	200	250	300
Data Recoveries	Sites	14	20	26	32	38
Site Interpetations	Sites	9	11	13	15	17
Wildlife and Fish Use	MWFUD's/ Year	93 2	108 6	123 2	130.5	137.8

(1) Includes fishing RVD's
(2) Includes hunting RVD's
(3) Reflects actual visual condition that will exist over the five decades

Table 13. Resource Outputs and Activities for Wildlife, Range, Water, and Soil

OUTPUT/ACTIVITY	UNIT	DECADES 1st	2nd	3rd	4th	5th
Wildlife and Fish Use	M WFUD's/Year	93 20	108.60	123 20	130.50	137.80
Wildlife Old-Growth Management Areas 3 and 14	MAcres	50.9	50.9	50.9	50.9	50.9
Management Indicator Species:						
Bald Eagles	Pairs	10	14	15	18	20
Peregrine Falcons	Pairs	1	2	3	3	3
Goshawks	Pairs	1,930	722	628	534	439
Three-toed Woodpecker	Pairs	330	284	277	270	263
Pileated Woodpecker	Pairs	129	61	53	45	37
Primary Excavators	% of Potential	60	60	60	60	60
Red-naped Sapsucker	Pairs	465	465	465	465	465
Pine Marten	Breeding Units	264	217	211	205	198
Mule Deer:						
Winter Range	M Deer	7.5	10.1	10.1	10.1	10.1
Summer Range	M Deer	21.3	26.2	26.2	26.2	26.2
Trout	M Trout	877.4	964 3	1,028 66	1,092.22	1,294.6
Habitat Improvement:						
Wildlife	Acres/Year	1,000	1,000	1,000	1,000	1,000
Fish (In-Stream and SMU)	Acres/Year	100	100	100	100	100
Wildlife	Structures/Year	1,050	1,050	1,050	1,050	1,050
Fish (In-Stream)	Structures/Year	400	400	400	400	400
Range: Available Grazing(2)	MAUM's/Year	75.6	70.1	71.9	69.9	68.7
Water Yield Production	MAcre Ft./Year	421.8		427.0		430.2
Sediment Production	MTons/Year	9.4	9.5	9.5	9.7	9.6
Watershed Resource Improvement	Acres	250	250	100	100	100

(1) From ODF&W objectives
(2) Permitted levels will average 71,000 per decade

Table 14. Resource Outputs and Activities for Roads, Fire, and Economics

OUTPUT/ACTIVITY	UNIT	DECADE 1st	2nd	3rd	4th	5th
Timber Purchaser Road Construction	Miles/Year	36 0	32 0	32 0	31.0	28.0
Timber Purchaser Road Reconstruction	Miles/Year	149.0	124.0	141.0	121.0	114.0
Road Maintenance	Miles/Year	1,350	1,358	1,360	1,365	1,367
Fire Management - Fuel Treatment·						
Protection	MAcres/Year	20.0	20.0	20.0	20.0	20.0
Site Preparation	MAcres/Year	8.9	4.3	6.3	5.6	4 6
Air Quality - Total Suspended Particulates	MTons/Year	20.6	9.7	8.7	8.2	7.4
Operational Costs	Million $/Year	14.9	15.1	16.8	14.3	13 2
Capital Investment Cost	Million $/Year	1.0	0.9	0.7	0.7	0.7
Total Budget(1)	Million $/Year	15 9	16 0	17 5	15.0	13 9
Returns to Government	Million $/Year	37 9	41.9	49 5	50 0	51.3
Payments to Counties	Million $/Year					

(1) Costs and budget figures only represent a trend over the first five decades and do not relate to the actual budget needs that will be periodically updated

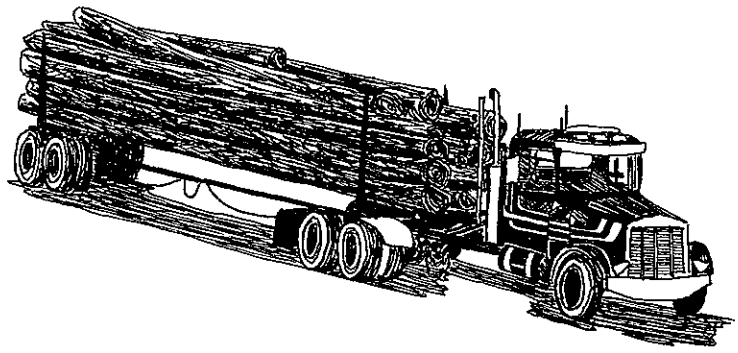


Table 15. Resource Outputs and Activities for Lands and Minerals (1)

OUTPUT/ACTIVITY	UNIT	DECADE 1st	2nd	3rd	4th	5th
Process and Administer Operating Plans - Locatable Minerals	Cases	80	100	110	110	120
Process - Geothermal Lease Applications/Exploration Permits	Cases	10	10	20	20	20
Administer Geothermal Leases (2)	Cases	1	1	2	2	2
Process - Oil and Land Lease Applications (2)	Cases	10	20	80	120	120
Administer Oil and Gas Leases (2)	Cases	0	0	0	0	0
Process Mineral Materials Applications (2)	Cases	50	40	40	45	60
Land Line Location	Miles	400 (3)	50	50	50	50
Land Line Maintenance	Miles	100	500	500	500	500
Land Exchange	Acres	100,000	6,000	5,000	4,000	4,000
Land Purchases	Acres	1,160	240	100	100	100
Process New Special Use Applications/Permits	Permits	200	220	220	220	220
Update Existing Special Use Permits	Permits	200	200	200	200	200
Administer Special Use Permits	Permits	800	900	900		

(1) Lands and minerals activities other than land line location, land purchases and some exchanges are generated by the private sector, consequently numbers are influenced strongly by present decade experience.
(2) Mineral leasing activities have occurred in cycles. For example, 12 geothermal leases were applied for in one 2-month period and about 140 oil and gas leases were applied for over a 6-month period in the last decade. All were dropped when leases were issued.
(3) Basic landline location program should be completed in first half of first decade.

RESOURCE SUMMARIES

Timber

A major objective of this Forest Plan is to schedule timber harvesting on 704,952 acres of suitable forest lands. The Plan schedules a departure from nondeclining flow in the lodgepole pine working group only. Forested lands not available for timber harvest include allocated Roadless Areas, lands allocated to certain wildlife habitats, portions of the Sycan, North Fork of the Sprague and Chewaucan river corridors, and lands allocated to or proposed as RNA's Timber harvest and related activities are reduced in scenic viewshed corridors, big game winter range, streamside-riparian areas, threatened and endangered species habitat and certain wildlife habitat areas. In the future, timber harvesting may be permitted in the scenic and recreation river corridors if specified in the completed management plans for the rivers.

Uneven-aged management is the preferred silvicultural system in the mature/overmature ponderosa pine and pine-associated community types. This prescription should be applied where stand and site conditions are appropriate and no other resource objectives which preclude the use of uneven-aged management have been identified and documented Approximately 190,00 acres, inventoried as suitable for this prescription, will be entered every two decades

An additional 75,000 acres will be managed under a prescription of initial overstory removal with understory retention until maturity. Upon maturation of this predominantly white fir understory, final regeneration harvest by clearcutting and reforestation is prescribed.

During the Plan Period (10-15 years) the annual quantity of chargeable volume (ASQ) offered for sale will be approximately 24.7 million cubic feet (135.7 million board feet). (See Appendix 1 for the projected Timber Sale Action Plan.) Figure 6 displays long-term sustained yield capacity and allowable sale quantity for each working circle and the Forest as a whole. Salvage of net and cull sawlogs including dead lodgepole pine are projected to annually add approximately 4.8 million cubic feet (fuelwood included). Approximately 12,500 cords of fuelwood will be made available annually during the Plan Period for personal and commercial use fuelwood.

Tables displaying land classification, vegetation management practices, timber productivity classification, allowable sale quantity and timber sale program quantity, display of long-term sustained yield capacity and ASQ, and Present and Future Forest Conditions are located in Appendix 11 of this Forest Plan.

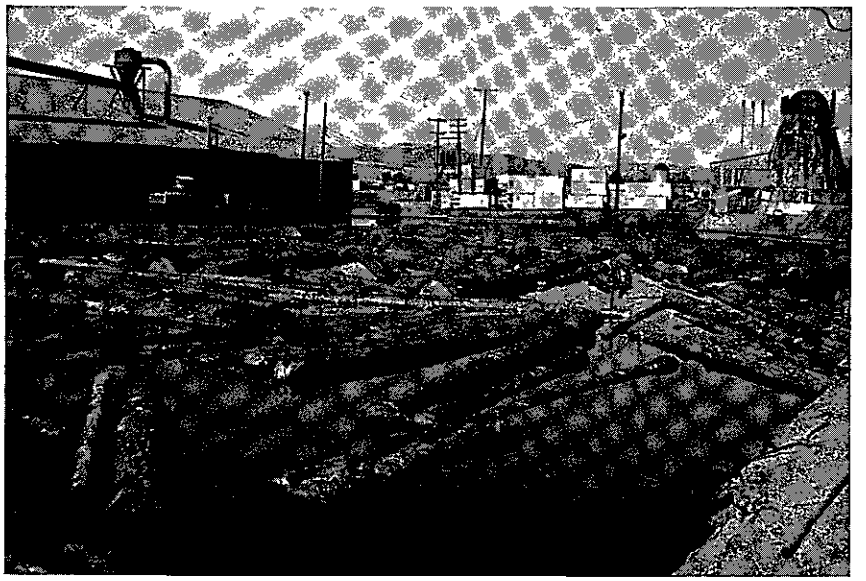
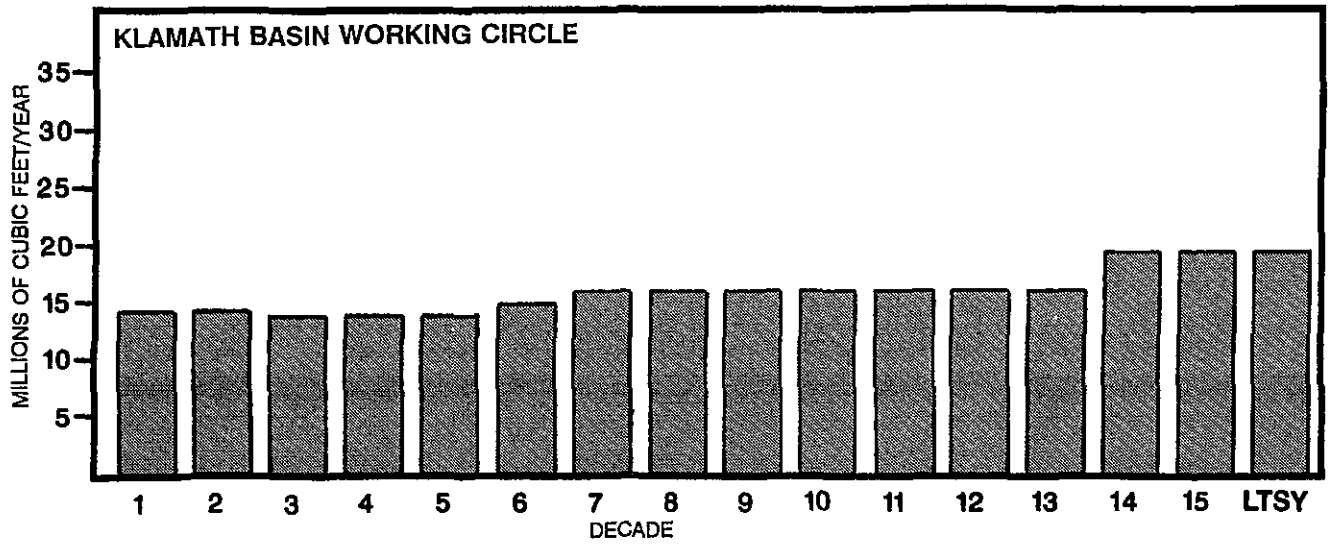
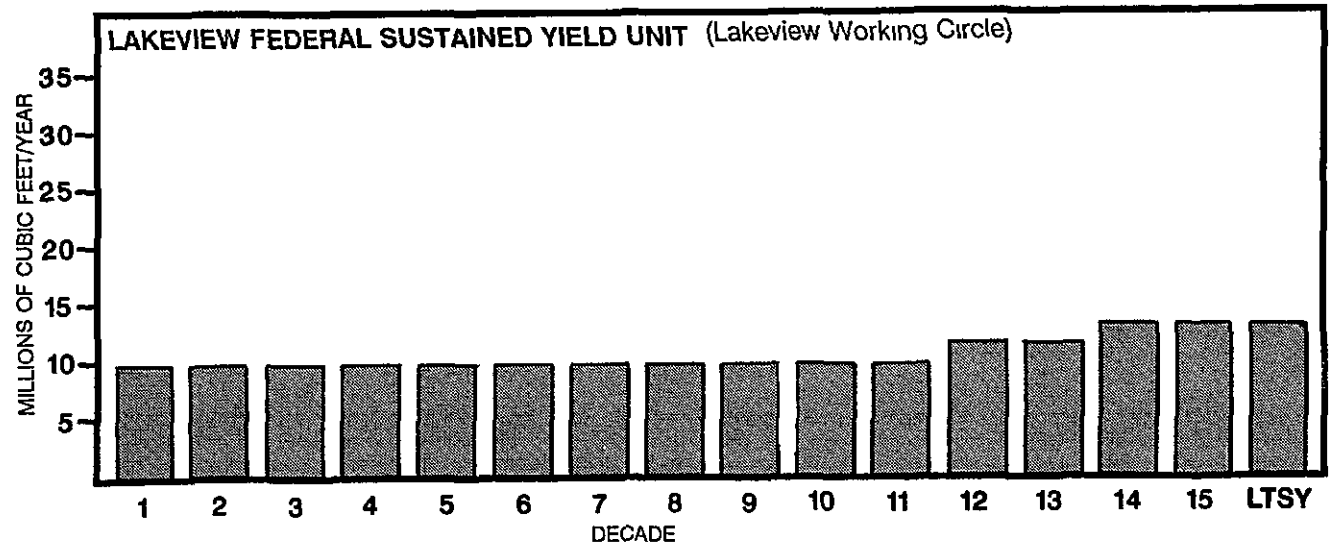


Figure 5. Display of Allowable Sale Quantity and Long Term Sustained Yield Capacity.





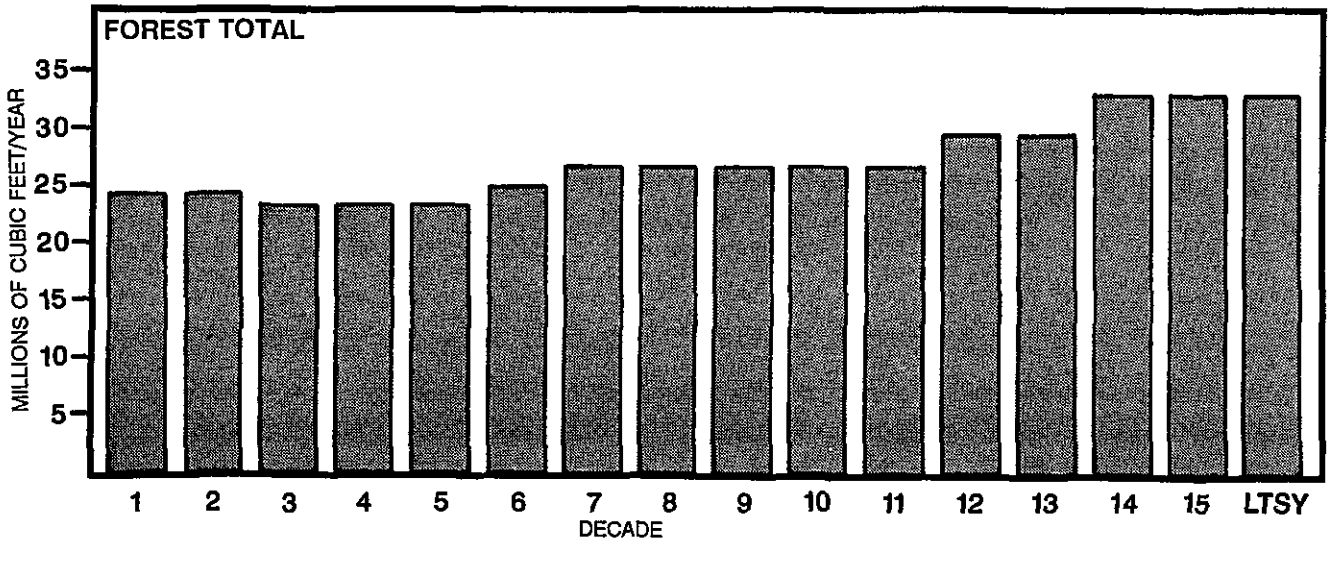


Table 16. Fremont National Forest Lands: Suitability and Productivity for Timber Management.

A SUITABILITY OF FREMONT NATIONAL FOREST LANDS FOR TIMBER PRODUCTION	KLAMATH BASIN WORKING CIRCLE		LAKEVIEW WORKING CIRCLE		FOREST SUMMARY	
	ACRE TOTALS (as of 6/3/85)	Unavailable or Unsuitable for Timber Production	ACRE TOTALS (as of 6/3/85)	Unavailable or Unsuitable for Timber Production	ACRE TOTALS (as of 6/3/85)	Unavailable or Unsuitable for Timber Production
LANDS WITHIN FREMONT NATIONAL FOREST BOUNDARY	1,043,447		667,153		1,710,600	
1 Other Ownerships inside the Forest Boundary	337,781		174,511		512,292	
NET FREMONT NATIONAL FOREST AREA	705,666		492,642		1,198,308	
NON FORESTED ACRES WITHIN NET FOREST AREA	191,704		148,774		340,478	
1 Water		1,123		1,078		2,201
2 Land not capable of supporting 10% commercial tree cover		190,581		147,696		338,277
SUBTOTAL A NON FORESTED ACRES		191,704		148,774		340,478
FORESTED[1] ACRES WITHIN NET FOREST AREA	513,962		343,868		857,830	
1 Unavailable for timber production - Wilderness[2]		14,085		6,445		20,530
2 Unavailable for timber production - Research Natural Areas[2]		1,024		0		1,024
3 Unsuitable for timber production[3]		10,682		9,262		19,944
SUBTOTAL B FORESTED ACRES UNAVAILABLE OR UNSUITABLE FOR TIMBER PRODUCTION		25,791		15,707		41,498
4 TENTATIVELY SUITED FOR TIMBER PRODUCTION[4]	488,171		328,161		816,332	

B TIMBER PRODUCTIVITY OF FREMONT NATIONAL FOREST LANDS	KLAMATH BASIN WORKING CIRCLE	LAKEVIEW WORKING CIRCLE	FOREST SUMMARY
	ACRE TOTALS (as of 6/3/85)	ACRE TOTALS (as of 6/3/85)	ACRE TOTALS (as of 6/3/85)
NET FREMONT NATIONAL FOREST AREA	705,666	492,642	1,198,308
PRODUCTIVITY OF NET FREMONT NATIONAL FOREST AREA UNAVAILABLE OR UNSUITABLE FOR TIMBER PRODUCTION			
1 Acres not capable of supporting 10% commercial tree cover	191,704	148,774	340,478
2 Acres capable of supporting at least 10% commercial tree cover, but not capable of producing 20 cubic feet of timber per acre per year	289	646	935
3 Acres capable of producing 20 cubic feet or more per acre per year	25,502	15,061	40,563
TOTAL UNAVAILABLE OR UNSUITABLE LAND (equals subtotal A + B in part A)	217,495	164,481	381,976
PRODUCTIVITY OF NET FREMONT NATIONAL FOREST AREA TENTATIVELY SUITED TO TIMBER PRODUCTION			
1 Acres capable of supporting at least 10% commercial tree cover, but not capable of producing 20 cubic feet of timber per acre per year (SSC Lands)[5]	18,901	25,219	44,120
2 Acres capable of producing 20 cubic feet or more per acre per year	469,270	302,942	772,212
TOTAL TENTATIVELY SUITED FOREST LAND	488,171	328,161	816,332

*C SUMMARY OF LAND SUITABILITY STATUS under the CURRENT (1979) TIMBER RESOURCE MANAGEMENT PLAN	KLAMATH BASIN WORKING CIRCLE	LAKEVIEW WORKING CIRCLE	FOREST SUMMARY
	ACRE TOTALS	ACRE TOTALS	ACRE TOTALS
NET FREMONT NATIONAL FOREST AREA	705,561	492,434	1,197,995
ACRES UNAVAILABLE OR UNSUITABLE FOR TIMBER PRODUCTION	235,117	191,590	426,707
ACRES TENTATIVELY SUITED FOR TIMBER PRODUCTION	470,444	300,844	771,288

1) These acres are capable of supporting a commercial tree cover of 10% or more

2) These figures include only those forested areas of the Wilderness & the Research Natural Area which can produce 20 cubic feet of timber or more per acre per year

3) Includes estimates of acres used for administrative sites roads railroads improved campgrounds or powerline corridors as well as acres unsuitable because of regeneration difficulty or potential irreversible soil damage

4) Tentatively Suitable Forest Land is forested land capable of producing industrial wood crops & for which a) no withdrawals have been made by Congress the Secretary of Agriculture or the Chief of the Forest Service b) available technology/knowledge can ensure timber production without irreversible damage to soils productivity or watershed conditions c) available technology/knowledge can reasonably assure that the land can be adequately restocked within 5 years after final harvest d) information is adequate to project responses to timber management activities

5) These acres are the Forest s SSC Lands Separate Suitability Component (SSC) lands include tentatively suited forested lands capable of supporting at least 10% commercial tree cover but not capable of producing 20 cubic feet of timber per acre per year These less productive lands are identified as a separate component for timber output calculations

* These numbers are those developed for the 1979 Timber Resource Management Plan They do not correspond with the numbers in parts A & B because 1979 timber inventory methods & timber yield tables have since been updated

Recreation

developed recreation
Recreation emphasis provides for a quality experience by providing sites maintained to developed standards, ensuring that they are sanitary and safe for public use.

To accomplish this emphasis, existing sites will be redeveloped, upgraded, and expanded to meet the needs of the public. The current capacity of 2,703 PAOTS will be increased to 3,288 PAOTS making 493,200 PAOT days available for developed recreation use.

Appendix 2 of this Plan indicates the recreation sites which will be redeveloped to accommodate the anticipated increased use. New sites will be added as demand warrants. Through redevelopment and improvement of services, select sites will be converted to fee status.

Timber sales will be used for vegetative manipulation in developed sites throughout the Forest. However, sales in these areas would be conducted in accordance with specific visual quality objectives. These sales will be tied in with sales covering the adjacent areas or may be small sales in their own right. K-V funds will be used in developing vegetative management plans, and for other permitted developed recreation enhancement.

Management of other types of developed recreation (e.g., Warner Canyon Ski Area and Cottonwood Organization Camp) will continue as in the past. Any increase in activity or new proposed development will be commensurate with demand and permitted on the basis of actual need.

dispersed recreation
Approximately 59,300 acres of the Forest outside of the Wilderness will be managed to provide semiprimitive recreation. Of this total, 23,510 acres will be managed as semiprimitive nonmotorized while the remaining acres will be managed for semiprimitive motorized recreation. Implementation schedules (plans) will be developed to ensure that each area is managed within the prescribed limits of acceptable change. Monitoring will be incorporated in these schedules to assure the semiprimitive areas are being maintained as prescribed.

The remainder of the Forest will be managed for roaded natural and roaded modified recreation opportunities. Popular dispersed recreation sites that occur within these settings will be managed and monitored using the Code-A-Site system.

The inventoried roadless areas identified will no longer be individually addressed. Their inventoried roadless status will be a matter of record for future reinventory reference if needed. Their roadless character and extent is directed by the allocations under this Plan.

trails
There are 190 miles of hiking/equestrian and snowmobile trails presently existing on the Forest Approximately 13.4 miles of this total are in the Wilderness. Additional trails will be constructed to meet the needs of the public. The planning and management of this trail system will require active participation by user groups.

Wilderness Trails
Due to the relatively small size of the Gearhart Mountain Wilderness, the current trail density is about 0.5 miles of trail per square mile of wilderness. In order to provide an environment that is consistent with the intent of the 1964 Wilderness Act, no new trails will be developed within the Wilderness. Trail

reconstruction and relocation may occur where there is a problem of adverse impacts to the wilderness resource due to trail location.

Wilderness trails are not available for mechanized or motorized equipment use The trails are open to pack and saddle animals unless specifically closed by order.

Nonwilderness Trails
The remaining 176.6 miles of trail are classified as multipurpose, which means they are open to horses, hiking, as well as motorized and nonmotorized trail bike use. These trails will be managed to maintain a balanced spectrum of travel opportunities according to difficulty, mode of travel, distance, and type of destination.

Off-road Vehicle (ORV) Routes
Currently there are approximately 4,800 miles of high-clearance roads They are not actively maintained by the Forest Service except as needed to prevent unacceptable environmental damage or eliminate safety hazards. Due to this extensive road network, designated routes have not been established.

A Forest Off-Road Vehicle Plan will be updated to reflect the status and management of the off-road vehicle system relative to the allocations under this Plan. This will be updated as necessary and will indicate which trails are open or closed to motorized travel and whether there are seasonal variations.

The current Off-Road Vehicle Plan allows for use of all National Forest lands and roads except where restrictions have been established. There are three main Forest closures listed in the Plan There is a general closure between November 1 and May 1 for off-road use of four-wheel vehicles Special closures are placed on the Gearhart Mountain Wilderness, Goodlow Mountain Natural Area and Warner Canyon Ski Area.

Fourteen areas are subject to year long closures because soil types are highly susceptible to damage by off-road vehicles. The Bald Mountain, Bald Butte, Hager Mountain, Long Creek, Quartz, Aspen and Crane Mountain areas are characterized by moderately steep to steep slopes and deep, poorly developed coarse-textured soils. The Summer Lake Rim, Brattain Butte, and Lofton areas have soils which either have high water tables, are derived from soft, incompetent bedrock, or have high amounts of surface runoff. This closure does not apply to snowmobiles.

There are five general rules for all motorized vehicles. These are: 1) Prohibited on wet or saturated soils. 2) Prohibited on areas within 100 feet of water (lakes, ponds, rivers, and streams), and wildfowl nesting areas except on existing roads. 3) Prohibited on meadows, except on travel ways or road crossings 4) Prohibited to groups of more than five vehicles to operate as an off-road vehicle unit on the Forest without permit. 5) Prohibited for cross-country travel on snow vehicles when snow depth is less than two feet. This depth is required for safety of the user and for the protection of the environment. Travel on an existing road is allowable when snow depth is at a minimum depth of six inches.

National Recreation Trails (NRT)
The Forest has two trails designated as National Recreation Trails (NRT): Fremont No. (160) and Crane Mountain (No. 106). Currently 15 miles of the NRT system exist. This trail system will be expanded by an Additional 131 miles, traversing a wide range of recreation opportunity settings.

Construction for the Fremont NRT has begun. This trail will be open to all users unless posted otherwise. When completed the trail will traverse 125 miles west-to-east across the Forest.

Snowmobile Routes
Approximately 50 miles of snowmobile routes exist, with an additional 40 miles planned for designation. Snowmobile trail mileage varies from year to year depending on logging activities and snow conditions. All designated routes are on existing road locations This system will be expanded as demand dictates.

Cross-country Ski Trails
Approximately 10 miles of designated cross-country ski trails exist at the Quartz Mountain area. An additional system of trails near the Warner Canyon Ski Area is proposed and under consideration. The Forest's relatively gentle topography and extensive road system provide unlimited cross-country ski opportunities.

Mountain Bike and Other Trails
The interest in and demand for Forest roads and trails as mountain bike trails is increasing. Opportunities for this recreation experience will be developed as need and use dictate.

Scenic Resource (Roaded Natural)
Lands within view of designated scenic travel routes will be managed under Retention and Partial Retention visual management standards. Visual quality will be considered as the most important resource to be protected under these land allocations. Of the acres suitable for timber management, 42,322 acres will have Retention and Partial Retention Visual Quality Objectives to protect visual quality. Nearly 57,500 acres on additional routes will receive special post-sale treatment. Harvest activities will take place within the provisions of Modification and Maximum Modification. However, special consideration will be given to treatment of logging activity residues, including slash.

A total of 600,000 acres of General Forest will be managed under Modification and Maximum Modification Visual Quality Objectives (VQO's). However, where appropriate, uneven-aged management principles will be followed. Even though alteration of the natural appearance of these lands is permitted, visual *management principles will be applied.*

These principles are contained in *National Forest Landscape Management,* Volumes 1 and 2 Published within *The Visual Management System*, included are "Utilities," "Range," "Roads," "Timber," "Fire," and "Ski Areas." These handbooks will be used in managing the visual resource.

The visual management system will be used in all resource programs to maintain high levels of scenic quality. Past applications of the system on the Forest have provided high-quality end results when landscape architectural design concepts and visual management principles were applied during the environmental analysis stage of project design. Continued integration of visual concerns into project management is necessary to enhance and retain high visual quality. National Forest Landscape Management Handbooks are available as user guides in management of the visual resource and should be consulted. Viewshed plans, such as the one for Highway 140, provide further direction for management of the visual resource along this travel route. Other viewshed plans will be done during the next decade. Refer to the Ten Year Recreation Program, in Appendix 2, for a detailed listing of the proposed viewshed plans.

Monitoring will be conducted to ensure that the predicted conditions are being met and that travel corridors are allocated to scenic recreation.

Wilderness
Wilderness will remain unchanged at 22,823 acres (approximately two percent of the Forest). The management goal is "to provide for present and future generations the benefits of an enduring resource of wilderness" (1964 Wilderness Act). To achieve this goal, the Gearhart Mountain Wilderness Management Plan, which is in accordance with this Forest Plan, identifies four intensity levels of management aimed at maintaining present conditions or improving conditions where deterioration to the wilderness resource has occurred They also provide a balance against the realities of what conditions exist and what is possible. The wilderness management intensity levels prescribed for this Plan are described in Appendix 5 of this Plan

Special Management Areas
The following areas will receive special management for enhancement of recreation, wildlife, or botanical resources None of these areas qualify as Special Interest Areas (FSM 2360).

Dog Lake (ROS Classification, Roaded Natural) 4,700 acres

Slide Mountain (ROS Classification, Roaded Natural) 720 acres

South Fork Sprague River 545 acres

Quamasia Quamash Botanical Area (Roaded Natural) 50 acres

Augur Creek Reserve Area 655 acres

Cultural Resources
The overall goal of the Forest's cultural resource program will be the scientific use and interpretation of appropriate cultural resource properties for the education and enjoyment of the general public. On-the-ground monitoring will be conducted to ensure that the goals of the cultural resource program are met in order to prevent loss or damage of cultural resources.

Cultural resource inventories will precede all ground-disturbing projects. These inventories will be conducted according to the current Forest Cultural Resource Inventory Plan. Management of any significant cultural resources found will be directed by the Forest-wide Standards and Guidelines which are found in the next section of this chapter.

Additional inventories will be conducted in areas not affected by anticipated project activities. These inventories will generally be conducted in order to increase the archaeological data base knowledge of an area, or in areas where natural degradation such as soil erosion is occurring or where sites have been reported but not verified

All sites found during inventory will be recorded using the Pacific Northwest Region's site record form. Identified sites will be evaluated using criteria of significance for eligibility to the National Register of Historic Places The significance of a site will determine its future management

American Indian and/or local community historical and religious values will be considered when evaluating sites found on the Forest.

In some cases, archaeological sites on the Forest will require test excavation. This is necessary to determine the boundaries, depth, and basic nature and condition of the site. This information is important in determining the significance of the sites.

Approximately ten percent of the known cultural resource sites will require some form of mitigation. Mitigation plans will be developed in consultation with the Oregon SHPO, and if necessary, The National Advisory Council on Historic Preservation, to protect significant sites from adverse effects due to projects, public use, and natural deterioration. Mitigation alternatives may include: project modification and/or layout to ensure complete avoidance of the site; removal of the cultural property (usually historic) to another location after complete documentation of the property in place; mapping, photodocumentation, and scaled drawings of historic properties before proceeding with project implementation; scientific archaeological data recovery to a level that is compatible with the anticipated ground-disturbing activity. Such data recovery efforts will probably be undertaken through contract, meeting the guidelines specified in FSM 2361.29 and 36 CFR 66.

Management plans will be developed for National Register sites and selected eligible sites, in consultation with the Oregon SHPO. Priority will be given to the depression era structures found at the Bly, Lakeview, and Paisley Ranger Districts and the several prehistoric housepit villages and cave sites found on the Forest. Other projects would include the Historic Logging Railroad Systems on the Bly District and the Historic Oregon Central Military Wagon Road that transects portions of the Forest.

Fisheries and Wildlife

The fisheries and wildlife goals and objectives of this Forest Plan will be met by 1) coordination with other resource activities and uses and 2) direct habitat rehabilitation, improvement, maintenance and species reintroduction.

Timber and livestock management have the greatest potential to change fisheries and wildlife habitats. The socio-economic, biological, and physical features or values of each timber sale or range allotment are unique. Only an interdisciplinary team analysis of each allotment or sale can identify the problems and opportunities present. The participation of a biologist in the process is a major objective. The Forest's fish and wildlife land allocation plans and standards and guidelines will be applied project-by-project.

The intensive range environmental analysis program begun in 1977 has succeeded in obtaining proper/intensive use and management on nearly all allotments analyzed. Consequently, improvements in vegetation, soil, and water conditions/trends will result in increasingly better conditions for some wildlife/fish habitats over time. Both reallocation of parts of allotments to fish/wildlife habitat and cultural treatments have been accomplished during this process. This process will continue with emphasis on problem allotments.

Projects in other resource areas which have the potential to change or impact fish and wildlife habitats will receive similar coordination.

Direct habitat improvement, rehabilitation, maintenance, and reintroduction of extirpated species will require the development of implementation plans. Major plans for projects such as the rehabilitation of the Chewaucan River, reintroduction of the peregrine falcon, and the 11 deer herd management units will be long-term and would involve other agencies. These projects will be cooperatively prioritized, funded, and managed. Smaller improvement projects such as rejuvenation of an aspen stand or maintenance of an osprey nest site can be identified and planned as a result of timber sale or range allotment inventories. Existing plans, such as the Forest Bald Eagle Management Plan, will also be used to design improvement projects (See Appendix 2).

The majority of habitat improvement projects will emphasize 1) deer habitat, especially on winter range, 2) riparian/fisheries habitat, especially the creation of new fishing reservoirs and rehabilitation of major river systems, 3) bald eagle nest and roost sites, 4) peregrine reintroduction, 5) sensitive species, and 6) indicator species habitats.

A variety of methods and tools will be used in habitat improvement. These treatments can range from clearcutting to no treatments, protection fencing of springs to digging new water holes, retention of dead trees to killing live trees to provide for dead tree habitat, or prescribed burning to planting vegetation. The individual project inventory and implementation plan will determine the appropriate methods or tools.

Monitoring of projects will determine if objectives are being met and will identify necessary changes. Monitoring will range from long-term measurements of changes in habitat quantity/quality to the identification of results immediately after project closure.

Range (Grazing)

Under the direction of this Forest Plan, livestock grazing will remain an important use on the Fremont National Forest. AUM's will remain close to existing levels During the period of this Plan, proper livestock use of available forage will be emphasized. Capital investments, resource coordination, and allotment plans incorporating site specific objectives will be needed to optimize utilization of the forage base.

Coordination of livestock grazing use and management of other Forest resources is a major emphasis item in this Plan Coordinated management of all resources will result in the achievement of the range objectives as well as the objectives of other resources. An example of such coordination is in the streamside/riparian areas This Plan will permit grazing in such areas, but the grazing will be monitored and managed to promote establishment and maintenance of a healthy, natural riparian vegetative cover within the streamside zone.

Many of the existing allotment management plans are outdated In order to meet the projected outputs called for in this Forest Plan, many of the plans will require reanalysis or updating. Through full implementation of the allotment plans and permittee commitment, the projected livestock numbers will be achieved, and other outputs, such as improved range conditions and enhancement of other resources, will be attained. The allotment plans contain schedules for structural improvements, such as fences, and nonstructural improvements, such as noxious weed control. A schedule of allotment needs can be found in Appendix 2 of this Plan, under detailed schedules of range management projects. It is assumed that the detailed schedule in each allotment plan will be updated periodically to reflect changes resulting from the reanalysis of allotments

The final step in meeting the range objectives of this Plan will be accomplished by monitoring the range management program The monitoring requirements are found in Table 32 in Chapter V.

Water

A key objective of this Forest Plan is the protection of water quality and favorable conditions of flow through the application of Best Management Practices (BMP's). These practices cover the spectrum of natural resource management elements, i.e., project planning, design, and implementation. These practices are outlined in EIS Appendix H They will be further refined at the project level to best fit local conditions and resource needs. Monitoring the implementation and effectiveness of applied BMP's is essential to achieving the key objective and fulfilling the Forest Service responsibility as a designated water management agency for nonpoint source pollution control.

A goal of the Forest is to improve and maintain trout habitat to support self-sustaining trout populations. Attainment of this goal is largely dependent on improvement of water quality, i.e., reduction in sediment and decreases in late summer stream temperatures. Sediment reduction from existing sources will be accomplished by aggressively restoring eroding gullies and streambanks affecting fish habitat in Class I and II streams. Contribution of sediment from soil-disturbing activities within the watershed will be minimized through the application of BMP's. Stream temperatures will be reduced by restoring and maintaining shade on stream surfaces and by restoring stream channel configurations to narrow and deep. This goal will be reached through the coordination with timber in the development of riparian harvest prescriptions and logging practices and with range in the development of allotment management plans.

The Chewaucan and Sycan river systems will receive top priority, because they are watersheds with the greatest potential to respond Objectives will be met on these two watersheds by: 1) managing livestock grazing on certain segments of the main stems and selected tributaries to promote full recovery of channel stability and late seral or climax riparian vegetative community type within 20 years; 2) strategically locating streambank improvement and protection work on severely eroding sections of the main stem and tributaries; and 3) restoring gullies on tributaries contributing significantly to the annual sediment load of the river. Meeting the Forest's goals on the Sycan River will require the cooperation of the Winema National Forest.

In order to determine existing and potential vegetative community types, the Forest is planning to complete a vegetative community type survey of all Class I and II streams.

Watershed and riparian restoration activities will continue at accelerated levels in other watersheds to improve water quality (and fish habitat), as well as other resource values on the Forest. Future maintenance of these improvements will be necessary in some cases.

Monitoring of water quality and riparian condition by projects and by long-term trend analysis will be used to document effects of plan implementation. If these data illustrate a problem in meeting water quality objectives, appropriate measures will be taken to achieve resolution.

Securing both instream and consumptive use of water is critical to carrying out National Forest programs. Working cooperatively with the State of Oregon on basin adjudications and water rights secured under state law is an important program element.

Public domestic water sources on the Forest will be tested on a scheduled basis to ensure compliance with state drinking water standards.

Soil

The soil program for the Fremont National Forest, identified in this Forest Plan, centers on the maintenance and improvement of the productivity of the land. The proper management of forest soils is essential to the highest production of timber and forage and also to the production of high-quality water, wildlife and fisheries habitat, and recreational opportunities. However, many management activities, such as timber harvest, road building, and grazing have the potential to reduce soil productivity.

The reduction of productivity can relate to several factors These are increases in erosion rates above the natural level, compaction, displacement of surface soil layers, mass movement, and nutrient loss. A minimum of 80 percent of an activity area must be left in a condition of acceptable productivity for trees and other vegetation following the land management activity. This is Pacific Northwest Region direction and was established in order to meet the intent of direction contained in the National Forest Management Act of 1976.

The soil program will consist of several parts: 1) support to other resources through consultation and participation in project planning; 2) training of personnel in other resource specialties; 3) monitoring of the effects of other activities on the soil resource; 4) restoration of damaged soil areas; and 5) updating of the Soil Resource Inventory to provide more accurate and detailed information.

Soil support to other resources will be determined on the basis of potential effects on productivity. Projects with the highest risk will receive the higher emphasis, in terms of support activities The effects are largely determined by the location of the project, the intensity of project activities, the extent of the project, and the repetition of project activities over time. Generally, timber sales and the associated road construction and reconstruction activities would constitute the major projects of concern However, range, minerals, fuels management, recreation, wildlife, and nontimber sale activities, such as fertilization and the superior tree program could also pose concerns regarding soil resources Support of this nature will be done by an experienced person qualified in the field of soil science

One of the major tasks of a Forest soil scientist is to provide training to other resource personnel at both the district and Forest Headquarters levels This is especially true of people new to the Forest, who are not familiar with soil characteristics, interpretations, and limitations on the Fremont National Forest Training is necessary so that these persons can provide the required information in certain situations and also so that they can recognize a potential problem and ask for the assistance of the Forest soil scientist

Monitoring of the effects of land management activities carried out under the direction of this Forest Plan will determine if these activities are having an effect on soil productivity Although mitigating measures and constraints will be implemented for all activities that have the potential to degrade the soil resource, some effects will still occur. Monitoring will determine the effectiveness of these mitigating measures. Monitoring will be done by district personnel and the soil scientist Specific guidance and details can be found in Chapter V

Soil restoration activities will be done in coordination with water quality restoration needs These activities will include those lands degraded by excessive erosion, compaction, displacement, and mass movement. All identified projects are listed in the "Soil and Water Resource Improvement Inventory." New projects will be added to the inventory and prioritized. Project selection will be based on the potential value to soil productivity and the watershed, and also on funding availability Existing projects will be inspected annually and needed maintenance will be done on those soil and water projects to prevent further resource damage or loss of investment

The existing Soil Resource Inventory will be updated in some areas where more detailed information is necessary for management activities. The first priority will be to meet the Forest's cooperative agreement with the Soil Conservation Service to complete the progressive soil survey for the Warner Mountain portion of the Lakeview District. Updating of the Inventory on other portions of the Forest will occur throughout the planning period

Transportation

The road management and development strategy in this Plan is to provide local roads needed for timber management and resource protection, to reconstruct the arterial and collector system to provide for joint use, and to reduce the cost and impact of roads while providing facilities that meet the resource management objectives of timber, wildlife, range, and recreation

Approximately 48 percent of the total existing roadless area of the Forest is accessed for timber harvest under this Forest Plan. It is estimated that road construction in areas that are currently roadless will total 35 miles in the first decade and 36 miles in the second decade By the end of the fifth decade,

there will be 115 miles of road in currently unroaded areas There will be a total of 190 miles of roads in these areas by the end of the tenth decade.

Other portions of the Forest are currently roaded, but the existing roads in these areas do not provide access to some timber stands. In addition, some existing roads will have to be reconstructed or relocated to provide timber access with minimum environmental effect Over ten decades there will be an average of 9 miles per year of new road construction and 40 miles per year of reconstruction in these currently roaded areas.

The planned road densities of 0.5 and 3.0 miles of road per square mile in semiprimitive motorized and roaded modified settings, respectively, will result in the eventual closure of about 1,000 miles of road. For a discussion of "closed" roads, see Chapter IV, section Forest-wide Standards and Guidelines - Transportation.

The proposed management for all existing Forest Development Roads is documented in the Forest Development Transportation Plan. This consists of a Transportation Information System, Bridge and Trail Inventories, and Primary and Secondary series maps. The Transportation Information System contains the road lengths, physical characteristics, and management objectives. The Primary Series maps show all known Forest roads to a scale of 1:24,000. The Secondary Series map, which is the source of the Forest Visitor map, shows the roads that are maintained for passenger cars, plus those roads on which high clearance vehicle traffic is encouraged.

Monitoring of the Forest Plan for roads will generally be accomplished through maintenance of the Forest Development Transportation Plan.

The projected operational status of the forest development road system is as follows:

	Open & Maintained For Pass. Car		Open & Maintained For High Clearance Vehicles		Long Term Closure **		Total Forest Mileage
Decade	*Mi.*	%	*Mi.*	%	*Mi*	%	*Mi.*
Current	1170	19	4980	80	82	1	6232
1st	1074	17	3383	54	1810	29	6267
5th	1091	17	3229	54	2026	29	6346

** To meet 2.5 mile per square mile standard.

See Chapter 4, Forest Wide Standards and Guidelines - Transportation for a discussion of "closed" roads.

Direction detailing construction, reconstruction, operational management, and environmental protection requirements for the Forest road system is further described in the Forest-wide Standards and Guidelines and the Management Area Prescription sections of this chapter.

Fire Management

The objective of this Forest Plan is to reduce fire management program costs by about two million dollars annually while enhancing the air quality by reducing Total Suspended Particulates (TSP) levels an estimated 18 percent by the second decade and 33 percent overall.

In general, this objective will be achieved by shifting the emphasis from treating fuels in high elevation/low fire microclimate areas for hazard reduction to treating low elevation/high fire microclimates to reduce the potential for resource loss due to catastrophic wildfires More specifically it will be met by aggressively implementing a natural fuels underburning program which enters 20,000 acres of high-fire microclimate areas annually. The intent of this program is to treat natural fuels in the high-fire microclimates (low elevation, south slopes, pine types) by prescribed fire rather than activity fuels in low-fire microclimates (high elevation, north slopes, pine-associated types) by mechanical methods. High-fire microclimates traditionally have more fire starts, larger fire sizes, and higher suppression costs than low-fire microclimates. Low-fire microclimates traditionally have higher fuel treatment costs due to site, species composition, and viable treatment methods (limited to mechanical treatment). By treating the natural fuels (at a normally lower cost than mechanical methods) and closely replicating fire's natural role, the probability of a major conflagration and the associated high suppression costs will be reduced. By limiting treatment of activity fuels in low-fire microclimates to areas requiring special attention, the largest portion of current fuel treatment costs will be saved. By spending the dollar where it does the most good, this program will produce a savings in fire protection.

Effects of the underburning program will be monitored. Monitoring efforts will include: big game forage, tree growth, yield and scorch, downed woody material, and soils. Data from this monitoring program will be used to determine cumulative effects on vegetation, downed woody material, and soils.

The objective will also be met by treating an average of 7,400 acres of harvest clearcut activity fuels annually, for site preparation and other management objectives and by using the confine, contain, control fire suppression strategy for resource protection.

While the above actions produce the projected program savings, they also enhance the air quality resource by substantially reducing the amount of total suspended particles (TSP) produced annually. Low intensity fires result in less fuel consumption, which reduces the total TSP amounts, and even though more acres are being burned, total TSP is reduced Also, due to the shift in emphasis, more latitude exists to schedule burns when meteorological conditions are advantageous to TSP transport

Potential adverse effects from the fire program are not expected; however, should they arise, they will be mitigated through the use of the Forest's standards and guidelines and Best Management Practices. Coordination with and support from other resource areas should ensure that, in the long run, the fire program will be successful.

Monitoring of this program has been recognized as imperative to its success. Toward this end an aggressive and extensive monitoring plan for the underburning program will be developed. It will be consistent with the objectives of the Forest Plan If data collection indicates a problem, appropriate measures will be taken to achieve resolution.

Minerals

Nearly all mineral and energy exploration, development, and production from the National Forest System and other public lands are conducted by the private sector. As most mineral and many energy sources are subsurface occurrences, probable areas of mineralization are identified by surface geological indicators Verification of the existence of a mineral resource underlying or adjacent to these surface indicators and of the magnitude and potential of the resource usually requires costly drilling and analysis. Politics, mineral or energy prices and demand, and other external factors can also determine whether a mining or subsurface energy venture is profitable. Given these conditions, mineral/energy resource inventories are nonexistent and outputs are unpredictable. Factual knowledge is limited to area geology, past mining activities and production records, and information shared by individuals or corporations actively engaged in mining or energy exploration.

The Forest Service role in minerals and energy management applies only to the surface. Acting in this role, the Fremont National Forest has the following objectives:

- To ensure the coordination of mineral resource programs and activities with other Forest programs through the land and resource management planning process, recognizing that mineral development can occur concurrently or sequentially with other resource uses;

- To coordinate and cooperate with other federal and state agencies having authority and expertise in mineral-related activities;

- To require appropriate reclamation for all mineral exploration and development proposals that would create environmental disturbance.;

- To plan and provide for reasonable access to and occupancy of National Forest System lands for mineral resource activities, consistent with the overall land management objectives and rights granted through statutes, leases, licenses, and permits;

- To eliminate and prevent occupancy that is not reasonably incident to and required for mineral operations.

locatable minerals

Mineral activity on the Fremont National Forest is dominated, at this time, by gold exploration at Quartz Mountain. It is quite possible that a mine will go into production about 1990, with an anticipated life span of five to seven years. Mineral exploration is occurring on a limited basis on other claim blocks with geologic features similar to those on Quartz Mountain.

Uranium production on Forest lands is at a standstill. The major companies have or are in the process of dropping their claims. The Forest is planning to clean up and otherwise mitigate hazards from high headwalls, radioactive tailing and overburden sites and contaminated water accumulations at the Lucky Lass mine and those portions of the White King mine located on NFS lands. Funding will be provided under the Federal Facilities Compliance Program, with financial assistance hoped for from the State of Oregon for clean up of the private lands. A consultant is presently evaluating the safety, health and environmental hazards associated with these mines, which were active prior to current environmental requirements. No uranium mining is expected in the next decade.

leaseable minerals

A considerable amount of interest was shown in geothermal resources in the late 1970's. After several thermal gradient holes were drilled revealing one warm-water anomaly, interest waned. Some activity in the utilization of geothermal resources for nonpower purposes may occur within five to ten years, but development will probably occur on private lands. Six binary geothermal generating units sit unused just north of Lakeview. A non-charging geothermal reservoir is reportedly the problem.

In late 1982 and early 1983, the Forest received over 150 oil and gas lease applications. While no drilling occurred, a research group did conduct some electromagnetic tests. With the exception of Conoco, which held its leases for about three years, all other leases were terminated the first year for nonpayment of land rental fees. No resurgence is anticipated in gas and oil leasing for the next decade.

mineral materials
A sustained production of 450,000 tons to 600,000 tons of common varieties of rock for National Forest and other agency use, sales to cooperators, and small sales to individuals can be anticipated over the next decade.

Lands

special uses
Activities allowed under special use permit are generated by the private sector and other government agencies. Therefore, there are no production targets. Based on past experience, it can be estimated that 190 to 250 active special use permits and 15 to 30 land use Memorandums of Understanding will be on file during any year of the first two decades.

Objectives of special use management are:

-- To evaluate applications and respond to proposals promptly;

-- To consider public benefits as well as applicant's need by evaluating the relationship of proposal to other forest uses and objectives,

-- To attempt to provide alternatives to the applicant when the proposal and other forest uses are in conflict;

-- To eliminate special uses necessitated by erroneous or nonposted land lines, unless factors, such as topography, clearly indicate that retention of the special land use is necessary;

-- To convert special use pastures to allotments when practical

land exchange
Successful land exchanges are dependent upon the "willing buyer, willing seller" principle. Therefore accomplishment of land exchanges, especially acquisition of high priority tracts, is difficult to estimate. The Forest should accomplish 15 to 30 percent of the high priority acquisitions within the first two decades

Objectives of land exchange are:

-- To acquire lands needed to meet the Forest's specific objectives and dispose of lands which are difficult to manage, isolated, or unsuitable for National Forest purposes;

-- To acquire lands meeting Region 6 priorities. These priorities are.

I. those lands Congress has designated for acquisition, i.e., wilderness (not applicable to the Fremont National Forest at this time);

II. those lands contributing to special management or special public needs; and

III. general forest lands.

purchase
Land purchases are limited to parcels that help meet recreation and wildlife needs. Presently, the Forest has requests for two small purchases in the Dog Lake area and one on the east side of Thompson Reservoir.

donations
Donations will be considered on a case by case basis.

MULTIPLE-USE STANDARDS AND GUIDELINES

Standards and guidelines define the bounds or constraints within which all management practices would be carried out in achieving the planned multiple-use prescriptions They direct the implementation of management prescriptions on management areas.

These multiple-use standards and guidelines will be used in conjunction with direction found in Forest Service Manuals and Handbooks, as well as the Regional Guide for the Pacific Northwest Region. They are also designed to comply with all applicable state and federal laws. Some standards and guidelines are common to all prescriptions and, subsequently, all management areas They are identified as Forest-wide standards and guidelines Where direction for a specific management prescription differs from the Forest-wide standards and guidelines, the direction is identified in conjunction with each specific prescription.

FOREST-WIDE STANDARDS AND GUIDELINES

The following standards and guidelines are grouped by resource activity and were developed as the minimum standards that must be met in all applicable management areas Exceptions or additions to these standards and guidelines may be found in the individual management area prescription(s) to which they apply The exceptions may require a higher standard or permit waiver for nonapplicability.

Operational considerations aid in the understanding, implementation, or application of the standards and guidelines

TIMBER MANAGEMENT

Timber Harvest

1. The timber harvest schedule will generally comply with nondeclining flow with the exception of lodgepole pine which will follow a two-decade departure

   Operational Consideration· All available logging systems may be used, including, but not limited to· horse, tractor and skidder; high-lead, skyline, and helicopter. The choice of logging systems should be based on· the capability to protect the resources involved, practicality, and economic and technological feasibility. Generally, skidding by conventional tractors and skidders should follow recommendations outlined in the Fremont National Forest Soil Resource Inventory (Wenzel 1979). Any variation will be analyzed by an interdisciplinary team with the consequences explained to the decision maker

2. The harvest schedule will provide for perpetual harvest at the long-term sustained-yield capacity

3. Rotation ages will be equal to or greater than that age which produces 95 percent of the volume that can be achieved at culmination of mean annual increment in cubic feet.

4. Utilization standards will follow the Regional Guide.

5. Long-term site productivity will be considered in all silvicultural prescriptions Items to be integrated into the prescription will include, but are not be limited to, maintenance of small and large woody debris to act as a nutrient reservoir; wildlife habitat and erosion impediments; soil compaction, displacement, and erosion potential; and effect of frequency of harvest entries on insect and disease occurrence

Regeneration

1. Guidelines for restocking periods after regeneration harvesting are:

   a. After clearcutting and planting - 5 years.

   b. Using a natural regeneration prescription; lodgepole pine and white fir - 10 years; ponderosa pine - 15 years These periods are measured after the seed cut, not the final removal. Restocking periods greater than these may be purposely prescribed to meet specific management goals, such as economics.

   c. After selection cutting - 5 years.

2. Forest opening definition, size, shape, and juxtaposition will follow the Regional Guide.

3 Minimum stocking of seedlings, unless amended by site-specific guidelines, will be 100 trees per acre.

4. Stocking level control will be done on stands, commensurate with Earned Harvest Effect requirements.

Pest Management

1. Integrated pest management (IPM) strategies will be utilized to manage pests within the constraints of laws and regulations and to meet Forest management objectives. Prescribed fire and manual, mechanical, cultural, biological and chemical IPM strategies will be used Strategy selection(s) will be based on environmental analyses.

2. Stands may require protection from biological agents in order to meet stocking and growth standards.

Protection

1. All high-investment timber areas, such as seed orchards, plantations and progeny test sites, will be protected from fire by taking aggressive initial attack, and by considering their location in subsequent line location and attack strategies.

2. Fuel treatment in ponderosa pine stands should usually be limited to prescribed underburning.

3. Fuel treatment of pine-associated precommercial thinning slash, where more than 15 percent of the trees per acre are white fir, will not be treated by underburning.

RANGE MANAGEMENT

General

1. The forage resource will be managed for healthy range with satisfactory conditions (see Satisfactory Range Conditions in glossary). Allotment management plans (AMP's), with stated vegetation objectives to obtain specific resource goals, will be prepared for all grazing allotments. As outlined in the Range Action Plan for the Fremont National Forest, approved AMP's for each allotment are planned for completion by 1995. The following standards and guidelines will be followed until approved AMP's are implemented.

Table 17. Suitable Range (Except Riparian)(1) and Allowable Use of Forage(2)

Range Resource FRES(4) Management Level (FSH 2209.21 R-6)	Maximum Annual Utilization (percent)(3) Forest		Grassland		Shrubs	
	S(5)	U(6)	S(5)	U(6)	S(5)	U(6)
B. Livestock use managed within current grazing capacity by riding, herding, and salting, cost-effective improvements used only to maintain stewardship of range.	40	0-30	50	0-30	40	0-25
C. Livestock managed to achieve full utilization of allocated forage. Management systems designed to obtain distribution and maintain plant vigor include fencing and water developments.	45	0-35	55	0-35	45	0-30
D. Livestock managed to optimize forage production and utilization. *Cost-effective culture practices* improving forage supply, forage use, and livestock distribution may be combined with fencing and water developments to implement complex grazing systems	50	0-40	60	0-40	50	0-35

(1) This will guide development of annual operating plans and will be used where allotment management plans do not address allowable use Allotment management plans may include utilization standards which are either lower or rarely higher when associated with intensive grazing systems and specific vegetation management objectives which will meet resource objectives Includes cumulative annual use by big game and livestock

(2) Allowable use of forage is based on the amount of forage that will be left at the end of the overall grazing season or the end of the growing season, whichever is later

(3) Utilization based on percent removed by weight for grass, grasslike, and forbs

(4) Forest Range Environmental Study

(5) Satisfactory condition is determined by allotment classification and/or forage condition

(6) *Unsatisfactory condition is anything not meeting satisfactory conditions*

Table 18. Riparian Areas, Forage Utilization(1) and Allowable Use of Forage(2)

Range Resource FRES(3) Management Level (FSH 2209.21 R-6)	Maximum Annual Utilization (percent) Grass and Grasslike(4)		Shrubs(5)	
	S(6)	U(7)	S(6)	U(6)
B. Livestock use managed within current grazing capacity by riding, herding, and salting, cost-effective improvements used only to maintain stewardship of range.	40	0-30	30	0-25
C. Livestock managed to achieve full utilization of allocated forage. Management systems designed to obtain distribution and maintain plant vigor include fencing and water developments.	45	0-35	40	0-30
D. Livestock managed to optimize forage production and utilization. Cost-effective culture practices improving forage supply, forage use, and livestock distribution may be combined with fencing and water developments to implement complex grazing systems.	50	0-40	50	0-35

(1) This will guide development of annual operating plans and will be used where allotment management plans do not address allowable use Allotment management plans may include utilization standards which are either lower or rarely higher when associated with intensive grazing systems and specific vegetation management objectives which will meet resource objectives for the riparian dependent resources. Includes cumulative annual use by big game and livestock
(2) Allowable use of forage is based on the amount of forage that will be left at the end of the overall grazing season or the end of the growing season, whichever is later.
(3) Forest Range Environmental Study
(4) Utilization based on percent removed by weight
(5) Utilization based on incidence of use, weight and/or twig length For example, if 50 leaders out of 100 are browsed, utilization is 50%.
(6) Satisfactory condition is determined by allotment classification and/or forage condition
(7) Unsatisfactory condition is anything not meeting satisfactory conditions

range/livestock management intensities

FRES B - Environmental Management with Livestock - Livestock use is within the apparent present capacity of the range environment. Investments for range management are applied only to the extent required to maintain the environment at a stewardship level in the presence of grazing. Investments for implementation may be very low for some resource classes. Resource damage resulting from past use is charged to benefitting or stewardship functions. The goal for the strategy is to attain livestock control. No attempt is made to achieve livestock distribution (i.e., minimal structural improvements).

FRES C - Extensive Management of Environment and Livestock - Management systems and techniques, including fencing and water developments, are applied as needed to obtain relatively uniform livestock distribution and plant use, and to maintain plant vigor. Management seeks full utilization of the animal unit months available for livestock grazing. No attempt is made to maximize livestock forage production by silvicultural practices such as seeding. On the Fremont National Forest, Management Level C will be the proper classification of allotments where an attempt is made (or planned) to realize benefits from the full productive potential of native vegetation occurring in the area. This would include all structural improvements of the allotment.

FRES D - Intensive Management of Environment and Livestock - All available technology for range and livestock management is considered. Management seeks to maximize livestock forage production consistent with constraints of maintaining the environment and providing for multiple use. Existing vegetation may be replaced through improvement in growing conditions. Structures may be installed to accommodate complex livestock management systems and practices. Advanced livestock management practices are commonplace. Management toward this end means that attempts are made at maximizing livestock forage production through improvement developments up to and including range revegetation. Range revegetation includes forage seeding, prescribed burning, and other silvicultural treatments where the primary purpose of the action is to increase forage for domestic livestock production.

Range Administration

1. A change in the term permit will be effected when, for three consecutive years:

   -- the livestock are removed from the allotment early because allowable use has been reached on riparian or key areas before the off date specified in the permit and/or a utilization study reveals allowable use was exceeded by more than ten percent;

   -- or, an extension was granted because allowable use was not reached on the riparian or key areas by the off date specified in the permit and/or a utilization study reveals that actual is at least ten percent below allowable use.

   All resource objectives will be considered before effecting a change in the permit.

2. Requests from user for extension of the grazing season must be received in writing at least two weeks in advance of end of season. Extensions granted will be made to achieve a documented resource objective.

3. A documented range inspection will be prepared for each allotment annually. The grazing permittee will be involved, either through participation and/or by receiving a copy of the inspection notes.

Allotment Management Planning

1. Allotment management planning, an interdisciplinary process, will provide for cost effective management of range vegetation consistent with land stewardship practices. Planning will involve grazing permittees, other range users, interested publics, and other agencies. As AMP's are written and updated, management emphasis will be the intensification of allotment management levels to obtain maximum forage utilization consistent with other resource objectives. Maintenance of viable, cost-effective operations will also be emphasized Allotments no longer cost effective will be considered for combination with other lands and/or allotments to provide economical units or for closure.

on suitable range

1. Identify lands in unsatisfactory condition Develop allotment management plans with specific objectives for these lands on a priority basis under a schedule established by the Forest Supervisor (Fremont National Forest Range Action Plan). These objectives will define a desired future condition based on existing and potential values for all resources. The allotment plan will include· 1) a time schedule for improvement; 2) activities needed to meet forage objectives; and 3) and economic efficiency analysis.

on riparian areas in less than satisfactory condition

1. Identify allotments with riparian areas in unsatisfactory condition, i.e., forage condition on suitable range is less than fair with a stable trend or classification of PC or PD.

2. Range allotment management plans will include a strategy for managing riparian areas for a mix of resource uses. A measurable desired future riparian condition will be established based on existing and potential vegetative conditions. When the current riparian condition is less than that desired, objectives will include a schedule for improvement. The allotment management plans will identify management actions needed to meet riparian objectives within the specific time frame. Measurable objectives will be set for key parameters, such as shaded stream surface, streambank stability, and shrub cover. This process is described in "Managing Riparian Ecosystems (Zones) for Fish and Wildlife in Eastern Oregon and Eastern Washington" (1979). The plan will address the monitoring needed to determine if the desired rate of improvement is occurring. Allotment management plans currently not consistent with this direction will be developed or revised on a priority basis under a schedule established by the Forest Supervisor.

3. Objectives for site specific areas will be accomplished as outlined in the Riparian Management Plan for the Fremont National Forest, 1988.

Range Improvements

1. Maintenance of structural improvements essential to management of the forage base on Forest-owned or controlled lands will be assigned to permittees on an equitable basis This maintenance will be performed annually until the improvements are removed. Exceptions to assigned or required maintenance will be documented and approved by a line officer. Structural improvements will be responsive to cultural resources, sensitive plant species, and state water rights. In planning structural improvements, the needs of other resources and publics will be considered.

2. Structural improvement construction will meet current approved standards. When required for livestock control, Forest boundary fences will be constructed on surveyed property lines.

Noxious Weed Control

1. Prior to initiating control projects, coordinate identification, inventories, and control methods with Lake and Klamath County Weed Boards and consult with specialists on threatened and endangered species and other publics as deemed appropriate in the NEPA process.

2. Treatment priorities per Oregon State Comprehensive Classification List·

   -- "A" Classification (isolated distribution) - within available funding, eradicate existing populations

   -- "B" Classification (general distribution) - within available funding, intensively control or eradicate

   -- "C" Classification (general distribution) - within available funding, control, or if feasible, eradicate.

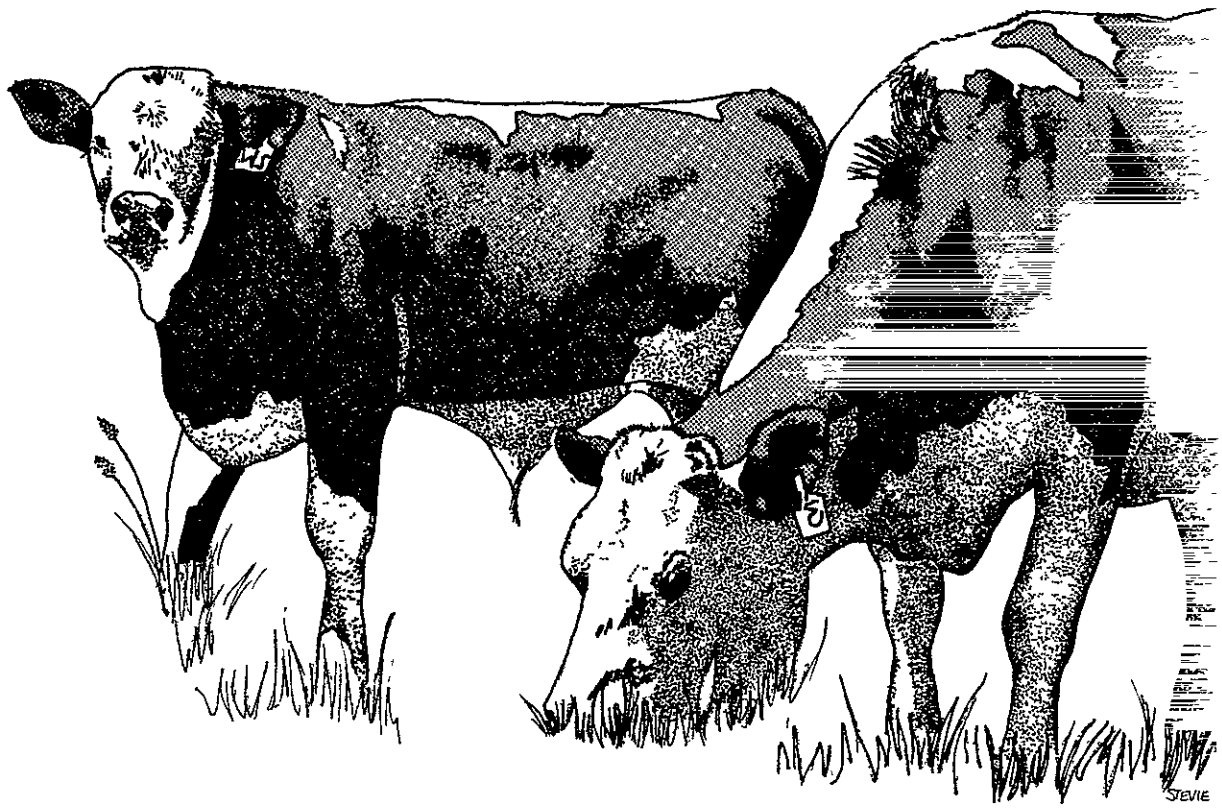
3. Under any funding level, funds available for weed control activities would be distributed in the following order:

-- Cooperation with Lake and Klamath County Weed Boards per present purchase orders;

-- Treatment of Forest infestations through internal funding;

-- Treatment of waived private lands within Forest boundaries through internal funding.

Operational Considerations. In project planning, fully consider all available methods of control, i.e., manual, mechanical, biological, chemical, cultural, fire, and regulatory methods.



SOILS MANAGEMENT

General

1. Revise and update current Soil Resource Inventory to meet management needs

   Operational Considerations: Store all information in Forest's database.

   Incorporate inventory into the National Cooperative Soil Survey with Soil Conservation Service. Correlation will begin with the Warner Mountain portion of the Forest.

2. Maintain or improve soil productivity. A minimum of 80 percent of an activity area must be left in a condition of acceptable productivity potential for trees and other vegetation, following the land management activity. Do not adversely affect more than 20 percent of an activity area. Adverse impacts are detrimental effects on the soil resource and include: a) surface soil condition; b) surface erosion; c) soil mass wasting; and d) organic residues. These are defined below under operational considerations (FSM R6 SUPP 50).

   Operational Considerations:

   a. *Surface Soil Condition*: Management activities create various degrees of soil disturbance. Good land stewardship minimizes significant adverse impacts on soils. Management should not exceed these limits by significant amounts and may want to strive for higher standards.

      Each of the surface soil conditions known to result in reduced productivity or loss of the productive land surface, and the accompanying criteria for determining when and where these conditions occur, are defined below:

      (1) **detrimental compaction**. Compaction of soil increases soil bulk density and decreases porosity as a result of the application of mechanical forces such as weight and vibration. Detrimental compaction is that beyond the limits described. Because of the unique physical properties and management problems of volcanic ash and pumice soils, a different criterion for determining detrimental compaction has been established for them. Limits are as follows:

         (a) *volcanic ash/pumice soils*: An increase in soil bulk density of 20 percent or more over the undisturbed level.

         (b) *other soils*: An increase in soil bulk density of 15 percent or more over the undisturbed level, or a macropore space reduction of 50 percent or more.

      (2) **detrimental puddling**. Soil puddling is a physical change in soil properties due to shearing forces that destroy soil structure and reduce porosity. Detrimental puddling can be observed as vehicle tracks when soil is molded and when depth of rutting has reached six inches or more.

      (3) **detrimental displacement**. Soil displacement is the removal and horizontal movement of soil from one place to another by mechanical forces such as equipment blades. Detrimental displacement is the removal of more than 50 percent of the topsoil or humus-enriched A1, and/or AC horizons from an area of 100 square feet or more, which is at least five feet in width.

Mixing of surface soil layers by disc-plow operations or removal of surface soil layers by hand scalping are not considered detrimental displacement.

(4) **severely burned** Soils are considered to be severely burned when all the organic layer is consumed and the mineral soil structure and color are visibly altered Prescribed burning activities must result in less than ten percent of the project area rated as "severe intensity."

b. *Surface Erosion* Surface erosion is the detachment and transport of individual soil particles by wind, water, or gravity. Surface erosion can occur as the loss of soil in a fairly uniform layer across the land surface, or as rills or gulleys.

To stay within acceptable levels of soil loss and meet soil management objectives, the minimum percent effective ground cover following cessation of any soil-disturbing activity should be as follows:

Minimum Percent
Effective Ground Cover

Erosion Hazard Class	*Ist Year*	*2nd Year*
Low (Very slight-slight)	20-30	30-40
Medium (Moderate)	30-45	40-60
High (Severe)	45-60	60-75
Very High (Very Severe)	60-75	75-90

c. *Soil Mass Wasting* Soil mass wasting is the detachment and movement of soil or surface bedrock material Some landslides fall in a single mass or single event and move downslope to cause debris slides and avalanches. Other landslides detach and move slowly over a period of years.

d. *Organic Residues.*

1) Leave five to ten tons per acre of woody material, less than nine inches on the small end, on site after an activity.

2) Leave ten pieces per acre, of logs eight feet long and twelve inches small-end diameter, on site after an activity.

Refer to Table 19 for determining potential by Capability Area (CA) for erosion, compaction, displacement, and mass movement Ratings are based on average soil/landform characteristics Refer to Table 20 for the SRI mapping units within each Capability Area.

Table 19. Soil Potential

CAPABILITY AREA	POTENTIAL FOR: Erosion	Compaction	Displacement	Mass Movement
1	High	High	High	Low
2	High	High	Low	Low
3	High	Moderate	Low	Low
4	Low	High	Low	Low
5	Low	Low	Moderate	Low
6	Moderate	High	Low	Low
7	High	Low	High	Low
8	Low	Low	Moderate	Low
9	High	Low	High	Low
10	Moderate	Moderate	Moderate	Moderate
11	High	Moderate	Low	Moderate
12	Moderate	Moderate	Moderate	Low
13	High & Low	High	Low	Low
14	High	Low	High	Low

Table 20. Soil Resource Inventory Components of Capability Areas

Capability Area	Soil Resource Inventory Components
1	7, 12, 13, 16, 17, 18, 25, 70, 283(40%)
2	28, 30A, 81, 283(60%), 850(50%), 882(50%)
3	14, 19, 20, 22, 24, 27, 29, 50, 53, 56A, 81, 503, 601
4	23, 26, 34A, 35, 36, 37A, 38, 39, 63A, 64, 67A, 68A, 368, 632, 676
5	84, 85, 86, 87, 88A, 89A, 91, 93A, 94A, 96A, 97A, 98, 99, 864, 882(50%), 987, 850(50%)
6	2, 9, 34B, 34C, 37B, 37C, 376
7	10, 87, 88B, 88C, 89B, 89C, 92, 93B, 94B, 96B, 97B, 988
8	40A, 41A, 42, 74A, 76A, 77A, 80A
9	8, 40B, 40C, 41B, 41C, 42, 43, 74B, 74C, 76B
10	62A, 62B, 63B, 66, 67B, 67C, 68B, 68C, 342, 377, 623, 648, 684(50%), 678, 688
11	1, 3, 4, 6, 11, 30B, 44, 51, 56B, 57, 60, 61, 301, 563, 568, 675, 684(50%)
12	82, 83, 90, 95
13	348, 350, 378, 882, 892
14	77B, 78, 79, 80B, 417

Operational Consideration: Refer to the following documents for further guidelines

-- Pacific Northwest Region "Soils Procedures Handbook,"

-- "Soil Resource Inventory for the Fremont National Forest,"

-- "Guide to Erosion Control on Forest Roads and Trails" for the Fremont National Forest;

-- "Soil Notes,"

-- Fremont National Forest "Fire Effects Expectations."

3. Soil properties and slope steepness are major considerations in the selection of logging systems and site-preparation activities These activities should be based on Capability Areas and the "Soil Resource Inventory." (Reference the "Soil Resource Inventory" for recommendations.)

4 Keep soil erosion levels within tolerable limits. Guidelines to achieve this are presented by capability area in Table 21. Three columns are shown· The percentages shown under the "Natural" column are the amounts that would normally exist in an undisturbed condition The percentages under the "Project" column are the recommended maximum amounts of additional mineral soil exposure that could be added by a management activity. The last column shows the recommended total allowable amount of mineral soil exposure.

Table 21. Mineral Soil Exposure

CAPABILITY AREA	SOIL EXPOSURE (% Per Acre) NATURAL	PROJECT	TOTAL ALLOWABLE SOIL EXPOSURE
1	10	20	30
2	60	10	70
3	45	20	65
4	20	50	70
5	35	40	75
6	20	35	55
7	25	30	55
8	30	40	70
9	40	25	65
10	20	35	55
11	50	10	60
12	40	40	80
13	20 - 60	10 - 50	60 - 70
14	35	20	55

Operational Consideration: Do not locate machine-constructed fire lines or fire roads within Capability Areas 1, 2, 3, and the scabland plateau portions of Capability Area 13.

Apply additional erosion control practices commensurate with erosion hazards and resource values in conjunction with silvicultural objectives. These practicies include:

1) seeding, fertilization, and mulching of freshly disturbed road cuts and fills, landings, and skidtrails;
2) construction of slash filter windrows below roads near stream crossings;
3) obliteration of temporary roads;
4) installation of additional cross-drainage on system and nonsystem roads;
5) expansion of the amount of seeding, mulching, and fertilization following all soil-disturbing activities;
6) acceleration of the soil and water restoration improvement program in accordance with the **Riparian Management Action Plan**; and
7) expansion of the maintenance program on existing areas causing sediment problems which involves revegetation of existing road systems through reseeding and fertilization; periodic

fertilizer applications to maintain vegetative cover; and the closure or restricted use on problem roads.

5. Keep land stability at pre-activity levels.

   Operational Consideration: The capability areas with the highest potential for mass movement are 10 and 11. In addition, Capability Area 9 is susceptible to debris avalanches in localized areas.

6. Require necessary soil protection measures in Plans of Operation for mining and mineral leasing activities. Avoid road construction on sideslopes in excess of 40 percent.

7. Develop and implement plans needed to restore the quality of the soil resource. Restoration includes those projects done for erosion control, compaction, and displacement. All projects are listed and described in the Forest "Soil and Water Resource Improvement Inventory." New projects will be added to the inventory and prioritized.

   Operational Considerations: Develop and coordinate soil resource plans with water resource plans.

   Select projects through coordination between District and Forest Headquarters personnel on the basis of potential value to the watershed and increases in soil productivity.

   Refer to Forest documents entitled "Planning Gully Control and Restoration" and "Guide to Erosion Control on Forest Roads and Trails "

8 Inspect existing soil restoration projects to determine if maintenance is necessary to protect investments. Generally, these projects will involve gully restoration.

9. Monitor results and impacts of land management activities on soil productivity in accordance with the Forest Monitoring Plan. Conduct a monitoring study on tree fertilization to determine the possibility of reflecting fertilizer-induced growth in yield tables.

   Operational Considerations· Emphasize monitoring of impacts due to timber harvest, range management activities, road management activities, and mining operations.

   Concentrate monitoring efforts on suitable Forest land.

   Coordinate project selection between District and Forest Headquarters to select most desirable sites for monitoring

   Establish fertilizer plots in seven to eight soil types representing a majority of the commercial forest land.

WATERSHED MANAGEMENT

General

1. In watersheds where project scoping identifies an issue or concern regarding the cumulative effects of activities on water quality or stream channels, a cumulative effects assessment will be made. This will include land in all ownerships in the watershed. Activities on National Forest System lands in these watersheds should be dispersed in time and space to the extent practical and at least to the extent necessary to meet MR's. On intermingled ownerships, coordinate scheduling efforts to the extent practicable

2. Table 22 identifies the percentage of each of the Forest's watersheds (tentatively suitable forested lands only) that can be impacted at any one time, unless more stringent guidelines are required by other resources. The guidelines will be applied in conjunction with regeneration harvest practices as well as other activities or events which significantly alter the vegetative condition of the watershed.

   Operational Considerations: These limits also apply to sub-basins within the watersheds listed in Table 22 that are larger than 10,000 acres in size. These percentages can be modified up or down based upon project or area hydrologic analysis. Areas will no longer be considered as contributors to watershed impacts when stocked with trees averaging, as a minimum, six feet in height and in sufficient numbers to provide 60 percent crown cover to the site.

Table 22. Watershed Impact Limits

WATERSHED	PERCENT OF AREA	ACRES(1)
Bridge Creek	35	16,000
Buck Creek	35	18,800
Chewaucan River	30	94,700
Crooked Creek	30	6,500
Dairy - Elder Creek	30	15,400
Deep Creek	30	24,300
Drews Creek	30	82,100
Goose Lake	30	43,900
Honey Creek	35	5,200
Lake Abert	35	32,800
McDowell Creek	35	5,700
Silver Creek	30	102,500
Silver Lake	50	262,900
South Creek	30	30,900
Sprague River - Middle	35	35,800
Sprague River - North Fork	35	118,300
Sprague River - South Fork	35	156,300
Sycan River - Middle	35	176,300
Sycan River - Upper	35	58,700
Thomas - Cottonwood	30	102,500
Tule Lake - Lost River	40	112,500
Twentymile Creek	35	5,100
Willow Creek	35	28,500

(1) Acreages calculated include both Federal, State and private lands within the National Forest boundary

WATERSHED MANAGEMENT

3. Protection of Water Quality

Comply with state requirements in accordance with the Clean Water Act for protection of waters of the State of Oregon (Oregon Administrative Rules, Chapter 340-341) through planning, application, and monitoring of Best Management Practices (BMP's) in conformance with the Clean Water Act, regulations, and federal guidance issued thereto.

In cooperation with the State of Oregon, the Forest will use the following process:

1. Select and design BMP's based on site-specific conditions, technical, economic, and institutional feasibility, and the water quality standards for those waters potentially impacted.

2. Implement and enforce BMP's.

3. Monitor to ensure that practices are correctly applied as designed.

4. Monitor to determine the effectiveness of practices in meeting design expectations and in attaining water quality standards.

5. Evaluate monitoring results and mitigate where necessary to minimize impacts from activities where BMP's do not perform as expected

6. Adjust BMP design standards and application when it is found that beneficial uses are not being protected and water quality standards are not being achieved to the desired level. Evaluate the appropriateness of water quality criteria for reasonably assuring protection of beneficial uses. Consider recommending adjustment of water quality standards.

Use the existing agreed-to process to implement the State Water Quality Management Plan on lands administered by the USFS as described in Memorandums of Understanding between:

The Oregon Department of Environmental Quality and U.S. Department of Agriculture, Forest Service (2/12/79 and 12/7/82), and "Attachments A and B" referred to in this MOU (Implementation Plan for Water Quality Planning on National Forest lands in the Pacific Northwest 12/78 and Best Management Practices for Range and Grazing Activities on Federal lands, respectively).

For a more complete explanation of the above, refer to Appendix H in the EIS, "Best Management Practices."

Individual, general Best Management Practices are described in *General Water Quality Best Management Practices*, Pacific Northwest Region, 11/88. This provides guidance but is not a direction document. Also included in this document is a description of the process and limitations and use of these BMP's. Each BMP listed includes the Title, Objectives, Explanation, Implementation and Responsibility, and Monitoring. Evaluations of ability to implement and estimated effectiveness are made at the project level.

Not all of the general BMP's listed will normally apply to a given project, and there may be specific BMP's which are not represented by a general BMP in this document.

The sensitivity of the project determines whether the site-specific BMP prescriptions are included in the EA/EIS or in the sale/project plan, or in the analysis files.

4. Protect climatological data collection sites from the influence of Forest activities

   Operational Considerations: Maintain undisturbed buffer around all Forest Service or cooperative climatological data collection sites, i e., weather stations, rain gauges, snow survey courses, snow telemetry sites (snow pillows) and aerial snow markers. The size of the buffer will be sufficient to protect the integrity of the site and will be determined on a case-by-case basis On cooperative sites, agreements exist which define the size of the buffer.

Water Use and Rights

1. Use of water for National Forest purposes will be authorized under federal or state statutes depending on the location and purpose of use Claims necessary under state statutes will be submitted in a timely manner The Forest will cooperate with the state on Basin Adjudications as appropriate

2. Recommended monthly instream flows for selected streams

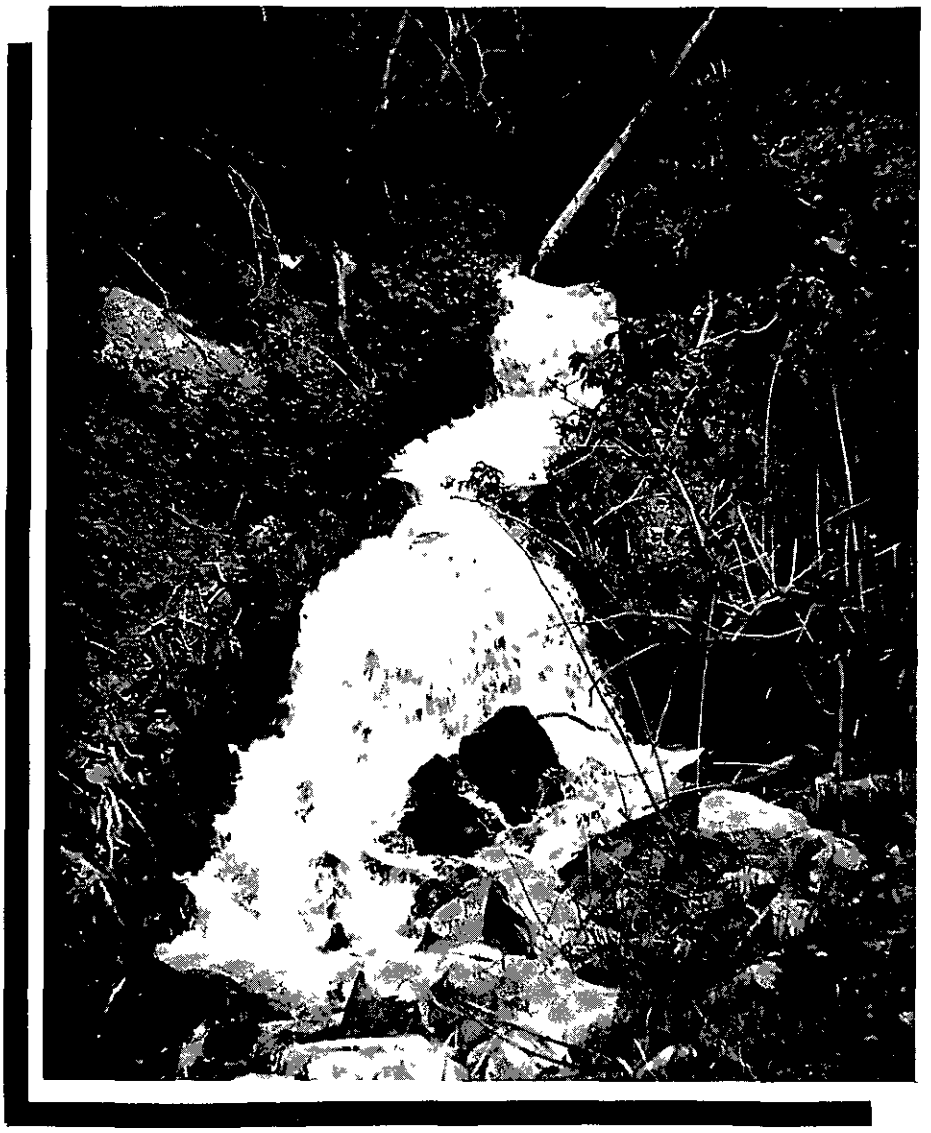


Table 23. Recommended(1) Monthly Instream Flow for Selected Streams

RECOMMENDED STREAMFLOW (cfs) (2) at Measurement Site													
STREAM	**MEASUREMENT SITE**	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Sprague River	Boundary USGS Gauge #11-4975	100	100	100	100	100	80	60	60	60	60	100	100
North Fork Sprague River	At Boulder Creek	50	50	50	150	150	40	20	15	15	50	50	50
Five Mile Creek	At Forest Boundary	10	10	10	20	20	20	15	15	15	15	10	10
North Fork Sprague River	1/2 Mile Above Sheepy Creek	20	20	30	80	80	40	20	10	10	10	15	15
South Fork Sprague River	At Sprague River Picnic Area	45	45	45	100	100	30	15	15	15	15	45	45
South Fork Sprague River	At Adler Creek	10	10	30	70	70	20	5	5	5	7	10	10
Deming Creek	Above Diversion Campbell Reservoir	10	10	10	10	10	5	1	1	5	10	10	10
Sycan River	At Forest Boundary	50	50	70	70	70	50	30	20	20	20	30	40
Sycan River	At Sycan Ford	50	50	70	70	70	50	30	20	20	20	30	40
Sycan River	At Forest Road 27	50	50	70	70	70	30	10	5	5	10	15	15
Sycan River	At Forest Road 3239	15	30	60	60	60	30	20	10	10	10	15	15
Long Creek (Winter Rim Side)	At Confluence with Sycan	3	3	6	6	6	3	1	1	1	2	3	3
Long Creek (Yamsay Mountain)	At Forest Road 2916	15	15	25	90	90	30	17	12	12	15	15	15
West Fork Silver Creek	At Forest Boundary	5	5	10	30	30	5	2	2	3	5	5	5
Bridge Creek	At Forest Boundary	4	4	5	10	15	10	5	2	2	5	5	4
Buck Creek	At Forest Boundary	8	8	12	15	30	30	8	8	8	10	10	8
Chewaucan River	At Forest Boundary	50	50	50	75	75	50	30	30	30	30	50	50

SEE END OF TABLE FOR FOOTNOTES.

Table 23. Continued. Recommended(1) Monthly Instream Flow for Selected Streams

RECOMMENDED STREAMFLOW (cfs) (2) at Measurement Site													
STREAM	MEASUREMENT SITE	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Dairy Creek	At Forest Road 28	20	20	30	50	50	25	20	20	20	20	20	20
Elder Creek	At Forest Road 33	8	10	12	25	25	12	6	4	4	6	6	6
Thomas Creek	At Forest Boundary	3	5	15	30	30	10	3	5	.5	1	3	3
Honey Creek	At Forest Boundary	3	5	10	20	20	10	3	2	2	2	3	3

(1) Recommendations derived from previous Oregon Department of Fish and Wildlife data, modified by personnel from the Klamath Tribe, Winema National Forest, and Fremont National Forest
(2) *Cubic feet/second*

Protection of instream flow needs may be achieved through: filing protests with the State Water Resource Department when applications are made that adversely affect National Forest resources, asserting claims for this water under federal or state laws where applicable, inserting protection measures into special use permits, or reaching formal agreements on use. Purchase of water rights and impoundments are other means for reducing these impacts

Watershed Restoration

1. Degraded areas with a high potential for recovery will receive the highest priority for treatment. Structural treatments should be applied only when management changes are made concurrently, or when management changes have failed to achieve desired results within reasonable time frames.

   Operational Consideration. Planning and design of watershed and/or riparian restoration projects will be preceded by a thorough analysis of the tributary watershed by an interdisciplinary team.

Minerals Management

1. Protect floodplains, wetlands, and other riparian zones to the extent provided by law, through requirements in Plans of Operation and recommendations for protective lease stipulations.

2 Establish water monitoring stations in vicinity of active mines, leaseable mineral extraction sites, and exploratory areas if potential for chemical or physical water degradation exists

3. Require timely stabilization of cuts, fills, overburden/waste material piles, and other disturbed areas.

CULTURAL RESOURCE MANAGEMENT

General

1. Significant cultural resources will be managed using a combination of Inventory, Evaluation, Protection, and Enhancement Activities.

Overview

1. Maintain the Forest-wide Cultural Resources Overview to summarize and compile cultural resources information.

Inventory

1. A Cultural Resource Inventory will be conducted on all Forest lands, in addition to specific ground-disturbing project areas, prior to the commencement of the project. These inventories will follow the guidelines set forth in the Forest Inventory Plan and will be supervised by a professional archaeologist.

Evaluation

1. Cultural Resources will be evaluated against the Criteria for Eligibility to the National Register of Historic Places; nominations to the register will be scheduled incidentally until completion of the Forest-wide inventory.

Protection

1. Known cultural resources will be protected from adverse effects until they have been evaluated to determine whether they are eligible for inclusion in the National Register of Historic Places.

   Operational Consideration: Protection may include physical protection such as fences and barriers, scientific study and collection, patrol and site monitoring, proper use or removal of signs, maintaining site anonymity, and gaining public understanding and support through education.

2. Ground-disturbing activities will be designed to ensure that there should be no effect on inventoried cultural properties that have been determined eligible to the National Register of Historic Places (36 CFR 60.4). When protection is not possible, treatment of the site will be conducted in order to negate or mitigate adverse effects.

   Operational Consideration: Treatment may include modifying or redesigning the undertaking or scientific data recovery and analysis of the site.

3. Results of project-level cultural resource inventories, evaluations, and mitigations will be documented in project environmental assessments.

4. Properties suffering from vandalism and destruction by unauthorized collection and excavation will be protected.

   Operational Consideration: Protection may include physical protection such as fences and barriers, scientific study and collection, patrol and site monitoring, proper use or removal of signs, maintaining site anonymity, and gaining public understanding and support through education.

5. Monitoring inspections will be conducted on all special-use permits containing cultural resource stipulations or considerations.

Enhancement

1. Specific properties may be interpreted for educational, scientific, or recreational purposes where need is indicated and suitable properties exist to foster appreciation and understanding of heritage values. Management of cultural resources will be coordinated with other agencies, including the State Historic Preservation Office and the Advisory Council of Historic Preservation.

2. Antiquities permits may be issued to qualifying academic institutions or other organizations for study and research of sites Activities which are consistent with policy and management objectives and do not conflict with the property's historical and/or social values will be permitted

Native American Religious Freedom Act

1 The Klamath Tribal Executive Council will be requested to identify tribal issues for proposed projects on former reservation land

2 Opportunities to exercise Klamath Tribal rights and Klamath and Paiute Native American Religious Practices will be considered, as provided by the American Indian Religious Freedom Act of 1978. Under the preferred Forest Management Alternative (F), sites within former reservation lands on the Bly and Silver Lake Ranger Districts that provide members of the Klamath Tribe opportunities to practice their native religion will be protected as they are identified. This will be done in the spirit of good land stewardship and in consultation with the tribe

3 Proposed activities will be analyzed for effects on traditional food-gathering sites.

SPECIAL LAND USE MANAGEMENT

Application, Evaluation, and Permit Issuance

1. Screen and evaluate all new proposals for use of National Forest System lands through the National Environmental Policy Act (NEPA) process.

2. Issue new permits where there is demonstrated public need which cannot be met off the National Forest.

   Operational Consideration: Grant new permits when: (1) Use is appropriate for National Forest System land; (2) National Forest resources or programs will not be damaged or impaired, or public benefits outweigh such damage; (3) Private land is not available to accommodate the use; (4) National Forest System lands are the most logical place for the use; (5) Use of intermingled private lands by property owners is contingent upon use of National Forest under permit.

3. New transportation and utility proposals will be accommodated within existing corridors where possible. New corridors needed for major utilities or highways will be evaluated and designated through an interagency analysis. Routes through or in close proximity to Wilderness, Wild/Scenic/ Recreation Rivers, Research Natural Areas and Special Management Areas are excluded from consideration as utility corridors. The Warner Canyon "window" identified by BPA and the Western Utilities Group and rejected by a previous interagency EIS is not available for major transmission facilities.

4. Concentrate electronic users on a minimal number of selected sites.

   Operational Consideration: Require comparative electronic survey by applicant when new sites instead of existing sites are requested.

5. Encourage use of industry-owned lands for industry-owned improvements and National Forest Service lands for Forest Service Improvements.

Permit Administration

1. Prioritize administration of permits to protect public health, safety, and welfare and to prevent or minimize degradation of resources.

   Operational Considerations: Inspection on permits will be based on the schedule established in FSM 2700. Deficiencies found will be corrected within a reasonable time frame Permits no longer needed or those on which payment has not been made will be terminated and facilities removed from National Forest Land. Timely notification will be given to permittees concerning expiration of permits. Permits which do not reflect new regulations will be upgraded within two years. All permits will be recorded in the Forest Land Use Report (FLUR).

2. Manage each electronic site as prescribed by appropriate Electronic Site Management Plan.

3. Manage the permitted ski facilities in accordance with the Warner Canyon Winter Sports Area Master Plan.

4. Manage Extra High Voltage (EHV) corridors as agreed upon with permittee, through approved corridor management plans and environmental coordinating documents.

   Operational Consideration: Complete corridor management plans with all permittees and secure necessary agreements.

RESEARCH NATURAL AREA MANAGEMENT

A. Manage RNA's to maintain the naturally occurring physical and biological characteristics of the area with no or minimal human intervention.

B Prepare management plans within five years of establishment of new RNA's

C. Encourage scientific and educational use of RNA's by responsible scientists and educators. Research must be conducted under special use permit or cooperative agreement issued by the Station Director, Pacific Northwest Station Educational use should generally be limited to upper class college or graduate students.

Timber Management

A. Logging activities, thinning, and firewood cutting will not be permitted.

Range Management

A. Permit livestock grazing only if essential to maintain specific vegetative communities.

Recreation Management

A. Discourage recreation use, and prohibit camping and recreational activities which could modify the environment or threaten scientific and educational values. I Secure closures if necessary to protect area

Transportation Management

A Do not construct roads, fences, or erect signs within an RNA unless necessary to protect or contribute to the objectives of the area. Boundary fencing is permitted for protection against livestock or excessive human use.

Facilities Management

A. Buildings are not permitted within RNA's.

Protection

A Protect RNA's from fire, insect, disease, and animal damage primarily by management practices outside the area such as underburning, thinning, etc

Minerals Management

A. Withdraw RNA's from mineral entry once RNA is established

B. Recommend "no surface occupancy" stipulations or denial of mineral leases in and immediately adjacent to RNA's.

Landownership

A Acquire private lands within RNA's and private lands which would provide protective buffers adjacent to the RNA's.

B. Retain National Forest System lands within and adjacent to RNA's.

Fire Management

A. Fight wildfires aggressively using methods which minimize surface disturbance. Controlled fires will not be mopped up nor will merchantable timber be salvaged.

B. Prescribed underburns may be used in RNA's in the Pacific Northwest Region in ecosystems that developed with frequent fires.

Scenic Management

A. The Visual Quality Objective of preservation shall be practiced in the RNA.

MINERALS MANAGEMENT

Mining Claim/Surface Management Activities (Reserved Lands Only)

1. Inform public of rights, obligations, and restrictions under the mining laws.

   Operational Consideration: Maintain and distribute informational handouts to interested parties.

2 An Operating Plan (Plan of Operations) will be required where significant surface disturbance is proposed. Unnecessary impacts to surface resources will be minimized through inclusion of reasonable environmental protection measures in the operating plan. The regulations, specifically 36 CFR 228 8, specify measures applicable to surface resources, particularly air quality, water quality, solid wastes, scenic values, fisheries and wildlife habitat; and also set direction for road construction and overall reclamation. Guidance will be provided to operators for developing environmentally sound operating plans and planning reclamation. All Notices of Intent and Operating Plan proposals will be processed within the time frames established by 36 CFR 228.

   Operational Consideration: Appropriate environmental analysis is required for all proposals.

3. Claimants are entitled access to their mining claims under the mining laws. Road construction, reconstruction, and commercial road use outside the claims being developed shall be authorized through a Special Use permit or Plan of Operations When mine development proposals include roads, the NEPA process and documentation will be used to analyze and evaluate proposed routes

4. All practicable measures shall be employed to maintain and protect fisheries and wildlife habitat which may be affected by the operations Negotiations with the operator at the time of operating plan development will emphasize inclusion of mitigating measures such as adjusting operations or seasons to reduce impact on winter ranges, calving areas, riparian zones, and other critical habitat

5. Operations shall, to the extent practicable, be harmonized with scenic values (specifically Recreation Opportunity Spectrum and Visual Quality Objectives included in this Plan), through such measures as the design and location of operating facilities, including roads and other means of access, vegetative screening of operations, and construction of structures and improvements which blend with the landscape

6. All garbage, refuse, and waste shall be removed from National Forest lands and disposed of at an approved sanitary landfill or other authorized disposal site. Chemical wastes will be properly neutralized and disposed of to DEQ standards All tailings, dumpage, deleterious materials or substances and other waste produced by operations shall be deployed or treated so as to minimize adverse impacts.

7. The post-mining land use objectives for each project site should be determined prior to disturbance.

8. Reclamation standards that meet the intent of 36 CFR 228.8 shall be part of each operating plan and describe reclamation and mitigation practices appropriate to the site. Agreement between the operator and the Forest Service should be reached on inclusion of applicable reclamation standards and bond release criteria in all reclamation plans prior to approval of the operation plan.

9. Bonding for reclamation shall be adequate for the Forest Service to accomplish agreed-upon reclamation standards in the event of default by the operator Bond cost determinations shall be documented and justified as part of the evaluation process

10. Short-term or concurrent reclamation should minimize, mitigate, and prevent erosion through planned drainage control and stabilization.

11. Reclamation and mitigation standards that specifically address recurrent maintenance and end-of-season and interim shutdown will be part of operating plans.

12. Appropriate sediment control measures shall be designed, constructed, and maintained to prevent, to the extent possible, additional contributions of sediment to stream flow or to runoff outside the operating area, meet the more stringent of applicable State or Federal effluent limitations, and minimize erosion.

13 Long-term or final reclamation should return the land to a planned use that is consistent with the overall land-use objectives of the area.

14. Upon exhaustion of the mineral deposit, at the earliest practicable time during operations, or within one year of the conclusion of operations, the surface should be reclaimed. The operator should take measures to prevent or control on-site and off-site damage to the environment and forest surface resources including:

- Control of erosion and landslides;
- Control of water runoff:
- Isolation, removal or control of toxic materials;
- Reshaping where reasonably practicable and revegetation of disturbed areas;
- Rehabilitation of fisheries and wildlife habitat; and,
- Removal of buildings and improvements, equipment, and scrap

15. All disturbed surfaces such as waste dumps, backfilled areas, leach piles, access roads, and haul roads, etc., will be shaped according to the operating plan within one year after it has completed its function. The operating plan must provide for grading to meet Visual Quality Objectives, prevent mass stability problems, and provide adequate drainage. Where practicable, shaping must be planned to conform as nearly as possible to the original natural contour.

16. Where settlement ponds, tailing dams, or impoundments are planned, each shall be designed and inspected during construction under the supervision of a professional engineer.

17. Mining development roads shall be constructed and maintained to assure adequate drainage and to eliminate or minimize damage to soil, water, and other resource values. Mitigation measures and seasonal maintenance practices for mining access roads should be part of the operating plan. Direction applicable to Forest Development Roads used for commercial mining uses is found in the Facilities Standards and Guidelines. Roads no longer needed should be:

- Closed to vehicular traffic;
- Bridges and culverts removed;
- Cross-drains, dips, or water bars constructed; and
- The road surface shaped to as near a natural contour as practicable and stabilized.

18. A permanent acceptable ground cover for watershed protection, and erosion control must be provided.

19. The operating plan shall list the species planned for seeding. Acceptable species must contribute to species diversity, be adaptable to the area, be non-noxious, and be approved by the Forest Service.

20 The seed must be certified unless collected on site and the rate of pure live seed per square foot must be approved by the Forest Service.

21. Minimal acceptable ground cover requirements should be met before bond release. The minimum ground cover requirement is a permanent ground cover equal to 80 percent of that on adjacent undisturbed areas - determined by plant basal area, litter and light slash not to exceed 6 inches in diameter. At least 30% of the ground cover must be live perennial vegetation.

22 A justification examination will be conducted prior to approving new access into roadless areas or in any area when the proposed activity or related access is questionable. The proposal must be shown to be the next reasonable, logical, and sequential step in development of the claim prior to approval

23. Coordination will be accomplished with State Agencies which have authority over mineral activities and potentially impacted resources on the Forest, including the Department of Geology and Mineral Industries, Oregon Department of Fish and Wildlife, Oregon Water Resources Department and Oregon State Department of Environmental Quality.

24. Action will be taken to prevent and eliminate unauthorized mining claim occupancy. Where occupancy is not reasonably necessary for mining, trespass action or validity contest will be initiated where persuasion and/or Letter of Noncompliance actions are unsuccessful in resolving the problem

Mineral Leasing/Surface Management activities (Reserved and Acquired Lands)

1. Process mineral lease recommendations as specified in 36 CFR 228; Subpart B, and interim guidelines in a timely manner.

2. Recommend appropriate special stipulations as an alternative to lease denial for protection of sensitive parcels and lineal land areas, such as SMU-riparian zones, utility and transportation corridors, National Recreation Trails, sensitive soils, Native American religious sites, etc.

   Operational Consideration: Limit recommendations for lease denial primarily to large areas such as Research Natural Areas and special interest or special management areas.

Mineral Reservations and Outstanding Rights

1. Administer mineral reservations and outstanding rights in a manner consistent with the rights reserved or outstanding, to minimize damage to National Forest System lands and resources.

   Operational Consideration: Refer to 36 CFR 251 15 for general guidance. Consult with the Office of the General Counsel when mineral rights are not clear. Clarification might also be found under state law.

Removals - Minerals/Materials

1 Coordinate mineral/material disposals through District Rangers and Zone Engineers

   Operational Considerations· Consider geotechnical inventory data, conflicts with timber sale road activities, existing permitted users, etc. Avoid active competition with commercial sources of sand, gravel, rock, etc., in mineral/material sales.

2. Require that development or removal of material from quarry sites be done according to Mining Safety and Health Administration (MSHA) safety standards.

   Operational Consideration: Require pit development/resource removal plan for entries removing 1,000 or more cubic yards of materials.

3. Aggregate sources (saleables) will be developed only after environmental analysis assures that other resources are adequately protected and that reclamation is feasible.

Recreation/Hobby Mining Activities

1. Recreational use of small hydraulic suction dredges or other mechanized equipment shall be subject to 36 CFR 228, particularly sections 228.4 through 228.8.

   Operational Consideration: Microscopic particulate gold embodied in sulphide ore is probably the most predominant mineral on the Forest. The probability of collecting an identifiable mineral specimen by dredging is remote.

2. The Thunder Egg Lake partial withdrawal will be retained to promote recreational geode collecting and prohibit commercial monopoly of the geode resource.

LANDOWNERSHIP ADJUSTMENTS

Exchange

1. Correlate exchange priorities and alternative emphasis to accomplish the resource management objectives of the Forest Plan.

2. Consider all exchange proposals. Consider other public, resource, and administrative benefits.

   Operational Consideration. Consider established classification groups noted in FSM 5530, the Fremont National Forest Landownership-Classification plan dated March 17, 1980, and Pacific Northwest Region Landownership Planning guidelines dated May, 1981, all as may be amended or revised.

Purchase

1 Continue to pursue purchase opportunities in recreation composites and key wildlife habitat.

Donation

1. Consider public benefits on case-by-case basis.

Small Tracts Act

1. Identify and work toward elimination of encroachments, as they are identified

   Operational Consideration: Consider alternatives which may be more desirable or cost-effective than exchange/interchange/disposal of encumbered parcels.

PROTECTION

General

1. Provide and execute a fire protection and fire use program that is cost-efficient, and responsive to land and resource management goals and objectives.

2. All wildfire will receive an appropriate suppression response, utilizing a strategy of confine, contain, or control.

3. Wildfires that threaten life, property, public safety, improvements, or investments will receive aggressive suppression action using a control strategy.

4. Prescribed fire will be considered for use in meeting management objectives in areas where ecological studies show that fire has played a significant role in ecosystem development.

5 Integrated Pest Management (IPM) strategies will be utilized to manage pests within the constraints of laws and regulations, and to meet Forest management objectives IPM strategies include manual, mechanical, cultural, biological, chemical, prescribed fire, and regulatory means. Strategy selection(s) will be based on environmental analysis

AIR

General

1. The Forest will demonstrate reasonable progress in reducing Total Suspended Particulates (TSP) from prescribed burning.

2. Visibility standards will be established for wilderness as one of the physical setting objectives to be measured and kept within a Limit of Acceptable Change (LAC).

3. Planned prescribed burning ignitions which might adversely affect visibility in the Gearhart Mountain Wilderness (a Class I area) will be scheduled to avoid high use periods (Fourth of July through Labor Day) and holiday weekends, such as Memorial Day.

4. Planned prescribed burning ignitions will be scheduled when weather conditions are favorable to quick smoke dispersion away from populated and Class I areas.

FISH AND WILDLIFE MANAGEMENT

Aspen Stands

1. Timber stands which contain a component of aspen (from 20 to 80 percent aspen present) are mixed aspen stands. Approximately 5,000 acres of mixed aspen stands exist on the Fremont National Forest. These stands will be managed to maintain the present basal area ratio of aspen in mixed stands Aspen stands for treatment should be at least one-half acre in size

2. Approximately 9,000 acres of pure aspen stands are present on the Forest. A total of 2,500 acres of the pure aspen stands will be maintained in the mature stage for dependent species such as red-naped sapsuckers. Another 2,500 acres will be managed as replacement stands and will be converted to a younger successional stage Aspen stands for treatment should be at least one-half acre in size

   a. Pure aspen stands will be managed to maintain the dominance (80 percent or more) of aspen stems.

3. Site-specific objectives for each stand will be developed by an interdisciplinary team

4 District range conservationists and wildlife biologists will determine the need for fencing or other protective measures for mixed aspen stands

5 Aspen stands will be avoided whenever possible in the construction of fire lines, new roads or facilities such as rock pits

6. Cultural resources (primarily arborglyphs) will be protected or the data will be documented.

Operational considerations. Stands with good site potential for response but presently in poor condition should be given priority for treatment. Poor condition is defined as follows

-- overstory falling apart and little or no reproduction,

-- reproduction severely browsed,

-- stand with heavy conifer competition.

Dead Trees

1. Snag densities will be provided within the harvest units. Past harvest units should be evaluated to determine need to provide snags within those units. Densities will be maintained through the full rotation on these areas.

2 Wildlife trees in Management Areas 2, 3, and 14 will be maintained at levels to provide habitat for at least 100 percent of the potential population of cavity-dependent species. Dead and defective trees will be maintained to carry at least 100 percent of the potential population of cavity-dependent species in Management Areas 7 and 15 except where safety concerns (hazard trees in developed and dispersed campsites) dictate a lower level of habitat. Management Areas 4, 6, 12, and 13, being areas of high human activity, will be managed to maintain 60 percent of the potential population of cavity-dependent species where safety concerns permit such management. Management Areas 8, 9, 10, 11, and 16 will provide wildlife trees at whatever level naturally occurs in those areas.

3. Management Areas 1 and 5 will be managed to provide habitat for 40 percent of the potential population of cavity-dependent species except where retention of wildlife trees may not be possible due to past management activities or around log landings, rock pits, along certain roads, or other activities. Wildlife trees should be managed for 80 percent of the potential cavity-nesting population in the following situations:

   a. within 200 feet of dry, moist, or wet meadows and scab rock flats greater than two acres in size;

   b. in timbered stringers less than one-quarter mile wide.

4. Each successional stage, including those in early succession (i.e., clearcuts), will carry the appropriate amount of habitat for the prescribed potential population of cavity-dependent species.

5. Snags and leave trees should be retained in the same species composition of the harvested stand. Where dead trees are not available for present numbers of snags, green trees will be retained and made into snags to meet the desired level for that area. These green trees should be of low value, cull, limby or deformed. If such trees are not available, then higher value trees should be made into snags to meet the desired level.

6. The number of dead trees needed for present habitat as well as green replacement trees for wildlife habitat through the rotation will be retained as shown in Tables 24 and 25. The number of dead and live trees are those present at the completion of the project and retained through a full rotation.

Table 24. Dead Trees Needed to Meet Present and Long-Term Habitat Requirements for Primary Excavators (Woodpeckers) by Timber Types (1)

TIMBER TYPE AND MANAGEMENT LEVEL	NUMBER OF DEAD TREES PER 100 ACRES d.b.h. (2) X HEIGHT	
	10 - 12" x 15'	12 -20" x 15' - 30'
Lodgepole Pine		
40%	49	23
60%	73	35
80%	97	47
100%	121	59
Pine and Pine-Associated		
40%	30	60
60%	127	8
80%	169	11
100%	211	14

(1) Derived from Wildlife Habitats in Managed Forests, U.S Department of Agriculture Handbook #553, J W Thomas
(2) d.b.h. = Diameter Breast Height

Table 25. Live Trees Needed to Meet Present and Long-Term Habitat Requirements for Primary Excavators (Woodpeckers) by Timber Types (1)

TIMBER TYPE AND MANAGEMENT LEVEL	NUMBER OF GREEN TREES PER 100 ACRES d.b.h (2) IN INCHES										
	0 (3)	0-2	2-4	4-6	6-8	8-10	10-12	12-14	14-16	16-18	18-20
Lodgepole Pine											
40%	370	72	72	72	48	44	16	84	5		
60%	555	108	108	108	71	65	23	11	5		
80%	740	144	144	144	95	87	31	15	8		
100%	925	180	180	180	119	109	39	19	9		
Pine and Pine-Associated											
40%	219	147	88	88	88	73	64	40	23	12	3
60%	329	221	133	133	133	110	96	60	34	17	4
80%	438	294	159	159	159	146	128	80	45	22	6
100%	548	368	221	221	221	183	160	100	56	28	8

(1) Derived from Wildlife Habitats in Managed Forests, U S Department of Agriculture Handbook #553, J W Thomas
(2) d b h = Diameter Breast Height
(3) 0 inch d b h size trees should be grown or planted throughout the stand rotation The number of 0 inch size class should be divided by 10, and that number be planted or grown per decade

7. On acres receiving uneven-aged management, wildlife trees and their replacements should be uniformly distributed or in patches On acres receiving even-aged management, snags should be uniformly distributed where possible. In clearcuts, emphasis is placed on creating wildlife tree/replacement tree clumps. A mixture of clumps and individual trees can be created on harvest units. Table 26 provides wildlife tree clump sizes per harvest unit size and timber type for Management Areas 1 and 5

Table 26. Number of One-Acre Wildlife Tree Clumps Per Harvest Unit Size and Timber Type, Management Areas 1 and 5

TIMBER TYPE	HARVEST UNIT SIZE 20	40	60	80	100
Ponderosa Pine	1	2	3	4	5
Pine Associated	1	2	3	4	5
Lodgepole Pine	1	1	2	2	2

8. Wildfire areas equal to or greater than 200 acres in size will be managed for standing dead trees at the following levels:

   a. Pine and pine-associated. four snags per acre, of which two are equal to or greater than 20 inches in d.b.h. and at least 30 feet tall; and two equal to or greater than 12 inches in d b h and at least 15 feet tall

b. Lodgepole pine: four snags per acre which are equal to or greater than 12 inches in d b.h. and at least 15 feet tall

c. Larger snags or replacement trees may be substituted for small snags. If larger snags or replacement trees are absent, smaller snags may be used to obtain desired number.

9. Downed material will be retained at or above the organic residues outlined for soils management. Minimum levels of non-casehardened materials to be left on site after activity are:

a. five to ten tons per acre of woody material, less than nine inches on the small end, on site after activity;

b. ten pieces per acre, of logs eight feet long and twelve inches small-end diameter, on site after activity.

Raptors
Golden eagle - Projects will be designed to have no significant effect on golden eagle nesting and roosting habitat. Significant effect includes abandonment of nest and/or young, destruction of nest or roost site, or harassment during nesting and roosting.

1. Nest sites

a. A management zone of at least two acres in size will be established around nest sites. Vegetational and structural character of the site will be maintained.

b. Maintain at least three perching/roosting sites consisting of three to six overmature trees and snags within one-quarter mile of the nest management zone. Best arrangement would be for these trees to be as close to the nest management zone as possible.

c. Avoid major land management activities within one-quarter mile of the nest site during the nesting season, February 1 to August 1. If nesting has not occurred by May 20, major land management activities can be conducted within one-quarter mile of the nest site.

d. Avoid developing recreational or other facilities within one-quarter mile of nest sites. Discourage recreational activities within one-quarter mile of the nest site during nesting season.

e. Identify and maintain at least one alternate nesting area of two acres, with the vegetational and structural characteristics of the original nest site, in the most suitable habitat available, and within one-quarter mile of the existing nest site

2. Roosting sites

a. Maintain key trees or snags used as roost trees

b. Avoid major land management activities when eagles are concentrated in roost areas (January 1 to March 31).

c. Avoid recreational or other facilities development within a winter roost. Discourage recreational activities within the winter roost concentration area during roosting season.

Osprey - Projects will be designed to have no significant effect on osprey nesting sites and foraging habitat. Significant effect includes abandonment of nest and/or young, destruction of nest or roost site, or harassment during nesting and roosting.

1. Nest sites

   a Establish a management zone around nest sites based on the individual character of the site as well as the management activity proposed for the area. Maintain the vegetational and structural character of the site.

   b. Identify and maintain an alternate nesting opportunity in the most suitable habitat available adjacent to the existing nest site.

   c. Avoid major land management activities within one-quarter mile of the nest site during the nesting season, April 1 to August 1. If nesting has not occurred by June 1, major land management activities can be conducted within one-quarter mile of the nest site.

   d. Avoid developing recreational or other facilities within one-quarter mile of nest sites. Discourage recreational activities within one-quarter mile of the nest site during nesting season.

   e. Identify the need or opportunity to artificially create nesting, perching, and fledgling sites.

2. Foraging sites

   a Maintain key trees or snags used as hunting/feeding perches or roosts.

   b. Identify the opportunity or need to artificially create perching trees where none presently exist.

   c. Introduce fish to lakes/ponds to increase the osprey prey base.

   d. Minimize prey shortages resulting from chemical treatments of undesirable fish in reservoirs.

Prairie falcon - Projects will be designed to have no significant effect on prairie falcon nesting habitat. Significant effect includes abandonment of nest and/or young, destruction of nest site, or harassment during nesting.

1. Nest sites

   a. Establish a management zone around nest sites with a site-specific prescription based on the individual characteristics of the site as well as the type of management activity that is proposed for the area

   b Maintain perching/roosting sites near the nest site.

   c. Avoid major land management activities within one-quarter mile of the nest site during the nesting season, April 1 to August 1. If nesting has not occurred by June 1, major land management activities can be conducted within one-quarter mile of the nest site.

d. Discourage recreational activities within one-quarter mile of the nest site during nesting season.

Great gray owls - Projects will be designed to have no significant effect on great gray owl nesting habitat. Significant effect includes abandonment of nest and/or young, destruction of nest or roost site, or harassment during nesting and roosting.

1. Nest sites

   a. Buffer areas around meadows should be retained where possible. Buffer areas should be 600 feet wide at a minimum. As a rule, one buffer area could be retained for every mile of meadow edge for a large meadow. For smaller meadows, at least 50 percent of the forested edge should be retained.

   b. For known nest sites, a management zone of at least 600 feet diameter from the nest site (could be wider to include tree cover to the edge of the nearest meadow) will be maintained.

   c. Avoid major land management activities within one-quarter mile of the nest site during the nesting season, March 1 to June 30. If nesting has not occurred by April 30, major land management activities can be conducted within one-quarter mile of the nest site.

   d. Identify opportunities to create artificial nesting habitat in forested areas adjacent to meadows.

2. Foraging Perches

   a. Maintain key trees or snags present in meadows.

   b. Identify opportunities to erect foraging perches at scattered locations throughout meadows.

Other raptors - Active nests of raptors (red-tailed hawks, great horned owls, long-eared owls, sharp-shinned hawks, Cooper's hawks, pygmy owls, flammulated owls, turkey vultures, American kestrels, Swainson's hawks, etc.) should be protected.

1. Active raptor nests found in project areas will be left standing with at least four adjacent large trees for cover and perches. The nest and perch trees may be harvested after the young have left the area, usually by August 15. Attempt to make an agreement with timber purchasers to retain active nest, perch, and cover trees.

2. Major activities such as logging and road construction adjacent (300 yards) to active raptor nests, should be postponed until young have fledged (usually around July 30).

Threatened, Endangered, Sensitive Species
Endangered, threatened, and sensitive species will be managed and identified in cooperation with the US Fish and Wildlife Service, Oregon Department of Fish and Wildlife (animals), and Oregon Department of Agriculture (plants).

1. Legal and biological requirements for the conservation of endangered, threatened, and proposed plants and animals will be met. All proposed projects that involve significant ground disturbance and have the potential to alter habitat of endangered, threatened, or sensitive plant and animal species shall be evaluated to determine if any of these species are present (FSM 2670 Threatened, Endangered and Sensitive Plants and Animals.)

2. Where *endangered or threatened* species are present, the required biological assessment process shall be carried out according to the requirements of the Endangered Species Act (Public Law 93-205), and consultation requirements with US Fish and Wildlife Service and state agencies shall be met Before the project can be carried out, protection or mitigation requirements shall be specified (36CFR 219.27(a)(8)). Habitat for existing federally classified threatened and endangered species shall be managed to achieve objectives of recovery plans.

   a. For bald eagles, implement management guidelines as outlined in "Fremont National Forest Bald Eagle Management Plan," 1981, Silovsky and Isaacs or revision of this Plan.

   b. Peregrine falcons are not known to nest on the Forest. Habitat for nesting and feeding does exist Sufficient existing nesting and feeding habitat shall be protected to meet the objectives of the Pacific Coast Recovery Plan for the American Peregrine Falcon (USDI Fish and Wildlife Service 1982). Any nest found shall be protected; associated habitat (such as feeding areas) shall be protected, and enhanced if necessary.

      -- A site specific management plan for the reintroduction of peregrine falcons should be completed by 1989.

3. When *sensitive* species are present, a biological evaluation will be performed. For sensitive plant species, it may be helpful to consult with local knowledgeable and interested botanical authorities. Habitat for sensitive plants and animals shall be managed or protected to ensure that the species do not become threatened or endangered because of Forest Service actions. Use species management guides as a strategy for ensuring that sensitive species do not become threatened or endangered.

   a. Management plans for sensitive species will be completed by 1993. Additional management plans may be needed as species are added to the Regional Forester's Sensitive Species List.

4. For *endangered*, *threatened* and *sensitive* species, maintain or increase the status of populations and habitats. Implement the strategies prepared for protection. Maintain and update lists of threatened, endangered, and sensitive plants and animals periodically as new information is collected Submit pertinent Forest information to the Regional Office for updating Regional Forester's Sensitive Species lists, and to the appropriate agency for inclusion in state-wide data bases.

Mule Deer - Summer and Transition Range

Management of deer summer habitat should be designed to provide a mosaic of forest stands suitable to provide hiding and thermal cover interspersed with openings suitable as forage.

1 Project activities can be evaluated using the Interagency Mule Deer Habitat Model or other habitat effectiveness models based on principles found in or similar to the Interagency Mule Deer Habitat Model

2 On transition range, projects should maintain at least 60 percent of the potential habitat effectiveness where site capabilities allow. At least 50 percent of the potential habitat effectiveness should be maintained on summer range. Cover and forage relationships will emphasize spacing between project units, maintenance of at least 30 percent cover well distributed over the project area; road densities; water availability; livestock grazing on mule deer forage, and other specific habitat needs identified at the project level through the interdisciplinary process

a. Forage areas created through timber harvest should create openings no greater than 600 feet from an edge of cover.

b Where shrubs are part of the plant community within summer range, 10 to 20 percent of each project unit should be retained in shrubs to naturally restock the area. Where shrubs are part of the plant community within transition range, 30 to 40 percent of each project unit should be retained in shrubs to naturally restock the area

c. The cover component for project areas shall be a mixture of thermal, hiding, and fawning cover. Site specific factors will dictate the types of cover to be retained on any given project area. Thermal cover stands should range from 5 to 20 acres. Hiding cover can be emphasized in areas where hunting pressure is high. On acres treated with uneven-aged management, approximately 15 percent of the area in residual thickets of saplings, pole timber and small sawtimber will be left unthinned and managed as mule deer habitat (see Timber Standards and Guidelines).

d. Fawning cover should be emphasized in riparian areas where a high density of shrubs, lush forage and running water are available during fawning season (month of June).

3. Habitat improvement may include any of the following techniques after evaluation of effects on habitat and nontarget species is completed:

- seeding or planting desirable plants, including trees
- fertilization
- prescribed burning
- mechanical ground and vegetative disturbance
- treatment of undesirable plants
- water developments

4. Special big game habitats such as mineral licks or fawning cover should be protected as much as possible. Use of these special habitats for cover units in timber sale or other project planning would be a feasible way to protect special big game habitats.

5. Roads open to motorized vehicle traffic will be managed at a level of 2.5 miles or less per square mile of summer range. Where possible, road density should be dropped to 1 mile or less of open road per square mile of summer/transition range.

6. Timber harvesting will be delayed on 500 acres of even-aged managed stands per district in the first four decades so the cover objective can be met. This should be accomplished by delaying precommercial thinnings in two-storied stands, following overstory removal. Other criteria for choosing these stands include:

a. Areas adjacent to the above stands have already been thinned and will not provide cover for the next four decades

7. About 20 percent of the roaded area on the Forest will be placed under a big game hunting season road closure program with the ODF&W. This would allow recreational hunting to occur in an area of limited access The selection of these areas will go through the public involvement process.

Rocky Mountain Elk

1. Special elk habitats such as mineral licks, calving areas and elk wallows should be protected as much as possible. Use of these special habitats for cover units in timber sale or other project planning would be a feasible way to protect special elk habitats.

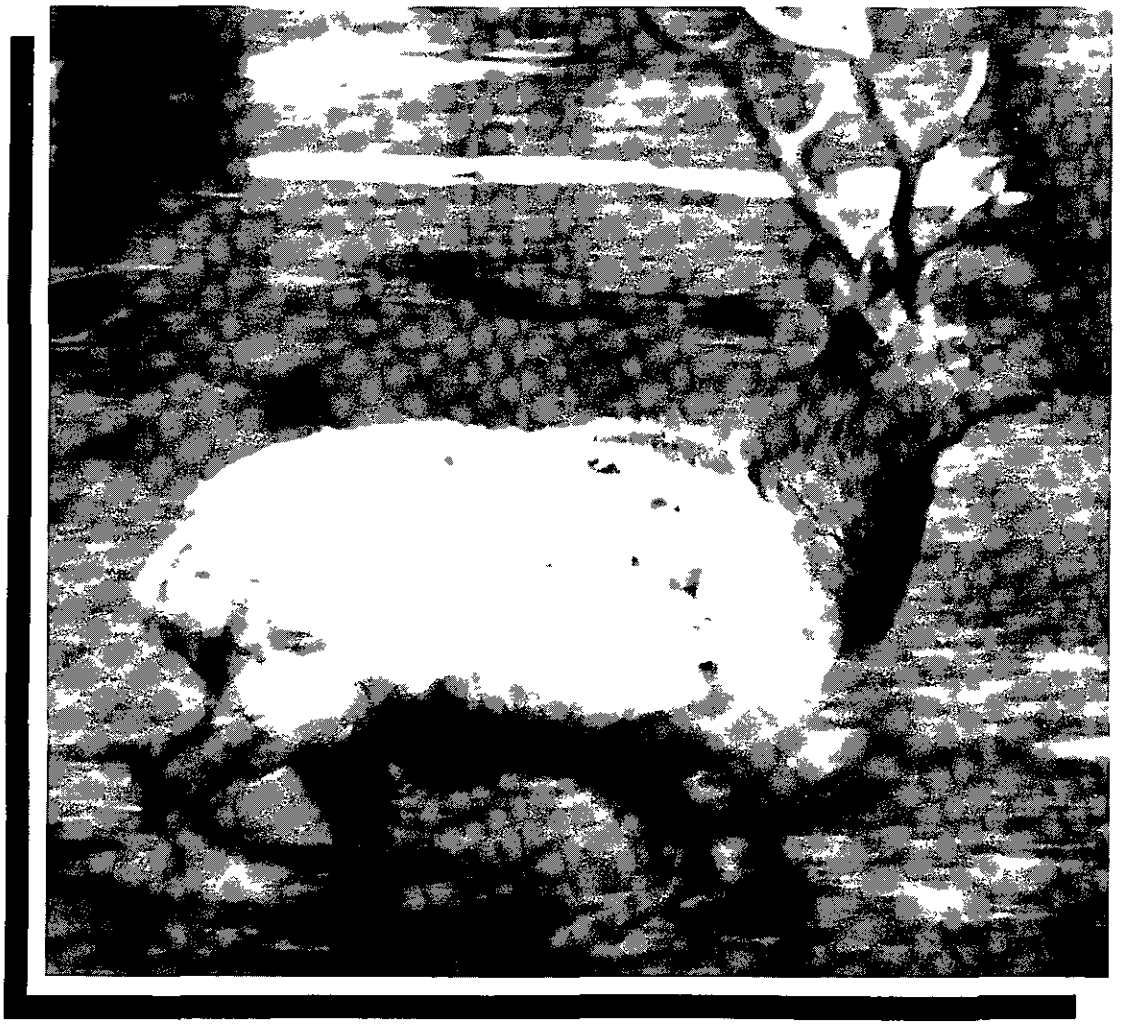
2. Where possible, road density should be reduced to one mile of open road per square mile of summer range

Other Special Habitats

1 Rio Grande turkey - Prescribed burning or natural fuels reduction should be restricted in known nesting areas from March 15 to May 15.

2. Cliffs/caves/talus - Cliffs/caves/talus habitats in forested stands should be protected by management of the shade provided by nearby trees At least 80 percent of the shade should be retained through use of buffer strips, leave trees, or other methods

3 Beaver dams should be protected and encouraged where their construction would benefit riparian area objectives



RECREATIONAL MANAGEMENT

Dispersed Areas

1. Roads, landings, slash, and debris may be strongly dominant from within yet should remain subordinate from distant sensitive roads and highways.

2. There should be little on-site control of users except for some gated and/or closed roads.

Transportation

1. Manage access to dispersed sites.

   Operational Consideration: Where desirable roads should offer long drives, some with varying levels of difficulty for Off-Road Vehicles (ORV's).

2. Roads should not be paved for recreation purposes in dispersed sites.

3. Evaluate the potential effects of vehicle use off roads and, on the basis of both the mandatory and discretionary criteria set out in FSM 2355.12, classify all areas and trails of National Forest System lands as to whether or not off-road vehicle use may be permitted.

4. All areas and trails shall be classified as open, closed, or restricted to off-road vehicle use.

Trail System

1. Provide for use of the existing trail system that serves the identifiable needs of recreationists and satisfies demand levels in a condition that protects the resource and meets minimum requirements for health and safety.

2. Provide for range of trail difficulty levels and user types as identified in the Fremont National Forest Trails Management Plan. Plan for the development of these trail opportunities in conjunction with other Forest management activities.

3. Provide sufficient maintenance to protect soil and water resources at their minimum level

4. *National Recreation Trails*: Trails designated as National Recreation Trails shall be maintained as such for a period of ten years, with the date of designation made by the Secretary of Agriculture.

5. Trail management plans will be prepared by each district two years after Plan implementation.

6. All trails will have written objectives for development and maintenance.

7. All trails will be entered into the RIM Trails Information System.

   Operational Consideration: Although the primary purpose of the trail shall be for outdoor recreation use, other uses such as powerlines, livestock driveways, and logging road operations that will not conflict with the nature and purpose of the trail may be permitted (Reference FSM 2353).

Dispersed Recreation Sites

1. The Forest's dispersed inventory (Code-a-Site) will be updated annually to monitor frequency of use and to evaluate existing and potential sites.

Operational Considerations: Any trees scheduled for removal within the immediate foregrounds of campsites should be felled so they can be "snaked" out of the foreground from the outside.

Keep equipment out of the foreground areas to the extent practicable

2. Well-established, high use dispersed sites will be managed for a visual objective of partial retention.

3. Use timber harvesting techniques such as directional falling to minimize disturbance to immediate foreground areas

4 Slash or logging debris shall not exceed three tons per acre in the immediate foreground area. Protect sites from broadcast burning.

Operational Consideration· Prescribed burning is acceptable only to reduce fuel loading or buildup

5. Develop information and education materials, (such as maps) concerning dispersed sites for Roaded Modified users.

Operational Consideration Personal contact by Forest personnel for the purposes of time and safety management is encouraged

6 The development of range facilities adjacent to heavily used dispersed recreation sites will be discouraged.

Developed Recreation

1 Developed sites will be managed for the enjoyment of the recreating public while protecting the associated resources.

Operational Considerations· Sites will be inspected annually for health, safety, and sanitation, and deficiencies will be corrected prior to opening Maintenance of RIM (Recreation Information System) will be accomplished according to the schedule found in FSH 2309 11. Sites with resource damage will be closed to public use until the deficiencies are corrected.

Interpretation/Information Services Program

1. The Forest Interpretation Plan will be completed within three years by the Forest Interpretive Specialist in coordination with the Districts.

SCENIC MANAGEMENT

General

1. Maximum modification visual quality has been interpreted to be in compliance with all applicable legal requirements for management of the visual resource.

2. Maximum modification provides that vegetation and land form alterations resulting from management activities may dominate the characteristic landscape. However, when viewed as background, their visual characteristics must be those of natural occurrences within the surrounding areas or character type. When viewed as foreground or middleground, management treatments may not appear to completely borrow from naturally established form, line, color, or texture. Alterations may also be out of scale or contain detail which is incongruent with natural occurrences.

   - The introduction of structures, roads, slash, and root wads must remain visually subordinate to the proposed composition when viewed as background.

   - For this level of management, the reduction in visual contrast of activities and treatments with their surroundings should be accomplished within five years.

3. A created opening exists until the regenerated stand is twenty feet in height for retention, partial retention, and modification areas.

4. Where feasible and practical, the Forest will make a concerted effort to integrate the Forest Service Visual Management System with adjacent state, private, or BLM land holdings.

5. The following guidelines will ensure the visual integrity of landscapes in the foreground viewing zones of certain Forest roads and trails:

   - take extra care in the clean-up of logging slash, root wads, and logging debris;

   - smooth earth over skid and tire tracks;

   - paint or mark trees on side of the tree facing away from the road;

   - adjust cutting boundaries to blend into the natural indigenous landscape;

   - uneven-aged management techniques will be encouraged in these areas.

   The following Forest roads and trails shall abide by these guidelines:

   FS Road 3462 (27 to Forest boundary north of Beatty)
   FS Road 2901 (Highway 31 to 2901033)
   FS Road 3360 (29 to Slide Lake)
   FS Road 3411 (Gold Creek to 28)
   FS Road 3315 (28 to Forest boundary southwest of Paisley)
   FS Road 3915 (Highway 140 to Willow Creek Campground)
   Fremont National Recreation Trail
   Crane Mountain National Recreation Trail

FACILITIES MANAGEMENT

1. Buildings, utility systems, and related facilities will be planned, developed, maintained, and operated for safe use, support of the Forest resource programs, and cost effectiveness.

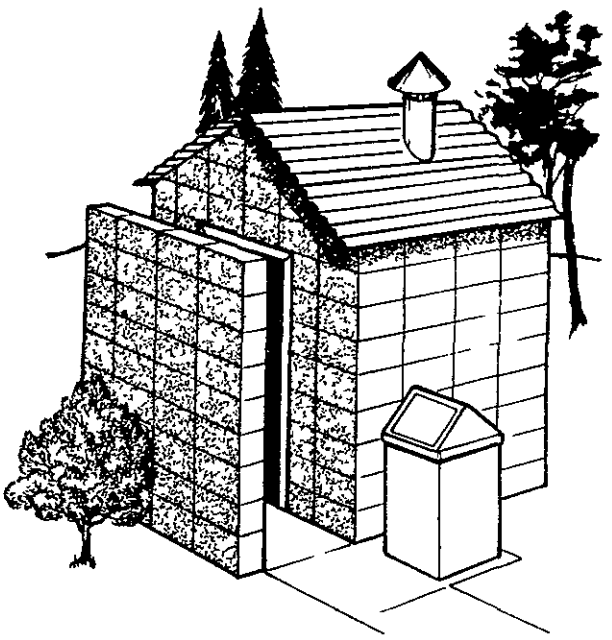
2. The construction of new buildings or additions to existing buildings and utility systems will comply with the approved site development plan.

3. Provide and manage administrative facilities sufficient to accomplish land and resource management and protection objectives of the Forest. Prepare administrative site master plans for all Forest administrative sites. Long-term development and maintenance costs will be a consideration in facilities planning.

4. Protection, stabilization, preservation, rehabilitation, restoration, and reconstruction of buildings and structures that are on or have been nominated to the National Register of Historic Places will follow the Secretary of the Interior's standards for historic preservation projects

5 Administrative facilities management and maintenance should be guided by the following priorities:

   a. public and employee safety and health
   b. prevention of site and exterior building deterioration
   c. prevention of building interior deterioration
   d. energy conservation
   e. minor improvements



TRANSPORTATION MANAGEMENT

General

1. Road density will be the most economical system necessary to meet land management objectives. Overall density for the roaded area of the Forest will not exceed 2.5 miles per square mile.

2. The Forest Transportation System will be planned to serve long-term multiple resource needs using area plans that integrate other resource, timber, and transportation requirements. The system will be the minimum necessary to provide access for the activities authorized under management area direction.

3. Road design standards will be based on the following criteria:

   a. resource management objectives,
   b. environmental constraints,
   c. safety,
   d. physical environmental factors,
   e. traffic requirements,
   f. traffic service levels,
   g. vehicle characteristics,
   h. road users,
   i. economics.

   Arterial and collector roads will be designed for traffic service levels A, B, or C. Local roads will be designed for traffic service levels C or D.

4. All system roads will be operated and maintained to protect the resources, perpetuate the intended road management objective, and promote safety.

5. Management of roads will be in accordance with the Highway Safety Act on roads intended to be used by the public for travel with normal passenger cars

6. Traffic management may be used to control access due to road structural limitations, safety considerations, road standards, limitations imposed by resource management, or resource management objectives, such as exclusion from winter range or providing a quality hunt.

7. Signing necessary for traffic information and user control should be minimal and compatible with the direction for each management prescription.

8. Road entrance information communicating road condition and purpose (mixed traffic, passenger car, high clearance, logging use, etc.) to Forest visitors will be provided for each Forest development road. Emphasis will be on providing this information at the road entrance.

9. Short-term, nonpost-sale (temporary) roads will be closed within one year of timber purchaser completion of contractual requirements for portion of the timber sale served by the road.

10. As appropriate, long-term, intermittent roads will be closed at the termination of sale or post sale activities. These roads will be maintained at maintenance level 1 until needed for re-entry.

11. Decisions to eliminate or prohibit vehicle use on roads will be based on the following criteria:

    a. safety of expected road users;
    b. need to protect soil and water;

c. need to maintain or improve fish and wildlife habitat;
d. need to provide planned recreation experience opportunities,
e expected use and needs,
f maintenance costs

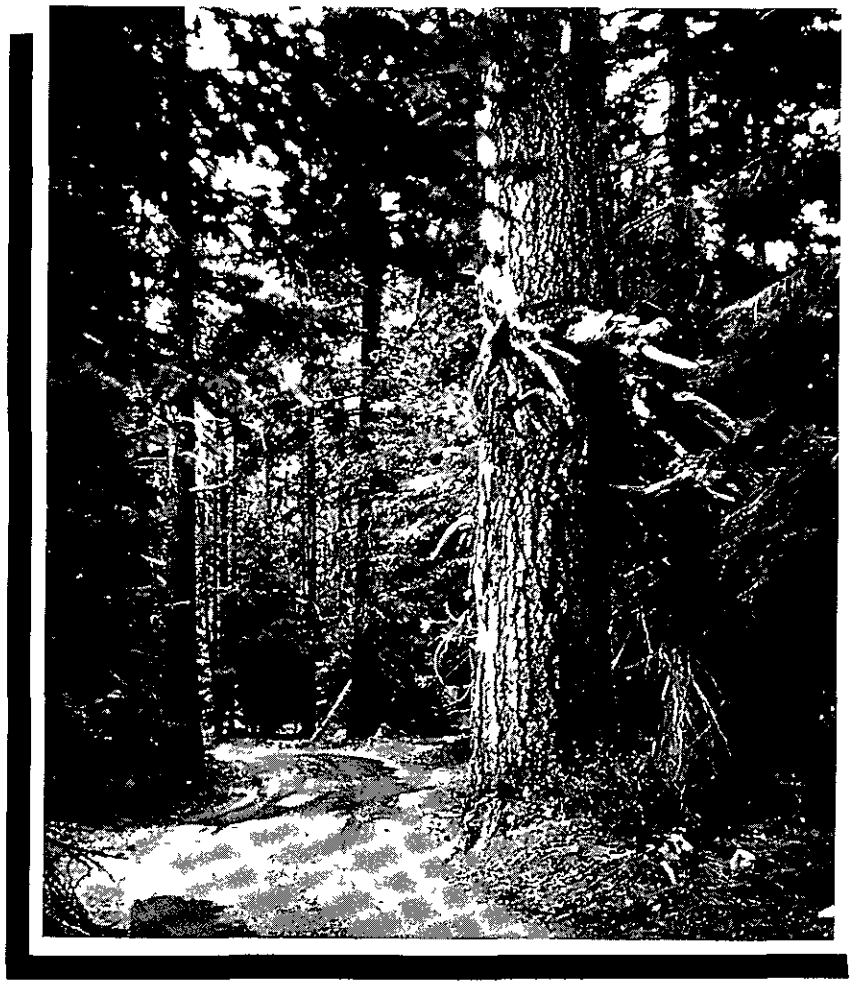
12. Road and traffic management will be coordinated with county, state, and other federal agencies as well as adjacent Forests.

13. Unless closed by other means, a road is considered "closed" if there is very little or no use on it and any use is not counter to resource management objectives.

14. Generally, local roads should be reconstructed, operated, and maintained to encourage highway vehicle access to developed recreation sites.

15 When vandalism is a problem, the Prohibit Traffic Scheme can be applied to seasonally closed sites When vandalism is not a problem, road use may be seasonally discouraged.

16 Access to undeveloped sites where there is a historical precedent of use will not be blocked without additional analysis



FIRE MANAGEMENT

General

1. A fire protection and fire use program that is cost efficient and responsive to land and resource management goals and objectives will be provided and executed.

2. All wildfire will receive an appropriate suppression response utilizing a strategy of confine, contain, or control.

3. Wildfire that threatens life, property, public safety, or improvements will receive aggressive suppression action using a control strategy.

4. All high investment timber areas, such as seed orchards and evaluation plantations will be protected from fire by taking aggressive initial attack and by considering their location in subsequent line location and attack strategies.

5. Prescribed fire will be considered for use in meeting management objectives in areas where ecological studies show that fire has played a significant role in ecosystem development.

DESIRED FUTURE CONDITION OF THE FOREST

The condition of the Fremont National Forest will change if this Forest Plan is implemented. However, it is likely to be several decades before the total effects of management, directed by this Forest Plan, are evident over the entire Forest This section summarizes the changes that can be expected to occur in the short term, 10 years, and over the long term, 50 years and beyond.

THE FOREST IN TEN YEARS

Overall, the Forest will show some effects of management by the end of the first decade. However the general character and condition should be retained Subtle changes in the ownership pattern will result from efforts to consolidate National Forest System lands. The Forest will still possess an abundance of large diameter, old-growth stands of trees Changes in diversity will be relatively subtle and, for the most part, relatively unnoticeable All or major portions of five existing roadless acres will continue to be roadless The remaining roadless areas will have been entered with roads for timber sales

The principal access roads (arterials and collectors) will be readily identifiable Generally, they will have paved or gravel surfaces and look suitable for passenger car use. Signs will assist the traveler in finding his/her destination. Other roads will appear less inviting for use. Looking rough or primitive, most will be available for use by the more experienced traveler Signing or gates will close some roads

Permitted livestock grazing on the Forest will remain at current levels Range improvements will increase in an attempt to manage cattle grazing more effectively, especially in riparian areas Change on the range will result in using livestock as management tools to manipulate vegetation and enhance other resources such as, increased palatability of forage for wildlife, plantation release, and noxious weed control

There will be a decrease in old-growth habitats after ten years This decrease will be the result of timber harvesting activities. The number of deer should increase as the Forest manages habitat to meet the Oregon Department of Fish and Wildlife herd objectives

Recreational opportunities will be relatively unchanged although some increase in trail and campground development will be evident. The range of recreation opportunities currently available will still be available after the first decade.

Four areas of the Forest will receive special management considerations. These include the existing 4,700-acre Dog Lake Special Management Area, the Slide Mountain Area (geologic), the South Fork of the Sprague River, and the Quamasia Quamash Botanical Area

The Sycan River corridor from the headwaters downstream to the Forest boundary at Coyote Bucket would be managed as a Scenic river in accordance with the Wild and Scenic Rivers Act

Four Research Natural Areas could be in existence on the Forest. This is based on the assumption that the recommendation for classification is accepted and acted upon. The areas include the Goodlow Area (presently established), Deadhorse Rim-Whitebark Pine area, Silver Lake Exclosure area, and Vee Pasture area.

A fifth area, in the vicinity of Augur Creek, may also be recommended for RNA classification The actual decision will be made three years after Plan implementation

Several major changes will likely occur during this period that will change the condition of the Forest significantly in the impacted areas. The first change will take place lodgepole pine stands, particularly on the Silver Lake and Paisley Ranger Districts. In these areas, the harvest of the dead and dying trees will have created marked changes in the local landscapes. Clearcuts and additional roads will replace much of what are now large areas of unbroken live or dead tree canopy.

The initial effects of uneven-aged managed stands and delayed final harvest stands will be evident. Generally, sale areas will be large. Impacted stands will begin to show a variety of age classes, including some old growth. These effects will be seen on approximately 140,000 acres of pine and pine-associated lands.

A second noticeable change will be in the appearance and condition of the existing roadless areas. Roads will be constructed and timber will be harvested in portions of the Antler, Coleman Rim, Deadhorse Rim, Crane Mountain, and Hanan Trail Roadless Areas.

Another change which could be significant is in the Quartz Mountain area. It is very possible that an open pit gold mine could materialize in the area, causing significant changes to the existing landscape. However, it is anticipated that this change will likely occur independent of the implementation of this Plan.

Noticeable improvement in some degraded riparian zones will be evident at the end of the first decade. Willows, alder, and other deciduous species will give those areas a more brushy look. Consequently, fish habitat will be improved.

THE FOREST IN FIFTY YEARS

This Forest Plan will be reviewed every five years and normally revised every 10-15 years. The following section describes the Forest as it is expected to appear in 50 years and beyond.

In 50 years, the Forest would undergo major changes if the direction provided by the Plan continued for that period of time. The landownership pattern should be noticeably improved. Roadless areas that were entered in the first decade would show the effects of being fully roaded, a result of subsequent timber harvest activities.

Most of the principal road system (arterials and collectors) would be completed and have paved or improved surfaces. A few may have State Highway or County Road designations. Most other roads would either be closed or visually inviting only to seasoned forest travelers in high clearance vehicles

Permitted livestock grazing use on the Forest would continue at near current levels. Additional improvements to facilitate the management of cattle grazing, especially in riparian areas, would be evident. Change in the Range will result in using livestock as management tools to manipulate vegetation and enhance other resources such as, increased palatability of forage for wildlife, plantation release, and noxious weed control.

Perhaps the most notable change would be to the timber resources. Much of the Forest would present a "managed" look. The total effect of uneven-aged management would be evident. Impacted stands would show a variety of age classes ranging from immature, small trees to mature, large diameter (20") trees. Road systems to facilitate managing approximately 200,000 acres of uneven-aged stands would be in place. Even with increased road use (entry every 20 years), negative effects should be minimal. Most of the stands scheduled for delayed final harvest would have been clearcut and regenerated. On lands scheduled for clearcutting, the regeneration harvesting would start after 95 percent of culmination of mean annual increment (CMAI) was reached. Genetic stock would be used for any planting. There

would be less old-growth timber, but because of uneven-aged management, it would remain interspersed Old-growth habitat containing relatively large-diameter trees would exist in additional MR areas in the Klamath Basin, areas allocated as SMU/RIP zones, or dispersed recreation areas. Over the entire Forest, much of the old-growth habitat areas would occur in a grid pattern, with managed timber stands separating the areas.

Most of the insect-infested lodgepole pine stands that were regenerated in the first two decades would be between 30 and 50 years old.

Attractive, natural-appearing Forest settings would be maintained along 300 miles of designated travel routes. In timbered areas along these routes, uneven-aged management emphasizing large trees would be evident. On some of the less traveled routes, evidence of timber harvesting and other management activities would be visible. In nontimbered areas, the Forest would appear much as it does today.

Six roadless areas, totaling 43,789 acres, would remain undeveloped, affording recreationists some opportunities for backcountry recreation in relatively isolated and natural settings. These areas are Antler, Brattain Butte, Buck Creek, Crane Mountain, Drake-McDowell and Mount Bidwell They would be managed to provide semiprimitive recreational opportunities. Another 14,337 acres would continue to be managed to provide semiprimitive recreation opportunities This allocation would include the Winter Rim, north Brattain Butte, and south Brattain Butte areas.

All existing developed recreation sites would be retained, as would the Gearhart Mountain Wilderness Wilderness management would vary in intensity.

Five areas of the Forest would receive special management considerations. These include the existing 4,700-acre Dog Lake Special Management Area, the Slide Mountain Area (geologic), the South Fork of the Sprague River, the Quamasia Quamash Botanical Area, and the Augur Creek Reserve (while being evaluated for RNA classification).

The Sycan River corridor from the headwaters downstream to the Forest boundary at Coyote Bucket would be managed as a Scenic river in accordance with the Wild and Scenic Rivers Act.

Management efforts to improve wildlife habitat conditions would be in full implementation phase through cooperative efforts with the ODF&W. As a result, winter and summer ranges would carry the mule deer populations to meet the ODF&W herd management objectives for the Forest. Forest management practices would provide a high level of habitat effectiveness on winter ranges. Restricting thinning in some timber stands and maintaining thermal cover in older stands would be used to achieve habitat effectiveness. Annual improvement on about 1,000 acres of big game summer range would be implemented as directed by this Plan. This would mostly involve creation of forage through timber harvesting. Winter ranges would also be improved at a rate of 500 acres per year.

The addition of high-clearance roads into formerly unroaded areas would increase access for hunters, woodcutters, and others with high-clearance vehicles. However, total and overall road density on the Forest's roaded lands would be reduced to less than 2.5 miles of road per square mile of land. To accomplish this, some less-traveled roads would be closed. As a result, there would be less harassment of big game animals and reduced watershed impacts in areas of closed roads. Additionally, a majority of the roads on about 20 percent of the Forest would be temporarily closed during big game hunting seasons.

There would be more old-growth habitat than that called for by management requirements (MR's). Old growth would be found in wilderness, roadless areas, and special wildlife areas. Additional

old-growth plots totaling about 2,940 acres would be allocated to provide habitat for old-growth-dependent species. Some of the plots originally identified to fulfill MR's would be enlarged by a combined total of 5,710 acres. However, the total acreage allocated to old-growth management would be less than what is presently existing on the Forest. Old growth would not be present in general forest programmed for timber harvest. Consequently, animal species composition would change from a predominance of oldgrowth-dependent species to those species preferring earlier successional stages.

On those lands scheduled for intense timber harvest, dead trees would be retained to provide habitat for 40 percent of the potential populations of cavity-nesting species. Replacement trees would also be identified to provide this type of habitat through a full rotation. On most lands not scheduled for timber management, dead tree habitat would be managed to support 100 percent of the potential populations of dependent species. In addition to meeting the Forest's MR's for threatened and endangered species, this Plan would allocate three additional sites to management for bald eagle habitat and reintroduce the peregrine falcon to the Forest. Bighorn sheep and river otters would also be present as a result of reintroduction efforts.

Fisheries habitat would be improved considerably over present conditions. Through a multi-agency cooperative effort, the objectives of the Oregon Department of Fish and Wildlife would either be fully met or in the process of being achieved. If met, an increase of up to 75 percent in catchable trout could be realized. Management would emphasize the restoration, maintenance, and/or improvement of habitat quality on major fish-bearing streams, as well as the creation of several small reservoirs.

Riparian habitat conditions would be significantly improved with noted improvement in overall water quality. Evidence of eroded streambanks would be notably reduced from present levels. Minimum streamflows would be maintained on selected streams. Livestock use of these areas would be reduced. Additional improvements would be apparent in presently active eroding gullies. These areas would be restored to dry or wet meadow conditions. Many would provide water flow as a result of improvement measures.

Four established Research Natural Areas would exist on the Forest. They include the Goodlow Area (presently established), Deadhorse Rim-Whitebark Pine Area, Silver Lake Exclosure Area, and Vee Pasture Area.

MANAGEMENT AREAS

Management areas are subject to management prescriptions and accompanying standards and guidelines. A management area is the unit of land to which a management prescription is applied. In essence, it is a unit of land to be managed to achieve a desired condition in the future. For each management area on the Forest, one or more management prescriptions may be applied, each of which would achieve a different future condition.

The acres in the different management areas for this Plan are presented in Table 27. The Management Areas are shown on the Forest Plan map and the map of Common Management Areas.

Brief descriptions of each of the management areas follow. They are described here to aid in the understanding of this Plan.

MANAGEMENT AREA 1

Winter ranges for mule deer will be managed to produce habitat capable of supporting the population objectives identified for this preferred alternative These ranges occur at lower elevations along the forest-desert interface, and are often nonforested. Where timber stands do occur, they are critical in providing thermal cover to deer and elk during the harsh winter months.

Woodfiber production and livestock grazing will also occur in this management area. Timber and range management activities will be designed to complement big game habitat objectives. On timbered winter range, vegetative cover and other components of mule deer habitat will be manipulated to maintain at least 80 percent habitat effectiveness.

Road systems will be maintained for multiple-use purposes, but at reduced densities Seasonal closures will occur on certain roads in the Fort Rock area to prevent disturbance of winter deer herd concentrations, and one similar closure in another area will be established

MANAGEMENT AREA 2

Habitats for the northern bald eagle and the American peregrine falcon (the Forest's two threatened and endangered species) will be managed to increase populations of these species. Bald eagles presently nest on the Forest. The Forest is currently participating, as required by the Threatened & Endangered Species Act, in an interagency effort to reintroduce the peregrine falcon, formerly a rare migrant, as a nesting species

Habitat management will ensure numerous mature/overmature trees for bald eagle nesting and roosting sites; retention of desirable nesting characteristics on the cliff faces preferred by the peregrine falcon; abundance of food sources for both species, and minimal human disturbance.

Planned timber harvesting in bald eagle habitat will be restricted but not eliminated. Timber harvests will be done by selective cutting and will be used only to improve bald eagle habitat Both existing and potential nesting sites are included in this management area.

MANAGEMENT AREA 3

Selected old-growth habitat will be managed to increase populations of oldgrowth-dependent species. As in Management Area 14 (designed to meet management requirements), the sites selected for management include stands of old-growth ponderosa pine, lodgepole pine, and mixed conifers (primarily ponderosa pine and white fir). Goshawks, pine martens, pileated woodpeckers, and three-toed woodpeckers are the representative indicator species for old-growth habitat on the Fremont National Forest. This management area both expands the average size of old-growth habitat plots provided for in Management Area 14, and increases the overall number of plots allocated to old-growth habitat.

Additional and enlarged old-growth habitat plots will receive the same management as the original MR core area from which they were developed. Management of MR core areas depends on the tree species they contain (see discussion under Management Area 14) Ponderosa pine and pine-associated stands will be "dedicated" to an old-growth condition. Lodgepole pine sites will be managed under a two-tiered harvest rotation system. The identification of specific plot locations will be mapped and retained at Fremont National Forest Headquarters. Estimated plot locations are shown on the map accompanying this Forest Plan.

MANAGEMENT AREA 4

The history of commercial mining activities on the Forest is best documented for mercury and uranium production in the 1950's and 1960's. Reportedly, some gold was also mined in the Brattain Butte area near the turn of the century. Exploratory drilling for oil and gas have been undertaken on private lands both within and outside the Forest boundary to depths of 12,000-13,000 feet, but efforts were reportedly abandoned as these depths failed to penetrate volcanic deposits. Similarly, geothermal test drilling in the Forest was inconclusive as to the presence of viable geothermal resources in the selected areas.

Some potential for oil and gas on 92 percent of the Forest is a "given." Oil and gas potential will be included as a resource in Management Area 4 discussions (including those on acreages) but will not be displayed in tables or graphs. Management Area 4 displays will address: areas where surface geologic features indicate potential for locatable minerals, hardrock minerals on acquired lands which fall under mineral leasing laws, and areas with suspected geothermal potential.

Management Area 4 is not a distinct land allocation, as it overlaps both within itself (locatable minerals and leaseable minerals) and with other management areas. Furthermore, very few reserves of mineral or energy resources have been substantiated on the Forest. Current market and environmental factors render mercury and uranium, substantiated mineral reserves, uneconomical to mine.

Forest Service authority over mining claims extends only to management of the surface resources on the claims. This management will emphasize prevention and/or mitigation of damage to surface resources, including water, cultural resources, improvements, air quality, habitats for threatened and/or endangered wildlife, and for sensitive plant species. Within areas allocated to semiprimitive nonmotorized, semiprimitive motorized, or scenic viewshed management, operators will be required to restore the natural appearance of sites affected by their mining activities. Stipulations for mitigating damage to surface resources must be specified on the Plan of Operations approved by the Forest Service All mitigation costs are borne by the prospector or miner.

MANAGEMENT AREA 5

This management area emphasizes commercial timber production and forage for domestic livestock. Management activities will follow standards and guidelines designed to produce timber and livestock

forage while meeting environmental requirements for soil, water quality, and wildlife habitats. A range of management strategies and intensities can be used, depending on stand conditions and management objectives For example, in order to respond to the mountain pine beetle epidemic, lodgepole pine stands may be converted to managed conditions on an accelerated schedule.

Old-growth stands predominate on the forested lands within this management area Timber management will emphasize converting these unmanaged stands to managed conditions The objective of this conversion is to create a variety of age classes, with all stands achieving their optimum growth potential. Stand treatments will include controlling stocking levels and species mix; improving growth rates; protecting stands from insects, disease, and other damage; and regenerating old stands no longer showing optimum growth rates.

Management for livestock grazing will be emphasized on nonforested lands. Structural improvements such as fences and water developments may be built to meet range management objectives Prescribed burning or seeding may be used to improve forage. Transitory forage growing in openings created by timber management will also be managed for livestock grazing.

MANAGEMENT AREA 6

Travel routes crossing the Forest pass through many different landscapes, varying from dense old-growth forest and stream-fed meadows to sagebrush flats and distant rimrock bluffs. The Forest's more frequently used, visually sensitive travel corridors will be managed to maintain or enhance the natural appearance of their surroundings

Some of the natural settings within these scenic view corridors may display evidence of management activity. However, to the casual observer this evidence will be unnoticeable or subordinate to the landscape. Visual quality objectives (VQO's) that may be applied to this management area include Retention, Partial Retention, and Middleground Partial Retention Under these VQO's, limited timber harvesting and livestock grazing will occur, using a three-stage shelterwood system (uneven-age management). Timber harvests planned within scenic view corridors must be compatible with visual quality objectives.

MANAGEMENT AREA 7

The selected sites will be managed to meet special recreation, wildlife habitat, and/or botanical objectives. Timber harvesting will be limited. Harvest activities adjacent to roads, trails, water use areas, and developed sites shall conform, at a minimum, to the visual quality objective of Partial Retention. Development will be limited to items associated with larger sites. access roads, scenic overlooks, trails, trail shelters, campgrounds, picnic areas, boat ramps, and sanitary facilities.

Dog Lake Special Management Area (proposed)
This site includes Dog Lake and adjacent acreage, much of which supports groves of ponderosa pine, white fir, and aspen. This scenic natural lake provides habitat for trout and bass, and for numerous waterfowl and raptors

Slide Mountain Geologic Management Area (proposed)
Slide Mountain lies at the southeastern end of Winter Rim, and is the remnant of a dome-shaped volcano Several thousand years ago, the volcano experienced a massive slide of the entire northern face, exposing its interior structure. The enormous debris slope faces north, providing southbound travelers on Highway

31 with an excellent view of this geologic phenomenon. Two small lakes of the type typically associated with large slides support cold-water fisheries. Slide Mountain summit offers an excellent scenic overview of the lakes, debris slope, Winter and Abert Rims, Summer Lake, and the Diablo Mountains.

South Fork, Sprague River Special Management Area (proposed)
This two-mile segment of the South Fork of the Sprague River lies in a steep basalt canyon. Old-growth ponderosa pine, white fir, and other conifers comprise the dominant vegetation. No developed sites occur within the 550 acres of the river canyon. Slope steepness, soil types, and other resource considerations limit the feasibility of timber management opportunities.

Augur Creek Reserve Area
This area comprises 655 acres and lies within the southeast corner of the former Deadhorse Rim Roadless Area. Research has identified it as an area that meets a priority vegetative community cell need The cell is recognized as a ponderosa pine-white fir/snowberry or white fir/snowberry association. This Plan calls for the area to be held in reserve for three years During this time, attempts will be made to locate a comparable cell in a different location on the Forest. At the end of the three-year time period, the recommendation that the area be designated as a RNA will be reevaluated.

Quamasia Quamash Special Management Area (Botanical)
This area, originally established and approved in 1939, will continue to be managed to maintain a colony of common camas (Quamasia quamash or Camassia quamash), considered at the time of establishment as a vanishing species. Through the years, the original markers have deteriorated or been obliterated by livestock. The area will be resurveyed, reinventoried, signed, and posted A monitoring plan will be developed. Currently, livestock grazing is a compatible use.

MANAGEMENT AREA 8

The national Research Natural Area Program reserves typical or distinctive examples of natural ecosystems for scientific and educational purposes. Lands designated or proposed for designation as Research Natural Areas (RNA's) are managed to preserve or restore natural processes, features, and biological communities.

Only authorized scientific research projects and educational use are allowed. Management practices necessary to preserve the vegetation for which the RNA was created may be allowed. These may include. grazing, control of excessive animal populations, or prescribed burning. Management practices must be approved by the Station Director, with concurrence of the Forest Supervisor.
Under this Forest Plan, the sites designated or proposed as RNA's include:

- Goodlow Mountain RNA (existing) - 1,260 acres representing the transition from sagebrush steppe communities through ponderosa pine savannah to ponderosa pine/white fir forest.

- Deadhorse Rim Whitebark Pine RNA (proposed) - 841 acres containing primarily whitebark pine/lodgepole pine communities.

- Silver Lake Exclosure RNA (proposed) - 300 acres of transition communities with varying plant associations Major species present include sagebrushes, bunch and wheat grass, Idaho fescue, bitterbrush, western juniper, and ponderosa pine.

- Vee Pasture RNA (proposed) - 620 acres of grasslands. Dominant plant communities include western juniper/low sage, low sage/blue grass/fescue, and low sage/one-spike oatgrass/junegrass.

MANAGEMENT AREA 9

These lands provide opportunities for users to enjoy hiking, camping, hunting, and other recreational pastimes in relatively undisturbed natural settings. Vegetation, topography, and geology vary widely.

This management area provides two dispersed recreation management intensities:

- *Semiprimitive Nonmotorized*. Provides recreationists with moderate opportunities for solitude and isolation from the sights and sounds of other people, independence, enjoyment of nature, and practice of outdoor skills. These areas are generally 1/2 mile from all roads or trails with motorized use (and can include the existence of primitive roads and trails if closed to motorized use). They are generally 2,500 acres or larger. They may contain subtle evidence of human activity, but such activity would not draw the attention of an observer wandering through the area No timber harvesting will be permitted

- *Semiprimitive Motorized*. Provides recreationists with moderate opportunities for solitude and isolation from the sights and sounds of other people, enjoyment of nature, and practice of outdoor skills. Motorized equipment can be used in the area. These areas are generally 1/2 mile away from high-standard access roads passable by low-clearance vehicles Trails or primitive roads are designed to accommodate motorized use such as high clearance 4-wheel drive vehicles but to discourage 2-wheel drive and other low-clearance vehicles. The areas are generally 2,500 acres or larger and may contain evidence of human activity that may draw the attention of the observer wandering through the area. No timber harvesting will be permitted

MANAGEMENT AREA 10

The Gearhart Mountain Wilderness (22,823 acres) will be managed, as mandated by the Wilderness Act of 1964, to preserve natural conditions and to retain an environment where the effects of human activity are substantially unnoticeable, where outstanding opportunities for solitude or primitive recreation can be provided, and where natural ecological processes can continue with minimum interference.

The Wilderness contains diverse plant communities, wildlife species, and landforms. Notable landforms include Gearhart Mountain and the Palisades, a group of picturesque rock formations.

Use will be managed to provide Wilderness visitors with moderate to high degrees of solitude and primitive recreation opportunities Four management intensity levels may be used (see descriptions, Appendix 5) to control impacts from human use. Timber management activities are prohibited; however, domestic livestock grazing is permitted, as specified by the Wilderness Act of 1964.

MANAGEMENT AREA 11

This management area includes the Sycan, North Fork of the Sprague, and Chewaucan river corridors recommended for inclusion in the National Wild and Scenic Rivers system. This section will be managed to preserve natural characteristics, pending legislative action on the Forest Service recommendation. Descriptions of the scenic and recreational values of the Sycan River appear in Chapter III and Appendix F of the accompanying EIS.

The sections of river corridor recommended for Scenic River designations are largely undeveloped and free of any impoundments, although they are accessible by road in a few spots. However, no new roads will be built within these segments of the river corridor.

Management will focus on preserving the undeveloped character and scenic quality of the river corridor, maintaining or improving water quality, improving fish and wildlife habitats, and providing recreation opportunities dependent on scenic, undeveloped river environments.

Timber harvesting will not be permitted in this management area unless specified in completed management plans. Domestic livestock grazing will be permitted.

MANAGEMENT AREA 12

Lands in this management area consist of special use sites (such as microwave stations, work camps, and substations), as well as utility and transportation corridors for electrical transmission lines, roads, and railroads. The physical and biological characteristics of these lands vary widely. The primary objective of Management Area 12 is to provide for the safe and efficient operation of these facilities, while minimizing environmental impacts and encouraging compatible resource uses.

Special use sites will be managed to concentrate developments on small areas, with minimal damage to the site and surrounding environment. Such sites may be developed to meet Forest Service, other agency, or private sector needs. However, the Forest Service must approve the appropriate special use permits and site plans for developments proposed by other agencies or by the private sector. When possible, overhead and/or buried transmission lines will be managed to share right-of-way with roads.

Utility and/or transportation corridors will also be managed for complementary resource objectives if conditions permit. For example, lands within transmission line corridors can be used to produce forage for livestock and wildlife. Forage growth also stabilizes soils within the corridor.

MANAGEMENT AREA 13

A variety of Forest settings are allocated to provide recreation opportunities dependent on developed facilities. Developments include a downhill ski area, campgrounds, picnic areas, boating sites, swimming areas, scenic overlooks, and access roads.

Physical developments and human activities, sights, and sounds may dominate the setting and will often be important in providing the desired recreation experiences. Roads suitable for low-clearance passenger cars will provide access, and camp sites will be large enough to accommodate many users at one time.

Timber harvesting will not be scheduled in developed recreation sites, although some timber management activities may be used in order to improve scenic quality and safety. Livestock grazing will be prohibited in these areas.

MANAGEMENT AREA 14

As described in the Management Requirements, selected old-growth habitat will be managed to maintain viable populations of the Forest's old-growth dependent species at minimum required levels. Sites selected for this management area are distributed across the Forest in a grid-like pattern and are composed of mature and overmature stands of ponderosa pine, lodgepole pine, and mixed conifers Sites are also distributed to provide links with similar habitat on adjacent National Forests. The representative indicator species selected to measure the success of old-growth habitat management on the Fremont National Forest include goshawks, pine martens, pileated woodpeckers, and three-toed woodpeckers

Ponderosa pine and mixed conifer stands will be "dedicated" to an old-growth condition Lodgepole pine sites will be managed under a two-tiered harvest rotation system. The identification of specific plot locations will be mapped and retained at Fremont National Forest Headquarters Estimated plot locations are shown on the map accompanying this Forest Plan

MANAGEMENT AREA 15

The resources provided by water sources and associated areas of riparian vegetation include high quality water, fish and wildlife habitat, and productive soils.

This management area encompasses all streams, lakes, reservoirs, seeps, moist and wet meadows, springs, and associated riparian vegetation on the Forest These areas, known as Streamside or Waterbody Management Units/Riparian Areas, will be managed to protect the water source and its riparian environment; meet or exceed water quality standards, using Best Management Practices; stabilize and/or protect streambanks, and improve fish and wildlife habitats

Timber harvesting in Streamside and Water body Management Units/Riparian Areas will occur at reduced levels (low intensity, uneven-aged management for ponderosa pine and pine-associated stands; 120-year rotation for lodgepole pine stands).

MANAGEMENT AREA 16

Generally, lands where timber or range management investments would significantly exceed returns, and which were not allocated to other resource uses, were selected (through FORPLAN analysis) for minimum level management. Minimum level management would meet basic stewardship responsibilities at minimum cost. It includes:

- protecting the health and safety of people using these lands;
- preventing unacceptable environmental damage;
- administering any special uses of these areas required by other agencies or the private sector;
- meeting management requirements for soil resources, water quality, and wildlife.

Lands typical of this management area include. sparsely forested areas (greater than ten percent tree cover per acre, but unable to produce more than 20 cubic feet of timber per acre per year) on steep slopes; nonforested areas with soils too poor, erodible, or rocky to support livestock forage; and some lodgepole pine stands.

Management Area 16 does not appear on the Forest Plan map because of technical mapping difficulties. Lands allocated to minimum level management are usually scattered over the entire Forest, and many exist as very small units surrounded by productive lands.

Table 27. Management Area Acreages (1)

Management Areas	Acreage	Tentatively Suitable
1	129,525	45,483
2	27,128	6,402
3	7,020	7,020
4	508,132	(2)
5	618,568	618,568
6	45,065	45,065
7	6,670	4,919
8	3,021	861
9	58,126	0
10	22,823	0
11	12,832	7,186
12	8,858	0
13	304	188
14	44,040	44,040
15	22,847	8,700
16	59,277	59,277

(1) Some of these management area acres overlap with other management areas

(2) These acres were not inventoried and all overlap on other management areas Area includes lands with surface geology indicating potential for "hardrock" minerals (both locatable and leaseable) and lands with indications of geothermal resources Lands classified by U S G S as "prospectively valuable" for oil and gas (1,107,257 acres) are not included

STANDARDS AND GUIDELINES SPECIFIC TO INDIVIDUAL MANAGEMENT AREA PRESCRIPTIONS

Emphasis: Mule Deer Forage and Cover on Winter Range

Goal: Food, cover, and human disturbance on mule deer winter range will be managed to provide the habitat needed to meet the ODF&W and Klamath Tribe herd management objectives.

Discussion: The Forest contains 136,217 acres of mapped winter range for 11 deer herds. However, 6,692 acres occur in Management Areas 2, 3, 9, 14, and 15 of this Plan.

The majority of winter range is nonforested. Cover is present in pine and juniper stands. Optimum spacing between cover and forage areas seldom occurs. Both the quantity and quality of food and cover on most winter range is significantly below its potential. Livestock use occurs on most winter ranges but is presently designed to have no significant effect on deer forage.

Most winter range occurs at low elevations on sites with gentle topography. Road densities are high and potential for disturbance to wintering deer is also high

Prescriptions
Management for mule deer on winter range will emphasize the improvement of forage, thermal cover, and maintenance of at least 80 percent of the potential habitat effectiveness where site capabilities allow. Emphasis will be placed on creating and maintaining an adequate forage base. Cover and forage will be managed through habitat effectiveness. Habitat effectiveness will be quantified through the use of the Interagency Mule Deer Model or other habitat effectiveness models which use principles outlined in this model. Livestock use will continue to be managed so significant competition for food does not occur. On forested sites the timber management program will be the major tool used to improve food and cover. Site preparation will be used and managed to create an adequate forage base of shrubs, forbs, and grasses. Direct habitat improvement for forage will occur on 500 acres annually; this includes development of water in water-short areas.

The existing Fort Rock-Cabin Lakes winter road closure will remain in effect, and one other similar closure may be added after studies are completed. To reduce harassment, a reduction in roads open to motorized vehicle traffic from December through March will occur on a project-by-project basis.

Standards and Guidelines

fish and wildlife management

A. Habitat improvement can include any of the following techniques after evaluation of effects on habitat and nontarget species:

   1. seeding or planting desirable plants, including trees
   2. fertilization
   3. prescribed burning
   4. mechanical ground and vegetative disturbance
   5. chemical treatment of undesirable plants
   6. water developments.

B. Cover and forage relationships will emphasize spacing between these habitat components, road densities, water availability, effects of livestock grazing on winter forage availability, and other

specific habitat needs identified at the project level through the interdisciplinary process. Eighty percent of the potential habitat effectiveness is the minimum.

C. Forage - Forage conditions will be maintained or improved with emphasis on increasing the forb and grasses available for forage and on a mixture of age classes of shrubs.

1 Where foraging areas are created through resource management activities, the openings should not be farther than 600 feet from an edge of cover.

2. Where bitterbrush is a component in the plant community, at least 40 percent of the harvest unit will be retained in bitterbrush distributed throughout the unit to naturally restock the project site. Bitterbrush stands in poor condition should be improved and the variety of forage species increased.

a. Where forage improvement or other resource management activities not directly associated with manipulation of the tree stands (crushing and prescribed burning) are planned, treated acres will include unmanipulated islands. These islands should be 10 to 30 acres in size and not more than 600 feet apart.

C Cover - The cover component for project areas shall be a mixture of thermal, hiding, and fawning cover with emphasis on thermal cover. Thermal cover stands should range from 5 to 20 acres On timber lands under uneven-aged management, approximately 15 percent of the area in residual thickets of saplings, pole timber, and small sawtimber will be left unthinned to help meet at least 80 percent habitat effectiveness (See Timber Standards and Guidelines). On those acres capable of producing thermal cover, 40 to 50 percent of the area should be managed for thermal cover On areas not capable of producing 40 to 50 percent thermal cover, lesser amounts would be left and other mitigating measures used to meet at least 80 percent habitat effectiveness.

timber management

A. Silvicultural prescriptions will emphasize maintenance of cover to meet 80 percent habitat effectiveness. Even-aged Management will be the primary silvicultural system employed.

transportation management

A. Roads open to motorized vehicle traffic will be managed at a level of one mile or less of open road per square mile during the critical winter period, December 1 to March 31

range management

A Livestock use on winter range will be designed to provide adequate winter forage for mule deer during the winter months.

fire management

A. Wildfire on winter range will be evaluated for appropriate suppression action.

B A natural fuels management plan for winter range will be developed through an interdisciplinary process

landownership adjustments

A. Retain National Forest System (NFS) lands in winter range where appropriate.

B. Acquire parcels providing important mule deer habitat.

MANAGEMENT AREA 2

Emphasis: Endangered and Threatened Species

Goal: Manage the habitat of federally listed endangered and threatened animals to obtain population increases consistent with the Final Bald Eagle Recovery Plan (August 1987) and the Pacific Coast Recovery Plan for the Peregrine Falcon (1982). These increases will result in the eventual declassification of the species.

Discussion: Ten occupied bald eagle nest and roost sites and ten potential nest sites on the Forest are allocated to management for bald eagles. The three potential peregrine falcon nest sites are allocated to management for peregrine falcons.

Bald eagle areas (nest sites, winter roosts, and feeding areas) will be managed to provide: (1) an abundance of mature/overmature trees for nesting/roosting platforms, (2) a minimum amount of disturbance from people, and (3) an abundance of food

The three potential peregrine falcon nest sites occur on cliff faces and are generally surrounded by nonforested or unsuitable forest lands. These sites will be managed to retain their natural character and a high degree of solitude and to provide an adequate food base.

Standards and Guidelines

1. Legal and biological requirements for the conservation of endangered, threatened and candidate plants and animals will be met. All proposed projects that involve significant ground disturbance and have the potential to alter habitat of endangered, threatened or sensitive plant and animal species shall be evaluated to determine if any of these species are present (FSM 2670 Threatened, Endangered and Sensitive Plants and Animals).

2. Where endangered or threatened species are present, the required biological assessment process shall be carried out according to the requirements of the Endangered Species Act (Public Law 93-205) and consultation requirements with US Fish and Wildlife Service and state agencies shall be met Before the project can be carried out, protection or mitigation requirements shall be specified (36CFR 219 27(a)(8)). Habitat for existing federally classified threatened and endangered species shall be managed to achieve objectives of recovery plans.

Bald Eagle

Direction within the Fremont National Forest Bald Eagle Management Plan, July 1981, or a revision of this plan, will be used to manage all bald eagle nesting, roosting, and feeding sites In the case of new nesting sites, site-specific management guides will be prepared.

timber management

A. Timber will be under a managed system with partial yields. Timber harvest will be used as a management tool to enhance and perpetuate bald eagle habitat where necessary and appropriate. Silvicultural prescriptions will be designed to meet specific habitat needs, rather than traditional descriptions of even or uneven-aged management systems.

fire management

A. Bald eagle management areas are highest priority for wildlife suppression if potential for damage to habitat is high.

B. Fuel treatment by fire for bald eagle areas will take place only if objectives for treatment would benefit bald eagle habitat.

C. Fuel treatment by fire around active nest sites will take place outside nesting season (March 1 to July 15) if fire activities and smoke would affect nesting eagles.

Peregrine Falcon
An interagency plan similar to the Fremont National Forest Bald Eagle Management Plan will be developed by the Forest for peregrines. Until this plan is developed the following standards apply:

facilities management
A. Development of rock quarries, roads, or other similar facilities will be evaluated for effects on nesting peregrines or hack sites.

B. Activity in existing facilities will be evaluated for effect on nesting peregrines and hack sites. Seasonal closures may be necessary to protect birds during courtship and through fledging of young (approximately March 15 to July 31).

timber management
A. Forested stands will be managed to provide a variety of habitats to support an adequate food base.

B. Timber harvest activities near an active nest or reintroduction site will be evaluated for effects on the birds. Restrictions may be applicable if activities could potentially affect nesting or reintroduction success.

fire management
A. Fuels management activities (including fuels treatment) will be evaluated for effect on nesting peregrines or hack sites.

transportation management
A. Road closures may be necessary to protect nesting and hack sites when birds are present.

MANAGEMENT AREA 3

Emphasis: Old-growth Habitat for Dependent Species Above the Management Requirement Level

Goal: Provide additional areas of old growth (above the Management Requirement level) for better habitat distribution and quality in the Klamath Basin. Additional pine and pine-associated sites will be dedicated old growth.

Discussion: Twenty-five of the 61 lodgepole pine sites and seven pine-associated pine marten sites needed for management requirements will be expanded by 40 acres each to provide larger habitats. The lodgepole pine sites will be managed under a two-tiered system and the pine-associated sites will be dedicated.

Goshawk sites (60 acres each) will not be expanded in size. Two additional pine-associated sites and seven new ponderosa pine sites will be established to obtain better distribution. Both forest types will be dedicated old-growth habitat.

Two additional dedicated 300-acre pine-associated sites will be established for pileated woodpeckers.

Twenty-four additional three-toed woodpecker sites will be established in lodgepole pine. These lodgepole pine sites will be managed on a two-tiered system.

Tables 28 and 29 identify the number of sites, acres, and breeding units of old-growth indicator species for expanded and additional old-growth allocations.

Table 28. Additional Old Growth

Indicator Species	# of Additional Sites	Size of Sites (Acres)	Acres of Additional Sites		
			Lodgepole	Pine	Pine-Associated
Goshawk	7 2	60 60		420	 120
Three-toed Woodpecker	24	75	1,800(1)		
Pileated Woodpecker	2	300			600
Total Acres			1,800(1)	420	720

(1) These acres will be managed on a two-tiered system The total acres allocated therefore will be double the figure shown

Table 29. Expanded Old Growth

Indicator Species	# of Enlarged Sites	# of Acres Site Enlarged	Acres of Habitat Added to MR		
			Lodgepole	Pine	Pine-Associated
Pine Marten	25 7	40 40	1,000 (1)		280
Total Acres			1,000		280

(1) These acres will be managed on a two-tiered system. The total acres allocated therefore will be double the figure shown

Prescriptions
Old-growth lodgepole pine stands will be managed on a 120-year rotation Dedicated old-growth stands will be maintained as long as possible without treatment. Old growth with the greatest potential for longevity should be selected.

This prescription also calls for selecting and managing replacement lodgepole pine stands, with emphasis on stands with the earliest replacement potential.

Standards and Guidelines

fish and wildlife management

A. The number and location of old-growth stands will approximate that on the EIS Common Management Areas Map and the map of Management Areas Unique to the Plan. The actual site may deviate no more than 1.5 miles from the location on the map.

B. Areas will be located by an interdisciplinary team, composed of timber and wildlife staff at a minimum.

C. Stands selected for retention will fit the following descriptions depending on the indicator species:

a. The components of old-growth habitat for pileated woodpecker (300 acres) and northern goshawk (160 acres) include mature and overmature trees (at least 15 trees per acres of 20 inches or larger d.b.h.), multi-storied stands are preferred A minimum average of two hard snags per acre of at least 12 inches d.b.h must be present with one snag per six acres at least 20 inches d.b.h. The old-growth habitat unit should be maintained in 300 contiguous acres where possible, but habitat may be arranged in blocks no less than 50 acres and no more than 1/4 mile apart.

b. Old-growth habitat for pine marten includes 160 acres of mature and overmature high elevation conifers with a crown closure greater than 50 percent. Two hard snags per acre greater than 12 inches d.b.h. with at least one 20 inch d.b.h snag every 12 acres must be present.

c. The components of old-growth habitat for three-toed woodpeckers include 75 acres of mature *or overmature lodgepole pine and pine associated stands. A minimum average of two hard* snags per acre greater than 10 inches d.b h. must be present and one large snag (greater than 12 inches d.b.h.) must be present every three acres.

D. Old growth area configuration priorities are:

1. blocky in shape with few or no management activities,

2. blocky in shape with management activities present,

3. timbered stringers.

timber management

A Old-growth pine and pine-associated stands will be dedicated.

B. Old-growth lodgepole pine stands will be managed on a 120-year rotation.

1 Select and place under management replacement stands with emphasis on stands with the earliest replacement potential.

C. Salvage operations will take place only when catastrophic events occur (such as wildlife, insect infestations, windthrow, etc.) and the affected old growth stand is no longer considered suitable old-growth habitat. A new old-growth stand should be delineated to replace the original habitat

fire management

A. Natural fuels management will take place in old growth areas only to meet old growth habitat objectives.

B Old-growth areas should be a high priority for wildfire suppression

transportation management

A. *Old-growth stands should not be bisected or dissected by new road or facility construction.*

MANAGEMENT AREA 4

Emphasis: Mineral Exploration/Development Activities

Goal: Encourage and facilitate the orderly exploration, development, and production of mineral and energy resources on the Fremont National Forest.

Ensure that exploration, development, and production of mineral and energy resources are conducted in an environmentally sound manner and that these activities are integrated with the planning and management of other National Forest resources.

Discussion: The Forest has had a limited history of commercial mining, primarily for mercury, uranium, and gold. This management area identifies the sites of previous or current locatable mineral exploration/ development activity. It also identifies National Forest System lands where surface geology indicates a potential for: locatable minerals (65,060 acres), leaseable "hardrock" minerals which would be locatable if they did not underlie lands purchased from the former Klamath Indian Reservation (29,280 acres), and geothermal resources (438,525 acres). Overlaps reduce the total area of Management Area 4 to approximately 508,132 acres. This management area does not include lands classified by the U.S. Geological Survey as "prospectively valuable for oil and gas" because this category includes all Forest lands except: 64,010 acres in the northwest corner of the Forest, 6.055 acres south of Bly, and the 22,823 acre Gearhart Mountain Wilderness.

Prescriptions

Ensure the coordination of mineral resource programs and activities through the land and resource management planning process, recognizing that mineral development can occur concurrently or sequentially with other resource uses

Coordinate and cooperate with other federal and state agencies having authority and expertise in mineral-related activities.

Require appropriate reclamation for all mineral exploration and development proposals that would create environmental disturbance.

Plan and provide for reasonable access through, and occupancy of, National Forest System Lands for mineral resource activities consistent with overall management objectives and rights granted through statutes, leases, licenses, and permits.

Eliminate or prevent occupancy that is not reasonably incident to and required for mineral operations.

Standards and Guidelines

recreation management

A. Within areas allocated to semiprimitive nonmotorized, semiprimitive motorized, or scenic viewshed management, operators will be required, to the extent reasonably and operationally feasible, to restore the natural appearance of sites affected by their mining activities.

Operational Consideration: All mitigation costs are borne by the prospector or miner.

minerals management

Mining Claim/Surface Management Activities (Reserved Lands Only)

A. All valid claim markers and discovery points will be protected.

B. Inform public of rights, obligations, and restrictions under the mining laws.

Operational Consideration. Maintain and distribute informational handouts to interested parties.

C. An Operating Plan (Plan of Operations) will be required where significant surface disturbance is proposed Unnecessary impacts to surface resources will be minimized by including reasonable environmental protection measures in the operating plan. The regulations, specifically 36 CFR 228.8, specify measures applicable to surface resources, particularly air quality, water quality, solid wastes, scenic values, fisheries and wildlife habitat, and also set direction for road construction and overall reclamation Guidance will be provided to operators for developing environmentally sound operating plans and planning reclamation All Notices of Intent and Operating Plan proposals will be processed within the time frames established by 36 CFR 228

Operational Consideration: Appropriate environmental analysis is required for all proposals. An EIS will be necessary for major projects and will be funded by proponent. The Forest will participate by providing available data pertinent to the project and assistance with NEPA requirements

D. Claimants are entitled to access their mining claims under the mining laws. Road construction, reconstruction, and commercial road use outside the claims being developed shall be authorized through a Special Use permit or Plan of Operations. When mine development proposals include roads, the NEPA process and documentation will be used to analyze and evaluate proposed routes.

E. All practicable measures shall be employed to maintain and protect fisheries and wildlife habitat which may be affected by the operations Negotiations with the operator at the time of operating plan development will emphasize inclusion of mitigating measures such as adjusting operations or seasons to reduce impact on winter ranges, calving areas, riparian zones, and other critical habitat.

F. Operations shall, to the extent practicable, be harmonized with scenic values (specifically Recreation Opportunity Spectrum and Visual Quality Objectives included in this Plan), through such measures as the design and location of operating facilities, including roads and other means of access, vegetative screening of operations, and construction of structures and improvements which blend with the landscape.

G All garbage, refuse, and waste shall be removed from National Forest lands and disposed of at an approved sanitary landfill or other authorized disposal site. Chemical wastes will be properly neutralized and disposed of to DEQ standards. All tailings, dumpage, deleterious materials or substances and other waste produced by operations shall be deployed or treated so as to minimize adverse impacts.

H. The post-mining land use objectives for each project site should be determined prior to disturbance.

I. Reclamation standards that meet the intent of 36 CFR 228.8 shall be part of each operating plan and describe reclamation and mitigation practices appropriate to the site. Agreement between

the operator and the Forest Service should be reached on inclusion of applicable reclamation standards and bond release criteria in all reclamation plans prior to approval of the operation plan.

J. Bonding for reclamation shall be adequate for the Forest Service to accomplish agreed upon reclamation standards in the event of default by the operator. Bond cost determinations shall be documented and justified as part of the evaluation process.

K. Short-term or concurrent reclamation should minimize, mitigate, and prevent erosion through planned drainage control and stabilization.

L. Reclamation and mitigation standards that specifically address recurrent maintenance and end-of-season and interim shutdown will be part of operating plans.

M. Appropriate sediment control measures shall be designed, constructed, and maintained to prevent to the extent possible, additional contributions of sediment to stream flow or to runoff outside the operating area, meet the more stringent of applicable state or federal effluent limitations, and minimize erosion.

N. Long-term or final reclamation should return the land to a planned use that is consistent with the overall land-use objectives of the area.

O. Upon exhaustion of the mineral deposit, at the earliest practicable time during operations, or within one year of the conclusion of operations, the surface should be reclaimed. The operator should take measures to prevent or control on-site and off-site damage to the environment and forest surface resources including:

--Control of erosion and landslides;
--Control of water runoff;
--Isolation, removal or control of toxic materials;
--Reshaping where reasonably practicable and revegetation of disturbed areas;
--Rehabilitation of fisheries and wildlife habitat; and,
--Removal of buildings and improvements, equipment, and scrap.

P. All disturbed surfaces such as waste dumps, backfilled areas, leach piles, access roads, and haul roads, etc., will be shaped according to the operating plan within one year after it has completed its function. The operating plan must provide for grading to meet Visual Quality Objectives, prevent mass stability problems, and provide adequate drainage. Where practicable, shaping must be planned to conform as nearly as possible to the original natural contour.

Q. Where settlement ponds, tailing dams, or impoundments are planned, each shall be designed and inspected during construction under the supervision of a professional engineer.

R. Mining development roads shall be constructed and maintained to assure adequate drainage and to eliminate or minimize damage to soil, water, and other resource values. Mitigation measures and seasonal maintenance practices for mining access roads should be part of operating plan Direction applicable to Forest Development Roads used for commercial mining uses are found in the Facilities Standards and Guidelines. Roads no longer needed should be:

--Closed to vehicular traffic;
--Bridges and culverts removed;
--Cross-drains, dips, or water bars constructed; and
--The road surface shaped to as near a natural contour as practicable and stabilized.

S. A permanent acceptable ground cover for watershed protection, and erosion control must be provided.

T. The operating plan shall list the species planned for seeding. Acceptable species must contribute to species diversity, be adaptable to the area, be non-noxious, and be approved by the Forest Service.

U The seed must be certified unless collected on site and the rate of pure live seed per square foot must be approved by the Forest Service.

V. Minimal acceptable ground cover requirements should be met before bond release. The minimum ground cover requirement is a permanent ground cover equal to 80 percent of that on adjacent undisturbed areas - determined by plant basal area, litter and light slash not to exceed 6 inches in diameter. At least 30% of the ground cover must be live perennial vegetation.

W. A justification examination will be conducted prior to approving new access into roadless areas or in any area when the proposed activity or related access is questionable The proposal must be shown to be the next reasonable, logical, and sequential step in development of the claim prior to approval.

X Coordination will be accomplished with State Agencies which have authority over mineral activities and potentially impacted resources on the Forest, including the Department of Geology and Mineral Industries, Oregon Department of Fish and Wildlife, Oregon Water Resources Department and Oregon State Department of Environmental Quality.

Y. Action will be taken to prevent and eliminate unauthorized mining claim occupancy. Where occupancy is not reasonably necessary for mining, trespass action or validity contest will be initiated where persuasion and/or Letter of Noncompliance actions are unsuccessful in resolving the problem

Mineral Leasing/Surface Management Activities - (Reserved and Acquired Lands)

A. Process mineral lease recommendations as specified in 36 CFR 228; Subpart B, and interim guidelines in a timely manner.

B. Recommend appropriate special stipulations as an alternative to lease denial for protection of sensitive parcels and lineal land areas, such as SMU-riparian zones, utility and transportation corridors, National Recreation Trails, sensitive soils, Native American religious sites, etc.

Operational Consideration: Limit recommendations for lease denial primarily to large areas such as Research Natural Areas and special interest or special management areas.

Use Standard Stipulations.

Mineral Reservations and Outstanding Rights

A Administer mineral reservations and outstanding rights in a manner consistent with the rights reserved or outstanding, to minimize damage to National Forest System lands and resources.

Operational Consideration: Refer to 36 CFR 251.15 for general guidance. Consult with the Office of the General Counsel when mineral rights are not clear. Clarification might also be found under state law.

Removals - Minerals/Materials

A. Coordinate mineral/material disposals through District Rangers and Zone Engineers.

Operational Consideration: Consider geotechnical inventory data, conflicts with timber sale road activities, existing permitted users, etc. Avoid active competition with commercial sources of sand, gravel, rock, etc., in mineral/material sales.

B. Require that development or removal of material from quarry sites be done according to Mining Safety and Health Administration (MSHA) safety standards.

Operational Consideration: Require pit development/resource removal plan for entries removing 1,000 or more cubic yards of materials.

C. Aggregate sources (saleables) will be developed only after environmental analysis assures that other resources are adequately protected and that reclamation is feasible.

Recreation/Hobby Mining Activities

A. Recreational use of small hydraulic suction dredges or other mechanized equipment shall be subject to 36 CFR 228; particularly Sections 228.4 through 228.8.

Operational Consideration: Microscopic particulate gold embodied in sulphide ore is probably the most predominant mineral on the Forest The probability of collecting an identifiable mineral specimen by dredging is remote.

B. The Thunder Egg Lake partial withdrawal will be retained to promote recreational geode collecting and prohibit commercial monopoly of the geode resource.

MANAGEMENT AREA 5

Emphasis: Timber and Range Production

Goal: Manage for commercial production of sawtimber and forage for domestic livestock on appropriate lands within established standards and guidelines.

Discussion: This management area is a complex of both forest and rangelands. Many of the rangelands occur as small meadows which are inclusions within the general forest areas. Because of the complexity of occurrence, the meadows were not mapped as separate units. This management area emphasizes commercial timber production and forage for domestic livestock. Management activities will follow standards and guidelines designed to produce timber and livestock forage, while meeting environmental requirements for soil, water quality, air, and wildlife habitats. A range of management prescriptions and intensities can be used, depending on stand conditions and management objectives. For example, in order to respond to the mountain pine beetle epidemic, lodgepole pine stands may be converted to managed conditions on an accelerated schedule.

Mature and overmature stands predominate on the forested lands within this management area. Timber management will emphasize converting these unmanaged stands to managed conditions. The objective of this conversion is to create a variety of age classes, with all stands achieving their optimum growth potential. Stand treatments will include controlling stocking levels and species mix; improving growth rates, protecting stands from insects, disease, and other damage; and regenerating old stands no longer showing optimum growth rates.

Vegetative management utilizing livestock grazing will be emphasized on meadows and other nonforested lands. Structural improvements such as fences and water developments may be built to meet range management objectives. Prescribed burning or seeding may be used to improve forage. Transitory forage growing in openings created by timber management will also be managed for livestock grazing.

Prescriptions

Any of five distinct prescriptions which relate to timber management and three intensities involving range/livestock management may be utilized, depending on the capabilities and limitations of resources on the particular project area, and management objectives.

timber management prescriptions

Detailed prescriptions will be written and/or approved by a certified silviculturist for each stand.

Even-aged management with Natural Regeneration.
This prescription can be used on timbered lands when even-aged management is desired; a viable understory is not present, and low initial investment is prescribed. All three species groups are appropriate for this prescription.

Shelterwood, seed tree, or clearcutting in small (< 10 acres) patches will be prescribed, followed by site preparation for natural regeneration. Stocking level control will be done, initially by precommercial thinning then followed by a moderate amount of commercial entries. As natural regeneration is prescribed, there will be no genetic planting and a regeneration lag is anticipated. Fertilization is not anticipated. Harvesting in this component will usually provide an opportunity to meet forest resource objectives other than timber production.

Even-aged Management with Genetic Planting:
This prescription can be used on timbered lands when even-aged management is desired and a viable understory is not present. This prescription may apply to all vegetation types; however, it is used most often in the pine-associated and lodgepole pine.

Clearcutting in patches will be prescribed followed by site preparation, planting, and genetic stock and stand tending. Stocking level control will be done, initially with precommercial thinning, then with various levels of stocking level control. Fertilization is not anticipated. Four intensities are planned as listed below:

minimum:
This intensity calls for a precommercial thinning and no commercial entries until final harvest. This results in an early culmination of mean annual increment, early rotation age, and small-diameter products at the time of regeneration cut.

moderate:
Under this regime the stand is treated with a precommercial thin and one or two commercial entries prior to final harvest. The target size diameter for the first entry is the perceived marketability on the Forest. Rotation age is longer than under the minimum intensity.

heavy thin:
This intensity is similar to the moderate intensity, except that the first commercial entry removes a larger percentage of the standing volume and applies to the pine working groups only.

high:
The attributes that make this intensity different from the others in this prescription include: more commercial entries, a slightly larger diameter tree at final harvest, and a smaller diameter at first entry.

Overstory Removal: This prescription can be used on timbered lands when even-aged management is desired and a viable understory is present. The pine and pine-associated species groups are appropriate for this prescription.

Overwood removal will be prescribed, followed by a variety of stocking level control choices. These choices range from doing nothing; to precommercial thinning, to precommercial thinning followed by commercial entries. As natural regeneration is present, there will be no genetic gain planned. Fertilization is not anticipated. Even-aged prescriptions are planned after final harvest. Three intensities are listed below:

minimum:
This intensity calls for no stocking level control following overwood removal The result of this regime is to delay final harvest, slow diameter growth so a small tree is present at final harvest, and reduce initial investments. The primary purpose of this intensity is to maintain hiding cover for mule deer

moderate:
Under this intensity, only precommercial thinning and final harvest are planned.

high.
This regime calls for precommercial thinning, a commercial entry, and final harvest The rotation is later and the diameter is larger than called for with the moderate intensity.

Uneven-Aged or Even-Aged Management with Natural Regeneration or Genetic Planting and with Viable Understory.
Uneven-aged management is the preferred silviculturist system within portions of Management Area 5 This system should be prescribed within the mature and overmature ponderosa pine and pine-associated community types where stand and site conditions are appropriate, and no other resource objectives which preclude the use of uneven-aged management have been identified and documented during the project planning process.

The application of uneven-aged management is characterized by stands which contain at least three well-defined age classes. Even-aged aggregations of trees within these uneven-aged stands should be of a size such that regeneration never loses the protection of the adjacent older age classes. Regulation of the rate of harvest within uneven-aged stands requires the control and maintenance of a desired distribution of age classes Uneven-aged management is an appropriate silvicultural system for uneven-aged ponderosa pine and pine-associated community types where stand and site conditions are appropriate, and no other resource objectives have been identified during the project planning process.

range/livestock management intensities:

FRES B - Environmental Management with Livestock.
Livestock use is within the apparent present capacity of the range environment Investments for range management are applied only to the extent required to maintain the environment at a stewardship level in the presence of grazing Investments for implementation may be very low for some resource classes. Resource damage resulting from past use is charged to benefitting or stewardship functions. The goal for the strategy is to attain livestock control No attempt is made to achieve livestock distribution (i.e., minimal structural improvements).

FRES C - Extensive Management of Environment and Livestock·
Management systems and techniques, including fencing and water developments, are applied as needed to obtain relatively uniform livestock distribution and plant use, and to maintain plant vigor. Management seeks full utilization of the animal unit months available for livestock grazing No attempt is made to maximize livestock forage production by silvicultural practices such as seeding On the Fremont National Forest, Management Level C will be the proper classification of allotments where an attempt is made (or planned) to realize benefits from the full productive potential of *native* vegetation occurring in the area. This would include *all structural* improvement of the allotment

FRES D - Intensive Management of Environment and Livestock:
All available technology for range and livestock management is considered. Management seeks to maximize livestock forage production consistent with constraints of maintaining the environment and providing for multiple use. Existing vegetation may be replaced through improvement in growing conditions Structures may be installed to accommodate complex livestock management systems and

practices. Advanced livestock management practices are commonplace. Management toward this end means that attempts are made at maximizing livestock forage production through improvement developments, up to and including, range revegetation. Range revegetation includes forage seeding, prescribed burning, and other silvicultural treatments where the *primary* purpose of the action is increasing forage for domestic livestock production.

Standards and Guidelines Applicable To All Prescriptions and Intensities

range management

A. To the extent possible, maximize utilization of transitory forage by livestock.

Operational Consideration: Consider the use of all structural range improvement practices to increase use of forage species in these areas. However, this increased use should be used to complement and/or supplant livestock use in other areas of the involved allotment.

B. Although increased use of transitory forage is desirable in these harvest areas, the physiological needs of forage species and specific objectives for the site *should be considered* in setting utilization.

landownership adjustments

Land Exchange

A. Prioritize acquisition of high-site timberlands which complement National Forest landownership patterns and benefit administration.

B. Emphasize disposal of isolated or low-site National Forest parcels, but other lands would be considered.

Transportation Management

A. Local road access for timber management shall be adequate for logging, post sale activities, and protection.

B. Long-term local roads for timber access shall be planned, constructed, maintained, and operated to be economically efficient. During commercial hauling activities, public access shall be discouraged or prohibited. High clearance vehicles shall be accepted during post sale activities, and all low clearance motorized traffic shall be discouraged or eliminated after post sale activities.

C. Generally, maintain commercial haul roads for low clearance vehicles, Levels 3,4,and 5. However, some commercial haul roads may be maintained for high clearance vehicles, Level 2. Following use for timber haul, local roads with planned future use will generally be open to high clearance access, Level 2, for forest visitor and administrative use unless significant reasons in the Road Management Objectives state otherwise.

Standards and Guidelines Which Are Specific to Individual Prescriptions and Intensities

prescription:
Even-aged Management with Natural Regeneration

Timber Management
Operational Consideration: All forms of even-aged regeneration cutting, including seed tree, shelterwood, and small clearcuts, are appropriate.

prescription:
Even-Aged Management with Genetic Planting

timber management
A. First entry diameters and final harvest timing vary by intensity as follows:

Intensity	*First entry d.b h.*	*Final Harvest*
Minimum	N/A	95% cmai
Moderate	10"	95% cmai
Heavy Thin	Regional Utilization Standard	95% cmai
High	Regional Utilization Standard	95% cmai

Range Management
Operational Considerations· Timing and degree of utilization are critical to achieving "release" from competition (i e., high intensity grazing early in the season).

Temporary permits, livestock use permits, contract grazing, etc. can be used to accomplish management objectives in these areas.

prescription:
Overstory Removal

Timber Management
Operational Consideration: Partial and final removal cuts are the appropriate silvicultural prescriptions.

prescription:
Uneven-Aged Management with Natural Regeneration or Genetic Planting and Viable Understory

Timber Management

1. Uneven-aged management can be applied using either individual tree or group selection silvicultural systems. The decision to apply either system should be based on actual stand and site conditions.

2 Uneven-aged management is applicable to immature, mature, and overmature stands of essentially pure ponderosa pine within the ponderosa pine community types. Uneven-aged management can be most readily applied to relatively vigorous pure stands of ponderosa pine which display an uneven or mixed stand structure

3. Uneven-aged management is applicable to stands of mixed ponderosa pine and lodgepole pine within the ponderosa pine community types but only where silvicultural activities will result in stands dominated by ponderosa pine. Dominance in these community types is achieved when stocking by ponderosa pine can be maintained at or above 50 percent of the minimum stocking level established in the silvicultural prescription on 80 percent of the treated acres. As an objective, dominance by ponderosa pine should maintain the existing character of these stands as well as meet the long term needs for species diversity.

4. Uneven-aged management is applicable to the mature and overmature stands within the pine-associated community types, but only where silvicultural activities will result in stands dominated by early successional species including ponderosa pine, western white pine, and sugar pine Dominance in these community types is established when stocking by early successional species can be maintained at or above 50 percent of the minimum stocking level basal area established in the silvicultural prescription on 80 percent of the treated acres. As an objective, dominance by early successional species should assure long term stand health and vigor as well as provide for the final harvest of preferred species as planned in the silvicultural prescription.

5. Stands which are severely understocked, overmature and single-storied, decadent, heart-rotted, and are producing little net growth are generally poor candidates for uneven-aged management.

6. Uneven-aged management is not recommended in lodgepole pine community types

7. Uneven-aged management is applicable where there is reasonable assurance that natural regeneration will occur within 10 to 15 years Planting or interplanting is also appropriate to maintain acceptable genetic quality, dominance by early successional species, or to assure timely regeneration under extremely harsh site conditions.

8. Uneven-aged management is most applicable on slopes less than 30 percent where tractors normally operate.

9. Uneven-aged management is most applicable where the total area impacted by detrimental soil compaction, erosion, or displacement can be restricted to less than 20 percent of the stand

10. Uneven-aged management is most applicable where stands are free from dwarf mistletoe. Where stands are lightly infected, uneven-aged management is applicable only where dwarf mistletoe can be confined to the lower half of the tree crowns and within a single canopy layer. The infection of lower canopy layers by upper canopy layers should be avoided. The objective here is to maintain stand growth within 80 percent of its disease-free potential.

11. Uneven-aged management is most applicable where stands are free from root rots. Where stands are lightly infected, uneven-aged management is applicable only where root rot can be managed to maintain stand growth within 80 percent of its disease-free potential. Root rot centers should be managed using even-aged systems

12 Silvicultural prescriptions should be designed to maintain or improve the existing size class diversity and uneven-aged structure. Emphasis, however, should be given to managing the existing growing stock. The existing relationship between trees in all size classes as well as the condition of those trees should be considered first as a basis for developing marking guidelines rather than the ultimately desired size class distribution or upper diameter limit.

13. Timber harvest and post sale activities should generally be planned on a 20-year entry cycle. All post sale activities should be completed within 9 years following the harvest entry. Stands should not be salvage logged at other than the prescribed entry cycle except where wildfire, bark beetles, disease or other conditions have created catastrophic mortality.

A suggested sequence of activities is.

Year	Activity
1	Harvest
2	Precommercial thinning
3-5	Treat fuels, protecting residual regeneration where feasible (prescribed fire should be strongly considered, both to reduce hazard and to control species composition)
9	Plant, if adequate natural regeneration has not occurred
21	Repeat this cycle

This sequence allows for KV funding of all post sale activities, while providing the greatest opportunity for natural regeneration. It also times prescribed fire to occur when regeneration will be the least susceptible to damage, that is, at least 14 years after planting.

14. No minimum or maximum sized stand treatment units are specified where an uneven-aged structure can be maintained throughout the stand treatment unit. An average treatment unit of approximately 100 acres or larger is recommended to facilitate inventory and record keeping needs.

15. Timber marking guidelines should be developed which retain the most vigorous trees of best quality. First priority for leave trees are those with demonstrated good vigor. Second priority are those trees which will produce high value products in the future

16. Following each commercial harvest entry, post sale activities should emphasize natural regeneration and stocking level control. Where natural regeneration is a planned objective, post sale activities should be closely coordinated to produce disturbance to the litter and vegetation as necessary for natural regeneration to occur.

17. Timber harvest, fuels treatment, and site preparation activities should strive not to damage residual trees

18. Treatment areas will be coordinated with wildlife habitat needs for game hiding cover Approximately 15 percent of the area in residual thickets of saplings, pole timber, and small saw timber will be left unthinned in order to accommodate habitat needs. Silvicultural prescriptions will address the

size, spatial arrangement, and opportunities presented by the existing vegetation within a treatment area.

Range Management

intensity:
FRES D - Intensive Management of Environment and Livestock

Operational Considerations: Feasible practices on the Fremont National Forest are:

-- Fertilization

-- Brush Control Fire Chemical Mechanical

These will vary by soil type. Feasible practices to be developed site-specifically. Mechanical soil treatment will vary by slope, soil type, and other site-specific conditions.

Site-specific seed mixes to be developed.

Use concept of integrated Pest Management for insect and disease control.

MANAGEMENT AREA 6

Emphasis: Scenic Viewsheds

Goals: Provide high to moderately high visual quality concerns within selected viewsheds on the Forest.

Manage the visual corridor to retain or create the desired forest character in an attractive sequential arrangement over time and space.

Provide for managing the necessary supporting vegetative size classes and distribution of successional stages to maintain the desired visual character indefinitely.

Discussion: Travel routes crossing the Forest pass through many different landscapes, varying from dense old-growth forest and stream-fed meadows to sagebrush flats and distant rimrock bluffs. The Forest's more frequently used, visually sensitive travel corridors will be managed to maintain or enhance the natural appearance of their surroundings.

Some of the natural settings within these scenic viewshed corridors may display evidence of management activity. However, to the casual observer this evidence will be unnoticeable or subordinate to the landscape Management activities planned within scenic viewshed corridors must be compatible with visual quality objectives as stated in USDA Handbook 462.

Prescription

This prescription applies to viewsheds selected from sensitivity level I and II scenic areas Timber harvest activities may be planned in foreground Retention and Partial Retention areas if they will create and/or maintain desired visual characteristics. In middleground visual zones, timber harvest is planned to maintain the natural appearance as well as meet other resource objectives.

Two intensities are emphasized under this prescription They represent combinations of two distance zones and three visual quality levels The purpose of combining foreground and middleground in a single intensity is to provide for a coordinated allocation and treatment of these distance zones in a viewshed.

foreground retention - middleground partial retention (sensitivity level I)

This management intensity provides that the highways, forest roads, foreground areas adjacent to developed recreation sites, specified waterways, and specified trails will be managed to retain an attractive, natural-appearing forest character. Important landscape elements include large trees, distinctive bark, spring and fall color, variety of tree species having age class diversity, shrubs, and ground covers.

Forest management activities associated with this intensity will not be visually evident and may only repeat form, line, color, and texture elements which are found in the characteristic landscape. Visual contrast of management with these elements will be minimized through manipulation of the shape, edge effect, scale, and distribution of resource treatments.

foreground partial retention - middleground modification (sensitivity level II)

This management intensity provides that the highways, forest roads, foreground areas adjacent to developed recreation sites, high-use dispersed sites, and specified trails will be managed to provide an attractive, natural-appearing forest character. Important landscape elements are moderately large trees, distinctive bark, spring and fall color, variety of trees species having age class diversity, shrubs, and ground covers.

Forest management activities associated with this intensity will be noticeable but subordinate to the characteristic landscape. Visual contrast of management with these elements will be minimized through manipulation of the shape, edge effect, scale, and distribution of resource treatments.
n
Road management objectives would "encourage" highway vehicle use with considerable guidance to the user on primary routes. Road closures may be necessary to discourage or eliminate dispersed recreation use.

Standards and Guidelines Applicable To all Intensities

visual management

A. Scenic road corridors will generally have visual foreground zones extending 1/4 to 1/2 mile out from the centerline of the road and will be managed for retention or partial retention

B. Harvesting methods meeting the needs for both foreground retention and partial retention will be used in these areas. The created openings in evenaged stands will be limited to three percent of the stand area per decade in retention and five percent per decade in partial retention.

C. Designated middleground areas will extend from the foreground zone to five miles from the observer and will be managed for partial retention.

D. Middleground partial retention areas will use harvesting methods meeting partial retention guidelines. Created openings in evenaged stands will be limited to eight percent per decade.

landownership adjustments

Land Exchange

A. Retain National Forest System lands except those parcels identified for disposal in the land adjustment plan as amended.

minerals management

A. Common mineral materials sources will be designed and/or located to reduce effects upon the visual resource by using vegetative screening, topography, and rehabilitation potential of the site.

B. Prudent requirements in Plans of Operation and recommendations for lease stipulations will be provided to minimize effects of mining activities and improvements on the visual resource.

Land Uses

A. Land uses within the viewshed corridor must be in parity with the visual objectives of retention and partial retention. This includes the treatment of wildfire and prescribed burns as directed in USDA Handbook 608 (National Forest Landscape Management, Volume 2, Chapter 6, Fire).

Standards and Guidelines Applicable To Specific Intensities

Intensity:
Foreground Retention - Middleground Partial Retention

Visual Management
A. General

1. Complete a Visual Corridor Plan per USDA Handbook 559 for all sensitivity level I travel corridors within three years of Forest Plan implementation. This plan will be developed according to guidelines in USDA Handbook 559 (National Forest Landscape Management, Volume 2, Chapter 5, Timber).

   Operational Considerations: Identify the desired character of each corridor or portion of corridor to be included in corridor viewshed planning.

   Emphasize visual rehabilitation of past management activities (with silvicultural prescriptions, where appropriate) during preparation and implementation of the timber sale program.

2. Identify and prioritize potential visual enhancement opportunities and rehabilitation needs

3. Design the management of all lands to meet or exceed the Visual Quality Objectives (VQO's).

   Operational Consideration Temporary departure from assigned VQO's may be necessary in areas highly susceptible to insect or disease epidemics in order to protect long-term values.

4. Suppress pests when outbreaks threaten managed resources and/or users.

   Operational Consideration: Use methods that minimize site disturbance.

5. Utilize integrated pest management (IPM) strategies to prevent unacceptable damage in visual corridors

   Operational Consideration· Manual, mechanical, and silvicultural methods are emphasized

B. Foreground Retention

1. Created openings are not to exceed a rate of three percent of the stand area/decade. However, some variation is permitted based upon differences in rotation length due to site or species-dependent growth rates.

2 Maximum unit size for regeneration units will be 3 to 5 acres, except in the roadside frontage zone where the maximum is 1.5 acres, and in the trailside zones where the maximum is 1 0 acre

3. Road and trail frontage. Created openings shall not exceed 300 lineal feet/mile during the first 10-year period, each side; gradually increasing to 600 lineal feet/mile, each side, in the last 10-year period of the management rotation.

4. Maintain 20 percent of the area in an old-growth size/age class condition at all times.

5. A created opening exists until the regenerated stand is 20 feet in height.

6. In uneven-aged stands, the stocking of trees within each size class will be described in a silvicultural prescription prepared in accordance with the standards and guidelines for uneven-aged management. This prescription will provide for the long-term maintenance of trees approximately 36 inches in diameter, as well as trees of smaller sizes which will ensure a continuing supply of old-growth, yellow-barked ponderosa pine.

   Operational Considerations: Stumps should generally be cut flush to the ground. Reshape visible landings, and establish ground cover.

C. Middleground, Partial Retention

1. Harvest area stands at a maximum average rate of eight percent of the stand area/decade in even-aged management areas only.

2. Maximum unit size is 20 acres. Unit sizes between 10-15 acres are preferred.

3. The prescription will provide for the long-term maintenance of trees approximately 30 inches in diameter, as well as smaller trees in order to ensure a continuing supply of larger trees.

4. In uneven-aged stands, the stocking of trees within each size class will be described in a silvicultural prescription prepared in accordance with the standards and guidelines for uneven-aged management.

Minerals Management

A. Mineral operations will be designed for minimal visual impacts, screened by vegetation or designed to reduce effects upon the visual resource.

Timber Management

A. Foreground Retention

1. Rotation age is 330 years for regeneration prescription in ponderosa pine and pine-associated stands for even-aged management harvest areas only.

   Operational Consideration: Shelterwood, small clearcuts, and partial and final removal cuts are the appropriate silvicultural prescriptions.

2. Unevenaged management will be emphasized where appropriate.

Range Management

A. Improvement projects shall be designed to meet prescribed visual quality objectives to the extent that projects shall be subordinate to the characteristic landscape as seen from travel route/use area (Reference USDA Handbook 484, National Forest Landscape Management, Volume 2, Chapter 3, Range).

Operational Considerations: Minimize the number and visibility of structural improvements within the foreground zone.

Minimize the impact of fence lines by selecting locations and designs that blend with the form, line, color, and texture of the natural landscape. Avoid silhouetting fence lines against the sky.

Recreation Management

A. Management practices adjacent to recreation areas will provide a physical condition that is at least equal to the Roaded Natural setting of the Recreation Opportunity Spectrum.

Intensity:

Foreground Partial Retention - Middleground Modification

Visual Management

A. General

1. Complete a visual corridor plan for all sensitivity level II travel corridors within five years of Forest Plan implementation (Reference USDA Handbook 559, National Forest Landscape Management, Volume 2, Timber).

   a. Identify the desired character of each corridor or portion of corridor to be included in corridor viewshed planning. The plan will emphasize the foreground distance zone.

   b Manage the visual corridor to partially retain or create the desired forest character in an attractive sequential arrangement over time and space.

   c. Provide for managing the necessary supporting vegetative size classes and distribution of successional stages to maintain the desired visual character.

      Operational Consideration: Temporary departure from the Partial Retention VQO may be necessary in areas highly susceptible to insect or disease epidemics, in order to protect long-term values

B. Foreground, Partial Retention

1. Harvest evenaged stands at a maximum average rate of five percent of the stand area/decade.

   Operational Consideration: Some variation is permitted, based upon differences in rotation length due to site or species-dependent growth rates

2 Size of the created opening is eight to ten acres, except in the roadside frontage zone where the maximum is three acres, and in the trailside zone where the maximum is two acres.

   Operational Consideration: Minimize contrast with the characteristic landscape in form, line, color, and texture through manipulation of edge, shape, scale, and distribution of treatment activities and maintenance of understory vegetation in road and trail frontage zones. The preferred unit sizes are 5-8 acres in the general foreground and 1 5-3 acres in the roadside zone.

3. Road and trail frontage: Created openings shall not exceed 300 linear feet/mile during the first 10-year period, each side; gradually increasing to 600 linear feet/mile, each side, in the last 10-year period of the management rotation.

4. Maintain at least ten percent of the area in a mature to old-growth size/age class condition at all times.

   Operational Consideration: Timber stands maintained in the late mature to old-growth seral stage should exhibit diameter, bark texture, color, branching habit, height, and crown development characteristics typical of each species type and growing site combination present.

5. Unevenaged management will be emphasized where appropriate.

C. Middleground, Modification

1. Harvest area stands at an average rate of 8 percent of the stand area/decade in even-aged management harvest areas only.

   Operational Consideration: Some variation is permitted, based upon differences in rotation length due to site or species-dependent growth rate.

2. Maximum unit size is 40 acres. Unit sizes of 15-30 acres are preferred.

   Operational Consideration: Minimize contrast with the characteristic landscape in form, line, color, and texture through manipulation of edge, shape, scale, and distribution of treatment activity.

3. Unevenaged management will be emphasized where appropriate.

Timber Management

A. Foreground, Partial Retention

1. Rotation age is 240 years for regeneration prescription in ponderosa pine and pine-associated stands in even-aged harvest areas only.

   Operational Consideration: Shelterwood, small clearcuts, and partial and final removal cuts are the appropriate silvicultural prescriptions.

2. Unevenaged management will be emphasized where appropriate.

Range Management

A. Improvement projects shall be designed to meet prescribed visual quality objectives to the extent that projects shall be subordinate to the characteristic landscape as seen from travel route/use area (Reference USDA Handbook 484, National Forest Landscape Management, Volume 2, Chapter 3, Range).

   Operational Consideration: Minimize the number and visibility of structural improvements within the foreground zone.

B. Minimize the impact of fence lines by selecting locations and designs that blend with the form, line, color, and texture of the natural landscape. Avoid silhouetting fence lines against the sky.

MANAGEMENT AREA 7

Emphasis: Special Management Areas

Goal: Provide an attractive, natural-appearing forest character in areas that possess unique or special biological or physical characteristics

Discussion: The selected sites described below will be managed to meet special recreation and/or wildlife habitat objectives. Timber harvesting will be limited, with planned harvests varying by area. Harvest activities adjacent to roads, trails, water use areas, and developed sites shall conform, at a minimum, to the Visual Quality Objective of Partial Retention. Development will be limited to access roads, scenic overlooks, trails, trail shelters, campgrounds, picnic areas, boat ramps, sanitary facilities, and those items associated with larger sites.

Dog Lake Special Management Area (proposed):
This site includes Dog Lake and adjacent acreage, much of which supports groves of ponderosa pine, white fir, and aspen. This scenic natural lake provides fishery habitat for trout and bass, and for various waterfowl and raptors.

Slide Mountain Geologic Management Area (proposed):
Slide Mountain lies at the southeastern end of Winter Rim, and is the remnant of a dome-shaped volcano. Several thousand years ago, the volcano experienced a massive slide of the entire northern face, exposing its interior structure. The enormous debris slope faces north, providing southbound travelers on Highway 31 with an excellent view of this geologic phenomenon. Two small lakes of the type typically associated with large slides support cold-water fisheries. Slide Mountain summit offers an excellent scenic overview of the lakes, debris slope, Winter and Abert Rims, Summer Lake, and the Diablo Mountains

South Fork, Sprague River Special Management Area (proposed):
This two-mile segment of the South Fork of the Sprague River lies in a steep basalt canyon. Old-growth ponderosa pine, white fir, and other conifers comprise the dominant vegetation. No developed sites occur within the 550 acres of the river canyon Slope steepness, soil types, and other resource considerations limit the feasibility of timber management opportunities.

Quamasia Quamash Special Management Area (Botanical)
This area, originally established and approved in 1939, will continue to be managed to maintain a colony of common camas (Quamasia quamash or Camassia quamash), considered at the time of establishment as a vanishing species Through the years, the original markers have deteriorated or been obliterated by livestock The area will be resurveyed, reinventoried, signed, and posted. A monitoring plan will be developed. Currently, livestock grazing is a compatible use.

Augur Creek Reserve Area
This area comprises 655 acres and lies within the southeast corner of the former Deadhorse Rim Roadless Area. This area was identified, after the draft planning documents were published, as representative of ecosystems needed to fill specific cells in research natural areas. It is designated as a special management area for a period not to exceed three years. During this period, attempts will be made to locate a suitable substitute area. If a replacement area is found, the Augur Creek area will be reallocated to general forest use, including timber harvesting If another area is not found, this special management area will be reevaluated as a RNA.

Standards and Guidelines Specific To
MANAGEMENT AREA 7

Prescription
This management prescription provides the opportunity for users to experience a moderate degree of isolation from sights and sounds of humans, in an environment that is primarily natural-appearing but with easy access for the highway vehicle. Alterations to the natural landscape remain subordinate to the user from view points, water use areas, trails, and developed facilities within the setting.

Activities associated with this intensity are both motorized and nonmotorized in nature and may include hiking, motorcycle and trail bikes, nature study, camping, fishing, hunting, snowmobiling, etc.

Standards and Guidelines for All Areas

timber management
A. Reference Standards and Guidelines for Scenic Viewsheds, Management Area 6.

Operational Considerations: See operational considerations for Scenic Viewsheds, Management Area 6.

transportation management
A. *Access is generally single to double lane, dirt or gravel roads.*

recreation management
A. Area Use

1. The area shall be made available for maximum use for a range of activities that are consistent with maintaining area conditions and providing Roaded Natural-Appearing Recreation Experiences.

2. *Recreation use densities will not exceed 2.0 PAOT/acre. This density range includes* averaging in developed recreation sites.

   Operational Consideration: Campsites: Dispersed camp areas should be located to take advantage of topographic and vegetation screening and placed outside of foreground areas of lakes, streams, trails, and key interest features.

3. Open campfires may be limited to designated sites.

B. Visitor Contact

1. Visitor contact shall be for the purposes of:

   a. Informing users of management goals and objectives.

   b. Encouraging user behavior that is respectful of area resources.

      Operational Consideration: Provide information and education material to prospective users through the media and at administrative headquarters.

   c. Ensuring that visitor activities are in compliance with established management standards.

      Operational Consideration: Forest officers or resource technicians should visit, on an average, 50 percent of the dispersed sites annually

C. Structures and Improvements

1. Structures and improvements shall be provided to facilitate use, protect resource values, and for administration needs.

2 Development will be limited to scenic overlooks, trails, trail shelters, campgrounds, picnic areas, boat ramps, sanitary facilities, and those associated with the larger sites. Structures and improvements will be constructed with rustic, natural-appearing materials.

Operational Considerations: Trail management should be consistent with the Roaded Natural classification requirements for construction and maintenance

Toilet facilities may be provided for the protection of area resources and for the purpose of health and safety.

Bridges and culverts may be provided to enhance visitor use, protect resource values, and for user safety.

Dimensional and non-native materials may be utilized but should remain subtle to the area users.

D. Transportation

1. Access will generally be single or double lane, dirt or gravel roads.

2 Motorized Use - The general area is open to off-road vehicle use, except as otherwise closed or restricted.

3. All areas closed or restricted to off-road vehicle use shall be posted.

Operational Consideration: Area and trail closures should be based upon the mandatory and discretionary planning criteria listed in FSM 2355.

minerals management

A Removal of common mineral materials within the Special Management Areas will not be permitted.

B. Continuation of existing withdrawals will be recommended. New areas shall be recommended for withdrawal if adequate protection through operating plans appears feasible and all values including mineral values are evaluated.

C. A "No Surface Occupancy" stipulation will be required for energy and mineral leases in these areas.

special land use management

A. Noncompatible uses, activities, or improvements will not be authorized in these areas.

landownership adjustments

A. Land Exchange

1. Retain National Forest System lands.

2. Purchase private tracts near Dog Lake.

visual management

A Area management practices will be compatible with objectives of this Forest Plan.

Operational Consideration: Physical changes and improvements in these areas should meet quality requirements as described in this Forest Plan.

fire management

Operational Consideration: Give preference to those suppression methods resulting in the smallest practicable area burned and having the least effect on roaded natural recreation values

range management

Operational Consideration: Livestock grazing will be allowed when site-specific objectives for vegetative management have been established and coordinated with all other interests.

Dog Lake Special Management Area (Reference Dog Lake Management Plan, 1981)

recreation management

A. Within three years of designation as a Special Management Area, the District and Forest Headquarters will prepare a coordinated management plan. The plan will detail the type of development which will be allowed in the management area.

B. Recreation development will remain subordinate to the wildlife management purposes of the area.

c. Detailed recreation site plans and objectives will be prepared by the District and Forest Headquarters before any construction occurs.

visual management

A. A viewshed plan will be prepared within two years after designation.

wildlife and fisheries management

A. Maintain and improve wildlife habitat within the management area.

B Conduct wildlife studies to determine nesting habitat

range management

A. Provide for suitable management which coordinates livestock grazing with other resources in order to meet site-specific objectives

B. All range facilities will be constructed so they blend with the area.

timber management

A Timber harvest must meet partial retention standards except in the foreground of the lake where the standard is retention.

transportation management

A Access will be limited to administrative use on the east side of the management area.

B Unless management objectives state otherwise, existing roads serving no purpose will be obliterated.

watershed management

A. Management of the dam and stored water will be conducted in accordance with· The signed stipulation between the Fremont National Forest and Lakeview Water Users, dated January 17, 1983; and the Management Agreement between the Forest and Oregon Department of Fish and Wildlife dated March 4, 1987.

lands management

A. Acquire all private lands within the management area

B. Discourage private development that does not meet the objectives of the area.

Slide Mountain Geologic Management Area (Reference Slide Mountain Geologic Plan, 1966)

recreation management

A. Within two years of designation, the District and Forest Headquarters will prepare a management plan for the area.

B. Recreation development should be kept to a minimum.

C. Interpretation will be used in the area.

visual management

A. A visual inventory will be completed prior to the management plan.

B. The visual retention objective will be observed until the inventory and management plan are completed.

watershed management

A. Lakes will remain in their natural condition without alterations.

timber management

A. Timber harvest should be restricted until completion of the management plan.

South Fork of the Sprague River

recreation management

A. A management plan will be prepared by the District and Forest Headquarters within three years of designation.

B. Dispersed recreation will be emphasized.

visual management

A. The visual retention objective will be observed until completion of the management plan.

MANAGEMENT AREA 8

Emphasis: Research Natural Areas

Goal: Preserve examples of natural ecosystems for research and education.

Discussion: The national Research Natural Area Program reserves typical or distinctive examples of natural ecosystems for scientific and educational purposes. Lands designated or proposed for designation as Research Natural Areas (RNA's) are managed to preserve or restore natural processes, features, and biological communities.

Only authorized scientific research projects and educational use are allowed. Management practices necessary to preserve the vegetation for which the RNA was created may be allowed. These may include grazing, control of excessive animal populations, or prescribed burning. Management practices must be approved by the Station Director with concurrence of the Forest Supervisor

Protection of RNA's will be accomplished using a special closure issued by the Regional Forester under the provisions of 36 CFR 261 50.

The sites designated or proposed as Research Natural Areas (RNA's) include:

Goodlow Mountain RNA (existing):
1,260 acres representing the transition from sagebrush steppe communities through ponderosa pine savannah, to ponderosa pine-white fir forest.

Deadhorse Rim-Whitebark Pine RNA (proposed):
841 acres containing primarily whitebark pine/lodgepole pine communities

Silver Lake Exclosure RNA (proposed):
300 acres of transition communities with varying plant associations. Major species present include sagebrushes, bunch and wheat grass, Idaho fescue, bitterbrush, western juniper, and ponderosa pine.

Vee Pasture RNA (proposed):
620 acres of grasslands Dominant plant communities include western juniper/low sage, low sage/blue grass/fescue, and low sage/one-spike oatgrass/junegrass.

Prescription
Research natural areas will be created in sufficient size and number to adequately illustrate the various important forest and range types in each forest region, as well as other plant communities that have special or unique characteristics of scientific interest and importance. These areas will be created for research and educational purposes (36 CKFR 251.23).

The criteria for selection of RNA's are found in the General Technical Report, PNW-38, Research Natural Areas of the Pacific Northwest, 1975.

These criteria are as follows:

1. Areas which provide a baseline against which the effects of human activities in similar environments can be measured.

2. Sites for study of natural processes in undisturbed ecosystems.

3. Gene pool preserves for plant and animal species, particularly those which are threatened or endangered.

4. Areas which contain a distinctive or unique plant community.

Standards and Guidelines for All Research Natural Areas
See Forestwide Standards and Guidelines for all RNA's.

MANAGEMENT AREA 9

Emphasis: Semiprimitive Recreation

Goal: Provide for a spectrum of dispersed recreation experience opportunities from semiprimitive nonmotorized to semiprimitive motorized through the management of user activities and natural resource settings.

Discussion: These lands provide opportunities for users to enjoy hiking, camping, hunting, and other recreational pastimes in relatively undisturbed natural settings. Vegetation, topography, and geology vary widely.

This management area will provide opportunities for two dispersed recreation experiences.

Semiprimitive Nonmotorized:
Provides recreationists with moderate opportunities for: solitude and isolation from the sights and sounds of other people; independence; enjoyment of nature; and practice of outdoor skills. These areas are generally 1/2 mile from all roads or trails with motorized use (and may include the existence of primitive roads and trails if closed to motorized use) They are generally 2,500 acres or larger They may contain subtle evidence of human activity, but such activity would not draw the attention of an observer wandering through the area. No commercial timber harvesting will be permitted

Semiprimitive Motorized:
Provides recreationists with moderate opportunities for· solitude and isolation from the sights and sounds of other people; enjoyment of nature; and practice of outdoor skills. Motorized equipment may be used in the area. These areas are generally 1/2 mile away from high-standard access roads passable by low-clearance vehicles. Trails or primitive roads are designed to accommodate motorized use such as high-clearance 4-wheel drive vehicles but to discourage 2-wheel drive and other low-clearance vehicles. The areas are generally 2,500 acres or larger and may contain evidence of human activity that may draw the attention of observers wandering through the area. No commercial timber harvesting will be permitted.

Prescription
This prescription comprises two experience levels.

semiprimitive nonmotorized:
Recreation activities associated with this intensity are exclusively nonmotorized in nature. Specific activities are oriented toward both consumptive and nonconsumptive use of the land and water resources of the area, including hunting, fishing, hiking, camping, nature study, cross-country skiing, etc

semiprimitive motorized:
Activities associated with this intensity are both motorized and nonmotorized in nature. Specific activities are centered toward both consumptive and nonconsumptive use of land and water areas, including hiking, motorcycle and trail bikes, boating, nature study, camping, hunting, snowmobiling, etc.

Standards and Guidelines Specific To
MANAGEMENT AREA 9

Standards and Guidelines Applicable To All Intensities

recreation management

A. Visitor Contact

1. Provide information and educational material to prospective users through the media and at administrative headquarters and respective trailheads.

2. Ensure that visitor activities are in compliance with established management standards. These standards will be presented in each area's management plan, prepared no later than four years after establishment.

   Operational Considerations: Visitor contact shall be for the purpose of:

   — Informing users of area management goals and objectives.

   — Encouraging user behavior that is respectful of area resources.

B. Structures and Improvements

1. Structures and improvements shall be provided to facilitate use, protect resource values, and for administration.

   Operational Considerations: Trail management shall be consistent with the Fremont National Forest Trails Management Plan and Trails Management Handbook (FSH 2309).

   Dimensional and non-native materials may be utilized but should blend with the natural features and remain subtle to area users.

C. Administrative Coordination

Operational Considerations: Where area management is shared by two or more administrative units, coordinating conferences should be held to ensure continuity of plan implementation actions.

Formal regulations, orders and/or permits may be necessary to achieve management objectives. Formal and informal user education programs may be initiated to inform users about what to expect and how to use the area for optimum benefit to all. Information/service actions are designed to help meet management objectives, not to promote use.

D. Search/Rescue

The Forest Service will assist within its capacity, as requested by the County Sheriff, in search and rescue and evacuation operations.

Standards and Guidelines Applicable to Specific Intensities

Intensity:
Semiprimitive Nonmotorized

Timber Management

A. Timber harvesting is prohibited in these areas.

Transportation Management

A. No new roads may be built.

B. Existing primitive roads will not be maintained. These roads will be left to close naturally.

C Facilities are limited to trails, trail shelters, signing, and those structures needed for sanitation and safety Facilities will be constructed of rustic native materials.

Landownership Adjustments

A Land Exchange

1. Prioritize acquisition of lands within or adjacent to designated undeveloped areas which benefit Forest administration of roadless resources.

2. Retain National Forest System lands within the designated areas.

Recreation Management

A. Area Use

1. Recreation use density will not exceed 0 15 PAOT/acre and/or at a level that maintains recreation use within the acceptable social carrying capacity without causing damage to the physical resource

   Operational Consideration: The designated carrying capacity is 6 to 15 parties encountered on the trail per day or 6 or less parties visible at camps.

2. The area shall be made available for maximum use for a range of activities that are consistent with maintaining area conditions and providing semiprimitive nonmotorized recreation experiences.

3. Campsites: Dispersed camp areas should be located to take advantage of topographic and vegetation screening and placed outside of foreground view (100 feet) from lakes, streams, trails, and key interest features. A maximum of six or less campsites may be visible to or audible from one another.

B. Visitor Contact

1. Forest officers or resource technicians should visit an average of 20 percent of the dispersed sites annually.

C. Structures and Improvements

1. Signing would be kept to the minimum needed for resource protection and administration.

D. Transportation

1. Trail Planning - Trail development within these areas should follow direction in the Fremont National Forest Trails Management Plan.

   Operational Consideration: Trail difficulty levels will be designed to provide for more difficult to most difficult experiences.

2. Motorized Use - Unroaded areas are not open to off-road vehicle use.

E Visual Management

1. Area management practices shall be compatible with the Retention Visual Quality Objective.

Operational Consideration: Management will provide for ecosystem diversity through natural plant succession.

Range Management

A. Use of motorized equipment in construction, reconstruction and maintenance of existing structural range improvements will be discouraged. Some exceptions (e.g., chainsaws) may be allowed site specifically.

B. Nonstructural range improvement work will be designed to maintain or enhance the semiprimitive characteristics of the area.

Minerals Management

A. Locatable Minerals - Claimants may use existing primitive roads in undeveloped areas as access to claims served by these roads. Additional road construction or extension of road by vehicle use will be permitted if necessary for activities proposed and as approved in the Plan of Operations. Road obliteration may be required if mineral related activities are abandoned.

Operational Consideration: A full range of options must be considered in developing the Plan of Operations access requirements. These could include foot or horseback access, ATV access, primitive wheel track roads, normal side cast construction or full bench construction requiring end-haul and stockpiling excavation for reclamation.

B. Leasable Minerals - No surface occupancy stipulations may be recommended for mineral/energy leases proposed in undeveloped areas.

Fire Management

A Allow fire to play a natural part within the setting.

Operational Consideration: Develop an implementation plan that will allow for planned and unplanned ignitions to alleviate fuels and stimulate ecosystem diversity. This plan will address "minimum impact" suppression (e.g., use of natural barriers in fireline construction, use of clear or "fugitive" retardant, use of motorized equipment only as a last resort, etc.) consistent with other fire management objectives (cost, safety, demand for suppression forces, etc). This plan will be prepared in conjunction with the area management plan.

Intensity:
Semiprimitive Motorized

Timber Management

A. There will be no scheduled timber harvesting permitted to occur in these areas. Vegetative management may occur only to maintain or enhance the semiprimitive setting.

Recreation Management

A. Area Use

1. The area shall be made available for maximum use, for a range of activities that are consistent with maintaining area conditions and providing semiprimitive experiences.

2. Motorized recreation use density will not exceed 0.25 PAOT/acre, and/or at a level that maintains recreation use within acceptable social carrying capacity without causing damage to the physical resource.

   Operational Consideration: The acceptable social carrying capacity is considered to be 15 to 30 parties on trails per day and 10 or less parties at campsites.

3. Campsites· Dispersed camp areas should be located 100 feet from streams, primitive roads, trails, and key interest features

4. Campfires: May be limited to designated sites.

B. Visitor Contact

1. Forest officers or resource technicians should visit, on an average, 20 percent of the dispersed sites annually.

Visual Management

A. Area management practices shall be compatible with the Retention Visual Quality Objective.

Range Management

Operational Consideration: Range improvement location and construction standards should be consistent with this recreational intensity

Transportation Management

A *Encourage the development of trails within these areas, per the Fremont National Forest Trails* Management Plan. Trail difficulty levels will be designed to provide for most difficult to easiest experiences, per Fremont National Forest Trails Management Plan and FSH #2309 Trails Management Handbook.

B. Development is limited to trails, trail shelters, signs, and those structures needed for sanitation and safety. Structures must be constructed of rustic, native materials.

C. Public access is by trails and primitive roads, ranging in challenge from most difficult to easiest

D. Primitive roads are maintained at a level passable for high-clearance vehicles.

E. Road density should not exceed 0.5 mile per square mile of land. Where road density is exceeded, closures and/or obliteration will be considered.

Fire Management

A. Develop a fire management plan addressing the use of prescribed and natural fire to:

1. reduce natural buildups of fuels that present a fire danger in excess of that which might have existed had fire been allowed to occur naturally; and

2. reduce to an acceptable level the risks and consequences of wildfire within the setting or escaping from the setting.

   Operational Consideration: Fires will be suppressed to avoid serious threats to life and/or property within the semiprimitive setting or to life, property, or natural resources.

3. The fire management plan will be prepared in conjunction with the area management plan.

MANAGEMENT AREA 10

Emphasis: Wilderness

Goal: To manage the Gearhart Mountain Wilderness in accordance with the Wilderness Act regulations and policy.

Discussion. The Gearhart Mountain Wilderness (22,823 acres) will be managed, as mandated by the Wilderness Act of 1964, to preserve natural conditions and to retain an environment where the effects of human activity are substantially unnoticeable, where outstanding opportunities for solitude or primitive recreation can be provided, and where natural ecological processes can continue with minimum interference.

The Wilderness contains diverse plant communities, wildlife species, and landforms Notable landforms include Gearhart Mountain and the Palisades, a group of picturesque rock formations. The Gearhart Mountain Wilderness is described in detail in Chapter III of the accompanying EIS.

Use will be managed to provide Wilderness visitors with moderate to high degrees of solitude and primitive recreation opportunities. One of four management intensity levels may be used to control impacts from human use. Timber management activities are prohibited; however, domestic livestock grazing is permitted, as specified by the Wilderness Act of 1964

Prescription
This prescription comprises four management intensities, including:

wilderness management intensity two:
Characterized by an essentially unmodified natural environment. Ecological and natural processes are not measurably affected by the actions of users, but are slightly affected by commercial livestock grazing. Environmental impacts are minimal, restricted to temporary loss of vegetation where camping and commercial livestock grazing occur. Most impacts recover on an annual basis and will be apparent to only a low number of visitors.

This intensity provides an outstanding opportunity for isolation and solitude, with very infrequent encounters with other users. The user has opportunities to travel across country utilizing a moderately high degree of self-reliance, in an environment where the evidence of human-related activities may be unnoticeable. Interparty contacts will be very few while traveling and rare to nonexistent at the campsite.

Management will strongly emphasize sustaining and enhancing the natural ecosystem. Direct on-site management of visitors will be seldom Necessary rules and regulations will be communicated to visitors outside the area, such as at trailheads or boundary portals. Contact of visitors by Forest personnel will be mostly reactive and by invitation, with discussion items limited to what visitors want to know. Formal and informal user education programs will be initiated to inform users about what to expect and how to use the area for optimum benefits to all Formal restrictive regulations or programs may be considered only when light-handed, less restricted measures have consistently failed to achieve desired goals and objectives. Infrequent patrols and monitoring of conditions by appropriate state and federal agency personnel will be conducted only as necessary to achieve management objectives All scientific and ecological monitoring actions will be scheduled to meet social setting criteria. Trails will not be constructed, and maintenance will be conducted only to protect the resource. No trail signs will be present, and no facilities of any kind will be provided or permitted, including lookouts and radio transmitter stations.

wilderness management intensity three:
Characterized by an essentially unmodified natural environment. Ecological and natural processes and conditions are minimally affected by the action of users, but moderately affected by commercial livestock grazing. Environmental impacts are low and restricted to minor losses of vegetation where camping and commercial livestock grazing occur. Most impacts recover on an annual basis and will be apparent to only a low number of visitors.

There is high opportunity for experiencing isolation from the sights and sounds of people, with the probability of encountering other users being low. The user has good opportunity for experiencing independence, closeness to nature, tranquility, and self-reliance through the application of primitive recreation skills. These opportunities occur in an environment that offers a moderately high degree of self-reliance. Interparty contacts will be low on the trail and fairly low at the campsite, with parties often camped in isolation.

Management will emphasize sustaining and enhancing the natural ecosystem. Direct, on-site management will involve minimum visitor contact during the normal use season. Necessary rules and regulations will be communicated to visitors by Forest personnel and will be mostly reactive and by invitation. In addition to what the visitor wants to know, the opportunity will be seized to present other pertinent site-specific messages. Formal and informal user education programs will be initiated to inform users about what to expect and how to use the area for optimum benefit to all. Formal rules and regulations may be necessary to achieve management objectives, and permits may be considered only when less restrictive measures have failed to achieve desired goals and objectives. Signs will be permitted within the area, and will provide only the minimum information necessary to protect the wilderness resource. Trails will normally be constructed, maintained, and managed at the most difficult level, per Trails Handbook (FSH 2309). Routes will be maintained only for resource protection and minimal user safety. Modification of the natural environment would be minimal. The route should provide the user with an opportunity for testing skills and experiencing a sensation of physical exertion and a feeling of accomplishment. Facilities will be provided only in a few extreme cases, only for the purpose of resource protection, and will use only native materials.

wilderness management intensity four:
Characterized by an essentially unmodified natural environment where ecological and natural processes are, in a few areas, moderately affected by the action of users and/or commercial livestock grazing and show some losses of vegetation. Impacts in some areas often persist from year to year and are apparent to a moderate number of visitors.

Moderate opportunities for experiencing isolation from the sights and sounds of people, with the probability of encountering other users low to moderate. The user has moderate opportunities for experiencing independence, closeness to nature, tranquility and self-reliance through the application of primitive recreation skills. Contact with other visitors both on the trail and while camped will be moderately frequent.

Management will emphasize sustaining and enhancing the natural ecosystem. On-site management will involve routine visitor contact. Necessary rules and regulations will be communicated to visitors outside the area, such as at trailheads and boundary portals. Contact is initiated by Forest personnel during routine duties. Information concerning protection of site-specific wilderness resources will be presented. Formal and informal user education programs will be initiated to inform users about what to expect and how to use the area for optimum benefit to all. Formal rules and regulations may be necessary to achieve management objectives, and permits may be considered only when less restrictive measures have failed to achieve desired goals and objectives. Signs will be permitted within the area, and will include the minimum number necessary to protect the wilderness resource and for administration. Trails will normally be constructed, maintained, and managed at "difficult" level, per Trails Handbook (FSH 2309), to accommodate moderate use for the majority of the use season The route will modify

natural conditions only to the extent necessary to protect the environment and provide for moderately safe use by a user with limited experience and average physical ability. A moderate number of facilities will be provided or permitted, and only those necessary for the protection of the wilderness resource and the user. Natural materials will predominate. Dimensional and non-native materials may be used, but must remain nonevident to the average user.

wilderness management intensity five:
Characterized by a predominantly unmodified natural environment, where ecological and natural processes are, in many locations, substantially affected by the action of users. Environmental impacts are generally high in areas along the shores of Blue Lake and near major entry points. Impacts often persist from year to year and there may be moderate loss of vegetation and soil at some sites. Impacts are readily apparent to most visitors.

This intensity offers moderate to low opportunities for experiencing isolation from the sights and sounds of people with the probability of encountering other area users moderate to high. The user has the opportunity for a high degree of interaction with the natural environment. Contacts with other users can be relatively high, both on the trail and at campsites. Some parties will camp out of sight and sound of other parties, but this will not be common during the main-use season.

Management will be oriented to sustaining and enhancing the natural ecosystem. Necessary rules and regulations will be communicated to visitors outside the area, such as at trailheads and boundary portals. Special efforts will be taken to contact visitors. Information concerning wilderness management, user conflicts, fire prevention, and other pertinent subjects will be presented. Formal and informal user education programs will be initiated to inform users about what to expect and how to use the area for optimum benefit to all. Formal rules and regulations may be necessary to achieve management objectives and permits may be considered only when less restrictive measures have failed to achieve desired goals and objectives. Signs within the wilderness will be placed for resource protection purposes. Trails will normally be constructed, maintained, and managed at "easy" level, per Trails Handbook (FSH 2309), to accommodate heavy traffic for the majority of the use season. The routes will blend into the natural features of the area Facilities and improvements may be provided and permitted for resource protection. Facilities, when constructed, will emphasize the use of natural materials. Dimensional and non-native materials are acceptable, but should harmonize with the natural environment

Standards and Guidelines Applicable to All Intensities

recreation management

A. Accomplish wilderness management activities with nonmotorized equipment and nonmechanical transport of supplies and personnel. Do not approve or request approval for the use of motorized equipment or mechanical transport, unless it meets criteria outlined in FSM 2326 1.

B. Discourage flights over the Wilderness within 2,000 feet of the ground surface Contact Federal Aviation Administration (FAA) for posting 2,000 feet over terrain flight for the Gearhart Mountain Wilderness. Maintain contact with the FAA, NOAA, military authorities, and with pilots to keep aeronautical charts current and to reduce low-level flights.

C. Restrict any combination of persons and recreation livestock entering the Wilderness to 12, without written authorization Maximum recommended size for cross-country travel is 6. Total maximum size with authorization is not to exceed 20.

D. Camps shall be separate from other campsites and set back from trails, meadows, lakes, and streams at least 200 feet.

E. Place the minimum number of signs necessary to protect the wilderness resources and for administration compatible with the adopted wilderness management intensity for the area.

Operational Considerations: A maximum of two directional signs, with a maximum of two destination geographic features per sign, to be placed at trail junctions.

Geographic features may be used, if necessary, to direct users to designated campsites (indirect methods favored).

F. Recreational stock is permitted, except in camp areas. Stock held overnight will be kept away from foreground of lakes and streams, and out of sight of camp areas and trails.

G. *Pets must be under reliable voice control and/or physical restraint to protect both people and* wildlife.

H. Coordinate with Klamath and Lake County Sheriffs in search and rescue operations within the Wilderness.

Operational Considerations: County sheriffs must be aware of the authority of the Forest Service to authorize motorized and mechanical equipment, including aircraft.

With coordinated preplanning, search and rescue operations can be conducted without conflict with the Wilderness Act.

District Ranger will annually review search and rescue plans with respective county sheriffs. These reviews will emphasize the Forest Service responsibility to ensure compliance with the Wilderness Act.

transportation management

A. *Trails*

1. Trail density will not exceed the existing density of 2.10 miles per 640 acres. No new trails will be constructed within the Wilderness.

2. *Trail Reconstruction (applies only to management intensities three, four and five)*: Reconstruction will be limited to the Nottin Creek Trailhead and Gearhart Ridge relocation. Design and construct at easy, more difficult, or most difficult as determined by the intensity level.

   Operational Consideration: Trail reconstruction will only modify natural conditions to the extent necessary to protect the environment and provide for safe use by a user with limited experience and average physical ability.

B. Trail Maintenance

1. With the exception of intensity level 5, maintain existing Wilderness trails at more difficult levels, per FSM 2309.

   Operational Consideration: Conduct trail maintenance activities during periods of low use and/or prior to heavy use season.

soil management

A. Displacement and eroding of soil resulting from human activity will be limited to a rate that closely approximates the natural process.

Operational Considerations: Minimize impacts to the soil by:

-- Discouraging shortcutting trail switchbacks through trail redesign/reconstruction.

-- Establishing erosion control devices such as water bars, etc

-- Minimizing soil compaction by rehabilitating and/or closing high-use sites.

-- Prohibit the practice of tying recreation livestock to trees Use of picket lines is permitted.

B. Soil compaction should not exceed limits which will prevent natural plant establishment and growth, except on trail treads.

C. Promote natural healing through reestablishment of vegetation with indigenous or appropriate naturalized species, when monitoring demonstrates there is no reasonable expectation of natural healing

Operational Considerations: Conduct restoration during late spring (May) or early fall (October).

Use nonmotorized/nonmechanized equipment to accomplish improvement objectives.

water management

A. Maintain the natural quality of streams and lakes

B. Establish nonpoint water quality monitoring systems in the Dairy Creek drainage. A water quality monitoring plan will be prepared

Operational Considerations: Use information and education program to inform visitors of:

-- Precautions for treating drinking water.

-- Proper methods of washing, personal sanitation, and human waste disposal.

air management

A. Manage smoke from management-ignited prescribed fires occurring in or adjacent to the Wilderness in a way that causes the least impact on air quality-related values

In accordance with the Federal Clean Air Act, sources of air pollution which affect the visibility from the wilderness will be sought out and corrected.

fish and wildlife management

A Manage to allow natural ecological successions, including natural infestations of insects, to operate freely, insofar as they do not endanger significant resources outside the Wilderness. Maintain fish and wildlife indigenous to the area immediately prior to designation, with emphasis on preservation of threatened and endangered species.

B. Improvements and activities necessary for fish and wildlife management, and in existence prior to designation, are permitted and maintained, provided work is performed with nonmotorized equipment and subject to management plan guidelines.

C. Reestablishment of native species or establishment of an endangered or threatened species is permitted, provided the action is for correcting an undesirable condition resulting from human influences.

Operational Considerations: Evaluate constraining factors (habitat, socio-economic, etc.).

Cooperate with other agencies such as the Oregon Department of Fish and Wildlife.

Use an information and education program to inform visitors of appropriate, nondisturbing behaviors.

D. Fish stocking of Blue Lake shall be compatible with wilderness resource values and use. Stocking may be curtailed or discontinued if recreation impacts exceed the limits of acceptable change prescribed for the Blue Lake area.

minerals management

A. Mining and mineral/energy leasing activities are prohibited in the Gearhart Mountain Wilderness.

Operational Consideration: Wildernesses were withdrawn from all forms of appropriation under the mining laws and from disposition under all mineral leasing laws as of January 1, 1984 by the Wilderness Act. There were no existing mining claims or outstanding mineral leases on the Gearhart Mountain Wilderness as of that date.

cultural resource management

A. A cultural resource inventory will be conducted prior to the commencement of any ground-disturbing activity, i.e., construction of trails and range improvements, within the Wilderness boundaries. As funding becomes available, cultural resource inventories will be conducted within the Wilderness boundaries. This inventory will follow the guidelines set forth in the Forest Inventory Plan and will be supervised by a professional archaeologist.

Operational Considerations: Proposed ground-disturbing activities will be designed to ensure that there should be no effect on inventoried cultural properties.

When protection is not possible, treatment of the site will be conducted in order to negate or mitigate any adverse effects.

range management

A. Commercial livestock grazing is permitted

B. Range improvements shall be permitted under an approved Allotment Management Plan that specifically addresses the following:

1. Whether the improvement is needed for wilderness or range resource protection.

2. The improvement shall be constructed of native materials unless it can be documented that the cost differential for such construction is unreasonable.

Operational Considerations: Generally, these practices will occur during the off-use season (before June 1 and after September 1).

Facilities should remain subordinate in foreground distance zones (200 feet to 300 feet) from trails, lakes, and key interest features. They should remain nonevident and harmonious with the natural landscape in middleground and background distance zones.

C. Suppress noxious weeds when outbreaks threaten wilderness objectives or resources in adjacent lands. Such action shall occur only when authorization is granted per FSM 2320. Favor biological methods when available. Monitor conditions during annual range trend analysis.

D. Where possible, range improvements will be placed outside the Wilderness boundary.

E. Available forage will be managed for 35 percent utilization.

F. The general range trend will be managed for stable and upward trends.

G. The management of the range condition will be good to excellent.

H. Manage to maintain and enhance sensitive plant species and their habitats.

timber management

A. Timber harvesting and fuelwood cutting is prohibited.

insect and disease control

A Pest Suppression

1. Suppress pests when outbreaks threaten wilderness objectives or resources in adjacent areas. Such action shall occur only when authorization is granted per FSM 2320. Favor biological methods when available.

B. Pest Prevention

1. Monitor pest populations within the Wilderness as a management strategy for adjacent resource areas.

fire management

A. Management objectives presented in the Gearhart Mountain Wilderness Management Plan will be followed.

B. Utilize a low-intensity prevention effort.

Operational Considerations: Inform the public of the role of fire in wilderness ecosystems.

-- Provide signing at trailheads to inform public of the role of fire in the Wilderness.

-- If necessary, conduct public meetings to inform public of fire management policies regarding the wilderness resource.

C. For initial attack suppression action and escaped fire suppression:

1. use suppression techniques that achieve minimal disturbance;

2. all naturally-occurring fires within Wilderness boundaries will initially be considered prescribed. Upon analysis of each ignition, the fire will be declared either a prescribed fire or a wildfire. If a fire is declared a wildfire, the appropriate suppression strategy will be applied. These strategies by fire intensity level include:

   - FIL 1 - Confine
   - FIL 2 - Contain
   - FIL 3 - Contain/Control

3. human-caused fire will be suppressed, using the appropriate suppression strategy.

D. For treatment of natural fuels:

1. the use of natural or planned prescribed fire may be permitted for wilderness resource enhancement or to protect resource values outside the Wilderness (Reference FSM 2324, 5100, 5150, and 5190);

2. treatment will occur with natural fire occurrence under prescribed conditions; and

3. utilize prescribed fire when appropriate.

E. Motorized/mechanized-made fuelbreaks are not appropriate for fuelbreak construction.

landownership adjustments

A. Land Exchange

1. Retain National Forest System lands.

Standards and Guidelines Applicable to Specific Intensities

Intensity:
Wilderness Management Intensity Two

Recreation Management

A. Ninety percent probability of not encountering another party while traveling and camping.

B. No other camps visible or audible from any one site.

C. No more than two low-impact sites per 640 acres.

D. No moderately or highly impacted sites. One site per one square mile (640 acres)

Intensity:
Wilderness Management Intensity Three

Recreation Management

A Eighty percent probability of encountering not more than one other party while traveling and camping.

B. Not more than one campsite should be visible or audible from any campsite.

C. No more than three low-impact sites per 640 acres.

D. No more than two moderately impacted sites per 640 acres.

E. No highly impacted sites per 640 acres.

Intensity:
Wilderness Management Intensity Four

Recreation Management

A Eighty percent probability of encountering not more than three or fewer parties per day while traveling or camping.

B. Not more than one campsite should be visible or audible from any campsite.

C. No more than four low-impact sites per 640 acres.

D. No more than two moderately impacted sites per 640 acres.

E. No highly impacted sites per 640 acres.

Intensity:
Wilderness Management Intensity Five

Recreation Management

A. Eighty percent probability of encountering five or fewer parties per day while traveling or camping.

B. A maximum of two campsites may be visible or audible from any campsite.

C. No more than five low-impact sites per 640 acres.

D. No more than five moderately impacted sites per 640 acres.

E. One highly impacted site per 640 acres

MANAGEMENT AREA 11

Emphasis: Wild and Scenic River

Goal: To preserve the Scenic River characteristics of the rivers and corridors designated as Scenic Rivers and study rivers under the Oregon Wild and Scenic Rivers Act.

Discussion: This management area includes those sections of the Sycan River, North Fork Sprague River, and Chewaucan River corridors included in the National Wild and Scenic Rivers System, under the Oregon Wild and Scenic Rivers Act. These sections will be managed to preserve natural characteristics.

The sections of river corridor designated for Scenic River, and Recreation River designation are largely undeveloped and free of any impoundments, although they are accessible by road in a few spots However, no new roads will be built within the river corridor in these segments.

This management area will not be used for timber production until management plans are prepared. Domestic livestock grazing will be permitted.

The formal boundary of the designated rivers will be established within one year from designation and a management plan will be prepared within three years.

A river study will be completed on the study river within three years and a recommendation prepared as to the results of that study.

Prescription
This prescription is applicable to those segments of the Sycan River and North Fork Sprague River that were designated Scenic River class.

The Scenic and Recreation River area designations will be managed to: (1) maintain or enhance the condition of the high quality scenery and the largely undeveloped character of its shoreline; (2) maintain or improve the quality of the water which enters the river; (3) improve the fish and wildlife habitat; (4) provide opportunities for river-oriented recreation which is consistent with its largely undeveloped nature and dependent on its free-flowing condition; and (5) utilize other resources and permit other activities which maintain or enhance the quality of the wildlife habitat, river fishery, scenic attraction, or recreation values.

Standard and Guidelines

timber management

A. Timber harvesting shall not be permitted within the river corridor unless specified in completed management plans.

recreation management

A. Area Use

1. The area shall be made available for maximum use for a range of trail and river related activities that are consistent with maintaining area conditions and providing Scenic River experiences. Except for area size, this management prescription will provide an ROS physical setting for semiprimitive nonmotorized recreation.

Operational Considerations: River use levels should be managed to maintain the recreation experience quality; establish regulations when the need warrants; and, in cooperation with the Oregon State Marine Board, limit size, number, and type of boats.

2. Open campfires should be limited to designated dispersed camp sites.

B Visitor Contact

1. Visitor contact shall be for the purpose of disseminating information on area management goals and objectives.

   Operational Consideration: Provide information and education material to prospective users through the media and at campgrounds, administrative sites, at trailheads, and boat launch sites.

2. Encourage user behavior that is respectful of the river and area resources.

   Operational Consideration: Emphasis shall be in terms of user safety on the river.

3. Ensure that visitor activities are in compliance with established management standards, regulations, and state and local laws.

   Operational Consideration As necessary, Forest officers should contact users within the area to ensure compliance.

C Structures and Improvements

1. Structures and improvements shall be provided to enhance user experiences, facilitate use, protect resource values, and administration of the area

   Operational Consideration: Trail management should be consistent with the Semiprimitive ROS classification guidelines for construction and maintenance.

   Boat ramps may be provided at periodic intervals as required to accommodate the varied needs and skills of river users.

   Structures that may be permitted in the area include:

   -- single family residences
   -- lodges
   -- public recreation facilities
   -- where demand indicates, compatible commercial service facilities may also be provided.

2. Place any new developments out of view from the river by taking advantage of topographic and vegetative screening.

3. Signs and other VIS structures shall identify the area, provide information, and direct use.

   Operational Consideration: Dimensional and non-native materials may be utilized but should be subtle to the user.

D. Site Planning and Design

1. Developed campgrounds within the area shall be adapted to accommodate boating groups.

2. Structures and sites should be attractive in their designs, materials, and coloring and located and screened to be as inconspicuous as possible.

3. Soil compaction should not exceed established limits, except as necessary for the development of camp sites, administration facilities, trail treads, trailheads, and boat launch sites.

4. The general area and trails are closed to off-road motorized vehicle use, except for administrative purposes.

E. Administrative Coordination

Operational Consideration: Where area management is shared by two or more administrative units, coordination conferences should be held to ensure continuity of management decisions and actions.

F. Search/Rescue

1. The Forest Service will assist within its capacity, as requested by the County Sheriff, in search and rescue and evacuation operations.

minerals management

A. Removal of mineral materials within the corridor will not be permitted.

B. "No Surface Occupancy" stipulations will be recommended for energy or mineral lease applications within the corridor.

C. Where possible, protect corridor under mining laws.

Operational Consideration: The river bed and a corridor one-quarter mile in width on each bank will be withdrawn legislatively from appropriation under the mining laws, subject to valid existing rights.

land use management

A. *Acquisition*

1. Acquire fee title on a willing seller basis, or scenic easements, or other easements on private lands where necessary for reasonable public access and maintenance of existing river character.

B. *Regulation*

1. Maintain existing patterns of land use and ownership provided they remain consistent with the purposes of the Wild and Scenic Rivers Act.

2. Protect river area scenic values in accordance with the requirements of the Wild and Scenic Rivers Act.

3. Construct and maintain utility structures and facilities within the river corridor in a manner that minimizes effects on fish, wildlife, scenic, and recreation values.

   Operational Considerations: Generally, there will be no new utility routes across the river. If crossings are required, they shall occupy existing corridors, as expanded for the facility.

visual management

A. Area management practices shall be commensurate with the retention visual quality.

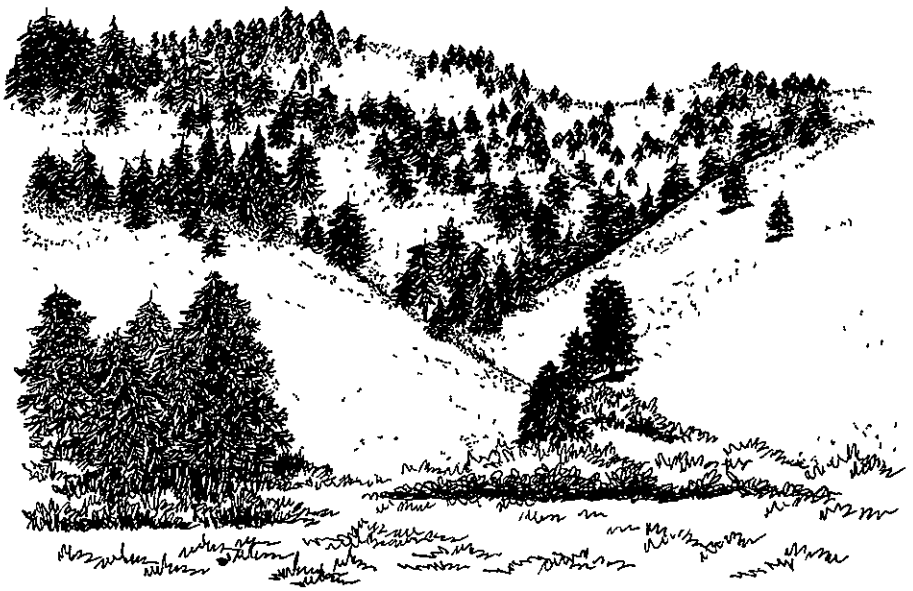
transportation management

A Construction

1. All future roads shall be located and designed to remain visually inconspicuous from the river surface and river banks

B. Maintenance

Operational Consideration· Most Forest Service roads in the corridor should be closed to commercial traffic on weekends from mid-April through September.



MANAGEMENT AREA 12

Emphasis: Utility and Transportation Corridors and Single Use Areas

Goals: Provide for and administer necessary special purpose corridors across National Forest System lands to ensure safe, efficient use of the facilities necessitating use of these lands, and minimize impacts upon Forest resources, landscape, and environment.

Consider Forest Service, other agency, and private sector needs for sites for special purposes, while minimizing adverse impacts upon the productive land base, aesthetics, and other environmental factors.

Discussion: Lands in this management area consist of special use sites (such as microwave stations, work camps, and substations), as well as utility and transportation corridors for electrical transmission lines, roads, and railroads. The physical and biological characteristics of these lands vary widely. The primary objective of Management Area 12 is to provide for the safe and efficient operation of these facilities, while minimizing environmental impacts and encouraging compatible resource use.

Special use sites will be managed to concentrate developments on small areas, with minimal damage to the site and surrounding environment. Such sites may be developed to meet Forest Service, other agency, or private sector needs. However, the Forest Service must approve the appropriate special use permits and site plans for developments proposed by other agencies or by the private sector. When possible, overhead and/or buried transmission lines will be managed to share right-of-way with roads.

All electronic sites with previously approved site plans will remain dedicated to electronic uses. In addition, Cox Peak, T.V. Hill, Shake Butte, and Bald Mountain will be allocated as electronic sites pending preparation and approval of electronic site plans

Spodue Mountain will continue as a site for the MCI microwave facility. Other public service uses will be allowed if the facilities can be reasonably enclosed within the MCI security fence. No facilities impairing fire detection activities from or adjacent to Spodue Lookout will be permitted. Spodue will not be dedicated as an electronic site.

Slide Mountain, the primary feature of the Slide Mountain Special Management Area, will not be considered for electronic uses.

None of the high points in the Drake-McDowell Roadless Area will be considered for electronic uses.

Utility and/or transportation corridors will also be managed for complementary resource objectives, if conditions permit. For example, lands within transmission line corridors can be used to produce forage for livestock and wildlife. Forage growth also stabilizes soils within the corridor.

Prescription
This prescription is applicable to strips of land or other relatively small land areas which are, or may be, occupied by high to moderately high investment facilities authorized by memorandums of understanding, easements, or special use permits These lands are, or may become, primarily occupied for purposes other than renewable resource production. Although these lands are included in a management area which aggregates all special purpose lands outside the suitable land base, some multiple-use benefits may be derived within the corridors upon lands not actually occupied by improvements.

Standards and Guidelines - See Forest-wide Standards and Guidelines

timber management

A. Include Extra High Voltage (EHV) corridors in timber sales rather than using R/W line as sale boundary.

B. Coordinate danger tree removal with permittee.

Operational Considerations. Consider visual improvement of corridor through timber harvest coordinated with landscape management.

Consider corridor management in KV activities

wildlife management

A. Encourage low-growing species for thermal and hiding cover in EHV corridors

MANAGEMENT AREA 13

Emphasis: Developed Recreation

Goal: To provide convenient recreational opportunities at readily accessible and appropriately designed developed sites.

Discussion: A variety of Forest settings are allocated to provide recreation opportunities dependent on developed facilities. Developments include downhill ski areas, campgrounds, picnic areas, boating sites, swimming areas, scenic overlooks, and access roads.

Physical developments and human activities, sights, and sounds may dominate the setting and will often be important in providing the desired recreation experiences. Roads suitable for low-clearance passenger cars will provide access, and home sites will be large enough to accommodate many users at one time.

Timber harvesting will not be scheduled in developed recreation sites, although some timber management activities may be used in order to improve scenic quality and safety. Livestock grazing will be prohibited in developed sites.

Prescription
This prescription comprises four management intensities, including:

existing recreation sites - full service:
This management intensity is applied to areas of land where physical improvements have been provided for a range of developed recreation opportunities. These existing developed sites will be maintained at a full service level to provide a setting for a variety of recreation activities and experiences, including canoeing, picnicking, hiking, skiing, boating, etc.

Full Service Sites:

Lofton Reservoir Campground
Dog Lake Campground
Cottonwood Meadows Picnic Area, Campground, and Boat Launch
Marster Spring Campground

existing recreation sites - reduced service:
This management intensity is applied to areas of land where physical improvements have been provided for a range of developed recreation opportunities. These existing developed sites will be maintained at a reduced service level to provide a setting for a variety of recreation activities and experiences including canoeing, picnicking, hiking, skiing, boating, etc.

Reduced Level Sites:

Sprague River Picnic Area
North Warner Viewpoint
Deep Creek Campground
Willow Creek Campground
Mud Creek Campground
Drews Creek Picnic Area and Campground

Campbell Lake Picnic Area, Campground, and Boat Launch
Deadhorse Lake Picnic Area, Campground, and Boat Launch
Dairy Point Campground
Lee Thomas Campground
Sandhill Crossing Campground
Happy Camp Campground
Thompson Reservoir Picnic Area, Campground, and Boat Launch
East Bay Picnic Area, Campground, and Boat Launch
Silver Creek Marsh Campground

proposed recreation site:
This management intensity is applied to areas of the Forest that are suitable for a variety of developed recreation facilities. Under this intensity, selected areas will be reserved for future study and development.

The types of facilities to be developed depend on user demand patterns and specific site suitability. Sites to be developed will complement the existing developed facilities and will expand the Forest's capacity to accommodate additional use.

private sector recreation site:
This management intensity is applied to areas of the Forest that are currently under special use or have the potential as special-use sites Developed recreation opportunity types associated with this intensity are provided by developed winter sports sites, organization camps, and resorts.

Standards and Guidelines Applicable to All Intensities

recreation management
A. Administration

1. Occupancy and use of recreation sites shall be regulated to the extent necessary to protect the resources and to ensure safe, enjoyable recreation experiences for the maximum number of visitors, at the level for which the sites were designed

   Operational Considerations: Utilize regulations contained in 36 CFR 261 as necessary to ensure full public enjoyment of recreation sites.

   Clearly notify the public of the conditions of occupancy and use of the recreation sites.

   Ensure that personnel who perform operation and maintenance (O&M) functions are familiar with the full/reduced service levels of O&M plans. (See USDA Handbook "Cleaning Recreation Sites ")

2. A vegetative management prescription and plan will be prepared and implemented for each site or group of sites (See USDA Handbook "Cleaning Recreation Sites.")

3. Each site should be analyzed periodically to determine whether its intended function is being served and if it requires alteration, replacement, closure, or elimination

4. Provide periodic patrols and site supervision, utilizing volunteer hosts where appropriate.

B. Operation

1. An O&M plan at the full/reduced service level shall be prepared and updated annually.

   Operational Consideration: Cleaning and policing should be performed regularly to ensure that sites are clean and sanitary, free of litter, and neat in appearance. (See USDA Handbook "Cleaning Recreation Sites.")

2. Each site shall be inspected annually and all known safety hazards should be eliminated to the extent practicable.

3. Potable water sources shall be operated and maintained in accordance with FSM 7420 and federal, state, and local regulations. Water supply systems will be closed if testing indicates a hazard to human health.

4. Vaults, septic tanks, and wastewater systems shall be inspected at regular intervals to ensure adequate operation.

5. Maintain all site improvements to their design standards, with priority given to health and safety-related items.

C. *Rehabilitation*

1. A detailed site plan will be developed prior to site rehabilitation.

   Operational Consideration: Rehabilitate sites only for the protection of capital investments and resource values.

2. Rehabilitation work shall conform to the approved site plan.

   Operational Consideration: Soil compaction should not exceed established limits except as necessary for rehabilitation of sites.

special land use management

A. Noncompatible uses, activities, and improvements will not be authorized in these areas.

land use management

A. Developed sites are not available for other uses provided by special use permit.

Operation Consideration: Exceptions may be made for short-term uses such as weddings, reunions, and special services related to the administration, operation, and maintenance of sites.

B. Use of developed sites for commercial livestock grazing is not permitted.

operational consideration: Install fences when necessary for control

timber management

A No scheduled timber harvests

Operational Consideration: Salvage activities should be specified in the vegetation management plan for the site.

B. Extended harvest rotations, varying from 120 to 330 years, will be used to retain the large tree characteristic of developed sites in forested areas.

minerals management

A. Removal of common mineral materials will not be permitted

B. Existing mineral withdrawals in developed sites will be continued. Sites without withdrawals will be proposed for withdrawal within two years of Plan implementation New sites will be withdrawn when development is completed.

C. "No Surface Occupancy" stipulations will be recommended for energy and mineral lease applications on these sites.

landownership adjustments

A. Purchase

1. Prioritize purchase of private lands adjacent to Thompson Reservoir and East Bay Campgrounds and Dog Lake.

B. Exchange

1. Retain National Forest System lands.

visual management

A. Management practices shall, at a minimum, comply with the Partial Retention Visual Quality Objective for developed sites and areas.

B Viewshed plans will be developed for each recreation site and included with the overall site plan.

fire management

A. Prescribed fire is permitted only under an approved vegetative management plan.

Operational Consideration: Prescribe burn before or after season of use.

Insect and disease control

A. *Pest Suppression*

1. Suppress pest outbreaks with a minimum of disturbance to protect developments and/or users. Favor biological and silvicultural treatments where possible.

B. *Pest Prevention*

1. Utilize IPM strategies to prevent unacceptable losses.

2. Monitor trees in developed sites for hazard to facilities and users.

3. Remove hazardous trees.

Standards and Guidelines Applicable to Specific Intensities

Intensity:
Existing Recreation Sites - Reduced Service

Recreation Management

A. Administration

1. Sites at this service level will not be operated under the Land and Water Conservation Fund Act fee system.

B. Operation and Maintenance

1. Although not required at this service level, potable water sources shall be operated and maintained in accordance with FSM 7420 and federal, state, and local regulations.

2. Garbage services will not be provided on a regular basis and only for the protection of health and safety.

Intensity:
Existing Recreation Sites - Full Service

Recreation Management

A. Administration

1. Collect fees for those sites that meet Land and Water Conservation Fund Act fee site designation criteria.

B. Operation

1. Garbage disposal will be accomplished at intervals sufficient to minimize odors, prevent pollution of water supplies, and avoid attracting disease-spreading insects and rodents.

Intensity:
Proposed Recreation Site

Recreation Management
A Site Planning and Design

1. Development of proposed sites will be based on need and developed under the recreation strategies

2. A comprehensive and detailed plan will be developed prior to site construction or expansion, in accordance with requirements specified in FSM 2330

3. Site plans shall show the specific location and design of all facilities and will provide for proper utilization of the site, control of traffic, public safety, sanitation, site protection, grading, landscape planting, and use distribution.

4 Site designs shall be based upon the Recreation Opportunity Spectrum (ROS) class and development scale concept

B. Site Development

1. The site shall be constructed or expanded to conform with an approved site plan

2. Soil compaction should not exceed established limits except as necessary to accommodate development.

C. Administration

1. The area shall be administered to protect its value for future development.

2. Following development, the site shall be managed under the full service prescription

Timber Management
A. There is no scheduled timber harvests on these lands. Harvest activities shall be only those needed for the protection of area value, health and safety, and the preparation of the site for future development.

Land Use Management
A. Proposed sites are not available for any interim uses under special permit which would change the character of, or otherwise render the site unfit for planned development

B. Use of Cottonwood Organizational Site for livestock grazing is not permitted.

Fire Management

A. All wildfires will be suppressed to minimize size and impacts.

Visual Management

A. Management practices shall at minimum comply with the Partial Retention Visual Quality Objective for developed sites and areas.

Range Management

A. No restrictions for commercial livestock grazing.

Intensity:
Private Sector Recreation Site

Recreation Management

A. Design

1. A master plan will be developed for each site.

2. Plans and designs for sites will show proposed locations for major improvements needed for public use. Design requirements specified in FSM 2337 apply.

   Operational Consideration: Each site will be studied to determine its specific commercial development need and suitability.

3. A site analysis will be made to determine the natural physical attributes and limitations of the site as well as appropriate locations of structures, services, parking, and access.

4. All plans and specifications for site development and operations authorized by a special use permit shall conform to building code requirements of the Forest Service, state, and local governments.

B. Administration

1. Privately financed developments shall be administered to ensure that the terms of the special use permit are being satisfied.

2. Ensure that public health and safety standards are being met and safeguarded

3. Ensure that public services are being provided satisfactorily and at reasonable rates.

   Operational Considerations: Resolve any conflicts with other uses. Preserve the character of the site.

4. Forest Service-owned developments operated by concessionaires will be inspected regularly to determine that the terms of the permit are being satisfied.

Operational Considerations: Ensure that improvements are being maintained adequately. Ensure that improvements are being used as authorized

Timber Management

A. There are no scheduled timber harvests on these lands.

Operational Considerations· Not all standards may be applicable to any given permit

Harvest activities must either be necessary to the achievement of permit objective and activities, or be necessary to protect the public

Fire Management

A All fires will be suppressed to minimize size and impacts.

Visual Management

A. Management practices shall at minimum comply with the Retention Visual Quality Objective for developed sites and areas.

MANAGEMENT AREA 14

Emphasis: Old-growth Habitat to Provide Management Requirements for Dependent Species

Goal: Manage stands of old growth on the Forest to maintain minimum viable populations of dependent, native vertebrate species.

Discussion: Mature and overmature stands of ponderosa pine, pine-associated, and lodgepole pine are the preferred/required habitat of certain wildlife species. Table 30 displays the species and habitat requirements for minimum viable populations.

Table 30. Old-Growth Management Requirements

Indicator Species	# of Sites	Size of Sites (Acres)	Old-Growth Habitat (Acres) Lodgepole	Pine	Pine-Associated
Goshawk	88 48 (21) (1)	60 60		5,280	2,880
Three-toed Woodpecker	84 (61) (1)	75	6,300 (2)		
Pine Marten	47 48 (6) (1)	160 160	7,520 (2)		7,680
Pileated Woodpecker	12	300			3,600
Total Acres			13,820 (2)	5,280	11,120

(1) Additional sites provided by overlap with other indicator species in this table
(2) These acres will be on a two-tired system Total acres would be double

Prescriptions
There are two prescriptions associated with this management area:

dedicated:
Old-growth pine and pine-associated stands will be dedicated, i e , receive no timber management; however, these stands may have wildlife habitat enhancement projects to maintain or enhance old-growth habitat

managed:
Old-growth lodgepole pine stands will be managed on a 120-year rotation At any one time, there will be 15,610 acres in mature/overmature condition.

1. Maintain designated old-growth stands as long as possible without treatment. Select old growth with the greatest potential for longevity.

2. Select and place under management replacement stands, with emphasis on stands with the earliest replacement potential.

Standards and Guidelines

fish and wildlife management

A. The number and location of old-growth stands will approximate that on the Forest Old Growth MR Map (1/15/85) and the Map of Management Areas Common to All Alternatives. The actual site may occur deviate no more than 1 5 miles from the point on the map

B Areas will be selected by a team composed of timber and wildlife as a minimum

C. Stands selected for retention will fit the following descriptions depending on the indicator species:

a. The components of old-growth habitat for pileated woodpecker (300 acres) and northern goshawk (160 acres) include mature and overmature trees (at least 15 trees per acres of 20 inches or larger d.b.h.), multi-storied stands are preferred. A minimum average of two hard snags per acre of at least 12 inches d.b.h must be present with one snag per six acres at least 20 inches d b.h. The old-growth habitat unit should be maintained in 300 contiguous acres where possible, but habitat may be arranged in blocks no less than 50 acres and no more than 1/4 mile apart.

b. Old-growth habitat for pine marten includes 160 acres of mature and overmature high elevation conifers with a crown closure greater than 50 percent. Two hard snags per acre greater than 12 inches d.b.h. with at least one 20 inch d.b.h snag every 12 acres must be present.

c. The components of old-growth habitat for three-toed woodpeckers include 75 acres of mature or overmature lodgepole pine and pine-associated stands. A minimum average of two hard snags per acre greater than 10 inches d b.h. must be present and one large snag (greater than 12 inches d.b.h. must be present every three acres.

D. Old growth area configuration priorities are.

1. blocky in shape with few or no management activities;

2. blocky in shape with management activities present,

3. timbered stringers

timber management

A. Salvage operations will take place only when catastrophic events occur (such as wildlife, insect infestations, windthrow, etc.) and the affected old growth stand is no longer considered suitable old-growth habitat. A new old-growth stand should be delineated to replace the original habitat.

B. Old-growth lodgepole pine stands will be managed on a 120-year rotation.

1. Select and place under management replacement stands, with emphasis on stands with the earliest replacement potential.

fire management

A. Natural fuels management will take place in old-growth areas only to meet old-growth habitat objectives.

B. Old-growth areas should be a high priority for wildfire suppression.

transportation management

A. Old-growth stands should not be bisected or dissected by new road or facility construction.

MANAGEMENT AREA 15

Emphasis: Fish and Wildlife Habitat and Water Quality

Goals: Water bodies and courses, their riparian vegetation, and the immediately adjacent upland areas will be managed to maintain or improve water quality, fish habitat, recreation opportunities, and riparian habitat for dependent wildlife species

Class I and II (perennial and intermittent) streams and water bodies with high recreation, fish, or wildlife values will be managed to provide the habitat capacity needed to meet the ODF&W trout management objectives. The long term goal is to approach the historical riparian condition

Class III (perennial) streams will be managed, at a minimum, to maintain their existing water quality conditions and bank and channel stability.

Class IV (intermittent) streams will be managed, at a minimum, to ensure that the cumulative effects of land-disturbing activities will not jeopardize downstream objectives for perennial streams.

Wet and moist meadows in poor condition will be managed to obtain a fair or better range condition and a stable or upward trend. Meadows in good or better range condition will not be allowed to degrade to lower conditions The long term goal is to approach the historical climax ecological condition.

Management emphasis for wet (CL-M1-11) and moist (CL-M3-11) lodgepole pine ecosystems will be to provide wildlife habitat.

Management Area Wide Standards and Guidelines

A Applicable state and federal water quality standards will be met.

B. Site-specific prescriptions will be required for all project activities that affect aquatic/riparian systems (FSM 2526, R6 Supplement #42).

C. In cases of unresolvable conflict, soil, fish, water, and wildlife will receive preferential consideration.

D. Watershed, wildlife, and fisheries habitat rehabilitation and improvements will be required to meet goals for aquatic/riparian systems.

E. Nonforested riparian zones will be managed to increase the presence of late seral or climax vegetative community types

F. Fencing of aquatic/riparian systems may be required when other means cannot meet management area goals

G. Implement objectives and action items outlined in the Fremont National Forest Riparian Management Action Plan (see Appendix 7)

Standards and Guidelines Applicable to Specific Types within the Management Area

Perennial Streams and Water Bodies

all management activities

A. Management activities in and adjacent to Class I, II, and III perennial streams will be conducted so that all applicable state and federal water quality standards are met or exceeded.

1. Management activities will not cause a measurable increase in water temperature when daily high temperatures exceed the Oregon water quality standard of 58 degrees Fahrenheit (Klamath Basin), or 68 degrees Fahrenheit (all other Fremont National Forest basins) on all perennial streams.

2. Project activities will be conducted in a manner to ensure that turbidity levels do not exceed ten percent of pre-activity levels on Class I, II, and III streams. Short-term violations for required in-stream construction work (i.e., restoration measures, bridges, etc.) are acceptable.

timber management

A. The SMU or WMU occupied by tentatively suitable forest land will be managed on low intensity uneven-aged management for pine and pine-associated stands or a 120-year rotation for lodgepole pine stands.

B. Management of the SMU or WMU will be directed toward providing or meeting the following:

1. Conditions or characteristics

(a) an abundance of mature/overmature trees

(b) diversity in conifer and deciduous tree species

(c) diversity in age classes

(d) an abundance of deciduous shrubs and trees

(e) high (composite) canopy closure - shade to stream

(f) retain: at least 1.5 snags of 10 to 20 inches d b h. and 1 snag greater than 20 inches per acre and at least 2 down logs per acre of 12 inch diameter on the small end and 25 feet in length with the bark and sapwood intact

(g) high amount of large woody debris in the stream channel and upper and lower banks, for stream channel and bank stability and structural fish habitat

2. Management treatments

(a) infrequent disturbance of soil/duff

(b) single tree/group selection harvest

(c) trees growing into lower and upper banks should be retained

(d) minimal amount of equipment disturbance-use in riparian areas

(e) prescriptions will be designed to increase residual density as the stream is approached

(f) no heavy equipment movement up and down stream channels, SMU, or WMU areas during fire suppression or logging activities, perpendicular crossings permitted, but rehabilitation required

(g) allow natural accumulations of dead wood debris; treat only large accumulations that hinder meeting riparian, water, or wildlife objectives

(h) instream construction will take place in accordance with time periods outlined in "Guidelines for Timing of Instream Construction, Fremont National Forest"

range management

A. The SMU's or WMU's subject to livestock grazing will be managed so they do not exceed the following use levels for the forage component.

Table 31. Riparian Areas, Forage Utilization(1) and Allowable Use of Forage(2)

Range Resource FRES(3) Management Level (FSH 2209.21 R-6)	Maximum Annual Utilization (percent) Grass and Grasslike(4)		Shrubs(5)	
	S(6)	U(7)	S(6)	U(6)
B. Livestock use managed within current grazing capacity by riding, herding, and salting, cost-effective improvements used only to maintain stewardship of range.	40	0-30	30	0-25
C. Livestock managed to achieve full utilization of allocated forage. Management systems designed to obtain distribution and maintain plant vigor include fencing and water developments.	45	0-35	40	0-30
D. Livestock managed to optimize forage production and utilization. Cost-effective culture practices improving forage supply, forage use, and livestock distribution may be combined with fencing and water developments to implement complex grazing systems.	50	0-40	50	0-35

(1) This will guide development of annual operating plans and will be used where allotment management plans do not address allowable use Allotment management plans may include utilization standards which are either lower or rarely higher when associated with intensive grazing systems and specific vegetation management objectives which will meet resource objectives for the riparian dependent resources Includes cumulative annual use by big game and livestock
(2) Allowable use of forage is based on the amount of forage that will be left at the end of the overall grazing season or the end of the growing season, whichever is later
(3) Forest Range Environmental Study
(4) Utilization based on percent removed by weight
(5) Utilization based on incidence of use, weight and/or twig length For example, if 50 leaders out of 100 are browsed, utilization is 50%
(6) Satisfactory condition is determined by allotment classification and/or forage condition
(7) Unsatisfactory condition is anything not meeting satisfactory conditions

B. Specific riparian objectives designed to meet a variety of resource needs will be developed by an interdisciplinary team on an allotment basis.

landownership adjustments

A. Emphasize retention of National Forest System lands adjacent to major watercourses.

transportation management

A. Construction of parallel roads will be minimized in the SMU of Class I, II, and III perennial streams or the WMU of lakes with high recreational, wildlife, or fisheries values.

B. Arch or box culverts with open bottoms or bridges will normally be required on all Class I and II perennial streams on permanent road systems, to allow for fish passage.

C. Existing roads within the SMU which parallel Class I, II, or III perennial streams will be relocated on an opportunity basis. Abandoned roadbeds will be rehabilitated.

fire management

A. Machine constructed fire lines should not be constructed in riparian areas during fire suppression activities. Perpendicular crossings, with subsequent rehabilitation, are permitted, but discouraged if alternatives exist

B. Use of prescribed fire will be limited to:

1 Burning of activity fuels located in the upland portion of the SMU

2. Burning of natural fuels for the purpose of enhancing riparian dependant values.

fish and wildlife management

A Reservoirs will be planned for fisheries and other compatible uses where feasible.

B As a minimum, instream fisheries habitat improvement will be coordinated with range, watershed, recreation, and the ODF&W Objectives will be developed based upon the Fremont National Forest "Rise to the Future" Plan.

Intermittent Streams

all management activities

A. The riparian portion of the SMU will be managed to provide the following:

1. Conditions or characteristics

(a) an abundance of trees greater than six inches d b h

(b) high amounts of naturally occurring large woody debris in the stream channel and upper and lower banks

(c) high levels of herbaceous and shrub vegetation (as measured against potential)

2. Management treatments

(a) trees growing into lower and upper banks are usually retained

(b) single tree or group selection harvests - preferred

(c) soil and duff disturbance minimized (minimal amount of equipment disturbance)

(d) stream channels and riparian areas will not be used for skid trails or landings

(e) new roads will not be constructed in the riparian area of the SMU and generally will not be constructed in the upland portion of the SMU

(f) no heavy equipment movement up and down stream channels and riparian areas during fire suppression and logging

(g) perpendicular crossings permitted but rehabilitation required

Ephemeral Draws

all management activities

A. The bottoms of ephemeral draws will not be used for skid trails, landing sites, or as road locations Equipment disturbance of duff land soil will be minimized

Seeps and Springs

all management activities

A Management of seeps and springs will be directed toward providing or meeting the following in the *riparian portion*:

1. Conditions or characteristics:

   (a) an abundance of deciduous trees or shrubs

   (b) an abundance of standing dead trees

   (c) an abundance of conifer trees greater than ten inches d.b.h.

   (d) good water flow and quality

2. Management treatments:

   (a) single tree or group selection harvest - generally

   (b) infrequent soil/duff disturbance

   (c) no equipment disturbance except for restoration or improvement

Moist Lodgepole

timber management

A. The timber in each moist lodgepole pine area will be harvested on a 100-year rotation schedule (no more than ten percent of an area cut per decade).

Wet Lodgepole

timber management

A. These sites are classified as unsuitable Timber harvest will not be scheduled.

MANAGEMENT AREA 16

Emphasis Minimum Management

Goal: To meet stewardship responsibilities of managing National Forest system lands at minimum cost.

Discussion: Lands where timber or range management investments would significantly exceed returns (determined through FORPLAN analysis) and which are not allocated to other resource uses, will generally be managed at minimum levels. Minimum level management will meet basic stewardship responsibilities at minimum cost. It includes:

1. protecting the health and safety of people using these lands;

2. preventing unacceptable environmental damage;

3. administering any special uses upon these areas required by other agencies or the private sector;

4. meeting management requirements for soil resources, water quality, and wildlife.

Lands typical of this management area include: sparsely forested areas (greater than ten percent tree cover per acre, but unable to produce more than 20 cubic feet of timber per acre per year) on steep slopes; nonforested areas with soils too poor, erodible, or rocky to support livestock forage, and some lodgepole pine stands.

Management Area 16 does not appear on the map of Alternative F, because of technical mapping difficulties. Lands allocated to minimum level management are usually scattered over the entire Forest, and many exist as very small units surrounded by productive lands. It is impossible to map these widely varying units onto the highly-detailed, quarter-inch scale alternative maps

Prescription

This prescription is based upon management that promotes natural successional stages and processes Generally, Forest Service managed outputs and uses are not produced.

Standards and Guidelines

recreation management

A Trails

1. Maintain only existing trail systems needed to protect the life, health, and lives of incidental users

B. Cultural

1 Cultural resources determined to be significant will be protected from ground-disturbing activities (including vandalism) When protection is not possible, the resource will be treated to negate or mitigate the adverse effects of the ground-disturbing activity.

timber management

A. Commercial timber harvest will not be scheduled. Any unscheduled timber harvest will be designated to prevent unacceptable resource damage through special treatment prescriptions.

minerals management

A. Administer mining claims and mineral leases to protect surface resources on National Forest System land, and to administer mineral reservations and outstanding rights in a manner consistent with the nature of those reservations and rights.

transportation management

A. New system roads will only be constructed in this management area for some objective other than timber management. The intent is that pre-roading with appropriated funds will not be done to access timber stands in these areas for future sales.

land use management

A. Administer existing special use permits to provide necessary public services, promote safety and health of Forest users, and prevent damage to the environment. Issue new permits only to maintain safety and health standards and those which are clearly in the public interest. Inventory and resolve all new encroachments and only those existing encroachments that damage or threaten to damage resources on Forest Service land. Boundary line location will be done to the extent necessary to carry out resolution of encroachment.

fire management

A. Detection

1. Provide the level of fire detection and suppression activities needed to protect adjacent lands and the safety, health, and lives of area residents.

B. Law Enforcement

1. Provide the level necessary to protect the Forest resources

landownership adjustments

A. Land Exchange

1. Consider these lands for disposal by exchange, unless retention is dictated by important administrative or non-timber/range resource values.