

APPENDIX C

ROADLESS AREAS

PURPOSE

The purpose of this Appendix is to present a detailed and site-specific analysis of the areas of the Willamette National Forest that are in an unroaded and essentially undeveloped condition. It includes a description of the resources, physiographic and biologic features, and the present management situation for each area. In addition, it specifically indicates how each area would be affected by the Alternatives proposed in this FEIS.

BACKGROUND

This evaluation of roadless areas has been conducted in a setting following some important background legislation and activities. These include the Wilderness Act, the second Roadless Area Review and Evaluation (RARE II), the National Forest Management Act, and the Oregon Wilderness Act. These are discussed as follows.

The Wilderness Act

The 1964 Wilderness Act establishes the National Wilderness Preservation System, defines wilderness, and provides for activities which may occur within designated Wilderness areas.

The Act defines Wilderness as an area where the earth and its community of life are untrammeled by humans, where a person is a visitor who does not remain...an area of undeveloped Federal land containing its primeval character and influence, without permanent improvements or human habitation, which is protected and managed so as to preserve its natural conditions and which (1) generally appears to have been affected primarily by the forces of nature, with the imprint of human work substantially unnoticeable; (2) has outstanding opportunities for solitude or a primitive and unconfined type of recreation; (3) has at least five thousand acres of land or is of sufficient size as to make practicable its preservation and use in an unimpaired condition; and (4) may also contain ecological, geological, or other features of scientific, educational, scenic, or historical value.

The Act provides that rights of access to non-National Forest lands surrounded by a Wilderness will be granted the landowner.

Subject to valid existing rights, minerals in lands within Wilderness are withdrawn from appropriations under mining laws and disposition of mineral leasing laws. Validated mining claims and minerals leases predating January 1, 1984, may be accessed and operated provided there will be no unnecessary or undue degradation of Wilderness.

Forest Service proposals for Wilderness are recommendations only. Final decisions on Wilderness designation have been reserved by the Congress to itself.

The Roadless Area Review and Evaluation

In January 1979 the Forest Service issued nationally a Final Environmental Statement documenting a review of 62 million acres of roadless and undeveloped areas within the 190 million acre National Forest system. The purpose of this second Roadless Area Review and Evaluation (RARE II) was to determine which areas were suitable for Wilderness and which should be used for other purposes.

The RARE II Environmental Statement was the basis for recommending that Congress designate 15.1 million acres as Wilderness, that about 36 million acres should be managed for multiple use purposes other than Wilderness, and that the remaining 10.8 million acres needed further planning before a decision could be made.

In 1979, the state of California challenged the adequacy of the RARE II Final Environmental Statement as the basis for decisions to manage 47 areas in that state for other than Wilderness (State of California vs. Block). In October 1982 the United States Court of Appeals for the Ninth Circuit affirmed the lower court decision that the RARE II Final Environmental Statement was inadequate.

The National Forest Management Act

In September 1983 the National Forest Management Act Regulation (36 CFR Part 219.17) was revised, directing that unless otherwise provided by law, roadless areas within the National Forest System will be evaluated and considered for recommendation as potential Wilderness during the Forest planning process.

Roadless areas subject to evaluation include those previously inventoried in RARE II, in a unit plan, or in a Forest plan, which remain essentially roadless and undeveloped, and which have not yet been designated as Wilderness or for non-Wilderness uses by law.

The Oregon Wilderness Act

With the passage of the Oregon Wilderness Act of 1984, Congress directed that, when developing this Forest Plan, the Forest Service is not required to review the Wilderness option for the remaining Roadless Area Review and Evaluation (RARE II) areas, areas less than 5,000 acres in size, certain areas evaluated for Wilderness in unit plans, and Further Planning Areas. This law does provide that the areas that are still in an unroaded condition when this Plan is revised will be reviewed with Wilderness as an option. Section 7 of the Oregon Wilderness Act follows.

"The Congress finds that:

1. The Department of Agriculture has completed the second roadless area review and evaluation program (RARE II);
2. The Congress has made its own review and examination of national forest system roadless areas in Oregon and the environmental impacts associated with alternative allocations of such areas.

On the basis of such review, the Congress hereby determines and directs that:

1. Without passing on the question of legal and factual sufficiency of the RARE II final environmental statement (dated January 1979) with respect to National Forest lands in states other than Oregon, such statement shall not be subject to judicial review with respect to national forest system lands in the State of Oregon;
2. With respect to the national forest system lands in the State of Oregon which were reviewed by the Department of Agriculture in the second roadless area review and evaluation (RARE II), and those lands referred to in subsection (d), except those lands remaining in further planning or special management pursuant to section 4 of this Act upon enactment of this Act, that review and evaluation or reference shall be deemed for the purpose of the initial land management plans required for such lands by the Forest and Rangeland Renewable Resources Planning Act of 1974, as amended by the National Forest Management Act of 1976, to be an adequate consideration of the suitability of such lands for inclusion in the National Wilderness Preservation System and the Department of Agriculture shall not be required to review the wilderness option prior to the revision of the plans, but shall review the wilderness options when the plans are revised, which revisions will ordinarily occur on a ten-year cycle, or at least every fifteen years, unless prior to such time the Secretary of Agriculture finds that conditions in a unit have significantly changed;
3. Areas in the State of Oregon reviewed in such final environmental statement or referenced in subsection (d) and not designated as wilderness or for special management pursuant to section 4 of this Act or remaining in further planning upon enactment of this Act shall be managed for multiple use in accordance with land management plans pursuant to section 6 of the Forest and Rangeland Renewable Resources Planning Act of 1974, as amended by the National Forest Management Act of 1976: Provided, that such areas need not be managed for the purpose of protecting their suitability for wilderness designation prior to or during revision of the land management plans;
4. In the event that revised land management plans in the State of Oregon are implemented pursuant to section 6 of the Forest and Rangeland Renewable Resources Planning Act of 1974, as amended by the National Forest Management Act of 1976, and other applicable law, areas not recommended for wilderness designation, need not be managed for the purpose of protecting their suitability for wilderness designation prior to or during revision of such plans, and areas recommended for wilderness designation shall be managed for the purpose of protecting their suitability for wilderness designation as may be required by the Forest and Rangeland Renewable Resources Planning Act of 1974, as amended by the National Forest Management Act of 1976, and other applicable law; and
5. Unless expressly authorized by Congress, the Department of Agriculture shall not conduct any further statewide roadless area review and evaluation of national forest system lands in the State of Oregon for the purpose of determining their suitability for inclusion in the National Wilderness Preservation System.

As used in this section, and as provided in section 6 of the Forest and Rangeland Renewable Resources Planning Act of 1974, as amended by the National Forest Management Act of 1976, the term "revision" shall not include an "amendment" to a plan.

The provisions of this section shall also apply to:

1. Those National Forest System roadless lands which were evaluated in the Mt. Hood, Siskiyou, Umatilla, Umpqua, Wallowa-Whitman, Willamette, and Winema National Forests in the State of Oregon which were evaluated in the Eagle Creek; Roaring River; Mt. Butler-Dry Creek; Oregon Butte; Cougar Bluff-Williams Creek; Grand Ronde; Wallowa Valley; Willamette; or Chemult unit plans; and
2. National Forest System roadless land in the State of Oregon which are less than 5,000 acres in size."

THE INFORMATION PRESENTED IN THIS APPENDIX

This Appendix presents information about the unroaded areas to disclose the environmental effects of allocating each area to a continued unroaded condition, or to some level of development (of all or a portion of each area).

To do this, this Appendix presents a description of the environment, presents the proposed management allocation for each of the Alternatives, and discloses the environmental consequences of those Alternatives for each area. The descriptions include information for the Wilderness evaluation criteria of capability, availability, and need.

It should be noted that in the Figures that present the effects, habitats for Major Indicator Species may included portions of several habitats scattered throughout the roadless area. These portions are not to be confused as being the total habitat area.

Descriptions of ecosystems are derived from ecoregions identified by Bailey and potential natural vegetation mapped by Kuchler. Delineation of ecosystems provides a method to determine distribution of natural ecosystems within the National Wilderness Preservation System (NWPS). It allows identification of opportunities to provide additional representations of a particular ecosystem within the NWPS. The potential natural vegetation is that vegetation that would occur naturally in a given area if succession were not interrupted by manipulation. Ecoregions are characterized by distinctive flora, fauna, climate, landform, soil, vegetation, and ecological climax.

Maps that show the inventoried roadless areas in Appendix C have two characteristics. First, all roadless areas are outlined with a bold black line. Second, the roadless area being described will have a gray tint covering the area. Nearby roadless areas are also outlined in bold black lines.

For orientation of where the roadless areas are located on a Forest wide basis refer to Figure III-Q-3 in Chapter III of this FEIS.

Bull of the Woods - 6,378 Acres

Description

History Bull of the Woods was studied as the Little North Santiam Area in RARE I, and RARE II. About 6,165 acres were included in the Oregon Wilderness Act of 1984 as the Bull of the Woods Wilderness. This is not to be confused with the inventoried roadless area that is also called Bull of the Woods for our report. This Act resulted in 6,378 acres released for multiple use management in the Willamette National Forest. The area is contiguous to 11,400 acres of Bull of the Woods roadless area on the Mt. Hood National Forest.

Location and Access T. 8 S., R. 4 and 5 E. Bull of the Woods is located within Marion County approximately eight miles north and west of Detroit on the Detroit Ranger District. The area is contiguous to unroaded lands on the northeast in the Mt. Hood National Forest. It is accessed from the east by Trail 3370 and is bordered by Forest Road 2209 on the south. Forest Trails 3369, 3356, and 3352 traverse the area.

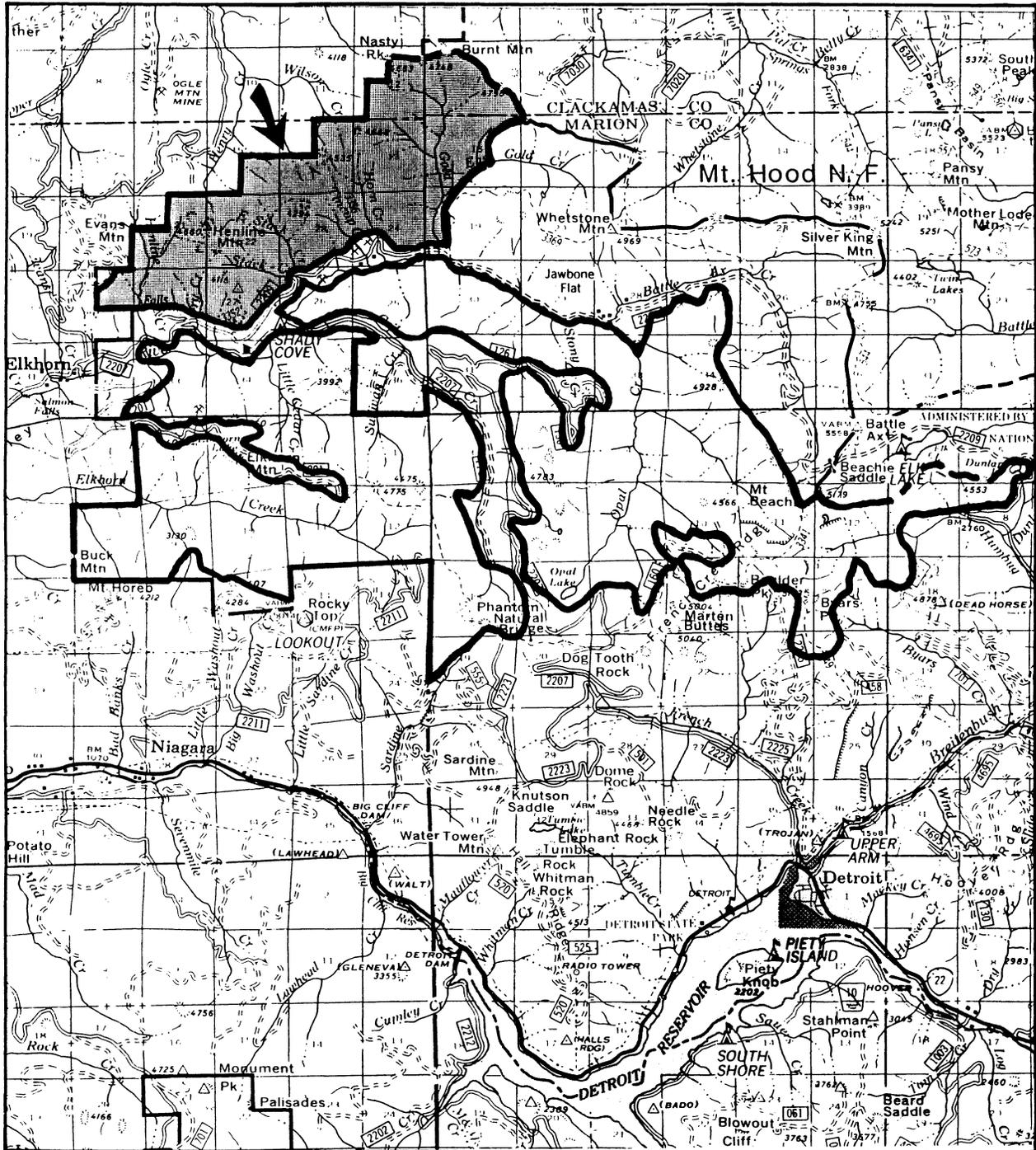
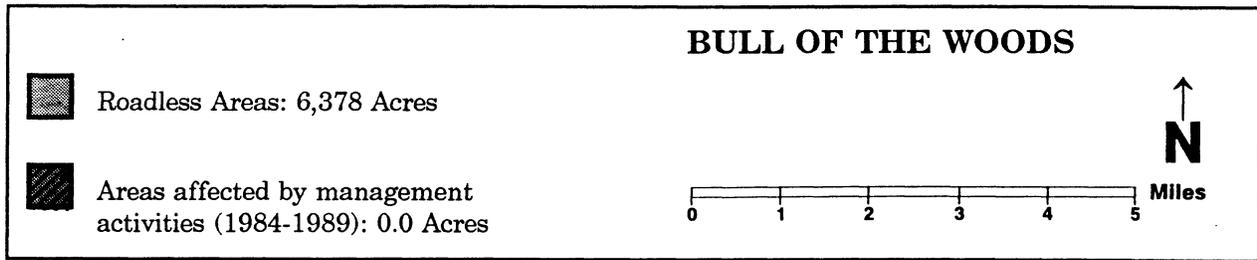
Geography and Topography The area is characterized by very steep, mountainous country, dissected by numerous streams. Elevations range from 1,600 at Henline Creek to 4,795 feet along the boundary ridge with the Mt. Hood National Forest. Lower slopes are typically steep. Upper slopes are commonly steep and rocky with outcrops.

Soil Upper slopes are often associated with a shallow soil mantle (depths of eight to 25 inches) with high erosion hazard. They are generally associated with landtypes 3, 9, 61, and 710. There are about 4,543 acres that have potential for severe surface erosion; and approximately 21 acres of potentially severe surface erosion and unstable soil. The area west of the Gold Creek drainage is generally on land types which cannot be reforested within five years. For more soil information refer to *Willamette National Forest Soil Resource Inventory* (Legard and Meyer 1973).

Vegetation Upper slopes are typically forested with Douglas-fir, true fir, and western hemlock. Lower and middle slopes are covered by stands of Douglas-fir and western hemlock.

Ecosystem There is one major potential vegetation zone and two vegetation communities for this area according to classification systems by Bailey (1976); Kuchler (1966). The vegetation zone is the Pacific Forest (M2410) zone. The vegetative communities are fir/hemlock (*Abies-Tsuga*) forest (004) and Pacific silver fir/Douglas-fir (*Abies-Pseudotsuga*) forest (003).

Figure C-1-1



Current Uses Mining and prospecting activities are evident in the Gold Creek and Henline Creek drainage. Approximately 80 acres are in patented mining claims and numerous mining claims are staked in this drainage. Hiking and backpacking along ridgetop trails are other uses. Land allocations from the 1977 Willamette National Forest land Management Plan, are General Forest in the Gold Creek drainage and dispersed unroaded recreation for the remainder.

Appearance This area is characterized by large bands of rock outcrops occurring at all points on the slopes from ridgetop to creek bottom. Hillsides contain highly dissected, steep, "V" shaped drainages. Ridges are generally rocky and knife-edged. Age and size class diversity of the timber stands is extensive as a result of repeated burning in the past. The Gold Creek Drainage has a high density of snags and a heavy understory of rhododendron.

Surroundings The area to the east is classified as Wilderness with the exception of 80 acres of private land (patented mining claims). To the northeast is the Mt. Hood National Forest and the Salem District Bureau of Land Management. About 15 to 25 percent of these lands have been clearcut. The land to the northwest is privately owned and has been almost entirely cutover. To the south is National Forest Land administered by the Detroit Ranger District of the Willamette National Forest. Clearcuts occur along Elkhorn Ridge.

Attractions The primary attraction is Forest Trail 3348 accessing the abandoned lookout site on Henline Mountain which provides scenic views. Other attractions are Forest Trails 3357 and 3356 with their views of forest and wildlife as they ascend the slopes to the north of the Little North Santiam River.

Capability

Manageability and Boundaries All boundaries would be easily managed.

Natural Integrity Bull of the Woods includes roads (0.5 mile mining road near east side of Gold Creek), helispots (four located on ridgetops within the area), trails (6.8 miles of traversing the area), mineral developments (adits), vegetative manipulation, fire history, and air pollution.

Roads and mineral developments are in isolated areas with natural processes interrupted to a low degree. Helispots are present but the natural processes have not been disturbed to any extent. The impacts of trails and vegetative manipulation are present and measurable but of only minor significance, and processes continue to operate largely uninterrupted. Although smoke and air pollution are occasionally present, the effects on natural processes are currently unknown.

Natural Appearance Without the mineral development separated, the roadless area appears to be natural to most visitors but there are some visual impacts apparent. With the mineral development separated, most visitors would find the roadless area apparently natural.

Opportunity for Solitude Opportunities for solitude are high with a diversity of highly dissected topography that easily screens people from one another within short distances. Most of the area has dense vegetation which also screens people from one another; however, the rugged terrain tends to concentrate people on existing trails. Offsite intrusions from mining activities and adjacent timber harvesting are perceptible, but most are relatively distant and generally not permanent.

Opportunities for Primitive Recreation Bull of the Woods offers high potential for primitive recreation. The principal contributors to diversity are ridgetops and creek bottoms. Challenges and hazards are similar or greater to what is normally expected in typical western Oregon Douglas-fir

timber stands. The only facilities available are low standard trails; and some undeveloped campsites that receive recurring use.

Special Features Several cultural resource sites exist in the roadless area. The ridge along the northern boundary was apparently used as a travel route to the higher elevation berry fields and hunting grounds by Native Americans. Several creeks have historic mining activity. For more information, see *Little North Santiam Mining District Cultural Resource Inventory Report* (Cox 1985).

No federally listed threatened or endangered species are known to be present.

Availability

Resource Potentials

Recreation Resource Currently the area provides primarily day-use opportunities. Existing trails have point destinations and no water available for much of the year. Other than on established trails, the area receives little use due to the rugged terrain. With construction of connecting trails along the ridge system, camping would be feasible but water would generally not be available. Capacity estimates indicate that this area could provide 3,654 Recreation Visitor Days (RVDs) of Semiprimitive Dispersed Nonmotorized recreation use. Potential trails have been identified and could provide access and disperse visitors in the area. No potential developed recreation sites have been identified.

Wildlife Resource Bull of the Woods roadless area is characterized by rugged terrain and considerable habitat and species diversity. Second growth and old-growth conifer forests contain numerous unique habitat features such as rock outcrops, alder and vine maple stands, and small ponds. Riparian areas along stream courses offer prime habitat for a multitude of wildlife. The area receives moderate use by black bear, coyote, bobcat and small fur-bearing animals as well as an abundance of songbirds.

The area is classified almost entirely as summer range for deer and elk. Deer densities are low because of lack of forage. Cutover land on adjacent ownerships provides most of the available forage. Elk use is minimal due to the rugged terrain.

A management regime that increased diversity through timber harvest would probably increase big game use if consideration was given to good unit design and location.

Developing late successional stands would increase the quality of old growth for spotted owls.

Timber Resource The area west of the Gold Creek drainage as well as the upper slopes of the Gold Creek drainage are predominantly unsuited for timber production due to the low regeneration potential. The stands have high defect and are characterized by a high content of snags. The roadless area includes about 3,178 acres of land that is tentatively suitable for growing timber under managed conditions. Site productivity ranges from Class IV to Class V. Stands of mature Douglas-fir and western hemlock occupy the area representing about 141 million board feet. If stands are converted to a managed condition, biological potential yield will be 429,000 cubic feet per year at culmination of mean annual increment. The remaining 3,264 acres are unsuitable.

Land Use Authorizations Portions of a stipulated mining claim are located on Gold Creek near Forest Road 2209. As of October 1986, Shiny Rock Mining Corporation has filed for a patent on this claim and the application is pending. Publishers Paper Company have a permit for use of the existing road on the east side of Gold Creek.

Management Considerations

Fire Fuel loading averages 50 tons per acre; however, any specific area may vary significantly from this average.

Insects and Disease A high incidence of western hemlock mistletoe occurs.

Private Land The surface rights for the patented mining claims in the Gold Creek drainage are controlled on 64 acres by Publishers Paper Company. The subsurface rights are controlled by Shiny Rock Mining Corporation. Portions of a stipulated mining claim are located within the roadless area on Gold Creek near Road 2209.

Need

Nearby Wilderness and Its Use The Bull of the Woods Wilderness (34,900 acres) is adjacent to the eastern boundary of the roadless area. The portion of the Wilderness adjacent to the roadless area has received very little use in the past; however with its recent (1984) designation as Wilderness, use is anticipated to increase. As of 1985, this Wilderness received 14,700 RVDs of use primarily from hiking, camping, and fishing. For more information about Bull of the Woods Wilderness, refer to Chapter III.

Five miles to the north is Table Rock Wilderness (5,500 acres) on the Salem District of the USDI Bureau of Land Management. Its primary use is hiking.

Distance from Population Centers The area is approximately 40 miles by road to the east of Salem, and 70 miles from Portland.

Interest by Proponents The Bull of the Woods roadless area generated a high amount of interest with 68 percent of the responses favoring inclusion of the roadless area into the inventory.

Environmental Consequences

As a consequence of implementing any of the proposed Alternatives there will be effects on the Bull of the Woods roadless area. In Alternatives NC, K, and A, about 35 percent of this area will be affected by road construction and timber harvest. As a result of this development, uses dependent on roadless conditions--such as semiprimitive recreation--will not be provided in portions of the area. Implementation of proposed management activities associated with Alternative NC, A, and K would alter the suitability of this area for future Wilderness consideration. Alternatives J, W, D, and L maintain the option of future Wilderness consideration for this area. Figure C-1-2 illustrates how this area has been allocated in each Alternative.

Based on the amount and distribution of management areas assigned to the Bull of the Woods roadless area an array of goods and services are provided. Emphasis on priced commodities such as wood products are provided in Alternatives NC, K, and A. Amenity values such as dispersed recreation opportunities, high visual quality, and old-growth habitat are provided in Alternatives C, D, F, and J, and J-Departure. The amounts of goods and services to be provided from the area for each Alternative are illustrated in Figure C-1-3. Additional information regarding the environmental consequences of the activities associated with these goods and services is located in Chapter IV of this FEIS.

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Table T314. Management Area Acreage of Alternatives (C-1-2)

Management Areas	Alternatives						
	NC (No Change)	K (WFC)	A (No Action)	J (DEIS-PA)	W (PA)	D (Wildlife)	L (ONRC)
1 Wilderness							
Management Area 1a	--	--	--	--	--	--	--
Management Area 1b	--	--	--	--	--	--	--
Management Area 1c	--	--	--	--	--	--	21
Management Area 1d	--	--	--	--	--	--	--
2 Oregon Cascades Recreation Area							
Management Area 2a	--	--	--	--	--	--	--
Management Area 2b	--	--	--	--	--	--	--
3 Experimental Forest							
Management Area 3	--	--	--	--	--	--	--
4 Research Natural Area							
Management Area 4	--	--	--	--	--	--	--
5 Special Interest Area							
Management Area 5a	--	--	--	--	--	--	107
Management Area 5b	--	--	--	--	--	--	--
6 Wild and Scenic River							
Management Area 6a	--	--	--	--	--	--	--
Management Area 6b	--	--	--	--	--	--	--
Management Area 6c	--	--	--	--	--	--	149
7 Old-Growth Grove							
Management Area 7	--	--	--	--	--	--	2,986
8 T & E Species							
Management Area 8	--	--	--	--	--	--	--
9 Special Habitat ¹							
Management Area 9a	--	704	661	--	--	--	21
Management Area 9b	--	--	--	--	--	--	171
Management Area 9c	--	--	--	--	--	--	171
Management Area 9d	--	--	--	--	--	--	--
10 Dispersed Recreation							
Management Area 10a	--	--	--	--	--	--	--
Management Area 10b	--	--	--	--	--	--	--
Management Area 10c	--	--	--	--	21	--	--
Management Area 10d	--	--	--	--	--	--	--
Management Area 10e	4,181	4,223	4,181	6,100	6,036	6,015	--
Management Area 10f	--	--	--	--	--	--	--

Management Areas	NC (No Change)	K (WFC)	A (No Action)	J (DEIS-PA)	W (PA)	D (Wildlife)	L (ONRC)
11 Scenic							
Management Area 11a	--	--	--	--	--	--	--
Management Area 11b	--	85	--	--	--	--	--
Management Area 11c	64	--	43	--	--	--	--
Management Area 11d	--	--	--	85	64	--	--
Management Area 11e	--	--	--	--	--	--	64
Management Area 11f	192	--	192	--	64	171	2,560
12 Developed Recreation							
Management Area 12a	--	--	--	--	--	--	--
Management Area 12b	--	--	--	--	--	--	--
13 Special and Ad- ministrative Use							
Management Area 13a	--	--	--	--	--	--	--
Management Area 13b	--	--	--	--	--	--	--
14 General Forest							
Management Area 14a	1,941	1,280	1,216	171	171	171	--
15 Riparian ²							
Management Area 15	*	*85	*85	*21	21	21	128

¹ Acres of network sites that overlap with other no harvest management areas are not included in MA9a, 9b, 9c acres.

² Only alternatives with acres assigned to no harvest prescriptions for riparian have acres allocated to MA15. In alternatives K, A, and J riparian acres follow Forest-wide standards and guidelines for riparian harvest rates. Riparian acres in NC are distributed throughout other management areas.

**Table C-1-3. Bull of the Woods Roadless Area
Quantifiable Resources Outputs, Environmental Effects, and Activities by Alternative**

		Alternatives						
Output, Effects, or Activity	Unit of Measure	NC	K	A	J	W	D	L
Recommended Wilderness Recreation Use 1st Decade Area Recommended for Wilderness	RVDs	--	--	--	--	--	--	--
	Acres	--	--	--	--	--	--	21
Nonwilderness Dispersed Recreation Use in the 1st Decade								
Semiprimitive Nonmotorized	RVDs	284	486	284	637	561	637	--
	Acres	4,181	4,223	4,181	6,100	6,036	6,015	--
Semiprimitive Motorized	RVDs	--	--	--	--	65	--	--
	Acres	--	--	--	--	21	--	--
Roaded Natural	RVDs	988	988	1,976	494	988	494	8,299
	Acres	256	789	981	107	149	192	6,356
Roaded Modified	RVDs	1,860	1,101	1,481	721	721	721	--
	Acres	1,941	1,365	1,216	171	171	171	--
Trails								
Existing Trails								
Full Protection Level	Miles	4.0	4.0	4.0	4.0	4.0	4.0	3.0
Moderate Protection Level	Miles	--	--	0.0	--	--	--	--
Low Protection Level	Miles	--	--	--	--	--	--	--
Potential Trails								
Full Protection Level	Miles	8.0	8.0	8.0	8.0	8.0	8.0	8.0
Moderate Protection Level	Miles	--	--	--	--	--	--	2.0
Low Protection Level	Miles	2.0	2.0	2.0	1.0	1.0	1.0	--
Visual Quality Objectives								
Preservation	Acres	4,181	4,927	4,842	6,100	6,036	6,015	3,477
Retention	Acres	192	--	192	--	85	171	2,624
Partial Retention	Acres	64	85	128	107	85	21	277
Modification	Acres	--	85	--	--	--	--	--
Maximum Modification	Acres	1,941	1,280	1,216	171	171	171	--
1st Decade								
Road Construction	Miles	--	1.2	1.5	0.7	0.2	0.5	0.9
Area Harvested	Acres	--	242	238	84	36	74	46
Programmed Timber Harvest	MBF	--	1,915	1,322	256	277	277	1,003
Area Remaining Undeveloped	%	--	88	88	96	98	96	98
Lands by Timber Yield Levels								
Full Yield (95-100%)	Acres	1,728	1,067	1,066	149	150	149	--
75-94% of Full Yield	Acres	--	21	21	64	64	--	--
50-74% of Full Yield	Acres	192	107	235	43	64	128	128
30-49% of Full Yield	Acres	--	--	--	--	--	--	875

Opal Creek - 10,687 Acres

Description

History A portion of the Opal Creek roadless Area was studied under RARE I as Little North Santiam. It was also studied in RARE II and combined in the description with Bull of the Woods. Portions of Opal Creek were also considered for inclusion in the Oregon Wilderness Act of 1984. Out of a total of 12,670 acres, 1,301 acres were included in the Bull of the Woods Wilderness and 11,284 acres were released for multiple use management. Since the release of these lands in 1984, approximately 597 acres have been affected by development activities.

Location and Access Tps. 8 and 9 S., Rs. 5 and 6 E. Opal Creek is located within Marion County approximately eight miles to the north and west of Detroit. The area is contiguous on the northeast corner to the Mt. Hood National Forest. Forest Road 2209 lies north of the area, with Road 2207 to the west, and Roads 2225 and 160 on the south. Forest Trails 3341 and 3358 provide access to the interior of the area.

Geography and Topography The area is characterized by very steep mountainous country dissected by numerous streams. Elevations range from 2,200 feet near the mouth of Opal Creek to 5,133 feet at Byars Peak. Slopes are typically steep with rocky outcrops on the upper slopes.

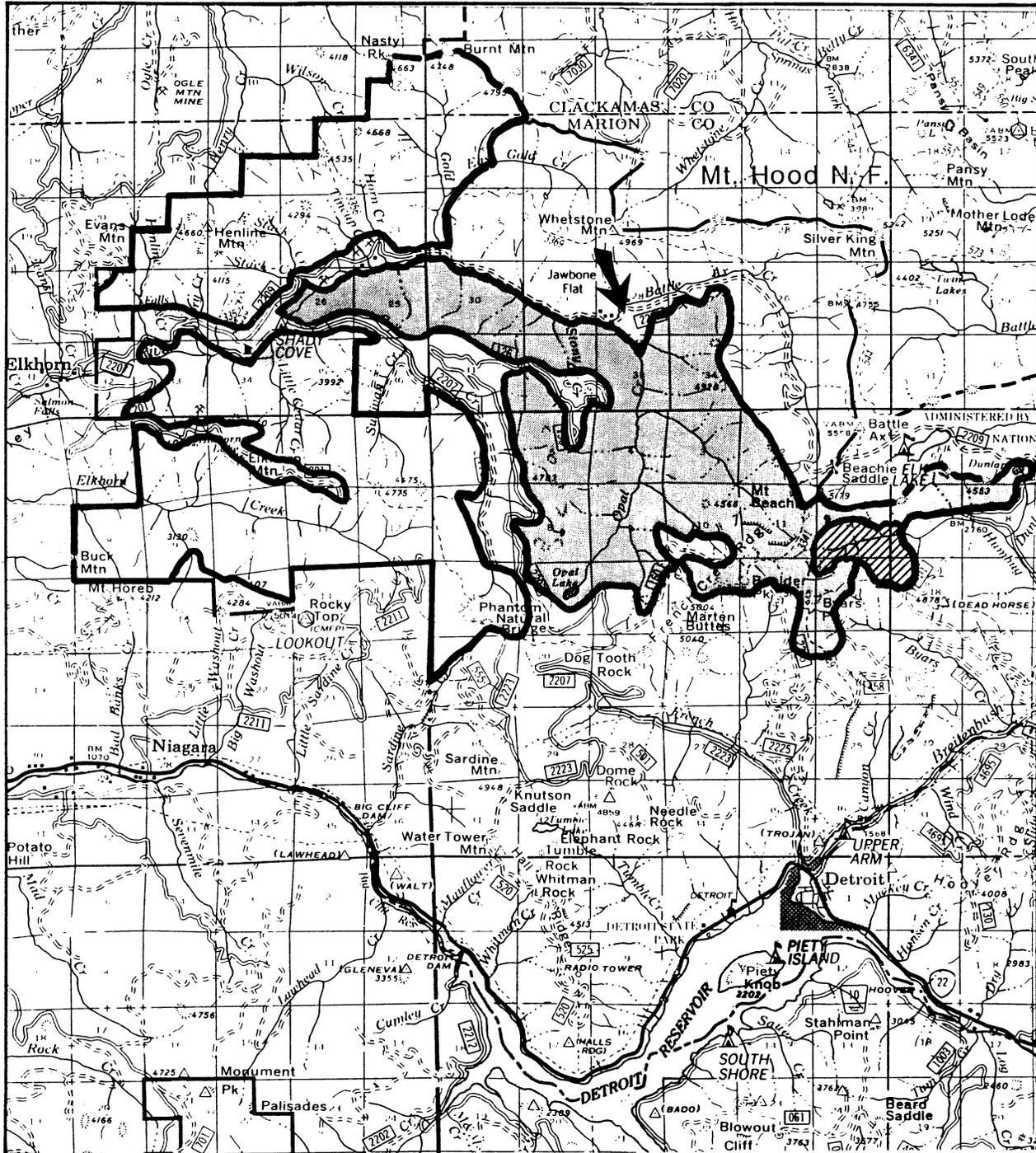
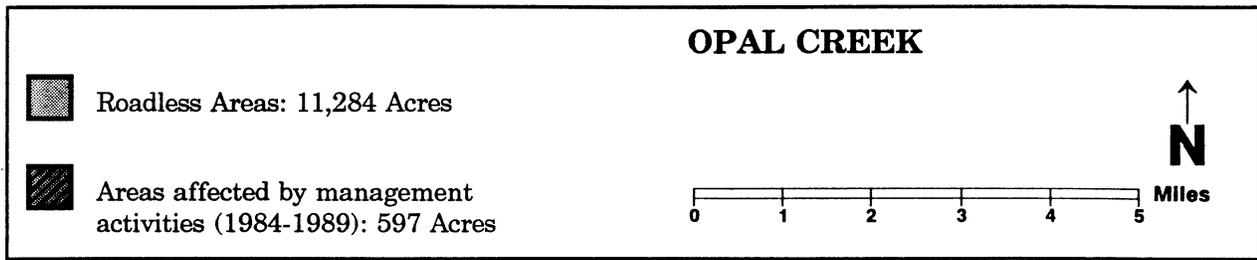
Soils A shallow soil mantle (depths eight to 25 inches) with high erosion hazard is associated with the upper slopes. There are about 4,970 acres that have potential for severe surface erosion. For more soil information refer to *Willamette National Forest Soil Resource Inventory* (Legard and Meyer 1973).

Vegetation The area is typically forested with Douglas-fir, true fir, and western hemlock. Lower slopes are covered by dense stands of Douglas-fir and western hemlock while upper slopes are covered with true firs and some maintain hemlock.

Ecosystem Type There is one major potential vegetation zone and two vegetation communities for this area according to classification systems by Bailey (1976) and Kuchler (1966). The vegetation zone is the Pacific Forest (M2410) zone. The vegetative communities are fir/hemlock (*Abies-Tsuga*) forest (004) and Pacific silver fir/Douglas-fir (*Abies-Pseudotsuga*) forest (003).

Current Uses Hiking, fishing, and backpacking are primary uses; however, use is light. General Forest is the predominant allocation with Scenic Influence II along Opal Creek as allocated in the 1977 Forest Land Management Plan. Since this area was inventoried in 1984, management activities are estimated to have affected 640 acres of this area.

Figure C-2-1



Appearance This area is characterized by a continuous forested canopy with rock outcrops occurring on the slopes. Hillsides contain highly dissected, steep "V" shaped drainages. Ridges are generally rocky and knife-edged which screen the views of adjacent timber management activities from roadless area users.

Surroundings Land adjoining the boundaries to the north is Wilderness, to the east, south, and west is General Forest as allocated by the 1977 Land Management Plan. There is some private land in the Cedar Creek drainage. Timber harvesting is apparent on several boundaries.

Attractions Opal Lake, Opal Pool, Opal Falls, existing trails, and the brushed road survey line to Opal Creek are the primary attractions in the roadless area.

Capability

Manageability and Boundaries Existing timber harvest units would cause problems with the manageability and affect the natural character of the area.

Natural Integrity Management activities present are helispots, seven miles of maintained trails, occasional smoke intrusions, and vegetative manipulation in the form of timber sales. Natural processes are disturbed to some extent. Natural processes continue to operate uninterrupted where the other activities occur. Although the impacts of air pollution are sometimes present, the effects on natural process are either nonexistent or so minimal as to be insignificant in any ecological sense.

Natural Appearance The roadless area appears to be natural to most visitors with only limited clues of unnaturalness.

Opportunity for Solitude Opportunities for solitude are moderate. Diversity of topography offers screening potential in at least half the area, but may be limited or lacking in the remainder. Most of the roadless area has dense vegetation which screens people from one another, even within a quarter mile. Offsite intrusions are perceptible, but most are relatively distant and generally not permanent.

Opportunities for Primitive Recreation Opportunities for primitive recreation are moderate with a limited range of fish and wildlife species, similar terrain throughout, and no particular hazards or challenges.

Special Features The Opal Creek area contains one vegetative feature of infrequent occurrence in this area: a variety of mountain ash along Battle Ax Creek, and some Douglas maple. As many as 108 species of plants have been identified along French Ridge including Gorman's Aster and Cascade daisy. The area also contains cultural resource features. No federally listed endangered or threatened species are known to be present.

Availability

Resources Potentials

Recreation Resource Currently the area provides day-use opportunities, although the trail on French Creek Ridge is lightly used by backpackers. Opal Lake receives a moderate amount of use for fishing and camping. Other than on established trails and the brushed survey lines, the area receives little use. A long range proposal for a trail along Opal Creek and into the heart of the roadless area exists. Capacity estimates indicate that this area could provide 6,879 Recreation Visitor Days (RVDs) of Semiprimitive Dispersed Nonmotorized recreation use. Potential trails totaling 14.4 miles have been

identified and could provide for access and disperse visitors in the area. A potential 40 acre campground has been identified at Opal Lake along the southern edge. This potential site could accommodate 100 Persons-At-One-Time (PAOT) and provide 12,000 RVDs of developed site use annually.

Wildlife Resource The area receives very little big-game use. Black-tailed deer are present in small numbers, generally near plantations along the western, southern, and eastern boundaries where forage is plentiful. Other species common to the western slopes of the Cascade Range are present.

Opal Creek roadless area supports an old-growth Douglas-fir, western hemlock, Pacific silver fir ecosystem which provides habitat for species adapted to these stand conditions. The terrain is rugged and habitat diversity is minimal throughout most of the roadless area. Exceptions are evident in the diverse riparian habitat along stream bottoms and in the rock outcrops, hardwood stands, meadows and small lakes east of Mt. Beachie. Dead and defective tree habitat is abundant throughout the area.

A pair of spotted owls has been verified and two other single owl responses have been recorded within the roadless area boundaries. Deer use is minimal due to lack of forage and elk use is generally light to non-existent because of topographic conditions. Evidence of black bear is plentiful. Chickaree, chipmunk and snowshoe hare are also common. Warblers, sparrows, thrushes and other songbirds as well as great horned owls are known to use the area. Adding diversity in successional stages through timber harvest would increase use by big-game if harvest unit size, shape and arrangement is considered. Trout populations (both rainbow and brook) can be found in the larger streams and lakes.

Timber Resource The area has stands of large, old-growth Douglas-fir, western hemlock, true firs, and mountain hemlock representing about 314 million board feet. The largest timber is in the creek bottoms. Most of the stands have high defect which is a characteristic of the old-growth ecosystem. The roadless area includes about 6,634 acres of land suitable for growing timber under managed conditions. If stands are converted to a managed condition, biological potential yield will be 966,000 cubic feet per year at culmination of the mean annual increment. Site productivity ranges from Class IV to Class V. The remaining area is unsuitable.

Cultural Resources Several sites exist, French Creek Ridge was apparently used as a travel route to the higher elevation berry fields and hunting grounds by Native Americans and the lower reaches of Opal Creek have historic mining resources. For more information, see *Little North Santiam Mining District Cultural Resource Inventory Report* (Cox 1985).

Land Use Authorizations Portions of four stipulated mining claims are located along the northern boundary. Shiny Rock Mining Corporation has filed for patent on these claims; the application is pending as of October 1986.

Management Considerations

Fire Fuel loading averages 50 to 60 tons per acre; however, any specific area may vary significantly from this average. Several human caused and one lightning caused fires have occurred between 1975 to 1985.

Private Land Three patented mining claims are located at the north end of Stony Ridge. The subsurface and surface rights are controlled by Shiny Rock Mining Corporation. A road and log stringer bridge are present across the Little North Santiam River that access the base of this claim group.

Need

Nearby Wilderness and Its Use The Bull of the Woods Wilderness (34,900 acres) lies adjacent to the Opal Creek roadless area on the northeastern boundary. This Wilderness was created under the Oregon Wilderness Act of 1984. The land in the Wilderness adjacent to the roadless area has received very little use in the past; however with its recent designation as Wilderness, the use is anticipated to increase. Refer to Chapter III for more information about Bull of the Woods Wilderness. To the northwest 10 miles, is Table Rock Wilderness.

Distance from Population Centers The area lies approximately 47 miles by road east of Salem, Oregon.

Interest by Proponents The Opal Creek roadless area generated a moderate amount of interest with 61 percent of the responses favoring inclusion of the roadless area into the inventory.

Environmental Consequences

As a consequence of implementing any of the proposed Alternatives there will be effects on the Opal Creek roadless area. In Alternatives NC, K, A, J, and W 88 to 99 percent of this area will be affected by road construction and timber harvest. In addition Alternatives D and L will affect about 26 percent and 19 percent respectively. As a result of this development, uses dependent on roadless conditions--such as semiprimitive recreation--will not be provided in portions of the area. Implementation of proposed management activities associated with all Alternatives would alter the suitability of this area for future Wilderness consideration. However, portions of this area contiguous to the Bull of the Woods Wilderness would remain suitable for consideration as Wilderness additions in the next cycle of Forest planning. Alternatives D and L maintain the option of future Wilderness consideration for most of this area. Figure C-2-2 illustrates how this area has been allocated in each Alternative.

Based on the amount and distribution of management areas assigned to the Opal Creek roadless area an array of goods and services are provided. Emphasis on priced commodities such as wood products are provided in Alternatives NC, K, A, J, and W. Amenity values such as dispersed recreation opportunities, high visual quality, and old-growth habitat are provided in 74 percent of D and 81 percent of L. The amounts of other goods and services to be provided from the area for each Alternative are illustrated in Figure C-2-3. Additional information regarding the environmental consequences of the activities associated with these goods and services is located in Chapter IV of this FEIS.

Table T314. Management Area Acreage of Alternatives (C-2-2)

Management Areas	Alternatives						
	NC (No Change)	K (WFC)	A (No Action)	J (DEIS-PA)	W (PA)	D (Wildlife)	L (ONRC)
1 Wilderness							
Management Area 1a	--	--	--	--	--	--	--
Management Area 1b	--	--	--	--	--	--	7,039
Management Area 1c	--	--	--	--	--	--	--
Management Area 1d	--	--	--	--	--	--	--
2 Oregon Cascades Recreation Area							
Management Area 2a	--	--	--	--	--	--	--
Management Area 2b	--	--	--	--	--	--	--
3 Experimental Forest							
Management Area 3	--	--	--	--	--	--	--
4 Research Natural Area							
Management Area 4	--	--	--	--	--	--	--
5 Special Interest Area							
Management Area 5a	--	--	--	--	341	--	896
Management Area 5b	--	--	--	--	--	--	--
6 Wild and Scenic River							
Management Area 6a	--	--	--	--	--	--	--
Management Area 6b	--	--	--	--	--	--	--
Management Area 6c	--	--	--	--	--	--	341
7 Old-Growth Grove							
Management Area 7	--	--	--	--	--	--	256
8 T & E Species							
Management Area 8	--	--	--	--	--	--	--
9 Special Habitat ¹							
Management Area 9a	--	--	--	--	--	--	--
Management Area 9b	--	427	555	405	85	277	--
Management Area 9c	--	341	341	341	341	277	--
Management Area 9d	--	--	--	--	448	--	--
10 Dispersed Recreation							
Management Area 10a	--	--	--	--	--	2,794	--
Management Area 10b	--	--	--	--	--	--	--
Management Area 10c	--	--	--	--	--	--	--
Management Area 10d	--	--	--	--	--	--	--
Management Area 10e	192	--	192	--	--	3,797	--
Management Area 10f	--	235	--	299	--	64	--

Management Areas	NC (No Change)	K (WFC)	A (No Action)	J (DEIS-PA)	W (PA)	D (Wildlife)	L (ONRC)
11 Scenic							
Management Area 11a	--	--	--	2,538	1,024	192	--
Management Area 11b	--	1,045	--	--	--	213	--
Management Area 11c	1,706	--	1,557	--	277	--	384
Management Area 11d	832	--	533	1,258	--	661	--
Management Area 11e	--	--	--	--	--	--	363
Management Area 11f	1,173	--	1,109	--	1,301	--	1,216
12 Developed Recreation							
Management Area 12a	--	--	--	--	--	--	--
Management Area 12b	--	--	--	--	--	--	--
13 Special and Ad- ministrative Use							
Management Area 13a	85	85	85	85	85	85	85
Management Area 13b	--	--	--	--	--	--	--
14 General Forest							
Management Area 14a	6,698	8,127	6,079	5,333	6,356	1,642	--
15 Riparian ²							
Management Area 15	*	*426	*235	*426	426	320	107

¹ Acres of network sites that overlap with other no harvest management areas are not included in MA9a, 9b, 9c acres.

² Only alternatives with acres assigned to no harvest prescriptions for riparian have acres allocated to MA15. In alternatives K, A, and J riparian acres follow Forest-wide standards and guidelines for riparian harvest rates. Riparian acres in NC are distributed throughout other management areas.

**Table C-2-3. Opal Creek Roadless Area
Quantifiable Resources Outputs, Environmental Effects, and Activities by Alternative**

		Alternatives						
Output, Effects, or Activity	Unit of Measure	NC	K	A	J	W	D	L
Recommended Wilderness Recreation Use 1st Decade Area Recommended for Wilderness	RVDs	--	--	--	--	--	--	--
	Acres	--	--	--	--	--	--	7,039
Nonwilderness Dispersed Recreation Use in the 1st Decade								
Semiprimitive Nonmotorized	RVDs	29	--	29	--	--	699	--
	Acres	192	--	192	--	--	3,797	--
Semiprimitive Motorized	RVDs	--	--	--	--	--	--	--
	Acres	--	--	--	--	--	--	--
Roaded Natural	RVDs	1,090	5,582	15,089	11,385	11,903	19,537	9,952
	Acres	3,711	1,429	4,330	2,730	3,221	4,757	3,562
Roaded Modified	RVDs	8,334	11,466	47,537	9,094	8,866	3,113	95
	Acres	6,783	9,257	6,614	7,956	7,466	2,133	85
Trails								
Existing Trails								
Full Protection Level	Miles	7.0	8.0	7.0	8.0	3.0	8.0	7.0
Moderate Protection Level	Miles	0.0	--	0.0	--	3.0	--	0.0
Low Protection Level	Miles	--	--	--	--	2.0	--	--
Potential Trails								
Full Protection Level	Miles	6.0	7.0	7.0	7.0	3.0	12.0	14.0
Moderate Protection Level	Miles	8.0	4.0	6.0	6.0	12.0	2.0	1.0
Low Protection Level	Miles	0.0	3.0	0.0	0.0	--	0.0	--
Visual Quality Objectives								
Preservation	Acres	192	768	1,088	747	768	4,351	8,191
Retention	Acres	1,173	235	1,109	299	1,749	427	1,578
Partial Retention	Acres	2,538	427	2,325	1,685	704	3,775	832
Modification	Acres	85	1,130	85	--	1,109	491	85
Maximum Modification	Acres	6,698	8,127	6,079	5,333	6,356	1,642	--
1st Decade								
Road Construction	Miles	--	6.2	10.3	12.2	6.2	8.8	1.1
Area Harvested	Acres	--	1,143	1,071	2,269	1,018	1,242	60
Programmed Timber Harvest	MBF	--	9,086	7,928	20,098	0,497	17,842	409
Area Remaining Undeveloped	%	--	67	68	35	71	64	98
Lands by Timber Yield Levels								
Full Yield (95-100%)	Acres	4,991	4,906	4,458	4,586	3,494	2,815	85
75-94% of Full Yield	Acres	469	107	341	427	128	213	--
50-74% of Full Yield	Acres	1,024	811	1,003	811	1,003	320	512
30-49% of Full Yield	Acres	--	--	--	--	--	--	683

Elkhorn - 8,958 Acres

Description

History The Elkhorn roadless area was studied in RARE I and was later considered for Wilderness by the United States Congress. They released the area for multiple use management in the Oregon Wilderness Act of 1984. Since the release of these lands in 1984, approximately 363 acres have been effected by development activities.

Location and Access T. 9 S., Rs. 4 and 5 E. The Elkhorn Area is located within Marion County in the Detroit Ranger District approximately eight miles northeast of Detroit. It is bounded by Forest Road 2207 on the north, Forest 225 on the south, and touched by Forest Road 201 on the west. Forest Trail 3347 along Elkhorn Ridge provides access to the interior.

Geography The roadless area lies between the Little North Santiam River and the North Santiam River on the west side of the Detroit Ranger District.

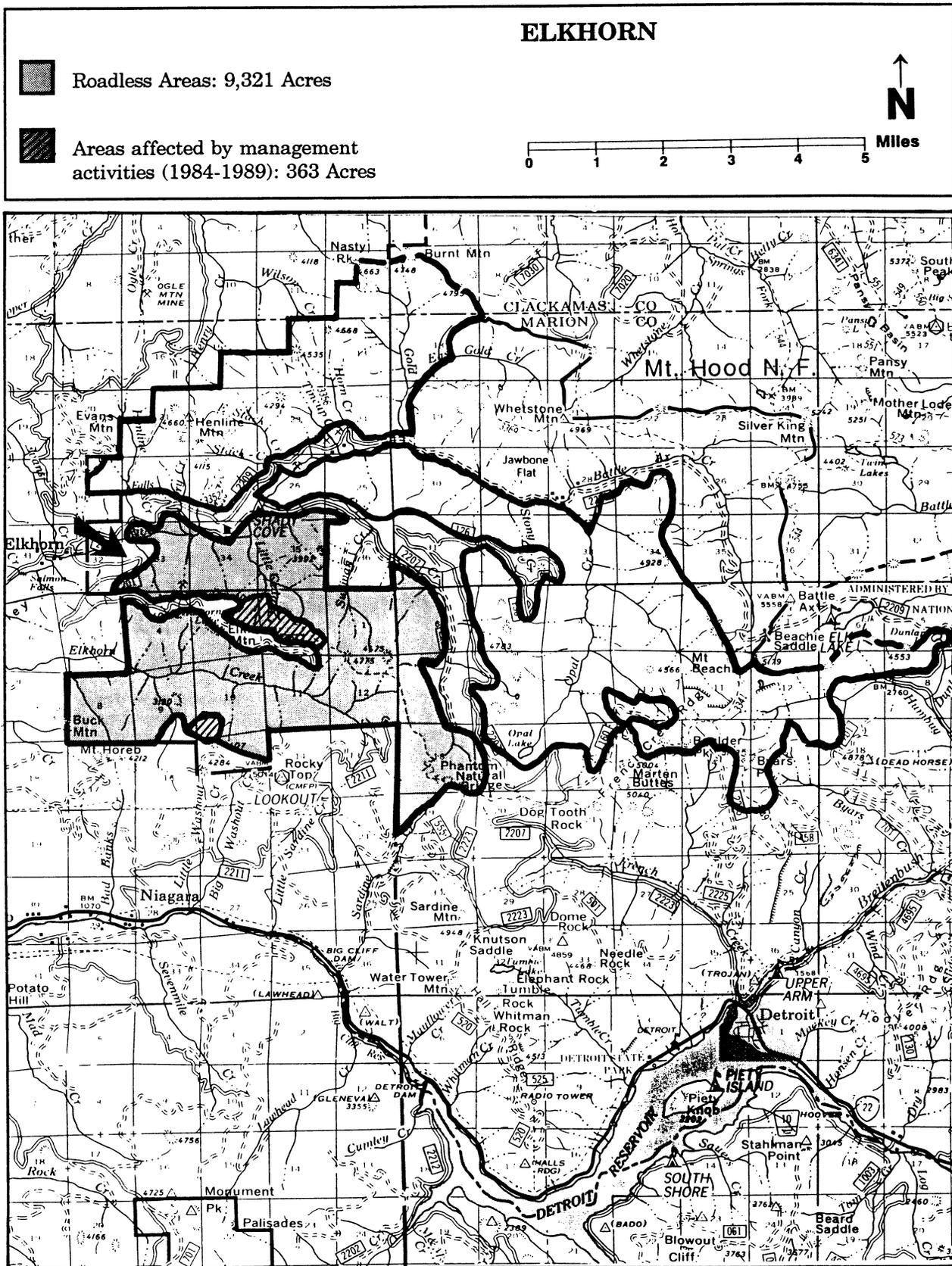
Topography Elevations range from 1,800 feet at the Little North Santiam River to 4,775 feet near the eastern boundary. The slopes are steep to very steep and are highly dissected.

Soil Soil depth on the steep slopes is from 25 to 80 inches, with high erosion hazard. Approximately 40 percent of these soil units are classified as low to medium timber site quality and moderate to easy regeneration potential. The remaining 60 percent are rock and soils with low site class and difficult to regenerate. There are about 5,311 acres that have potential for severe surface erosion. For more soil information refer to *Willamette National Forest Soil Resource Inventory* (Legard and Meyer 1973).

Vegetation Most of the timber stands are old-growth and mature stands of Douglas-fir, western hemlock, and western red cedar.

Ecosystem There is one major potential vegetation zone and two vegetation communities for this area according to classification systems by Bailey (1976); Kuchler (1966). The vegetation zone is the Pacific Forest (M2410) zone. The vegetative communities are fir/hemlock (*Abies-Tsuga*) forest (004) and Pacific silver fir/Douglas-fir (*Abies-Pseudotsuga*) forest (003).

Figure C-3-1



Current Uses The 1977 Land Management Plan (FLMP) allocated narrow corridor of Scenic Influence I which occurs along the Little North Santiam River and Scenic Influence II which occurs along Forest Trail 3347. The majority of the area is in General Forest with little recreation use; Phantom Bridge attracts a few hikers and there is some hunting and fishing in the area. As of 1985 Environmental Assessments have been completed on four proposed timber sales (Elkhorn Creek, South Sullivan, Top, and Sullivan West). Four more sales (Horeb, West Cedar, Crown, and Upper Elk) are in the planning process. Since this area was inventoried in 1984 management activities are estimated to have affected 480 acres of this area.

Appearance This area is characterized by a continuous forested canopy with rock outcrops occurring on the slopes. Hillsides contain highly dissected, steep, "V"-shaped drainages. Some age and size class diversity of the timber stands exists as a result of past fire history.

Surroundings Lands adjacent on the south and west boundaries are Bureau of Land Management, State of Oregon, and private timber lands. The area to the north is Undeveloped Roadless Recreation and Scenic Influence II (FLMP). To the east is mostly General Forest with corridors of Scenic Influence II going through it.

Attractions Phantom Bridge, a natural rock arch, is the most outstanding attraction.

Capability

Manageability and Boundaries The proposed timber sale harvest units pose a problem and makes this area relatively hard to manage as wilderness and maintain its primitive character. Harvest units would be excluded. If this were done, most boundaries would not follow terrain that forms a barrier, but follow the edge of nonconforming uses. Sights and sounds of civilization would be easily detected.

Natural Integrity Impacts are limited to several rehabilitated drill sites, Elkhorn Ridge Trail, and helispots. These impacts are present and measurable but minor in significance. Natural processes continue to operate uninterrupted.

Natural Appearance Most visitors find the roadless area apparently natural. Evidence of unnaturalness is either absent or apparent only to the most knowledgeable.

Opportunity for Solitude Offsite intrusions from surrounding logging activities and recreational use are perceptible, but relatively distant and generally not permanent. Some offsite intrusions are close-by, but generally not permanent.

Opportunity for Primitive Recreation Opportunities for primitive recreation are good with few outstanding peaks or vistas, and one developed trail. Travel by traversing the steep slopes or creek bottoms is a challenge.

Special Features Phantom Natural Bridge is an outstanding geological feature. No federally listed endangered or threatened species are known to be present.

Availability

Resource Potentials

Recreation Resource Currently the area provides primarily day use opportunities, although the trail on Elkhorn Ridge is lightly used by backpackers. Phantom Bridge is the primary attraction. Elkhorn

Creek receives little fishing activity. Capacity estimates indicate that this area could provide 5,640 Recreation Visitor Days (RVDs) of Semiprimitive Dispersed Nonmotorized recreation use. Potential trails totaling 2.2 miles have been identified and could provide access and disperse visitors in the area. No potential developed recreation sites have been identified.

Wildlife Resource Elkhorn roadless area includes both second growth and old-growth habitat in very rugged terrain. Dead and defective tree habitat is abundant. Proper harvest unit design would enhance diversity and therefore big-game populations (mostly deer). Black-tailed deer are present in small numbers near plantations along the boundaries where forage is plentiful. Deer use is light because of lack of forage, and elk use is minimal due to steep topography. Development of late successional stands would increase quality of old growth stands for species dependent on old-growth habitat. Bear, coyote, bobcat, small fur-bearers and songbirds are common. Salmonids are present along the entire length of Elkhorn Creek and anadromous fish can be found in the Little North Santiam River.

Timber Resource The area has stands of large, old-growth Douglas-fir, western hemlock, western redcedar, and true firs representing about 200 million board feet. The largest timber is in the creek bottoms. Most of the stands have high defect which is a characteristic of the old-growth habitat. The roadless area includes about 5,098 acres of land suitable for growing timber under managed conditions. Site productivity ranges from Class IV to Class V. The remaining area is unsuitable. If stands are converted to a managed condition, biological potential yield will be 738,000 cubic feet per year at culmination of mean annual increment.

Mineral and Energy Resource One quartz-diorite body occurs at the Crown Mine (*Oregon Metal Mines Handbook* 1951).

Cultural Resources Several cultural resource sites exist. Elkhorn Ridge was apparently used as a travel route to the higher elevation berry fields and hunting grounds by Native Americans. Remnants of historical mining activity are located at the Crown Mine. For more information, see *Little North Santiam Mining District Cultural Resource Inventory Report* (Cox 1985).

Management Considerations

Fire Fuel loading averages 50 to 60 tons per acre, however, any specific area may vary significantly from this average. Several human caused fires have occurred between 1975 and 1985.

Need

Nearby Wilderness and Its Use The Bull of the Woods Wilderness (34,900 acres) is within 3 miles with dispersed recreation opportunities in the areas of Opal Creek and Bull of the Woods roadless areas. About 7 miles to the north is Table Rock Wilderness (5,500 acres).

Distance from Population Centers The area lies approximately 40 miles by road east of Salem, Oregon.

Interest by Proponents The Elkhorn roadless area generated a moderate amount of interest with 42 percent of the responses favoring inclusion of the roadless area into the inventory.

Environmental Consequences

As a consequence of implementing any of the proposed Alternatives there will be effects on the Elkhorn roadless area. In Alternatives NC, K, A, J, and W, 84 percent of this area will be affected by road

construction and timber harvest. Alternative L will develop 60 percent of the area. As a result of this development, uses dependent on roadless conditions--such as semiprimitive recreation--will not be provided in this portion of the area. Implementation of proposed management activities associated with the Alternatives, except Alternatives D and L, would alter the suitability of this area for future Wilderness consideration. Alternatives D and L maintain the option of future Wilderness consideration for most of this area. Figure C-3-2 illustrates how this area has been allocated in each Alternative.

Based on the amount and distribution of management areas assigned to the Elkhorn roadless area an array of goods and services are provided. Emphasis on priced commodities such as wood products are provided in Alternatives NC, K, A, J, and W. Amenity values such as dispersed recreation opportunities, high visual quality, and old-growth habitat are provided in Alternatives D, and 40 percent of L. The amounts of other goods and services to be provided from the area for each Alternative are illustrated in Figure C-3-3. Additional information regarding the environmental consequences of the activities associated with these goods and services is located in Chapter IV of this FEIS.

Table T314. Management Area Acreage of Alternatives (C-3-2)

Management Areas	Alternatives						
	NC (No Change)	K (WFC)	A (No Action)	J (DEIS-PA)	W (PA)	D (Wildlife)	L (ONRC)
1 Wilderness							
Management Area 1a	--	--	--	--	--	--	--
Management Area 1b	--	--	--	--	--	--	--
Management Area 1c	--	--	--	--	--	--	--
Management Area 1d	--	--	--	--	--	--	--
2 Oregon Cascades Recreation Area							
Management Area 2a	--	--	--	--	--	--	--
Management Area 2b	--	--	--	--	--	--	--
3 Experimental Forest							
Management Area 3	--	--	--	--	--	--	--
4 Research Natural Area							
Management Area 4	--	--	--	--	--	--	--
5 Special Interest Area							
Management Area 5a	--	--	--	--	128	--	--
Management Area 5b	--	--	--	--	--	--	--
6 Wild and Scenic River							
Management Area 6a	--	--	--	--	--	--	--
Management Area 6b	--	--	--	--	--	--	--
Management Area 6c	--	--	--	--	--	--	192
7 Old-Growth Grove							
Management Area 7	--	--	--	--	--	--	2,709
8 T & E Species							
Management Area 8	--	--	--	--	--	--	--
9 Special Habitat ¹							
Management Area 9a	--	1,365	1,365	1,365	1,365	--	405
Management Area 9b	--	--	--	--	--	--	--
Management Area 9c	--	--	--	--	--	--	--
Management Area 9d	--	--	--	--	--	--	--
10 Dispersed Recreation							
Management Area 10a	--	--	--	--	--	--	--
Management Area 10b	--	--	--	--	--	--	--
Management Area 10c	--	--	--	--	--	--	43
Management Area 10d	--	--	--	--	--	--	--
Management Area 10e	--	--	--	--	--	8,873	--
Management Area 10f	--	--	--	--	--	--	--

Management Areas	NC (No Change)	K (WFC)	A (No Action)	J (DEIS-PA)	W (PA)	D (Wildlife)	L (ONRC)
11 Scenic							
Management Area 11a	--	--	--	2,048	1,898	--	--
Management Area 11b	--	235	--	43	85	64	--
Management Area 11c	--	--	--	--	--	--	405
Management Area 11d	320	--	277	661	256	--	--
Management Area 11e	--	--	--	--	--	--	64
Management Area 11f	171	--	171	--	384	--	4,842
12 Developed Recreation							
Management Area 12a	21	21	21	21	21	21	21
Management Area 12b	--	--	--	--	--	--	--
13 Special and Ad- ministrative Use							
Management Area 13a	--	--	--	--	--	--	--
Management Area 13b	--	--	--	--	--	--	--
14 General Forest							
Management Area 14a	8,447	7,039	6,826	4,522	4,522	--	--
15 Riparian ²							
Management Area 15	*	*299	*299	*278	299	278	278

¹ Acres of network sites that overlap with other no harvest management areas are not included in MA9a, 9b, 9c acres.

² Only alternatives with acres assigned to no harvest prescriptions for riparian have acres allocated to MA15. In alternatives K, A, and J riparian acres follow Forest-wide standards and guidelines for riparian harvest rates. Riparian acres in NC are distributed throughout other management areas.

**Table C-3-3. Elkhorn Roadless Area
Quantifiable Resources Outputs, Environmental Effects, and Activities by Alternative**

		Alternatives						
Output, Effects, or Activity	Unit of Measure	NC	K	A	J	W	D	L
Recommended Wilderness Recreation Use 1st Decade Area Recommended for Wilderness	RVDs	--	--	--	--	--	--	--
	Acres	--	--	--	--	--	--	--
Nonwilderness Dispersed Recreation Use in the 1st Decade								
Semiprimitive Nonmotorized	RVDs	--	--	--	--	--	1,940	--
	Acres	--	--	--	--	--	8,873	--
Semiprimitive Motorized	RVDs	--	--	--	--	--	--	45
	Acres	--	--	--	--	--	--	43
Roaded Natural	RVDs	1,087	6,521	7,360	9,188	9,337	247	19,238
	Acres	512	1,685	2,133	2,346	2,453	21	8,916
Roaded Modified	RVDs	7,289	5,201	4,860	4,139	4,100	95	--
	Acres	8,447	7,274	6,826	6,612	6,506	64	--
Trails								
Existing Trails								
Full Protection Level	Miles	4.0	4.0	4.0	4.0	1.0	7.0	5.0
Moderate Protection Level	Miles	3.0	2.0	3.0	3.0	6.0	--	3.0
Low Protection Level	Miles	0.0	1.0	0.0	0.0	--	0.0	--
Potential Trails								
Full Protection Level	Miles	--	--	--	--	--	--	--
Moderate Protection Level	Miles	--	--	--	--	--	--	--
Low Protection Level	Miles	--	--	--	--	--	--	--
Visual Quality Objectives								
Preservation	Acres	--	1,365	1,365	1,365	1,493	8,873	3,114
Retention	Acres	171	--	171	--	384	--	4,949
Partial Retention	Acres	341	320	597	981	576	21	896
Modification	Acres	--	235	--	2,090	1,984	64	--
Maximum Modification	Acres	8,447	7,039	6,826	4,522	4,522	--	--
1st Decade								
Road Construction	Miles	--	4.2	4.2	10.2	4.3	0.2	2.6
Area Harvested	Acres	--	745	715	1,474	683	24	138
Programmed Timber Harvest	MBF	--	5,939	5,267	13,066	6,344	347	955
Area Remaining Undeveloped	%	--	74	75	49	76	99	95
Lands by Timber Yield Levels								
Full Yield (95-100%)	Acres	4,693	3,477	3,455	3,435	3,327	64	128
75-94% of Full Yield	Acres	43	128	149	171	85	--	--
50-74% of Full Yield	Acres	341	405	405	405	363	--	235
30-49% of Full Yield	Acres	--	--	--	--	--	--	2,645

Mt. Jefferson North - 6,036 Acres

Description

History The Mt. Jefferson North roadless area was studied in RARE I, and RARE II. The original acreage was about 16,871 acres. The Oregon Wilderness Act of 1984 designated 7,187 acres as Wilderness. This left 9,684 acres to be released for multiple use management. Since the release of these lands in 1984, approximately 3,648 acres have been affected by development activities.

Location and Access Tps. 9, 10, and 11 S., Rs. 7, 7 1/2, and 8 E. Located about 13 miles east of Detroit, bordering the west side of Mt. Jefferson Wilderness Area. It is accessible from the west by a series of Forest Roads: 4685, 4685310, 4685330, 2233650, 2243, 2243440, 2243040, 2246, 2246750, 2253, and 2255; and from a series of Forest Trails: 3361, 3441, 3373, 3421, and 3445.

Geography and Topography This area occurs within the High Cascades Physiographic Province, and is characterized by elevations of from 2,800 to 5,434 feet, with steep talus slopes, rock outcrops, and meadow openings. The area is composed of a series of irregular areas adjacent to the northwest boundary of the Mt. Jefferson Wilderness.

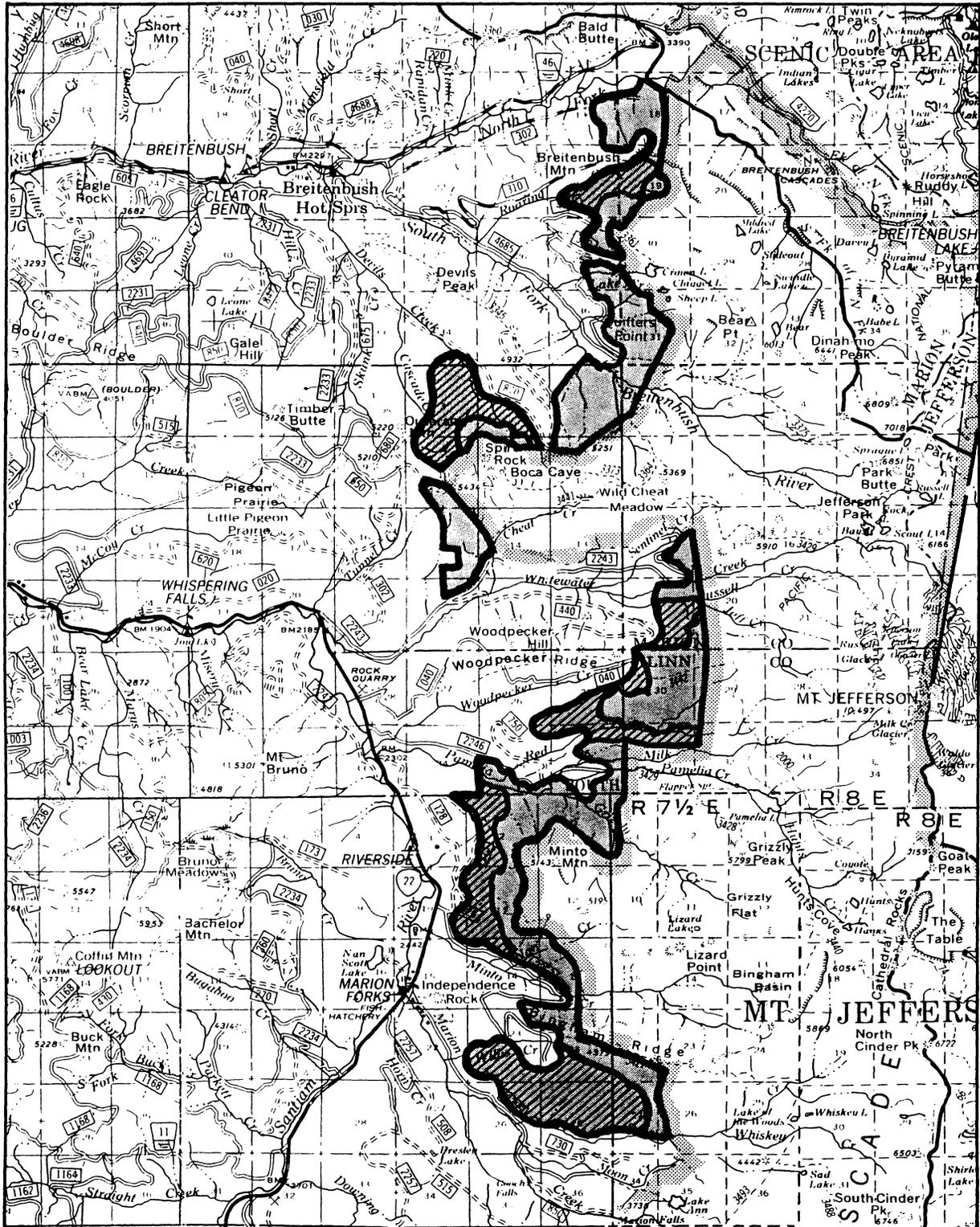
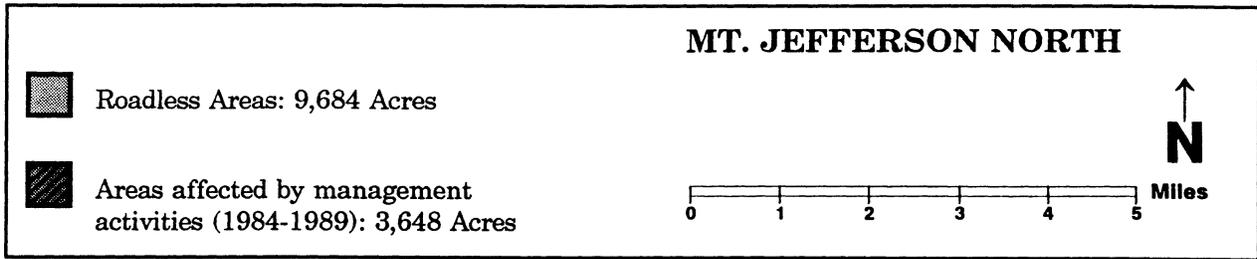
Soils Soil may vary greatly in local areas. Generally soil is about three feet deep and may vary from cobbly to sandy loam. Fertility is low to moderate and erosion may be severe on steep slopes. There are about 1,941 acres that have potential for severe surface erosion. For more information refer to *Willamette National Forest Soil Resource Inventory* (Legard and Meyer 1973).

Vegetation Vegetative species include Douglas-fir, Pacific silver fir, mountain hemlock, vine maple, ocean spray, chinquapin, and huckleberry.

Ecosystem There is one major potential vegetation zone and one vegetation community for this area according to classification systems by Bailey (1976) and Kuchler (1966). The vegetation zone is the Pacific Forest (M2410) zone. The vegetative community is fir/hemlock (*Abies-Tsuga*) forest (004).

Current Uses Current uses include hiking, firewood gathering, and timber management. This area attracts hikers on the way into the Mt. Jefferson Wilderness. As of 1985, several timber sales have been planned and sold which include acreage within this unroaded area. Since this area was inventoried in 1984 management activities are estimated to have affected 1,920 acres of the area.

Figure C-4-1



Appearance The area is characterized by a continuous forested canopy with rock outcrops occurring on the slopes. Hillsides contain highly dissected, steep, "V" shaped drainages. Some areas have gentle sloping hillsides that break off steeply into the creek bottoms. Some age and size class diversity of the timber stands exists as a result of past fire history.

Attractions Existing trails that enter the Mt. Jefferson Wilderness, Minto Mountain, and Triangulation Peak are the primary attractions.

Capability

Manageability and Boundaries As of 1985, several timber sales are either sold or will be sold in the near future. The long narrow shape of the area, with possibilities of harvest activity on the west boundary, makes this area relatively hard to manage as wilderness and maintain its primitive character. Sights and sounds of civilization in the narrow portion will be easily detected. Most boundaries do not follow terrain that forms a barrier, but follow the edge of nonconforming uses.

Natural Integrity The natural integrity of the Mt. Jefferson North roadless area is varied. The amount of area occupied by helispots is minimal. Several harvested units are within the area along the edge. The potential for increased disturbance is high since additional timber sales have been sold. Portions of many trails traverse the area.

Evidence of previous wildfire is visible and will remain apparent over 60 to 70 percent of the area for a long time.

Smoke from grass field and slash burning covers almost the entire area periodically during the summer and fall seasons, but apparently does not affect the natural process. Occasionally smoke and air pollution will be apparent from higher elevations and may affect scenic enjoyment. The impact is not permanent.

Natural Appearance Most visitors find the area apparently natural but there are some impacts apparent to some visitors.

Opportunity for Solitude The Mt. Jefferson North roadless area has high potential for solitude. Diversity of topography offers screening potential in at least half the area. Use in the more rugged terrain would tend to be concentrated on top of ridges or in creek bottoms. The area contains dense timber stands and undergrowth which screen people from one another, even within a quarter mile; but there is still sufficient opening to permit travel and camping without undue concentration of people. Offsite intrusions are close-by and intermittent.

Opportunity for Primitive Recreation Opportunities for primitive recreation are high including hiking, fishing, rock scrambling, and camping.

Special Features Prehistoric cultural features are present. No federally listed endangered or threatened species are known to be present.

Availability

Resource Potentials

Recreation Resource Capacity estimates indicate that this area could provide 6,457 Recreation Visitor Days (RVDs) of Semiprimitive Dispersed Nonmotorized recreation use. No potential trail locations have been identified. However, a potential 40 acre campground has been identified in Devils Creek and is located just within the boundary of the roadless area. This potential site could accommodate 50 Persons-At-One-Time (PAOT) and provide 6,000 RVDs of developed recreation use annually.

Wildlife Resource Mt. Jefferson North roadless area extends more than 20 miles north and south along the Mt. Jefferson Wilderness boundary. Topographic conditions and vegetative communities vary greatly from one part of the roadless area to another, therefore an array of wildlife habitats are represented here. Management regimes that develop late successional stands increase quality of old growth stands for spotted owls. Most of the wildlife species found on the Detroit District are represented here.

Water Resource Puzzle Creek has a power withdrawal within the roadless area and the existing Wilderness. Little other potential development of water resource exists.

Timber Resource The area has stands of large, old-growth Douglas-fir and western hemlock. Stands of Pacific silver fir, mountain hemlock and lodgepole pine occur in the higher elevations. The stands generally have high defect which is a characteristic of the old-growth ecosystem. The roadless area includes 204 million board feet growing on about 4,799 acres of land suitable for growing timber under managed conditions. Site productivity ranges from Class IV to Class V. The remaining area is unsuitable. If stands are converted to a managed condition, biological potential yield will be 648,500 cubic feet per year at culmination of mean annual increment.

Mineral and Energy Resource Portions of the roadless area are within the Breitenbush known Geothermal Resource Area. Geothermal resources have been leased on portions of the roadless areas and other portions are available for leasing.

Cultural Resources Several cultural sites exist most of which are open prehistoric lithic scatters. There are areas of high probability where more sites are suspected.

Land Use Authorizations Portions are either leased or available for lease for geothermal resources.

Management Considerations

Fire Fuel loading averages 50 tons per acre; however, any specific area may vary significantly from this average. Numerous human caused and lightning caused fires have occurred from 1975 to 1985.

Need

Nearby Wilderness and Its Use The Mt. Jefferson Wilderness (105,299 acres) lies adjacent to the roadless area to the east. It was enlarged with the additions designated by the Oregon Wilderness Act of 1984 and receives very heavy use in the Jefferson Park, Pamela and Marion lakes, and Eight Lakes Basin areas.

Distance from Population Centers The area is between 70 to 80 miles by road southeast of Salem, Oregon.

Interest by Proponents The Mt. Jefferson North roadless area generated a high amount of interest with 56 percent of the responses favoring inclusion of the roadless area into the inventory.

Environmental Consequences

As a consequence of implementing any of the proposed Alternatives there will be effects on the Mt. Jefferson North roadless area. In Alternatives NC, K, A, J, and W, 85 to 95 percent of this area will be affected by road construction and timber harvest. Alternative D will develop about 26 percent and Alternative L will develop about 23 percent of the area. As a result of this development, uses dependent on roadless conditions--such as semiprimitive recreation--will not be provided in portions of the area. Implementation of proposed management activities associated with all Alternatives would alter the suitability of this area for future Wilderness consideration. However, portions of this area contiguous

to the Mt. Jefferson Wilderness would remain suitable for consideration as Wilderness additions in the next cycle of Forest planning. Alternatives D and L maintain the option of future Wilderness consideration for most of this area. Figure C-4-2 illustrates how this area has been allocated in each Alternative.

Based on the amount and distribution of management areas assigned to the Mt. Jefferson North roadless area an array of goods and services are provided. Emphasis on priced commodities such as wood products are provided in Alternatives NC, K, A, J, and W. Amenity values such as dispersed recreation opportunities, high visual quality, and old-growth habitat are provided in 74 to 77 percent of D and L. The amounts of other goods and services to be provided from the area for each Alternative are illustrated in Figure C-4-3. Additional information regarding the environmental consequences of the activities associated with these goods and services is located in Chapter IV of this FEIS.

Table T314. Management Area Acreage of Alternatives (C-4-2)

Management Areas	Alternatives						
	NC (No Change)	K (WFC)	A (No Action)	J (DEIS-PA)	W (PA)	D (Wildlife)	L (ONRC)
1 Wilderness							
Management Area 1a	--	--	--	--	--	--	--
Management Area 1b	--	--	--	--	--	--	1,472
Management Area 1c	--	--	--	--	--	--	--
Management Area 1d	--	--	--	--	--	--	--
2 Oregon Cascades Recreation Area							
Management Area 2a	--	--	--	--	--	--	--
Management Area 2b	--	--	--	--	--	--	--
3 Experimental Forest							
Management Area 3	--	--	--	--	--	--	--
4 Research Natural Area							
Management Area 4	--	--	--	--	--	--	--
5 Special Interest Area							
Management Area 5a	--	--	--	--	--	--	--
Management Area 5b	--	--	--	--	--	--	--
6 Wild and Scenic River							
Management Area 6a	--	--	--	--	--	--	--
Management Area 6b	--	--	--	--	--	--	--
Management Area 6c	--	--	--	--	--	--	--
7 Old-Growth Grove							
Management Area 7	--	--	--	--	--	--	1,557
8 T & E Species							
Management Area 8	--	--	--	--	--	--	--
9 Special Habitat ¹							
Management Area 9a	--	576	576	576	576	171	64
Management Area 9b	--	--	--	--	--	--	--
Management Area 9c	--	64	64	64	64	--	--
Management Area 9d	--	235	--	235	256	--	--
10 Dispersed Recreation							
Management Area 10a	--	--	--	--	--	--	--
Management Area 10b	--	--	--	--	--	--	--
Management Area 10c	--	--	--	--	--	--	--
Management Area 10d	277	--	277	--	--	--	--
Management Area 10e	--	--	--	--	--	4,287	1,578
Management Area 10f	--	--	--	--	--	--	--

Management Areas	NC (No Change)	K (WFC)	A (No Action)	J (DEIS-PA)	W (PA)	D (Wildlife)	L (ONRC)
11 Scenic							
Management Area 11a	--	469	--	576	256	43	--
Management Area 11b	--	--	--	--	--	--	--
Management Area 11c	--	--	--	448	576	85	683
Management Area 11d	491	--	299	533	384	128	--
Management Area 11e	--	--	--	--	--	--	405
Management Area 11f	--	--	--	--	128	149	213
12 Developed Recreation							
Management Area 12a	43	43	43	43	43	43	43
Management Area 12b	--	--	--	--	--	--	--
13 Special and Ad- ministrative Use							
Management Area 13a	--	--	--	--	--	--	--
Management Area 13b	--	--	--	--	--	--	--
14 General Forest							
Management Area 14a	5,226	4,479	4,607	3,370	3,583	1,088	--
15 Riparian ²							
Management Area 15	*	*181	*181	*192	171	43	21

¹ Acres of network sites that overlap with other no harvest management areas are not included in MA9a, 9b, 9c acres.

² Only alternatives with acres assigned to no harvest prescriptions for riparian have acres allocated to MA15. In alternatives K, A, and J riparian acres follow Forest-wide standards and guidelines for riparian harvest rates. Riparian acres in NC are distributed throughout other management areas.

**Table C-4-3. Mt. Jefferson North Roadless Area
Quantifiable Resources Outputs, Environmental Effects, and Activities by Alternative**

		Alternatives						
Output, Effects, or Activity	Unit of Measure	NC	K	A	J	W	D	L
Recommended Wilderness Recreation Use 1st Decade Area Recommended for Wilderness	RVDs	--	--	--	--	--	--	--
	Acres	--	--	--	--	--	--	1,472
Nonwilderness Dispersed Recreation Use in the 1st Decade								
Semiprimitive Nonmotorized	RVDs	29	--	29	--	--	1,708	766
	Acres	277	--	277	--	--	4,287	1,578
Semiprimitive Motorized	RVDs	--	--	--	--	--	--	--
	Acres	--	--	--	--	--	--	--
Roaded Natural	RVDs	3,063	5,211	6,545	8,941	8,941	4,471	14,968
	Acres	533	1,088	1,152	2,090	2,197	619	2,986
Roaded Modified	RVDs	9,852	8,971	8,486	7,689	7,689	2,905	--
	Acres	5,226	4,949	4,607	3,946	3,839	1,130	--
Trails								
Existing Trails								
Full Protection Level	Miles	1.0	4.0	2.0	4.0	3.0	6.0	7.0
Moderate Protection Level	Miles	3.0	1.0	2.0	2.0	6.0	1.0	0.0
Low Protection Level	Miles	5.0	4.0	5.0	3.0	--	1.0	1.0
Potential Trails								
Full Protection Level	Miles	1.0	1.0	1.0	1.0	--	1.0	1.0
Moderate Protection Level	Miles	--	--	--	--	--	--	--
Low Protection Level	Miles	--	--	--	--	--	--	--
Visual Quality Objectives								
Preservation	Acres	--	640	640	640	640	4,458	4,671
Retention	Acres	277	235	277	299	384	149	619
Partial Retention	Acres	533	213	512	1,152	1,173	299	747
Modification	Acres	--	469	--	576	256	43	--
Maximum Modification	Acres	5,266	4,479	4,607	3,370	3,583	1,088	--
1st Decade								
Road Construction	Miles	--	5.0	4.2	8.0	4.6	1.7	0.7
Area Harvested	Acres	--	643	487	1,292	463	193	88
Programmed Timber								
Harvest	MBF	--	4,053	4,212	10,066	4,111	2,733	607
Area Remaining								
Undeveloped	%	--	67	75	34	76	90	95
Lands by Timber Yield Levels								
Full Yield (95-100%)	Acres	4,053	3,648	3,605	3,285	3,072	1,045	469
75-94% of Full Yield	Acres	405	43	256	405	363	107	--
50-74% of Full Yield	Acres	299	320	384	320	363	128	405
30-49% of Full Yield	Acres	--	--	--	--	--	--	43

Mount Jefferson South - 4,991 Acres

Description

History The Mt. Jefferson South roadless area was studied in RARE I and RARE II. The original acreage was about 7,316 acres. The Oregon Wilderness Act of 1984 designated 1,002 acres as Wilderness, releasing 6,314 acres to multiple-use management. Since the release of these lands in 1984, approximately 1,323 acres have been affected by development activities. Several timber sales have physically changed the area along the boundary through harvest operations.

Location and Access Tps. 12 and 13 S., Rs. 7 and 7 1/2 E. Mt. Jefferson South is located about 16 miles southeast of Detroit, bordering the west side of Mt. Jefferson Wilderness. It is accessible by Forest Roads 2261, 2261345, 2267, 2267220, Highway 20, and by Forest Trails 3436, 3490, and 3391.

Geography and Topography This area occurs within the High Cascades Physiographic Province, and is characterized by elevations of from 2,800 to 5,434 feet, with steep talus slopes, rock outcrops, and meadow openings.

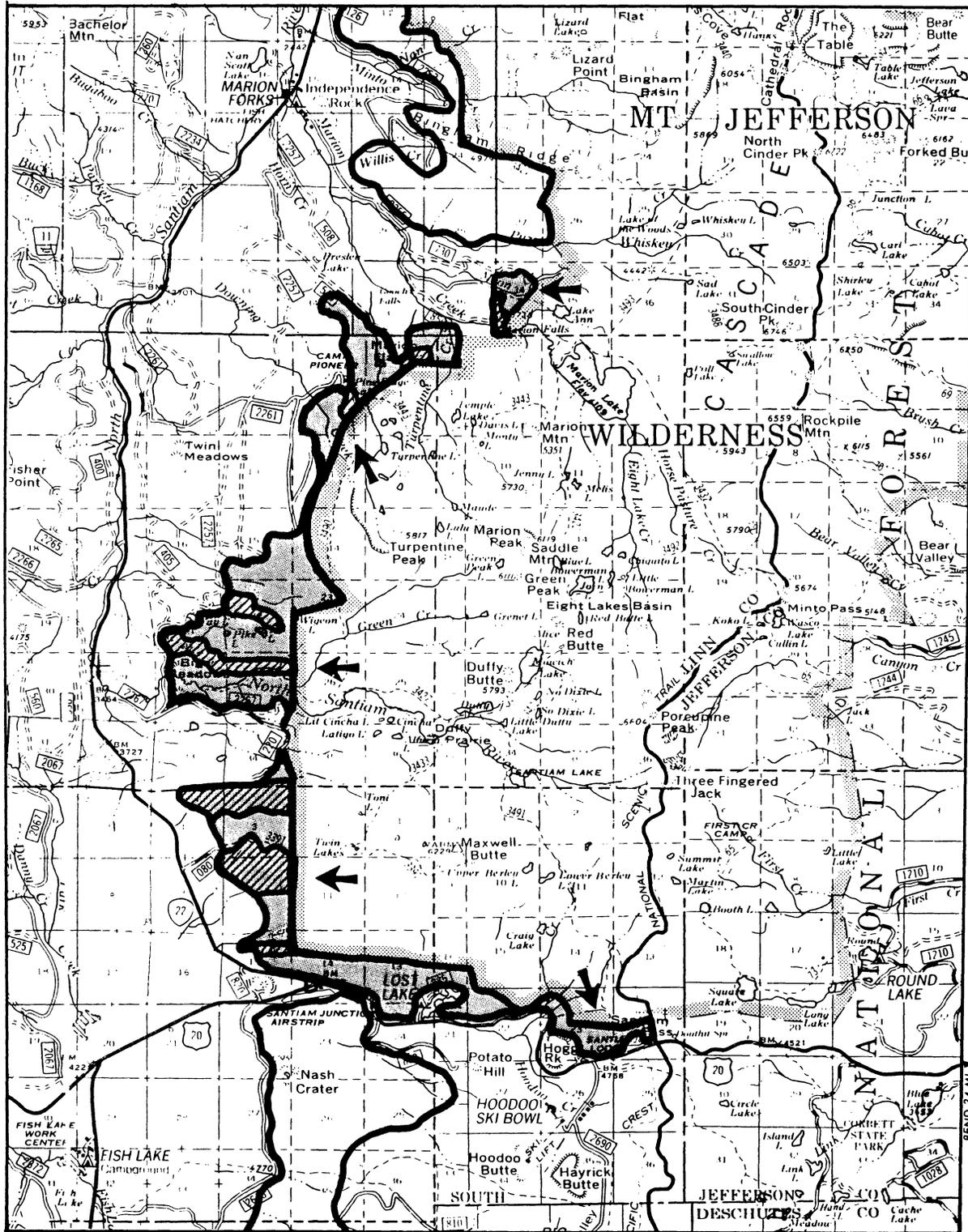
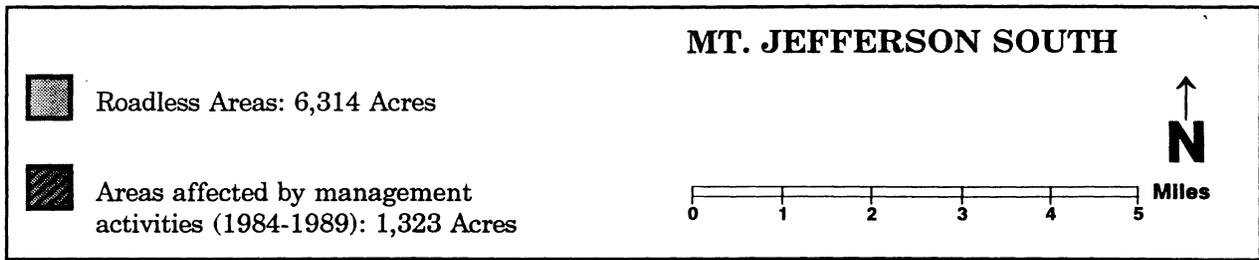
Soils Soils may vary greatly in local areas. Generally, soils are about three feet deep and vary from cobbly to sandy loam. Fertility is low, and erosion may be severe on steep slopes. There are about 491 acres that have potential for severe surface erosion. For more soil information refer to *Willamette National Forest Soil Resource Inventory* (Legard and Meyer 1973).

Vegetation Vegetative species include Douglas-fir, Pacific silver fir, mountain hemlock, vine maple, ocean spray, chinquapin, and huckleberry.

Ecosystem There is one major potential vegetation zone and one vegetation community for this area according to classification systems by Bailey (1976) and Kuchler (1966). The vegetation zone is the Pacific Forest (M2410) zone. The vegetative community is fir/hemlock (*Abies-Tsuga*) forest (004).

Current Uses Current uses include hiking, timber commodities, and firewood. As of 1985, there are seven timber sales on contract, seven proposed sales that have approved Environmental Assessments, and six sales that are in the planning phase that lie within the area. Since this area was inventoried in 1984 management activities are estimated to have affected 1,120 acres of the area.

Figure C-5-1



Appearance This area is characterized by a continuous forested canopy with rock outcrops occurring on the slopes. Hillsides contain highly dissected, steep, "V" shaped drainages. Some areas have gentle sloping hillsides that break off steeply into the creek bottoms. Age and size class diversity of the timber stands exists as a result of past fire history.

Attractions Big Meadows, Fay Lake, Pika Lake, Fir Lake, Pine Ridge Lake, Camp Pioneer, existing trails, and Wilderness trailheads are the primary attractions. Spectacular views of Mt. Jefferson and the surrounding forest are available from some of these locations.

Capability

Manageability and Boundaries With possibilities of harvest activity on the west boundary, makes this area relatively hard to manage as wilderness and maintain its primitive character. Sights and sounds of civilization along the west boundary would be easily detected. Most boundaries do not follow terrain that forms a barrier, but follow the edge of nonconforming uses.

Natural Integrity Management activities such as helispots and clearcuts are present. The potential for impact is high since seven timber sales have been sold. Fourteen trails traverse the area.

Smoke from grass field and slash burning covers the entire area periodically during the summer and fall seasons, but does not apparently affect the natural process. Smoke and air pollution will be apparent from higher elevations and may affect scenic enjoyment. The impact is not permanent. Evidence of previous wildfires is visible on 60 to 70 percent of the area.

Natural Appearance Most visitors find the roadless area apparently natural but there are some impacts apparent to some visitors.

Opportunity for Solitude The Mt. Jefferson South roadless area has high potential for solitude. Diversity of topography offers screening potential in at least half the area. Use in the more rugged terrain would be concentrated on top of ridges or in creek bottoms. The area contains dense timber stands and undergrowth which screen people from one another, even within a quarter mile; but there is still sufficient opening to permit travel and camping without undue concentration of people. Offsite intrusions are close-by and permanent. Aircraft and highway traffic may be heard.

Opportunity for Primitive Recreation Opportunities for primitive recreation are varied. The area contains steep terrain, a variety of vegetation, and one stream. Facilities consist of many trails, two pit toilets at Big Meadows, and Camp Pioneer Boy Scout Camp.

Special Features The area generally contains fairly common features. Cultural features are present. No federally listed endangered or threatened species are known to be present.

Availability

Resource Potentials

Recreation Resource The area provides a travel corridor and buffer to the Mt. Jefferson Wilderness. The roadless area contains a few small high mountain lakes, a large wet meadow and a Boy Scout Camp which receive moderate use. The other portions of the roadless area are used primarily as a passage way to the existing Wilderness. Capacity estimates indicate that this area could provide 11,517 Recreation Visitor Days (RVDs) of Semiprimitive Dispersed Motorized recreation use. Provide access and disperse visitors in the area.

The undeveloped horse camp at Big Meadows receives heavy use. Potential exists for development.

Two potential snow play sites have been identified along the southern boundary. One site is 10 acres and could accommodate 150 Persons-At-One-Time (PAOT) and provide 7,200 Recreation Visitor Days (RVDs); the second site is 20 acres and could accommodate 150 PAOT and provide 9,000 RVDs of developed site use.

Wildlife Resource The roadless area receives extensive use by big game as summer range. Forage is plentiful, resulting in the presence of large numbers of Roosevelt elk and black-tailed deer. Other species common to the western slopes of the Cascade Range are present.

Mt. Jefferson South roadless area extends more than 20 miles north and south along the Mt. Jefferson Wilderness boundary. Topographic conditions and vegetative communities vary greatly from one part of the roadless area to another, therefore a vast array of wildlife habitats are represented here. Management regimes that develop late successional stands increase quality of old growth stands for spotted owls. Most of the wildlife species found on the Detroit District are represented here. Proper design and location of harvest units could enhance big-game populations.

Water Resource Puzzle Creek has a power withdrawal within the roadless area and the existing Wilderness. Little other potential for development of the water resource exists.

Timber Resource There are stands of large, old-growth Douglas-fir and western hemlock in the area with stands of Pacific silver fir, mountain hemlock and lodgepole pine in the higher elevations. The stands generally have high defect which is a characteristic of the old-growth ecosystem. The roadless area includes about 147 million board feet on about 4,202 acres of land suitable for growing timber under managed conditions. Site productivity ranges from Class IV to Class V. The remaining area is unsuitable. If stands are converted to a managed condition, biological potential yield will be 512,136 cubic feet per year at culmination of the mean annual increment.

Mineral and Energy Resource Nearly 5,000 acres of the roadless area is within the Belknap- Foley Geothermal Study Area. Geothermal resources have been leased on portions of the roadless areas and other portions are available for leasing.

Cultural Resources Several cultural sites exist.

Land Use Authorizations Camp Pioneer has been operated under a special use permit by the Cascade Area Council of the Boy Scouts of America for approximately 40 years. Portions of the area are either leased or available for lease for the geothermal resources.

Management Considerations

Fire Fuel loading averages 50 tons per acre; however, any specific area may vary significantly from this average. Numerous human caused and lightning caused fires have occurred from 1975 to 1985.

Need

Nearby Wilderness and Its Use The Mt. Jefferson Wilderness (105,299 acres) is adjacent to the roadless areas on the east. The Wilderness was enlarged with additions designated by the Oregon Wilderness Act of 1984. It receives very heavy use in the Jefferson Park, Pamela and Marion Lake, and Eight Lakes Basin areas.

Distance from Population Centers The area is approximately 85 miles by road southeast of Salem, and about 75 miles east of Albany, Oregon.

Interest by Proponents The Mt. Jefferson North roadless area generated a high amount of interest with 44 percent of the responses favoring inclusion of the roadless area into the inventory.

Environmental Consequences

As a consequence of implementing any of the proposed Alternatives there will be effects on the Mt. Jefferson South roadless area. In Alternatives NC, K, A, J, and W, 51 to 55 percent of this area will be affected by road construction and timber harvest. Alternative D will develop 22 percent of the area. As a result of this development, uses dependent on roadless conditions--such as semiprimitive recreation--will not be provided in portions of the area. Implementation of proposed management activities associated with all Alternatives would alter the suitability of this area for future Wilderness consideration. However, portions of this area contiguous to the Mt. Jefferson Wilderness would remain suitable for consideration as Wilderness additions in the next cycle of Forest planning. Alternative D and L maintains the option of future Wilderness consideration for a majority of this area. Figure C-5-2 illustrates how this area has been allocated in each Alternative.

Based on the amount and distribution of management areas assigned to the Mt. Jefferson South roadless area an array of goods and services are provided. Emphasis on priced commodities such as wood products are provided in Alternatives NC, K, A, J, and W. Emphasis on amenity values such as dispersed recreation opportunities, high visual quality, and old-growth habitat are provided in Alternatives L and 78 percent of D. The amounts of other goods and services to be provided from the area for each Alternative are illustrated in Figure C-5-3. Additional information regarding the environmental consequences of the activities associated with these goods and services is located in Chapter IV of this FEIS.

Table T314. Management Area Acreage of Alternatives (C-5-2)

Management Areas	Alternatives						
	NC (No Change)	K (WFC)	A (No Action)	J (DEIS-PA)	W (PA)	D (Wildlife)	L (ONRC)
1 Wilderness							
Management Area 1a	--	--	--	--	--	--	--
Management Area 1b	--	--	--	--	--	--	2,496
Management Area 1c	--	--	--	--	--	--	--
Management Area 1d	--	--	--	--	--	--	--
2 Oregon Cascades Recreation Area							
Management Area 2a	--	--	--	--	--	--	--
Management Area 2b	--	--	--	--	--	--	--
3 Experimental Forest							
Management Area 3	--	--	--	--	--	--	--
4 Research Natural Area							
Management Area 4	--	--	--	--	--	--	--
5 Special Interest Area							
Management Area 5a	--	--	--	--	--	--	--
Management Area 5b	--	--	--	--	--	--	--
6 Wild and Scenic River							
Management Area 6a	--	--	--	--	--	--	--
Management Area 6b	--	--	--	--	--	--	--
Management Area 6c	--	--	--	--	--	--	--
7 Old-Growth Grove							
Management Area 7	--	--	--	--	--	--	--
8 T & E Species							
Management Area 8	--	--	--	--	--	--	--
9 Special Habitat ¹							
Management Area 9a	--	939	1,194	1,152	1,152	85	--
Management Area 9b	--	--	--	--	--	--	--
Management Area 9c	--	128	128	128	128	--	--
Management Area 9d	--	--	--	--	--	--	--
10 Dispersed Recreation							
Management Area 10a	--	--	--	--	--	--	--
Management Area 10b	--	--	--	--	--	--	--
Management Area 10c	--	--	--	--	--	1,621	512
Management Area 10d	2,240	--	1,109	725	704	--	--
Management Area 10e	--	--	--	--	--	1,642	1,813
Management Area 10f	--	661	--	277	277	555	--

Management Areas	NC (No Change)	K (WFC)	A (No Action)	J (DEIS-PA)	W (PA)	D (Wildlife)	L (ONRC)
11 Scenic							
Management Area 11a	--	896	--	853	704	--	--
Management Area 11b	--	--	--	--	--	--	--
Management Area 11c	--	149	--	299	149	640	--
Management Area 11d	277	--	277	107	213	64	--
Management Area 11e	--	192	--	--	192	--	--
Management Area 11f	149	256	107	235	192	256	107
12 Developed Recreation							
Management Area 12a	64	64	64	64	64	64	64
Management Area 12b	--	21	--	21	21	21	--
13 Special and Ad- ministrative Use							
Management Area 13a	--	--	--	--	--	--	--
Management Area 13b	--	--	--	--	--	--	--
14 General Forest							
Management Area 14a	2,261	1,642	2,090	1,109	1,152	43	--
15 Riparian ²							
Management Area 15	*	*42	*21	*21	43	--	--

¹ Acres of network sites that overlap with other no harvest management areas are not included in MA9a, 9b, 9c acres.

² Only alternatives with acres assigned to no harvest prescriptions for riparian have acres allocated to MA15. In alternatives K, A, and J riparian acres follow Forest-wide standards and guidelines for riparian harvest rates. Riparian acres in NC are distributed throughout other management areas.

**Table C-5-3. Mt. Jefferson South Roadless Area
Quantifiable Resources Outputs, Environmental Effects, and Activities by Alternative**

		Alternatives						
Output, Effects, or Activity	Unit of Measure	NC	K	A	J	W	D	L
Recommended Wilderness Recreation Use 1st Decade Area Recommended for Wilderness	RVDs	--	--	--	--	--	--	--
	Acres	--	--	--	--	--	--	2,496
Nonwilderness Dispersed Recreation Use in the 1st Decade								
Semiprimitive Nonmotorized	RVDs	2,352	--	1,053	672	661	1,703	1,976
	Acres	2,240	--	1,109	725	704	1,642	1,813
Semiprimitive Motorized	RVDs	--	--	--	--	--	4,512	1,517
	Acres	--	--	--	--	--	1,621	512
Roaded Natural	RVDs	5,014	26,329	19,562	24,748	26,082	18,178	1,976
	Acres	491	2,453	1,792	2,304	2,432	1,685	171
Roaded Modified	RVDs	9,511	10,327	8,790	8,220	7,746	190	--
	Acres	2,261	2,538	2,090	1,962	1,856	43	--
Trails								
Existing Trails								
Full Protection Level	Miles	2.0	5.0	4.0	5.0	2.0	7.0	8.0
Moderate Protection Level	Miles	5.0	0.0	3.0	1.0	7.0	2.0	--
Low Protection Level	Miles	2.0	4.0	2.0	3.0	--	--	--
Potential Trails								
Full Protection Level	Miles	0.0	1.0	1.0	1.0	--	1.0	2.0
Moderate Protection Level	Miles	0.0	--	--	--	2.0	--	--
Low Protection Level	Miles	1.0	1.0	1.0	2.0	--	1.0	--
Visual Quality Objectives								
Preservation	Acres	--	1,066	1,322	1,280	1,280	1,728	4,309
Retention	Acres	2,389	1,109	1,216	1,237	1,365	2,432	619
Partial Retention	Acres	341	277	363	512	491	789	64
Modification	Acres	--	896	--	853	704	--	--
Maximum Modification	Acres	2,261	1,642	2,090	1,109	1,152	43	--
1st Decade								
Road Construction	Miles	--	1.4	3.0	5.0	4.0	0.4	0.1
Area Harvested	Acres	--	190	268	824	377	95	--
Programmed Timber Harvest	MBF	--	826	2,344	6,409	3,298	577	78
Area Remaining Undeveloped	%	--	88	83	49	76	94	--
Lands by Timber Yield Levels								
Full Yield (95-100%)	Acres	2,090	2,112	1,962	1,984	1,557	576	--
75-94% of Full Yield	Acres	213	128	213	107	363	64	--
50-74% of Full Yield	Acres	1,834	320	747	640	725	213	107
30-49% of Full Yield	Acres	--	--	--	--	--	--	--

Middle Santiam - 6,783 Acres

Description

History Although the area boundaries have since changed, the Middle Santiam roadless area was studied in Rare I and Rare II. The Oregon Wilderness Act of 1984 set aside 8,553 acres as the Middle Santiam Wilderness and released 15,827 acres for multiple-use management. Since the release of these lands in 1984, approximately 9,044 acres have been affected by development activities.

Location and Access Tps.11 and 12S., Rs.4, 5, and 6E. This roadless area lies within the Sweet Home Ranger District approximately 40 miles northeast of Sweet Home. Forest Road 11 borders on the north, Forest Road 2041 borders the south, and access to the interior is provided by Forest Trails 3382 and 3387.

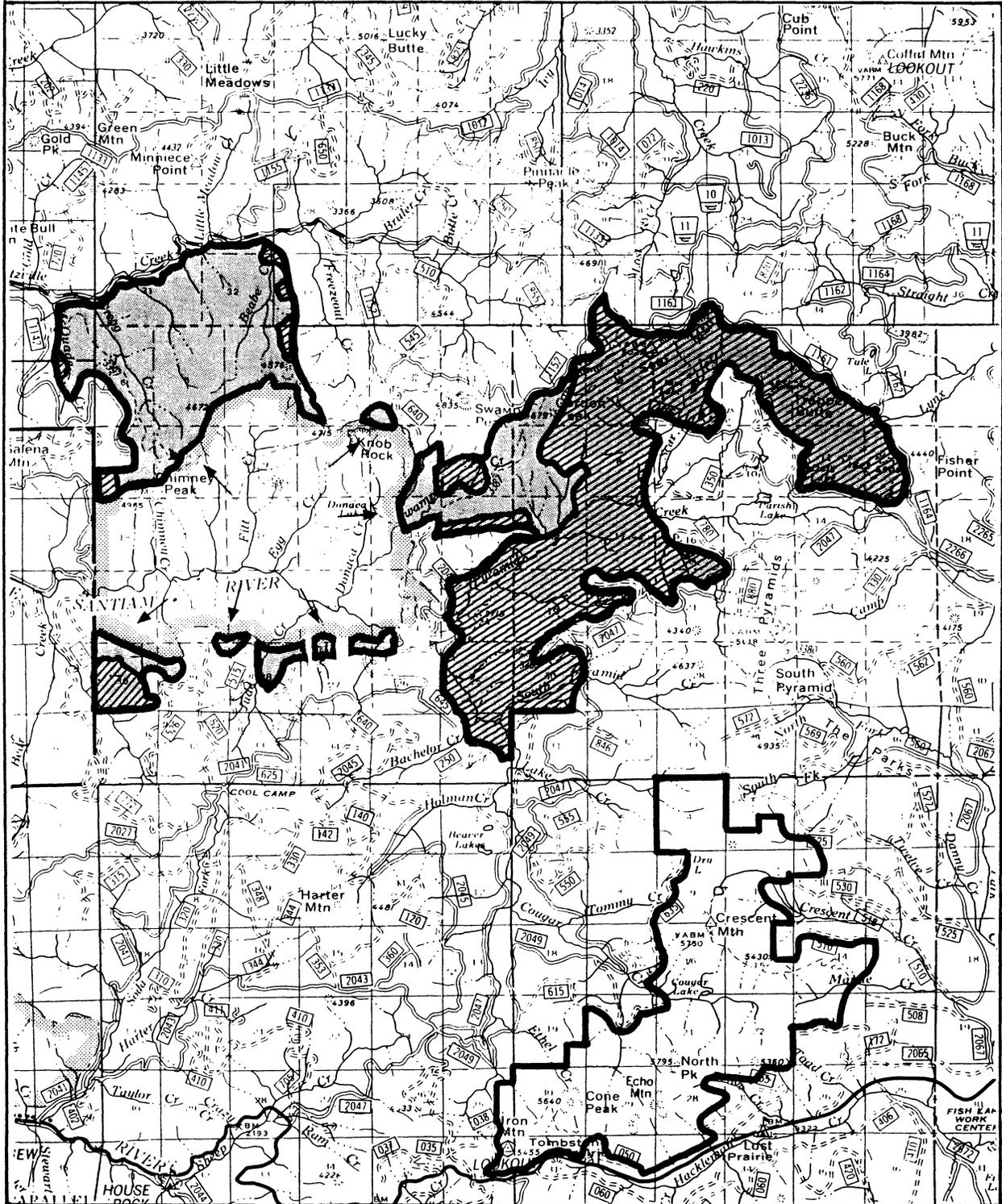
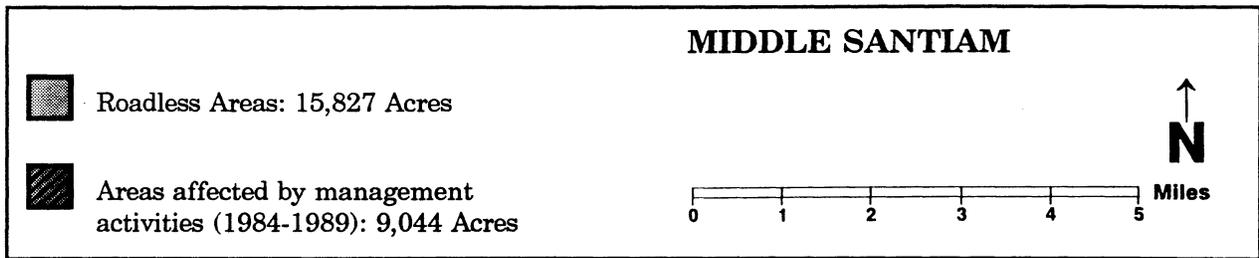
Geography and Topography A wide variety of topography ranging from steep slopes, high peaks and ridges, to more gentle slopes and benches is evident with elevations ranging from 2,000 feet along the Middle Santiam River to 5,022 feet on Scar Mountain.

Soil The Quartzville area (north area) is comprised of steep, highly dissected landforms developed on green and red breccias and tuffs. Soils generally have numerous rock fragments and range from less than 1-foot deep along ridgetops to more than 15 feet deep along drainages with 2 to 4 feet on the midslopes. The Pyramid Creek area (east area) is characterized by uneven to hummocky benches and basins, often separated by rocky scarps. Soils on the flatter areas are relatively deep and fertile. Bedrock is variable but consists primarily of breccias and tuffaceous materials. These soils are unstable once they are disturbed and maybe prone to erosion. There are about 4,373 acres that have potential for severe surface erosion; and approximately 3,050 acres of potentially severe surface erosion and unstable soil. For more soil information refer to *Willamette National Forest Soil Resource Inventory* (Legard and Meyer 1973).

Vegetation Vegetation varies from true fir associations at upper elevations to Douglas-fir/western hemlock at lower elevations.

Ecosystem There is one major potential vegetation zone and two vegetation communities for this area according to classification systems by Bailey (1976) and Kuchler (1966). The vegetation zone is the Pacific Forest (M2410) zone. The vegetative communities are fir/hemlock (*Abies-Tsuga*) forest (004) and Pacific silver fir/Douglas-fir (*Abies-Pseudotsuga*) forest (003).

Figure C-6-1



Current Uses At present there is little evidence of use, due partly to the lack of access and partly because of the limited number of attractions. The Recreation Opportunity Spectrum (ROS) class is Semiprimitive Nonmotorized. Current management direction is to practice multiple-use management of all resources with an emphasis on sustained timber yield. The Middle Santiam attracts about 11,500 Recreation Visitor Days (RVDs) for such activities as fishing, hunting, and hiking. Since this area was inventoried in 1984 management activities are estimated to have affected 2,240 acres of the area.

Appearances The variety in conifer timber types, understory vegetation, meadows and rock outcrops make this area typical of the Western Cascades.

Surroundings Roads have been developed and timber has been harvested around the perimeter. Several placer and lode mining claims are being operated along Quartzville Creek and McQuade Creek.

Attractions Daly, Don, and Riggs lakes are primary attractions of interest in the area. Daly Lake is a popular dispersed recreation destination surrounded by old-growth forests. Mid-elevation natural appearing lakes like Daly Lake are becoming uncommon as more development takes place throughout the Cascades. Don and Riggs lakes are secluded by the surrounding forest and terrain. The true fir stands dwarf the parklike understory. The meadows in the area attract big-game and the lakes provide habitat for small native fish. The Middle Santiam River and the lower extremities of its tributaries support native and anadromous fish.

Capability

Manageability and Boundaries The shape (long and narrow) of the east area, with harvest activity on all but the west boundary, makes this area relatively hard to manage as wilderness and maintain its primitive character. Sights and sounds of civilization in the narrow portion will be easily detected. Most boundaries do not follow terrain that forms a barrier, but follow the edge of nonconforming uses.

Natural Integrity There are roads and cutting units present. Three maintained trails traverse the Middle Santiam roadless area, totaling 11.0 miles. Present trails do not measurably alter the natural processes.

Recreation facilities that are present include Shed Camp Shelter near Pyramid Creek, McQuade Creek shelter near McQuade Creek, and a pit toilet at Daly Lake. These facilities have stopped natural processes in their immediate proximity. Daly Lake receives a high amount of recreation use resulting in compaction of the soil, deterioration of the vegetation, and pollution of the lake.

Other fixed site facilities in the area are helispots at Gordon Peak and an unnamed peak two miles north of Chimney Peak. The natural processes continue to operate largely uninterrupted at these locations.

Smoke from grass field and slash burning covers the entire area periodically during the spring, summer and fall seasons, but apparently does not affect the natural process. Smoke and air pollution will be visible to the visitor from higher elevations and will affect scenic enjoyment.

Natural Appearance Most visitors would find the roadless area apparently natural when roads and cutting units are separated from the area.

Opportunity for Solitude North and east portions offer moderate opportunity for solitude. Diversity of topography in the form of benches and rolling slopes offers screening potential in at least half of

the area but may be limited or lacking in the remainder. Most of the roadless area has dense vegetation, which screens people from one another at short distances. There is still sufficient opening to permit travel and camping without undue concentration. Noises from air traffic, mining activity, and surrounding timber harvest operations are the most perceptible offsite intrusions. The sounds are transitory in nature.

Opportunity for Primitive Recreation Primitive recreation opportunities are moderate, with the Middle Santiam River and tributaries, Daly Lake, Don Lake, and Riggs Lake providing the only diversity to a homogeneous Douglas-fir forest. Developments are limited to trails maintained to a low standard, two shelters, and one pit toilet.

Special Features The area generally contains fairly common features. Spotted owl responses have been recorded in the area. Sensitive plant species habitat exists in the roadless area. However, no federally listed endangered or threatened species are known to be present. Twenty-four cultural resource sites have been recorded in the area. Interest has been expressed about 108 acres of actively unstable terrain manifesting: leaning trees, hummocky ground, tension cracks, seeps, and debris chutes.

Availability

Resource Potentials

Wildlife Resource The Middle Santiam roadless area includes critical big game winter range (107 acres) at low elevations along the Middle Santiam River and is used moderately as summer range by deer and elk at the higher elevations. Development, dependent upon harvest design and access control, would improve carrying capacity for seral stage species. However, a reduction in old-growth stands will gradually reduce habitat for old-growth dependent species. Developing the Middle Santiam drainage for an anadromous fisheries is dependent upon the development of fish passage across Foster and Green Peter dams. A resident fishery exists in several small streams and lakes. Habitat parallel with the Middle Santiam River is considered potential nesting habitat for the bald eagle and osprey.

Timber Resource The roadless area includes about 6,271 acres of land suitable for growing timber under managed conditions. Stands of mature Douglas-fir occupy the area representing about 294 million board feet. Site productivity ranges from Class III to Class V. The remaining area is unsuitable. If stands are converted to a managed condition, biological potential yield will be 876,740 cubic feet per year at culmination of the mean annual increment.

Mineral and Energy Resource The Quartzville area (north portion) contains two existing active placer and lode mining claims. These claims run from the confluence of McQuade Creek with Quartzville Creek on McQuade Creek south for approximately 4,500 feet. A road has been constructed on the east side of McQuade Creek and runs for approximately 2,000 feet south of Quartzville Creek. In the summer of 1984 an operation was being conducted where soils and gravels were dug from the stream bank and run through a dredge. No other claims exist within the unroaded area, though a potential exists on two tributaries to Quartzville Creek, Beabe Creek and Gregg Creek.

Recreation Resource Capacity estimates indicate that this area could provide 4,696 RVDs of Semiprimitive Dispersed Nonmotorized recreation use. Potential trails have been identified and could provide access and disperse visitors in the area. No potential developed recreation sites have been identified.

Cultural Resource Several sites have been identified in the area. These upland sites contain primarily lithic material, and are believed to be related to the seasonal camps of the aboriginal people. More sites are probable.

Management Considerations

Fire From 1965 to 1985, the majority of fires have been small (less than 1 acre) lightning strikes and a few human caused fires. The average occurrence is approximately 2 per year. Fuel loading ranges from 30 to 130 tons per acre in old-growth stands (150 years plus) and 10 to 40 tons per acre in younger stands (80 to 150 years).

Insects and Disease Normal endemic diseases are found; there is no documentation of past infestations of insects or diseases. A potential for infestation by both the western spruce budworm and gypsy moth exists, as they have occurred in nearby forests. Scattered pockets of root rot, *Phellinus wierii*, are found throughout the area.

Need

Nearby Wilderness and Its Use The Middle Santiam Wilderness (8,553 acres) lies adjacent to the roadless area, and the Menagerie Wilderness (5,033 acres) is 15 miles southwest. These Wildernesses were created by the Oregon Wilderness Act of 1984. To the east 10 miles is the Mt. Jefferson Wilderness (105,299 acres). Refer to Chapter III for the amount of use these Wildernesses receive.

Distance from Population Centers The area is approximately 55 miles by road to the east of Albany, Oregon.

Interest by Proponents The Middle Santiam roadless area generated a high amount of interest with 52% of the responses favoring inclusion of the roadless area into the inventory.

Environmental Consequences

As a consequence of implementing any of the proposed Alternatives there will be effects on the Middle Santiam roadless area. In all Alternatives, 10 to 98% of this area will be affected by road construction and timber harvest. As a result of this development, uses dependent on roadless conditions--such as semiprimitive recreation--will not be provided in portions of the area. Implementation of proposed management activities associated with all Alternatives, except Alternative L, would alter the suitability of this area for future Wilderness consideration. However, portions of this area contiguous to the Middle Santiam Wilderness would remain suitable for consideration as Wilderness additions in the next cycle of Forest planning. Alternatives L and D maintains the option of future Wilderness consideration for most of this area. Figure C-6-2 illustrates how this area has been allocated in each Alternative.

Based on the amount and distribution of management areas assigned to the Middle Santiam roadless area, an array of goods and services are provided. Emphasis on priced commodities such as wood products are provided in Alternatives NC, A, K, and J. Emphasis on amenity values such as dispersed recreation opportunities, high visual quality, and old-growth habitat are provided in Alternatives L and 78% of D. The amounts of other goods and services to be provided from the area for each Alternative are illustrated in Figure C-6-3. Additional information regarding the environmental consequences of the activities associated with these goods and services is located in Chapter IV of this FEIS.

Table T314. Management Area Acreage of Alternatives (C-6-2)

Management Areas	Alternatives						
	NC (No Change)	K (WFC)	A (No Action)	J (DEIS-PA)	W (PA)	D (Wildlife)	L (ONRC)
1 Wilderness							
Management Area 1a	--	--	--	--	--	--	--
Management Area 1b	--	--	--	--	--	--	3,967
Management Area 1c	--	--	--	--	--	--	128
Management Area 1d	--	--	--	--	--	--	--
2 Oregon Cascades Recreation Area							
Management Area 2a	--	--	--	--	--	--	--
Management Area 2b	--	--	--	--	--	--	--
3 Experimental Forest							
Management Area 3	--	--	--	--	--	--	--
4 Research Natural Area							
Management Area 4	--	--	--	--	--	--	--
5 Special Interest Area							
Management Area 5a	--	--	--	--	--	--	--
Management Area 5b	--	--	--	--	--	--	--
6 Wild and Scenic River							
Management Area 6a	--	--	--	--	--	--	--
Management Area 6b	--	--	--	--	--	--	--
Management Area 6c	--	--	--	--	--	--	85
7 Old-Growth Grove							
Management Area 7	--	--	--	--	--	--	2,026
8 T & E Species							
Management Area 8	--	--	--	--	--	--	--
9 Special Habitat ¹							
Management Area 9a	--	--	--	--	--	--	--
Management Area 9b	--	--	--	--	--	--	--
Management Area 9c	--	171	171	171	171	--	--
Management Area 9d	--	--	--	--	--	--	21
10 Dispersed Recreation							
Management Area 10a	--	--	--	--	--	--	--
Management Area 10b	--	--	--	--	--	--	--
Management Area 10c	--	--	--	--	--	--	--
Management Area 10d	--	--	--	--	--	1,728	--
Management Area 10e	--	--	--	--	--	3,967	21
Management Area 10f	--	--	--	--	--	--	--

Management Areas	NC (No Change)	K (WFC)	A (No Action)	J (DEIS-PA)	W (PA)	D (Wildlife)	L (ONRC)
11 Scenic							
Management Area 11a	--	--	--	--	--	--	--
Management Area 11b	--	--	--	--	--	--	--
Management Area 11c	--	--	--	--	--	--	--
Management Area 11d	384	277	384	789	--	--	--
Management Area 11e	--	--	--	--	--	--	--
Management Area 11f	--	--	--	--	--	21	--
12 Developed Recreation							
Management Area 12a	--	--	--	--	--	--	--
Management Area 12b	--	--	--	--	--	--	--
13 Special and Ad- ministrative Use							
Management Area 13a	--	--	--	--	--	--	--
Management Area 13b	--	--	--	--	--	--	--
14 General Forest							
Management Area 14a	6,399	6,058	5,951	3,391	6,335	917	512
15 Riparian ²							
Management Area 15	*	*277	*277	*107	277	149	21

¹ Acres of network sites that overlap with other no harvest management areas are not included in MA9a, 9b, 9c acres.

² Only alternatives with acres assigned to no harvest prescriptions for riparian have acres allocated to MA15. In alternatives K, A, and J riparian acres follow Forest-wide standards and guidelines for riparian harvest rates. Riparian acres in NC are distributed throughout other management areas.

**Table C-6-3. Middle Santiam Roadless Area
Quantifiable Resources Outputs, Environmental Effects, and Activities by Alternative**

		Alternatives						
Output, Effects, or Activity	Unit of Measure	NC	K	A	J	W	D	L
Recommended Wilderness Recreation Use 1st Decade Area Recommended for Wilderness	RVDs	--	--	--	--	--	--	--
	Acres	--	--	--	--	--	--	4,095
Nonwilderness Dispersed Recreation Use in the 1st Decade								
Semiprimitive Nonmotorized	RVDs	--	--	--	--	--	1,978	--
	Acres	--	--	--	--	--	5,695	21
Semiprimitive Motorized	RVDs	--	--	--	--	--	--	--
	Acres	--	--	--	--	--	--	--
Roaded Natural	RVDs	4,150	4,174	5,409	4,421	1,260	1,507	16,720
	Acres	384	725	832	1,237	448	171	2,154
Roaded Modified	RVDs	8,790	8,752	8,277	8,657	9,909	2,203	1,310
	Acres	6,399	6,058	5,951	5,546	6,335	917	512
Trails								
Existing Trails								
Full Protection Level	Miles	1.0	1.0	1.0	1.0	3.0	5.0	7.0
Moderate Protection Level	Miles	3.0	3.0	3.0	6.0	4.0	3.0	--
Low Protection Level	Miles	4.0	4.0	4.0	1.0	--	--	--
Potential Trails								
Full Protection Level	Miles	0.0	0.0	0.0	0.0	3.0	7.0	8.0
Moderate Protection Level	Miles	0.0	1.0	2.0	3.0	5.0	--	--
Low Protection Level	Miles	7.0	7.0	7.0	6.0	--	1.0	--
Visual Quality Objectives								
Preservation	Acres	--	171	171	171	171	3,967	6,143
Retention	Acres	--	--	--	--	--	1,749	21
Partial Retention	Acres	384	555	661	1,066	277	149	107
Modification	Acres	--	--	--	--	--	--	--
Maximum Modification	Acres	6,399	6,058	5,951	5,546	6,335	917	512
1st Decade								
Road Construction	Miles	--	6.0	5.0	3.0	5.5	3.1	0.4
Area Harvested	Acres	--	929	1,026	554	793	347	104
Programmed Timber Harvest	MBF	--	8,372	9,542	5,059	7,047	6,958	939
Area Remaining Undeveloped	%	--	59	54	75	64	84	95
Lands by Timber Yield Levels								
Full Yield (95-100%)	Acres	5,546	5,290	5,183	4,799	4,394	811	405
75-94% of Full Yield	Acres	640	597	704	1,088	235	--	--
50-74% of Full Yield	Acres	85	213	213	213	768	1,728	128
30-49% of Full Yield	Acres	--	--	--	--	--	--	21

Echo Mountain - 7,551 Acres

Description

History Although the area boundaries have since changed due to roading and cutting units, the Echo Mountain roadless area was studied in Rare I and was considered for Wilderness in the Willamette National Forest Environmental Impact Statement of 1977. The Echo Mountain roadless area was considered for Wilderness by the United States Congress. They released the area for multiple use management in the Oregon Wilderness Act of 1984. Since the release of these lands in 1984, approximately 533 acres have been affected by development activities.

Location and Access T.13S., R.6E. This roadless area lies within the Sweet Home Ranger District approximately 45 miles northeast of Sweet Home. Forest Roads 2029 and 2029038 provide access on the west, Forest Roads 2067525 and 2067530 provide access on the northeast, and U.S. Highway 20 and Forest Road 050 provide access on the south. Forest Trails 5430 and 5640 provide access to the interior.

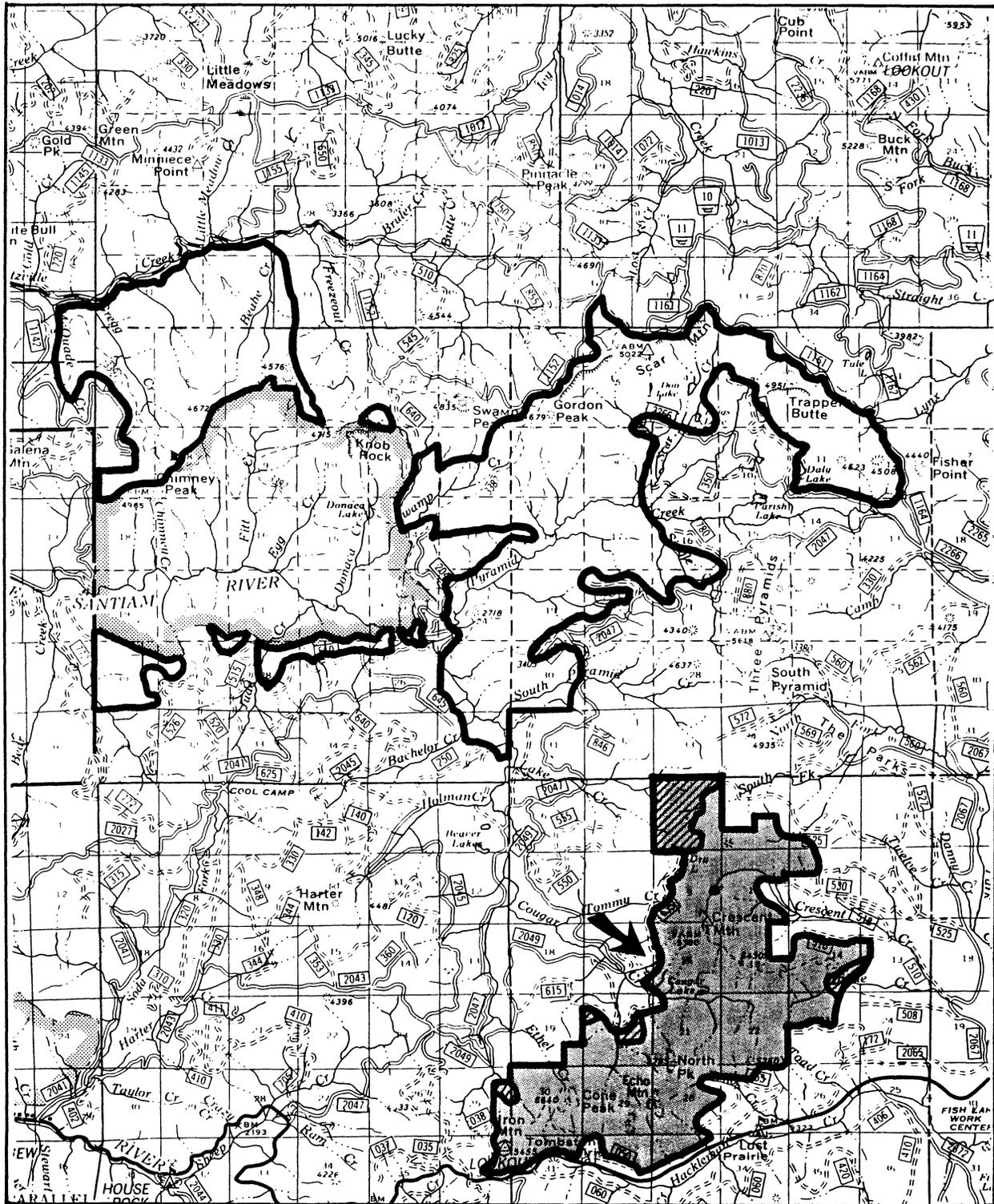
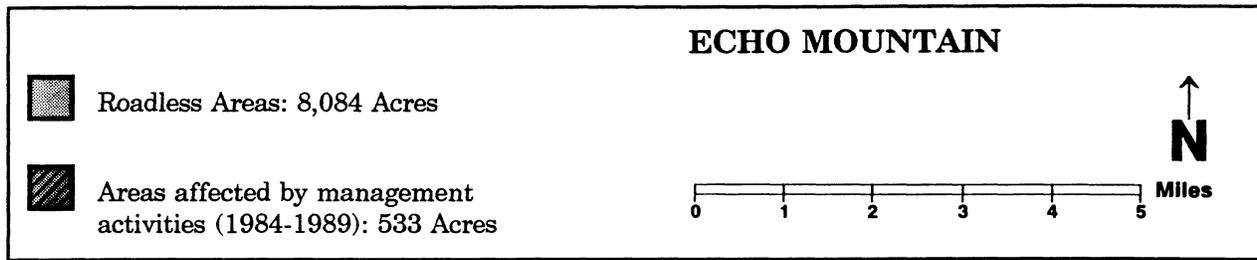
Geography and Topography The elevation ranges from 4,000 to 5,800 feet, with six mountain peaks over 5,000 feet. Crescent Mountain is situated in the northern portion and is separated from the other peaks, which are grouped in the southern portion, by a saddle of about 4,000 feet. There is a wide variety of topography, from cliffs and spires on Iron Mountain, volcanic rocks and uplifts on Echo Mountain, undulating ridges on Crescent Mountain to gentle slopes in the Maude and Cougar Creek headwaters.

Soil Soils in the Echo Mountain roadless area are shallow, rocky, and generally have a low timber production potential. There are about 1,429 acres that have potential for severe surface erosion and approximately 64 acres of potentially severe surface erosion and unstable soil. For more soil information refer to *Willamette National Forest Soil Resource Inventory* (Legard and Meyer 1973).

Ecosystem Type and Vegetation There is one major potential vegetation zone and two vegetation communities for this area according to classification systems by Bailey (1976) and Kuchler (1966). The vegetation zone is the Pacific Forest (M2410) zone. The vegetative communities are fir/hemlock (*Abies-Tsuga*) forest (004) and Pacific silver fir/Douglas-fir (*Abies-Pseudotsuga*) forest (003).

Current Uses The Iron Mountain-Cone Peak area has been used by faculty from local universities as a field laboratory for plant identification and classification. Primary uses are for recreational pursuits including hiking, scenic viewing, berry picking and general observation of existing geology. Recreation Visitor Days (RVDs) approach 22,800. Hunting and fishing are not significant or important uses. The Recreation Opportunity Spectrum (ROS) class is Semiprimitive Nonmotorized. By current management direction, 700 acres have been allocated to Undeveloped Roadless Recreation (FLMP 1977).

Figure C-7-1



The objective is to maintain or enhance recreation opportunities in a near natural environment.

Appearances The high meadows and rocky areas along Echo Mountain Ridge are surrounded by forests which contains a variety of coniferous species.

Surroundings Roads have been developed and timber has been harvested around the perimeter of the roadless area. Several mineral claims containing emery and emery-like material have been staked on, and adjacent to, the west side.

Attractions Crescent Lake, Crescent Mountain, and Iron Mountain Trails are primary among the attractions. They provide scenic views of the Cascades, numerous alpine meadows for plant identification, and short day hikes on well established trails.

Capability

Manageability and Boundaries The small size and juxtaposition to the highway and harvest activities (Sights and sounds of civilization) limit the ability to retain a primeval character. Boundaries tend to be located adjacent to nonconforming uses rather than shielding terrain features. Adequate motor vehicle access to boundaries exists on all sides.

Natural Integrity A Forest Service lookout building located on Iron Mountain, and trails to Iron Mountain and Crescent Mountain are the major structures. Natural processes continue to operate largely uninterrupted in the area.

Mineral developments (emery mining), 0.2 mile of road, and a 25 acre partial cut are located in the roadless area.

Other fixed site facilities in the area are helispots on Crescent Mountain, in the saddle between Cone Peak and South Peak, one mile north of Crescent Lake, and on Iron Mountain.

Smoke from grass field and slash burning covers virtually the entire area periodically during the spring, summer and fall seasons; but apparently does not affect the natural process.

Natural Appearance Most visitors find the roadless area apparently natural when physical developments are separated. Evidence of unnaturalness is either absent or apparent to only the most knowledgeable visitor. Smoke and air pollution will be apparent to the visitor from higher elevations and may affect scenic enjoyment.

Opportunity for Solitude The unroaded area offers a low opportunity for solitude. The distance from the perimeter to the approximate geographic center is less than one mile. Most of the area is within sight or sound of roads and development activity on adjacent lands.

Opportunity for Primitive Recreation Primitive recreation opportunities are low because of the limited opportunities for solitude. Developments are limited to 10 miles of trails maintained to a low standard and a lookout. There are 4 lakes including Crescent and Cougar lakes. Crescent Lake offers opportunities for fishing. The Echo Mountain Ridge area provides opportunities for hiking, photography, and scenic viewing.

Special Features The area contains a Iron Mountain Lookout for fire detection. There are no federally listed endangered or threatened species known to be present.

Availability

Resource Potentials

Timber Resource The roadless area includes about 4,010 acres of land suitable for growing timber under managed conditions. Stands of mature true fir and mountain hemlock occupy the area representing about 186 million board feet. Site productivity ranges from Class IV to Class V. The remaining area is unsuitable. If stands are converted to a managed condition, biological potential yield will be 498,139 cubic feet per year at culmination of the mean annual increment.

Wildlife Resource The Echo Mountain roadless area includes a scattering of high mountain meadows and openings amid varied timber types. This high degree of interspersed plant communities supports a wide diversity of wildlife and unique/sensitive plant species. The area is also heavily used by deer and elk as summer range. Development and timber harvesting is restricted by the unsuitability of much of the area. Several small lakes support a native trout fishery.

Mineral and Energy Resource An emery mining operation covering half an acre north of Cone Peak has removed the top three feet of earth. Further mining is planned for the future as of 1985. No other claims exist, though there is potential for emery mining adjacent to the existing claim.

Land Use Authorization A radio relay station on Iron Mountain has been authorized for state law enforcement use.

Recreation Resource Capacity estimates indicate that this area could provide 3,940 RVDs of Semiprimitive Dispersed Nonmotorized recreation use. Potential trails have been identified and could provide access and disperse visitor use. A potential visitor information site has been identified which could accommodate 50 persons-at-one-time (PAOT) and provide 7,300 RVDs annually.

Management Considerations

Fire From 1965 to 1985, the majority of fires have been small (less than 1 acre) lightning strikes, and a few human caused fires. The average occurrence is approximately 1 per year. Fuel loadings range from 30 to 130 tons per acre in old-growth stands (150 years plus) and 10 to 40 tons per acre in younger stands (80 to 150 years).

Insects and Disease Normal endemic diseases are found. There is a pocket of dwarf mistletoe covering approximately 50 acres north of South Peak. A potential for infestation by the western spruce budworm and gypsy moth exists, as they have occurred in nearby forests. Scattered pockets of root rot, *Phellinus weirii*, are found throughout the timbered area.

Need

Nearby Wilderness and Its Use Four Wildernesses are within 10 miles of the Echo Mountain roadless area. These include the Middle Santiam Wilderness (8,553 acres) to the northwest, the Menagerie Wilderness (5,033 acres) to the west, to the east 10 miles is the Mt. Jefferson Wilderness (105,299 acres), and Mt. Washington Wilderness (56,202 acres) to the southeast. Refer to Chapter III for the amount of use these Wildernesses receive.

Distance from Population Centers The area is approximately 65 miles by road to the east of Albany, Oregon.

Interest by Proponents The Echo Mountain roadless area generated a high amount of interest with 75% of the responses favoring inclusion of the roadless area into the inventory.

Environmental Consequences

As a consequence of implementing any of the proposed Alternatives there will be effects on the Echo Mountain roadless area. In Alternative K, 93% of this area will be affected by road construction and timber harvest. Alternative NC, A, J, and W will develop 19 to 32% of the area. As a result of this development, uses dependent on roadless conditions--such as semiprimitive recreation--will not be provided in portions of the area. Implementation of proposed management activities associated with Alternatives B and I, would alter the suitability of this area for future Wilderness consideration. All other Alternatives would maintain the option of future Wilderness consideration for most of this area. Figure C-7-2 illustrates how this area has been allocated in each Alternative.

Based on the amount and distribution of management areas assigned to the Echo Mountain roadless area an array of goods and services are provided. Emphasis on priced commodities such as wood products are provided in Alternative K. Emphasis on amenity values such as dispersed recreation opportunities, high visual quality, and old-growth habitat are provided in Alternatives NC, A, J, and W, 98% of D, and 100% of L. The amounts of other goods and services to be provided from the area for each Alternative are illustrated in Figure C-7-3. Additional information regarding the environmental consequences of the activities associated with these goods and services is located in Chapter IV of this FEIS.

Table T314. Management Area Acreage of Alternatives (C-7-2)

Management Areas	Alternatives						
	NC (No Change)	K (WFC)	A (No Action)	J (DEIS-PA)	W (PA)	D (Wildlife)	L (ONRC)
1 Wilderness							
Management Area 1a	--	--	--	--	--	--	--
Management Area 1b	--	--	--	--	--	--	7,146
Management Area 1c	--	--	--	--	--	--	--
Management Area 1d	--	--	--	--	--	--	--
2 Oregon Cascades Recreation Area							
Management Area 2a	--	--	--	--	--	--	--
Management Area 2b	--	--	--	--	--	--	--
3 Experimental Forest							
Management Area 3	--	--	--	--	--	--	--
4 Research Natural Area							
Management Area 4	--	--	--	--	--	--	--
5 Special Interest Area							
Management Area 5a	--	--	--	107	2,538	107	--
Management Area 5b	--	--	--	--	--	--	--
6 Wild and Scenic River							
Management Area 6a	--	--	--	--	--	--	--
Management Area 6b	--	--	--	--	--	--	--
Management Area 6c	--	--	--	--	--	--	--
7 Old-Growth Grove							
Management Area 7	43	--	43	43	--	43	--
8 T & E Species							
Management Area 8	--	--	--	--	--	--	--
9 Special Habitat ¹							
Management Area 9a	--	363	128	149	128	64	--
Management Area 9b	--	--	--	--	--	--	--
Management Area 9c	--	171	43	--	--	--	--
Management Area 9d	--	--	--	--	--	--	85
10 Dispersed Recreation							
Management Area 10a	--	--	--	--	--	--	--
Management Area 10b	--	--	--	--	--	--	--
Management Area 10c	--	--	--	--	--	--	320
Management Area 10d	--	--	--	--	--	--	--
Management Area 10e	5,077	--	5,077	6,058	3,391	7,167	--
Management Area 10f	--	--	--	--	--	--	--

Management Areas	NC (No Change)	K (WFC)	A (No Action)	J (DEIS-PA)	W (PA)	D (Wildlife)	L (ONRC)
11 Scenic							
Management Area 11a	--	2,666	--	427	832	--	--
Management Area 11b	--	--	--	--	--	--	--
Management Area 11c	--	--	--	43	--	--	--
Management Area 11d	64	--	64	43	--	--	--
Management Area 11e	--	--	--	--	--	--	--
Management Area 11f	277	491	192	320	341	171	--
12 Developed Recreation							
Management Area 12a	--	--	--	--	--	--	--
Management Area 12b	--	--	--	--	--	--	--
13 Special and Ad- ministrative Use							
Management Area 13a	--	--	--	--	--	--	--
Management Area 13b	--	--	--	--	--	--	--
14 General Forest							
Management Area 14a	2,090	3,711	1,962	363	299	--	--
15 Riparian ²							
Management Area 15	*	*149	*42	*--	21	--	--

¹ Acres of network sites that overlap with other no harvest management areas are not included in MA9a, 9b, 9c acres.

² Only alternatives with acres assigned to no harvest prescriptions for riparian have acres allocated to MA15. In alternatives K, A, and J riparian acres follow Forest-wide standards and guidelines for riparian harvest rates. Riparian acres in NC are distributed throughout other management areas.

**Table C-7-3. Echo Mountain Roadless Area
Quantifiable Resources Outputs, Environmental Effects, and Activities by Alternative**

		Alternatives						
Output, Effects, or Activity	Unit of Measure	NC	K	A	J	W	D	L
Recommended Wilderness Recreation Use 1st Decade Area Recommended for Wilderness	RVDs	--	--	--	--	--	--	--
	Acres	--	--	--	--	--	--	7,146
Nonwilderness Dispersed Recreation Use in the 1st Decade								
Semiprimitive Nonmotorized	RVDs	1,998	--	1,998	2,950	2,363	3,976	--
	Acres	5,077	--	5,077	6,058	3,391	7,167	--
Semiprimitive Motorized	RVDs	--	--	--	--	--	--	804
	Acres	--	--	--	--	--	--	320
Roaded Natural	RVDs	3,631	8,521	4,545	5,335	9,632	3,384	741
	Acres	384	1,173	512	704	3,029	384	85
Roaded Modified	RVDs	7,404	13,536	7,043	3,113	3,626	--	--
	Acres	2,090	6,378	1,962	789	1,130	--	--
Trails								
Existing Trails								
Full Protection Level	Miles	6.0	6.0	7.0	8.0	8.0	8.0	9.0
Moderate Protection Level	Miles	1.0	1.0	1.0	0.0	--	0.0	--
Low Protection Level	Miles	1.0	2.0	1.0	--	1.0	--	--
Potential Trails								
Full Protection Level	Miles	2.0	2.0	2.0	2.0	3.0	3.0	3.0
Moderate Protection Level	Miles	1.0	--	1.0	1.0	--	--	--
Low Protection Level	Miles	--	1.0	--	--	--	--	--
Visual Quality Objectives								
Preservation	Acres	5,119	533	1,365	6,356	6,058	7,380	7,146
Retention	Acres	277	491	171	320	341	171	405
Partial Retention	Acres	64	149	597	85	21	--	--
Modification	Acres	--	2,666	427	427	832	--	--
Maximum Modification	Acres	2,090	3,711	1,962	363	299	--	--
1st Decade								
Road Construction	Miles	--	3.1	2.1	2.2	0.8	0.1	0.1
Area Harvested	Acres	--	357	310	457	147	25	53
Programmed Timber Harvest	MBF	--	3,011	2,621	4,015	1,361	227	442
Area Remaining Undeveloped	%	--	85	87	81	94	99	98
Lands by Timber Yield Levels								
Full Yield (95-100%)	Acres	1,792	3,178	1,706	725	832	--	--
75-94% of Full Yield	Acres	64	469	85	43	--	--	--
50-74% of Full Yield	Acres	256	43	213	235	277	149	--
30-49% of Full Yield	Acres	--	--	--	--	--	--	64

Moose Lake - 4,778 Acres

Description

History The Moose Lake roadless area was included in RARE I, and was subsequently analyzed for potential Wilderness in the Willamette National Forest Land Management Plan (1977). The roadless area was considered for Wilderness by the United States Congress. They released the area for multiple use management in the Oregon Wilderness Act of 1984. Since the release of these lands in 1984, approximately 896 acres have been affected by development activities.

Location and Access T.13S., Rs.3 and 4E. The area lies approximately 10 miles east of Sweet Home within the Sweet Home Ranger District near Moose Ridge. Moose Lake roadless area is bordered on the north by Moose Ridge and on the south by Forest Roads 2025 and 2025720. No maintained trails access the area.

Geography and Topography This area is characterized by steep, heavily dissected sideslopes, separated by flatter lying, irregular ridges. Elevations vary from 1,300 feet at Moose Creek to 4,000 feet at the northern edge of Moose Ridge along the Forest boundary.

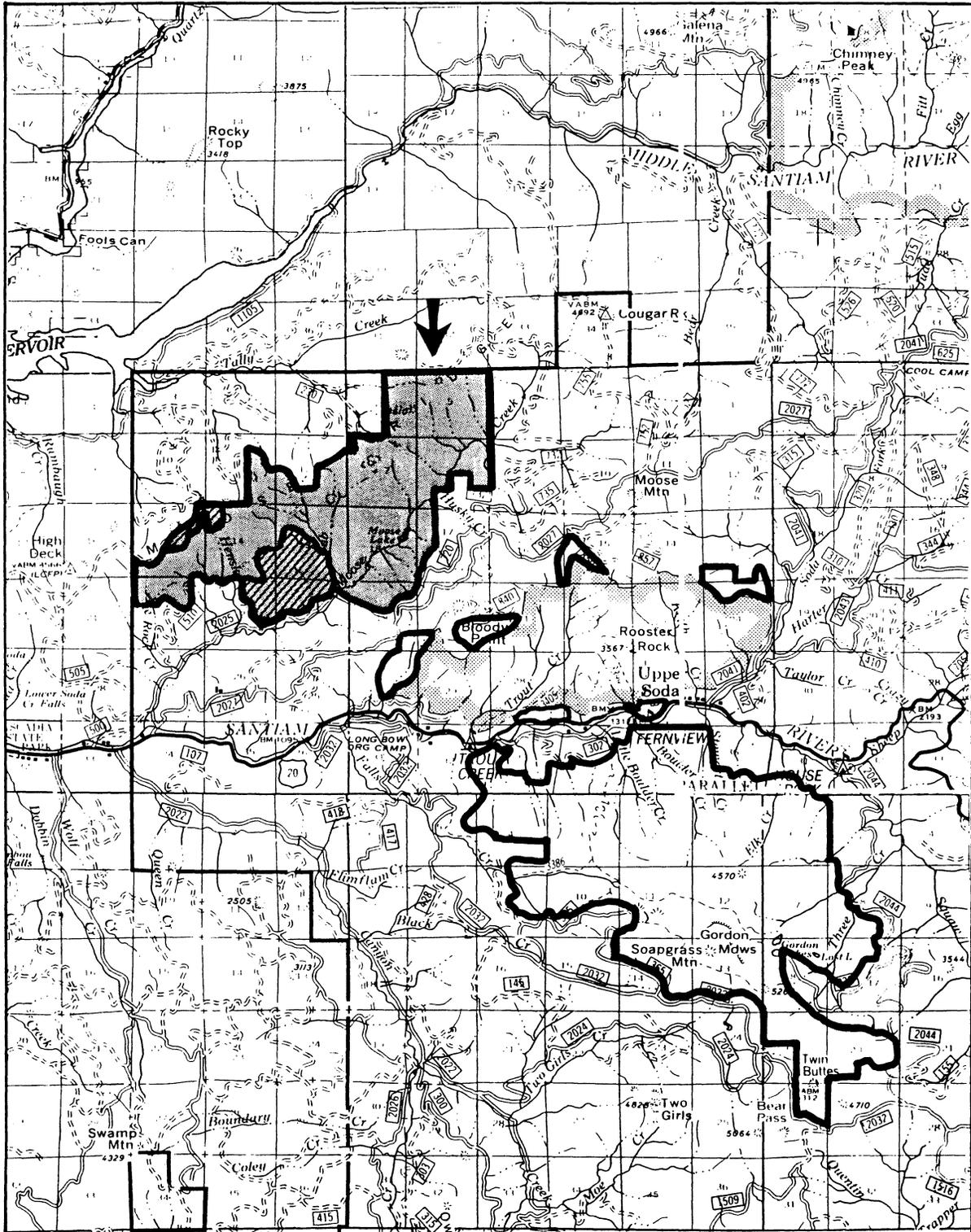
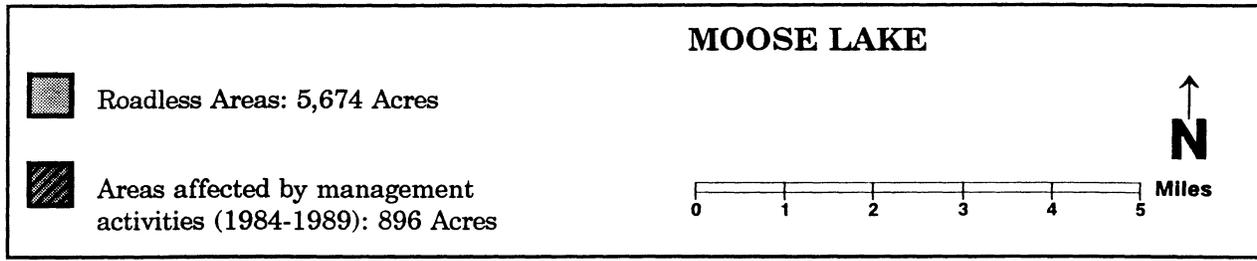
Soil Soils within the area range from less than 1 foot to over 12 feet in depth with the more shallow rocky soils on steeper slopes and deeper soils along the drainages. Soil materials consist of residuum and colluvium, developed on green and red breccias and tuffs. There are about 3,136 acres that have potential for severe surface erosion and approximately 1,813 acres of potentially severe surface erosion and unstable soil. For more soil information refer to *Willamette National Forest Soil Resource Inventory* (Legard and Meyer 1973).

Vegetation Vegetation consists predominantly of Douglas-fir/western hemlock associations. The ground is covered by salal, Oregon grape, rhododendron, and smaller shade tolerant trees.

Ecosystem Type There is one major potential vegetation zone and one vegetation community for this area according to classification systems by Bailey (1976) and Kuchler (1966). The vegetation zone is the Pacific Forest (M2410) zone. The vegetative community is Pacific silver fir/Douglas-fir (*Abies-Pseudotsuga*) forest (003).

Current Uses At present there is little evidence of use due to the lack of access and the limited number of attractions. Due to its undeveloped state, the area is similar to Semiprimitive Nonmotorized. Recreation activities are hiking, fishing, and hunting. There are about 1,200 Recreation Visitor Days (RVDs) of use. Current management direction (FLMP 1977) is to practice multiple use management of all resources with an emphasis on

Figure C-8-1



sustained timber yield. Since this area was inventoried in 1984 management activities are estimated to have affected 320 acres of the area.

Appearance This area is densely forested with Douglas-fir. Moose Lake, Moose Creek, and its tributaries offer pleasant diversity to the dense timber stands.

Surroundings Roads have been developed and timber has been harvested around the perimeter of the area.

Attractions The primary attractions are Moose Lake and Moose Creek which support a small native and anadromous fish population.

Capability

Manageability and Boundaries Boundaries generally avoid conflict with potential or existing public use and conform with terrain to constitute a barrier. Transportation access is available to the boundaries in the form of existing roads. The small size limits the ability to manage the area as Wilderness and maintain a primeval character. Sights and sounds of nonconforming uses are more apparent because of the limited distance from the core to the perimeter.

Natural Integrity Approximately 11.5 miles of unmaintained trails traverse the area. There is a helispot 1 mile northwest of Moose Lake.

Recreation use results in compaction and vegetative deterioration around Moose Lake, which is an integral feature of the area. These activities will continue as long as use occurs. Water pollution from recreation has impacted Moose Lake. Water pollution in the lake is not normally apparent to visitors and has no known effect on the natural process.

Smoke from grass field and slash burning covers virtually the entire area periodically during the spring, summer, and fall seasons but probably does not affect the natural processes. Smoke and air pollution may be apparent to the visitor from higher elevations and may affect scenic enjoyment.

Natural Appearance Most visitors find the roadless area apparently natural appearing. Evidence of unnaturalness is either absent or apparent to only the most knowledgeable visitor.

Opportunity for Solitude The Moose Lake roadless area offers a low opportunity for solitude. Diversity of topography in the form of ridges and dissected slopes offers screening potential in about half of the area, but may be limited or lacking in the remainder. Most of the roadless area has dense vegetation, which screens people from one another at short distances. There are still sufficient openings to permit travel and camping without undue concentration. The distance from the perimeter to the approximate geographic center is less than one mile; and because of this short distance, the opportunity to provide a feeling of solitude is lessened. Noise from air traffic and surrounding timber harvest operations are the most perceptible offsite intrusions. They are transitory in nature.

Opportunity for Primitive Recreation Primitive recreation opportunities are low with Moose Lake, Moose Creek, and tributaries providing the only diversity to a homogeneous Douglas-fir stand. Developments are limited to 11.5 miles of unmaintained trails.

Special Features The area generally contains fairly common features. Northern spotted owl responses have been noted, and nine cultural resources sites have also been recorded. No federally listed endangered or threatened species

Availability

Resource Potentials

Timber Resource The roadless area includes about 4,223 acres of land suitable for growing timber under managed conditions. Stands of mature Douglas-fir occupy the area representing about 150 million board feet. Site productivity ranges from Class II to Class V. The remaining area is unsuitable. If stands are converted to a managed condition, biological potential yield will be 611,855 cubic feet per year at culmination of the mean annual increment.

Wildlife Resource The Moose Lake roadless area includes winter range for Roosevelt elk, however, a resident deer population is the predominant user. Suitable habitat for mature old-growth timber dependent species is constrained by surrounding mixed ownerships and large areas of second growth timber. Development, to some extent, would be of benefit to big-game species if proper cover conditions and road management were maintained. Moose Creek is a steelhead nursery stream protected for an expanding population, while Moose Lake supports a resident cutthroat trout fishery.

Recreation Resource Capacity estimates indicate that this area could provide 9,115 Recreation Visitor Days (RVDs) of Semiprimitive recreation use. Potential trails have been identified and could provide access and disperse visitors throughout the area. No potential developed recreation sites have been identified.

Cultural Resource The Moose Lake roadless area has low potential for identifying the presence of cultural resources. A few lithic sites and isolated finds have been recorded in and near the area. The terrain is generally not conducive to the existence of prehistoric sites. No evidence of historic activity has been found in the area.

Management Considerations

Fire The majority of the roadless area was burned by intense wildfire around the turn of the century. From 1965 to 1985, the majority of fires have been small (less than 1 acre) lightning strikes and a few human caused fires. The average occurrence in this area is less than 1 per year. Fuel loading ranges from 30 to 130 tons per acre in old-growth stands (150 years plus) and 5 to 15 tons per acre in younger stands (80 to 150 years).

Insects and Disease Normal endemic diseases are found, and there are no documentation of past infestations of insects or disease. A potential for infestation by both the western spruce budworm and gypsy moth exists as they are presently occur in nearby forests. Scattered pockets of root rot, *Phellinus weirii*, are found throughout the area.

Need

Nearby Wilderness and Its Use Two Wildernesses are within 10 miles of the Moose Lake roadless area. These include the Middle Santiam Wilderness (8,553 acres) 10 miles to the northeast, and the Menagerie Wilderness (5,033 acres) 2 miles to the southeast. Refer to Chapter III for the amount of use these Wildernesses receive.

Distance from Population Centers The area is approximately 45 miles by road to the east of Albany, Oregon.

Interest by Proponents The Moose Lake roadless area generated a moderate amount of interest with 54% of the responses favoring inclusion of the roadless area into the roadless inventory.

Environmental Consequences

As a consequence of implementing any of the proposed Alternatives, there will be effects on the Moose Lake roadless area. In all Alternatives except Alternative L, 75% of this area will be affected by road construction and timber harvest. As a result of this development, uses dependent on roadless conditions--such as semiprimitive recreation--will not be provided in portions of the area. Implementation of proposed management activities associated with all Alternatives, except Alternative L, would alter the suitability of this area for future Wilderness consideration. Alternative L maintains the option of future Wilderness consideration for most of this area. Figure C-8-2 illustrates how this area has been allocated in each Alternative.

Based on the amount and distribution of management areas assigned to the Moose Lake roadless area, an array of goods and services are provided. Emphasis on priced commodities such as wood products are provided in Alternatives NC, A, K, D, W, and J. Emphasis on amenity values such as dispersed recreation opportunities, high visual quality, and old-growth habitat are provided in Alternative L. The amounts of other goods and services to be provided from the area for each Alternative are illustrated in Figure C-8-3. Additional information regarding the environmental consequences of the activities associated with these goods and services is located in Chapter IV of this FEIS.

Table T314. Management Area Acreage of Alternatives (C-8-2)

Management Areas	Alternatives						
	NC (No Change)	K (WFC)	A (No Action)	J (DEIS-PA)	W (PA)	D (Wildlife)	L (ONRC)
1 Wilderness							
Management Area 1a	--	--	--	--	--	--	--
Management Area 1b	--	--	--	--	--	--	--
Management Area 1c	--	--	--	--	--	--	4,479
Management Area 1d	--	--	--	--	--	--	--
2 Oregon Cascades Recreation Area							
Management Area 2a	--	--	--	--	--	--	--
Management Area 2b	--	--	--	--	--	--	--
3 Experimental Forest							
Management Area 3	--	--	--	--	--	--	--
4 Research Natural Area							
Management Area 4	--	--	--	--	--	--	--
5 Special Interest Area							
Management Area 5a	--	--	--	--	--	--	--
Management Area 5b	--	--	--	--	--	--	--
6 Wild and Scenic River							
Management Area 6a	--	--	--	--	--	--	--
Management Area 6b	--	--	--	--	--	--	--
Management Area 6c	--	--	--	--	--	--	--
7 Old-Growth Grove							
Management Area 7	--	--	--	--	--	--	--
8 T & E Species							
Management Area 8	--	--	--	--	--	--	--
9 Special Habitat ¹							
Management Area 9a	--	1,045	1,045	1,045	960	1,045	--
Management Area 9b	--	--	--	--	--	--	--
Management Area 9c	--	128	128	128	128	128	85
Management Area 9d	--	--	--	--	--	--	--
10 Dispersed Recreation							
Management Area 10a	--	--	--	--	--	--	--
Management Area 10b	--	--	--	--	--	--	--
Management Area 10c	--	--	--	--	--	--	--
Management Area 10d	--	--	--	--	--	--	--
Management Area 10e	--	--	--	--	--	--	--
Management Area 10f	--	--	--	--	171	--	--

Management Areas	NC (No Change)	K (WFC)	A (No Action)	J (DEIS-PA)	W (PA)	D (Wildlife)	L (ONRC)
11 Scenic							
Management Area 11a	--	107	--	85	85	--	--
Management Area 11b	--	--	--	--	--	--	--
Management Area 11c	--	--	--	--	--	107	--
Management Area 11d	--	--	--	--	--	--	--
Management Area 11e	--	--	--	--	--	--	--
Management Area 11f	64	--	64	--	--	--	--
12 Developed Recreation							
Management Area 12a	--	--	--	--	--	--	--
Management Area 12b	--	--	--	--	--	--	--
13 Special and Ad- ministrative Use							
Management Area 13a	--	--	--	--	--	--	--
Management Area 13b	--	--	--	--	--	--	--
14 General Forest							
Management Area 14a	4,714	3,370	3,413	3,391	3,349	3,370	213
15 Riparian ²							
Management Area 15	*	*128	*128	*128	85	128	--

¹ Acres of network sites that overlap with other no harvest management areas are not included in MA9a, 9b, 9c acres.

² Only alternatives with acres assigned to no harvest prescriptions for riparian have acres allocated to MA15. In alternatives K, A, and J riparian acres follow Forest-wide standards and guidelines for riparian harvest rates. Riparian acres in NC are distributed throughout other management areas.

**Table C-8-3. Moose Lake Roadless Area
Quantifiable Resources Outputs, Environmental Effects, and Activities by Alternative**

Output, Effects, or Activity	Unit of Measure	Alternatives							
		NC	K	A	J	W	D	L	
Recommended Wilderness Recreation Use 1st Decade Area Recommended for Wilderness	RVDs	--	--	--	--	--	--	--	
	Acres	--	--	--	--	--	--	4,479	
Nonwilderness Dispersed Recreation Use in the 1st Decade	Semiprimitive Nonmotorized	RVDs	--	--	--	--	--	--	
		Acres	--	--	--	--	--	--	
	Semiprimitive Motorized	RVDs	--	--	--	--	--	--	
		Acres	--	--	--	--	--	--	
	Roaded Natural	RVDs	247	2,396	2,643	2,396	2,396	3,631	988
		Acres	64	1,301	1,365	1,301	1,344	1,408	85
	Roaded Modified	RVDs	7,556	6,721	6,626	6,721	6,721	6,246	854
		Acres	4,714	3,477	3,413	3,477	3,434	3,370	213
Trails	Existing Trails								
	Full Protection Level	Miles	--	--	--	--	--	--	
	Moderate Protection Level	Miles	--	--	--	--	--	--	
	Low Protection Level	Miles	--	--	--	--	--	--	
	Potential Trails								
	Full Protection Level	Miles	1.0	1.0	1.0	1.0	1.0	1.0	
	Moderate Protection Level	Miles	--	0.0	0.0	0.0	--	--	
Low Protection Level	Miles	1.0	1.0	1.0	--	--	1.0		
Visual Quality Objectives	Preservation	Acres	--	1,173	1,173	1,173	1,088	1,173	4,565
	Retention	Acres	64	--	64	--	171	--	--
	Partial Retention	Acres	--	128	128	128	85	235	--
	Modification	Acres	--	107	--	85	85	--	--
	Maximum Modification	Acres	4,714	3,370	3,413	3,391	3,349	3,370	213
1st Decade	Road Construction	Miles	--	2.1	4.2	4.1	3.2	4.4	0.2
	Area Harvested	Acres	--	359	656	537	333	954	336
	Programmed Timber Harvest	MBF	--	2,890	4,552	4,731	2,881	7,546	2,468
	Area Remaining Undeveloped	%	--	77	57	65	78	39	79
	Lands by Timber Yield Levels								
Full Yield (95-100%)	Acres	4,181	3,136	3,114	3,156	3,093	3,136	213	
75-94% of Full Yield	Acres	--	43	21	21	--	--	--	
50-74% of Full Yield	Acres	43	85	128	85	--	21	--	
30-49% of Full Yield	Acres	--	--	--	--	--	--	--	

Menagerie (Rooster Rock) - 405 Acres

Description

History The Menagerie (Rooster Rock) roadless area was analyzed for potential Wilderness in the Willamette National Forest Land Management Plan (FLMP 1977). The Oregon Wilderness Act of 1984 designated 5,034 acres as Menagerie Wilderness and released 448 acres to multiple-use management in scattered parcels adjacent to the Menagerie Wilderness. Since the release of these lands in 1984, approximately 43 acres have been affected by development activities.

Location and Access T.13S., R.4E. The Menagerie roadless area is made up of several parcels scattered along the north and west boundaries of the Menagerie Wilderness and is approximately 15 miles east of Sweet Home in the Sweet Home Ranger District. Forest Road 2027 borders the west areas and Forest Road 2041 is adjacent to the eastern most area.

Geography and Topography The east area is characterized by steep dissected slopes. The west contains gentle, undulating, smooth slopes. Elevations vary from 1,600 feet near Highway 20 to 3,900 feet in the upper Keith Creek drainage.

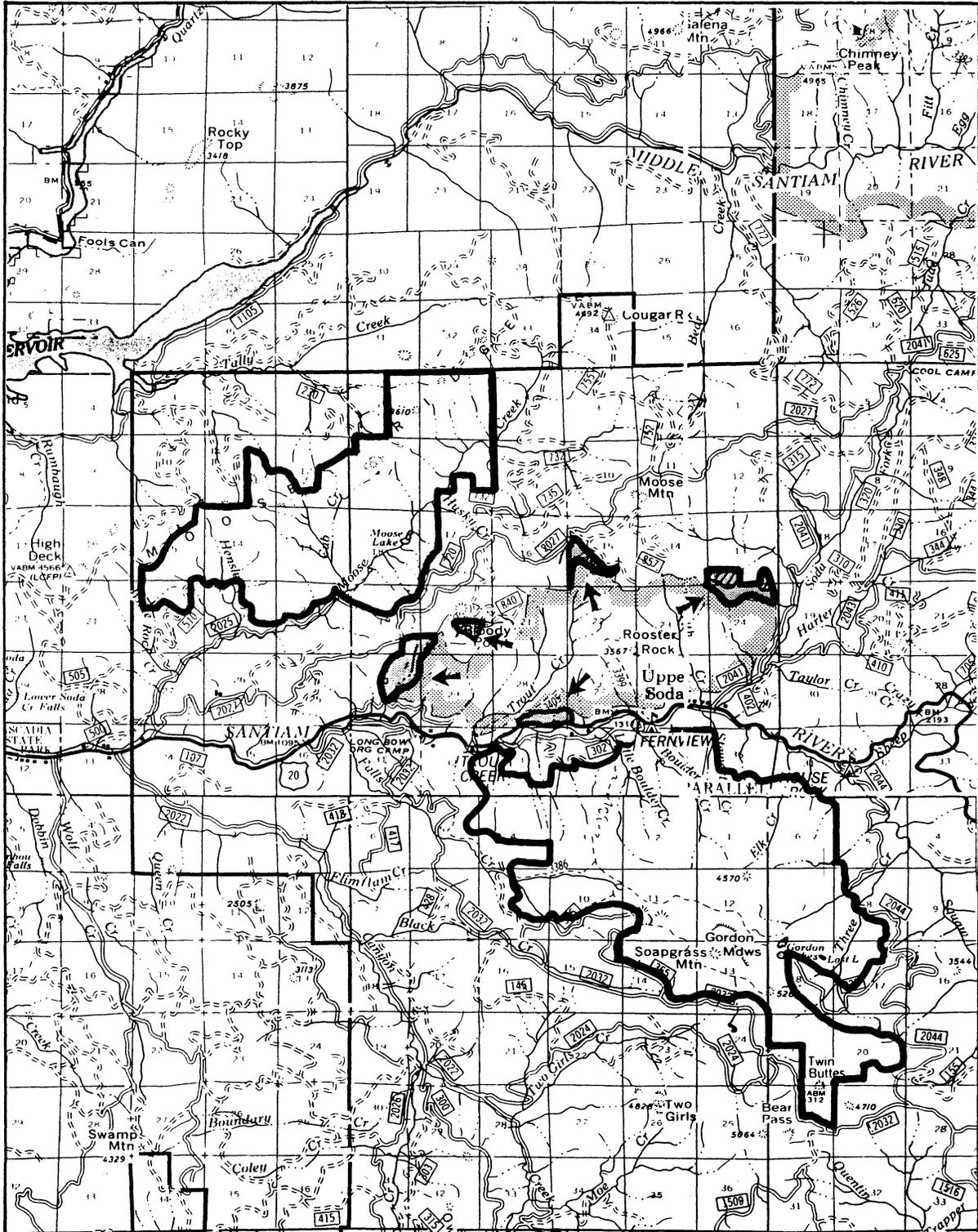
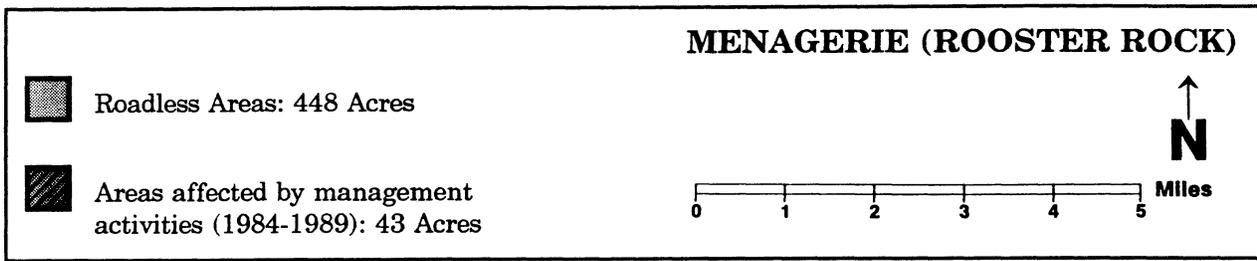
Soil Soil depths vary from less than one foot on the steep upper slopes in the east to five feet or more on the more gentle slopes in the west. Soils are generally colluvial/residual in nature, developed on breccias and tuffs. There are about 171 acres that have potential for severe surface erosion, and approximately 64 acres of potentially severe surface erosion and unstable soil. For more soil information refer to *Willamette National Forest Soil Resource Inventory* (Legard and Meyer 1973).

Vegetation Vegetation consists predominantly of Douglas-fir/western hemlock associations. Both summer and winter range for big-game animals is available, though quality forage is limited to existing clearcuts adjacent to the area.

Ecosystem There is one major potential vegetation zone and one vegetation community for this area according to classification systems by Bailey (1976) and Kuchler (1966). The vegetation zone is the Pacific Forest (M2410) zone. The vegetative community is Pacific silver fir/Douglas-fir (*Abies-Pseudotsuga*) forest (003).

Current Uses There is little evidence of use which is limited to occasional hunters, hikers, or rock climbers. There are about 900 Recreation Visitor Days (RVDs) per year. The Recreation Opportunity Spectrum (ROS) class is Semiprimitive Nonmotorized. Current management direction (FLMP 1977) is to practice multiple use management of all resources with an emphasis on sustained timber yield. Since this area was inventoried in 1984 management activities are estimated to have affected 25 acres of the area.

Figure C-9-1



Appearance The Menagerie roadless area is densely forested with low elevation conifers. The eastern most portion contains six rock spires which are geologically unique to the Western Cascades.

Surroundings Roads have been developed and timber has been harvested around the perimeter on both private and Federal land.

Attractions The east area contains the only attraction, the rock spires, which are common to the surrounding area.

Capability

Manageability and Boundaries These areas are adjacent to the Menagerie Wilderness and offer a greater manageability for the entire area. Boundaries not abutting the Wilderness are immediately adjacent to nonconforming uses (i.e. harvest units, roads). These areas offer more opportunity for motor vehicle access and minor intrusions by people.

Natural Integrity Smoke from grass field burning and slash burning covers virtually the entire area periodically during the spring, summer, and fall seasons, but apparently does not affect natural processes.

Natural Appearance Most visitors find the roadless area natural appearing. The close proximity of roads and cutting units reduce natural appearance. Smoke and air pollution will be apparent to the visitor from higher elevations and may affect scenic enjoyment.

Opportunity for Solitude The west and east portions of the roadless area offer a moderate opportunity for solitude. Diversity of topography in the form of benches, dissected, and rolling slopes offer screening potential in at least half of the area, but may be limited or lacking in the remainder. Most of the roadless area has dense vegetation, which screens people from one another, even within a quarter of a mile; but there is still sufficient opening to permit travel and camping without undue concentration of people. The distance from the perimeter of the roadless area to the approximate geographic center of the Wilderness area is from one to two miles. Offsite intrusions include surrounding timber harvesting activities, including private land operations, and highway traffic noise (in the western most area).

Opportunity for Primitive Recreation Primitive recreation opportunities are moderate with the rock spires in the east area providing the only diversity to a homogenous Douglas-fir stand with few hazards. There are no recreation developments within any of the area boundaries.

Challenging Experiences There are opportunities for rock climbing on the spires.

Special Features The area generally contains fairly common features. One cultural resource site has been recorded in the area. No federally listed endangered or threatened species are known to be present.

Availability

Resource Potentials

Timber Resource The roadless area includes about 363 acres of land suitable for growing timber under managed conditions. Stands of mature Douglas-fir occupy the area, representing about 58 million

board feet. The remaining area is unsuitable. If stands are converted to a managed condition, biological potential yield will be 51,500 cubic feet per year at culmination of the mean annual increment.

Wildlife Resource Menagerie roadless area is surrounded by large and medium size timber. The majority of the roadless area lies within winter range for big-game. Rock outcrops and steep and broken topography typify portions of the area. Habitat at lower elevations is used moderately by deer and elk during winter months. The South Santiam River is also potential osprey and bald eagle habitat. A management regime focused on developing the large segment of the second growth for late successional stands would encourage expansion of populations for such species as the spotted owl and other old-growth dependent species. Developing late successional stands would also provide dead and defective tree habitat for cavity users. Managing for early successional stands at the lower elevations could provide more usable forage for deer and elk, with proper size and location of harvest areas.

Recreation Resource Capacity estimates indicate that this area could provide 281 RVDS of Semiprimitive recreation use. No potential trail locations or developed recreation sites have been identified within the area.

Minerals and Energy Resource A small parcel of this roadless area has been leased for oil and gas resources. This occurs at the northeast tip of the roadless area.

Management Considerations

Fire The majority of the unroaded area was burned by intense wildfire around the turn of the century. From 1965 to 1985 the majority of fires in the area have been small (less than 1 acre) lightning strikes and a few human caused fires (campfires, etc). The average occurrence in this area is less than 1 per year. Fuel loading in the area ranges from 30 to 130 tons per acre in old-growth stands (150 years plus) and 10 to 40 tons per acre in younger stands (80 to 150 years).

Insects and Disease Only normal endemic diseases are found in the area with no documentation of past infestations of insects or diseases. A potential for infestation by both the western spruce budworm and gypsy moth exists, as they presently occur in nearby forests. Scattered pockets of root rot, *Phellinus weirii*, are found throughout the area.

Need

Nearby Wilderness and Its Use Two Wildernesses are within 10 miles of the Menagerie roadless area. These include the Middle Santiam Wilderness (8,553 acres) 10 miles to the northeast and the Menagerie Wilderness (5,033 acres) adjacent with common boundaries. Refer to Chapter III for the amount of use these Wildernesses receive.

Distance from Population Centers The area is approximately 45 miles by road to the east of Albany, Oregon.

Interest by Proponents The Menagerie roadless area generated a high amount of interest with 71% of the responses favoring inclusion of the roadless area into the roadless inventory.

Environmental Consequences

As a consequence of implementing any of the proposed Alternatives, there will be effects on the Menagerie roadless area. In all Alternatives 68 to 95% of this area will be affected by road construction timber harvest. As a result of this development, uses dependent on roadless conditions--such as semiprimitive

recreation--will not be provided in portions of the area. Implementation of proposed management activities associated with all Alternatives would alter the suitability of this area for future Wilderness consideration. However, portions of this area contiguous to the Menagerie Wilderness would remain suitable for consideration as Wilderness in the next cycle of Forest planning. Figure C-9-2 illustrates how this area has been allocated in each Alternative.

Based on the amount and distribution of management areas assigned to the Menagerie roadless area, an array of goods and services are provided. Emphasis on priced commodities such as wood products are provided in all Alternatives. The amounts of other goods and services to be provided from the area for each Alternative are illustrated in Figure C-9-3. Additional information regarding the environmental consequences of the activities associated with these goods and services is located in Chapter IV of this FEIS.

Table T314. Management Area Acreage of Alternatives (C-9-2)

Management Areas	Alternatives						
	NC (No Change)	K (WFC)	A (No Action)	J (DEIS-PA)	W (PA)	D (Wildlife)	L (ONRC)
1 Wilderness							
Management Area 1a	--	--	--	--	--	--	--
Management Area 1b	--	--	--	--	--	--	--
Management Area 1c	--	--	--	--	--	--	--
Management Area 1d	--	--	--	--	--	--	--
2 Oregon Cascades Recreation Area							
Management Area 2a	--	--	--	--	--	--	--
Management Area 2b	--	--	--	--	--	--	--
3 Experimental Forest							
Management Area 3	--	--	--	--	--	--	--
4 Research Natural Area							
Management Area 4	--	--	--	--	--	--	--
5 Special Interest Area							
Management Area 5a	--	--	--	--	--	--	--
Management Area 5b	--	--	--	--	--	--	--
6 Wild and Scenic River							
Management Area 6a	--	--	--	--	--	--	--
Management Area 6b	--	--	--	--	--	--	--
Management Area 6c	--	--	--	--	--	--	64
7 Old-Growth Grove							
Management Area 7	--	--	--	--	--	--	--
8 T & E Species							
Management Area 8	--	--	--	--	--	--	--
9 Special Habitat ¹							
Management Area 9a	--	--	--	--	--	--	--
Management Area 9b	--	--	--	--	--	--	--
Management Area 9c	--	--	--	--	--	--	--
Management Area 9d	--	--	--	--	--	--	--
10 Dispersed Recreation							
Management Area 10a	--	--	--	--	--	--	--
Management Area 10b	--	--	--	--	--	--	--
Management Area 10c	--	--	--	--	--	--	--
Management Area 10d	--	--	--	--	--	--	--
Management Area 10e	--	--	--	--	--	--	43
Management Area 10f	--	--	--	--	--	--	--

Management Areas	NC (No Change)	K (WFC)	A (No Action)	J (DEIS-PA)	W (PA)	D (Wildlife)	L (ONRC)
11 Scenic							
Management Area 11a	--	213	--	171	171	--	--
Management Area 11b	--	--	--	--	--	--	--
Management Area 11c	--	--	--	21	21	213	--
Management Area 11d	--	--	--	--	--	--	--
Management Area 11e	--	--	--	--	--	--	--
Management Area 11f	43	43	43	64	64	43	--
12 Developed Recreation							
Management Area 12a	--	--	--	--	--	--	--
Management Area 12b	--	--	--	--	--	--	--
13 Special and Ad- ministrative Use							
Management Area 13a	--	--	--	--	--	--	--
Management Area 13b	--	--	--	--	--	--	--
14 General Forest							
Management Area 14a	363	128	341	128	128	128	277
15 Riparian ²							
Management Area 15	*	*21	*21	*21	21	21	21

¹ Acres of network sites that overlap with other no harvest management areas are not included in MA9a, 9b, 9c acres.

² Only alternatives with acres assigned to no harvest prescriptions for riparian have acres allocated to MA15. In alternatives K, A, and J riparian acres follow Forest-wide standards and guidelines for riparian harvest rates. Riparian acres in NC are distributed throughout other management areas.

**Table C-9-3. Menagerie (Rooster Rock) Roadless Area
Quantifiable Resources Outputs, Environmental Effects, and Activities by Alternative**

		Alternatives						
Output, Effects, or Activity	Unit of Measure	NC	K	A	J	W	D	L
Recommended Wilderness Recreation Use 1st Decade Area Recommended for Wilderness	RVDs	--	--	--	--	--	--	--
	Acres	--	--	--	--	--	--	--
Nonwilderness Dispersed Recreation Use in the 1st Decade								
Semiprimitive Nonmotorized	RVDs	--	--	--	--	--	--	--
	Acres	--	--	--	--	--	--	43
Semiprimitive Motorized	RVDs	--	--	--	--	--	--	--
	Acres	--	--	--	--	--	--	--
Roaded Natural	RVDs	494	741	741	1,235	1,235	173	988
	Acres	43	64	64	107	107	277	85
Roaded Modified	RVDs	1,386	1,291	1,291	1,101	1,101	3,325	1,196
	Acres	363	341	341	299	299	128	277
Trails								
Existing Trails								
Full Protection Level	Miles	--	--	--	--	--	--	--
Moderate Protection Level	Miles	--	--	--	--	--	--	--
Low Protection Level	Miles	--	--	--	--	--	--	--
Potential Trails								
Full Protection Level	Miles	--	--	--	--	--	--	--
Moderate Protection Level	Miles	--	--	--	--	--	--	--
Low Protection Level	Miles	--	--	--	--	--	--	--
Visual Quality Objectives								
Preservation	Acres	--	--	--	--	--	--	43
Retention	Acres	43	43	43	64	64	64	--
Partial Retention	Acres	--	21	21	43	43	235	85
Modification	Acres	--	213	--	171	171	--	--
Maximum Modification	Acres	363	128	341	128	128	128	277
1st Decade								
Road Construction	Miles	--	0.5	1.0	0.5	0.4	0.5	0.2
Area Harvested	Acres	--	39	73	59	36	113	471
Programmed Timber Harvest	MBF	--	314	503	523	310	893	3,455
Area Remaining Undeveloped	%	--	69	42	54	72	14	100
Lands by Timber Yield Levels								
Full Yield (95-100%)	Acres	320	299	299	277	277	299	235
75-94% of Full Yield	Acres	--	21	21	21	--	--	--
50-74% of Full Yield	Acres	43	43	43	64	64	64	64
30-49% of Full Yield	Acres	--	--	--	--	--	--	--

Gordon Meadows - 8,361 Acres

Description

History The Gordon Meadows roadless area was analyzed for potential Wilderness in the Willamette National Forest Land Management Plan (1977). The Oregon Wilderness Act of 1984 released all 9,556 acres to multiple-use management. Since the release of these lands in 1984, approximately 1,195 acres have been affected by development activities.

Location and Access Tps.13 and 14S., Rs.4 and 5E. The Gordon Meadows roadless area is within the Sweet Home Ranger District approximately 16 miles east of Sweet Home. The area is south of U.S. Highway 20, bordered on the south by several local Forest Roads that are tributary to Forest Road 2032, and bordered on the east by Road 2044. Forest Trail 3386 to Gordon Meadows provides additional access.

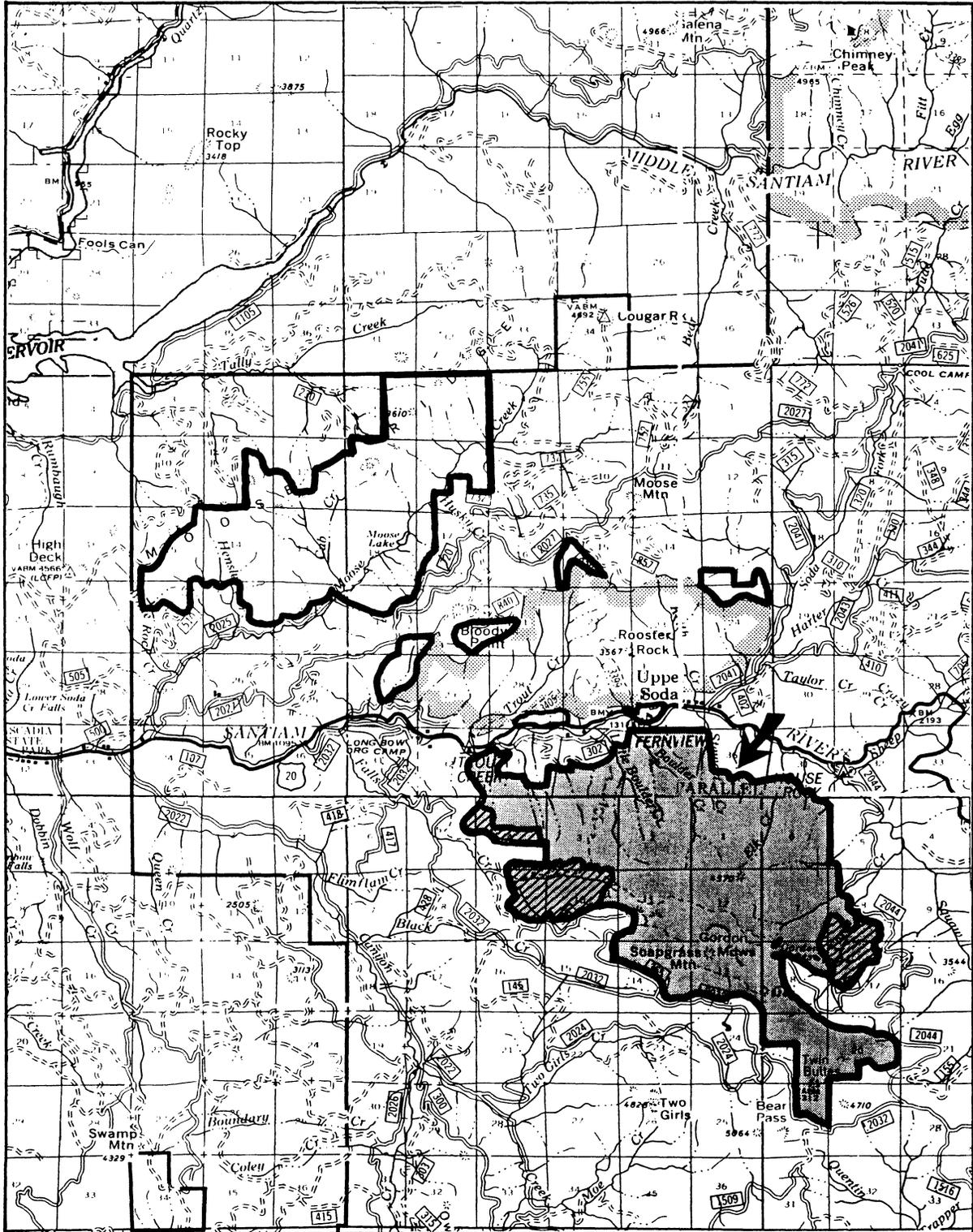
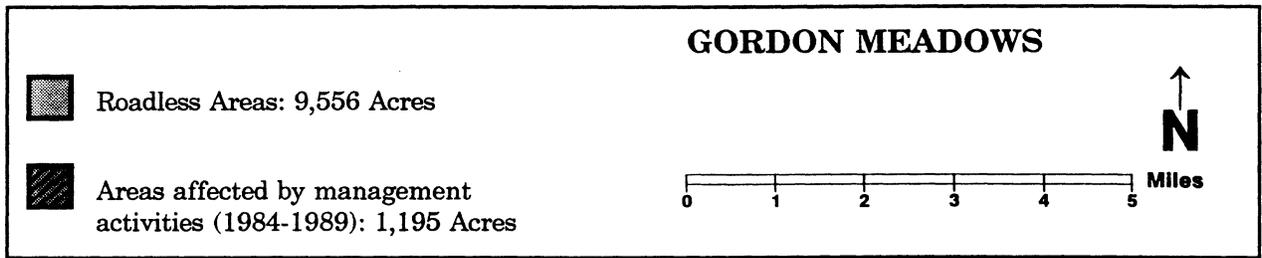
Geography and Topography This area is characterized by a variety of terrain. The southern portion is comprised mainly of upland benches and flats with ponds and numerous wet areas. These flatter, smooth slopes extend east and west throughout the area. The remaining lands to the north are typically steep to very steep, highly dissected slopes of the Western Cascades that terminate upslope in rock outcroppings and an impressive escarpment. Elevations range between 1,600 feet at Lower Boulder Creek and 5,300 feet along Twin Butte Ridge.

Soil Soils on the steep, dissected scarps are made up primarily of colluvial/residual material and range from 2 to 10 feet deep. The flatter upland benches soils are glacial in origin and vary between 6 and 12 feet. There are about 4,586 acres that have potential for severe surface erosion and approximately 683 acres of potentially severe surface erosion and unstable soil. For more soil information refer to *Willamette National Forest Soil Resource Inventory* (Legard and Meyer 1973).

Vegetation Plant associations in the lower elevations are in the western hemlock climax zone and in the higher elevations are in the Pacific silver fir zone. However, there is a high diversity of plant life within the area. Gordon Lakes and the nearby wet meadows with there surrounding stands of very old trees are a testimony to its protection from fire. Many of the forest's ecological characteristics such as tree height and diameter, stand volume, spatial volume, structural diversity, species diversity, wildlife habitat value, fire resistance, nutrient cycling, and organic matter are a result of trees living past 200 years of age.

Ecosystem Type There is one major potential vegetation zone and two vegetation communities for this area according to classification systems by Bailey (1976) and Kuchler (1966). The vegetation zone is the Pacific Forest (M2410) zone. The vegetative communities are fir/hemlock (*Abies-Tsuga*) forest (004) and Pacific silver fir/Douglas-fir (*Abies-Pseudotsuga*) forest (003).

Figure C-10-1



Current Uses At present there is little evidence of use partly due to the lack of access and partially because of the limited number of attractions. The Recreation Opportunity Spectrum (ROS) class for the area is Semiprimitive Nonmotorized based on lack of development. Activities such as fishing, hunting, hiking, and dispersed camping attract 9,100 Recreation Visitor Days (RVDs) annually. Current management direction to practice multiple-use management of all resources with an emphasis on sustained timber yield. Since this area was inventoried in 1984 management activities are estimated to have affected 136 acres of the area.

Appearances This area is densely forested with Douglas-fir and western hemlock at the lower elevations which gradually mixes of true fir as elevation increases. On the upland flats, Gordon Meadows and Gordon Lakes offer a pleasant diversity to the dense stand of trees. The meadows open to silhouetted views of the mountains on the crest of the Cascade Range.

Surroundings Roads have been developed and timber has been harvested around the perimeter of the area. U.S. Highway 20 parallels relatively close to the north boundary of the unroaded area.

Attractions The primary attractions are Gordon Lakes and Gordon Meadows areas and the very old trees of the Three Creeks drainage.

Capability

Manageability and Boundaries Boundaries generally avoid conflict with potential or existing public use and conform with terrain. Transportation access is available to the boundaries in the form of existing roads. The small size somewhat limits the ability to manage the roadless area and maintain a primeval character. Boundaries tend to be located adjacent to nonconforming uses rather than shielding terrain features.

Natural Integrity Special recreation facilities include Gordon Meadows shelter at Gordon Meadows and Twin Buttes lookout at Twin Buttes. The shelter and the lookout are no longer maintained and have collapsed and are in the process of deteriorating. The Gordon Lakes Trail, totaling 10.5 miles, traverses the Gordon Meadows roadless area. Present trails do not measurably alter the natural processes.

Recreation and range allotment use have resulted in compaction and vegetative deterioration at Gordon Lakes.

A 50 cow/calf range permit on Gordon Meadows results in trampling and grazing of meadow vegetation.

Water pollution from recreational use and cattle has had a small amount of effect on Gordon Lakes and Falls Creek. The source of pollution cannot be corrected without elimination of visitors and cattle. Water pollution is not normally apparent to visitors and has little known effect on natural processes.

Other fixed site facilities in the area are helispots one mile east of Gordon Meadows and at Soapgrass Mountain.

Transitory smoke from grass field and slash burning covers virtually the entire area periodically during the spring, summer, and fall seasons; but apparently does not affect the natural process.

Natural Appearance Most visitors find the roadless area apparently natural with physical developments separated. Smoke and air pollution will be apparent to the visitor from higher elevations and will affect scenic enjoyment. Visibility of cattle and their droppings will affect the appearance of naturalness.

Opportunity for Solitude The Gordon Meadows roadless area offers a moderate opportunity for solitude. Diversity of topography in the form of benches and dissected slopes offer screening potential in at least half of the area, but may be limited or lacking in the remainder. Most of the roadless area has dense vegetation, which screens people from one another, even within a quarter of a mile, but there is still sufficient opening to permit travel and camping without undue concentration. The distance from the perimeter to the approximate geographic center is from one to two miles. Offsite intrusions are noise from airplanes, highway traffic, and surrounding timber harvesting. Highway traffic may be considered a permanent intrusion while the other intrusions would be considered transitory.

Opportunity for Primitive Recreation Primitive recreation opportunities are moderate with Gordon Lakes and Gordon Meadows providing the only diversity to the continuous forest canopy. Developments are limited to trails maintained to a low standard and the collapsed shelter and lookout. Gordon Lakes offer fishing and dispersed camping opportunities.

Special Features Some of the super old-growth stands are over 700 years old. Cultural resources have been recorded on fifteen sites; and no federally listed endangered or threatened species are known to be present.

The super old-growth stands offer a unique opportunity to study succession, ecosystem development, fire history, soil development, and soil microorganisms among other subjects. These stands near the upper age limit will exhibit more fully developed traits. Some processes such as wood decomposition and soil formation may depend on long-term cycles which are only evident in the oldest ages of stands.

Availability

Resource Potentials

Water Resource Approximately 0.3 mile of penstock for the Falls Creek Hydroelectric project runs along the northwest boundary.

Timber Resource The roadless area includes about 5,695 acres of land suitable for growing timber under managed conditions. Stands of mature Douglas-fir occupy the area, representing about 204 million board feet. Site productivity ranges from Class III to Class V. The remaining area is unsuitable. If stands are converted to a managed condition, biological potential yield will be 758,700 cubic feet per year at culmination of mean annual increment.

Livestock Resource A 50 cow/calf allotment exists for the Gordon Meadows area. There is no potential to increase this use.

Wildlife Resource The Gordon Meadows roadless area occupies high site summer range for deer and elk and critical winter range along its northern margin. Use on winter range is restricted by adverse topography, aspect, and lack of early successional stages. Harvesting would probably benefit big-game species if balanced through time with proper size and distribution of units. The Gordon Meadows complex is currently a grazing allotment supporting approximately 150 Animal Unit Months (AUMs). A management regime focused on developing the large segment of second growth timber for late successional stands would probably encourage expansion of populations of such species as the spotted owl. Fisheries include brook trout in Black Creek and resident cutthroat trout and rainbow trout in Gordon Lakes.

Recreation Resource Capacity estimates indicate that this area could provide 5,383 RVDs of Semiprimitive recreation use. Potential trails have been identified and could provide access and disperse visitors in the area. No potential developed recreation sites have been identified.

Cultural Resource Prehistoric sites have been recorded along the southwest portion of the roadless area. The terrain has broad flats ridges and meadows. Most of the land in the northeast portion is too steep to have much potential for locating artifacts and sites.

Management Considerations

Fire The majority of the Gordon Meadows roadless area was burned by intense wildfire around the turn of the century. From 1965 to 1985, the majority of fires have been small (less than 1 acre) lightning strikes and a few human caused fires. The average occurrence is less than 1 per year. Fuel loading ranges from 30 to 130 tons per acre in older stands (150 years plus) and 10 to 40 tons per acre in younger stands (80 to 150 years).

Insects and Disease Only common endemic diseases are found in the area; there is no documentation of past infestations of insects or diseases. A potential for infestation by both the western spruce budworm and gypsy moth exists, as they presently occur in nearby forests. Scattered pockets of root rot, *Phellinus weirii*, are found throughout the area.

Need

Nearby Wilderness and Its Use The Menagerie Wilderness (5,033 acres) is just north of U.S. Highway 20 (less than a quarter of a mile). Refer to Chapter III for the amount of use this Wildernesses receives.

Distance from Population Centers The area is approximately 50 miles by road to the east of Albany, Oregon.

Interest by Proponents The Gordon Meadows roadless area generated a moderate amount of interest with 55% of the responses favoring inclusion of the roadless area into the roadless inventory.

Environmental Consequences

As a consequence of implementing any of the proposed Alternatives there will be effects on the Gordon Meadows roadless area. In Alternatives NC, K, A, J, and W, 56 to 93% of this area will be affected by road construction and timber harvest. As a result of this development, uses dependent on roadless conditions--such as semiprimitive recreation--will not be provided in portions of the area. Implementation of proposed management activities associated with Alternative K would alter the suitability of this area for future Wilderness consideration. Alternatives L and D maintain the option of future Wilderness consideration for most of this area. The opportunity for future consideration of the undeveloped areas for inclusion in the National Wilderness Preservation System will be forgone due to the effects on the size of the area from the management activities. Figure C-10-2 illustrates how this area has been allocated in each Alternative.

Based on the amount and distribution of management areas assigned to the Gordon Meadows roadless area, an array of goods and services are provided. Emphasis on priced commodities such as wood products are provided in Alternatives NC, K, A, J, and W. Emphasis on amenity values such as dispersed recreation opportunities, high visual quality, and old-growth habitat are provided in Alternatives L and D. The amounts of other goods and services to be provided from the area for each Alternative are illustrated

in Figure C-10-3. Additional information regarding the environmental consequences of the activities associated with these goods and services is located in Chapter IV of this FEIS.

Table T314. Management Area Acreage of Alternatives (C-10-2)

Management Areas	Alternatives						
	NC (No Change)	K (WFC)	A (No Action)	J (DEIS-PA)	W (PA)	D (Wildlife)	L (ONRC)
1 Wilderness							
Management Area 1a	--	--	--	--	--	--	--
Management Area 1b	--	--	--	--	--	--	7,721
Management Area 1c	--	--	--	--	--	--	--
Management Area 1d	--	--	--	--	--	--	--
2 Oregon Cascades Recreation Area							
Management Area 2a	--	--	--	--	--	--	--
Management Area 2b	--	--	--	--	--	--	--
3 Experimental Forest							
Management Area 3	--	--	--	--	--	--	--
4 Research Natural Area							
Management Area 4	--	--	--	661	725	21	85
5 Special Interest Area							
Management Area 5a	--	--	--	--	--	--	--
Management Area 5b	--	--	--	--	--	--	--
6 Wild and Scenic River							
Management Area 6a	--	--	--	--	--	--	--
Management Area 6b	--	--	--	--	--	--	--
Management Area 6c	--	--	--	--	--	--	405
7 Old-Growth Grove							
Management Area 7	--	--	--	384	683	--	--
8 T & E Species							
Management Area 8	--	--	--	--	--	--	--
9 Special Habitat ¹							
Management Area 9a	--	64	64	64	64	--	--
Management Area 9b	--	--	--	--	--	--	--
Management Area 9c	--	64	128	64	--	--	--
Management Area 9d	--	256	--	256	341	--	--
10 Dispersed Recreation							
Management Area 10a	--	--	--	--	--	--	--
Management Area 10b	--	--	--	--	--	--	--
Management Area 10c	--	--	--	--	--	--	--
Management Area 10d	2,453	--	2,346	960	--	--	--
Management Area 10e	--	--	--	1,237	1,792	7,977	--
Management Area 10f	--	--	--	--	--	--	--

Management Areas	NC (No Change)	K (WFC)	A (No Action)	J (DEIS-PA)	W (PA)	D (Wildlife)	L (ONRC)
11 Scenic							
Management Area 11a	--	5,695	--	4,031	4,117	64	--
Management Area 11b	--	--	--	--	--	--	--
Management Area 11c	--	--	--	277	384	149	--
Management Area 11d	--	--	--	85	--	--	--
Management Area 11e	--	--	--	--	--	--	--
Management Area 11f	64	171	64	299	171	128	--
12 Developed Recreation							
Management Area 12a	--	--	--	--	--	--	--
Management Area 12b	--	--	--	--	--	--	--
13 Special and Ad- ministrative Use							
Management Area 13a	--	--	--	--	--	--	--
Management Area 13b	--	--	--	--	--	--	--
14 General Forest							
Management Area 14a	5,844	1,941	5,610	--	--	--	64
15 Riparian ²							
Management Area 15	*	*169	*149	*42	85	21	85

¹ Acres of network sites that overlap with other no harvest management areas are not included in MA9a, 9b, 9c acres.

² Only alternatives with acres assigned to no harvest prescriptions for riparian have acres allocated to MA15. In alternatives K, A, and J riparian acres follow Forest-wide standards and guidelines for riparian harvest rates. Riparian acres in NC are distributed throughout other management areas.

**Table C-10-3. Gordon Meadows Roadless Area
Quantifiable Resources Outputs, Environmental Effects, and Activities by Alternative**

		Alternatives						
Output, Effects, or Activity	Unit of Measure	NC	K	A	J	W	D	L
Recommended Wilderness Recreation Use 1st Decade Area Recommended for Wilderness	RVDs	--	--	--	--	--	--	--
	Acres	--	--	--	--	--	--	7,721
Nonwilderness Dispersed Recreation Use in the 1st Decade								
Semiprimitive Nonmotorized	RVDs	1,504	--	1,407	1,831	1,572	4,224	--
	Acres	2,453	--	2,346	2,858	2,517	7,977	--
Semiprimitive Motorized	RVDs	--	--	--	--	--	--	--
	Acres	--	--	--	--	--	--	--
Roaded Natural	RVDs	494	5,779	3,655	10,669	12,447	741	4,693
	Acres	64	725	405	1,472	1,728	320	576
Roaded Modified	RVDs	10,802	14,864	9,947	5,505	5,790	285	190
	Acres	5,844	7,636	5,610	4,031	4,117	64	64
Trails								
Existing Trails								
Full Protection Level	Miles	7.0	7.0	7.0	10.0	8.0	14.0	14.0
Moderate Protection Level	Miles	1.0	0.0	1.0	0.0	--	--	0.0
Low Protection Level	Miles	6.0	7.0	6.0	4.0	6.0	0.0	--
Potential Trails								
Full Protection Level	Miles	--	0.0	--	2.0	3.0	3.0	2.0
Moderate Protection Level	Miles	0.0	0.0	1.0	1.0	--	--	1.0
Low Protection Level	Miles	2.0	2.0	2.0	0.0	--	--	--
Visual Quality Objectives								
Preservation	Acres	--	128	192	2,410	3,263	7,999	7,807
Retention	Acres	2,517	427	2,410	1,514	512	128	--
Partial Retention	Acres	--	171	149	405	469	171	491
Modification	Acres	--	5,695	--	--	--	64	--
Maximum Modification	Acres	5,844	1,941	5,610	4,031	4,117		64
1st Decade								
Road Construction	Miles	--	4.3	6.1	4.1	4.0	0.5	0.4
Area Harvested	Acres	--	604	1,117	730	438	106	740
Programmed Timber Harvest	MBF	--	4,824	7,665	6,430	3,763	841	5,430
Area Remaining Undeveloped	%	--	78	59	73	84	96	73
Lands by Timber Yield Levels								
Full Yield (95-100%)	Acres	4,949	5,098	4,735	3,840	3,946	213	43
75-94% of Full Yield	Acres	149	128	171	128	43	--	--
50-74% of Full Yield	Acres	597	277	683	533	149	128	427
30-49% of Full Yield	Acres	--	--	--	--	--	--	--

Mt. Washington North - 1,003 Acres

Description

History There were 1,706 acres contiguous to the Mt. Washington Wilderness in the roadless area inventory. The Oregon Wilderness Act of 1984 designated 576 acres out of these to be Wilderness. The remaining 1,130 acres, referred to as Mt. Washington North roadless area, have been released for multiple-use management. Since the release of these lands in 1984, approximately 127 acres have been affected by development activities.

Location and Access T.14S., R.7½ E., Sec. 9, 10, and 11. The area is located contiguous to the central northern boundary of Mt. Washington Wilderness, immediately southwest of Big Lake in the Santiam Pass area. It is accessed from U.S. Highway 20 and Big Lake Road (Forest Road 2690). Patjens Lake Trail 3397 and Pocket Way Trail 3522 traverse the area. It is approximately 40 miles northwest Bend, Oregon.

Geography and Topography The area is situated within the High Cascade Physiographic Province. It is characterized by rolling gentle terrain common to the lands immediately west of the crest of the Cascade Range. The northern half is relatively flat; the topography is gentle with a northwest aspect. The southern half is situated on the north side of a northeast to southwest ridge which separates the Patjens Lakes Basin from Santiam Pass.

Soil Sands and cinders, with a scattering of rock outcrops, generally low fertility, short growing seasons, and cold temperatures are characteristic of this area. There are about 21 acres that have potential for severe surface erosion. For more soil information refer to *Willamette National Forest Soil Resource Inventory* (Legard and Meyer 1973).

Vegetation A mixed stand of lodgepole pine, mountain hemlock, Pacific silver fir and noble fir covers virtually the entire area.

Ecosystem There is one major potential vegetation zone and one vegetation community for this area according to classification systems by Bailey (1976) and Kuchler (1966). The vegetation zone is the Pacific Forest (M2410) zone. The vegetative community is fir/hemlock (*Abies-Tsuga*) forest (004).

Current Uses The area is identified in the 1977 Forest Land Management Plan as Dispersed Motorized Recreation/Timber allocation. Management activities to date focus on maintenance of the two trails which traverse the area. No motorized use is permitted on the trails and dense vegetation precludes Off-Road Vehicles (ORV) or other motorized users from using the area. The vast majority of use is hiking on the Patjens Lake Trail to Patjens Lake. Use is estimated to be less than 500 Recreation Visitor Days (RVDs) per year.

Appearance The area is fairly flat and dominated by a forested ridge in its southern half. The vegetation is fairly dense and continuous, with occasional small openings. Openings, in some cases, are meadows which dry up by mid to late summer. At the highest points on the ridge there are a couple of talus slopes and a few rock outcrops. The area is exceedingly similar to lands which border it to the west, south, and east.

Surroundings The area is bordered on the south by the Mt. Washington Wilderness. The Mt. Washington Wilderness is dominated by Mt. Washington and several hundred square miles of recent lava flows. The Wilderness has lightly concentrated use at a few lakes near its edges. To the east, north, and west, lies the Santiam Pass Winter Recreation Area, dominated by Big Lake and the Airstrip Burn. Intense year-round recreation activity occurs here, ranging from snowmobiling and nordic skiing in the winter, to ORV use, hiking, camping, and waterskiing at Big Lake in the summer. Intensive timber stand improvement activities have taken place in the burned area of the Airstrip Fire of 1967.

Attractions Patjens Lake Trail and Pocket Way are the main attractions.

Capability

Manageability and Boundaries The boundaries would be easily managed.

Natural Integrity Without the intervention of people, the area would probably have burned during the Airstrip Fire in 1967.

Natural Appearance Most visitors find the area apparently natural. Unnaturalness is evident only to the more knowledgeable visitors.

Opportunity for Solitude Rolling terrain and limited diversity of topography offers some screening potential while dense vegetation does screens people from one another, even within a quarter mile. There are still sufficient openings to permit travel and camping without undue concentration. The distance from the perimeter to the core of the contiguous Mt. Washington Wilderness is approximately 4 miles. Offsite intrusions are close by and permanent. Powerboats on Big Lake in the summer and snowmobiles and three wheelers in the winter can be heard from within the area.

Opportunity for Primitive Recreation The area is dominated by forested, rolling terrain, and contains no lakes or streams.

Special Features The area contains only common features; no cultural features or federally listed endangered or threatened species are known to be present.

Availability

Resource Potential

Wildlife Resource This Mt. Washington North roadless area is used by mule deer as summer range and by other animal species that are endemic to the area, such as pika, Clark's nutcracker, marten, etc. The management of the area for late successional stages would maintain the necessary cover required by big-game and other species.

Recreation Resource Capacity estimates indicate that this area could provide 1,828 RVDs of Semiprimitive recreation use. Potential trail locations and developed recreation sites have been identified.

Timber Resource The roadless area includes about 768 acres of land suitable for growing timber under managed conditions. Stands of mature lodgepole pine, true firs, and mountain hemlock occupy the area representing about 14 million board feet. If stands are converted to a managed condition, biological potential yield will be 60,000 cubic feet per year at culmination of mean annual increment. Site productivity ranges from Class IV to Class V. The remaining area is unsuitable.

Cultural Resource Given the presence of Big Lake along the northern edge of the area, it is likely that prehistoric sites are present.

Mineral and Energy Resource There is a geothermal lease covering the entire roadless area. Potential is low for development of geothermal resources.

Management Considerations

Fire Catastrophic fire frequency is 250-600 years. No recent known fire activity has occurred.

Need

Nearby Wilderness and Its Use The Mt. Washington Wilderness (56,202 acres) is adjacent to the southern boundary, and the Mt Jefferson Wilderness (105,299 acres) is 5 miles north. To the south 15 miles is the Three Sisters Wilderness (283,593 acres). Refer to Chapter III for the amount of use these Wildernesses receive.

Distance from Population Centers The area is approximately 85 miles by road to the east of Albany Oregon, 85 miles northeast of Eugene, and 40 miles northwest of Bend, Oregon.

Interest by Proponents The Mt. Washington North roadless area generated a low amount of interest with 78 % of the responses favoring inclusion of the roadless area into the inventory.

Environmental Consequences

As a consequence of implementing any of the proposed Alternatives there will be effects on the Mt. Washington North roadless area. In Alternatives NC and A, 4% of this area will be affected by development. Alternative L will develop 8% of the area and Alternatives K, J, W, and D will develop 2% of the area. As a result of this development, uses dependent on roadless conditions--such as semiprimitive recreation--will not be provided in portions of the area. Portions of this area contiguous to the Mt. Washington Wilderness would remain suitable for consideration as Wilderness additions in

the next cycle of Forest planning. All Alternatives maintain the option of future Wilderness consideration for this area. Figure C-11-2 illustrates how this area has been allocated in each Alternative.

Based on the amount and distribution of management areas assigned to the Mt. Washington North roadless area, an array of goods and services are provided. Emphasis on amenity values such as dispersed recreation opportunities, high visual quality, and old-growth habitat are provided in all Alternatives. The amounts of other goods and services to be provided from the area for each Alternative are illustrated in Figure C-11-3. Additional information regarding the environmental consequences of the activities associated with these goods and services is located in Chapter IV of this FEIS.

Table T314. Management Area Acreage of Alternatives (C-11-2)

Management Areas	Alternatives						
	NC (No Change)	K (WFC)	A (No Action)	J (DEIS-PA)	W (PA)	D (Wildlife)	L (ONRC)
1 Wilderness							
Management Area 1a	--	--	--	--	--	--	--
Management Area 1b	--	--	--	--	--	--	917
Management Area 1c	--	--	--	--	--	--	--
Management Area 1d	--	--	--	--	--	--	--
2 Oregon Cascades Recreation Area							
Management Area 2a	--	--	--	--	--	--	--
Management Area 2b	--	--	--	--	--	--	--
3 Experimental Forest							
Management Area 3	--	--	--	--	--	--	--
4 Research Natural Area							
Management Area 4	--	--	--	--	--	--	--
5 Special Interest Area							
Management Area 5a	--	--	--	--	--	--	--
Management Area 5b	--	--	--	--	--	--	--
6 Wild and Scenic River							
Management Area 6a	--	--	--	--	--	--	--
Management Area 6b	--	--	--	--	--	--	--
Management Area 6c	--	--	--	--	--	--	--
7 Old-Growth Grove							
Management Area 7	--	--	--	--	--	--	--
8 T & E Species							
Management Area 8	--	--	--	--	--	--	--
9 Special Habitat ¹							
Management Area 9a	--	--	--	--	--	--	--
Management Area 9b	--	--	--	--	--	--	--
Management Area 9c	--	--	--	--	--	--	--
Management Area 9d	--	--	--	--	--	--	--
10 Dispersed Recreation							
Management Area 10a	--	--	--	--	--	--	--
Management Area 10b	960	853	960	789	768	--	--
Management Area 10c	--	--	--	--	--	981	--
Management Area 10d	--	--	--	--	--	--	--
Management Area 10e	--	--	--	--	--	--	--
Management Area 10f	--	128	--	192	192	--	--

Management Areas	NC (No Change)	K (WFC)	A (No Action)	J (DEIS-PA)	W (PA)	D (Wildlife)	L (ONRC)
11 Scenic							
Management Area 11a	--	--	--	--	--	--	--
Management Area 11b	--	--	--	--	--	--	--
Management Area 11c	--	--	--	--	--	--	21
Management Area 11d	--	--	--	--	--	--	--
Management Area 11e	--	--	--	--	--	--	--
Management Area 11f	--	--	--	--	21	--	43
12 Developed Recreation							
Management Area 12a	--	--	--	--	--	--	--
Management Area 12b	21	21	21	21	21	21	21
13 Special and Ad- ministrative Use							
Management Area 13a	--	--	--	--	--	--	--
Management Area 13b	--	--	--	--	--	--	--
14 General Forest							
Management Area 14a	21	--	21	--	--	--	--
15 Riparian ²							
Management Area 15	*	*..	*..	*..	--	--	--

¹ Acres of network sites that overlap with other no harvest management areas are not included in MA9a, 9b, 9c acres.

² Only alternatives with acres assigned to no harvest prescriptions for riparian have acres allocated to MA15. In alternatives K, A, and J riparian acres follow Forest-wide standards and guidelines for riparian harvest rates. Riparian acres in NC are distributed throughout other management areas.

**Table C-11-3. Mt. Washington North Roadless Area
Quantifiable Resources Outputs, Environmental Effects, and Activities by Alternative**

		Alternatives						
Output, Effects, or Activity	Unit of Measure	NC	K	A	J	W	D	L
Recommended Wilderness Recreation Use 1st Decade Area Recommended for Wilderness	RVDs	--	--	--	--	--	--	--
	Acres	--	--	--	--	--	--	917
Nonwilderness Dispersed Recreation Use in the 1st Decade								
Semiprimitive Nonmotorized	RVDs	--	--	--	--	--	--	--
	Acres	--	--	--	--	--	--	--
Semiprimitive Motorized	RVDs	2,265	2,400	2,665	2,205	2,179	2,729	--
	Acres	960	853	960	789	768	981	--
Roaded Natural	RVDs	247	1,507	247	2,248	2,347	247	840
	Acres	21	149	21	213	235	21	85
Roaded Modified	RVDs	95	--	95	--	--	--	--
	Acres	21	--	21	--	--	--	--
Trails								
Existing Trails								
Full Protection Level	Miles	1.0	2.0	1.0	2.0	3.0	4.0	4.0
Moderate Protection Level	Miles	3.0	2.0	3.0	2.0	1.0	--	0.0
Low Protection Level	Miles	--	--	--	--	--	--	--
Potential Trails								
Full Protection Level	Miles	--	--	--	--	--	--	--
Moderate Protection Level	Miles	--	--	--	--	--	--	--
Low Protection Level	Miles	--	--	--	--	--	--	--
Visual Quality Objectives								
Preservation	Acres	--	--	--	--	--	--	917
Retention	Acres	--	128	--	192	213	981	43
Partial Retention	Acres	981	875	981	81	789	21	43
Modification	Acres	--	--	--	--	--	--	--
Maximum Modification	Acres	21	--	21	--	--	--	--
1st Decade								
Road Construction	Miles	--	0.5	1.0	1.0	0.7	--	0.0
Area Harvested	Acres	--	23	41	105	65	--	--
Programmed Timber Harvest	MBF	--	198	313	875	564	--	31
Area Remaining Undeveloped	%	--	92	86	67	80	--	--
Lands by Timber Yield Levels								
Full Yield (95-100%)	Acres	21	--	21	--	299	--	21
75-94% of Full Yield	Acres	747	683	747	619	555	--	--
50-74% of Full Yield	Acres	--	--	--	--	--	--	--
30-49% of Full Yield	Acres	--	--	--	--	--	--	21

Mt. Washington West - 6,676 Acres

Description

History The Mt. Washington West roadless area was considered for Wilderness by the United States Congress. They released the area for multiple-use management in the Oregon Wilderness Act of 1984. Since the release of these lands in 1984, approximately 3,050 acres have been affected by development activities.

Location and Access Tps.13, 14, and 15S., R.7E. The area is primarily a narrow strip which borders the western and northwestern boundary of the Mt. Washington Wilderness. The northern most portion covers the neck of land between Forest Road 2676 (Eno Road) and Potato Hill, and is bordered on the north by U.S. Highway 20. It is approximately 75 miles east and slightly north of Eugene, Oregon. Access is by Clear Lake Highway or U.S. Highway 20 to Forest Roads 2664, 2676, 2657, and 2653.

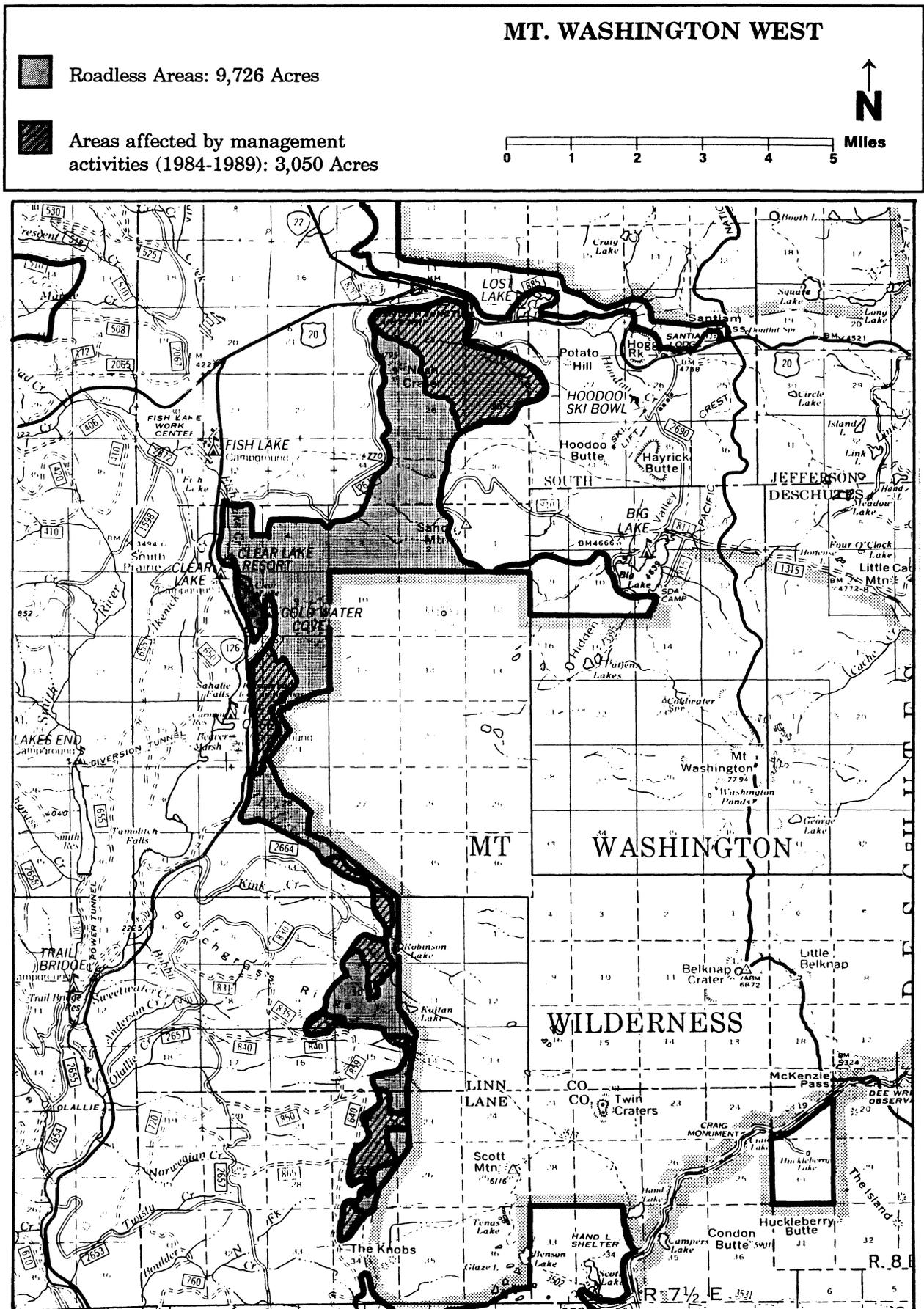
Geography The area is situated within the High Cascades Physiographic Province and is characterized by gentle terrain and recent lava flows common to the lands immediately west of the High Cascade Crest.

Topography The northern portion is predominantly rolling terrain and contains Nash Crater, the western flanks of Sand Mountain, and other small cinder cones. The central portion is also relatively gentle and rolling with the marked exception of a narrow tongue of the Belknap Lava Flow passing through it. The southern portion is rolling and gentle. Elevations range from 3,000 feet near Clear Lake to 5,200 feet at Sand Mountain, with the bulk ranging from 4,000 feet to 4,800 feet.

Soil Soils in the northern portion are markedly different from those in the southern portion. The soils in the northern portion are predominantly sands and cinders; approximately 30% of the area is lava. The southern portion is approximately 60% landtype 66, 15% landtype 67, and the remaining 25% is a mixture of landtypes 6, 64, and 610. There are about 619 acres that have potential for severe surface erosion. For more soil information refer to *Willamette National Forest Soil Resource Inventory* (Legard and Meyer 1973).

Vegetation The vegetative cover is primarily a mixed stand of lodgepole pine, mountain hemlock, Pacific silver fir, and noble fir. Approximately 20% of the vegetated land is covered by Douglas-fir.

Figure C-12-1



Ecosystem There is one major potential vegetation zone and two vegetation communities for this area according to classification systems by Bailey (1976) and Kuchler (1966). The vegetation zone is the Pacific Forest (M2410) zone. The vegetative communities are fir/hemlock (*Abies-Tsuga*) forest (004) and Pacific silver fir/Douglas-fir (*Abies-Pseudotsuga*) forest (003).

Current Uses The northern portion is identified in the 1977 Forest Land Management Plan (FLMP 1977) as part of the Santiam Pass Motorized Recreation/Timber allocation. The Recreation Opportunity Spectrum (ROS) class is Semiprimitive Motorized. This part of the area has several different uses occurring, including active harvesting and road building, Off-Road Vehicle (ORV) use along the Santiam Wagon Road, nordic skiing and snowmobile use on the Spud Timber Sale roads during the winter months, and hiking and backpacking on Deer Butte and Hand Lake trails. The southern portion is classified in the General Forest allocation (FLMP 1977) and has two active timber sales, Muskego and Mutton, occurring within its boundaries. Hiking and some backpacking occurs along portions of the Deer Butte Trail and a short piece of the Benson Trail. Along a strip on the western-most edge situated roughly east and south of Clear Lake, one sliver of land is classified Scenic I and another is classified Scenic II. This portion borders Clear Lake Highway, Coldwater Cove Campground, and Clear Lake; virtually no activities take place here. Since this area was inventoried in 1984 management activities are estimated to have affected 2,560 acres of the area.

Appearance The area for the most part is gentle landforms with some scattered small cinder cones which rise 500 to 700 feet above the surrounding area. The northern portion is typically a mixed stand of western white pine, western hemlock, and Douglas-fir with very few openings. There are some scattered small rock bluffs and several open cinder slopes on the sides of some of the cinder cones. The central portion has a mix of Douglas-fir and western hemlock stands which are broken up by several lava flows. The lava flows are dotted with scattered trees and are rough and jagged. The southern portion is characterized by continuous stands of mature trees, mostly Douglas-fir. Those portions not affected by trails, harvesting, and road building are in pristine condition.

Surroundings The northern half is part of the Santiam Pass Winter Recreation Area. Located immediately east of this portion lies Hoodoo Ski Bowl, with several winter parking areas and 40 miles of winter ski and snowmobile trails. These facilities are the backbone of the winter sports program for the Santiam Pass area. The Santiam Pass also experiences high levels of recreation use in the other seasons, especially in the summer months from ORV users and woodcutters. To the west, along Eno Road, some harvest activities took place in the early 1970s. Further south and to the west lies McKenzie River National Recreation Trail, Clear Lake, Clear Lake Resort, and Coldwater Cove Campground. This area is intensively managed for developed recreation opportunities. The southern portion is bordered to the west by a large block of relatively flat ground which is intensively managed for timber production. East of most of the area is the Mt. Washington Wilderness. The Wilderness is lightly used along this border; some small amounts of hiking, fishing, and backpacking take place.

Attractions Nash Crater, Belknap Lava Flow, and Hand Lake Trail are of particular importance.

Capability

Manageability and Boundaries Several recent timber harvest and road building activities will require the adjustment of this area's original boundary. To make the area more manageable, it is recommended the northern boundary be changed along the south side of the Santiam Wagon Road, and the central and southern portions' be adjusted to exclude harvest activities on the Muskego and Mutton Timber Sales.

Natural Integrity Timber harvest units and roads are present, which affect only a small portion of the total area.

Natural Appearance Aside from timber harvest areas, the rest appears natural to all but the most knowledgeable.

Opportunity for Solitude Rolling type terrain and limited diversity of topography offers limited screening potential. Dense vegetation would provide good screening but there are enough openings to prevent undue concentration of camping spots. Most of the area is in close proximity to roads and vehicle noise along Clear Lake Highway and U.S. Highway 20 can be heard.

Opportunity for Primitive Recreation The Mt. Washington West roadless area offers limited diversity; with the exception of lava flows, the Forest, for the most part, is dense and homogeneous. There is no water, no recreational facilities, and few trails. Occasional views can be afforded to the cross-country traveller from some of the cinder cones and rock bluffs.

Challenging Experiences There are boulder-scrambling possibilities in the lava flows.

Special Features No federally listed endangered or threatened species known to be present. The Santiam Wagon Road remnants still remain as a cultural resource interest.

Availability

Resource Potential

Wildlife Resource This roadless area actually consists of two different habitat types that influence the wildlife use and management potential. The portion north of Beaver Marsh consists of bare lava flows, lava forests, or volcanic influenced forest systems. This area receives moderate use from big-game (30 elk) and could benefit from management for early successional stages. The southern half consists of dense west side forest systems and receives more extensive use by big-game, spotted owls and mature timber dependent species. Big-game forage in the adjacent roaded clearcuts and use the roadless area for calving and rearing young. Managing this area for later successional stages would provide thermal cover and habitat for big-game and old-growth dependent species.

Recreation Resource Capacity estimates indicate that this area could provide 11,191 Recreation Visitor Days (RVDs) of Semiprimitive recreation use. Potential trail locations have been identified. A potential 25 acre walk-in type campground has been identified near Robinson Lake along the western edge of the Mt. Washington Wilderness. This site could accommodate 100 Persons-At-One-Time (PAOT) and provide 3,200 RVDs annually.

Mineral and Energy Resource The northern portion has eight geothermal leases from eight different companies. Some exploration work has been done.

Timber Resource The roadless area includes about 2,090 acres of land suitable for growing timber under managed conditions. Stands of mature Douglas-fir, true firs, and mountain hemlock occupy the area representing about 74 million board feet. If stands are converted to a managed condition, biological potential yield will be 268,000 cubic feet per year at culmination of mean annual increment. Site productivity ranges from Class IV to Class V. The remaining area is unsuitable.

Cultural Resource Most of the area south of Clear Lake is a high probability area for the presence of prehistoric sites. The area along the edge of the lava flows and along Bunchgrass Ridge may have

been an aboriginal travel route from Fingerboard Prairie area to the south. The northern part of the Mt. Washington West roadless area around Sand Mountain and Nash Crater has not been surveyed. Some sites may exist. The area in the vicinity of Clear Lake and north to the Santiam Pass area has high potential for the presence of historic sites associated with the Hogg railroad, Civilian Conservation Corps, and the Santiam Wagon Road which passes through the area.

Management Considerations

Fire Catastrophic fire frequency for this area is 250-600 years. No recent known fire activity has occurred.

Need

Nearby Wilderness and Its Use The Mt. Washington Wilderness (56,202 acres) lies adjacent to the roadless area, and the Mt Jefferson Wilderness (105,299 acres) is 1 mile north. To the south 5 miles is the Three Sisters Wilderness (283,593 acres). Refer to Chapter III for the amount of use these Wildernesses receive.

Distance from Population Centers The area is approximately 80 miles by highway to the east of Albany, Oregon, 70 miles northeast of Eugene, and 40 miles northwest of Bend, Oregon.

Interest by Proponents The Mt. Washington West roadless area generated a low amount of interest with 44% of the responses favoring inclusion of the roadless area into the inventory.

Environmental Consequences

As a consequence of implementing any of the proposed Alternatives there will be effects on the Mt. Washington West roadless area. In Alternatives NC, A, K, J, W, and L, 16 to 51% of this area will be affected by road construction and timber harvest. As a result of this development, uses dependent on roadless conditions, such as semiprimitive recreation, will not be provided in portions of the area. Portions of this area contiguous to the Mt. Washington Wilderness would remain suitable for consideration as Wilderness additions in the next cycle of Forest planning. Alternatives D and L maintain the option of future Wilderness consideration for this area. Figure C-12-2 illustrates how this area has been allocated in each Alternative.

Based on the amount and distribution of management areas assigned to the Mt. Washington West roadless area, an array of goods and services are provided. Emphasis on amenity values such as dispersed recreation opportunities, high visual quality, and old-growth habitat are provided in all Alternatives. The amounts of other goods and services to be provided from the area for each Alternative are illustrated in Figure C-12-3. Additional information regarding the environmental consequences of the activities associated with these goods and services is located in Chapter IV of this FEIS.

Table T314. Management Area Acreage of Alternatives (C-12-2)

Management Areas	Alternatives						
	NC (No Change)	K (WFC)	A (No Action)	J (DEIS-PA)	W (PA)	D (Wildlife)	L (ONRC)
1 Wilderness							
Management Area 1a	--	--	--	--	--	--	--
Management Area 1b	--	--	--	--	--	--	2,026
Management Area 1c	--	--	--	--	--	--	--
Management Area 1d	--	--	--	--	--	--	--
2 Oregon Cascades Recreation Area							
Management Area 2a	--	--	--	--	--	--	--
Management Area 2b	--	--	--	--	--	--	--
3 Experimental Forest							
Management Area 3	--	--	--	--	--	--	--
4 Research Natural Area							
Management Area 4	--	--	--	--	--	--	--
5 Special Interest Area							
Management Area 5a	--	--	--	107	363	299	--
Management Area 5b	--	--	--	--	--	--	--
6 Wild and Scenic River							
Management Area 6a	--	--	--	--	--	--	--
Management Area 6b	--	--	--	--	--	--	--
Management Area 6c	--	--	--	--	--	--	--
7 Old-Growth Grove							
Management Area 7	43	43	43	43	43		1,066
8 T & E Species							
Management Area 8	--	--	--	--	--	--	--
9 Special Habitat ¹							
Management Area 9a	--	21	21	21	--	--	--
Management Area 9b	--	107	107	107	107	--	107
Management Area 9c	--	--	--	--	--	--	--
Management Area 9d	--	--	--	277	405	--	--
10 Dispersed Recreation							
Management Area 10a	--	--	--	--	--	--	--
Management Area 10b	4,501	4,671	4,394	4,330	4,650	--	--
Management Area 10c	--	--	--	--	--	--	--
Management Area 10d	--	--	--	--	--	--	--
Management Area 10e	--	--	--	--	--	6,100	21
Management Area 10f	--	--	--	213	43	--	--

Management Areas	NC (No Change)	K (WFC)	A (No Action)	J (DEIS-PA)	W (PA)	D (Wildlife)	L (ONRC)
11 Scenic							
Management Area 11a	--	--	--	--	--	--	--
Management Area 11b	--	--	--	--	--	--	--
Management Area 11c	--	43	--	171	43	--	1,941
Management Area 11d	192	21	192	--	--	--	--
Management Area 11e	--	--	--	--	--	43	85
Management Area 11f	469	256	469	256	107	149	1,386
12 Developed Recreation							
Management Area 12a	21	21	21	21	21	21	21
Management Area 12b	--	--	--	--	--	--	--
13 Special and Ad- ministrative Use							
Management Area 13a	--	--	--	--	--	--	--
Management Area 13b	--	--	--	--	--	--	--
14 General Forest							
Management Area 14a	1,450	1,514	1,429	1,130	875	--	--
15 Riparian ²							
Management Area 15	*	21-	*..	*..	21	21	21

¹ Acres of network sites that overlap with other no harvest management areas are not included in MA9a, 9b, 9c acres.

² Only alternatives with acres assigned to no harvest prescriptions for riparian have acres allocated to MA15. In alternatives K, A, and J riparian acres follow Forest-wide standards and guidelines for riparian harvest rates. Riparian acres in NC are distributed throughout other management areas.

**Table C-12-3. Mt. Washington West Roadless Area
Quantifiable Resources Outputs, Environmental Effects, and Activities by Alternative**

		Alternatives						
Output, Effects, or Activity	Unit of Measure	NC	K	A	J	W	D	L
Recommended Wilderness Recreation Use 1st Decade Area Recommended for Wilderness	RVDs	--	--	--	--	--	--	--
	Acres	--	--	--	--	--	--	2,026
Nonwilderness Dispersed Recreation Use in the 1st Decade								
Semiprimitive Nonmotorized	RVDs	--	--	--	--	--	5,335	18
	Acres	--	--	--	--	--	6,100	21
Semiprimitive Motorized	RVDs	9,359	9,722	9,132	8,976	9,520	--	--
	Acres	4,501	4,671	4,394	4,330	4,650	--	--
Roaded Natural	RVDs	6,173	4,272	7,284	10,815	10,593	5,260	38,884
	Acres	725	491	853	1,216	1,152	576	4,629
Roaded Modified	RVDs	5,943	6,169	5,848	4,652	3,797	--	--
	Acres	1,450	1,514	1,429	1,130	875	--	--
Trails								
Existing Trails								
Full Protection Level	Miles	4.0	4.0	4.0	6.0	8.0	8.0	8.0
Moderate Protection Level	Miles	1.0	2.0	0.0	--	0.0	--	--
Low Protection Level	Miles	3.0	3.0	4.0	3.0	--	--	0.0
Potential Trails								
Full Protection Level	Miles	7.0	7.0	7.0	7.0	--	8.0	7.0
Moderate Protection Level	Miles	1.0	1.0	1.0	1.0	8.0	--	--
Low Protection Level	Miles	--	--	--	--	0.0	--	1.0
Visual Quality Objectives								
Preservation	Acres	43	128	171	277	512	6,442	3,221
Retention	Acres	469	256	469	747	555	192	1,472
Partial Retention	Acres	4,714	4,778	4,607	4,522	4,735	43	1,984
Modification	Acres	--	--	--	--	--	--	--
Maximum Modification	Acres	1,450	1,514	1,429	1,130	875	--	--
1st Decade								
Road Construction	Miles	--	3.0	2.0	3.0	2.6	0.0	1.2
Area Harvested	Acres	--	385	287	385	252	--	82
Programmed Timber								
Harvest	MBF	--	3,061	2,016	2,877	2,215	48	647
Area Remaining								
Undeveloped	%	--	82	87	82	88	--	96
Lands by Timber Yield Levels								
Full Yield (95-100%)	Acres	1,088	1,109	1,067	896	640	--	469
75-94% of Full Yield	Acres	768	811	768	704	768	21	--
50-74% of Full Yield	Acres	235	149	235	128	43	85	85
30-49% of Full Yield	Acres	--	--	--	--	--	--	277

Mt. Washington South - 4,224 Acres

Description

History The Mt. Washington South roadless area was considered for Wilderness by the United States Congress. They released the area for multiple-use management in the Oregon Wilderness Act of 1984. Since the release of these lands in 1984, approximately 213 acres have been affected by development activities.

Location and Access T.15S., R.7 E.; T.16S., Rs.7 and 8. It is approximately 75 miles east of Eugene, Oregon situated along the southwestern boundary of the Mt. Washington Wilderness near McKenzie Pass. It can be accessed either by State Highway 242, or Scott Creek Road (Forest Road 2649).

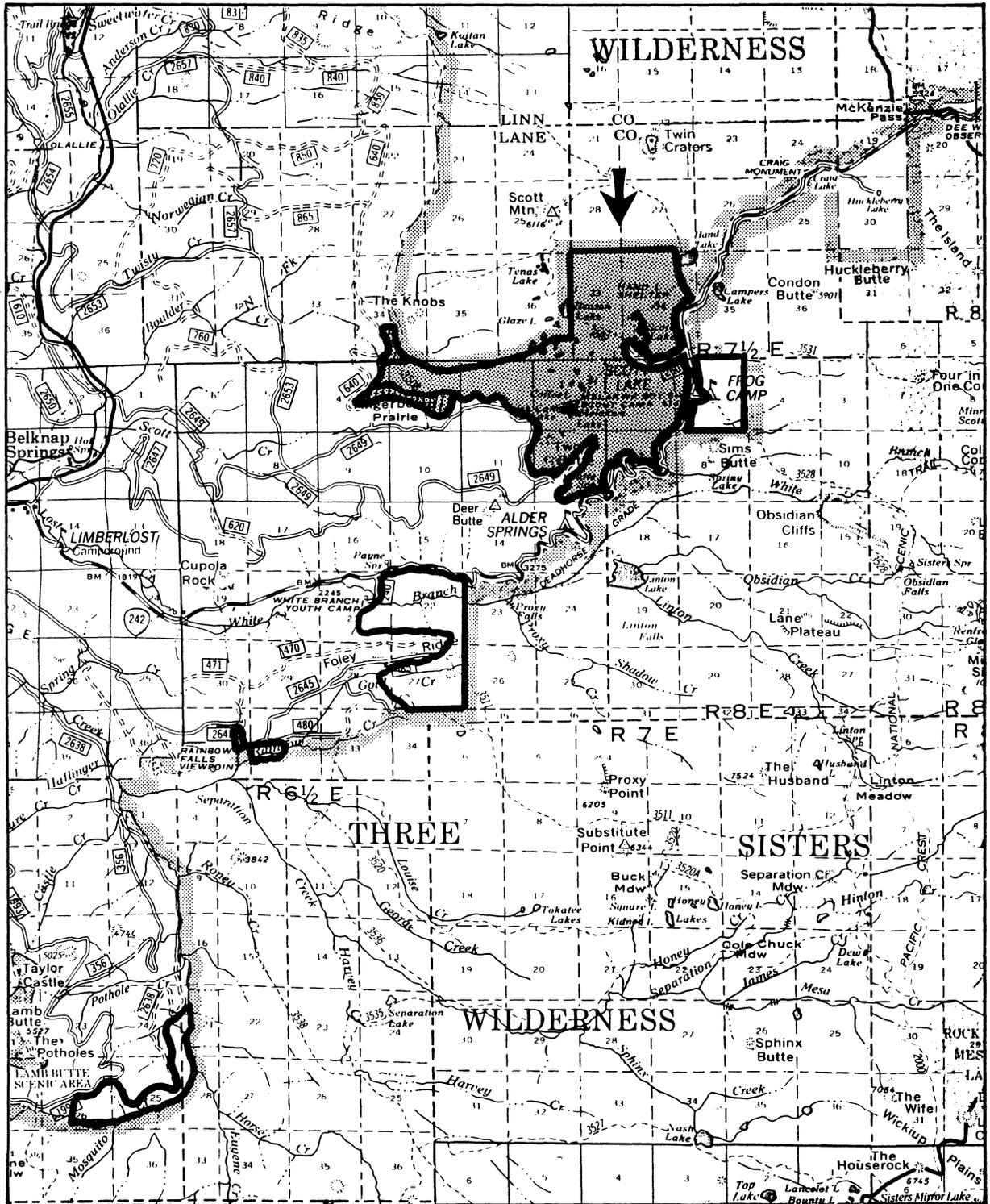
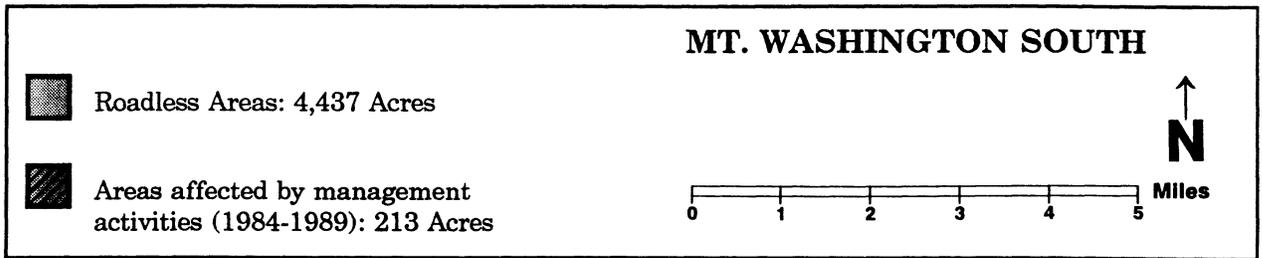
Geography and Topography The area is situated in the High Cascades Geographic Province and is characterized to the east and north by a series of lava bluffs and ridges and to the south and west by a lava plain, deeply dissected to the south. The western and northern portions are typified by fairly rolling, gentle terrain. The extreme southern edge is a steep, broad side-hill. The central section is an irregular series of small ridges and basins. Elevations range from 3,800 feet to 5,500 feet.

Soil Approximately 70% is made up of Landtype 73 and 736. About 15% is Landtype 710, 10% is Landtype 610, and 5% Landtype 3, 62, and 74. Generally it is a deep sandy loam over loam. There are about 768 acres that have potential for severe surface erosion. For more soil information refer to *Willamette National Forest Soil Resource Inventory* (Legard and Meyer 1973).

Vegetation Douglas-fir occupies approximately 20% of the roadless area. This is primarily on the west and south portions. About 70% is a lodgepole pine/mountain hemlock/true fir mix. The remainder is rock and talus slopes and shrub cover.

Ecosystem There is one major potential vegetation zone and two vegetation communities for this area according to classification systems by Bailey (1976) and Kuchler (1966). The vegetation zone is the Pacific Forest (M2410) zone. The vegetative communities are fir/hemlock (*Abies-Tsuga*) forest (004) and Pacific silver fir/Douglas-fir (*Abies-Pseudotsuga*) forest (003).

Figure C-13-1



Current Uses The entire area is classified in the 1977 Forest Land Management Plan as Dispersed Nonmotorized Recreation/Timber with the exception of the western edge which is classified as General Forest. The Dispersed Nonmotorized Recreation/Timber portion is primarily being managed for primitive recreation under a Recreation Opportunity Spectrum (ROS) class of Semiprimitive Motorized. The western portion has experienced active harvest in the Wool Timber Sale area. The Boy Scouts of America run an organizational camp, Camp Melakwa, near the center of the area. At the eastern edge of the area, immediately west of Scott Lake, a developed campground is heavily used each year from July through September. Benson Trail is also popular with hikers and backpackers as an access route to the Mt. Washington Wilderness. Use is in excess of 10,000 Recreation Visitor Days (RVDs) per year, virtually all of it occurring at Scott Lake Campground and Camp Melakwa. Since this area was inventoried in 1984 management activities are estimated to have affected 320 acres of the area.

Appearance The western edge is mostly mature Douglas-fir forest. The southern-most portion is the northern valley wall for White Branch Creek and is mostly brush covered with some rocky areas. The central portion is a series of small lakes separated by small rocky ridges. Tree cover is moderate and mostly western hemlock, Douglas-fir, and lodgepole pine with occasional small openings.

Surroundings The west and southwest lands are intensively managed for timber production. To the north is the Mt. Washington Wilderness which is managed to provide opportunities for primitive recreation and solitude. The south, southeast, and east are bordered by State Highway 242. This is a seasonal route used primarily by recreationists and sightseers. The highway is a corridor between Mt. Washington Wilderness and Three Sisters Wilderness.

Attractions Melakwa Lake, Coffee Lake, Two Buttes, and Benson Trail are the main attractions.

Capability

Manageability and Boundaries The boundary is effected by roads and timber harvest units, Camp Melakwa, and Scott Lake Campground.

Natural Integrity Harvested units, recreational facilities, trails, and unimproved roads occupy a small part of the total area.

Natural Appearance With the exception of the organization camp, campground, and harvest activities, the area would appear natural to most visitors.

Opportunity for Solitude Topographic screening is good throughout about half the area and vegetative screening is good over the other half. Noise and use of State Highway 242, Scott Lake Road, the Boy Scout camp, and the developed campground could affect a feeling of solitude for some visitors.

Opportunity for Primitive Recreation There are moderate to good opportunities, with several small lakes in the central portion. Overall diversity is fair to good and there are few trails. The southern portion is nearly impassable because of thick brush.

Special Features The area contains only common features. No federally listed endangered or threatened species are known to be present. Remnants of the Old Scott Trail remain as a cultural resource interest.

Availability

Resource Potential

Wildlife Resource This roadless area contains scattered openings and meadows which provide forage for 35 elk, black-tailed deer and mule deer in the summer months. Many of the lakes contain stocked trout. Harvest areas of proper design and size would probably increase available forage for big-game. Restricting traffic would reduce harassment of elk.

Recreation Resource Capacity estimates indicate that this area could provide 7,655 RVDs of Semiprimitive recreation use. Potential trail locations and developed recreation sites have been identified.

Mineral and Energy Resource This roadless area is within the study boundaries of the Belknap-Foley Geothermal Area. Most of the area is classified in the "substantial development constraints" category. There is little potential for mineral development.

Timber Resource The roadless area includes about 3,093 acres of land suitable for growing timber under managed conditions. Stands of mature Douglas-fir, true firs, and mountain hemlock occupy the area representing about 600 million board feet. If stands are converted to a managed condition, biological potential yield will be 282,000 cubic feet per year at culmination of mean annual increment. Site productivity ranges from Class IV to Class V. The remaining area is unsuitable.

Cultural Resource There is a high probability of finding sites within the entire roadless area. There are prehistoric travel routes and a historic route that make the probability high. One of these routes comes from the Obsidian Cliffs which was a major obsidian resource for Native Americans. Other sites may be associated with hunting and camps. Other high probability areas are around lakes and ponds.

Management Consideration

Fire Catastrophic fire frequency is 250-600 years. There has been no recent known fire activity.

Insects and Disease During the late 1960s and early 1970s extensive removal of white pine took place as a result of blister rust infestation. There have been no further known insect or disease related problems.

Need

Nearby Wilderness and Its Use The Mt. Washington Wilderness (56,202 acres) is adjacent to the Mt. Washington South roadless area on the north, and adjacent to the south is the Three Sisters Wilderness (283,593 acres). Refer to Chapter III for the amount of use these Wildernesses receive.

Distance from Population Centers The area is approximately 70 miles by highway east of Eugene, Oregon, and 40 miles northwest of Bend, Oregon.

Interest by Proponents The Mt. Washington South roadless area generated a low amount of interest with 38% of the responses favoring inclusion of the roadless area into the inventory.

Environmental Consequences

As a consequence of implementing any of the proposed Alternatives there will be effects on the Mt. Washington South roadless area. In Alternatives NC, A, and K, 19 to 25% of this area will be affected

by road construction and timber harvest. Alternatives D and L will develop 3% of the area. As a result of this development, uses dependent on roadless conditions--such as semiprimitive recreation--will not be provided in portions of the area. In Alternative L, portions of this area contiguous to the Mt. Washington Wilderness would remain suitable for consideration as Wilderness additions in the next cycle of Forest planning. All Alternatives maintain the option of future Wilderness consideration for most of this area. Figure C-13-2 illustrates how this area has been allocated in each Alternative.

Based on the amount and distribution of management areas assigned to the Mt. Washington South roadless area, an array of goods and services are provided. Emphasis on amenity values such as dispersed recreation opportunities, high visual quality, and old-growth habitat are provided in all Alternatives. The amounts of other goods and services to be provided from the area for each Alternative are illustrated in Figure C-13-3. Additional information regarding the environmental consequences of the activities associated with these goods and services is located in Chapter IV of this FEIS.

Table T314. Management Area Acreage of Alternatives (C-13-2)

Management Areas	Alternatives						
	NC (No Change)	K (WFC)	A (No Action)	J (DEIS-PA)	W (PA)	D (Wildlife)	L (ONRC)
1 Wilderness							
Management Area 1a	--	--	--	--	--	--	--
Management Area 1b	--	--	--	--	--	--	320
Management Area 1c	--	--	--	--	--	--	--
Management Area 1d	--	--	--	--	--	--	--
2 Oregon Cascades Recreation Area							
Management Area 2a	--	--	--	--	--	--	--
Management Area 2b	--	--	--	--	--	--	--
3 Experimental Forest							
Management Area 3	--	--	--	--	--	--	--
4 Research Natural Area							
Management Area 4	--	--	--	--	--	--	--
5 Special Interest Area							
Management Area 5a	--	--	--	--	--	--	--
Management Area 5b	--	--	--	--	--	--	--
6 Wild and Scenic River							
Management Area 6a	--	--	--	--	--	--	--
Management Area 6b	--	--	--	--	--	--	--
Management Area 6c	--	--	--	--	--	--	--
7 Old-Growth Grove							
Management Area 7	--	--	--	--	--	--	3,797
8 T & E Species							
Management Area 8	--	--	--	--	--	--	--
9 Special Habitat ¹							
Management Area 9a	--	--	--	--	--	--	--
Management Area 9b	--	--	--	--	--	--	--
Management Area 9c	--	--	--	--	--	--	--
Management Area 9d	--	--	--	--	--	--	--
10 Dispersed Recreation							
Management Area 10a	--	--	--	--	--	--	--
Management Area 10b	--	3,008	--	--	--	--	--
Management Area 10c	--	--	--	832	960	811	--
Management Area 10d	3,413	--	3,413	--	--	--	--
Management Area 10e	--	--	--	2,837	2,730	3,306	--
Management Area 10f	--	149	--	--	--	--	--

Management Areas	NC (No Change)	K (WFC)	A (No Action)	J (DEIS-PA)	W (PA)	D (Wildlife)	L (ONRC)
11 Scenic							
Management Area 11a	--	--	--	--	--	--	--
Management Area 11b	--	--	--	--	--	--	--
Management Area 11c	--	--	--	--	--	--	--
Management Area 11d	--	--	--	--	--	--	--
Management Area 11e	--	--	--	--	--	--	--
Management Area 11f	21	448	21	--	--	--	--
12 Developed Recreation							
Management Area 12a	21	21	21	21	21	21	85
Management Area 12b	64	64	64	64	64	64	--
13 Special and Ad- ministrative Use							
Management Area 13a	21	21	21	21	21	21	21
Management Area 13b	--	--	--	--	--	--	--
14 General Forest							
Management Area 14a	683	512	683	448	427	--	--
15 Riparian ²							
Management Area 15	*	*--	*--	*--	--	--	--

¹ Acres of network sites that overlap with other no harvest management areas are not included in MA9a, 9b, 9c acres.

² Only alternatives with acres assigned to no harvest prescriptions for riparian have acres allocated to MA15. In alternatives K, A, and J riparian acres follow Forest-wide standards and guidelines for riparian harvest rates. Riparian acres in NC are distributed throughout other management areas.

**Table C-13-3. Mt. Washington South Roadless Area
Quantifiable Resources Outputs, Environmental Effects, and Activities by Alternative**

		Alternatives						
Output, Effects, or Activity	Unit of Measure	NC	K	A	J	W	D	L
Recommended Wilderness Recreation Use 1st Decade Area Recommended for Wilderness	RVDs	--	--	--	--	--	--	--
	Acres	--	--	--	--	--	--	320
Nonwilderness Dispersed Recreation Use in the 1st Decade								
Semiprimitive Nonmotorized	RVDs	3,548	--	3,548	3,041	2,850	3,580	--
	Acres	3,413	--	3,413	2,837	2,730	3,306	--
Semiprimitive Motorized	RVDs	--	8,138	--	1,945	2,504	1,880	--
	Acres	--	3,008	--	832	960	811	--
Roaded Natural	RVDs	1,012	6,199	1,012	765	765	765	39,268
	Acres	107	683	107	85	85	85	3,882
Roaded Modified	RVDs	2,962	2,316	2,962	2,050	1,955	95	95
	Acres	704	533	704	469	448	21	21
Trails								
Existing Trails								
Full Protection Level	Miles	1.0	2.0	1.0	3.0	4.0	4.0	4.0
Moderate Protection Level	Miles	2.0	1.0	2.0	--	--	--	--
Low Protection Level	Miles	1.0	1.0	1.0	1.0	--	--	--
Potential Trails								
Full Protection Level	Miles	1.0	1.0	1.0	5.0	5.0	5.0	5.0
Moderate Protection Level	Miles	4.0	4.0	4.0	--	--	--	--
Low Protection Level	Miles	1.0	--	1.0	--	--	--	--
Visual Quality Objectives								
Preservation	Acres	--	--	--	2,837	2,730	3,306	4,117
Retention	Acres	3,434	597	3,434	832	960	811	--
Partial Retention	Acres	85	3,093	85	85	85	85	85
Modification	Acres	21	21	21	21	21	21	21
Maximum Modification	Acres	683	512	683	448	427	--	--
1st Decade								
Road Construction	Miles	--	2.0	3.0	1.0	0.8	--	--
Area Harvested	Acres	--	295	278	122	79	--	--
Programmed Timber Harvest	MBF	--	2,385	2,010	811	653	--	--
Area Remaining Undeveloped	%	--	78	79	91	94	--	--
Lands by Timber Yield Levels								
Full Yield (95-100%)	Acres	533	469	533	427	299	--	--
75-94% of Full Yield	Acres	--	2,133	--	--	--	--	--
50-74% of Full Yield	Acres	2,538	320	2,538	--	--	--	--
30-49% of Full Yield	Acres	--	--	--	--	--	--	--

Huckleberry - 853 Acres

Description

History The Huckleberry roadless area was considered for Wilderness by the United States Congress. They released the area for multiple-use management in the Oregon Wilderness Act of 1984.

Location and Access T.15S., R.8E. The area is approximately 75 miles due east and slightly north of Eugene, Oregon. It is bordered on three sides by the northern boundary of the Three Sisters Wilderness 2 miles west of McKenzie Pass. It can be accessed by State Highway 242, which parallels the area's northern boundary.

Geography and Topography The area is situated in the High Cascades Geographic Province in the midst of the several hundred square miles of recent lava activity in the McKenzie Pass area. The western half is typified by fairly rolling, gentle terrain. The eastern half is the Yapoah Lava Flow. Elevations range from 5,200 to 5,600 feet.

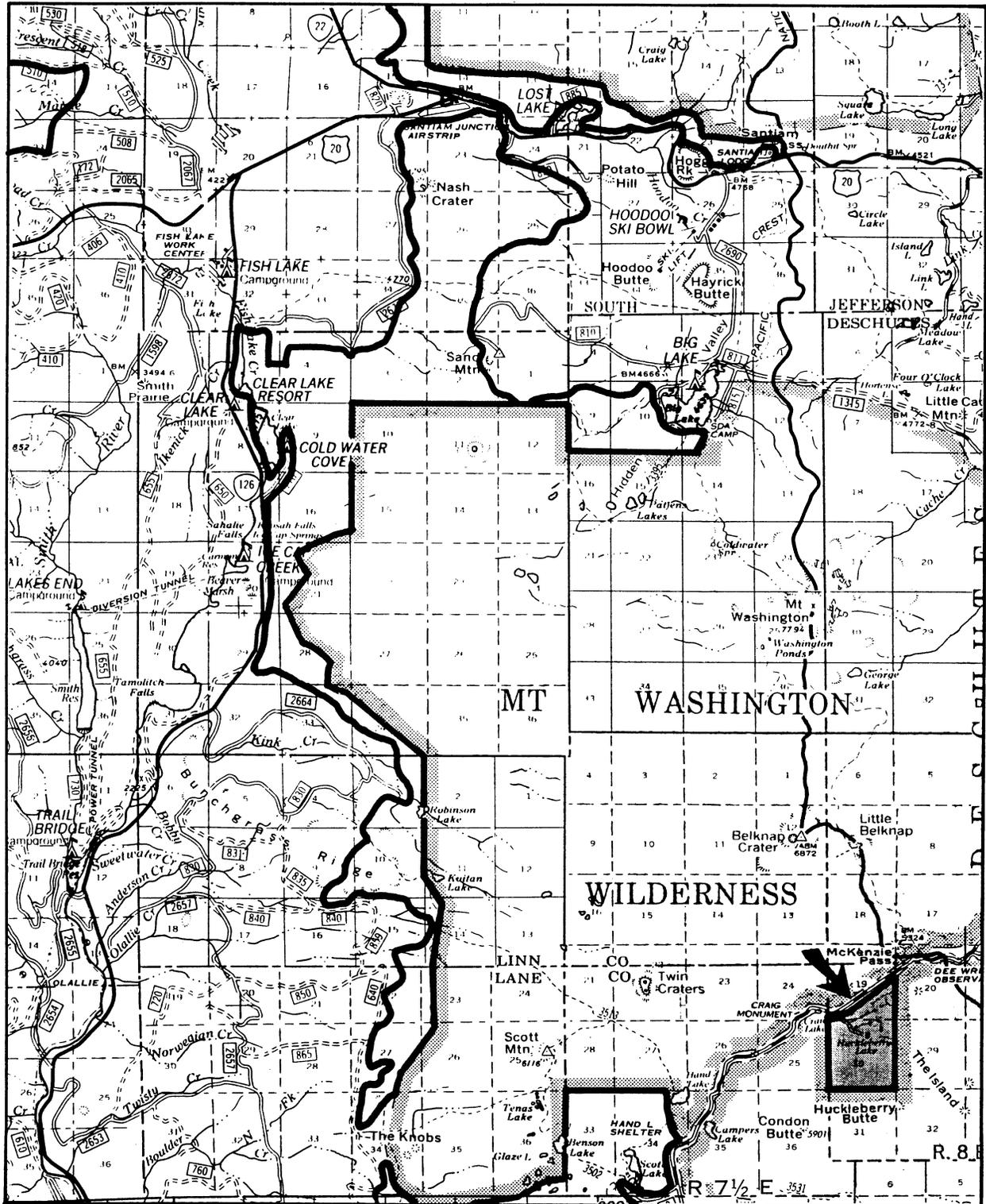
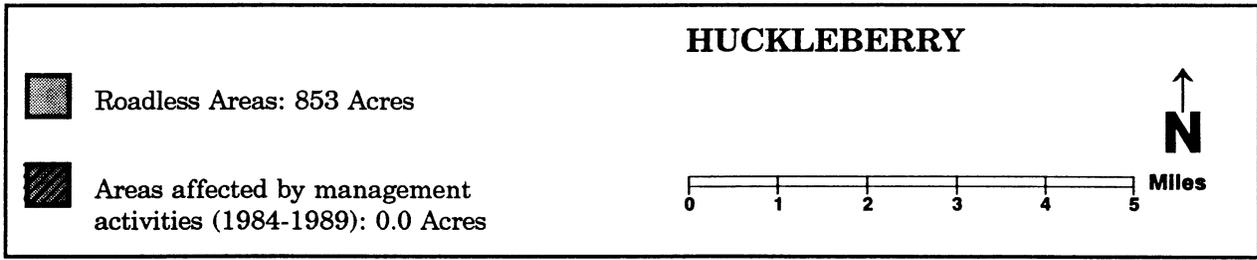
Soil Approximately 50% of the area is made up of Landtype 73 which is deep sandy loams over loams. The other 50% is lava flow. For more soil information refer to *Willamette National Forest Soil Resource Inventory* (Legard and Meyer 1973).

Vegetation Approximately 50% of the area, primarily to the west and south, is a lodgepole pine/mountain hemlock/true fir mix. The remainder is lava flow and is essentially barren with a few scrubby firs scattered through it.

Ecosystem There is one major potential vegetation zone and one vegetation community for this area according to classification systems by Bailey (1976) and Kuchler (1966). The vegetation zone is the Pacific Forest (M2410) zone. The vegetative community is fir/hemlock (*Abies-Tsuga*) forest (004).

Current Uses The entire area is classified in the 1977 Forest Land Management Plan as Dispersed Nonmotorized Recreation/Timber. The area is primarily being managed for primitive recreation. The Recreation Opportunity Spectrum (ROS) class is Semiprimitive Nonmotorized. Extending from the north central boundary southward to near its center is an old closed road bed. Hikers use this to access Huckleberry Lake. At Huckleberry Lake there are remains of a developed campground including toilets and tables which are no longer maintained. Use is approximately 500 Recreation Visitor Days (RVDs) per year.

Figure C-14-1



Appearance The western half is rolling, fairly gentle land continuously covered with a true fir, western hemlock, and lodgepole pine forest. The eastern half is a lava flow. Near the center along the edge of the lava flow is Huckleberry Lake.

Surroundings The east, south, and west boundaries of the Huckleberry roadless area abuts the Three Sisters Wilderness. State Highway 242 forms the northern boundary. State Highway 242 is a seasonal route used by recreationists and sightseers when the highway is free of snow, usually July through October. Across the Highway is the Mt. Washington Wilderness. The area is essentially surrounded by Wilderness.

Attractions Huckleberry Lake and Yapoah Lava Flow are the main attractions.

Capability

Manageability and Boundaries Boundaries are easily managed.

Natural Integrity The area is in essentially pristine condition, with the exception of the old abandoned road which bisects most of the area, and an old campground which is located near the center of the area.

Natural Appearance With most visitors using the road and campground area, impact may be perceived by virtually everyone. The roadless area appears unnatural to most people, but evidence of unnaturalness is usually restricted to one of the senses.

Opportunity for Solitude Topographic screening is good throughout about half the area and vegetative screening is good over the other half. Offsite intrusions from State Highway 242 are perceptible. Traffic is generally moving during daylight hours for sightseeing and is not of a commercial nature.

Opportunity for Primitive Recreation Huckleberry Lake provides fishing and canoeing in a tranquil setting.

Challenging Experience The forested portion has few challenges. However, the lava flow is mostly rough, jagged, small ridges of rock and would afford some rock-scrambling opportunities.

Special Features The area represents ecological processes of subalpine vegetative communities on lava flows and could provide an opportunity for study of these communities. One isolated find of a cultural artifact is present. No federally listed endangered or threatened species are known to be present.

Availability

Resource Potential

Wildlife Resource The Huckleberry roadless area is summer range for mule deer and year-round habitat for animal species that are endemic to the high alpine area. Small harvest units might contribute additional forage; but considering the harsh weather conditions and short growing season, the effort might not be cost effective.

Recreation Resource Capacity estimates indicate that this area could provide 518 Recreation Visitor Days (RVDs) of Semiprimitive Dispersed Nonmotorized recreation use. No potential trail locations or developed recreation sites have been identified.

Timber Resource The roadless area includes about 555 acres of land suitable for growing timber under managed conditions. Stands of mature lodgepole pine, true firs, and mountain hemlock occupy the area representing about 11 million board feet. If stands are converted to a managed condition, biological potential yield will be 42,949 cubic feet per year at culmination of mean annual increment. Site productivity ranges from Class IV to Class V. The remaining area is unsuitable.

Cultural Resource It is likely that there are additional prehistoric sites in the Huckleberry roadless area. They are probably associated with travel over the Cascade Range and gathering of camps by the Native Americans. This activity may have continued into the historic era with people from the Warm Springs Reservation using the area for hunting and gathering activities.

Management Considerations

Fire Catastrophic fire frequency is 250-600 years. No known fire activity has occurred recently.

Need

Nearby Wilderness and Its Use The Mt. Washington Wilderness (56,202 acres) is immediately across the highway to the north, and the Three Sisters Wilderness (283,593 acres) is adjacent to the remainder of the Huckleberry roadless area. Refer to Chapter III for the amount of use these Wildernesses receive.

Distance from Population Centers The area is approximately 75 miles by road to the east of Eugene, Oregon, and 40 miles northwest of Bend, Oregon.

Interest by Proponents The Huckleberry roadless area generated a low amount of interest with 77% of the responses favoring inclusion of the roadless area into the inventory.

Environmental Consequences

As a consequence of implementing any of the proposed Alternatives there will be effects on the Huckleberry roadless area. In Alternatives K and W, 8% of this area will be affected by road construction and timber harvest. Alternatives NC, A, J, D, and L will develop from 4% of the area. As a result of this development, uses dependent on roadless conditions--such as semiprimitive recreation--will not be provided in portions of the area. Portions of this area contiguous to the Three Sisters Wilderness would remain suitable for consideration as Wilderness additions in the next cycle of Forest planning. All Alternatives maintain the option of future Wilderness consideration for this area. Figure C-14-2 illustrates how this area has been allocated in each Alternative.

Based on the amount and distribution of management areas assigned to the Huckleberry roadless area, an array of goods and services are provided. Emphasis on amenity values such as dispersed recreation opportunities, high visual quality, and old-growth habitat are provided in all Alternatives. The amounts of other goods and services to be provided from the area for each Alternative are illustrated in Figure C-14-3. Additional information regarding the environmental consequences of the activities associated with these goods and services is located in Chapter IV of this FEIS.

Table T314. Management Area Acreage of Alternatives (C-14-2)

Management Areas	Alternatives						
	NC (No Change)	K (WFC)	A (No Action)	J (DEIS-PA)	W (PA)	D (Wildlife)	L (ONRC)
1 Wilderness							
Management Area 1a	--	--	--	--	--	--	--
Management Area 1b	--	--	--	--	--	--	--
Management Area 1c	--	--	--	--	--	--	--
Management Area 1d	--	--	--	--	--	--	--
2 Oregon Cascades Recreation Area							
Management Area 2a	--	--	--	--	--	--	--
Management Area 2b	--	--	--	--	--	--	--
3 Experimental Forest							
Management Area 3	--	--	--	--	--	--	--
4 Research Natural Area							
Management Area 4	--	--	--	747	789	747	--
5 Special Interest Area							
Management Area 5a	--	--	--	--	--	--	--
Management Area 5b	--	--	--	--	--	--	--
6 Wild and Scenic River							
Management Area 6a	--	--	--	--	--	--	--
Management Area 6b	--	--	--	--	--	--	--
Management Area 6c	--	--	--	--	--	--	--
7 Old-Growth Grove							
Management Area 7	--	--	--	--	--	--	811
8 T & E Species							
Management Area 8	--	--	--	--	--	--	--
9 Special Habitat ¹							
Management Area 9a	--	--	--	--	--	--	--
Management Area 9b	--	--	--	--	--	--	--
Management Area 9c	--	--	--	--	--	--	--
Management Area 9d	--	--	--	--	--	--	--
10 Dispersed Recreation							
Management Area 10a	--	--	--	--	--	--	--
Management Area 10b	--	--	--	--	--	--	--
Management Area 10c	--	--	--	64	--	64	--
Management Area 10d	--	--	--	--	--	--	--
Management Area 10e	811	725	811	--	--	--	--
Management Area 10f	--	--	--	--	--	--	--

Management Areas	NC (No Change)	K (WFC)	A (No Action)	J (DEIS-PA)	W (PA)	D (Wildlife)	L (ONRC)
11 Scenic							
Management Area 11a	--	--	--	--	--	--	--
Management Area 11b	--	--	--	--	--	--	--
Management Area 11c	--	--	--	--	--	--	--
Management Area 11d	--	--	--	--	--	--	--
Management Area 11e	--	--	--	--	--	--	--
Management Area 11f	--	64	--	--	--	--	--
12 Developed Recreation							
Management Area 12a	43	64	43	43	64	43	--
Management Area 12b	--	--	--	--	--	--	--
13 Special and Ad- ministrative Use							
Management Area 13a	--	--	--	--	--	--	--
Management Area 13b	--	--	--	--	--	--	--
14 General Forest							
Management Area 14a	--	--	--	--	--	--	--
15 Riparian ²							
Management Area 15	*	*--	*--	*--	--	--	--

¹ Acres of network sites that overlap with other no harvest management areas are not included in MA9a, 9b, 9c acres.

² Only alternatives with acres assigned to no harvest prescriptions for riparian have acres allocated to MA15. In alternatives K, A, and J riparian acres follow Forest-wide standards and guidelines for riparian harvest rates. Riparian acres in NC are distributed throughout other management areas.

**Table C-14-3. Huckleberry Roadless Area
Quantifiable Resources Outputs, Environmental Effects, and Activities by Alternative**

		Alternatives						
Output, Effects, or Activity	Unit of Measure	NC	K	A	J	W	D	L
Recommended Wilderness Recreation Use 1st Decade Area Recommended for Wilderness	RVDs	--	--	--	--	--	--	--
	Acres	--	--	--	--	--	--	--
Nonwilderness Dispersed Recreation Use in the 1st Decade								
Semiprimitive Nonmotorized	RVDs	793	749	793	760	782	760	--
	Acres	811	725	811	747	789	747	--
Semiprimitive Motorized	RVDs	--	--	--	77	--	77	--
	Acres	--	--	--	64	--	64	--
Roaded Natural	RVDs	346	741	346	346	445	346	8,026
	Acres	43	128	43	43	64	43	853
Roaded Modified	RVDs	--	--	--	--	--	--	--
	Acres	--	--	--	--	--	--	--
Trails								
Existing Trails								
Full Protection Level	Miles	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Moderate Protection Level	Miles	--	--	--	--	--	--	--
Low Protection Level	Miles	--	--	--	--	--	--	--
Potential Trails								
Full Protection Level	Miles	--	--	--	--	--	--	--
Moderate Protection Level	Miles	--	--	--	--	--	--	--
Low Protection Level	Miles	--	--	--	--	--	--	--
Visual Quality Objectives								
Preservation	Acres	811	725	811	747	789	747	811
Retention	Acres	--	64	--	64	--	64	--
Partial Retention	Acres	43	64	43	43	64	43	43
Modification	Acres	--	--	--	--	--	--	--
Maximum Modification	Acres	--	--	--	--	--	--	--
1st Decade								
Road Construction	Miles	--	--	--	--	--	--	--
Area Harvested	Acres	--	--	--	--	--	--	--
Programmed Timber Harvest	MBF	--	--	--	--	--	--	--
Area Remaining Undeveloped	%	--	--	--	--	--	--	--
Lands by Timber Yield Levels								
Full Yield (95-100%)	Acres	--	--	--	--	--	--	--
75-94% of Full Yield	Acres	--	--	--	--	--	--	--
50-74% of Full Yield	Acres	--	--	--	--	--	--	--
30-49% of Full Yield	Acres	--	--	--	--	--	--	--

Frog Camp - 469 Acres

Description

History The Frog Camp roadless area was considered for Wilderness by the United States Congress. They released the area for multiple use management in the Oregon Wilderness Act of 1984.

Location and Access T.16S., R.8E. The area is approximately 75 miles due east and slightly north of Eugene, Oregon. It is bordered on three sides by the northern boundary of the Three Sisters Wilderness 5 miles west of McKenzie Pass. It can be accessed by State Highway 242, which parallels the northern boundary.

Geography and Topography The area is situated in the High Cascades Geographic Province in the midst of the several hundred square miles of recent lava activity in the McKenzie Pass area. The northern half is typified by fairly rolling gentle terrain moderately dissected by two shallow ravines. The southern half is the northern slope of Sims Butte, one of many small cinder cones in the McKenzie Pass area. Elevations range from 4,700 feet to 5,200 feet.

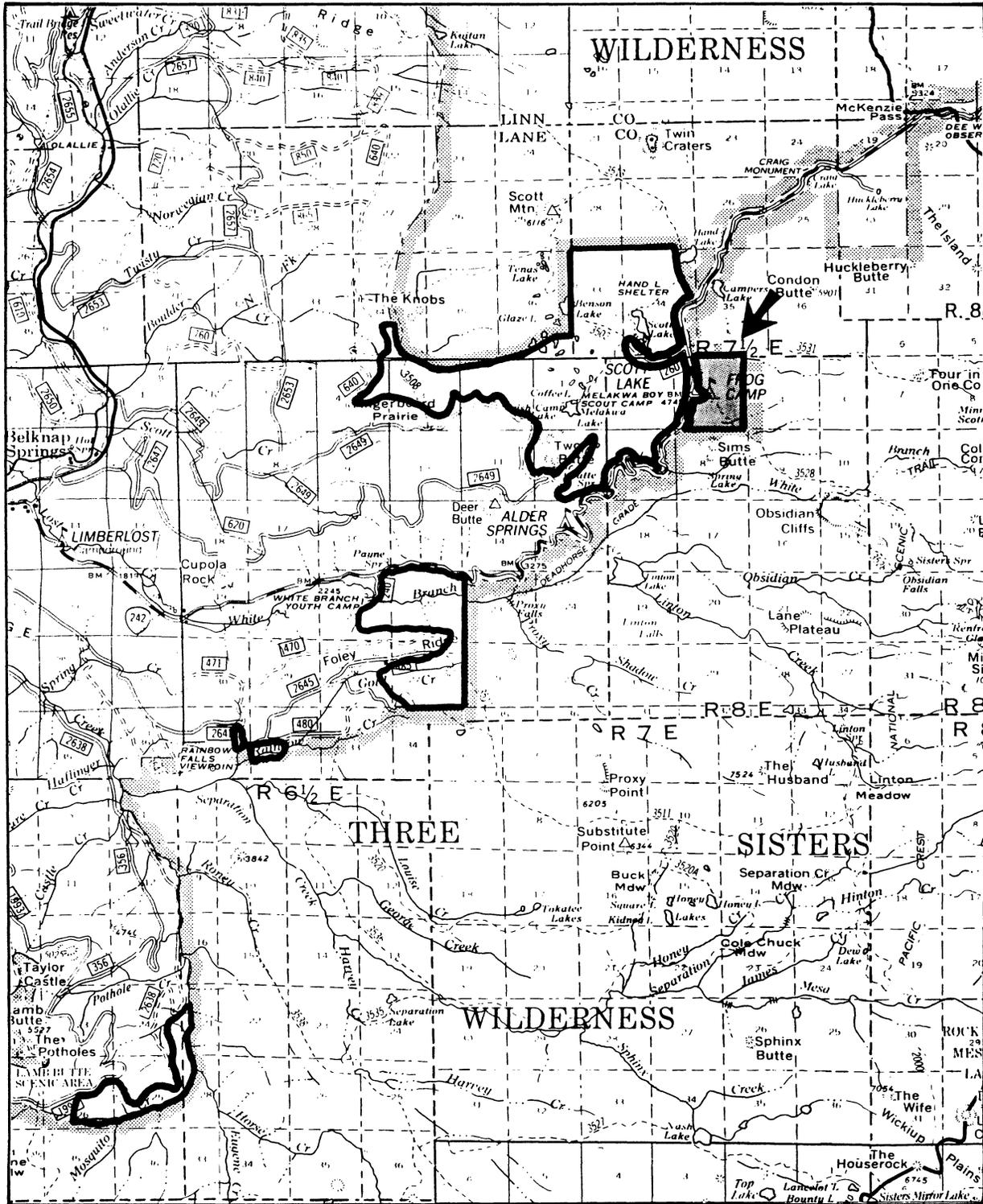
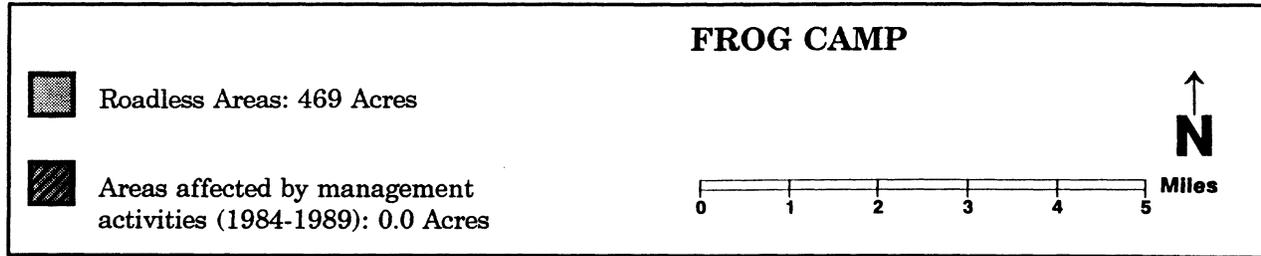
Soil The area is 35% Landtype 73, 35% Landtype 74, and 5% Landtype 6. These are deep soils of sandy loam over loam with low fertility. Growing season is short and cold. There are about 43 acres that have potential for severe surface erosion. For more soil information refer to *Willamette National Forest Soil Resource Inventory* (Legard and Meyer 1973).

Vegetation The entire area is forested with a lodgepole pine/mountain hemlock/true fir mix.

Ecosystem There is one major potential vegetation zone and one vegetation community for this area according to classification systems by Bailey (1976) and Kuchler (1966). The vegetation zone is the Pacific Forest (M2410) zone. The vegetative community is fir/hemlock (*Abies-Tsuga*) forest (004).

Current Uses The entire area is classified in the 1977 Forest Land Management Plan (FLMP 1977) as Dispersed Nonmotorized Recreation/Timber. The area is primarily managed as Semiprimitive Nonmotorized Recreation Opportunity Spectrum (ROS). Extending from the west central boundary southeastward to its eastern border is Obsidian Trail (3528) which is used by hikers to access the Three Sisters Wilderness. Obsidian Trail is the most popular trail on the McKenzie Ranger District portion of the Three Sisters Wilderness. The area receives approximately 5,000 Recreation Visitor Days (RVDs) use per year, virtually all of it on the trail.

Figure C-15-1



Appearance The area is a continuous forest of lodgepole pine, mountain hemlock, and true fir, with occasional small openings. Two small streams run in the spring and early summer. The lay of the land is mostly gentle and rolling with the exception of the moderate incline in its southern portion.

Surroundings The north, south, and east boundaries abut the Three Sisters Wilderness. State Highway 242 forms the western boundary. State Highway 242 is a seasonal route used by recreationists and sightseers during the snow free months of July through October. Across the highway from the area is the Melakwa/Scott Lake Dispersed Nonmotorized Recreation/Timber (FLMP 1977) unroaded area.

Attractions Obsidian Trail is the main attraction.

Capability

Manageability and Boundaries Boundary would not be a management problem. Sight and sound along the highway would affect the primitive character of the wilderness resource.

Natural Integrity The area is in essentially pristine condition with the exception of the Obsidian Trail which bisects the area and is used heavily throughout the summer and fall.

Natural Appearance The area would appear natural to all but the most knowledgeable.

Opportunity for Solitude Topographic screening is moderate, and vegetative screening is good. Offsite intrusions (State Highway 242, Frog Campground, and trailhead) may be perceptible.

Opportunity for Primitive Recreation The trail provides good access to primitive recreation. There is minimal diversity; seasonal water sources dry up by mid-summer.

Special Features The area contains only common features. One major cultural resource site exists in this area. No federally listed endangered or threatened species are known to be present.

Availability

Resource Potential

Wildlife Resource The Frog Camp roadless area currently supports medium populations of mule deer and black-tailed deer. Both of these species utilize the area during the summer months. Small harvest units would provide additional forage as long as adequate security areas are maintained.

Recreation Resource Capacity estimates indicate that this area could provide 327 RVDs of Semiprimitive Dispersed Nonmotorized recreation use. No potential trail locations or developed recreation sites have been identified.

Land Use Authorization A USGS snow pillow is operated under special use permit. There is little potential for other land uses.

Timber Resource The roadless area includes about 405 acres of land suitable for growing timber under managed conditions. Stands of mature lodgepole pine, true firs, and mountain hemlock occupy the area representing about 11 million board feet. If stands are converted to a managed condition, biological potential yield will be 31,910 cubic feet per year at culmination of mean annual increment. Site productivity ranges from Class IV to Class V. The remaining area is unsuitable.

Cultural Resource The Frog Camp roadless area has a very high potential for the presence of prehistoric cultural resources. These probably are associated with travel to and from the major obsidian source at Obsidian Cliffs as well as travel across the Cascade Range.

Management Considerations

Fire Catastrophic fire frequency is 250-600 years. No known fire activity has occurred recently.

Need

Nearby Wilderness and Its Use The Mt. Washington Wilderness (56,202 acres) is to the north 1 mile, and the Three Sisters Wilderness (283,593 acres) is adjacent on three sides. Refer to Chapter III for the amount of use these Wildernesses receive.

Distance from Population Centers The area is approximately 75 miles by road to the east of Eugene, Oregon, and 50 miles northwest of Bend, Oregon.

Interest by Proponents The Frog Camp roadless area generated a low amount of interest with 83% of the responses favoring inclusion of the roadless area into the inventory.

Environmental Consequences

As a consequence of implementing any of the proposed Alternatives there will be effects on the Frog Camp roadless area. In Alternative K, 18% of this area will be affected by road construction and timber harvest. Alternative F will develop 4% of the area. As a result of this development, uses dependent on roadless conditions--such as semiprimitive recreation--will not be provided in the developed portion of the area. Portions of this area contiguous to the Three Sisters Wilderness will remain suitable for consideration as Wilderness additions in the next cycle of Forest planning. All Alternatives maintain the option of future Wilderness consideration for this area. Figure C-15-2 illustrates how this area has been allocated in each Alternative.

Based on the amount and distribution of management areas assigned to the Frog Camp roadless area, an array of goods and services are provided. Emphasis on amenity values such as dispersed recreation opportunities, high visual quality, and old-growth habitat are provided in all Alternatives. The amounts of other goods and services to be provided from the area for each Alternative are illustrated in Figure C-15-3. Additional information regarding the environmental consequences of the activities associated with these goods and services is located in Chapter IV of this FEIS.

Table T314. Management Area Acreage of Alternatives (C-15-2)

Management Areas	Alternatives						
	NC (No Change)	K (WFC)	A (No Action)	J (DEIS-PA)	W (PA)	D (Wildlife)	L (ONRC)
1 Wilderness							
Management Area 1a	--	--	--	--	--	--	--
Management Area 1b	--	--	--	--	--	--	--
Management Area 1c	--	--	--	--	--	--	--
Management Area 1d	--	--	--	--	--	--	--
2 Oregon Cascades Recreation Area							
Management Area 2a	--	--	--	--	--	--	--
Management Area 2b	--	--	--	--	--	--	--
3 Experimental Forest							
Management Area 3	--	--	--	--	--	--	--
4 Research Natural Area							
Management Area 4	--	--	--	--	--	--	--
5 Special Interest Area							
Management Area 5a	--	--	--	--	--	--	--
Management Area 5b	--	--	--	--	--	--	--
6 Wild and Scenic River							
Management Area 6a	--	--	--	--	--	--	--
Management Area 6b	--	--	--	--	--	--	--
Management Area 6c	--	--	--	--	--	--	--
7 Old-Growth Grove							
Management Area 7	--	--	--	--	--	--	469
8 T & E Species							
Management Area 8	--	--	--	--	--	--	--
9 Special Habitat ¹							
Management Area 9a	--	--	--	--	--	--	--
Management Area 9b	--	--	--	--	--	--	--
Management Area 9c	--	--	--	--	--	--	--
Management Area 9d	--	--	--	--	--	--	--
10 Dispersed Recreation							
Management Area 10a	--	--	--	--	--	--	--
Management Area 10b	--	384	--	--	--	--	--
Management Area 10c	--	--	--	--	--	--	--
Management Area 10d	469	--	469	--	--	--	--
Management Area 10e	--	--	--	469	469	469	--
Management Area 10f	--	--	--	--	--	--	--

Management Areas	NC (No Change)	K (WFC)	A (No Action)	J (DEIS-PA)	W (PA)	D (Wildlife)	L (ONRC)
11 Scenic							
Management Area 11a	--	--	--	--	--	--	--
Management Area 11b	--	--	--	--	--	--	--
Management Area 11c	--	--	--	--	--	--	--
Management Area 11d	--	--	--	--	--	--	--
Management Area 11e	--	--	--	--	--	--	--
Management Area 11f	--	85	--	--	--	--	--
12 Developed Recreation							
Management Area 12a	--	--	--	--	--	--	--
Management Area 12b	--	--	--	--	--	--	--
13 Special and Ad- ministrative Use							
Management Area 13a	--	--	--	--	--	--	--
Management Area 13b	--	--	--	--	--	--	--
14 General Forest							
Management Area 14a	--	--	--	--	--	--	--
15 Riparian ²							
Management Area 15	*	*--	*--	*--	--	--	--

¹ Acres of network sites that overlap with other no harvest management areas are not included in MA9a, 9b, 9c acres.

² Only alternatives with acres assigned to no harvest prescriptions for riparian have acres allocated to MA15. In alternatives K, A, and J riparian acres follow Forest-wide standards and guidelines for riparian harvest rates. Riparian acres in NC are distributed throughout other management areas.

**Table C-15-3. Frog Camp Roadless Area
Quantifiable Resources Outputs, Environmental Effects, and Activities by Alternative**

		Alternatives									
Output, Effects, or Activity	Unit of Measure	NC	K	A	J	W	D	L			
Recommended Wilderness Recreation Use 1st Decade Area Recommended for Wilderness	RVDs	--	--	--	--	--	--	--			
	Acres	--	--	--	--	--	--	--			
Nonwilderness Dispersed Recreation Use in the 1st Decade	Semiprimitive Nonmotorized	RVDs	532	--	532	532	532	532	--		
		Acres	469	--	469	469	469	469	--		
	Semiprimitive Motorized	RVDs	--	1,128	--	--	--	--	--		
		Acres	--	384	--	--	--	--	--		
	Roaded Natural	RVDs	--	914	--	--	--	--	5,211		
		Acres	--	85	--	--	--	--	469		
	Roaded Modified	RVDs	--	--	--	--	--	--	--		
		Acres	--	--	--	--	--	--	--		
	Trails	Existing Trails	Full Protection Level	Miles	--	--	--	1.0	1.0	1.0	1.0
			Moderate Protection Level	Miles	1.0	1.0	1.0	--	--	--	--
Low Protection Level			Miles	--	--	--	--	--	--	--	
Potential Trails		Full Protection Level	Miles	--	--	--	--	--	--	--	
		Moderate Protection Level	Miles	--	--	--	--	--	--	--	
		Low Protection Level	Miles	--	--	--	--	--	--	--	
Visual Quality Objectives	Preservation	Acres	--	--	--	469	469	469	469		
	Retention	Acres	469	85	469	--	--	--	--		
	Partial Retention	Acres	--	384	--	--	--	--	--		
	Modification	Acres	--	--	--	--	--	--	--		
	Maximum Modification	Acres	--	--	--	--	--	--	--		
1st Decade	Road Construction	Miles	--	0.5	0.5	--	--	--	--		
	Area Harvested	Acres	--	14	22	--	--	--	--		
	Programmed Timber Harvest	MBF	--	117	165	--	--	--	--		
	Area Remaining Undeveloped	%	--	89	84	--	--	--	--		
Lands by Timber Yield Levels	Full Yield (95-100%)	Acres	--	--	--	--	--	--	--		
	75-94% of Full Yield	Acres	--	341	--	--	--	--	--		
	50-74% of Full Yield	Acres	405	64	405	--	--	--	--		
	30-49% of Full Yield	Acres	--	--	--	--	--	--	--		

Gold Creek - 1,045 Acres

Description

History The Gold Creek roadless area was considered for Wilderness by the United States Congress. They released the area for multiple-use management in the Oregon Wilderness Act of 1984. Since the release of these lands in 1984, approximately 256 acres have been affected by development activities.

Location and Access T.16S., R.7E. The area is approximately 65 miles due east of Eugene, Oregon, situated along the northwestern boundary of the Three Sisters Wilderness approximately 15 miles east of McKenzie Bridge. It can be accessed by State Highway 126 and Foley Ridge Road (Forest Road 26543). The northern portion can be accessed by State Highway 242, which parallels the northern boundary.

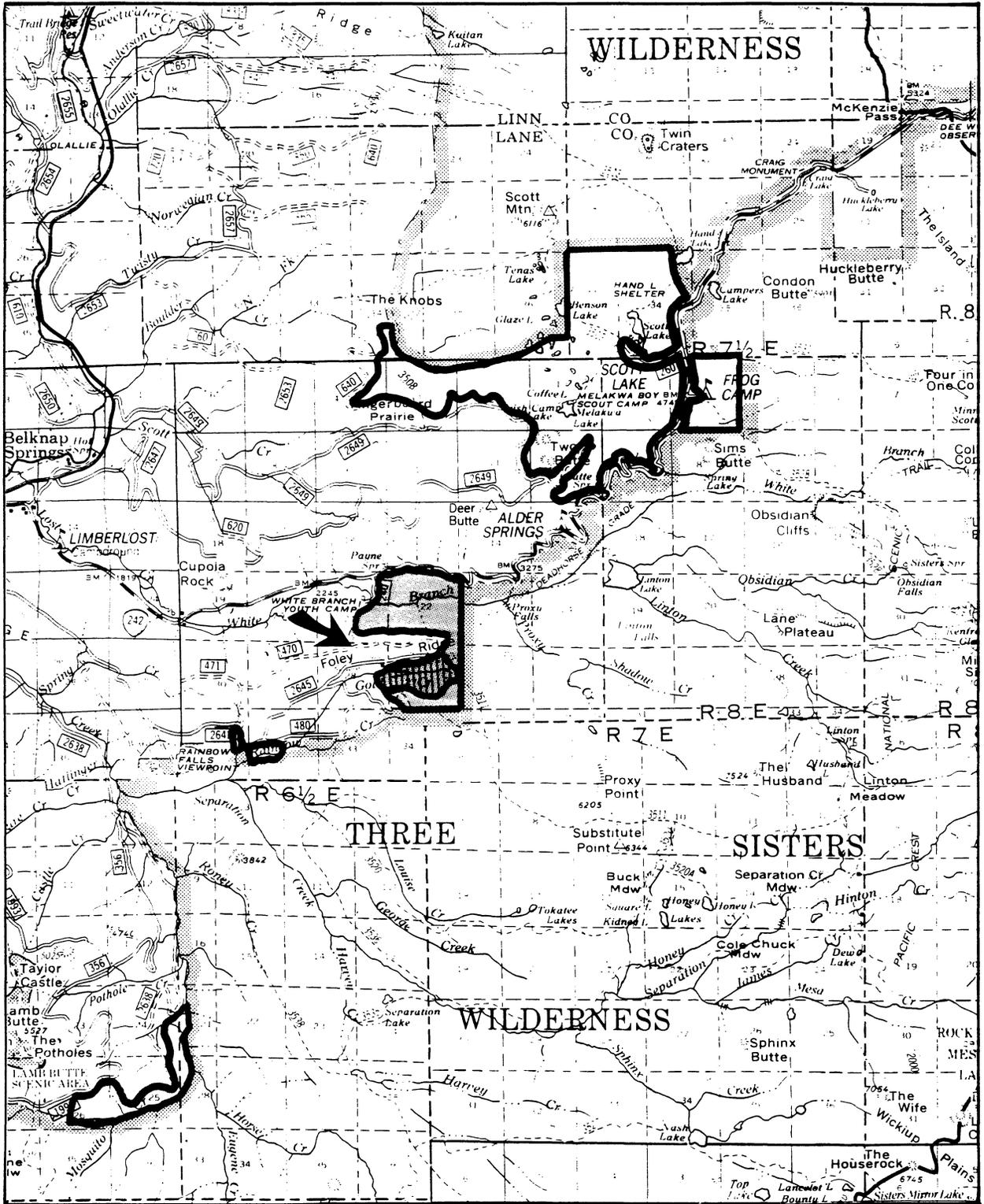
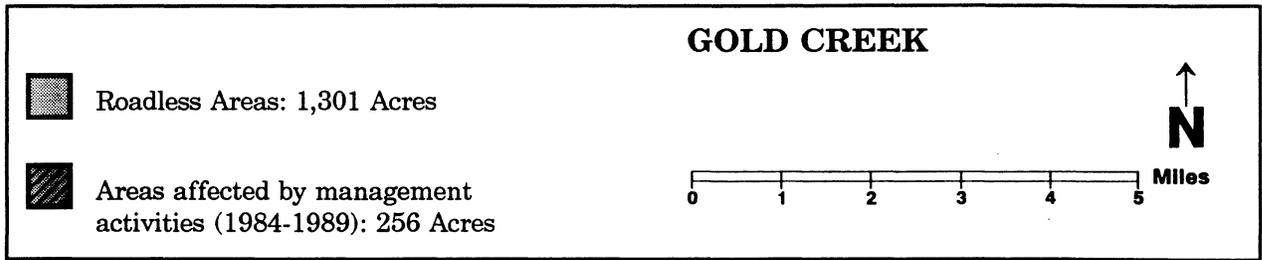
Geography and Topography The area is situated in the High Cascades Geographic Province and is characterized by the smooth, gentle terrain typical of lands immediately west of the Cascade Crest. The northern half is the southern wall of the White Branch Creek Drainage; the southern half is primarily gentle, rolling terrain moderately dissected by Gold Creek. Elevations range from 2,500 feet, near White Branch Creek, to 4,400 feet.

Soils The southern half is chiefly comprised of equal amounts of Landtypes 66 and 67. The northern half is predominantly Landtype 610, with small scatterings of Landtypes 62 and 63. The soil is deep sandy loams and loams over gravelly loams with low fertility. There are about 384 acres that have potential for severe surface erosion. For more soil information refer to *Willamette National Forest Soil Resource Inventory* (Legard and Meyer 1973).

Vegetation The entire area is dominated by Douglas-fir forest. Toward the south and east, Douglas-fir is mixed with true fir, mountain hemlock, and lodgepole pine with no openings.

Ecosystem There is one major potential vegetation zone and one vegetation community for this area according to classification systems by Bailey (1976) and Kuchler (1966). The vegetation zone is the Pacific Forest (M2410) zone. The vegetative community is Pacific silver fir/Douglas-fir (*Abies-Pseudotsuga*) forest (003).

Figure C-16-1



Current Uses The entire area is classified in the 1977 Forest Land Management Plan as General Forest and is managed with an emphasis on timber production. Current management includes annual maintenance for the Foley Ridge Trail (3511) and the Foley Cut-off Trail (3511A). These trails receive moderate use from hikers, trail stock, and backpackers for access to the Three Sisters Wilderness. The area receives approximately 500 Recreation Visitor Days (RVDs) use per year. The Recreation Opportunity Spectrum (ROS) class is Semiprimitive Nonmotorized.

Appearance The area is a continuous forest of mature Douglas-fir. Parts of the area near the existing Wilderness boundary are covered with continuous forests of Douglas-fir mixed with lodgepole pine, western hemlock, and true fir. Most of the area is fairly flat; the northern portion is a continuous, fairly steep, forested slope which serves as the southern wall of the White Branch Creek Valley.

Surroundings The southern and western boundaries abut the Three Sisters Wilderness. To the west is Foley Ridge, an area intensively managed for timber production and two large seed orchards. North is State Highway 242 and the northern wall of the White Branch Valley. The land north of the highway is in General Forest.

Attractions Foley Ridge Trail and Foley Cut-off Trail are the main attractions.

Capability

Manageability and Boundaries Boundaries are easily managed.

Natural Integrity Two trails are present, which do not interrupt the natural processes to any extent.

Natural Appearance The area would appear natural to most visitors.

Opportunity for Solitude Topographic screening is moderate and vegetative screening is good. Offsite intrusions (State Highway 242, White Branch Youth Camp, Foley Ridge Road, and Trailheads) may be perceptible.

Special Features The area contains only common features. No cultural features or federally listed endangered or threatened species are known to be present.

Availability

Resource Potential

Wildlife Resource The Gold Creek roadless area contains about 35 elk and resident deer that use the General Forest and adjacent Wilderness as summer range. The roadless areas provide hiding and thermal cover for both deer and elk and the adjacent clearcut areas provide forage. Management for early successional stages would provide additional forage for big-game, but could affect preferred travel corridors to winter range. Retaining older aged stands would benefit spotted owls, pileated woodpeckers, and other late successional stage dependant species.

Recreation Resource Capacity estimates indicate the area could provide 713 RVDs of Semiprimitive Dispersed Nonmotorized recreation use. No potential trail locations or developed recreation sites have been identified.

Mineral and Energy Resource The Gold Creek roadless area is within the study boundaries of the Foley-Belknap Geothermal Area. The northern half is classified in the "substantial development constraints" category; the southern half is classified in the "minimum development constraints" category. There is probably little potential for mineral development.

Timber Resource The roadless area includes about 811 acres of land suitable for growing timber under managed conditions. Stands of mature Douglas-fir, true firs, and mountain hemlock occupy the area representing about 37 million board feet. If stands are converted to a managed condition, biological potential yield will be 102,000 cubic feet per year at culmination of mean annual increment. Site productivity ranges from Class IV to Class V. The remaining area is unsuitable.

Cultural Resource There is potential to find sites in the area due to the presence of nearby sites along Foley Ridge. Early hunting and trapping activity by Euro-Americans are evident in these sites. Some potential sites may be associated with traveling, fall hunting, and gathering activities.

Management Considerations

Fire Catastrophic fire frequency is 250-600 years. No known fire activity has occurred recently.

Need

Nearby Wilderness and Its Use The Mt. Washington Wilderness (56,202 acres) is 3 miles to the north of the roadless area, and adjacent to the east is the Three Sisters Wilderness (283,593 acres). Refer to Chapter III for the amount of use these Wildernesses receive.

Distance from Population Centers The area is approximately 55 miles by road to the east of Eugene, Oregon, and 55 miles northwest of Bend, Oregon.

Interest by Proponents The Gold Creek roadless area generated a low amount of interest with 50% of the responses favoring inclusion of the roadless area into the inventory.

Environmental Consequences

As a consequence of implementing any of the proposed Alternatives there will be effects on the Gold Creek roadless area. In Alternatives NC, K, A, J, and W, 73 to 100% of this area will be affected by road construction and timber harvest. Alternative D will develop 22% of the area and Alternative L will develop 4%. As a result of this development, uses dependent on roadless conditions--such as semiprimitive recreation-- will not be provided in portions of the area. Implementation of proposed management activities associated with all Alternatives, except Alternatives L and D, would alter the suitability of this area for future Wilderness consideration. However, portions of this area contiguous to the Three Sisters Wilderness would remain suitable for consideration as Wilderness additions in the next cycle of Forest planning. Figure C-16-2 illustrates how this area has been allocated in each Alternative.

Based on the amount and distribution of management areas assigned to the Gold Creek roadless area, an array of goods and services are provided. Emphasis on priced commodities such as wood products are provided in Alternatives NC, A, K, J, and W. Emphasis on amenity values such as dispersed recreation opportunities, high visual quality, and old-growth habitat are provided in Alternatives L and D. The amounts of other goods and services to be provided from the area for each Alternative are illustrated in Figure C-16-3. Additional information regarding the environmental consequences of the activities associated with these goods and services is located in Chapter IV of this FEIS.

Table T314. Management Area Acreage of Alternatives (C-16-2)

Management Areas	Alternatives						
	NC (No Change)	K (WFC)	A (No Action)	J (DEIS-PA)	W (PA)	D (Wildlife)	L (ONRC)
1 Wilderness							
Management Area 1a	--	--	--	--	--	--	--
Management Area 1b	--	--	--	--	--	--	--
Management Area 1c	--	--	--	--	--	--	--
Management Area 1d	--	--	--	--	--	--	--
2 Oregon Cascades Recreation Area							
Management Area 2a	--	--	--	--	--	--	--
Management Area 2b	--	--	--	--	--	--	--
3 Experimental Forest							
Management Area 3	--	--	--	--	--	--	--
4 Research Natural Area							
Management Area 4	--	--	--	--	--	--	--
5 Special Interest Area							
Management Area 5a	--	--	--	--	--	--	--
Management Area 5b	--	--	--	--	--	--	--
6 Wild and Scenic River							
Management Area 6a	--	--	--	--	--	--	--
Management Area 6b	--	--	--	--	--	--	--
Management Area 6c	--	--	--	--	--	--	--
7 Old-Growth Grove							
Management Area 7	--	--	--	--	--	--	1,003
8 T & E Species							
Management Area 8	--	--	--	--	--	--	--
9 Special Habitat ¹							
Management Area 9a	--	--	--	--	--	--	--
Management Area 9b	--	149	149	128	107	--	--
Management Area 9c	--	--	--	--	--	--	--
Management Area 9d	--	--	--	--	--	--	--
10 Dispersed Recreation							
Management Area 10a	--	--	--	--	--	--	--
Management Area 10b	--	--	--	--	--	--	--
Management Area 10c	--	--	--	149	149	107	--
Management Area 10d	--	--	--	--	--	--	--
Management Area 10e	--	--	--	--	--	683	--
Management Area 10f	--	--	--	--	--	--	--

Management Areas	NC (No Change)	K (WFC)	A (No Action)	J (DEIS-PA)	W (PA)	D (Wildlife)	L (ONRC)
11 Scenic							
Management Area 11a	--	21	--	--	--	--	--
Management Area 11b	--	--	--	--	--	--	--
Management Area 11c	427	469	256	469	469	--	--
Management Area 11d	--	--	--	--	--	--	--
Management Area 11e	--	--	--	--	--	--	21
Management Area 11f	128	85	107	--	--	--	--
12 Developed Recreation							
Management Area 12a	--	--	--	--	--	--	--
Management Area 12b	--	--	--	--	--	--	--
13 Special and Ad- ministrative Use							
Management Area 13a	21	21	21	21	21	21	21
Management Area 13b	--	--	--	--	--	--	--
14 General Forest							
Management Area 14a	469	235	448	235	235	213	--
15 Riparian ²							
Management Area 15	*	64	64	43	64	21	--

¹ Acres of network sites that overlap with other no harvest management areas are not included in MA9a, 9b, 9c acres.

² Only alternatives with acres assigned to no harvest prescriptions for riparian have acres allocated to MA15. In alternatives K, A, and J riparian acres follow Forest-wide standards and guidelines for riparian harvest rates. Riparian acres in NC are distributed throughout other management areas.

**Table C-16-3. Gold Creek Roadless Area
Quantifiable Resources Outputs, Environmental Effects, and Activities by Alternative**

		Alternatives						
Output, Effects, or Activity	Unit of Measure	NC	K	A	J	W	D	L
Recommended Wilderness Recreation Use 1st Decade Area Recommended for Wilderness	RVDs	--	--	--	--	--	--	--
	Acres	--	--	--	--	--	--	--
Nonwilderness Dispersed Recreation Use in the 1st Decade								
Semiprimitive Nonmotorized	RVDs	--	--	--	--	--	291	--
	Acres	--	--	--	--	--	683	--
Semiprimitive Motorized	RVDs	--	--	--	304	415	304	--
	Acres	--	--	--	149	149	107	--
Roaded Natural	RVDs	3,260	3,754	3,507	2,840	2,420	247	6,643
	Acres	555	768	576	640	640	21	1,024
Roaded Modified	RVDs	1,405	1,215	1,310	1,120	1,120	1,025	95
	Acres	491	277	469	256	256	235	21
Trails								
Existing Trails								
Full Protection Level	Miles	--	--	--	--	1.0	--	1.0
Moderate Protection Level	Miles	--	0.0	0.0	0.0	--	0.0	--
Low Protection Level	Miles	1.0	0.0	0.0	0.0	--	0.0	--
Potential Trails								
Full Protection Level	Miles	--	--	--	--	--	--	--
Moderate Protection Level	Miles	--	--	--	--	--	--	--
Low Protection Level	Miles	--	--	--	--	--	--	--
Visual Quality Objectives								
Preservation	Acres	--	149	149	128	107	683	1,003
Retention	Acres	128	85	107	149	149	107	21
Partial Retention	Acres	427	533	320	512	533	21	--
Modification	Acres	21	43	21	21	21	21	21
Maximum Modification	Acres	469	235	448	235	235	213	--
1st Decade								
Road Construction	Miles	--	0.8	0.7	2.0	1.3	0.3	--
Area Harvested	Acres	--	63	67	194	101	45	--
Programmed Timber Harvest	MBF	--	555	562	1,706	906	724	15
Area Remaining Undeveloped	%	--	81	80	80	69	87	--
Lands by Timber Yield Levels								
Full Yield (95-100%)	Acres	704	682	662	661	640	192	--
75-94% of Full Yield	Acres	--	43	43	43	--	--	--
50-74% of Full Yield	Acres	107	85	107	--	--	21	21
30-49% of Full Yield	Acres	--	--	--	--	--	--	--

Rainbow Falls - 43 Acres

Description

History The Rainbow Falls roadless area, which consisted of 469 acres, was considered for Wilderness by the United States Congress. They released 43 acres for multiple use management and designated 427 acres as additions to the Three Sisters Wilderness in the Oregon Wilderness Act of 1984.

Location and Access T.16S., R.7E. The area is approximately 60 miles due east of Eugene, Oregon, situated along the northwestern boundary of the Three Sisters Wilderness approximately 10 miles east of McKenzie Bridge and can be accessed by State Highway 126 and Foley Ridge Road (Forest Road 2643). Forest Trail 3543 goes through the west parcel.

Geography and Topography The Rainbow Falls roadless area is situated in the High Cascades Geographic Province and is characterized by the smooth, gentle terrain typical of lands immediately west of the Cascade Crest. The area is situated atop Foley Ridge, a long linear landform marked by a wide gently undulating top. The area is essentially flat with some slight rolling terrain. Elevations range from 2,800 to 3,200 feet.

Soil The area is 100% Landtype 66, deep fine sandy loam and sandy loam over gravelly loam. For more soil information refer to *Willamette National Forest Soil Resource Inventory* (Legard and Meyer 1973).

Vegetation About half of the area is dominated by mature Douglas-fir forests, the other half is primarily 20-year old managed second growth Douglas-fir.

Ecosystem There is one major potential vegetation zone and one vegetation community for this area according to classification systems by Bailey (1976) and Kuchler (1966). The vegetation zone is the Pacific Forest (M2410) zone. The vegetative community is Pacific silver fir/Douglas-fir (*Abies-Pseudotsuga*) forest (003).

Current Uses The entire area is classified in the 1977 Forest Land Management Plan as General Forest and is managed with an emphasis on timber production. Approximately half of the area was clear-cut in the late 1960s. Forest Trail 3543 goes to the Wilderness viewpoint of Rainbow Falls.

Appearance The area is basically flat, the east and west portions have an unbroken forest of old-growth Douglas-fir and the center section is made up of young Douglas-fir about 20 years old.

Surroundings The southern boundary adjoins the Three Sisters Wilderness. To the west, north, and east are two large seed orchards and Foley Ridge, an area intensively managed for timber production.

Capability

Manageability and Boundaries The plantations have altered the natural processes and eliminated its natural character.

Natural Integrity About 50% of the area has had a disruption to its natural processes. Evidence of harvesting activities includes skid roads and old stumps.

Natural Appearance The area would appear natural to some, but many would perceive past activities.

Opportunity for Solitude Topographic screening is poor and vegetative screening is good. Offsite intrusions (Foley Ridge Road and Foley Seed Orchard) and the limited size of the area limits opportunity for solitude.

Opportunity for Primitive Recreation There is little diversity, with the exception of two different aged timber stands. The dense stand of young Douglas-fir is not suitable for foot travel. There is a trail that goes to the Rainbow Falls Viewpoint.

Special Features The area contains only common features. No cultural resource features or federally listed endangered or threatened species are known to be present.

Availability

Resource Potential

Wildlife Resource The Rainbow Falls roadless area supports resident deer and elk by providing hiding and thermal cover adjacent to clearcut forage areas. The area is a transition zone between summer and winter range, and receives moderate use throughout the year, depending on weather conditions.

Recreation Resource Capacity estimates indicate that this area could provide 23 Recreation Visitor Days (RVDs) of Semiprimitive recreation use. No potential trail locations or developed recreation sites have been identified.

Timber Resource The roadless area includes about 21 acres of land suitable for growing timber under managed conditions. Stands of mature Douglas-fir and true firs occupy the area representing about one million board feet. If stands are converted to a managed condition, biological potential yield will be 2,602 cubic feet per year at culmination of mean annual increment. Site productivity ranges from Class IV to Class V. The remaining 21 acres are unsuitable.

Management Consideration

Fire Catastrophic fire frequency is 250-600 years. No known fire activity has occurred recently.

Need

Nearby Wilderness and Its Use The Rainbow Falls roadless area is adjacent to the the Three Sisters Wilderness (283,593 acres). Refer to Chapter III for the amount of use these Wildernesses receive.

Distance from Population Centers The area is approximately 55 miles by highway to the east of Eugene, Oregon, and 65 miles northwest of Bend, Oregon.

Interest by Proponents The Rainbow Falls roadless area generated a moderate amount of interest with 85% of the responses favoring inclusion of the roadless area into the inventory.

Environmental Consequences

As a consequence of implementing any of the proposed Alternatives there will be effects on the Rainbow Falls roadless area. In all Alternatives 100% of this area will be affected by road construction and timber harvest. As a result of this development, uses dependent on roadless conditions--such as semiprimitive recreation--will not be provided in portions of the area. Implementation of proposed management activities associated with all Alternatives would alter the suitability of this area for future Wilderness consideration. However, portions of this area contiguous to the Three Sisters Wilderness would remain suitable for consideration as Wilderness additions in the next cycle of Forest planning. Figure C-17-2 illustrates how this area has been allocated in each Alternative.

Based on the amount and distribution of management areas assigned to the Rainbow Falls roadless area, an array of goods and services are provided. Emphasis on priced commodities such as wood products are provided in Alternatives NC, A, K, J, D, and W. Emphasis on amenity values such as visual quality are provided in Alternative L. The amounts of other goods and services to be provided from the area for each Alternative are illustrated in Figure C-17-3. Additional information regarding the environmental consequences of the activities associated with these goods and services is located in Chapter IV of this FEIS.

Table T314. Management Area Acreage of Alternatives (C-17-2)

Management Areas	Alternatives						
	NC (No Change)	K (WFC)	A (No Action)	J (DEIS-PA)	W (PA)	D (Wildlife)	L (ONRC)
1 Wilderness							
Management Area 1a	--	--	--	--	--	--	--
Management Area 1b	--	--	--	--	--	--	--
Management Area 1c	--	--	--	--	--	--	--
Management Area 1d	--	--	--	--	--	--	--
2 Oregon Cascades Recreation Area							
Management Area 2a	--	--	--	--	--	--	--
Management Area 2b	--	--	--	--	--	--	--
3 Experimental Forest							
Management Area 3	--	--	--	--	--	--	--
4 Research Natural Area							
Management Area 4	--	--	--	--	--	--	--
5 Special Interest Area							
Management Area 5a	--	--	--	--	--	--	--
Management Area 5b	--	--	--	--	--	--	--
6 Wild and Scenic River							
Management Area 6a	--	--	--	--	--	--	--
Management Area 6b	--	--	--	--	--	--	--
Management Area 6c	--	--	--	--	--	--	--
7 Old-Growth Grove							
Management Area 7	--	--	--	--	--	--	--
8 T & E Species							
Management Area 8	--	--	--	--	--	--	--
9 Special Habitat ¹							
Management Area 9a	--	--	--	--	--	--	--
Management Area 9b	--	--	--	--	--	--	--
Management Area 9c	--	--	--	--	--	--	--
Management Area 9d	--	--	--	--	--	--	--
10 Dispersed Recreation							
Management Area 10a	--	--	--	--	--	--	--
Management Area 10b	--	--	--	--	--	--	--
Management Area 10c	--	--	--	--	--	--	--
Management Area 10d	--	--	--	--	--	--	--
Management Area 10e	--	--	--	--	--	--	--
Management Area 10f	--	--	--	--	--	--	--

Management Areas	NC (No Change)	K (WFC)	A (No Action)	J (DEIS-PA)	W (PA)	D (Wildlife)	L (ONRC)
11 Scenic							
Management Area 11a	--	--	--	--	--	--	--
Management Area 11b	--	--	--	--	--	--	--
Management Area 11c	--	--	--	--	--	--	21
Management Area 11d	--	--	--	--	--	--	--
Management Area 11e	--	--	--	--	--	--	21
Management Area 11f	--	--	--	--	--	--	--
12 Developed Recreation							
Management Area 12a	--	--	--	--	--	--	--
Management Area 12b	--	--	--	--	--	--	--
13 Special and Ad- ministrative Use							
Management Area 13a	--	--	--	--	--	--	--
Management Area 13b	--	--	--	--	--	--	--
14 General Forest							
Management Area 14a	43	43	43	43	43	43	--
15 Riparian ²							
Management Area 15	*	*--	*--	*--	--	--	--

¹ Acres of network sites that overlap with other no harvest management areas are not included in MA9a, 9b, 9c acres.

² Only alternatives with acres assigned to no harvest prescriptions for riparian have acres allocated to MA15. In alternatives K, A, and J riparian acres follow Forest-wide standards and guidelines for riparian harvest rates. Riparian acres in NC are distributed throughout other management areas.

**Table C-17-3. Rainbow Falls Roadless Area
Quantifiable Resources Outputs, Environmental Effects, and Activities by Alternative**

		Alternatives						
Output, Effects, or Activity	Unit of Measure	NC	K	A	J	W	D	L
Recommended Wilderness Recreation Use 1st Decade Area Recommended for Wilderness	RVDs	--	--	--	--	--	--	--
	Acres	--	--	--	--	--	--	--
Nonwilderness Dispersed Recreation Use in the 1st Decade								
Semiprimitive Nonmotorized	RVDs	--	--	--	--	--	--	--
	Acres	--	--	--	--	--	--	--
Semiprimitive Motorized	RVDs	--	--	--	--	--	--	--
	Acres	--	--	--	--	--	--	--
Roaded Natural	RVDs	--	--	--	--	--	--	593
	Acres	--	--	--	--	--	--	43
Roaded Modified	RVDs	171	171	171	171	171	171	--
	Acres	43	43	43	43	43	43	--
Trails								
Existing Trails								
Full Protection Level	Miles	--	--	--	--	--	--	--
Moderate Protection Level	Miles	--	--	--	--	--	--	--
Low Protection Level	Miles	--	--	--	--	--	--	--
Potential Trails								
Full Protection Level	Miles	--	--	--	--	--	--	--
Moderate Protection Level	Miles	--	--	--	--	--	--	--
Low Protection Level	Miles	--	--	--	--	--	--	--
Visual Quality Objectives								
Preservation	Acres	--	--	--	--	--	--	--
Retention	Acres	--	--	--	--	--	--	21
Partial Retention	Acres	--	--	--	--	--	--	21
Modification	Acres	--	--	--	--	--	--	--
Maximum Modification	Acres	43	43	43	43	43	43	--
1st Decade								
Road Construction	Miles	--	0.1	0.1	0.1	0.1	0.0	0.1
Area Harvested	Acres	--	5.0	4.0	12.0	6.0	5.0	--
Programmed Timber Harvest	MBF	--	42	34	109	54	79	15
Area Remaining Undeveloped	%	--	62	69	13	55	65	--
Lands by Timber Yield Levels								
Full Yield (95-100%)	Acres	21	21	21	21	21	21	--
75-94% of Full Yield	Acres	--	--	--	--	--	--	--
50-74% of Full Yield	Acres	--	--	--	--	--	--	--
30-49% of Full Yield	Acres	--	--	--	--	--	--	21

Mosquito Creek - 406 Acres

Description

History The Mosquito Creek roadless area was considered for Wilderness in the 1977 Forest Land Management Plan. The United States Congress considered the area for Wilderness in the Oregon Wilderness Act of 1984. They released all 491 acres for multiple-use management in the Oregon Wilderness Act of 1984. Since the release of these lands in 1984, approximately 85 acres have been affected by development activities.

Location and Access T.17S., R.6E. The area is approximately 50 miles east of Eugene, Oregon, situated along the boundary of the Three Sisters Wilderness approximately 10 miles southeast of McKenzie Bridge. Forest Road 1993 accesses the west end of the roadless area and Horse Creek Road (Forest Road 2638).

Geography and Topography The Mosquito Creek roadless area is situated near the break of the High Cascades and Western Cascades Geographic Provinces and is characterized by the steep, moderately dissected terrain typical of lands in the Western Cascades. The area is situated along Horse Creek on the east and Mosquito Creek on the south. The elevations range from 2,400 feet at Horse Creek to 4,800 feet at a point along Forest Road 1993.

Soil The area is made up of soils that are prone to severe surface erosion, droughty on south slopes, stable, and may be locally low in fertility. There are about 43 acres that have potential for severe surface erosion. For more soil information refer to *Willamette National Forest Soil Resource Inventory* (Legard and Meyer 1973).

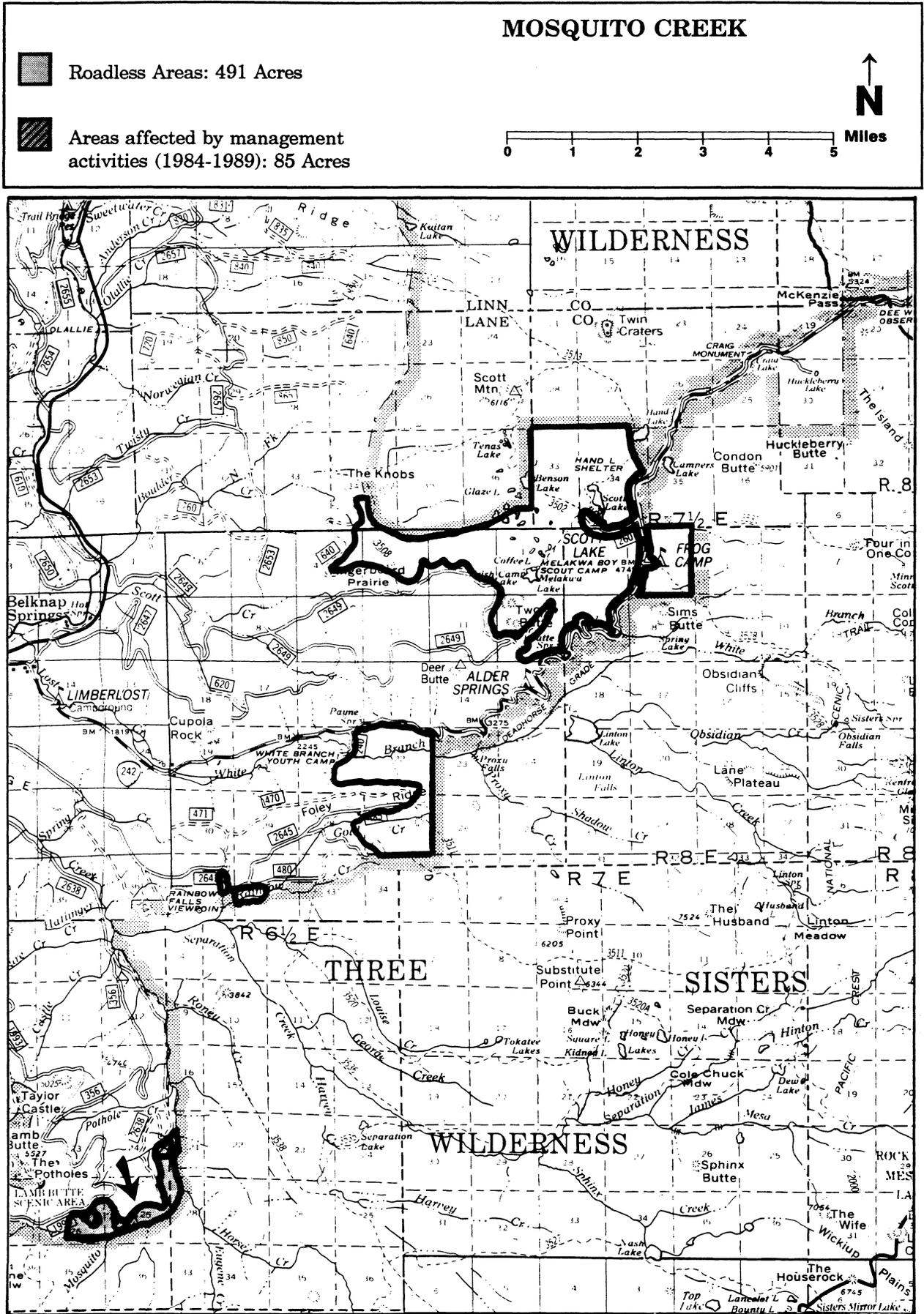
Vegetation About half of the area is dominated by dense old-growth and second growth Douglas-fir forests.

Ecosystem There is one major potential vegetation zone and one vegetation community for this area according to classification systems by Bailey (1976) and Kuchler (1966). The vegetation zone is the Pacific Forest (M2410) zone. The vegetative community is Pacific silver fir/Douglas-fir (*Abies-Pseudotsuga*) forest (003).

Current Uses The entire area is classified in the 1977 Forest Land Management Plan as General Forest and is managed with an emphasis on timber production. Since this area was inventoried in 1984 management activities are estimated to have affected 16 acres of the area.

Appearance The area appears natural away from the roads and clearcuts.

Figure C-18-1



Surroundings The southern boundary adjoins the Three Sisters Wilderness. To the west and north are clearcuts which includes area intensively managed for timber production. The Horse Creek corridor is managed for emphasis of scenery in the foreground.

Capability

Manageability and Boundaries The boundaries, located on nonconforming developments, are easily managed, and provide access to the area.

Natural Integrity As of 1985, the area is pristine with no development.

Natural Appearance The area would appear natural to most forest visitors.

Opportunity for Solitude Topographic screening is good and vegetative screening is dense. Offsite intrusions from the roads and the limited size of the area limits opportunity for solitude. Forest Road 1993 also accesses other popular recreation areas such as Quaking Aspen Swamp Botanical Area, Lamb Butte Scenic Area, and Ollalie Ridge Natural Area.

Opportunity for Primitive Recreation There is little diversity, with the exception of two different aged timber stands. The dense stand and steep slopes provides for cross country hiking.

Challenging Experience Cross country hiking through steep dense forests without any facilities is the most challenging experience.

Special Features The area contains only common features. No cultural resource features or federally listed endangered or threatened species are known to be present.

Availability

Resource Potential

Wildlife Resource The Mosquito Creek roadless area supports a moderate amount of big game and upland birds in the summer. Raptors forage in the grass and rock openings on the steep south-facing slopes. The area is utilized by spotted owls for foraging. The undisturbed vegetation along Horse and Mosquito creeks maintain optimum water quality for resident and anadromous fish. Management for later successional stages would maintain these conditions.

Recreation Resource Capacity estimates indicate that this area could provide 265 Recreation Visitor Days (RVDs) of Semiprimitive recreation use. No potential trail locations or developed recreation sites have been identified.

Timber Resource The roadless area includes about 299 acres of land suitable for growing timber under managed conditions. Stands of mature Douglas-fir occupy the area representing about 14 million board feet. If stands are converted to a managed condition, biological potential yield will be 44,000 cubic feet per year at culmination of mean annual increment. Site productivity ranges from Class IV to Class V. The remaining area is unsuitable.

Management Considerations

Fire Catastrophic fire frequency is 250-600 years. No known fire activity has occurred recently.

Need

Nearby Wilderness and Its Use The Mosquito Creek roadless area is adjacent to the Three Sisters Wilderness (283,593 acres). Refer to Chapter III for the amount of use these Wildernesses receive.

Distance from Population Centers The area is approximately 70 miles by road to the east of Eugene, Oregon.

Interest by Proponents The Mosquito Creek roadless area generated no responses for this inventory although responses concerning all areas in general may be applicable. This generated a high interest level with 67% of the responses favoring inclusion into the roadless inventory.

Environmental Consequences

As a consequence of implementing any of the proposed Alternatives there will be effects on the Mosquito Creek roadless area. In Alternatives NC, A, K, D, W, and J, 95 to 100% of this area will be affected by road construction and timber harvest. As a result of this development, uses dependent on roadless conditions--such as semiprimitive recreation--will not be provided in portions of the area. Implementation of proposed management activities associated with all Alternatives, except Alternative L, would alter the suitability of this area for future Wilderness consideration. However, portions of this area contiguous to the Three Sisters Wilderness would remain suitable for consideration as Wilderness additions in the next cycle of Forest planning. Alternative L maintains the option of future Wilderness consideration for this area. Figure C-18-2 illustrates how this area has been allocated in each Alternative.

Based on the amount and distribution of management areas assigned to the Mosquito Creek roadless area, an array of goods and services are provided. Emphasis on priced commodities such as wood products are provided in Alternatives NC, A, K, D, W, and J. Emphasis on amenity values such as dispersed recreation opportunities, high visual quality, and old-growth habitat are provided in Alternative L. The amounts of other goods and services to be provided from the area for each Alternative are illustrated in Figure C-18-3. Additional information regarding the environmental consequences of the activities associated with these goods and services is located in Chapter IV of this FEIS.

Table T314. Management Area Acreage of Alternatives (C-18-2)

Management Areas	Alternatives						
	NC (No Change)	K (WFC)	A (No Action)	J (DEIS-PA)	W (PA)	D (Wildlife)	L (ONRC)
1 Wilderness							
Management Area 1a	--	--	--	--	--	--	--
Management Area 1b	--	--	--	--	--	--	277
Management Area 1c	--	--	--	--	--	--	--
Management Area 1d	--	--	--	--	--	--	--
2 Oregon Cascades Recreation Area							
Management Area 2a	--	--	--	--	--	--	--
Management Area 2b	--	--	--	--	--	--	--
3 Experimental Forest							
Management Area 3	--	--	--	--	--	--	--
4 Research Natural Area							
Management Area 4	--	--	--	--	--	--	--
5 Special Interest Area							
Management Area 5a	--	--	--	--	--	--	--
Management Area 5b	--	--	--	--	--	--	--
6 Wild and Scenic River							
Management Area 6a	--	--	--	--	--	--	--
Management Area 6b	--	--	--	--	--	--	--
Management Area 6c	--	--	--	--	--	--	--
7 Old-Growth Grove							
Management Area 7	--	--	--	--	--	--	--
8 T & E Species							
Management Area 8	--	--	--	--	--	--	--
9 Special Habitat ¹							
Management Area 9a	--	--	--	--	--	--	--
Management Area 9b	--	--	--	--	--	--	--
Management Area 9c	--	--	--	--	--	--	--
Management Area 9d	--	--	--	--	--	--	--
10 Dispersed Recreation							
Management Area 10a	--	--	--	--	--	--	--
Management Area 10b	--	--	--	--	--	--	--
Management Area 10c	--	--	--	--	--	--	--
Management Area 10d	--	--	--	--	--	--	--
Management Area 10e	21	--	21	--	21	--	--
Management Area 10f	--	--	--	--	--	--	--

Management Areas	NC (No Change)	K (WFC)	A (No Action)	J (DEIS-PA)	W (PA)	D (Wildlife)	L (ONRC)
11 Scenic							
Management Area 11a	--	--	--	--	--	--	--
Management Area 11b	--	--	--	--	--	--	--
Management Area 11c	--	--	--	--	--	--	--
Management Area 11d	107	--	107	--	--	--	--
Management Area 11e	--	--	--	--	--	--	--
Management Area 11f	--	--	--	--	--	64	107
12 Developed Recreation							
Management Area 12a	--	--	--	--	--	--	--
Management Area 12b	--	--	--	--	--	--	--
13 Special and Ad- ministrative Use							
Management Area 13a	--	--	--	--	--	--	--
Management Area 13b	--	--	--	--	--	--	--
14 General Forest							
Management Area 14a	277	384	277	384	363	320	--
15 Riparian ²							
Management Area 15	*	21	*--	21	21	21	21

¹ Acres of network sites that overlap with other no harvest management areas are not included in MA9a, 9b, 9c acres.

² Only alternatives with acres assigned to no harvest prescriptions for riparian have acres allocated to MA15. In alternatives K, A, and J riparian acres follow Forest-wide standards and guidelines for riparian harvest rates. Riparian acres in NC are distributed throughout other management areas.

**Table C-18-3. Mosquito Creek Roadless Area
Quantifiable Resources Outputs, Environmental Effects, and Activities by Alternative**

		Alternatives						
Output, Effects, or Activity	Unit of Measure	NC	K	A	J	W	D	L
Recommended Wilderness Recreation Use 1st Decade Area Recommended for Wilderness	RVDs	--	--	--	--	--	--	--
	Acres	--	--	--	--	--	--	277
Nonwilderness Dispersed Recreation Use in the 1st Decade								
Semiprimitive Nonmotorized	RVDs	--	--	--	--	--	--	--
	Acres	21	--	21	--	21	--	--
Semiprimitive Motorized	RVDs	--	--	--	--	--	--	--
	Acres	--	--	--	--	--	--	--
Roaded Natural	RVDs	741	247	741	247	247	741	741
	Acres	107	21	107	21	21	85	128
Roaded Modified	RVDs	285	475	285	475	475	285	--
	Acres	277	384	277	384	363	320	--
Trails								
Existing Trails								
Full Protection Level	Miles	--	--	--	--	--	--	--
Moderate Protection Level	Miles	--	--	--	--	--	--	--
Low Protection Level	Miles	--	--	--	--	--	--	--
Potential Trails								
Full Protection Level	Miles	--	--	--	--	--	--	--
Moderate Protection Level	Miles	--	--	--	--	--	--	--
Low Protection Level	Miles	--	--	--	--	--	--	--
Visual Quality Objectives								
Preservation	Acres	21	--	21	--	21	--	277
Retention	Acres	--	--	--	--	--	64	107
Partial Retention	Acres	107	21	107	21	21	21	21
Modification	Acres	--	--	--	--	--	--	--
Maximum Modification	Acres	277	384	277	384	363	320	--
1st Decade								
Road Construction	Miles	--	0.5	0.2	1.0	0.5	0.5	0.1
Area Harvested	Acres	--	66	49	167	69	66	--
Programmed Timber Harvest	MBF	--	585	447	1,528	643	1,111	60
Area Remaining Undeveloped	%	--	49	63	100	47	49	--
Lands by Timber Yield Levels								
Full Yield (95-100%)	Acres	171	277	171	277	256	235	--
75-94% of Full Yield	Acres	107	21	107	21	--	--	--
50-74% of Full Yield	Acres	--	--	--	--	--	64	--
30-49% of Full Yield	Acres	--	--	--	--	--	--	85

French Pete (A) - 1,643 Acres

Description

History The French Pete roadless area was considered for Wilderness by the United States Congress. They released 1,728 acres for multiple-use management in the Oregon Wilderness Act of 1984. Since the release of these lands in 1984, approximately 85 acres have been affected by development activities.

The South Fork Corridor Task Force, a group consisting of representatives from several environmental organizations and Willamette National Forest officials, has been working on proposed management options which would protect the scenic and recreational quality of the area and limit commercial timber harvest. All of the areas inventoried as the French Pete unroaded area are within the South Fork Corridor Area.

Location and Access Segment "A" includes a series of narrow strips of land between the present boundary of the Three Sisters Wilderness, and several Forest Roads including 1993, 1993641, 19, 19500, and 19534. The area is about 12 miles southeast of Blue River on the Blue River Ranger District stretching from East Fork Creek in T.17S., R.5E., to Dutch Oven Campground at T.18S., R.5E.

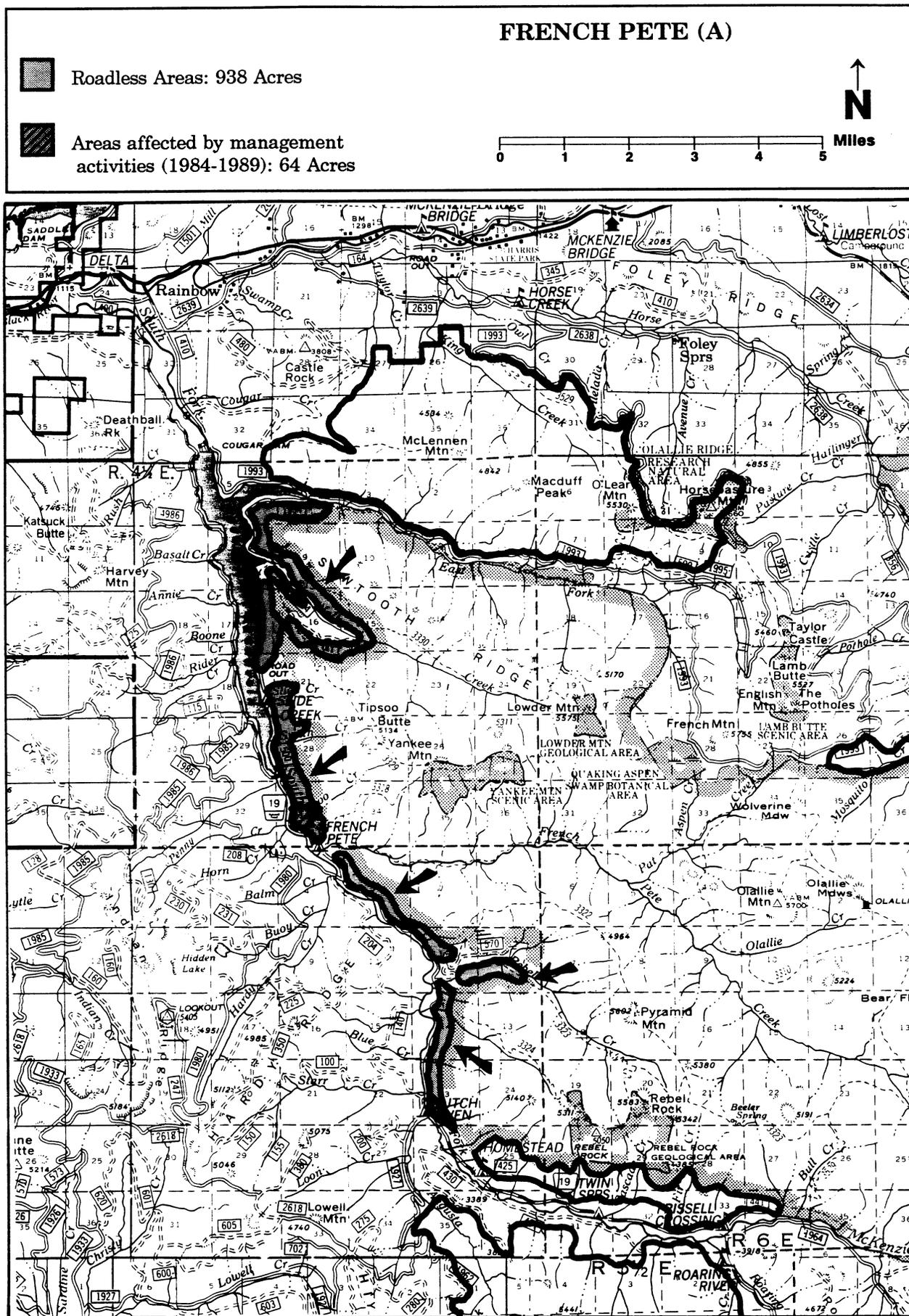
Geography and Topography The landform in Segment "A" is steep and moderately dissected by major stream channels and numerous smaller creeks and draws. Narrow benches of gentle slopes occupy some of the lower roadside areas; however, their number is limited. Elevations range from 2,000 feet on the north end to 2,400 feet on the south end. Where the boundary deviates up Rebel Creek and Walker Creek elevations are closer to 3,000 feet.

Soil Soils are thin and rocky on the steeper portions while modest accumulations of deeper, more fertile soil occupy the lower benches. There are about 235 acres that have potential for severe surface erosion; and approximately 21 acres of potentially severe surface erosion and unstable soil. For more soil information refer to *Willamette National Forest Soil Resource Inventory* (Legard and Meyer 1973).

Vegetation The major plant community is large diameter Douglas-fir second growth with associated western hemlock and western red cedar. Numerous pockets of old-growth Douglas-fir and western hemlock are intermixed, especially in the northern parcels. The southern parcels are typically second growth Douglas-fir.

Ecosystem Type There is one major potential vegetation zone and one vegetation community for this area according to classification systems by Bailey (1976) and Kuchler (1966). The vegetation zone is the Pacific Forest (M2410) zone. The vegetative community is Pacific silver fir/Douglas-fir (*Abies-Pseudotsuga*) forest (003).

Figure C-19a-1



Current Uses The 1977 Land Management Plan for the Willamette National Forest allocated most of the land to Scenic Influence I and Scenic Influence II. Recreation use on the east side of the roads is generally light. The steep nature of the hillside limits access. Past management has included several regeneration harvest units. Additionally, numerous roadside salvage harvests have occurred adjacent to all boundary roads and on virtually all of the flatter benches. Since this area was inventoried in 1984 management activities are estimated to have affected 57 acres of the area.

Appearances The appearance is a mature Douglas-fir forest and includes large and very large diameter Douglas-fir mixed with western hemlock and western red cedar. Immediately adjacent to the roads, where sunlight penetrates to the ground, the understory includes heavy brush consisting of rhododendron, vine maple, salal and Oregon grape. Snags and downed logs have been removed in salvage logging operations. Away from the roads, sunlight is reduced, producing a cool darkened woodland with minor amounts of vegetation but considerable quantities of dead and down logs. Patches of hardwoods such as maple and alder are scattered through the area where windthrows have created small openings in the canopy. Slopes are steep and broken by many small streams and draws. The ground is covered by litter and scattered brush, as well as small trees of shade tolerant varieties. Numerous game trails lace the ridges and terrain breaks where movement is easier.

Attractions The area offers an old-growth forest with pleasant views to motorists from Forest Road 19 (Aufderheide Forest Drive).

Capability

Manageability and Boundaries The boundaries described are easily and readily identified on the ground. Human intrusions could be controlled somewhat with exclusions of salvage operations and firewood cutting, making manageability less difficult.

Natural Integrity Salvage logging has both changed the canopy character, variety of tree sizes present, and removed dead logs and snags.

Natural Appearance Away from the immediate roadside zone there are no noticeable changes in natural appearance. Even within the roadside zone, where limited timber harvest has occurred, evidence is slight and only the most knowledgeable observer would notice the changes.

Opportunity for Solitude Diversity of topography offers screening potential in at least half the area, but is limited in the remainder. This is due primarily to the location adjacent to the existing Three Sisters Wilderness. Offsite intrusions of highway noise from Forest Road 19 are permanent and close.

Opportunity for Primitive Recreation The opportunity for this type of experience is moderate to high due mainly to the proximity of the Three Sisters Wilderness. There are no developed facilities in the area, with all maintained trails and trailheads in adjacent roaded areas.

Special Features Numerous sites and isolated finds have been identified along the South Fork of the McKenzie River. No federally listed endangered or threatened plants are known to be present. Bald eagles have been sighted in the area.

Availability

Resource Potentials

Recreation Resource Capacity estimates indicate that this area could provide 197 Recreation Visitor Days (RVDs) of Semiprimitive recreation use. Potential developed recreation sites have been identified.

Wildlife Resource The French Pete (A) roadless area includes critical winter range for deer and elk. More than 100 elk are found wintering along the South Fork of the McKenzie River adjacent to the Three Sisters Wilderness. The northern portion borders Cougar reservoir and is potential bald eagle nest site habitat. Frequent bald eagle sightings have been reported during summer and winter months for the past several years. The South Fork of the McKenzie River and Cougar Reservoir are popular for fishing during the summer months. Timber harvesting would decrease the small corridor of thermal cover for deer and elk provided by the older aged stands. To improve thermal cover in the winter range, stands should be managed to produce large trees with the multi-canopy understory.

Timber Resource The roadless area includes about 1,194 acres of land suitable for growing timber under managed conditions. Site productivity classes range from III to V. The remaining area is unsuitable. Stands of mature Douglas-fir occupy the area representing about 56 million board feet. If stands are converted to a managed condition, biological potential yield will be 174,000 cubic feet per year at culmination of mean annual increment.

Minerals and Energy Resource Geothermal exploration was conducted by the State of Oregon, Department of Geology and Mineral Industries in 1980 and 1981 including test drilling adjacent to Forest Road 1994 in the Walker Creek vicinity.

Land Use Authorizations A special use permit exists for a buried powerline corridor adjacent to Forest Road 19. Most of the corridor will be within the road right-of-way but some may extend into the roadless area.

Cultural Resource This area has a very high potential for cultural resources. Numerous sites and isolated finds have been identified along the South Fork of the McKenzie River. The area was used heavily during prehistoric times for camping, fishing, and hunting. It is likely that additional undiscovered sites are located at nearly every major stream confluence and along the river. The area was also used heavily during historic times by shepherders on their way to the high country.

Management Consideration Long term fire history suggests that this area was periodically subjected to numerous small fires over an extended time resulting in a mosaic of large fire resistant Douglas-fir, intermixed with younger Douglas-fir and western hemlock. More recent history indicates a scattered incidence of small, human caused, roadside fires, rapidly suppressed and not contributing to continued successional development. Current fuel loadings are light, ranging from 20 to 45 tons per acre.

Need

Nearby Wilderness and Its Use The French Pete roadless area is adjacent to the the Three Sisters Wilderness (283,539 acres). Refer to Chapter III for the amount of use these Wildernesses receive.

Distance from Population Centers The area is approximately 45 miles by highway to the east of Eugene, Oregon.

Interest by Proponents The French Pete roadless area generated a high amount of interest which led to the formation of a citizens group. This group, The South Fork Corridor Task Force, was discussed earlier in the History section.

Environmental Consequences

As a consequence of implementing any of the proposed Alternatives there will be effects on the French Pete (A) roadless area. In Alternatives NC, A, L, and K, 88 to 100% of this area will be affected by road construction and timber harvest. Alternatives J, L, and W will develop 45% of the area and D develops 4 percent. As a result of this development, uses dependent on roadless conditions--such as

recreation, will not be provided in portions of the area. Implementation of proposed management activities associated with all Alternatives, except Alternative D, would alter the suitability of this area for future Wilderness consideration. However, portions of this area contiguous to the Three Sisters Wilderness would remain suitable for consideration as Wilderness additions in the next cycle of Forest planning. Alternative D maintains the option of future Wilderness consideration for most of the area. Figure C-19a-2 illustrates how this area has been allocated in each Alternative.

Based on the amount and distribution of management areas assigned to the French Pete (A) roadless area, an array of goods and services are provided. Emphasis on priced commodities such as wood products are provided in Alternatives NC, A, L, and K. Emphasis on amenity values such as dispersed recreation opportunities, high visual quality, and old-growth habitat are provided in Alternatives J, W, and D. The amounts of other goods and services to be provided from the area for each Alternative are illustrated in Figure C-19a-3. Additional information regarding the environmental consequences of the activities associated with these goods and services is located in Chapter IV of this FEIS.

Table T314. Management Area Acreage of Alternatives (C-19a-2)

Management Areas	Alternatives						
	NC (No Change)	K (WFC)	A (No Action)	J (DEIS-PA)	W (PA)	D (Wildlife)	L (ONRC)
1 Wilderness							
Management Area 1a	--	--	--	--	--	--	--
Management Area 1b	--	--	--	--	--	--	--
Management Area 1c	--	--	--	--	--	--	--
Management Area 1d	--	--	--	--	--	--	--
2 Oregon Cascades Recreation Area							
Management Area 2a	--	--	--	--	--	--	--
Management Area 2b	--	--	--	--	--	--	--
3 Experimental Forest							
Management Area 3	--	--	--	--	--	--	--
4 Research Natural Area							
Management Area 4	--	--	--	--	--	--	--
5 Special Interest Area							
Management Area 5a	--	--	--	704	704	--	--
Management Area 5b	--	--	--	--	--	--	--
6 Wild and Scenic River							
Management Area 6a	--	--	--	--	--	--	--
Management Area 6b	--	--	--	--	--	--	--
Management Area 6c	--	--	--	--	--	--	--
7 Old-Growth Grove							
Management Area 7	--	--	--	--	--	--	107
8 T & E Species							
Management Area 8	--	--	--	--	--	--	--
9 Special Habitat ¹							
Management Area 9a	--	192	192	192	192	--	192
Management Area 9b	--	--	--	--	--	--	--
Management Area 9c	--	--	--	--	--	--	--
Management Area 9d	--	--	--	--	--	--	--
10 Dispersed Recreation							
Management Area 10a	--	--	--	--	--	--	--
Management Area 10b	--	--	--	--	--	--	--
Management Area 10c	--	--	--	--	--	1,578	--
Management Area 10d	--	--	--	--	--	--	--
Management Area 10e	--	--	--	--	--	--	--
Management Area 10f	--	--	--	--	--	--	--

Management Areas	NC (No Change)	K (WFC)	A (No Action)	J (DEIS-PA)	W (PA)	D (Wildlife)	L (ONRC)
11 Scenic							
Management Area 11a	--	--	--	277	--	--	--
Management Area 11b	--	704	--	--	--	--	--
Management Area 11c	--	--	--	--	256	--	341
Management Area 11d	277	--	213	--	--	--	--
Management Area 11e	--	--	--	--	--	--	405
Management Area 11f	1,045	--	896	405	277	43	171
12 Developed Recreation							
Management Area 12a	21	21	21	21	21	21	21
Management Area 12b	--	--	--	--	--	--	--
13 Special and Ad- ministrative Use							
Management Area 13a	--	--	--	--	--	--	--
Management Area 13b	--	--	--	--	--	--	--
14 General Forest							
Management Area 14a	299	384	256	--	--	--	--
15 Riparian ²							
Management Area 15	*	341	64	43	192	--	405

¹ Acres of network sites that overlap with other no harvest management areas are not included in MA9a, 9b, 9c acres.

² Only alternatives with acres assigned to no harvest prescriptions for riparian have acres allocated to MA15. In alternatives K, A, and J riparian acres follow Forest-wide standards and guidelines for riparian harvest rates. Riparian acres in NC are distributed throughout other management areas.

**Table C-19a-3. French Pete A Roadless Area
Quantifiable Resources Outputs, Environmental Effects, and Activities by Alternative**

		Alternatives						
Output, Effects, or Activity	Unit of Measure	NC	K	A	J	W	D	L
Recommended Wilderness Recreation Use 1st Decade Area Recommended for Wilderness	RVDs	--	--	--	--	--	--	--
	Acres	--	--	--	--	--	--	--
Nonwilderness Dispersed Recreation Use in the 1st Decade								
Semiprimitive Nonmotorized	RVDs	--	--	--	--	--	1,822	--
	Acres	--	--	--	--	--	1,578	--
Semiprimitive Motorized	RVDs	--	--	--	--	--	--	--
	Acres	--	--	--	--	--	--	--
Roaded Natural	RVDs	5,236	2,717	5,483	5,483	7,138	198	7,138
	Acres	1,344	555	1,386	1,365	1,642	64	1,642
Roaded Modified	RVDs	740	1,766	646	646	--	--	--
	Acres	299	1,088	256	277	--	--	--
Trails								
Existing Trails								
Full Protection Level	Miles	1.0	1.0	1.0	2.0	2.0	--	1.0
Moderate Protection Level	Miles	1.0	0.0	1.0	--	1.0	--	1.0
Low Protection Level	Miles	1.0	1.0	1.0	1.0	--	--	0.0
Potential Trails								
Full Protection Level	Miles	2.0	3.0	3.0	7.0	10.0	10.0	7.0
Moderate Protection Level	Miles	8.0	4.0	7.0	3.0	--	--	3.0
Low Protection Level	Miles	--	2.0	--	--	--	--	1.0
Visual Quality Objectives								
Preservation	Acres	--	192	192	896	896	--	299
Retention	Acres	1,045	--	896	405	277	1,621	576
Partial Retention	Acres	299	363	299	64	469	21	768
Modification	Acres	--	704	--	277	--	--	--
Maximum Modification	Acres	299	384	256	--	--	--	--
1st Decade								
Road Construction	Miles	--	2.0	1.0	1.0	0.2	--	0.4
Area Harvested	Acres	--	175	209	129	26	--	36
Programmed Timber Harvest	MBF	--	1,499	1,640	1,127	228	--	260
Area Remaining Undeveloped	%	--	66	61	76	95	--	93
Lands by Timber Yield Levels								
Full Yield (95-100%)	Acres	213	448	171	171	128	--	85
75-94% of Full Yield	Acres	149	363	128	--	43	--	--
50-74% of Full Yield	Acres	832	299	811	363	21	--	405
30-49% of Full Yield	Acres	--	--	--	--	--	--	128

French Pete (B) - 938 Acres

Description

History The French Pete roadless area was considered for Wilderness by the United States Congress. They released 1002 acres for multiple-use management in the Oregon Wilderness Act of 1984. Since the release of these lands in 1984, approximately 64 acres have been affected by development activities.

The South Fork Corridor Task Force, a group consisting of representatives from several environmental organizations and Willamette National Forest officials, is working on proposed management options which would protect the scenic and recreational quality and limit commercial timber harvest. All of the areas mapped as the French Pete unroaded area are within the South Fork Corridor Area.

Location and Access Segment "B" includes land between the Three Sisters Wilderness and a series of logging roads south of Rebel Rock in T.18S., R.5E. The area is about 20 miles southeast of Blue River on the Blue River Ranger District.

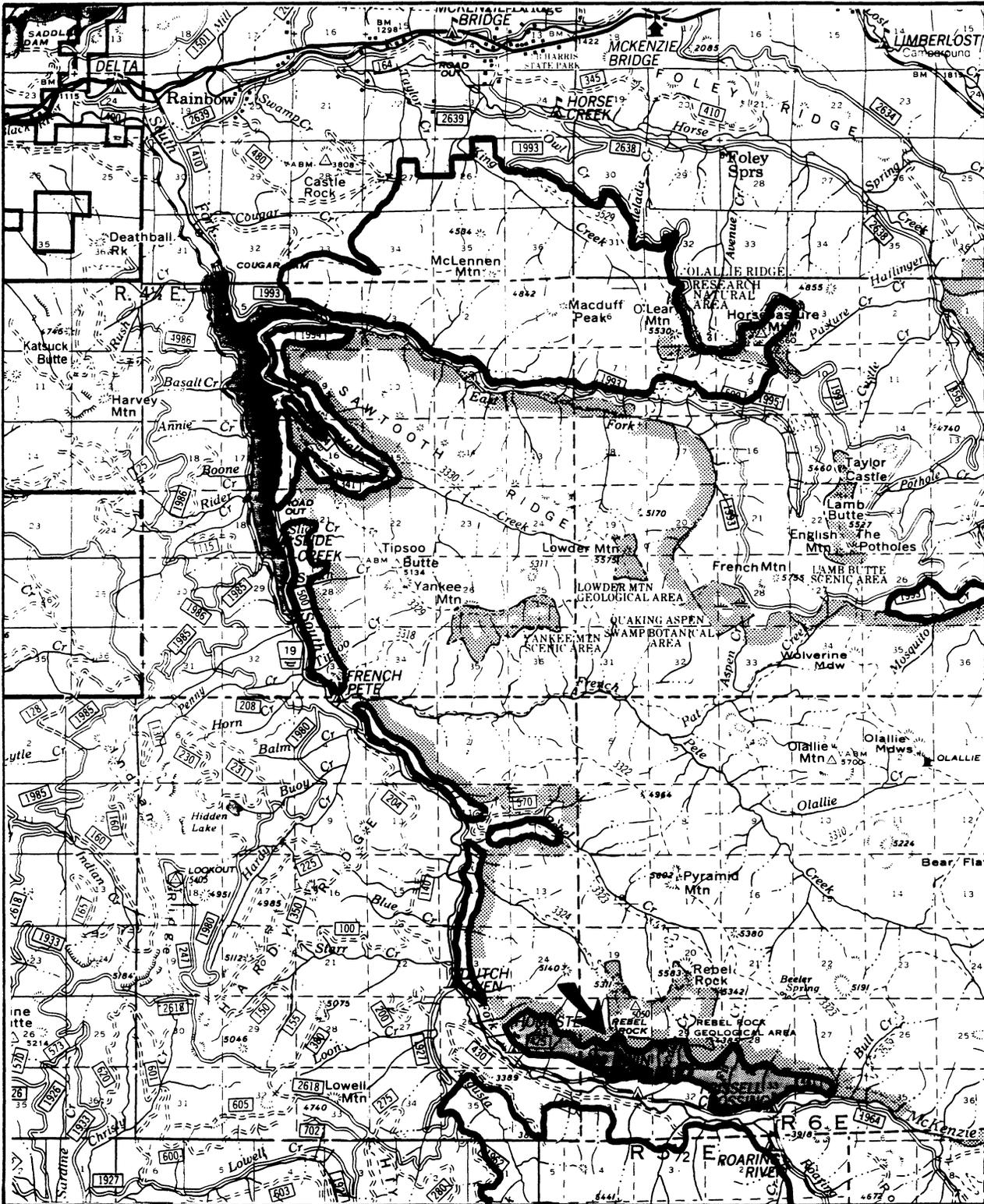
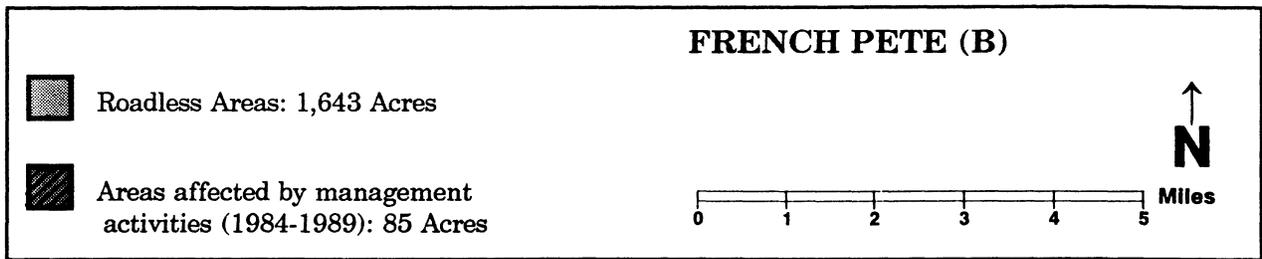
Geography and Topography The landform in Segment "B" is characterized by a broad, flat bench crossed by several sharply dissected stream channels. The northernmost edge rises sharply through a series of cliffs, rock outcrops, and steep rocky meadows into the Three Sisters Wilderness. Elevations range from 2,400 feet at the river on the west end to 3,000 feet near the boundary with the Wilderness on the east end.

Soil Soils are deep, mixed with river cobbles, and are generally fertile. The steeper portions are very thin, rocky soils intermingled with bare rock outcroppings and talus. There are about 213 acres that have potential for severe surface erosion. For more soil information refer to *Willamette National Forest Soil Resource Inventory* (Legard and Meyer 1973).

Vegetation Most of the flat benchland has been logged and reforested with plantations of Douglas-fir and ponderosa pine. These are well developed, now approaching commercial thinning size. The lower slopes of the hillsides have been harvested recently while the upper rocky slopes are stocked with native stands of small diameter Douglas-fir and sugar pine. Much of the rocky ground is not forested and is occupied by grassy meadows and brushland.

Ecosystem Type There is one major potential vegetation zone and one vegetation community for this area according to classification systems by Bailey (1976) and Kuchler (1966). The vegetation zone is the Pacific Forest (M2410) zone. The vegetative community is fir/hemlock (*Abies-Tsuga*) forest (004).

Figure C-19b-1



Current Uses The present Land Management Plan for the Willamette National Forest (1977) allocated most of the area to Scenic Influence II and in a lesser extent to General Forest. Recreation use by dispersed campers (mostly deer and elk hunters), and by firewood cutters is considered light. A lightly used, unimproved trailhead provides visitor access into the Three Sisters Wilderness via the Frissel Way Trail (3529). Several large regeneration harvest units are within the boundary. The area is laced with tractor skid roads and low standard truck roads, many with gravel surfacing. Since this area was inventoried in 1984 management activities are estimated to have affected 61 acres of the area.

Appearances The appearance is that of a managed commercial forest including dense plantations of small diameter Douglas-fir and pine, with a surrounding fringe of medium diameter Douglas-fir which has been commercially thinned.

Attractions The area has no particular attraction but does provide a view of Rebel Rock and the surrounding cliffs for visitors who choose to detour briefly from Forest Road 19 (Aufderheide Forest Drive).

Capability

Manageability and Boundaries The boundaries described are easily located and readily identified on the ground. If the roaded and logged portion is deleted, only a small fringe of land remains.

Natural Integrity Timber harvest and system roads throughout this segment have highly interrupted natural processes. Intensive timber management has replaced the natural process over most of the area. Dispersed recreation, unimproved roads, and trails are present.

Ponderosa pine introduced into the plantations is not a native species on this site. Additional species have been introduced for wildlife forage and for erosion control. The ceanothus population, while native, has been unnaturally increased by planting to improve wildlife forage.

Natural Appearance The roads and timber management activities are obvious to all visitors. The area is not natural in appearance.

Opportunity for Solitude Most of the roadless area has dense vegetation which screens people from one another, even within a quarter mile, but there is sufficient opening to permit travel and camping without undue concentration. There is offsite intrusion of highway noise from Forest Road 19, heavily used by both recreationists and commercial log haulers.

Opportunity for Primitive Recreation The opportunity for this type of experience is moderate to high, due to the proximity to the Three Sisters Wilderness. There are no developed facilities other than one minimally developed trailhead.

Special Features Numerous archeological sites and isolated finds have been identified along the South Fork of the McKenzie River. No federally listed endangered or threatened species are known to be present.

Availability

Resource Potentials

Recreation Resource Capacity estimates indicate that this area could provide 99 Recreation Visitor Days (RVDs) of Semiprimitive recreation use. Potential developed recreation sites have been identified.

Wildlife Resource The French Pete roadless area includes critical winter range for deer and elk. More than 100 elk are found wintering along the South Fork of the McKenzie River adjacent to the Three Sisters Wilderness. The South Fork of the McKenzie River is popular for fishing during the summer months. Timber harvesting would decrease the small corridor of thermal cover for deer and elk provided by the older aged stands. To improve thermal cover in the winter range, stands should be managed to produce large trees with the multi-canopy understory.

Timber Resource The roadless area includes about 533 acres of land suitable for growing timber under managed conditions. Site productivity ranges from Class III to Class V. The remaining area is unsuitable. Stands of mature Douglas-fir occupy the area representing about 18 million board feet. If stands are converted to a managed condition, biological potential yield will be 78,000 cubic feet per year at culmination of the mean annual increment.

Cultural Resource This area has a very high potential for cultural resources. Numerous sites and isolated finds have been identified along the South Fork of the McKenzie River. The area was used heavily during prehistoric times for camping, fishing, and hunting. It is likely that additional undiscovered sites are located at nearly every major stream confluence and along the river. The area was also used heavily during historic times by sheepherders on their way to the high country.

Management Considerations Fire history suggests that this area was periodically subjected to numerous small fires over an extended time resulting in a mosaic of different age classes. Current management, designed to protect the investment, has attempted to eliminate wildfire except as needed for management purposes.

Need

Nearby Wilderness and Its Use The French Pete roadless area is adjacent to the the Three Sisters Wilderness (283,539 acres) and is within six miles of the Waldo Wilderness (37,157 acres) which is south. Refer to Chapter III for the amount of use these Wildernesses receive.

Distance from Population Centers The area is approximately 55 miles by highway to the east of Eugene, Oregon.

Interest by Proponents The French Pete roadless area generated a high amount of interest which led to the formation of a citizens group. This group, The South Fork Corridor Task Force, was discussed earlier in the History section.

Environmental Consequences

As a consequence of implementing any of the proposed Alternatives there will be effects on the French Pete (B) roadless area. In Alternatives NC, A, K, and L, 95 to 100% of this area will be affected by road construction and timber harvest. As a result of this development, uses dependent on roadless conditions--such as semiprimitive recreation--will not be provided in portions of the area. Implementation of proposed management activities associated with Alternatives NC, A, K, and L, would alter the suitability of this area for future Wilderness consideration. However, portions of this area contiguous to the Three Sisters Wilderness would remain suitable for consideration as Wilderness additions in the next cycle of Forest planning. Alternatives W, D, and J maintain the option of future Wilderness consideration for the most of the area. Figure C-19b-2 illustrates how this area has been allocated in each Alternative.

Based on the amount and distribution of management areas assigned to the French Pete (B) roadless area, an array of goods and services are provided. Emphasis on priced commodities such as wood products are provided in Alternatives NC, A, K, and L. Emphasis on amenity values such as dispersed recreation opportunities, high visual quality, and old-growth habitat are provided in Alternatives W, D, and J. The amounts of other goods and services to be provided from the area for each Alternative are illustrated in Figure C-19b-3. Additional information regarding the environmental consequences of the activities associated with these goods and services is located in Chapter IV of this FEIS.

Table T314. Management Area Acreage of Alternatives (C-19b-2)

Management Areas	Alternatives						
	NC (No Change)	K (WFC)	A (No Action)	J (DEIS-PA)	W (PA)	D (Wildlife)	L (ONRC)
1 Wilderness							
Management Area 1a	--	--	--	--	--	--	--
Management Area 1b	--	--	--	--	--	--	--
Management Area 1c	--	--	--	--	--	--	--
Management Area 1d	--	--	--	--	--	--	--
2 Oregon Cascades Recreation Area							
Management Area 2a	--	--	--	--	--	--	--
Management Area 2b	--	--	--	--	--	--	--
3 Experimental Forest							
Management Area 3	--	--	--	--	--	--	--
4 Research Natural Area							
Management Area 4	--	--	--	--	--	--	--
5 Special Interest Area							
Management Area 5a	--	--	--	43	235	--	--
Management Area 5b	--	--	--	--	--	--	--
6 Wild and Scenic River							
Management Area 6a	--	--	--	--	--	--	--
Management Area 6b	--	--	--	--	--	--	--
Management Area 6c	--	--	--	--	--	--	--
7 Old-Growth Grove							
Management Area 7	--	--	--	--	--	--	43
8 T & E Species							
Management Area 8	--	--	--	--	--	--	--
9 Special Habitat ¹							
Management Area 9a	--	--	--	--	--	--	--
Management Area 9b	--	--	--	--	--	--	--
Management Area 9c	--	--	--	--	--	--	--
Management Area 9d	--	--	--	896	683	--	--
10 Dispersed Recreation							
Management Area 10a	--	--	--	--	--	--	--
Management Area 10b	--	--	--	--	--	--	--
Management Area 10c	--	--	--	--	--	939	--
Management Area 10d	--	--	--	--	--	--	--
Management Area 10e	--	--	--	--	--	--	--
Management Area 10f	--	--	--	--	--	--	--

Management Areas	NC (No Change)	K (WFC)	A (No Action)	J (DEIS-PA)	W (PA)	D (Wildlife)	L (ONRC)
11 Scenic							
Management Area 11a	--	--	--	--	--	--	--
Management Area 11b	--	43	--	--	--	--	--
Management Area 11c	--	--	--	--	--	--	789
Management Area 11d	43	--	43	--	--	--	--
Management Area 11e	--	--	--	--	--	--	64
Management Area 11f	85	--	85	--	--	--	--
12 Developed Recreation							
Management Area 12a	--	21	--	21	--	--	--
Management Area 12b	--	--	--	--	--	--	--
13 Special and Ad- ministrative Use							
Management Area 13a	--	--	--	--	--	--	--
Management Area 13b	--	--	--	--	--	--	--
14 General Forest							
Management Area 14a	811	832	768	--	--	--	--
15 Riparian ²							
Management Area 15	*	43	43	*--	--	--	43

¹ Acres of network sites that overlap with other no harvest management areas are not included in MA9a, 9b, 9c acres.

² Only alternatives with acres assigned to no harvest prescriptions for riparian have acres allocated to MA15. In alternatives K, A, and J riparian acres follow Forest-wide standards and guidelines for riparian harvest rates. Riparian acres in NC are distributed throughout other management areas.

**Table C-19b-3. French Pete B Roadless Area
Quantifiable Resources Outputs, Environmental Effects, and Activities by Alternative**

		Alternatives						
Output, Effects, or Activity	Unit of Measure	NC	K	A	J	W	D	L
Recommended Wilderness Recreation Use 1st Decade Area Recommended for Wilderness	RVDs	--	--	--	--	--	--	--
	Acres	--	--	--	--	--	--	--
Nonwilderness Dispersed Recreation Use in the 1st Decade								
Semiprimitive Nonmotorized	RVDs	--	--	--	--	--	2,121	--
	Acres	--	--	--	--	--	939	--
Semiprimitive Motorized	RVDs	--	--	--	--	--	--	--
	Acres	--	--	--	--	--	--	--
Roaded Natural	RVDs	1,482	667	1,902	8,076	8,076	--	8,076
	Acres	128	64	171	939	939	--	939
Roaded Modified	RVDs	2,638	2,942	2,468	--	--	--	--
	Acres	811	875	768	--	--	--	--
Trails								
Existing Trails								
Full Protection Level	Miles	--	0.0	--	0.0	0.0	--	--
Moderate Protection Level	Miles	0.0	--	0.0	--	--	--	0.0
Low Protection Level	Miles	--	--	--	--	--	--	--
Potential Trails								
Full Protection Level	Miles	--	--	--	--	--	--	--
Moderate Protection Level	Miles	--	--	--	--	--	--	--
Low Protection Level	Miles	--	--	--	--	--	--	--
Visual Quality Objectives								
Preservation	Acres	--	--	--	43	235	--	43
Retention	Acres	85	--	85	896	638	939	64
Partial Retention	Acres	43	64	85	--	21	--	832
Modification	Acres	--	43	--	--	--	--	--
Maximum Modification	Acres	811	832	768	--	--	--	--
1st Decade								
Road Construction	Miles	--	1.0	1.0	--	--	--	0.4
Area Harvested	Acres	--	81	101	--	--	--	28
Programmed Timber Harvest	MBF	--	692	788	--	--	--	197
Area Remaining Undeveloped	%	--	73	66	--	--	--	--
Lands by Timber Yield Levels								
Full Yield (95-100%)	Acres	363	384	341	--	--	--	320
75-94% of Full Yield	Acres	85	128	107	--	--	--	--
50-74% of Full Yield	Acres	85	--	85	--	--	--	149
30-49% of Full Yield	Acres	--	--	--	--	--	--	--

Roaring River - 2,048 Acres

Description

History The Roaring River roadless area was considered for Wilderness by the United States Congress. They released 2,410 acres for multiple use management in the Oregon Wilderness Act of 1984. Since the release of these lands in 1984, approximately 362 acres have been affected by development activities. Since the release of these lands in 1984, approximately 362 acres have been affected by development activities.

Location and Access The Roaring River roadless area is located about 24 miles southeast of Blue River on the Blue River Ranger District immediately adjacent to the Three Sisters Wilderness. This area may be found in T.19S., R.6E. The area is accessed by Forest Roads 1856 and 1922; and Forest Trails 3510 and 3307 (Roaring River Ridge Trail).

Geography and Topography The terrain is very steep and rocky in the northern half between the South Fork of the McKenzie River and Elk Creek, gradually flattening out to gentle rolling ridges along the southern portion of Roaring Ridge. Elevations range from 3,000 feet along the South Fork to 5,600 feet at the top of Roaring River Ridge.

Soil Soils range from shallow and rocky along the steep side slopes to deep and moderately fertile on the valley bottoms. The gentle benches along Roaring River Ridge include moderately deep ash derived soils of low fertility. There are about 555 acres that have potential for severe surface erosion. For more soil information refer to *Willamette National Forest Soil Resource Inventory* (Legard and Meyer 1973).

Vegetation The better soils support large diameter Douglas-fir and western hemlock, while the high elevation lands along Roaring River Ridge include smaller diameter lodgepole pine mixed with true firs and mountain hemlock.

Ecosystem Type There is one major potential vegetation zone and one vegetation community for this area according to classification systems by Bailey (1976) and Kuchler (1966). The vegetation zone is the Pacific Forest (M2410) zone. The vegetative community is Pacific silver fir/Douglas-fir (*Abies-Pseudotsuga*) forest (003).

Current Uses The 1977 Land Management Plan for the Willamette National Forest allocated most of this land to General Forest Management with special visual management corridors along access trails into the Three Sisters Wilderness. The low site land along Roaring River Ridge is considered marginal for timber production. Recreation use is moderate. Two trails crossing the roadless area, Elk Creek Trail 3510 and Roaring River Ridge Trail 3307, are fairly popular access routes into the Three Sisters Wilderness. The McBee Trail 3523 use is expected to increase as the new Box Canyon Horse Camp attracts more trail riders into the area. Since this area was inventoried in 1984 management activities are estimated to have affected 640 acres of the area.

Appearances The appearance changes markedly as a visitor climbs toward the Three Sisters Wilderness boundary. At the lower elevations, the landscape has the appearance of a mature second growth forest. Trees are medium to large diameter, primarily Douglas-fir and to a lesser extent, hemlock. They are regularly spaced, with a closed canopy reducing the amount of sunlight reaching the ground. Slopes are steep, and broken by many small streams and draws. The ground is covered by salal, Oregon grape, and vine maple, as well as smaller trees of shade tolerant varieties. Numerous game trails lace the ridges and terrain breaks where movement is easier.

As elevation increases, trees become smaller in size and more variety enters the stand including lodgepole pine, true fir, and mountain hemlock. The terrain becomes gentle and rolling as the high plateau is approached. The old pine stands at the southern edge contain large numbers of snags and spiketop trees. The canopy becomes more open, allowing sunlight to reach the ground. The surface vegetation changes with huckleberry and beargrass becoming the more common plants; small grassy meadows or marshes are occasionally encountered.

Surroundings The Roaring River Area is directly west and south of the Three Sisters Wilderness Area. Road corridors penetrate the area along the South Fork of the McKenzie River and Elk Creek. An additional road system has been built into the roadless area between Roaring River Ridge and Elk Creek. Extensive logging operations have taken place along the entire western edge, and new logging has been completed within the boundary throughout the northern half.

Attractions The Roaring River roadless area has no significant attractions within its borders. It does provide access to popular Wilderness attractions such as Reilly Meadows, McFarland and Smith lakes, and the Mink Lake Basin.

Capability

Manageability and Boundaries The boundaries described are easily identified and readily located on the ground. There are roads and harvested units within the area.

Natural Integrity Timber harvest in the northern half has altered the natural processes. Large and small clearcut units have changed the canopy characteristics and variety of tree sizes present and introduced other plant species through wildlife and erosion control plantings. Plant and animal species dependent on the closed canopy of large trees are reduced or eliminated in the harvested area, while other species preferring openings and earlier seral stages are increased. Slash treatment and fire control have changed the amount of woody debris and snag habitat available for small mammals and cavity nesting birds in and near the harvested units. Road cut and fill slopes contribute to increased erosion and sedimentation of downstream waterways. The natural processes have been interrupted.

Natural Appearance Newly constructed roads and the associated clearcut units are highly intrusive in appearance and are obvious to even the most casual observer. Even the smaller, patterned clearcuts intended to mimic natural openings can be identified as harvest units by knowledgeable visitors. This is especially obvious since the two popular trails pass through or are immediately adjacent to several units.

Opportunity for Solitude The Roaring River roadless area offers an opportunity for solitude partly due to its location adjacent to an existing Wilderness. This is offset somewhat by the obvious presence of timber management within the inventoried area. Opportunities for cross-country travel are limited in the north half but readily available in the south. The distance from the perimeter of the roadless area to the center of the Three Sisters Wilderness is in excess of eight miles.

Opportunity for Primitive Recreation The opportunity for this type of experience is relatively high due mainly to the proximity of an existing Wilderness as well as the lack of developed recreation sites and the low standard trail system currently in place.

Special Features The area contains mainly common features. Scattered findings of obsidian flakes indicate prehistoric use. No federally listed endangered or threatened species are known to be present.

Availability

Resource Potentials

Recreation Resource Capacity estimates indicate that this area could provide 1,373 Recreation Visitor Days (RVDs) of Semiprimitive recreation use. Potential trails have been identified and could provide access and disperse visitors in the area. No potential developed recreation sites have been identified.

Timber Resource The roadless area includes about 1,557 acres of land suitable for growing timber under managed conditions. Stands of mature Douglas-fir, true firs, lodgepole pine, and mountain hemlock occupy the area representing about 51 million board feet. If stands are converted to a managed condition, biological potential yield will be 188,000 cubic feet per year at culmination of mean annual increment. Site productivity ranges from Class IV to Class V. The remaining area is unsuitable.

Wildlife Resource Roaring River roadless area is used moderately by deer and elk as summer range. Timber harvesting would probably benefit game animals if proper cover conditions and road management were maintained.

Management Considerations

Fire Long-term fire history suggests that this area consistently has been burned by moderate size fires which maintained a mosaic of age classes and the presence of lodgepole pine. Current fuel loadings are variable, including very heavy tonnage in areas hit by insect and disease infestations.

Insects and Disease The southern half is heavily damaged by several disease organisms endemic to the area. Lodgepole pine suffers heavy loss from western gall rust, while the white pine population has been virtually eliminated by White pine blister rust. Western hemlock, mountain hemlock, and true firs are severely infested with dwarf mistletoe.

Need

Nearby Wilderness and Its Use The Roaring River roadless area is adjacent to the the Three Sisters Wilderness (189,346 acres) and two miles north of the Waldo Wilderness (37,157 acres). Refer to Chapter III for the amount of use these Wildernesses receive.

Distance from Population Centers The area is approximately 70 miles by highway to the east of Eugene, Oregon.

Interest by Proponents The Roaring River roadless area generated a low amount of interest with 88% of the responses favoring inclusion of the roadless area into the inventory.

Environmental Consequences

As a consequence of implementing any of the proposed Alternatives there will be effects on the Roaring River roadless area. In Alternatives NC, K, A, J, W, and D, 90 to 100% of this area will be affected by road construction and timber harvest. Alternative L will develop 18% of the area. As a result of this

development, uses dependent on roadless condition, such as semiprimitive recreation, will not be provided in portions of the area. Implementation of proposed management activities associated with all Alternatives, except alternative L, would alter the suitability of this area for future Wilderness consideration. However, portions of this area contiguous to the Three Sisters Wilderness would remain suitable for consideration as Wilderness additions in the next cycle of Forest planning. Alternative L maintains the option of future Wilderness consideration for most of this area. Figure C-20-2 illustrates how this area has been allocated in each Alternative.

Based on the amount and distribution of management areas assigned to the Roaring River roadless area, an array of goods and services are provided. Emphasis on priced commodities such as wood products are provided in Alternatives NC, A, K, D, W, and J. Emphasis on amenity values such as dispersed recreation opportunities, high visual quality, and old-growth habitat are provided in Alternative L. The amounts of other goods and services to be provided from the area for each Alternative are illustrated in Figure C-20-3. Additional information regarding the environmental consequences of the activities associated with these goods and services is located in Chapter IV of this FEIS.

Table T314. Management Area Acreage of Alternatives (C-20-2)

Management Areas	Alternatives						
	NC (No Change)	K (WFC)	A (No Action)	J (DEIS-PA)	W (PA)	D (Wildlife)	L (ONRC)
1 Wilderness							
Management Area 1a	--	--	--	--	--	--	--
Management Area 1b	--	--	--	--	--	--	1,685
Management Area 1c	--	--	--	--	--	--	--
Management Area 1d	--	--	--	--	--	--	--
2 Oregon Cascades Recreation Area							
Management Area 2a	--	--	--	--	--	--	--
Management Area 2b	--	--	--	--	--	--	--
3 Experimental Forest							
Management Area 3	--	--	--	--	--	--	--
4 Research Natural Area							
Management Area 4	--	--	--	--	--	--	--
5 Special Interest Area							
Management Area 5a	--	--	--	213	149	--	--
Management Area 5b	--	--	--	--	--	--	--
6 Wild and Scenic River							
Management Area 6a	--	--	--	--	--	--	--
Management Area 6b	--	--	--	--	--	--	--
Management Area 6c	--	--	--	--	--	--	--
7 Old-Growth Grove							
Management Area 7	--	--	--	--	--	--	--
8 T & E Species							
Management Area 8	--	--	--	--	--	--	--
9 Special Habitat ¹							
Management Area 9a	--	--	--	--	--	--	--
Management Area 9b	--	--	--	--	--	--	--
Management Area 9c	--	--	--	--	--	--	--
Management Area 9d	--	--	--	--	--	--	--
10 Dispersed Recreation							
Management Area 10a	--	--	--	--	--	--	--
Management Area 10b	--	--	--	--	--	--	--
Management Area 10c	--	--	--	--	--	171	--
Management Area 10d	--	--	--	--	--	--	--
Management Area 10e	--	--	--	--	--	--	--
Management Area 10f	--	--	--	--	--	--	--

Management Areas	NC (No Change)	K (WFC)	A (No Action)	J (DEIS-PA)	W (PA)	D (Wildlife)	L (ONRC)
11 Scenic							
Management Area 11a	--	--	--	--	299	--	--
Management Area 11b	--	--	--	--	--	--	--
Management Area 11c	--	--	--	--	--	--	320
Management Area 11d	811	--	811	576	640	320	--
Management Area 11e	--	--	--	--	--	--	43
Management Area 11f	--	--	--	--	--	--	--
12 Developed Recreation							
Management Area 12a	--	--	--	--	--	--	--
Management Area 12b	--	--	--	--	--	--	--
13 Special and Ad- ministrative Use							
Management Area 13a	--	--	--	--	--	--	--
Management Area 13b	--	--	--	--	--	--	--
14 General Forest							
Management Area 14a	1,237	2,005	1,194	1,216	917	1,514	--
15 Riparian ²							
Management Area 15	*	43	43	43	43	43	--

¹ Acres of network sites that overlap with other no harvest management areas are not included in MA9a, 9b, 9c acres.

² Only alternatives with acres assigned to no harvest prescriptions for riparian have acres allocated to MA15. In alternatives K, A, and J riparian acres follow Forest-wide standards and guidelines for riparian harvest rates. Riparian acres in NC are distributed throughout other management areas.

**Table C-20-3. Roaring River Roadless Area
Quantifiable Resources Outputs, Environmental Effects, and Activities by Alternative**

		Alternatives						
Output, Effects, or Activity	Unit of Measure	NC	K	A	J	W	D	L
Recommended Wilderness Recreation Use 1st Decade Area Recommended for Wilderness	RVDs	--	--	--	--	--	--	--
	Acres	--	--	--	--	--	--	1,685
Nonwilderness Dispersed Recreation Use in the 1st Decade								
Semiprimitive Nonmotorized	RVDs	--	--	--	--	--	--	--
	Acres	--	--	--	--	--	--	--
Semiprimitive Motorized	RVDs	--	--	--	--	--	415	--
	Acres	--	--	--	--	--	171	--
Roaded Natural	RVDs	7,162	494	7,656	7,262	7,756	2,964	1,334
	Acres	811	43	853	832	832	363	363
Roaded Modified	RVDs	2,734	5,392	2,544	2,771	2,582	3,816	--
	Acres	1,237	2,005	1,194	1,216	1,216	1,514	--
Trails								
Existing Trails								
Full Protection Level	Miles	1.0	1.0	1.0	2.0	--	1.0	4.0
Moderate Protection Level	Miles	3.0	--	3.0	2.0	6.0	1.0	0.0
Low Protection Level	Miles	3.0	5.0	3.0	2.0	--	4.0	1.0
Potential Trails								
Full Protection Level	Miles	--	--	--	--	--	--	--
Moderate Protection Level	Miles	--	--	--	--	--	--	--
Low Protection Level	Miles	--	--	--	--	--	--	--
Visual Quality Objectives								
Preservation	Acres	--	--	--	213	149	--	1,685
Retention	Acres	--	--	--	--	--	171	43
Partial Retention	Acres	811	43	853	619	683	363	320
Modification	Acres	--	--	--	--	299	--	--
Maximum Modification	Acres	1,237	2,005	1,194	1,216	917	1,514	--
1st Decade								
Road Construction	Miles	--	2.0	2.0	2.0	2.0	0.9	0.2
Area Harvested	Acres	--	246	294	341	185	287	16
Programmed Timber Harvest	MBF	--	2,104	2,302	2,975	1,619	1,691	116
Area Remaining Undeveloped	%	--	63	55	49	71	57	98
Lands by Timber Yield Levels								
Full Yield (95-100%)	Acres	1,003	1,493	960	832	683	1,130	235
75-94% of Full Yield	Acres	555	43	576	555	619	256	--
50-74% of Full Yield	Acres	--	21	21	21	64	21	43
30-49% of Full Yield	Acres	--	--	--	--	--	--	--

Mt. Hagan - 6,292 Acres

Description

History The Mt. Hagan roadless area was considered for Wilderness by the United States Congress. They released the area for multiple-use management in the Oregon Wilderness Act of 1984.

Location and Access T.16S., Rs.3 and 4E. The Mt. Hagan Roadless Area consists of 5,723 acres of National Forest lands lying just northwest of the town of Blue River within the Blue River Ranger District.

Access is provided by Forest Road 107 on the east, Forest Road 2611 on the south, BLM Road 16-3E-263 on the southwest, and the South Fork Gate Creek Road on the north. Only Forest Road 107 is available for public access. The other roads are either privately owned, or cross private lands without permanent easements to allow public use.

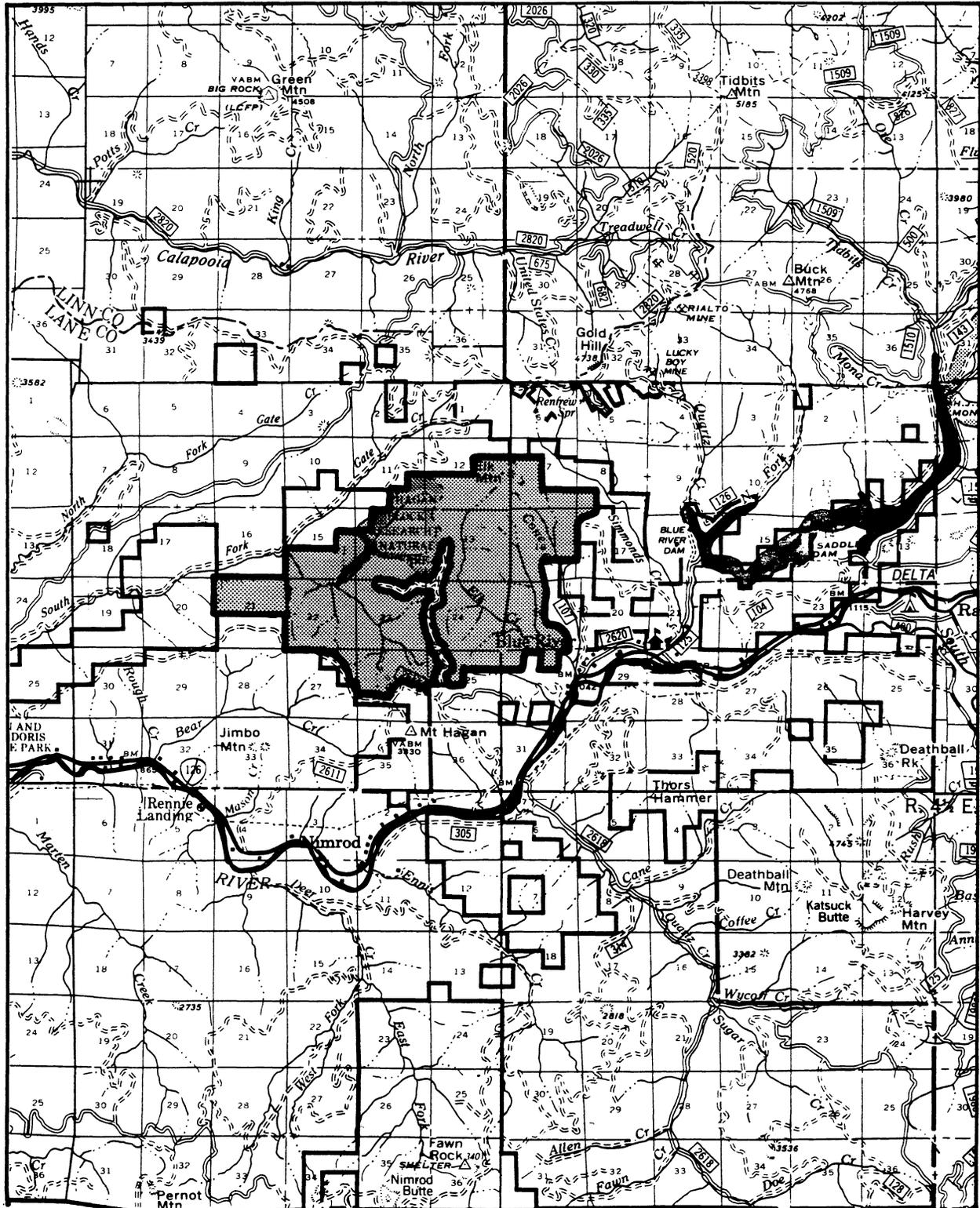
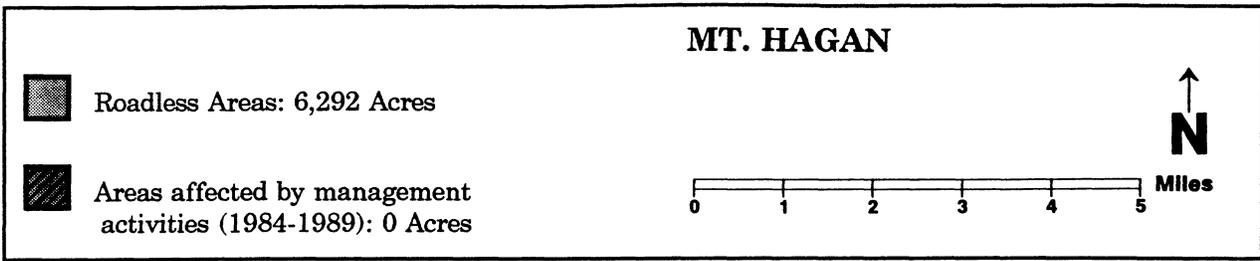
Geography and Topography The area is characterized by very steep convex dissected upper slopes. Elevations range from 1,200 feet at Elk Creek to 4,000 feet at Elk Mountain. Lower slopes are steep, smooth, and dissected. The steeper upper slopes are interspersed with occasional rock outcroppings.

Soil Soil depths range from 6 to 24 inches on upper slopes and from 24 to 60 inches on the lower hillsides, with high to very high surface erosion hazards. Deep seated mass failures are not unusual, and smaller landslides and debris avalanches can be found throughout the area. There are about 5,460 acres that have potential for severe surface erosion; and approximately 3,029 acres of potentially severe surface erosion and unstable soil. For more soil information refer to *Willamette National Forest Soil Resource Inventory* (Legard and Meyer 1973).

Vegetation The primary forest cover consists of second growth Douglas-fir mixed with smaller quantities of western hemlock. Stand ages generally range from 80 to 120 years. Old-growth timber is scarce and widely scattered, usually appearing as isolated individuals or small patches of residual trees.

Ecosystem There is one major potential vegetation zone and one vegetation community for this area according to classification systems by Bailey (1976) and Kuchler (1966). The vegetation zone is the Pacific Forest (M2410) zone. The vegetative community is cedar/hemlock/Douglas-fir (*Thuja-Tsuga-Pseudotsuga*) forest (002).

Figure C-21-1



Current Uses The 1977 Land Management Plan for the Willamette National Forest allocates most of this land to General Forest. A parcel on the north boundary is allocated to the proposed Hagan Block Research Natural Area.

As of 1985, two timber sales were planned. All preparatory work has been completed, but the projects have been held pending review of the Wilderness potential for the area. Prior management has included commercial thinning of timber adjacent to Forest Roads 2611, 2611080, and 2611090.

The proposed establishment of the Hagan Research Natural Area has been in the planning stages since 1974. While no establishment report has been approved, a great deal of research has taken place, and several active research projects are under way.

Recreation use is light, public access is limited, no maintained recreation trails, and no unique or scenic features exist to attract visitors.

Appearances The appearance is fairly consistent, typically that of a young second growth forest. Trees are medium in diameter, primarily Douglas-fir, and to a lesser extent western hemlock. They are regularly spaced, with a closed canopy reducing the amount of sunlight reaching the ground. Patches of hardwoods such as maple and alder are scattered throughout the area where windstorms or landslides have created small openings in the canopy. Slopes are steep and broken by many small streams and draws. The ground is covered by salal, Oregon grape, and rhododendron as well as smaller trees of shade tolerant varieties. Numerous game trails lace the ridges and terrain breaks where movement is easier.

In the northeast corner, near Elk Mountain, trees become smaller in size and more variety occurs in the stand, including more true fir and mountain hemlock. The terrain becomes steeper and still more broken with rock outcrops and sharp spur ridges common. The canopy becomes more open, allowing sunlight to reach the ground. Surface vegetation changes with huckleberry and beargrass becoming the more common plants.

Surroundings The Mt. Hagan roadless area is bounded on all sides by privately owned timberlands with the exception of the southwest corner where property is managed by the Bureau of Land Management (BLM) as part of the O & C Lands and the eastern edge where several corridors connect with National Forest lands. Most of the privately owned land has been roaded and clearcut earlier in the century. Much of the BLM land has been cutover within the last decade.

Forest Road 2611 penetrates the roadless area dividing it into two distinct segments joined by a one mile roadless neck at the north end where the proposed Hagan Research Natural Area is located.

Attractions Hikers climbing to the summit of Elk Mountain may be rewarded with with a scenic view of the surrounding mountains.

Capability

Manageability and Boundaries The boundaries described are easily identified and readily located on the ground. They have been compromised somewhat by the road corridor and thinning already mentioned. As of 1985, the Willamette National Forest was reviewing a proposed land exchange with the owners of two parcels of private land on the east edge of the roadless area (the Cone Creek and Simmons Creek parcels). Part of this land is unroaded and its acquisition would provide opportunities for dispersed nonmotorized recreation.

Natural Integrity Partial cut timber harvest along Forest Road 2611 corridor has occurred. This has caused a change in the spacing and variety of tree sizes present and a reduction in thermal cover due to reduced crown closure. The harvested area extends a quarter to a half mile from the edges of the road corridor. Plant species introduced to control erosion along roads have apparently not changed natural processes to any degree.

Slash treatment and fire control have changed the amount of woody debris and snag habitat available for small mammals and cavity nesting birds in and near the thinned area, while increased sunlight reaching the ground has accelerated the growth of brush and ground vegetation to some extent.

Natural Appearance Most of the area inventoried as unroaded has not been affected by human activity and is completely natural in appearance. The roadside segment which was harvested has been subjected to partial cut harvest only. While many visitors would note the stumps and changed spacing of the stand, most would accept it as natural appearing. Only the most knowledgeable would notice the changes in understory composition.

Opportunity for Solitude Mt. Hagan roadless area offers moderate opportunity for solitude. This is due to the screening effect of the dense natural vegetation and the steep broken nature of the terrain; although, this same characteristic can discourage visitors from cross country travel. Off site intrusions from highway noise is permanent. Smoke may be visible in the air for short periods of time.

Opportunity for Primitive Recreation The opportunity for this type of experience is moderate, due to its size and short distance to the core, which is less than 0.75 of a mile. However, the lack of developed recreation sites or a maintained trail system, as well as the challenge and moderate risk from steep, heavily wooded terrain provide opportunities for primitive recreation.

Special Features The area contains common features. Scattered findings of obsidian flakes indicate prehistoric use. No federally listed endangered or threatened species are known to be present.

The proposed Hagan Research Natural Area is located on the northern edge. It has been proposed to provide research opportunities for Douglas-fir (100-150 year age class) in the Western Cascades Province. This was identified as a high priority need in *Research Natural Area Needs in the Pacific Northwest*, USDA Forest Service General Technical Report PNW-38, 1975.

Availability

Resource Potentials

Recreation Resource Capacity estimates indicate that this area could provide 4,275 Recreation Visitor Days (RVDs) of Semiprimitive recreation use. No potential trail locations or developed recreation sites have been identified.

Wildlife Resource The Mt. Hagan roadless area is used moderately by deer as winter range. Harvesting with proper design and size would probably improve forage conditions for big game. Developing late successional stands would increase the quality of old-growth for spotted owls. The eastern portion has previously been occupied by northern spotted owls.

Timber Resource The roadless area includes about 5,141 acres of land suitable for growing timber under managed conditions. Stands of mature Douglas-fir and true firs occupy the area representing about 228 million board feet. If stands are converted to a managed condition, biological potential yield

will be 720,000 cubic feet per year at culmination of mean annual increment. Site productivity ranges from Class IV to Class V. The remaining area is unsuitable.

Water Resource The roadless area includes watersheds for Elk Creek and Cone Creek, both Class I streams, directly tributary to the McKenzie River, as well as Hagan Creek, a Class II stream, tributary to the South Fork of Gate Creek. There is no record of water developments or withdrawals in connection with these areas. Researchers from Oregon State University and the Pacific Northwest Forest and Range Experiment Station have several research projects underway or pending along Hagan Creek some of which are directly related to proposed timber sales currently planned.

Several land owners draw domestic water from Cone Creek.

Mineral and Energy Resource Current information does not indicate active mineral exploration or mining activity. Some prospecting occurred during the late 1800s while the Blue River mining district was active but no claims were developed. Mining potential is considered low.

Land Use Authorizations No special use authorizations are within the roadless area. Giustina Brothers Lumber Company has a Class "D" special use permit for a logging road (Gate Creek Road) which touches the northwest boundary.

Hagan Research Natural Area An establishment plan was developed and approved by the Forest Supervisor and Regional Forester; however, the Chief of the Forest Service has delayed approval pending review in the current forest planning process.

Cultural Resources Very Little is known about this area's potential for cultural resources. There is a limited amount of high probability ground due to the steep dissected slopes. The potential that does exist for prehistoric sites are on some of the broader ridge top and in the saddles.

Management Considerations

Fire Long-term fire history suggests that this area suffered several large catastrophic fires in the late 1800s and early 1900s resulting in the current forest of 80 to 120 year old Douglas-fir. More recent history indicates a scattered incidence of small lightning caused fires in the interior, as well as some minor roadside fires along the edges. Current fuel loadings are light, ranging from 20 to 45 tons per acre.

Need

Nearby Wilderness and Its Use The Mt. Hagan roadless area is within ten miles of the Three Sisters Wilderness (283,539 acres). Refer to Chapter III for the amount of use these Wildernesses receive.

Distance from Population Centers The area is approximately 35 miles by highway to the east of Eugene, Oregon.

Interest by Proponents The Mt. Hagan roadless area generated a low amount of interest with 60% of the responses favoring inclusion of the roadless area into the inventory.

Environmental Consequences

As a consequence of implementing any of the proposed Alternatives there will be effects on the Mt. Hagan roadless area. In Alternatives NC, K, A, J, and W, 60 to 88% of this area will be affected by road construction and timber harvest. Alternative L develops 24% and D develops 2% of the area. As a result of this development, uses dependent on roadless conditions--such as semiprimitive recreation--will not be provided in the developed portion of the area. Implementation of proposed management activities associated with Alternatives NC, K, A, J, and W alter the suitability of this area for future Wilderness consideration. Alternatives L and D maintain the option of future Wilderness consideration for this area. Figure C-21-2 illustrates how this area has been allocated in each Alternative.

Based on the amount and distribution of management areas assigned to the Mt. Hagan roadless area, an array of goods and services are provided. Emphasis on priced commodities such as wood products are provided in Alternatives NC, K, A, J, and W. Emphasis on amenity values such as dispersed recreation opportunities, high visual quality, and old-growth habitat are provided in Alternatives L and D. The amounts of other goods and services to be provided from the area for each Alternative are illustrated in Figure C-21-3. Additional information regarding the environmental consequences of the activities associated with these goods and services is located in Chapter IV of this FEIS.

Table T314. Management Area Acreage of Alternatives (C-21-2)

Management Areas	Alternatives						
	NC (No Change)	K (WFC)	A (No Action)	J (DEIS-PA)	W (PA)	D (Wildlife)	L (ONRC)
1 Wilderness							
Management Area 1a	--	--	--	--	--	--	--
Management Area 1b	--	--	--	--	--	--	4,266
Management Area 1c	--	--	--	--	--	--	--
Management Area 1d	--	--	--	--	--	--	--
2 Oregon Cascades Recreation Area							
Management Area 2a	--	--	--	--	--	--	--
Management Area 2b	--	--	--	--	--	--	--
3 Experimental Forest							
Management Area 3	--	--	--	--	--	--	--
4 Research Natural Area							
Management Area 4	747	747	747	1,130	1,152	1,109	747
5 Special Interest Area							
Management Area 5a	--	--	--	--	--	--	--
Management Area 5b	--	--	--	--	--	--	--
6 Wild and Scenic River							
Management Area 6a	--	--	--	--	--	--	--
Management Area 6b	--	--	--	--	--	--	--
Management Area 6c	--	--	--	--	--	--	--
7 Old-Growth Grove							
Management Area 7	--	--	--	--	--	--	--
8 T & E Species							
Management Area 8	--	--	--	--	--	--	--
9 Special Habitat ¹							
Management Area 9a	--	1,152	1,152	1,152	1,152	--	171
Management Area 9b	--	--	--	--	--	--	--
Management Area 9c	--	171	171	171	171	171	171
Management Area 9d	--	--	--	--	--	--	--
10 Dispersed Recreation							
Management Area 10a	--	--	--	--	--	--	--
Management Area 10b	--	--	--	--	--	--	--
Management Area 10c	--	--	--	--	--	--	--
Management Area 10d	--	--	--	--	--	--	--
Management Area 10e	--	--	--	--	--	4,906	--
Management Area 10f	--	--	--	--	--	--	--

Management Areas	NC (No Change)	K (WFC)	A (No Action)	J (DEIS-PA)	W (PA)	D (Wildlife)	L (ONRC)
11 Scenic							
Management Area 11a	--	--	--	--	--	--	--
Management Area 11b	--	--	--	--	--	--	--
Management Area 11c	--	384	--	341	384	--	597
Management Area 11d	363	--	320	--	--	--	--
Management Area 11e	--	--	--	--	--	--	853
Management Area 11f	--	--	--	--	--	--	21
12 Developed Recreation							
Management Area 12a	--	--	--	--	--	--	--
Management Area 12b	--	--	--	--	--	--	--
13 Special and Ad- ministrative Use							
Management Area 13a	21	21	21	21	21	21	21
Management Area 13b	--	--	--	--	--	--	--
14 General Forest							
Management Area 14a	5,162	4,351	3,711	3,327	3,263	85	85
15 Riparian ²							
Management Area 15	*	214	214	128	149	--	107

¹ Acres of network sites that overlap with other no harvest management areas are not included in MA9a, 9b, 9c acres.

² Only alternatives with acres assigned to no harvest prescriptions for riparian have acres allocated to MA15. In alternatives K, A, and J riparian acres follow Forest-wide standards and guidelines for riparian harvest rates. Riparian acres in NC are distributed throughout other management areas.

**Table C-21-3. Mt. Hagan Roadless Area
Quantifiable Resources Outputs, Environmental Effects, and Activities by Alternative**

		Alternatives						
Output, Effects, or Activity	Unit of Measure	NC	K	A	J	W	D	L
Recommended Wilderness Recreation Use 1st Decade Area Recommended for Wilderness	RVDs	--	--	--	--	--	--	--
	Acres	--	--	--	--	--	--	4,266
Nonwilderness Dispersed Recreation Use in the 1st Decade								
Semiprimitive Nonmotorized	RVDs	219	--	209	450	493	1,374	--
	Acres	747	--	747	1,130	1,152	6,015	--
Semiprimitive Motorized	RVDs	--	--	--	--	--	--	--
	Acres	--	--	--	--	--	--	--
Roaded Natural	RVDs	741	3,705	3,705	3,458	3,458	--	5,384
	Acres	363	1,920	1,813	1,813	1,856	171	1,920
Roaded Modified	RVDs	4,196	3,892	3,057	2,259	2,088	95	95
	Acres	5,183	4,373	3,733	3,349	3,285	107	107
Trails								
Existing Trails								
Full Protection Level	Miles	--	--	--	--	--	--	--
Moderate Protection Level	Miles	--	--	--	--	--	--	--
Low Protection Level	Miles	--	--	--	--	--	--	--
Potential Trails								
Full Protection Level	Miles	--	--	--	--	--	--	--
Moderate Protection Level	Miles	--	--	--	--	--	--	--
Low Protection Level	Miles	--	--	--	--	--	--	--
Visual Quality Objectives								
Preservation	Acres	747	1,322	2,069	2,453	2,474	6,186	4,607
Retention	Acres	--	--	--	--	--	--	875
Partial Retention	Acres	363	697	491	491	533	--	704
Modification	Acres	21	21	21	21	21	21	21
Maximum Modification	Acres	5,162	4,351	3,711	3,327	3,263	85	85
1st Decade								
Road Construction	Miles	--	4.2	4.2	9.3	4.2	1.3	1.1
Area Harvested	Acres	--	954	786	2,258	414	17	583
Programmed Timber Harvest	MBF	--	8,114	6,159	17,918	3,892	2,644	4,286
Area Remaining Undeveloped	%	--	54	62	100	97	99	72
Lands by Timber Yield Levels								
Full Yield (95-100%)	Acres	4,181	4,053	3,178	3,242	3,242	85	426
75-94% of Full Yield	Acres	353	64	341	21	--	--	--
50-74% of Full Yield	Acres	--	128	128	107	--	--	853
30-49% of Full Yield	Acres	--	--	--	--	--	--	21

McLennen Mountain - 7,807 Acres

Description

History McLennen Mountain roadless area was studied in RARE I. The area was considered for Wilderness by the United States Congress. They released 8,873 acres for multiple-use management in the Oregon Wilderness Act of 1984. In the past, several local groups have strongly advocated Wilderness status for the McLennen Mountain roadless area. A number of planned timber sales have been appealed. In all cases the management decisions for the area have been upheld. Since the release of these lands in 1984, approximately 1,066 acres have been affected by development activities.

Location and Access Tps.16 and 17S., Rs.5 and 6E. The McLennen Mountain roadless area lies three miles south of McKenzie Bridge on the Blue River and McKenzie Ranger districts. Forest Road 1993 borders the area on the north, east, and south, and Forest Road 590 provides additional access to the south. Forest Trail 3529 along the northeastern border provides the only interior access.

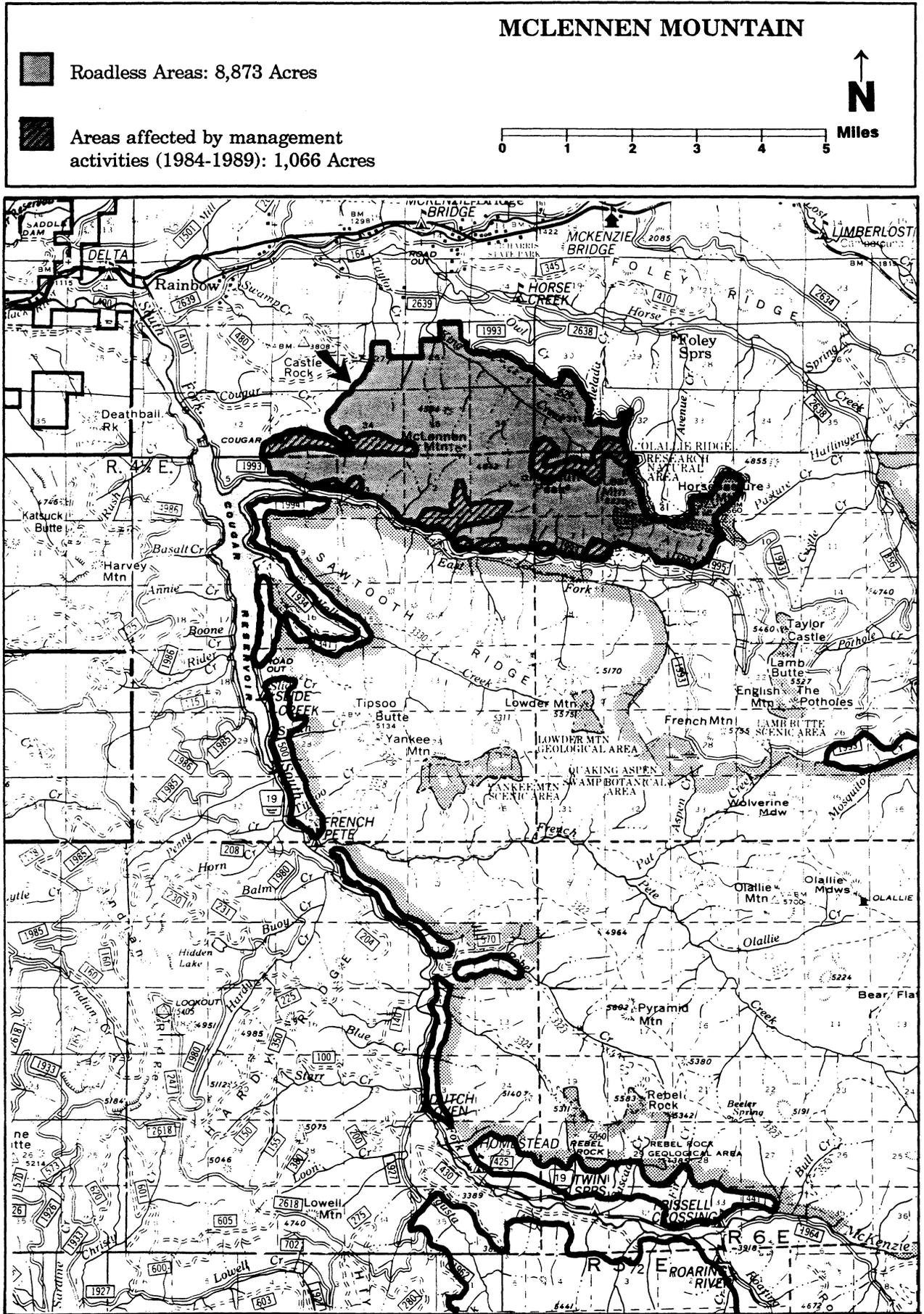
Geography and Topography Elevations range from 1,700 feet at the lower extremity of King Creek to over 5,000 feet on McLennen Mountain, O'Leary Mountain, and MacDuff Peak. These peaks and connecting ridges are situated in the central and eastern portions forming the backbone and headwaters for the remainder of the area. King Creek, Cougar Creek, and tributaries of the East Fork flow out of the area and ultimately into the McKenzie River. Topography varies from rock outcrops, talus slopes, and cliffs throughout the higher portions of the drainage to steep, deeply dissected side slopes.

Soil Soils are typically shallow at the upper elevations and moderately deep (20 to 40 inches) on the middle and lower slopes. There are about 5,439 acres that have potential for severe surface erosion. For more soil information refer to *Willamette National Forest Soil Resource Inventory* (Legard and Meyer 1973).

Vegetation The area is heavily timbered with second growth and mature Douglas-fir on the north slopes with a transition to mountain hemlock and true firs at higher elevations. The upper elevations are characterized by open grass meadows, tag alder patches, and dying true firs resulting from balsam wooly aphid infestations.

Ecosystem Type There is one major potential vegetation zone and one vegetation community for this area according to classification systems by Bailey (1976) and Kuchler (1966). The vegetation zone is the Pacific Forest (M2410) zone. The vegetative community is Pacific silver fir/Douglas-fir (*Abies-Pseudotsuga*) forest (003).

Figure C-22-1



Current Uses The 1977 Land Management Plan for the Willamette National Forest allocates most of the land to General Forest with special visual management corridors along major roads and trails. Recreation use is generally light and is usually day hiking with some occasional backpacking along the Ollalie Ridge and King Creek trails. A few hunters make use of the Castle Rock Saddle and short trails off existing road, but most do not hunt the steep dissected interior. As of 1985, three timber sales were active and two more were planned for the near future. The eastern edge includes the Ollalie Ridge Research Natural Area. Since this area was inventoried in 1984 management activities are estimated to have affected 1,200 acres of the area.

Appearance The appearance changes through three general landscape patterns as a visitor climbs toward the higher mountain ridges. At the lower elevations, the landscape has the appearance of a mature second growth forest. Trees are medium to large diameter, primarily Douglas-fir and to a lesser extent western hemlock. They are regularly spaced, with a closed canopy reducing the amount of sunlight reaching the ground. Patches of hardwoods such as maple and alder are scattered through the area where windstorms have created small openings in the canopy. Slopes are steep and broken by many small streams and draws. The ground is covered by salal, Oregon grape, rhododendron, and smaller trees of shade tolerant varieties. Numerous game trails lace the ridges and terrain breaks where movement is easiest.

As elevation increases, trees become smaller in size and more variety enters the stand which now includes more true fir and mountain hemlock. The terrain becomes steeper and broken with rock outcrops, and sharp spur ridges common. The canopy becomes more open, allowing sunlight to reach the ground. Surface vegetation changes with huckleberry and beargrass becoming the more common plants.

At the highest elevations trees are scarce, while ground cover is primarily beargrass, forbs, and dwarf huckleberry. Rocky meadows and tag alder shoots form the headwalls of the numerous small streams that flow from the sharp mountain ridgeline.

Surroundings The McLennen Mountain roadless area lies directly north of the French Pete addition to the Three Sisters Wilderness, separated by a narrow road corridor along East Fork Creek. Short spur roads have been built to access thinning harvest units. The forest is managed for timber production in General Forest on the remaining perimeter. Clearcuts and road development are common. New roads penetrate the area from the west and eastern edges.

Attractions The Ollalie Ridge Trail provides striking views of Sawtooth Ridge in the Three Sisters Wilderness and of the surrounding Willamette National Forest in general. It provides an opportunity for a relatively short day hike, with trailheads at the western and eastern termini. For a longer trip it is possible to pass through the Lamb Butte Scenic Area to the east and to cross Forest Road 1993 continuing into the Three Sisters Wilderness.

Capability

Manageability and Boundaries The boundaries are easily identified and readily located on the ground. New road construction and timber harvest have occurred within the boundary which may make management of the area more difficult for Wilderness.

Natural Integrity Timber harvest along the south and eastern edges and along the new roads into the heart of the area has changed the area's natural processes. Partial cutting and clearcutting have changed the canopy characteristics and variety of tree sizes present. Plant species have been introduced to the area for erosion control and wildlife habitat improvement. Plant and animal species dependent

on the closed canopy of large trees are reduced or eliminated in the harvested area, while other species preferring openings and earlier seral stages are increased. Slash treatment and fire control have changed the amount of woody debris and snag habitat available for small mammals and cavity nesting birds in and near the harvested units. Road cut and fill slopes contribute to increased erosion and sedimentation of downstream waterways, and block the normal migratory patterns of deer and elk.

Natural Appearance Roads and clearcut units are highly intrusive in appearance and are obvious to even the most casual observer in the immediate area. They will be especially visible due to their location adjacent to the major travel route, Ollalie Ridge Trail.

Opportunity for Solitude The area offers low opportunity for solitude. Logging roads penetrate into the interior of the area as well as almost surrounding it. Off site intrusions of sight and sound are permanent with heavily used roads like 1993. The size of the area is relatively small, also. These may be offset somewhat by the screening effect of the dense natural vegetation and steep broken nature of the terrain although this same characteristic can discourage visitors from leaving the established trail system. Opportunities for cross country travel are limited. The distance from the perimeter to the approximate geographic center is from one to 1.5 miles. If the boundary is adjusted to exclude the newly roaded area the distance would be about 0.5 mile, and the area would be reduced to 6,500 acres.

Opportunity for Primitive Recreation The opportunity for this type of experience is relatively high. This is due mainly to the lack of well developed recreation sites, the low standard trail system currently in place, the challenge of moderate risk from steep rocky terrain, and the chance of rockslides and debris avalanches.

Special Features Features are common. Scattered findings of obsidian flakes indicate prehistoric use. No federally listed endangered or threatened species are known to be present.

The Ollalie Ridge Trail provides an opportunity for identifying a wide variety of native plants. The trail is occasionally used in conjunction with the nearby East Fork Creek Trail as a field study area by classes from nearby schools and by members of native plant clubs.

The Ollalie Ridge Research Natural Area is located at the eastern edge providing ongoing research opportunities in the mountain meadow and true fir/mountain hemlock plant communities of Oregon's Western Cascade Mountains.

Availability

Resource Potentials

Recreation Resource Capacity estimates indicate that this area could provide 5,066 Recreation Visitor Days (RVDs) of Semiprimitive recreation use. Potential trails have been identified and could provide access and disperse visitors in the area. Potential developed recreation sites have been identified.

Wildlife Resource At least two separate elk herds totaling approximately 35 animals utilize the lower elevations during the winter months. A smaller number of elk utilize ridge lines as travel corridors in the summer months. Location of harvest units with proper forage and cover would probably increase deer and elk populations. However, removal of old-growth stands will gradually reduce habitat for old-growth dependent species. A management regime focused on developing late successional stands would improve the quality of habitat for species such as the spotted owl. A small portion of the area borders Cougar Reservoir. Developing older aged stands would improve nesting and roosting habitat for bald eagles which require trees with large platform branches and some dead tops.

Timber Resource The roadless area includes about 5,354 acres of land suitable for growing timber under managed conditions. Stands of mature Douglas-fir, true firs, and mountain hemlock occupy the area representing about 239 million board feet. If stands are converted to a managed condition, biological potential yield will be 735,000 cubic feet per year at culmination of mean annual increment. Site productivity ranges from Class IV to Class V. The remaining area is unsuitable.

Water Resource Cougar Creek has been identified as a cold water source for a fisheries enhancement project associated with the proposed Strube Dam Project.

Land Use Authorizations The extreme southwestern edge is included in a Flood Control Withdrawal established in 1959 as part of the Cougar Dam Project. Ollalie Ridge Research Natural Area was established by the authority of the Chief of the Forest Service in 1963. This 657 acre area is dedicated to long-term research needs.

Mineral Resources Some prospecting was done during the late 1800s while the Blue River mining district was active but no claims were developed. Geothermal exploration was conducted by the State of Oregon, Department of Geology and Mineral Industries, in 1980 and 1981 including test drilling adjacent to Road Forest 1993 at the south edge. Results of the tests are not available at this time.

Management Considerations

Fire Long-term fire history suggests that this area suffered several large catastrophic fires in the late 1800s and early 1900s resulting in the current forest of 70 to 120 year old Douglas-fir. More recent history indicates a scattered incidence of small lightning caused fires in the interior as well as some minor roadside fires along the edges. Current fuel loadings range from 20 to 45 tons per acre.

Need

Nearby Wilderness and Its Use The McLennen Mountain roadless area is adjacent to the the Three Sisters Wilderness (189,346 acres). Refer to Chapter III for the amount of use these Wildernesses receive.

Distance from Population Centers The area is approximately 40 miles by highway to the east of Eugene, Oregon.

Interest by Proponents The McLennen Mountain roadless area generated a moderate amount of interest with 57% of the responses favoring inclusion of the roadless area into the inventory.

Environmental Consequences

As a consequence of implementing any of the proposed Alternatives there will be effects on the McLennen Mountain roadless area. In Alternatives NC, K, A, J, and W, 80 to 92% of this area will be affected by road construction and timber harvest. Alternative D will develop 50% of the area and Alternative L will develop 18%. As a result of this development, uses dependent on roadless conditions-- such as semiprimitive recreation--will not be provided in portions of the area. Implementation of proposed management activities associated with all Alternatives will alter the suitability of this area for future Wilderness consideration. Alternative L and D maintains the option of future Wilderness consideration for most of this area. Figure C-22-2 illustrates how this area has been allocated in each Alternative.

Based on the amount and distribution of management areas assigned to the McLennen Mountain roadless area, an array of goods and services are provided. Emphasis on priced commodities such as

wood products are provided in Alternatives NC, K, A, J, and W. Emphasis on amenity values such as dispersed recreation opportunities, high visual quality, and old-growth habitat are provided in Alternatives L and D. The amounts of other goods and services to be provided from the area for each Alternative are illustrated in Figure C-22-3. Additional information regarding the environmental consequences of the activities associated with these goods and services is located in Chapter IV of this FEIS.

Table T314. Management Area Acreage of Alternatives (C-22-2)

Management Areas	Alternatives						
	NC (No Change)	K (WFC)	A (No Action)	J (DEIS-PA)	W (PA)	D (Wildlife)	L (ONRC)
1 Wilderness							
Management Area 1a	--	--	--	--	--	--	--
Management Area 1b	--	--	--	--	--	--	--
Management Area 1c	--	--	--	--	--	--	--
Management Area 1d	--	--	--	--	--	--	--
2 Oregon Cascades Recreation Area							
Management Area 2a	--	--	--	--	--	--	--
Management Area 2b	--	--	--	--	--	--	--
3 Experimental Forest							
Management Area 3	--	--	--	--	--	--	--
4 Research Natural Area							
Management Area 4	597	597	597	597	597	597	597
5 Special Interest Area							
Management Area 5a	--	--	--	--	--	--	--
Management Area 5b	--	--	--	--	--	--	--
6 Wild and Scenic River							
Management Area 6a	--	--	--	--	--	--	--
Management Area 6b	--	--	--	--	--	--	--
Management Area 6c	--	--	--	--	--	--	--
7 Old-Growth Grove							
Management Area 7	--	--	--	--	--	--	5,503
8 T & E Species							
Management Area 8	--	--	--	--	--	--	--
9 Special Habitat ¹							
Management Area 9a	--	875	875	875	875	21	235
Management Area 9b	--	128	128	128	128	107	21
Management Area 9c	--	--	--	--	--	--	--
Management Area 9d	--	--	--	--	--	--	--
10 Dispersed Recreation							
Management Area 10a	--	--	--	--	--	--	--
Management Area 10b	--	--	--	--	--	--	--
Management Area 10c	--	--	--	--	--	128	--
Management Area 10d	--	--	--	--	--	--	--
Management Area 10e	--	--	--	--	--	3,008	--
Management Area 10f	--	--	--	--	--	--	--

Management Areas	NC (No Change)	K (WFC)	A (No Action)	J (DEIS-PA)	W (PA)	D (Wildlife)	L (ONRC)
11 Scenic							
Management Area 11a	--	256	--	2,517	2,688	299	--
Management Area 11b	--	213	--	--	--	--	--
Management Area 11c	--	--	--	256	320	2,346	576
Management Area 11d	1,024	213	1,024	1,003	363	--	--
Management Area 11e	2,112	1,898	1,557	1,642	2,197	427	213
Management Area 11f	512	213	448	555	341	768	576
12 Developed Recreation							
Management Area 12a	21	21	21	21	21	21	21
Management Area 12b	--	--	--	--	--	--	--
13 Special and Ad- ministrative Use							
Management Area 13a	--	--	--	--	--	--	--
Management Area 13b	--	--	--	--	--	--	--
14 General Forest							
Management Area 14a	3,541	3,306	3,072	149	128	--	--
15 Riparian ²							
Management Area 15	*	85	85	64	149	107	64

¹ Acres of network sites that overlap with other no harvest management areas are not included in MA9a, 9b, 9c acres.

² Only alternatives with acres assigned to no harvest prescriptions for riparian have acres allocated to MA15. In alternatives K, A, and J riparian acres follow Forest-wide standards and guidelines for riparian harvest rates. Riparian acres in NC are distributed throughout other management areas.

**Table C-22-3. McLennen Mt. Roadless Area
Quantifiable Resources Outputs, Environmental Effects, and Activities by Alternative**

		Alternatives							
Output, Effects, or Activity	Unit of Measure	NC	K	A	J	W	D	L	
Recommended Wilderness Recreation Use 1st Decade Area Recommended for Wilderness	RVDs	--	--	--	--	--	--	--	
	Acres	--	--	--	--	--	--	--	
Nonwilderness Dispersed Recreation Use in the 1st Decade	Semiprimitive Nonmotorized	RVDs	282	282	282	282	282	725	282
		Acres	597	597	597	597	597	3,605	597
	Semiprimitive Motorized	RVDs	--	--	--	--	--	221	--
		Acres	--	--	--	--	--	128	--
	Roaded Natural	RVDs	9,977	6,174	10,224	9,977	9,780	5,779	11,904
		Acres	3,669	3,434	4,138	4,543	4,394	3,775	7,210
	Roaded Modified	RVDs	778	2,355	684	778	892	380	--
		Acres	3,541	3,775	3,072	2,666	2,816	299	--
	Trails	Existing Trails							
		Full Protection Level	Miles	6.0	7.0	7.0	7.0	2.0	8.0
Moderate Protection Level		Miles	3.0	2.0	3.0	3.0	8.0	0.0	0.0
Low Protection Level		Miles	3.0	3.0	2.0	3.0	1.0	3.0	1.0
Potential Trails									
Full Protection Level		Miles	--	--	--	--	0.0	1.0	0.0
Moderate Protection Level		Miles	1.0	0.0	1.0	1.0	0.0	--	0.0
Low Protection Level	Miles	--	0.0	--	--	--	--	--	
Visual Quality Objectives	Preservation	Acres	597	1,600	1,600	1,600	1,600	3,733	6,356
	Retention	Acres	2,624	2,112	2,005	2,197	2,538	1,322	789
	Partial Retention	Acres	1,045	320	1,130	1,344	853	2,453	661
	Modification	Acres	--	469	--	2,517	2,688	299	--
	Maximum Modification	Acres	3,541	3,306	3,072	149	128	--	--
1st Decade	Road Construction	Miles	--	5.0	4.0	8.0	5.0	2.0	0.6
	Area Harvested	Acres	--	800	817	1,572	783	579	55
	Programmed Timber Harvest	MBF	--	6,952	6,772	14,116	7,095	3,972	401
	Area Remaining Undeveloped	%	--	68	68	38	69	77	98
Lands by Timber Yield Levels	Full Yield (95-100%)	Acres	2,816	2,837	2,368	2,304	2,171	2,027	320
	75-94% of Full Yield	Acres	2,304	1,472	1,898	1,898	1,877	149	--
	50-74% of Full Yield	Acres	213	128	171	235	213	640	213
	30-49% of Full Yield	Acres	--	--	--	--	--	--	234

Chucksney Mountain - 15,507 Acres

Description

History The Chucksney Mountain roadless area was considered for Wilderness by the United States Congress. They released 16,211 acres for multiple-use management in the Oregon Wilderness Act of 1984. Since the release of these lands in 1984, approximately 704 acres have been affected by development activities.

Location and Access T.19S., Rs.5 and 5½E. The Chucksney Mountain roadless area is located 20 miles southeast of Blue River on the Blue River and Oakridge Ranger Districts. The area lies north and east of Forest Highway 19 (Aufterheide Drive) with Forest Road 1942 forming a portion of the southern boundary. Forest Roads 1962, 1929, 1929280, and 1940757 provide access from the west, and Forest Roads 19430 and 19431 from the north. Forest Trails 3560 and 3314 provide some access to the interior.

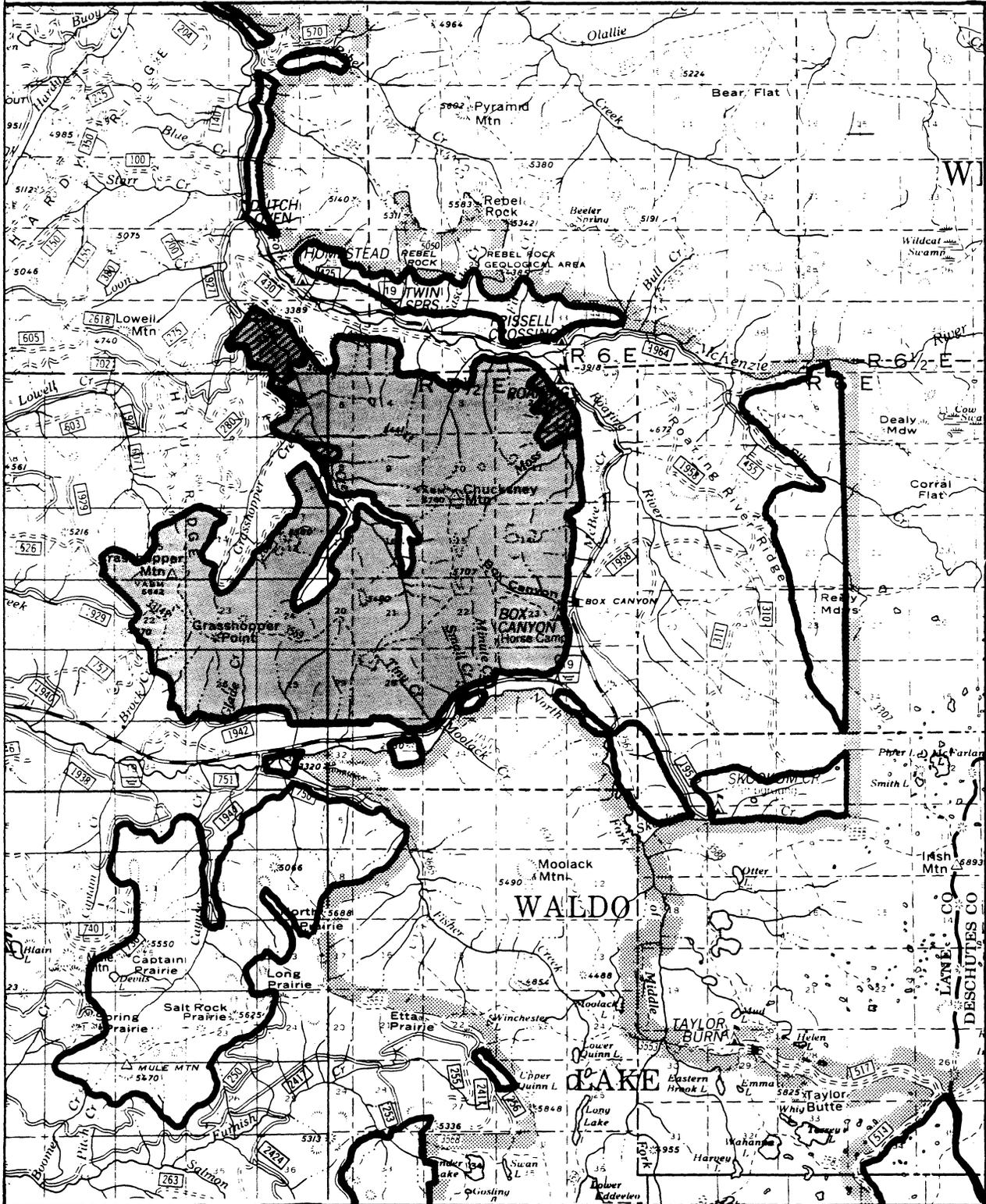
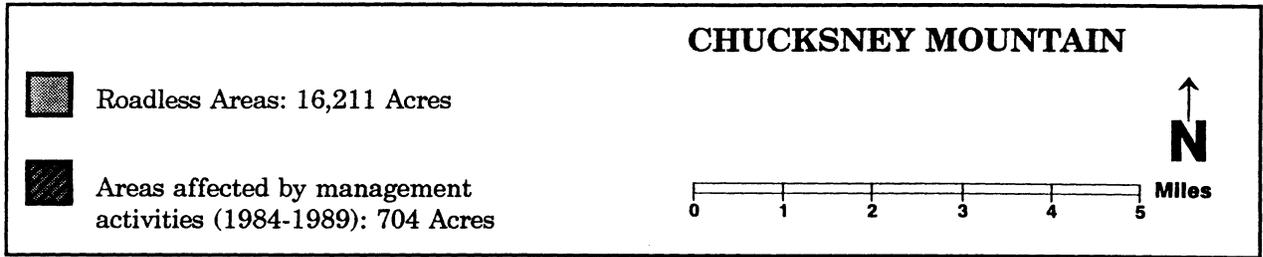
Geography and Topography The main topographical feature of the area is the ridge connecting Chucksney and Grasshopper Mountains. The highest elevation is 5,760 feet at Chucksney Mountain. The upper slopes are steep and rocky.

Soil The upper slopes contain erosive soil conditions and lower slopes are gentle with moderately deep soils. There are about 7,316 acres that have potential for severe surface erosion; and approximately 576 acres of potentially severe surface erosion and unstable soil. For more soil information refer to *Willamette National Forest Soil Resource Inventory* (Legard and Meyer 1973).

Vegetation At the lower elevation vegetation is mature second growth forest, with numerous patches of old-growth Douglas-fir. Trees are medium to large diameter, primarily Douglas-fir and to a lesser extent western hemlock. They are evenly spaced. Patches of hardwoods such as maple and alder are scattered through the intermediate canopy. The ground is covered by salal, Oregon grape, rhododendron, and smaller trees of shade tolerant species. As elevation increases, trees become smaller in size. More variety enters the stand which includes true fir and mountain hemlock. Huckleberry and beargrass become the dominant understory plants. At the highest elevations, trees are small spruce, subalpine fir, and lodgepole pine. Ground cover is primarily beargrass, forbs, and dwarf huckleberry. Several extensive meadows occur with many varieties of forbs.

Ecosystem Type There is one major potential vegetation zone and two vegetation communities for this area according to classification systems by Bailey (1976) and Kuchler (1966). The vegetation zone is the Pacific Forest (M2410) zone. The vegetative communities are fir/hemlock (*Abies-Tsuga*) forest (004) and Pacific silver fir/Douglas-fir (*Abies-Pseudotsuga*) forest (003).

Figure C-23-1



Current Uses The present allocation from the 1977 Forest Land Management Plan is Undeveloped Roadless Recreation and General Forest. Recreation use is generally moderate consisting of some backpacking along the Hi Yu Ridge and Chucksney Mountain Trails. This backpacking is usually done by elk hunters with trail stock. Horse use is expected to increase in the near future with construction of the Box Canyon Horse Camp and trail head complete at the southeast edge. As of 1985, two timber sales were active within the area: South Frissel on the extreme northeast corner and Locust adjacent to a narrow road corridor penetrating the western side. Several more sales were proposed, for the General Forest portion. Since this area was inventoried in 1984 management activities are estimated to have affected 640 acres of the area.

Appearance The appearance changes through three general landscape patterns as a visitor climbs toward the higher mountain ridges. At the lower elevations, the landscape has the appearance of a mature second growth forest with numerous patches of old-growth Douglas-fir. Trees are medium to large diameter, primarily Douglas-fir and to a lesser extent western hemlock. They are evenly spaced with a closed canopy reducing the amount of sunlight reaching the ground. Patches of hardwoods such as maple and alder are scattered through the area where natural events have created small openings in the canopy. Slopes are steep and broken by many small streams and draws. The ground is covered by salal, Oregon grape, rhododendron, and smaller trees of shade tolerant species. Numerous game trails lace the ridges and terrain breaks where movement is easier.

As elevation increases trees become smaller in size. More variety enters the stand which includes true fir and mountain hemlock. The terrain becomes steeper and broken with rock outcrops, and sharp spur ridges. Large cliffs and talus slopes are common, especially, along the southern slopes of the current Unroaded Recreation Area. The canopy becomes more open, allowing sunlight to reach the ground. Understory vegetation changes to huckleberry and beargrass. At the highest elevations trees are small spruce, subalpine fir, and lodgepole pine. Ground cover is primarily beargrass, forbs, and dwarf huckleberry. Several extensive meadows are the dominant feature of the landscape.

Surroundings The Chucksney Mountain roadless area lies south and west of the French Pete Addition to the Three Sisters Wilderness, separated by the South Fork of the McKenzie River and the Aufterheide Scenic Drive. It is north and west of the Waldo Lake Wilderness and an addition to the Three Sisters Wilderness south of Skookum Lake.

Attractions The Hi Yu Ridge and Chucksney Mountain Trails provide striking views of the Three Sisters and Waldo Lake Wilderness and of the surrounding Willamette National Forest in general. The high meadows are popular destinations for both hikers and trail horse riders. Aufterheide Drive is a popular drive for sightseers and others.

Capability

Manageability and Boundaries The boundaries described are easily identified and readily located on the ground. Nonconforming uses such as roads surround the roadless area. These uses provide opportunity for accessing the area and minor intrusions by people.

Natural Integrity Impacts on the natural integrity are low and localized to very small areas. There are roads and units from logging operations, soil compaction, soil erosion, human made structures, and spring development at a horse camp, unnatural openings for helispots, compaction on trails, a cabin, garbage, compaction and loss of ground cover on dispersed campsites, grazing, and interruption of natural fire events.

Natural Appearance With the exception of the roaded intrusion the area maintains a natural appearance. Since the major trail systems avoid the road location, the roadless area appears to be natural to most visitors but some impacts (sight, sound, or smell) are apparent.

Opportunity for Solitude The Chucksney Mountain roadless area offers low opportunity for solitude because of its size, proximity to roads, and managed forest. This may be offset somewhat by the screening effect of the dense natural vegetation and the steep broken nature of the terrain. This same characteristic can discourage visitors from leaving the established trail system. Opportunities for cross country travel are limited. The distance from the perimeter to the approximate geographic center is from two to 2.5 miles. Offsite intrusions are perceptible, but relatively distant and generally not permanent. Some off site intrusions are close by, but generally not permanent.

Opportunity for Primitive Recreation The opportunity for this type of experience is relatively high due to the lack of developed recreation sites, the challenge of moderate risk from steep rocky terrain, and the chance of rockslides and debris avalanches. The area provides opportunities for trail rides throughout the summer, packing in with horses for the fall hunting season, backpacking, and camping.

Special Features Features are common. Isolated finds of obsidian flakes indicate prehistoric use; however, both prehistoric and historic sites have been identified. It has been suggested that the high meadows were periodically burned by Native Americans to improve wildlife habitat and huckleberry production.

No federally listed endangered or threatened species are known to be present.

Availability

Resource Potentials

Recreation Resource Capacity estimates indicate that this area could provide 9,349 Recreation Visitor Days (RVDs) of Semiprimitive recreation use. Potential trails have been identified and could provide access and disperse visitors in the area. Potential developed recreation sites have been identified.

Wildlife Resource Considerable big-game winter use occurs on south facing benches up slope of the North Fork of the Middle Fork of the Willamette River. During the summer at least two elk herds, numbering 75 to 100 animals, utilize the meadow/ridgeline complex of Grasshopper Mountain. Forage/cover ratios at higher elevations favor cover. Timber harvest could help balance the ratios, but topography is so steep that forage utilization would likely be limited. Judicious harvest of older stands at lower elevations would probably improve big-game conditions, but would also reduce habitat for old-growth dependent species. A management system designed to develop late successional stands would benefit old-growth dependent species, but would probably preclude expansion of big-game herds to their highest potential.

Timber Resource The roadless area includes about 9,087 acres of land suitable for growing timber under managed conditions. Stands of mature Douglas-fir, true firs, and mountain hemlock occupy the area representing about 351 million board feet. If stands are converted to a managed condition, biological potential yield will be 1,151,000 cubic feet per year at culmination of mean annual increment. Site productivity ranges from Class IV to Class V. The remaining area is unsuitable.

Cultural Resources There is a high probability that numerous undiscovered prehistoric sites exist within the area due to the areas high suitability as a summer upland hunting, camping, and gathering

location. It is also likely that historic sites exist based on the high use of the area for summer grazing of cattle and sheep during the early part of the century.

Management Considerations

Fire Long-term fire history suggests that this area suffered several large catastrophic fires in the late 1800s and early 1900s resulting in the current stands of 70 to 120 year old Douglas-fir mixed with remnant stands of old-growth and mixed age timber. More recent history indicates a scattered incidence of small lightning caused fires in the interior as well as some minor roadside fires along the edges. Present suppression policies have been highly successful at limiting the size of wildfire. This may be responsible for encroachment of conifer forest types into the high meadows. Fuel loadings range from 20 to 45 tons per acre.

Insects and Disease The area is typical of second growth Douglas-fir types. Some incidence of bark beetle and a major infestation of root rot, *Phellinus weirii*, have been noticed in the northeast corner. The South Frissel Timber Sale is intended to convert this area to a less susceptible timber type and limit the further spread of the disease.

Need

Nearby Wilderness and Its Use The Waldo Lake Wilderness (37,157 acres) is just across the road to the south of the Chucksney Mountain. It is also within one mile of the Three Sisters Wilderness (283,539 acres) on the north edge of the roadless area. Refer to Chapter III for the amount of use these Wildernesses receive.

Distance from Population Centers The area is approximately 65 miles by highway to the east of Eugene, Oregon.

Interest by Proponents The Chucksney Mountain roadless area generated a low amount of interest with 50% of the responses favoring inclusion of the roadless area into the inventory.

Environmental Consequences

As a consequence of implementing any of the proposed Alternatives there will be effects on the Chucksney Mountain roadless area. In Alternatives NC, D, A, J, and W, 29 to 40% of this area will be affected by road construction and timber harvest. Alternative K will develop 86% of the area and L will develop 9%. As a result of this development, uses dependent on roadless conditions--such as semiprimitive recreation--will not be provided in portions of the area. Implementation of proposed management activities associated with Alternatives K would alter the suitability of this area for future Wilderness consideration. Alternative L maintains the option of future Wilderness consideration for most of this area. Figure C-23-2 illustrates how this area has been allocated in each Alternative.

Based on the amount and distribution of management areas assigned to the Chucksney Mountain roadless area, an array of goods and services are provided. Emphasis on priced commodities such as wood products are provided in Alternative K. Emphasis on amenity values such as dispersed recreation opportunities, high visual quality, and old-growth habitat are provided in Alternatives NC, K, A, J, D, and W. The amounts of other goods and services to be provided from the area for each Alternative are illustrated in Figure C-23-3. Additional information regarding the environmental consequences of the activities associated with these goods and services is located in Chapter IV of this FEIS.

Table T314. Management Area Acreage of Alternatives (C-23-2)

Management Areas	Alternatives						
	NC (No Change)	K (WFC)	A (No Action)	J (DEIS-PA)	W (PA)	D (Wildlife)	L (ONRC)
1 Wilderness							
Management Area 1a	--	--	--	--	--	--	--
Management Area 1b	--	--	--	--	--	--	13,139
Management Area 1c	--	--	--	--	--	--	--
Management Area 1d	--	--	--	--	--	--	--
2 Oregon Cascades Recreation Area							
Management Area 2a	--	--	--	--	--	--	--
Management Area 2b	--	--	--	--	--	--	--
3 Experimental Forest							
Management Area 3	--	--	--	--	--	--	--
4 Research Natural Area							
Management Area 4	--	--	--	--	--	--	--
5 Special Interest Area							
Management Area 5a	--	--	--	--	--	--	--
Management Area 5b	--	--	--	--	--	--	--
6 Wild and Scenic River							
Management Area 6a	--	--	--	--	--	--	--
Management Area 6b	277	277	277	192	171	277	--
Management Area 6c	--	--	--	--	--	--	--
7 Old-Growth Grove							
Management Area 7	--	--	--	--	--	--	192
8 T & E Species							
Management Area 8	--	--	--	--	--	--	--
9 Special Habitat ¹							
Management Area 9a	--	1,194	1,024	939	939	768	341
Management Area 9b	--	43	43	21	43	--	--
Management Area 9c	--	171	43	43	107	--	--
Management Area 9d	--	--	--	--	192	--	--
10 Dispersed Recreation							
Management Area 10a	--	--	--	--	--	--	--
Management Area 10b	--	--	--	--	--	--	--
Management Area 10c	--	--	--	--	--	--	--
Management Area 10d	--	--	--	--	--	--	--
Management Area 10e	9,087	--	9,087	9,492	9,364	11,987	--
Management Area 10f	--	--	--	--	--	--	--

Management Areas	NC (No Change)	K (WFC)	A (No Action)	J (DEIS-PA)	W (PA)	D (Wildlife)	L (ONRC)
11 Scenic							
Management Area 11a	--	--	--	2,112	2,069	--	--
Management Area 11b	--	192	--	--	--	--	--
Management Area 11c	--	--	--	--	--	832	427
Management Area 11d	704	--	597	448	299	--	--
Management Area 11e	--	--	--	--	--	--	491
Management Area 11f	--	--	--	--	--	--	512
12 Developed Recreation							
Management Area 12a	21	21	21	21	21	21	21
Management Area 12b	--	--	--	--	--	--	--
13 Special and Ad- ministrative Use							
Management Area 13a	--	--	--	--	--	--	--
Management Area 13b	--	--	--	--	--	--	--
14 General Forest							
Management Area 14a	5,418	13,161	4,245	2,112	2,133	1,493	--
15 Riparian ²							
Management Area 15	*	448	170	128	171	128	107

¹ Acres of network sites that overlap with other no harvest management areas are not included in MA9a, 9b, 9c acres.

² Only alternatives with acres assigned to no harvest prescriptions for riparian have acres allocated to MA15. In alternatives K, A, and J riparian acres follow Forest-wide standards and guidelines for riparian harvest rates. Riparian acres in NC are distributed throughout other management areas.

**Table C-23-3. Chucksney Roadless Area
Quantifiable Resources Outputs, Environmental Effects, and Activities by Alternative**

		Alternatives							
Output, Effects, or Activity	Unit of Measure	NC	K	A	J	W	D	L	
Recommended Wilderness Recreation Use 1st Decade Area Recommended for Wilderness	RVDs	--	--	--	--	--	--	--	
	Acres	--	--	--	--	--	--	13,139	
Nonwilderness Dispersed Recreation Use in the 1st Decade	Semiprimitive Nonmotorized	RVDs	2,936	--	2,936	2,932	2,986	3,897	--
		Acres	9,087	--	9,087	9,492	9,364	11,987	--
	Semiprimitive Motorized	RVDs	--	--	--	--	--	--	--
		Acres	--	--	--	--	--	--	--
	Roaded Natural	RVDs	8,447	9,336	10,842	9,682	9,953	13,758	13,806
		Acres	1,003	2,154	2,176	1,792	1,941	2,026	2,368
	Roaded Modified	RVDs	7,840	19,402	6,910	7,404	7,043	2,031	--
		Acres	5,418	13,353	4,245	4,223	4,202	1,493	--
	Trails	Existing Trails							
		Full Protection Level	Miles	16.0	10.0	16.0	16.0	16.0	17.0
Moderate Protection Level		Miles	1.0	1.0	1.0	1.0	2.0	--	0.0
Low Protection Level		Miles	1.0	8.0	1.0	1.0	--	--	0.0
Potential Trails									
Full Protection Level		Miles	7.0	4.0	7.0	7.0	8.0	8.0	8.0
Moderate Protection Level		Miles	1.0	--	1.0	1.0	--	--	--
Low Protection Level	Miles	1.0	4.0	1.0	1.0	--	--	--	
Visual Quality Objectives	Preservation	Acres	9,087	1,408	1,493	10,494	10,452	12,755	13,673
	Retention	Acres	277	277	405	192	363	277	1,280
	Partial Retention	Acres	725	469	597	597	491	981	555
	Modification	Acres	--	192	--	2,112	2,069	--	--
	Maximum Modification	Acres	5,418	13,161	4,245	2,112	2,133	1,493	--
1st Decade	Road Construction	Miles	--	7.0	3.2	4.5	3.2	2.5	2.0
	Area Harvested	Acres	--	1,129	790	861	472	603	73
	Programmed Timber Harvest	MBF	--	9,493	6,350	7,576	4,095	4,324	311
	Area Remaining Undeveloped	%	--	77	84	83	91	88	98
	Lands by Timber Yield Levels	Full Yield (95-100%)	Acres	3,839	7,060	2,880	2,965	2,986	1,941
75-94% of Full Yield		Acres	683	448	661	277	64	256	--
50-74% of Full Yield		Acres	256	405	341	277	192	320	768
30-49% of Full Yield		Acres	--	--	--	--	--	--	299

Waldo-Lake - 9,705 Acres

Description

History The Waldo-Lake roadless area is a parcel of much greater area called the Waldo Lake roadless area. To reduce confusion in describing the area, the descriptions of the 44,857 acres of Waldo roadless area was divided into six parcels: Fuji, Salmon Creek, Many Prairies, Koch, Moolack, and Lake. Waldo Lake roadless area was included in both RARE I and RARE II. The original 89,590 acres of roadless area was considered for Wilderness by the United States Congress. They released 44,857 acres for multiple-use management and designated 37,157 acres as Waldo Lake Wilderness, and designated 7,577 to be added to the Three Sisters Wilderness in the Oregon Wilderness Act of 1984. This area now includes only Waldo Lake and a strip of lake shore.

Location and Access This area is included in portions of T.21S., Rs.5½ and 6E., and T.22S., Rs.5 ½ and 6E., in Lane County within the Oakridge Ranger District and approximately 24 miles east of the town of Oakridge. It is accessed by Forest Service Road 5897 from the east and numerous trails from the south, west, and north.

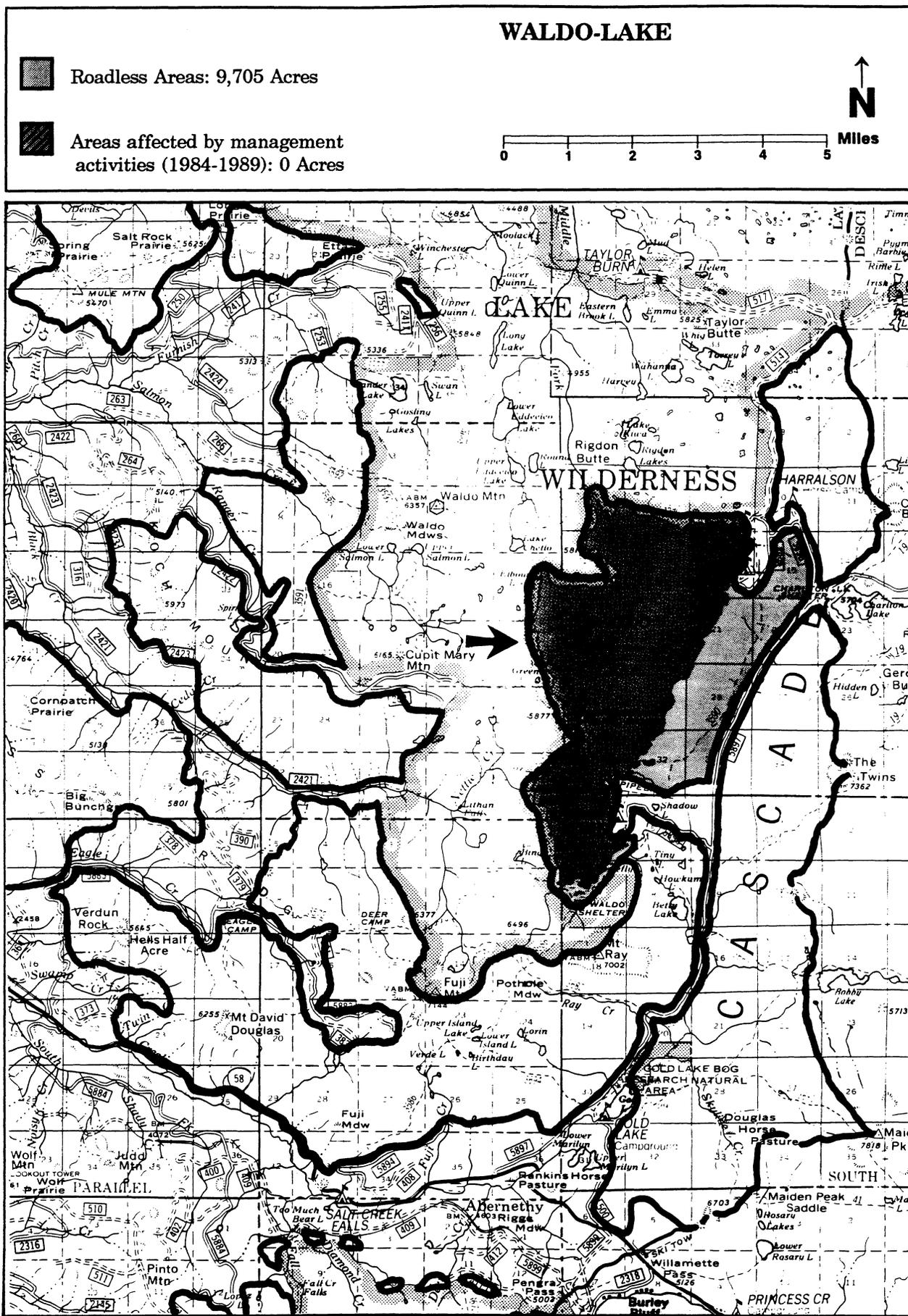
Geography and Topography The area is dominated by Waldo Lake which occupies 6,040 acres. The lake was formed by volcanic processes and modified by glaciation. The remainder of the area consists of a generally narrow strip of shoreline with flat to rolling topography. No permanent streams flow into the lake and the shoreline is moderately convoluted. Elevations range from 5,414 (Waldo Lake surface elevation) to 5,850 feet above sea level.

Soil Soil along the lake shore is generally shallow and derived from glacial materials overlaid by pumice deposits from Mt. Mazama. For more soil information refer to *Willamette National Forest Soil Resource Inventory* (Legard and Meyer 1973).

Vegetation Vegetation consists mostly of true fir/mountain hemlock forests that also contain a considerable amount of lodgepole pine and western white pine. There are many small wet meadows along the lake shore, and one large meadow at the south end of the lake.

Ecosystem There is one major potential vegetation zone and one vegetation community for this area according to classification systems by Bailey (1976) and Kuchler (1966). The vegetation zone is the Pacific Forest (M2410) zone. The vegetative community is fir/Hemlock (*Abies-Tsuga*) forest (004).

Figure C-24-1



Current Uses Management direction (FLMP 1977) provides for motorized and nonmotorized recreational use. Waldo Lake receives low to moderate boating use, usually associated with camping activities in the three campgrounds adjacent to the lake. Some hiking occurs on the trail that circles the lake. Some fishing also occurs, but the lake does not provide a rich fisheries resource.

Appearance Waldo Lake is one of the purest and clearest lakes in the world. Its large size embodies over 6,000 acres surrounded by evergreen forest. The distance of the far peaks in the background illustrate its size from serene viewpoints around the lake shore.

Surroundings The Waldo-Lake roadless area is bordered on the south and west sides by the Waldo Lake Wilderness, and on the north by the Three Sisters Wilderness. On the east, it is separated from the Maiden Peak roadless area by Forest Road 5897.

Attractions The clear water of Waldo Lake is the main attraction. The shoreline is easily accessible for canoes and boats. The afternoon winds fill the sails of wind propelled boats and boards. Campgrounds and easy to walk trails invite many visitors to the lake basin. The lake provides boating opportunities as well as panoramic views of the surrounding volcanic peaks.

Capability

Manageability and Boundaries The eastern boundary is located along adjacent nonconforming uses. This would make this area relatively hard to manage as Wilderness and maintain its primitive character. Sights and sounds of civilization in the narrow road corridor and developed campgrounds will be easily detected. The road provides good access to the eastern boundaries of the area.

Natural Integrity There are a number of small management developments consisting of approximately 25 miles of hiking trails, water control structures, and recreational structures associated with campgrounds.

There is a developed campground on Rhododendron Island which contains pit toilets, fire rings and picnic tables, and exhibits some evidence of soil compaction and vegetation damage. Boat ramps extend into the lake from the three adjacent highly developed campgrounds, and there are several benches in the vicinity of the campgrounds. An underground water line exists from Charlton Lake to Islet Campground. Motor boat use is currently permitted on Waldo Lake and some very limited and local water pollution from engine fuel and oil can be seen on occasion. There is also a primitive wooden shelter of historic value near the meadow at the south end of the lake.

There is a U.S. Geological Survey (USGS) stream gauging station at the outlet of the lake in its northwest corner. The original outlet channel was bypassed through excavation of the existing channel. At Klovdahl Bay there is a diversion tunnel with dam, that has been plugged, which once drained the lake into the Black Creek drainage to the west.

This tunnel consists of a massive cement and steel structure with a moderate amount of associated excavation. Neither of these water control features have much, if any, effect upon the integrity of the natural systems, since the tunnel is no longer a functional diversion structure, but they both present intrusive features into an otherwise natural environment.

Natural Appearance Aside from the localized development structures, the Waldo-Lake roadless area appears very natural to both the casual and informed observer.

Opportunities for Solitude Due to the long sight distance when on the lake, this area does not provide good opportunities for solitude, but there are many small bays that boaters can enter to experience a feeling of isolation. The forested margin provides excellent opportunities for solitude due to the screening effect of the vegetation, and to a lesser extent, the topography.

Opportunities for Primitive Recreation Waldo Lake provides excellent opportunities for human or wind powered boating, hiking, and fishing. It also provides photographic opportunities.

Challenging Experience The size of Waldo Lake provides a challenge for boating experiences, especially during stormy weather.

Special Features Scientists from Oregon and California universities have used the lake periodically for limnological (fresh water lake) studies. There is considerable history associated with Waldo Lake. The Klovdahl Tunnel and Hydroelectric Project and Waldo Lake access which was a primitive dirt road until 1967 when the Waldo Road was put in, have been long standing items of interest.

Availability

Resource Potentials

Water Resource A water system for Shadow Bay Campground is located at the end of Forest Road 504. This system pumps water out of Waldo Lake for campground use. A water gauging station is located at the head of the North Fork of the Middle Fork of the Willamette River, near Dam Camp, which is used by the U.S. Soil Conservation Service to measure the flow out of Waldo Lake.

Livestock Resource There is no potential for domestic livestock use, but good potential for recreation stock use.

Timber Resource The roadless area includes about 3,370 acres of land suitable for growing timber under managed conditions. Stands of mature Douglas-fir, true firs, and mountain hemlock occupy the area representing about 98 million board feet. If stands are converted to a managed condition, biological potential yield will be 273,000 cubic feet per year at culmination of mean annual increment. Site productivity ranges from Class IV to Class V. The remaining area is unsuitable.

Wildlife Resource The Waldo-Lake roadless area provides light to moderate summer range use for big game animals. Wolverine use is likely during the winter. The area encompasses nearly 3 miles of Waldo Lake's east shoreline, consequently any management activities could have a significant impact on water and fishing values. Most big game forage is associated with scattered root-rot pockets, and forage-cover ratios could be improved by timber harvest.

Recreation Resource Capacity estimates indicate that this area could provide 6,868 Recreation Visitor Days (RVDs) of Semiprimitive recreation use. Potential trail locations and developed recreation sites have been identified.

Cultural Resources The Waldo-Lake roadless area contains a large share of ground that could be classed as high potential for artifacts and sites. There is abundant water in most locations combined with a variety of upland food resources such as huckleberries, pond lilies (wocus), seeds, and game. This was likely a major resource catchment area during the summer and fall for many prehistoric people.

Only a small portion has been surveyed in the western portion of the Waldo roadless area. Four basic types of cultural resources have been derived: 1) Upland prehistoric Native American lithic scatters along ridges and in saddles; 2) lithic scatters and "campsites" adjacent to lakes and springs; 3) historic sheepherding camps, trapping camps, and cabins; and 4) historic USDA Forest Service guard stations, shelters, and petroglyphs.

Management Considerations

Insect and Disease Laminated root rot, *Phellinus weirii*, is prevalent throughout the area.

Need

Nearby Wilderness and Its Use The Waldo-Lake roadless area is adjacent to the Waldo Lake Wilderness (37,157 acres); 7 miles north of the Diamond Peak Wilderness (53,773 acres); and 7 miles south of the Three Sisters Wilderness (283,539 acres). Refer to Chapter III for the amount of use these Wildernesses receive.

Distance from Population Centers The area is approximately 60 miles by highway to the southeast of Eugene, Oregon.

Interest by Proponents The Waldo Lake roadless area generated a high amount of interest with 71% of the responses favoring inclusion of the roadless area into the inventory.

Environmental Consequences

As a consequence of implementing any of the proposed Alternatives there will be effects on the Waldo-Lake roadless area. In Alternative K, 13% of the land area will be affected by road construction and timber harvest. On the remaining alternatives less than 1% will be developed. As a result of this development, uses dependent on roadless conditions, such as semiprimitive recreation, will not be provided in the area. Portions of this area contiguous to the Waldo Lake Wilderness in Alternative K will remain suitable for consideration as Wilderness additions in the next cycle of Forest planning. All other Alternatives maintain the option of future Wilderness consideration for this area. Figure C-24-2 illustrates how this area has been allocated in each Alternative.

Based on the amount and distribution of management areas assigned to the Waldo-Lake roadless area, an array of goods and services are provided. Emphasis on amenity values such as dispersed recreation opportunities, high visual quality, and old-growth habitat are provided in all Alternatives. The amounts of other goods and services to be provided from the area for each Alternative are illustrated in Figure C-24-3. Additional information regarding the environmental consequences of the activities associated with these goods and services is located in Chapter IV of this FEIS.

Table T314. Management Area Acreage of Alternatives (C-24-2)

Management Areas	Alternatives						
	NC (No Change)	K (WFC)	A (No Action)	J (DEIS-PA)	W (PA)	D (Wildlife)	L (ONRC)
1 Wilderness							
Management Area 1a	--	--	--	--	--	--	--
Management Area 1b	--	--	--	--	--	--	9,684
Management Area 1c	--	--	--	--	--	--	--
Management Area 1d	--	--	--	--	--	--	--
2 Oregon Cascades Recreation Area							
Management Area 2a	--	--	--	--	--	--	--
Management Area 2b	--	--	--	--	--	--	--
3 Experimental Forest							
Management Area 3	--	--	--	--	--	--	--
4 Research Natural Area							
Management Area 4	--	--	64	--	--	--	--
5 Special Interest Area							
Management Area 5a	--	--	--	--	--	--	--
Management Area 5b	--	--	--	--	--	--	--
6 Wild and Scenic River							
Management Area 6a	--	--	--	--	--	--	--
Management Area 6b	--	--	--	--	--	--	--
Management Area 6c	--	--	--	--	--	--	--
7 Old-Growth Grove							
Management Area 7	--	--	--	--	--	--	--
8 T & E Species							
Management Area 8	--	--	--	--	--	--	--
9 Special Habitat ¹							
Management Area 9a	--	--	--	--	--	--	--
Management Area 9b	--	--	--	--	--	--	--
Management Area 9c	--	--	--	--	--	--	--
Management Area 9d	--	--	--	--	--	--	--
10 Dispersed Recreation							
Management Area 10a	--	--	--	--	--	--	--
Management Area 10b	6,164	8,445	6,164	6,143	--	--	--
Management Area 10c	--	--	--	747	7,060	6,911	--
Management Area 10d	--	--	--	--	--	--	--
Management Area 10e	3,455	--	3,455	2,730	2,560	2,709	--
Management Area 10f	--	--	--	--	--	--	--

Management Areas	NC (No Change)	K (WFC)	A (No Action)	J (DEIS-PA)	W (PA)	D (Wildlife)	L (ONRC)
11 Scenic							
Management Area 11a	--	--	--	--	--	--	--
Management Area 11b	--	--	--	--	--	--	--
Management Area 11c	--	--	--	--	--	--	--
Management Area 11d	--	--	--	--	--	--	--
Management Area 11e	--	--	--	--	--	--	--
Management Area 11f	--	1,216	--	--	--	--	--
12 Developed Recreation							
Management Area 12a	43	43	43	43	43	43	43
Management Area 12b	--	--	--	--	--	--	--
13 Special and Ad- ministrative Use							
Management Area 13a	21	21	21	21	21	21	43
Management Area 13b	21	21	21	21	21	21	--
14 General Forest							
Management Area 14a	--	--	--	--	--	--	--
15 Riparian ²							
Management Area 15	*	*..	*..	*..	--	--	--

¹ Acres of network sites that overlap with other no harvest management areas are not included in MA9a, 9b, 9c acres.

² Only alternatives with acres assigned to no harvest prescriptions for riparian have acres allocated to MA15. In alternatives K, A, and J riparian acres follow Forest-wide standards and guidelines for riparian harvest rates. Riparian acres in NC are distributed throughout other management areas.

**Table C-24-3. Waldo-Lake Roadless Area
Quantifiable Resources Outputs, Environmental Effects, and Activities by Alternative**

		Alternatives						
Output, Effects, or Activity	Unit of Measure	NC	K	A	J	W	D	L
Recommended Wilderness Recreation Use 1st Decade Area Recommended for Wilderness	RVDs	--	--	--	--	--	--	--
	Acres	--	--	--	--	--	--	9,620
Nonwilderness Dispersed Recreation Use in the 1st Decade								
Semiprimitive Nonmotorized	RVDs	4,089	50	4,089	3,222	3,003	3,197	--
	Acres	3,519	64	3,519	2,773	2,602	2,752	--
Semiprimitive Motorized	RVDs	7,381	14,138	7,381	9,612	10,176	9,677	--
	Acres	6,100	8,361	6,100	6,847	7,039	6,868	--
Roaded Natural	RVDs	420	14,103	420	420	247	420	420
	Acres	43	1,237	43	43	21	43	43
Roaded Modified	RVDs	190	190	190	190	190	190	190
	Acres	43	43	43	43	43	43	43
Trails								
Existing Trails								
Full Protection Level	Miles	9.0	2.0	9.0	9.0	9.0	9.0	9.0
Moderate Protection Level	Miles	--	8.0	--	--	--	--	--
Low Protection Level	Miles	--	--	--	--	--	--	--
Potential Trails								
Full Protection Level	Miles	6.0	0.0	6.0	6.0	6.0	6.0	6.0
Moderate Protection Level	Miles	--	6.0	--	--	--	--	--
Low Protection Level	Miles	--	--	--	--	--	--	--
Visual Quality Objectives								
Preservation	Acres	3,519	64	3,519	2,773	2,602	2,752	9,620
Retention	Acres	--	1,216	--	747	7,039	6,868	--
Partial Retention	Acres	6,143	8,383	6,143	6,143	21	43	43
Modification	Acres	43	43	43	43	43	43	43
Maximum Modification	Acres	--	--	--	--	--	--	--
1st Decade								
Road Construction	Miles	--	2.0	--	--	--	--	--
Area Harvested	Acres	--	351	--	--	--	--	--
Programmed Timber								
Harvest	MBF	--	2,659	--	--	--	--	--
Area Remaining								
Undeveloped	%	--	89	--	--	--	--	--
Lands by Timber Yield Levels								
Full Yield (95-100%)	Acres	--	--	--	--	--	--	--
75-94% of Full Yield	Acres	--	2,154	--	--	--	--	--
50-74% of Full Yield	Acres	--	1,152	--	--	--	--	--
30-49% of Full Yield	Acres	--	--	--	--	--	--	--

Waldo - Fuji - 15,742 Acres

Description

History The Waldo-Fuji roadless area is a parcel of much greater area called the Waldo Lake roadless area. To reduce confusion in describing the area, the descriptions of the 44,857 acres of Waldo roadless area was divided into six parcels: Fuji, Salmon Creek, Many Prairies, Koch, Moolack, and Lake. Waldo roadless area was included in both RARE I and RARE II. The original 89,590 acres of roadless area was considered for Wilderness by the United States Congress. They released 44,857 acres for multiple-use management and designated 37,157 acres as Waldo Lake Wilderness, and designated 7,577 to be added to the Three Sisters Wilderness in the Oregon Wilderness Act of 1984. Since the release of these lands in 1984, approximately 1,365 acres have been affected in the Fuji parcel by development activities.

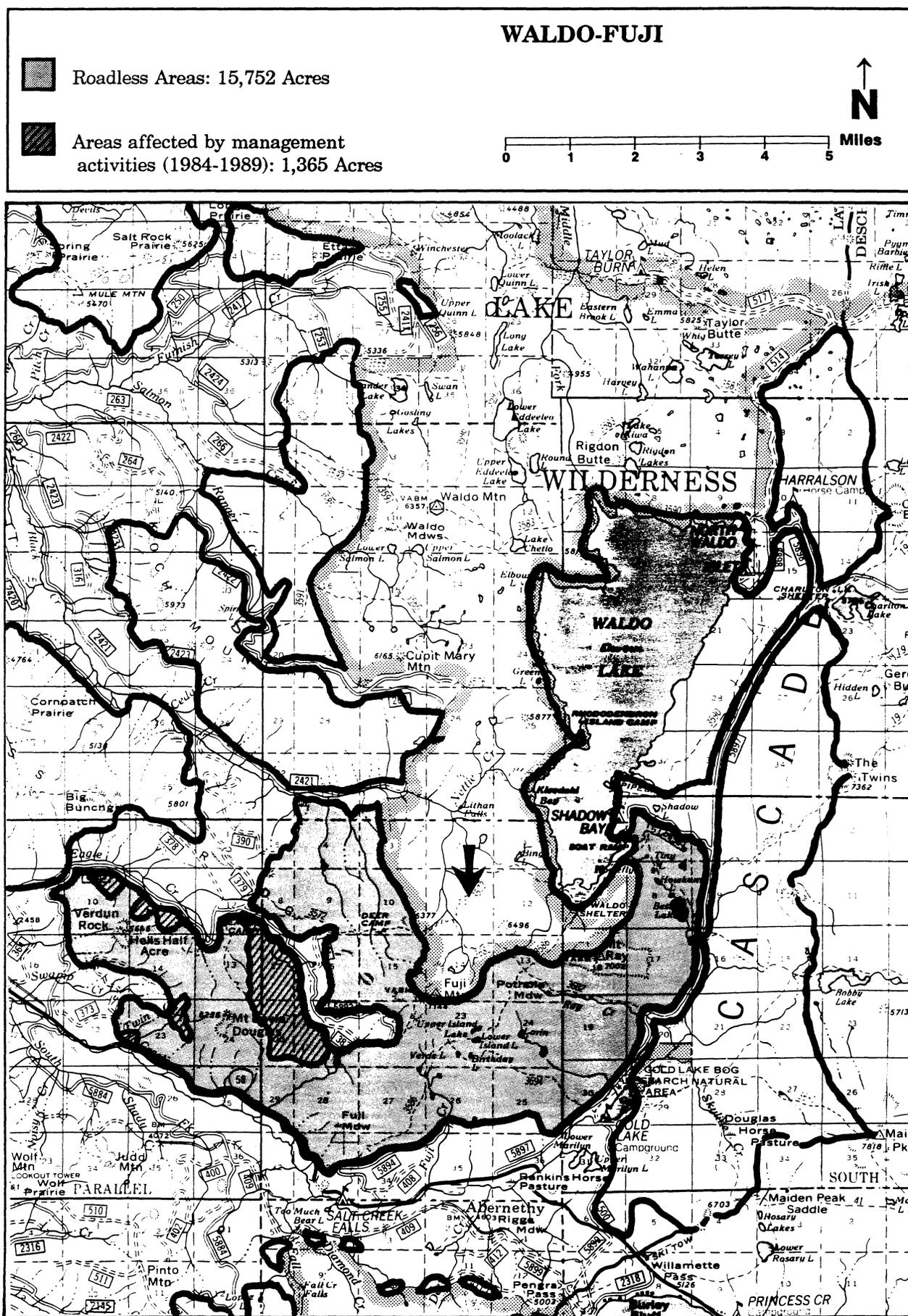
Location and Access The location is T.21S., R.5½E., and T.22S., Rs.5, 5½, and 6E., in Lane County. It is approximately 18 miles southeast of the city of Oakridge, just north of Salt Creek Falls along State Highway 58. It is accessed by Forest Roads 5883373, 5883, 5883381, 5883383, and 5894. Many trails traverse the area, the most heavily used being the High Divide/Eugene to Crest Trail, and Trails 3674, 3694, 3682, and 3664.

Geography and Topography This area offers a wide spectrum of geographic and topographic features; most is within the High Cascade Plateau. Topography is moderately sloping with occasional higher and steeper ridges or mountains. Elevations range from 2,900 feet to 7,150 feet at the summit of Mt. Fuji. The area is somewhat dissected in the western portion, with lower slopes being concave and upper slopes convex. The eastern portion is poorly drained with many small glacially formed lakes.

Soil The large area contains a wide variety of soil types, from deep organic soils in meadows near drainage headwalls, to shallow rocky soils and rock outcrops on steep south facing slopes. In much of the area, especially the flatter eastern portion, the upper soil profile is composed of six inches to three feet of Mazama pumice deposits. There are about 3,839 acres that have potential for severe surface erosion; and approximately 448 acres of potentially severe surface erosion and unstable soil. For more soil information refer to *Willamette National Forest Soil Resource Inventory* (Legard and Meyer 1973).

Vegetation The variety of soil types, elevation range, and slope aspects supports several vegetation types. Dense forests range from Douglas-fir/western hemlock types at the lower elevations, to nearly pure mountain hemlock stands at the higher elevations. Stands of Pacific silver fir occur on wetter high elevation sites. Approximately 10% of the area supports nonforest vegetation types ranging from dry rocky meadows on south slopes to wet meadows along drainages. The summit of Fuji Mountain is residence for a subalpine community of scattered subalpine fir and associated alpine herbaceous plants.

Figure C-25-1



Ecosystem There is one major potential vegetation zone and one vegetation community according to classification systems by Bailey (1976) and Kuchler (1966). The vegetation zone is the Pacific Forest (M2410) zone. The vegetative community is fir/hemlock (*Abies-Tsuga*) forest (004).

Current Uses Current management direction (FLMP 1977) provides for timber production on about three-quarters of the area. The eastern quarter is included in the Waldo Lake Recreation Area and provides for a variety of recreational activities. The area in general is used for hiking, hunting, fishing and camping. The Recreational Opportunity Spectrum (ROS) classes are Roded Natural in the west and Semiprimitive Nonmotorized to the east. Plantations are present in the western portion. Since this area was inventoried in 1984 management activities are estimated to have affected 800 acres of the area.

Appearance The dense forests and openings created by lakes, meadows, frequent rock outcrops, and high peaks provide a high diversity of scenic and recreational experiences.

Surroundings The area is adjacent to the southern end of the Waldo Lake Wilderness and its eastern portion is adjacent to the Waldo-Lake and Maiden Peak roadless areas. All are managed for recreational use. Adjacent areas to the south and west provide for intensive and extensive timber management. A portion of the southern boundary is defined by State Highway 58, a major commercial truck route for crossing the Cascade Range and scenic highway.

Attractions Attractions within the Fuji Area are numerous. Fuji Mountain, the second highest peak on the Oakridge Ranger District, provides excellent views of all the surrounding Cascade Crest. The area contains 11 lakes over five acres in size, all of which contain fish and a large swamp adjacent to Black Creek. Fuji Meadows is the largest of many meadows, several of which are located in the Deer Camp Area. The cliffs below Mt. David Douglas provide an impressive view from State Highway 58 as well as some of the most challenging rock climbing in the area. Hells Half Acre and Verdun Rock provide a diverse hiking experience to rugged dry meadows with diverse plant life. Most all creeks have picturesque waterfalls.

Capability

Manageability and Boundaries Boundaries follow topographic features and roads making the area easier to be administer as a wilderness resource. Boundary changes would be necessary to eliminate nonconforming uses. However, the roads would provide access to the area.

Natural Integrity Old harvest units represent about 2% of the total area. The extensive network of trails serves to disperse recreationists throughout the area, thus eliminating overuse of any one section. Betty Lake is an exception; it gets high use.

Natural Appearance Most visitors find this roadless area apparently natural, except for the harvest units on the flat near Mt. David Douglas.

Opportunity for Solitude Opportunities for solitude are very good since a great amount of topographic diversity and fairly dense vegetation screens people and objects within several hundred feet.

This area is contiguous with the Waldo Lake Wilderness. The distance from the perimeter to core is three to 5 miles. Offsite intrusions, mostly in the form of road, highway, and railroad noise are perceptible but relatively distant. Some logging operation noise may be perceptible.

Opportunity for Solitude Abundant primitive recreation opportunities exist for back country exploration. Many small lakes and several isolated, medium sized lakes provide opportunities for cross-country hiking and fishing. Mt. Ray is a relatively easy peak, but must be navigated without the benefit of a trail.

Challenging Experiences Fuji Mountain, Verdun Rock, and Mt. David Douglas are all moderately challenging peaks.

Special Features Several old-growth hemlocks, with carvings on them, indicate the early camp locations of one of the first USDA Forest Service Rangers in this area, Cy Bingham. They are located along the South Waldo Trail. A historic shepherders' camp still has some remains near Hells Half Acre. A historic fire lookout was once established on Fuji Mountain; nothing substantial remains of this lookout. There are prehistoric cultural resource sites near Mt. David Douglas and Deer Camp with considerable lithic scatterings.

The wet meadow-riparian complex located on Mt. David Douglas represents a unique ecological system from the standpoint of both big game use and botanical values. A number of unique, uncommon, and/or sensitive plant species are found, including *Asarum caudatum*, *Eburophyton austinae*, *Hypopitys monotropa*, and various sphagnums supporting carnivorous plants, including two species of sundew. The spotted frog, *Rana pretiosa*, considered threatened by the State of Oregon, also occurs in this area. Some bald eagle use occurs at Gold Lake.

Wolverine habitat is located near Mt. Ray. Fishers are found occasionally throughout the area. Spotted owls have been located in the Black Creek and Gold Lake areas. No federally listed endangered or threatened plant species are known to be present.

Availability

Resource Potentials

Livestock Resource No potential for domestic livestock; however, there is good potential for recreation stock use.

Timber Resource The roadless area includes about 10,750 acres of land suitable for growing timber under managed conditions. Stands of mature Douglas-fir, true firs, lodgepole pine, and mountain hemlock occupy the area representing about 420 million board feet. If stands are converted to a managed condition, biological potential yield will be 1,055,000 cubic feet per year at culmination of mean annual increment. Site productivity ranges from Class IV to Class V. The remaining area is unsuitable.

Wildlife Resource Some of the most valuable big game summer range on Oakridge District occurs in the vicinity of Verdun Rock and Mt. David Douglas. The Deer Camp area between Fuji Mountain and Black Creek also receives heavy use. A major seasonal migration route for elk runs through the area between Mount Ray and Pothole Meadows. Winter wolverine activity has been documented over much of the east end.

Theoretically, it might be possible to approach optimum forage-cover ratios by timber harvest, but big game animals flourish under existing conditions that it seems unlikely that disturbance could provide any significant improvements. Increased human activity resulting from roading could result in a net loss of habitat, for big game as well as old growth dependant species. Various small lakes support a sports fishery, most notably at Lucas Lake and several unnamed lakes located near Deer Camp.

Recreation Resource Capacity estimates indicate that this area could provide 9,060 Recreation Visitor Days (RVDs) of Semiprimitive recreation use. Potential trails have been identified and could provide access and disperse visitors. Two potential interpretive sites, each an acre in size, and one potential snow park site have been identified. One of the potential interpretive sites could accommodate 20 Persons-At-One-Time (PAOT) and provide 1,920 RVDs annually. The other site could accommodate 15 PAOT and provide 720 RVDs. The potential snow park site could accommodate 300 PAOT and provide 16,800 RVDs annually.

Cultural Resources The Waldo-Fuji roadless area contains a large share of ground that could be classed as high potential for artifacts and sites. There is abundant water in most locations combined with a variety of upland food resources such as huckleberries, pond lilies (wocus), seeds, and game. This was likely a major resource catchment area during the summer and fall for many prehistoric people.

Only a small portion has been surveyed in the western portion of the Waldo roadless area. Four basic types of cultural resources have been derived: 1) Upland prehistoric Native American lithic scatters along ridges and in saddles; 2) lithic scatters and "campsites" adjacent to lakes and springs; 3) historic sheepherding camps, trapping camps, and cabins; and 4) historic USDA Forest Service guard stations, shelters, and petroglyphs.

Management Considerations There have been 38 spot fires since 1943. Because of the great variety of vegetative communities, fuel loadings are just as diverse, ranging from five to 100 tons per acre.

Need

Nearby Wilderness and Its Use The Waldo-Fuji roadless area is adjacent to the the Waldo Lake Wilderness (37,157 acres) and is 2 miles north of the Diamond Peak Wilderness (53,773 acres). Refer to Chapter III for the amount of use these Wildernesses receive.

Distance from Population Centers The area is approximately 55 miles by highway to the southeast of Eugene, Oregon.

Interest by Proponents The Waldo Lake roadless area generated a high amount of interest with 71% of the responses favoring inclusion of the roadless area into the inventory.

Environmental Consequences

As a consequence of implementing any of the proposed Alternatives there will be effects on the Waldo-Fuji roadless area. In Alternatives NC, K, A, J, and W, 24 to 64% of this area will be affected by road construction and timber harvest. Alternative D and L will develop 3% of the area. As a result of this development, uses dependent on roadless conditions, such as semiprimitive recreation, will not be provided in portions of the area. Portions of this area contiguous to the Waldo Lake Wilderness may remain suitable for consideration as Wilderness additions in the next cycle of Forest planning. All Alternatives maintain the option of future Wilderness consideration on part of this area. Figure C-25-2 illustrates how this area has been allocated in each Alternative.

Based on the amount and distribution of management areas assigned to the Waldo-Fuji roadless area, an array of goods and services are provided. Emphasis on priced commodities such as wood products are provided in Alternatives NC, K, and A. Emphasis on amenity values such as dispersed recreation opportunities, high visual quality, and old-growth habitat are provided in Alternatives L, D, J, and W. The amounts of other goods and services to be provided from the area for each Alternative are illustrated

in Figure C-25-3. Additional information regarding the environmental consequences of the activities associated with these goods and services is located in Chapter IV of this FEIS.

Table T314. Management Area Acreage of Alternatives (C-25-2)

Management Areas	Alternatives						
	NC (No Change)	K (WFC)	A (No Action)	J (DEIS-PA)	W (PA)	D (Wildlife)	L (ONRC)
1 Wilderness							
Management Area 1a	--	--	--	--	--	--	--
Management Area 1b	--	--	--	--	--	--	14,888
Management Area 1c	--	--	--	--	--	--	--
Management Area 1d	--	--	--	--	--	--	--
2 Oregon Cascades Recreation Area							
Management Area 2a	--	--	--	--	--	--	--
Management Area 2b	--	--	--	--	--	--	--
3 Experimental Forest							
Management Area 3	--	--	--	--	--	--	--
4 Research Natural Area							
Management Area 4	--	--	--	--	--	--	--
5 Special Interest Area							
Management Area 5a	--	--	--	1,109	1,088	--	--
Management Area 5b	--	--	--	--	--	--	--
6 Wild and Scenic River							
Management Area 6a	--	--	--	--	--	--	--
Management Area 6b	--	--	--	--	--	--	--
Management Area 6c	--	--	--	--	--	--	--
7 Old-Growth Grove							
Management Area 7	64	--	64	--	--	--	256
8 T & E Species							
Management Area 8	--	--	--	--	--	--	--
9 Special Habitat ¹							
Management Area 9a	--	1,152	917	597	597	427	64
Management Area 9b	--	--	--	--	--	--	--
Management Area 9c	--	171	171	21	--	--	--
Management Area 9d	--	--	--	--	--	--	--
10 Dispersed Recreation							
Management Area 10a	--	--	--	--	--	--	--
Management Area 10b	21	5,674	21	21	--	--	--
Management Area 10c	--	--	--	448	619	448	85
Management Area 10d	--	--	--	--	--	--	--
Management Area 10e	5,631	--	5,631	9,769	9,726	14,398	--
Management Area 10f	--	--	--	--	--	--	--

Management Areas	NC (No Change)	K (WFC)	A (No Action)	J (DEIS-PA)	W (PA)	D (Wildlife)	L (ONRC)
11 Scenic							
Management Area 11a	--	2,474	--	64	43	--	--
Management Area 11b	--	--	--	--	--	--	--
Management Area 11c	--	1,408	--	1,301	1,408	128	85
Management Area 11d	256	320	256	320	--	--	--
Management Area 11e	1,493	--	1,365	--	--	--	171
Management Area 11f	683	981	640	405	213	--	149
12 Developed Recreation							
Management Area 12a	21	21	21	21	21	21	21
Management Area 12b	--	--	--	--	--	--	--
13 Special and Ad- ministrative Use							
Management Area 13a	--	--	--	--	--	--	--
Management Area 13b	--	--	--	--	--	--	--
14 General Forest							
Management Area 14a	7,572	3,157	6,335	1,450	1,813	299	--
15 Riparian ²							
Management Area 15	*	385	320	213	213	21	21

¹ Acres of network sites that overlap with other no harvest management areas are not included in MA9a, 9b, 9c acres.

² Only alternatives with acres assigned to no harvest prescriptions for riparian have acres allocated to MA15. In alternatives K, A, and J riparian acres follow Forest-wide standards and guidelines for riparian harvest rates. Riparian acres in NC are distributed throughout other management areas.

**Table C-25-3. Waldo-Fuji Roadless Area
Quantifiable Resources Outputs, Environmental Effects, and Activities by Alternative**

		Alternatives								
Output, Effects, or Activity	Unit of Measure	NC	K	A	J	W	D	L		
Recommended Wilderness Recreation Use 1st Decade Area Recommended for Wilderness	RVDs	--	--	--	--	--	--	--		
	Acres	--	--	--	--	--	--	14,888		
Nonwilderness Dispersed Recreation Use in the 1st Decade	Semiprimitive Nonmotorized	RVDs	5,424	--	5,424	9,105	9,059	11,548	--	
		Acres	5,631	--	5,631	9,769	9,726	14,398	--	
	Semiprimitive Motorized	RVDs	26	13,999	26	1,323	1,777	1,258	130	
		Acres	21	5,674	21	469	619	448	85	
	Roaded Natural	RVDs	7,237	27,170	14,844	15,436	11,212	2,890	8,422	
		Acres	2,517	4,437	3,754	3,989	3,541	597	768	
	Roaded Modified	RVDs	24,907	16,752	21,945	5,505	6,644	1,120	--	
		Acres	7,572	5,631	6,335	1,514	1,856	299	--	
	Trails	Existing Trails								
		Full Protection Level	Miles	15.0	8.0	16.0	20.0	17.0	21.0	21.0
Moderate Protection Level		Miles	2.0	12.0	2.0	1.0	5.0	--	0.0	
Low Protection Level		Miles	4.0	3.0	3.0	1.0	--	--	--	
Potential Trails										
Full Protection Level		Miles	1.0	2.0	2.0	4.0	5.0	5.0	6.0	
Moderate Protection Level		Miles	0.0	1.0	0.0	1.0	1.0	--	--	
Low Protection Level	Miles	4.0	3.0	4.0	1.0	--	1.0	--		
Visual Quality Objectives	Preservation	Acres	5,695	1,322	6,783	11,497	11,412	14,824	15,208	
	Retention	Acres	2,176	981	2,005	853	832	448	405	
	Partial Retention	Acres	299	7,807	619	1,877	1,642	171	128	
	Modification	Acres	--	2,474	--	64	43	--	--	
	Maximum Modification	Acres	2,572	3,157	6,335	1,450	1,813	299	--	
1st Decade	Road Construction	Miles	--	4.0	6.0	3.0	2.8	1.0	0.2	
	Area Harvested	Acres	--	1,062	1,312	552	479	114	51	
	Programmed Timber Harvest	MBF	--	7,980	9,885	4,058	3,747	1,605	350	
	Area Remaining Undeveloped	%	--	79	74	89	91	98	99	
Lands by Timber Yield Levels	Full Yield (95-100%)	Acres	5,332	4,288	4,373	2,219	2,303	362	85	
	75-94% of Full Yield	Acres	1,003	4,458	1,152	384	--	--	--	
	50-74% of Full Yield	Acres	427	917	405	320	384	--	171	
	30-49% of Full Yield	Acres	--	--	--	--	--	--	85	

Waldo - Salmon Creek - 3,007 Acres

Description

History The Waldo-Salmon Creek roadless area is a parcel of much greater area called the Waldo roadless area. To reduce confusion in describing the area, the descriptions of the 44,857 acres of Waldo roadless area was divided into six parcels: Fuji, Salmon Creek, Many Prairies, Koch, Moolack, and Lake. Waldo roadless area was included in both RARE I and RARE II. The original 89,590 acres of roadless area was considered for Wilderness by the United States Congress. They released 44,857 acres for multiple-use management and designated 37,157 acres as Waldo Lake Wilderness, and designated 7,577 to be added to the Three Sisters Wilderness in the Oregon Wilderness Act of 1984. Since the release of these lands in 1984, approximately 1,003 acres have been affected in the Salmon Creek parcel by development activities.

Location and Access The area includes portions of T.21S., R.5 and 5½E., and T.21S., R.5½E., in Lane County. The area is within the Oakridge Ranger District and approximately 12 miles east of the City of Oakridge. Access is by Forest Roads 2422, 2424, 2424266, and 2417253. Access to the interior is through Trails 3585, 3591, 3592, and 3568 which traverse the area in route to the Waldo Lake Wilderness.

Geography and Topography Topography is quite varied, ranging from flat, glaciated valley bottoms and broad gentle ridgetops to steep midslopes and cirque heads. Three major streams traverse the area, Salmon Creek, Ranger Creek, and Furnish Creek. These streams were highly glaciated in the past. The area also contains numerous smaller, somewhat dissected drainages. Elevations range from 3,100 to 5,850 feet above sea level.

Soil Soil types are quite variable and tend to be moderately deep along major drainages and somewhat shallow elsewhere. There are areas of talus rock and outcrops on the main valley sides and heads of drainages. There are about 7252 acres that have potential for severe surface erosion.

Vegetation Vegetation types range from old-growth Douglas-fir, western hemlock, and red cedar stands along the lower portions of the major drainages to stands of mountain hemlock, true-fir, or lodgepole pine on the broad ridgetops. There are extensive areas, especially in the upper reaches of Salmon Creek, where prehistoric fires have created large, open, brushy areas with trees widely scattered. There is a unique mature chinquapin grove about one half mile in on Trail 3585.

Ecosystem There is one major potential vegetation zone and one vegetation community for this area according to classification systems by Bailey (1976) and Kuchler (1966). The vegetation zone is the Pacific Forest (M2410) zone. The vegetative community is Pacific silver fir/Douglas-fir (*Abies-Pseudotsuga*) forest (003).

Current Uses Management direction as documented in the 1977 Willamette Land Management Plan provides commercial timber harvest over most of the area. As of 1985, 220 acres are under contract for harvest, involving 3.2 miles of road construction. The area is also used for hiking, fishing, and hunting to a moderate degree. Since this area was inventoried in 1984 management activities are estimated to have affected 1,120 acres of the area.

Appearance This area contains dense stands of old-growth timber, extensive brushy burned over areas, occasional rock outcrops, and talus slopes.

Surroundings The eastern boundary is adjacent to the newly created Waldo Lake Wilderness. To the south and southwest, the area is separated from the Waldo-Koch roadless area by Forest Road 2422. All areas adjacent to the Salmon Creek roadless area, except the eastern boundary that is common with the Waldo Lake Wilderness, are designated for commercial timber production.

Attractions Salmon Creek and Furnish Creek riparian habitats are the main attractions.

Capability

Manageability and Boundaries The boundaries would be modified to eliminate nonconforming uses such as plantations and roads. This would provide a boundary that would be easy to manage for its natural character.

Natural Integrity The harvest units and roads are present with natural processes disturbed to some extent.

Natural Appearance The roadless area appears unnatural to most people, because of the presence of timber harvest units. Evidence of unnaturalness is usually restricted to site and sound.

Opportunity for Solitude Diversity of topography offers screening potential in at least half the area, but may be limited or lacking in the remainder. Vegetative screening is good in half the area, screening people easily within a quarter mile of one another; there is limited or no screening available in the remainder. The distance from the perimeter to the approximate geographic center is from one to three miles.

Opportunity for Primitive Recreation There is good opportunity for primitive recreation. Four low standard trails lead into the Waldo Lake Wilderness. An opportunity to navigate untrailed backcountry exists.

Special Features Lithic scatterings have been identified adjacent to Forest Trail 3592, and near Waldo Meadows. No federally listed threatened or endangered plants or animals are known to be present.

Availability

Resource Potentials

Livestock Resource This area has no potential for domestic livestock, and good potential for recreation stock use.

Timber Resource The roadless area includes about 2,176 acres of land suitable for growing timber under managed conditions. Stands of mature Douglas-fir, true firs, and mountain hemlock occupy the area representing about 71 million board feet. If stands are converted to a managed condition, biological

potential yield will be 236,000 cubic feet per year at culmination of mean annual increment. Site productivity ranges from Class IV to Class V. The remaining area is unsuitable.

Wildlife Resource Much of the area is used heavily as summer range by big game. Timber harvest could help improve forage-cover ratios, with a probable increase in deer and elk populations. Old-growth habitat would be reduced, unless a management system were employed to develop late-succession stands.

Recreation Resource Capacity estimates indicate that this area could provide 1,953 Recreation Visitor Days (RVDs) of Semiprimitive recreation use. No potential trail locations have been identified. A potential interpretive site one acre in size exists which could provide 720 RVDs annually and accommodate 15 Persons-At-One-Time (PAOT).

Cultural Resources The Waldo roadless area contains a large share of ground that could be classed as high potential for artifacts and sites. There is abundant water in most locations combined with a variety of upland food resources such as huckleberries, pond lilies (wocus), seeds, and game. This was likely a major resource catchment area during the summer and fall for many prehistoric people.

Only a small portion has been surveyed in the western portion of the Waldo roadless area. Four basic types of cultural resources have been derived: 1) Upland prehistoric Native American lithic scatters along ridges and in saddles; 2) lithic scatters and "campsites" adjacent to lakes and springs; 3) historic sheepherding camps, trapping camps, and cabins; and 4) historic USDA Forest Service guard stations, shelters, and petroglyphs.

Management Considerations Five spot fires have occurred since 1943. Fuel loading ranges from five to 100 tons per acre.

Need

Nearby Wilderness and Its Use The Waldo-Salmon Creek roadless area is adjacent to the the Waldo Lake Wilderness (37,157 acres), 12 miles north of the Diamond Peak Wilderness (53,773 acres), and 10 miles southwest of the Three Sisters Wilderness (283,593 acres). Refer to Chapter III for the amount of use these Wildernesses receive.

Distance from Population Centers The area is approximately 60 miles by road to the southeast of Eugene, Oregon.

Interest by Proponents The Waldo Lake roadless area generated a high amount of interest with 71% of the responses favoring inclusion of the roadless area into the inventory.

Environmental Consequences

As a consequence of implementing any of the proposed Alternatives there will be effects on the Waldo-Salmon Creek roadless area. In Alternatives NC, K, A, J, and W, 93 to 96% of this area will be affected by road construction and timber harvest. Alternative D will develop 27% of the area. As a result of this development, uses dependent on roadless conditions, such as semiprimitive recreation, will not be provided in portions of the area. Implementation of proposed management activities associated with all Alternatives, except Alternatives L and D, would alter the suitability of this area for future Wilderness consideration. However, portions of this area contiguous to the Waldo Lake Wilderness would remain suitable for consideration as Wilderness additions in the next cycle of Forest planning. Alternative L maintains the option of future Wilderness consideration for nearly the entire area while

Alternative D maintains this option on about 70% of the area. Figure C-26-2 illustrates how this area has been allocated in each Alternative.

Based on the amount and distribution of management areas assigned to the Waldo-Salmon Creek roadless area, an array of goods and services are provided. Emphasis on priced commodities such as wood products are provided in Alternatives NC, K, A, J, and W. Emphasis on amenity values such as dispersed recreation opportunities, high visual quality, and old-growth habitat are provided in Alternatives L and D. The amounts of other goods and services to be provided from the area for each Alternative are illustrated in Figure C-26-3. Additional information regarding the environmental consequences of the activities associated with these goods and services is located in Chapter IV of this FEIS.

Table T314. Management Area Acreage of Alternatives (C-26-2)

Management Areas	Alternatives						
	NC (No Change)	K (WFC)	A (No Action)	J (DEIS-PA)	W (PA)	D (Wildlife)	L (ONRC)
1 Wilderness							
Management Area 1a	--	--	--	--	--	--	--
Management Area 1b	--	--	--	--	--	--	2,944
Management Area 1c	--	--	--	--	--	--	--
Management Area 1d	--	--	--	--	--	--	--
2 Oregon Cascades Recreation Area							
Management Area 2a	--	--	--	--	--	--	--
Management Area 2b	--	--	--	--	--	--	--
3 Experimental Forest							
Management Area 3	--	--	--	--	--	--	--
4 Research Natural Area							
Management Area 4	--	--	--	--	--	--	--
5 Special Interest Area							
Management Area 5a	--	--	--	--	--	--	--
Management Area 5b	--	--	--	--	--	--	--
6 Wild and Scenic River							
Management Area 6a	--	--	--	--	--	--	--
Management Area 6b	--	--	--	--	--	--	--
Management Area 6c	--	--	--	--	--	--	--
7 Old-Growth Grove							
Management Area 7	128	--	128	--	128	--	43
8 T & E Species							
Management Area 8	--	--	--	--	--	--	--
9 Special Habitat ¹							
Management Area 9a	--	128	128	128	128	107	--
Management Area 9b	--	--	--	--	--	--	--
Management Area 9c	--	85	--	85	--	--	--
Management Area 9d	--	--	--	--	--	--	--
10 Dispersed Recreation							
Management Area 10a	--	--	--	--	--	--	--
Management Area 10b	--	--	--	--	--	--	--
Management Area 10c	--	--	--	--	--	--	--
Management Area 10d	--	--	--	--	--	--	--
Management Area 10e	--	--	--	--	--	2,090	--
Management Area 10f	--	--	--	--	--	--	--

Management Areas	NC (No Change)	K (WFC)	A (No Action)	J (DEIS-PA)	W (PA)	D (Wildlife)	L (ONRC)
11 Scenic							
Management Area 11a	--	--	--	--	--	--	--
Management Area 11b	--	--	--	--	--	--	--
Management Area 11c	--	--	--	--	--	--	21
Management Area 11d	--	--	--	--	--	--	--
Management Area 11e	--	--	--	--	--	--	--
Management Area 11f	--	--	--	--	--	--	--
12 Developed Recreation							
Management Area 12a	--	--	--	--	--	--	--
Management Area 12b	--	--	--	--	--	--	--
13 Special and Ad- ministrative Use							
Management Area 13a	--	--	--	--	--	--	--
Management Area 13b	--	--	--	--	--	--	--
14 General Forest							
Management Area 14a	2,880	2,752	2,709	2,752	2,709	811	--
15 Riparian ²							
Management Area 15	*	43	43	43	43	--	--

¹ Acres of network sites that overlap with other no harvest management areas are not included in MA9a, 9b, 9c acres.

² Only alternatives with acres assigned to no harvest prescriptions for riparian have acres allocated to MA15. In alternatives K, A, and J riparian acres follow Forest-wide standards and guidelines for riparian harvest rates. Riparian acres in NC are distributed throughout other management areas.

**Table C-26-3. Waldo-Salmon Creek Roadless Area
Quantifiable Resources Outputs, Environmental Effects, and Activities by Alternative**

		Alternatives									
Output, Effects, or Activity	Unit of Measure	NC	K	A	J	W	D	L			
Recommended Wilderness Recreation Use 1st Decade Area Recommended for Wilderness	RVDs	--	--	--	--	--	--	--			
	Acres	--	--	--	--	--	--	2,944			
Nonwilderness Dispersed Recreation Use in the 1st Decade	Semiprimitive Nonmotorized	RVDs	--	--	--	--	--	--			
		Acres	--	--	--	--	--	--			
	Semiprimitive Motorized	RVDs	--	--	--	--	--	1,304	--		
		Acres	--	--	--	--	--	2,090	--		
	Roaded Natural	RVDs	1,334	2,396	2,816	2,396	2,816	741	173		
		Acres	128	256	299	256	299	107	64		
	Roaded Modified	RVDs	8,201	7,802	7,631	7,802	7,631	3,303	--		
		Acres	2,880	2,752	2,709	2,752	2,709	811	--		
	Trails	Existing Trails	Full Protection Level	Miles	1.0	2.0	2.0	2.0	--	3.0	4.0
			Moderate Protection Level	Miles	--	--	--	--	4.0	--	--
Low Protection Level			Miles	3.0	3.0	3.0	3.0	--	1.0	--	
Potential Trails		Full Protection Level	Miles	--	--	--	--	--	--	--	
		Moderate Protection Level	Miles	--	--	--	--	--	--	--	
		Low Protection Level	Miles	--	--	--	--	--	--	--	
Visual Quality Objectives	Preservation	Acres	128	213	256	213	256	2,197	2,986		
	Retention	Acres	--	--	--	--	--	--	--		
	Partial Retention	Acres	--	43	43	43	43	--	21		
	Modification	Acres	--	--	--	--	--	--	--		
	Maximum Modification	Acres	2,880	2,752	2,709	2,752	2,709	811	--		
1st Decade	Road Construction	Miles	--	3.0	2.0	0.0	2.0	1.2	--		
	Area Harvested	Acres	--	453	423	23	336	274	--		
	Programmed Timber Harvest	MBF	--	3,341	3,174	219	2,631	2,185	170		
	Area Remaining Undeveloped	%	--	53	57	98	65	72	--		
	Lands by Timber Yield Levels										
Full Yield (95-100%)	Acres	2,090	1,941	1,920	1,941	1,685	789	--			
75-94% of Full Yield	Acres	--	21	21	21	--	--	--			
50-74% of Full Yield	Acres	--	21	21	21	235	--	--			
30-49% of Full Yield	Acres	--	--	--	--	--	--	--			

Waldo - Many Prairies - 1,685 Acres

Description

History The Waldo-Many Prairies roadless area is a parcel of much greater area called the Waldo roadless area. To reduce confusion in describing the area, the descriptions of the 44,857 acres of Waldo Lake roadless area was divided into six parcels: Fuji, Salmon Creek, Many Prairies, Koch, Moolack, and Lake. Waldo Lake roadless area was included in both RARE I and RARE II. The original 89,590 acres of roadless area was considered for Wilderness by the United States Congress. They released 44,857 acres for multiple-use management and designated 37,157 acres as Waldo Lake Wilderness, and designated 7,577 to be added to the Three Sisters Wilderness in the Oregon Wilderness Act of 1984. Since the release of these lands in 1984, approximately 5,930 acres have been affected in the Many Prairies parcel by development activities.

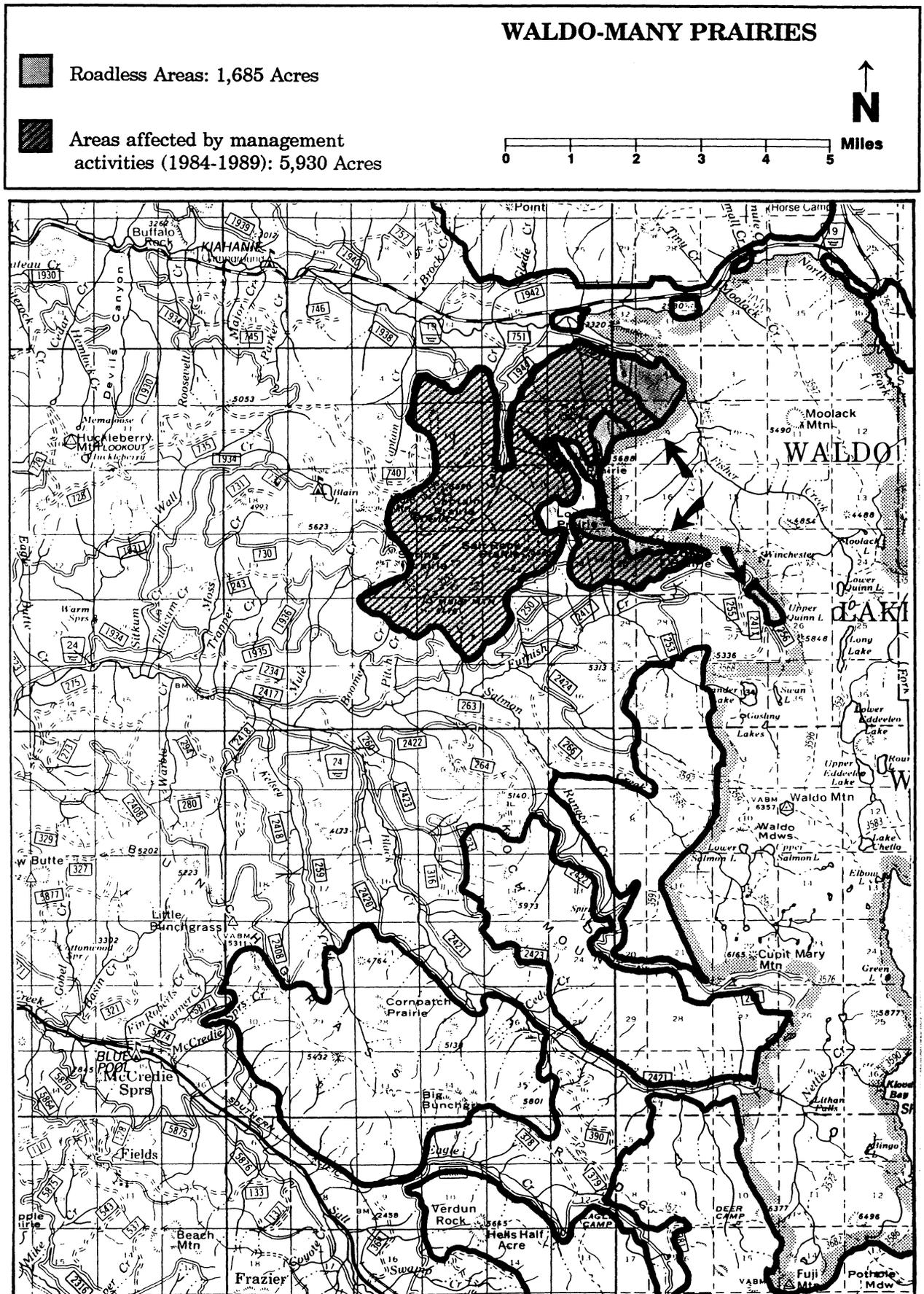
Location and Access The area includes portions of T.20S., Rs.5 and 5½E., in Lane County and is approximately 16 miles northeast of the town of Oakridge in the Oakridge Ranger District. It is accessed by Forest Roads 1944, 1938, 1944750, 2417250, 1936, 1935252, and 1934236. The Blair Lake Trail (3553) traverses the southern portion. This area borders the Waldo Lake Wilderness on the east.

Geography and Topography Elevations vary from 2,720 to 5,690 feet above sea level. Terrain is generally quite steep and dissected by numerous drainages. Some flatter areas exist on ridgetops and at the head of the major drainages. Topography has been influenced by past glaciation and a small lake occupies the cirque at the head of Cayuse Creek.

Soil A wide variety of soil types exist due to the complex land forms that occur. Soils range from moderately deep glacially influenced soils along drainages, to shallow to non-existent on the steep midslopes. Many rock outcrops occur, especially where mid slopes have been steepened by glacial activity. There are about 1,045 acres that have potential for severe surface erosion, and approximately 43 acres of potentially unstable landtypes. For more soil information refer to *Willamette National Forest Soil Resource Inventory* (Legard and Meyer 1973).

Vegetation The wide range of soil types, elevation and aspects generate an equally wide range of vegetation types. Old-growth forests of large Douglas-fir, western hemlock, and red cedar occur at lower elevations along drainages and on north slopes. More or less pure Douglas-fir old-growth forest exist on midslopes. The ridge tops support forests of noble fir, Pacific silver fir, and a limited amount of mountain hemlock. Occasional beargrass meadows occur along the ridgetops and grasses and forbs in wet meadows.

Figure C-27-1



Ecosystem There is one major potential vegetation zone and two vegetation communities for this area according to classification systems by Bailey (1976) and Kuchler (1966). The vegetation zone is the Pacific Forest (M2410) zone. The vegetative communities are fir/hemlock (*Abies-Tsuga*) forest (004) and Pacific silver fir/Douglas-fir (*Abies-Pseudotsuga*) forest (003).

Current Uses Management direction in the 1977 Forest Land Management Plan prescribes intensive and extensive timber management. To date, 761 acres have been harvested under 10 different timber sales. This activity has involved the construction of about 9 miles of road. Recreational use is moderate to light, mostly involving hiking on the Blair Lake Trail, elk hunting, and occasional fishing at Devils Lake and Fisher Creek. Since this area was inventoried in 1984 management activities are estimated to have affected 1,120 acres of the area.

Appearance The extensive beargrass meadow system along the ridgetops, which is surrounded by dense forests covering steep and sometimes deeply dissected topography, makes this area appear to be scenic, wild, and very unique.

Surroundings The roadless area is adjacent to the northwestern boundary of the Waldo Lake Wilderness. The north, south, and west areas are intensively managed forest lands.

Attractions The many beargrass meadows provide opportunities for viewing wildlife and landscape, including many waterfalls along the steep drainages.

Capability

Manageability and Boundaries Intensively planned roads and harvest units that will deeply penetrate the area preclude the primitive character, even though it is adjacent to the Waldo Lake Wilderness.

Natural Integrity Ecological processes are still functioning in an unaffected manner except for the exclusion of fire for the last 50 to 60 years. This has resulted in a small change in the abundance of brushy vegetation and, to an even smaller extent, has provided for some forest encroachment into the beargrass meadows. In addition there is the effect of 761 acres of timber harvest, and 9 miles of road construction.

Natural Appearance Aside from the areas where road construction and timber harvesting have occurred, the area appears very natural to the average observer. The area along the trail still leaves an impression of naturalness, as the topographic screening does not bring the harvest units into view.

Opportunity for Solitude Topographic variation and dense vegetation provide a moderate opportunity for solitude.

Challenging Experiences Cross-country hiking in to Devils Lake would be a moderate challenge due to the lack of trails.

Special Features Mule Mountain is the site of Old Lookout Tower, there are no structural remains but part of the foundation is still evident. There are small archaeological sites in the prairies and lithic scatters along the Blair Lake Trail. Several sensitive plant species have been identified in the high prairies. No federally listed threatened and endangered species are known to be present.

Availability

Resource Potentials

Livestock Resource There is good potential for domestic livestock, and recreation stock use in the prairie areas.

Timber Resource The roadless area includes about 1,088 acres of land suitable for growing timber under managed conditions. Stands of mature Douglas-fir, true firs, and mountain hemlock occupy the area representing about 50 million board feet. If stands are converted to a managed condition, biological potential yield will be 43,000 cubic feet per year at culmination of mean annual increment. Site productivity ranges from Class IV to Class V. The remaining area is unsuitable.

Wildlife Resource The Waldo-Many Prairies roadless area receives moderate summer elk use which occurs along the ridgetop from Captain Prairie east to North Prairie. Timber harvest could provide increased forage where side-slopes are not too steep.

Recreation Resource Capacity estimates indicate that this area could provide 1,103 Recreation Visitor Days (RVDs) of Semiprimitive recreation use. No potential trail locations or developed recreation sites have been identified.

Cultural Resources The Waldo-Many Prairies roadless area contains a large share of ground that could be classed as high potential for artifacts and sites. There is abundant water in most locations combined with a variety of upland food resources such as huckleberries, pond lilies (wocus), seeds, and game. This was likely a major resource catchment area during the summer and fall for many prehistoric people. Only a small portion has been surveyed in the western portion of the Waldo roadless area. Four basic types of cultural resources have been derived: 1) Upland prehistoric Native American lithic scatters along ridges and in saddles; 2) lithic scatters and "campsites" adjacent to lakes and springs; 3) historic sheepherding camps, trapping camps, and cabins; and 4) historic USDA Forest Service guard stations, shelters, and petroglyphs.

Management Considerations

Fire There have been 32 spot fires since 1943. Fuel loads vary from five to 150 tons per acre.

Insect and Disease Extensive bark beetle damage is evident between Devils Lake, Mule Mountain, and Captain Prairie.

Need

Nearby Wilderness and Its Use The Waldo-Many Prairies roadless area is adjacent to the the Waldo Lake Wilderness (37,157 acres) and 10 miles southwest of the Three Sisters Wilderness (283,593 acres). Refer to Chapter III for the amount of use these Wildernesses receive.

Distance from Population Centers The area is approximately 60 miles by road to the southeast of Eugene, Oregon.

Interest by Proponents The Waldo Lake roadless area generated a high amount of interest with 71% of the responses favoring inclusion of the roadless area into the inventory.

Environmental Consequences

As a consequence of implementing any of the proposed Alternatives there will be effects on the Waldo-Many Prairies roadless area. In all Alternatives, except Alternative L, 86 to 100% of this area will be affected by road construction and timber harvest. Alternative L will develop 6% of the area. As a result of this development, uses dependent on roadless conditions, such as semiprimitive recreation, will not be provided in portions of the area. Implementation of proposed management activities associated with all Alternatives except Alternative L, would alter the suitability of this area for future Wilderness consideration. However, portions of this area contiguous to the Waldo Lake Wilderness would remain suitable for consideration as Wilderness additions in the next cycle of Forest planning. Figure C-27-2 illustrates how this area has been allocated in each Alternative.

Based on the amount and distribution of management areas assigned to the Waldo-Many Prairies roadless area, an array of goods and services are provided. Emphasis on priced commodities such as wood products are provided in Alternatives NC, K, A, J, D, and W. Emphasis on amenity values such as dispersed recreation opportunities, high visual quality, and old-growth habitat are provided in Alternative L. The amounts of other goods and services to be provided from the area for each Alternative are illustrated in Figure C-27-3. Additional information regarding the environmental consequences of the activities associated with these goods and services is located in Chapter IV of this FEIS.

Table T314. Management Area Acreage of Alternatives (C-27-2)

Management Areas	Alternatives						
	NC (No Change)	K (WFC)	A (No Action)	J (DEIS-PA)	W (PA)	D (Wildlife)	L (ONRC)
1 Wilderness							
Management Area 1a	--	--	--	--	--	--	--
Management Area 1b	--	--	--	--	--	--	1,578
Management Area 1c	--	--	--	--	--	--	--
Management Area 1d	--	--	--	--	--	--	--
2 Oregon Cascades Recreation Area							
Management Area 2a	--	--	--	--	--	--	--
Management Area 2b	--	--	--	--	--	--	--
3 Experimental Forest							
Management Area 3	--	--	--	--	--	--	--
4 Research Natural Area							
Management Area 4	--	--	--	--	--	--	--
5 Special Interest Area							
Management Area 5a	--	--	--	--	--	--	--
Management Area 5b	--	--	--	--	--	--	--
6 Wild and Scenic River							
Management Area 6a	--	--	--	--	--	--	--
Management Area 6b	--	--	--	--	--	--	--
Management Area 6c	--	--	--	--	--	--	--
7 Old-Growth Grove							
Management Area 7	85	--	85	--	85	--	--
8 T & E Species							
Management Area 8	--	--	--	--	--	--	--
9 Special Habitat ¹							
Management Area 9a	--	--	--	--	--	--	--
Management Area 9b	--	--	--	--	--	--	--
Management Area 9c	--	--	--	--	--	--	--
Management Area 9d	--	--	--	128	149	128	--
10 Dispersed Recreation							
Management Area 10a	--	--	--	--	--	--	--
Management Area 10b	--	--	--	--	--	--	--
Management Area 10c	--	--	--	--	--	--	--
Management Area 10d	--	--	--	--	--	--	--
Management Area 10e	--	--	--	--	--	--	--
Management Area 10f	--	--	--	--	--	--	--

Management Areas	NC (No Change)	K (WFC)	A (No Action)	J (DEIS-PA)	W (PA)	D (Wildlife)	L (ONRC)
11 Scenic							
Management Area 11a	--	--	--	512	427	619	--
Management Area 11b	--	--	--	--	--	--	--
Management Area 11c	--	--	--	--	--	--	85
Management Area 11d	85	--	85	235	--	341	--
Management Area 11e	--	--	--	--	--	--	21
Management Area 11f	--	--	--	--	--	--	--
12 Developed Recreation							
Management Area 12a	--	--	--	--	--	--	--
Management Area 12b	--	--	--	--	--	--	--
13 Special and Ad- ministrative Use							
Management Area 13a	--	--	--	--	--	--	--
Management Area 13b	--	--	--	--	--	--	--
14 General Forest							
Management Area 14a	1,514	1,642	1,472	789	981	555	--
15 Riparian ²							
Management Area 15	*	43	43	21	43	43	--

¹ Acres of network sites that overlap with other no harvest management areas are not included in MA9a, 9b, 9c acres.

² Only alternatives with acres assigned to no harvest prescriptions for riparian have acres allocated to MA15. In alternatives K, A, and J riparian acres follow Forest-wide standards and guidelines for riparian harvest rates. Riparian acres in NC are distributed throughout other management areas.

**Table C-27-3. Waldo-Many Prairies Roadless Area
Quantifiable Resources Outputs, Environmental Effects, and Activities by Alternative**

		Alternatives						
Output, Effects, or Activity	Unit of Measure	NC	K	A	J	W	D	L
Recommended Wilderness Recreation Use 1st Decade Area Recommended for Wilderness	RVDs	--	--	--	--	--	--	--
	Acres	--	--	--	--	--	--	1,578
Nonwilderness Dispersed Recreation Use in the 1st Decade								
Semiprimitive Nonmotorized	RVDs	--	--	--	--	--	--	--
	Acres	--	--	--	--	--	--	--
Semiprimitive Motorized	RVDs	--	--	--	--	--	--	--
	Acres	--	--	--	--	--	--	--
Roaded Natural	RVDs	617	247	864	1,630	1,038	2,791	914
	Acres	171	43	213	384	277	512	107
Roaded Modified	RVDs	2,848	3,037	2,753	2,430	2,677	5,172	--
	Acres	1,514	1,642	1,472	1,301	1,408	1,173	--
Trails								
Existing Trails								
Full Protection Level	Miles	2.0	2.0	2.0	2.0	2.0	2.0	3.0
Moderate Protection Level	Miles	--	--	--	--	1.0	0.0	--
Low Protection Level	Miles	0.0	0.0	0.0	0.0	--	--	--
Potential Trails								
Full Protection Level	Miles	--	--	--	--	--	--	--
Moderate Protection Level	Miles	--	--	--	--	--	--	--
Low Protection Level	Miles	--	--	--	--	--	--	--
Visual Quality Objectives								
Preservation	Acres	85	--	85	--	85	--	1,578
Retention	Acres	--	--	--	128	149	128	21
Partial Retention	Acres	85	43	128	256	43	384	85
Modification	Acres	--	--	--	513	427	619	--
Maximum Modification	Acres	1,514	1,642	1,472	789	981	555	--
1st Decade								
Road Construction	Miles	--	1.5	2.0	1.0	0.8	2.8	0.1
Area Harvested	Acres	--	173	239	148	150	459	--
Programmed Timber Harvest	MBF	--	1,288	1,932	1,346	1,241	4,652	--
Area Remaining Undeveloped	%	--	68	56	73	73	16	--
Lands by Timber Yield Levels								
Full Yield (95-100%)	Acres	1,003	1,066	981	981	917	896	43
75-94% of Full Yield	Acres	--	21	21	21	--	85	--
50-74% of Full Yield	Acres	--	--	--	--	--	21	21
30-49% of Full Yield	Acres	--	--	--	--	--	--	--

Waldo - Koch - 4,970 Acres

Description

History The Waldo-Koch roadless area is a parcel of much greater area called the Waldo roadless area. To reduce confusion in describing the area, the descriptions of the 44,857 acres of Waldo Lake roadless area was divided into six parcels: Fuji, Salmon Creek, Many Prairies, Koch, Moolack, and Lake. Waldo Lake roadless area was included in both RARE I and RARE II. The original 89,590 acres of roadless area was considered for Wilderness by the United States Congress. They released 44,857 acres for multiple-use management and designated 37,157 acres as Waldo Lake Wilderness, and designated 7,577 to be added to the Three Sisters Wilderness in the Oregon Wilderness Act of 1984. Since the release of these lands in 1984, approximately 4,586 acres have been affected in the Koch roadless area by development activities.

Location and Access This area is within T.21S., Rs.5 and 5½E., in Lane County. It is approximately 15 miles east of the city of Oakridge and is accessed by Forest Service Roads 2421, 2423, and 2422. Trail access to the interior is limited to Forest Trail 3584 into Spirit Lake.

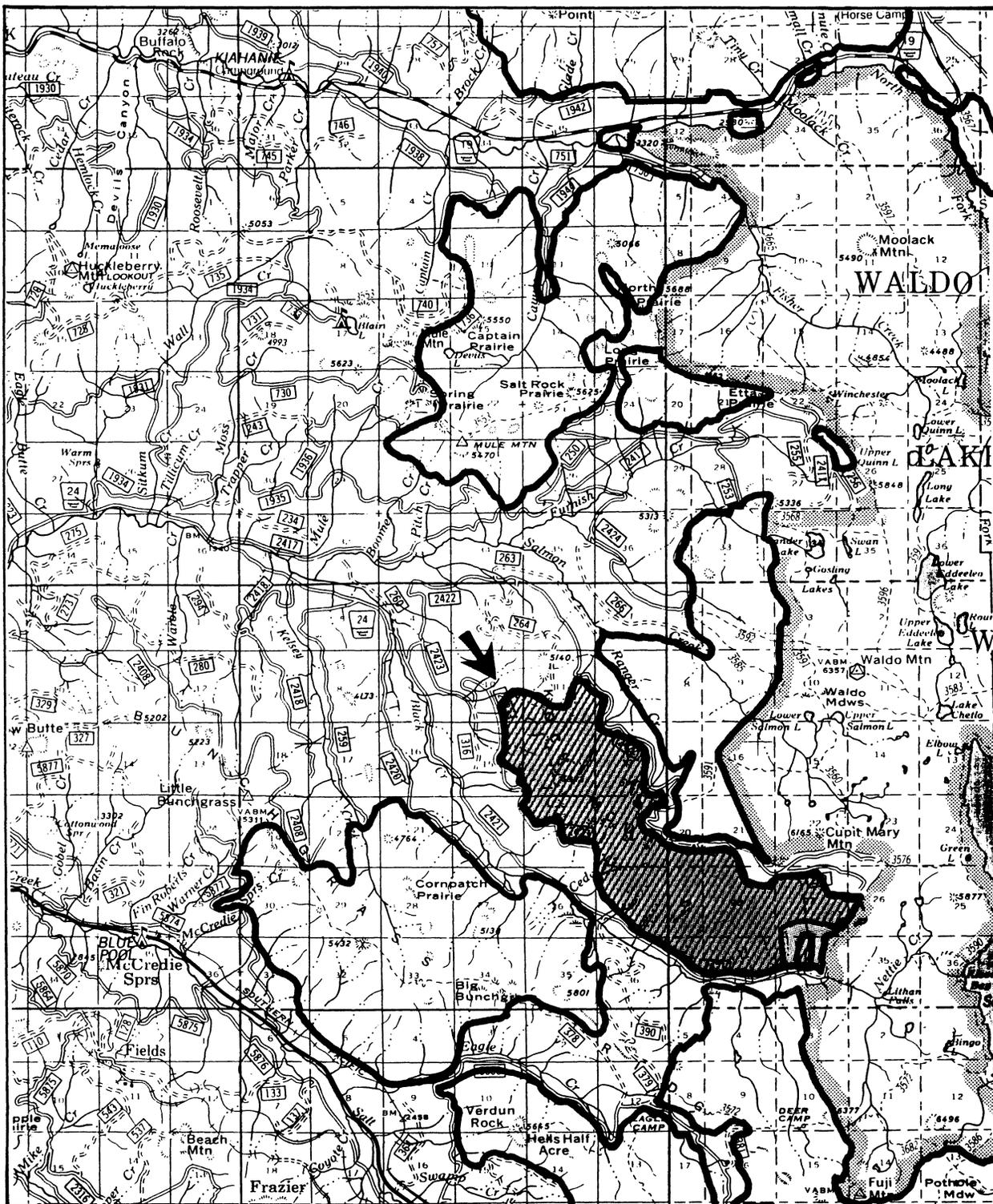
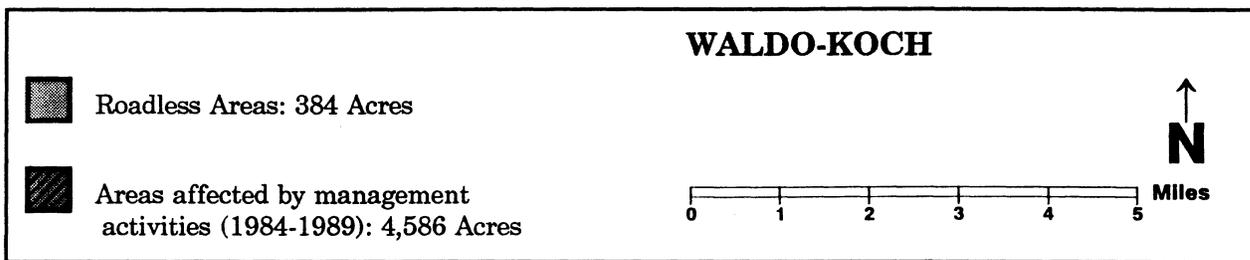
Geography and Topography This area is composed of a large ridge (Koch Mountain) and an associated portion of the High Cascades plateau. Koch Mountain and the smooth to concave slopes into Ranger Creek and Black Creek are moderately dissected by permanent and intermittent drainages. The area has been shaped by glacial processes. Elevations range from 3,200 to 5,910 feet. Slopes range from flat to very steep, in excess of 100%. Several glacially formed lakes can be found in the area.

Soil Soil types are many and various, ranging from deep cobbly soils along major drainages to moderately steep to shallow pumice soils on the high plateau and ridgetops. Soils on the midslopes are rocky and shallow and many large and extensive rock outcrops occur. There are about 320 acres that have potential for severe surface erosion. For more soil information refer to *Willamette National Forest Soil Resource Inventory* (Legard and Meyer 1973).

Vegetation Vegetation consists of old-growth Douglas-fir forests below 4,500 feet elevation, with western red cedar and western hemlock along drainages and on lower slopes. Above the Douglas-fir forests are stands of noble fir and Pacific silver fir and on the flat plateau are extensive stands of true fir/mountain hemlock forest types. There are occasional rocky meadows along ridgetops and a small wet meadow/brush community adjacent to Spirit Lake, but for the most part, the area is densely forested.

Ecosystem There is one major potential vegetation zone and two vegetation communities for this area according to classification systems by Bailey (1976) and Kuchler (1966). The vegetation zone is the Pacific Forest (M2410) zone. The vegetative communities are fir/hemlock (*Abies-Tsuga*) forest (004) and Pacific silver fir/Douglas-fir (*Abies-Pseudotsuga*) forest (003).

Figure C-28-1



Current Uses Current management direction is for commercial timber harvesting. Approximately 660 acres of timber has been sold for harvest involving the construction of 8.6 miles of road. Other uses are minimal, consisting mostly of elk hunting. Spirit Lake is also a popular camping and fishing spot. Since this area was inventoried in 1984 management activities are estimated to have affected 640 acres of the area.

Appearance The heavy forest cover, where harvest units are not present, and the steep rocky areas provide some scenic views and a rugged natural appearance.

Surroundings The east end is contiguous with the Waldo Lake Wilderness. The north, east, south, and southeast boundaries are adjacent to other roadless areas, though separated from them by roads and some past timber harvesting activities. The north and west boundaries are adjacent to intensively managed commercial forest land. A fair amount of recreational activity occurs in the general area surrounding the Waldo-Koch roadless area, mostly in the form of hunting, fishing, and camping.

Attractions The main attraction is Spirit Lake and the quality elk hunting that can be found along the ridgetops and on the steep south facing slopes of Koch Mountain.

Capability

Manageability and Boundaries If nonconforming uses were eliminated by boundary change, the area would no longer be contiguous with the Waldo Lake Wilderness and the small size would make it difficult to manage for its primeval character.

Natural Integrity and Apparent Naturalness Extensive harvest units and a road system are planned as of 1985; the roads will cut deeply into the interior and will be easily visible.

Natural Appearance The roadless area would appear unnatural to most visitors.

Opportunity for Solitude Due to limited trail access, steep terrain and lack of unique features the opportunity for solitude is very good; however, the sight and sound of management activities could lessen the primitive experience considerably.

Special Features There are lithic scatterings on the Koch Mountain Plateau. No federally listed threatened or endangered plants or animals are known to be present.

Availability

Resource Potentials

Livestock Resource There is no potential for domestic livestock, and very limited potential for recreation stock use.

Timber Resource The roadless area includes about 299 acres of land suitable for growing timber under managed conditions. Stands of mature Douglas-fir, true firs, and mountain hemlock occupy the area representing about 12 million board feet. If stands are converted to a managed condition, biological potential yield will be 34,000 cubic feet per year at culmination of mean annual increment. Site productivity ranges from Class IV to Class V. The remaining area is unsuitable.

Wildlife Resource Summer use by big game animals is heavy near Spirit Lake and the flats south and west of Cupit-Mary Mountain. A significant sports fishery exists at Spirit Lake. Timber harvest

and/or roading of the steep slopes between Koch Mountain and Black Creek could impact important migration routes for big game.

Recreation Resource Capacity estimates indicate that this area could provide 251 Recreation Visitor Days (RVDs) of Semiprimitive recreation use. No potential trail locations have been identified.

Cultural Resources The Waldo Lake roadless area contains a large share of ground that could be classed as high potential for artifacts and sites. There is abundant water in most locations combined with a variety of upland food resources such as huckleberries, pond lilies (wocus), seeds, and game. This was likely a major resource catchment area during the summer and fall for many prehistoric people.

Only a small portion has been surveyed in the western portion of the Waldo roadless area. Four basic types of cultural resources have been derived: 1) Upland prehistoric Native American lithic scatters along ridges and in saddles; 2) lithic scatters and "campsites" adjacent to lakes and springs; 3) historic sheepherding camps, trapping camps, and cabins; and 4) historic USDA Forest Service guard stations, shelters, and petroglyphs.

Management Considerations

Fire There have been 13 spot fires since 1943. Fuel loading varies from five to 150 tons per acre.

Insect and Disease Two small areas of bark beetle damage, one around Spirit Lake and one near Spirit Creek, occur within this roadless area.

Need

Nearby Wilderness and Its Use The Waldo-Koch roadless area is adjacent to the Waldo Lake Wilderness (37,157 acres), ten miles north of the Diamond Peak Wilderness (53,773 acres), and ten miles southwest of the Three Sisters Wilderness (283,539 acres). Refer to Chapter III for the amount of use these Wildernesses receive.

Distance from Population Centers The area is approximately 60 miles by road to the southeast of Eugene, Oregon.

Interest by Proponents The Waldo Lake roadless area generated a high amount of interest with 71% of the responses favoring inclusion of the roadless area into the inventory.

Environmental Consequences

As a consequence of implementing any of the proposed Alternatives there will be effects on the Waldo-Koch roadless area. In all Alternatives, 100% of this area will be affected by road construction and timber harvest. Alternative L will develop 84% of the area. As a result of this development, uses dependent on roadless conditions, such as semiprimitive recreation, will not be provided in portions of the area. Implementation of proposed management activities associated with all Alternatives would alter the suitability of this area for future Wilderness consideration. However, portions of this area contiguous to the Waldo Lake Wilderness would remain suitable for consideration as Wilderness additions in the next cycle of Forest planning. Figure C-28-2 illustrates how this area has been allocated in each Alternative.

Based on the amount and distribution of management areas assigned to the Waldo-Koch roadless area, an array of goods and services are provided. Emphasis on priced commodities such as wood products are provided in all Alternatives. The amounts of other goods and services to be provided from the area for each Alternative are illustrated in Figure C-28-3. Additional information regarding the environmental consequences of the activities associated with these goods and services is located in Chapter IV of this FEIS.

Table T314. Management Area Acreage of Alternatives (C-28-2)

Management Areas	Alternatives						
	NC (No Change)	K (WFC)	A (No Action)	J (DEIS-PA)	W (PA)	D (Wildlife)	L (ONRC)
1 Wilderness							
Management Area 1a	--	--	--	--	--	--	--
Management Area 1b	--	--	--	--	--	--	85
Management Area 1c	--	--	--	--	--	--	--
Management Area 1d	--	--	--	--	--	--	--
2 Oregon Cascades Recreation Area							
Management Area 2a	--	--	--	--	--	--	--
Management Area 2b	--	--	--	--	--	--	--
3 Experimental Forest							
Management Area 3	--	--	--	--	--	--	--
4 Research Natural Area							
Management Area 4	--	--	--	--	--	--	--
5 Special Interest Area							
Management Area 5a	--	--	--	--	--	--	--
Management Area 5b	--	--	--	--	--	--	--
6 Wild and Scenic River							
Management Area 6a	--	--	--	--	--	--	--
Management Area 6b	--	--	--	--	--	--	--
Management Area 6c	--	--	--	--	--	--	--
7 Old-Growth Grove							
Management Area 7	--	--	--	--	--	--	--
8 T & E Species							
Management Area 8	--	--	--	--	--	--	--
9 Special Habitat ¹							
Management Area 9a	--	--	--	--	--	--	--
Management Area 9b	--	--	--	--	--	--	--
Management Area 9c	--	--	--	--	--	--	--
Management Area 9d	--	--	--	--	--	--	--
10 Dispersed Recreation							
Management Area 10a	--	--	--	--	--	--	--
Management Area 10b	--	--	--	--	--	--	--
Management Area 10c	--	--	--	--	--	--	--
Management Area 10d	--	--	--	--	--	--	--
Management Area 10e	--	--	--	--	--	--	--
Management Area 10f	--	--	--	--	--	--	--

Management Areas	NC (No Change)	K (WFC)	A (No Action)	J (DEIS-PA)	W (PA)	D (Wildlife)	L (ONRC)
11 Scenic							
Management Area 11a	--	--	--	--	--	--	--
Management Area 11b	--	--	--	--	--	--	--
Management Area 11c	--	--	--	--	--	--	--
Management Area 11d	--	--	--	--	--	85	--
Management Area 11e	--	--	--	--	--	--	21
Management Area 11f	--	--	--	--	--	--	277
12 Developed Recreation							
Management Area 12a	--	--	--	--	--	--	--
Management Area 12b	--	--	--	--	--	--	--
13 Special and Ad- ministrative Use							
Management Area 13a	--	--	--	--	--	--	--
Management Area 13b	--	--	--	--	--	--	--
14 General Forest							
Management Area 14a	384	384	384	384	384	299	--
15 Riparian ²							
Management Area 15	*	*--	*--	*--	--	--	--

¹ Acres of network sites that overlap with other no harvest management areas are not included in MA9a, 9b, 9c acres.

² Only alternatives with acres assigned to no harvest prescriptions for riparian have acres allocated to MA15. In alternatives K, A, and J riparian acres follow Forest-wide standards and guidelines for riparian harvest rates. Riparian acres in NC are distributed throughout other management areas.

**Table C-28-3. Waldo-Koch Roadless Area
Quantifiable Resources Outputs, Environmental Effects, and Activities by Alternative**

		Alternatives						
Output, Effects, or Activity	Unit of Measure	NC	K	A	J	W	D	L
Recommended Wilderness Recreation Use 1st Decade Area Recommended for Wilderness	RVDs	--	--	--	--	--	--	--
	Acres	--	--	--	--	--	--	85
Nonwilderness Dispersed Recreation Use in the 1st Decade								
Semiprimitive Nonmotorized	RVDs	--	--	--	--	--	--	--
	Acres	--	--	--	--	--	--	--
Semiprimitive Motorized	RVDs	--	--	--	--	--	--	--
	Acres	--	--	--	--	--	--	--
Roaded Natural	RVDs	--	--	--	--	--	494	988
	Acres	--	--	--	--	--	85	299
Roaded Modified	RVDs	664	664	664	664	664	475	--
	Acres	384	384	384	384	384	299	--
Trails								
Existing Trails								
Full Protection Level	Miles	--	--	--	--	--	--	--
Moderate Protection Level	Miles	--	--	--	--	--	--	--
Low Protection Level	Miles	--	--	--	--	--	--	--
Potential Trails								
Full Protection Level	Miles	--	--	--	--	--	--	--
Moderate Protection Level	Miles	--	--	--	--	--	--	--
Low Protection Level	Miles	--	--	--	--	--	--	--
Visual Quality Objectives								
Preservation	Acres	--	--	--	--	--	--	85
Retention	Acres	--	--	--	--	--	--	299
Partial Retention	Acres	--	--	--	--	--	85	--
Modification	Acres	--	--	--	--	--	--	--
Maximum Modification	Acres	384	384	384	384	384	299	--
1st Decade								
Road Construction	Miles	--	0.5	0.5	0.0	0.3	0.4	0.2
Area Harvested	Acres	--	68	64	4-	52	104	35
Programmed Timber Harvest	MBF	--	503	483	33	409	827	243
Area Remaining Undeveloped	%	--	45	48	97	86	17	72
Lands by Timber Yield Levels								
Full Yield (95-100%)	Acres	299	299	299	299	299	213	--
75-94% of Full Yield	Acres	--	--	--	--	--	85	--
50-74% of Full Yield	Acres	--	--	--	--	--	--	21
30-49% of Full Yield	Acres	--	--	--	--	--	--	--

Waldo - Moolack - 1,365 Acres

Description

History The Waldo-Moolack roadless area is a parcel of much greater area called the Waldo roadless area. To reduce confusion in describing the area, the descriptions of the 44,857 acres of Waldo Lake roadless area was divided into six parcels: Fuji, Salmon Creek, Many Prairies, Koch, Moolack, and Lake. Waldo Lake roadless area was included in both RARE I and RARE II. The original 89,590 acres of roadless area was considered for Wilderness by the United States Congress. They released 44,857 acres for multiple-use management and designated 37,157 acres as Waldo Lake Wilderness, and designated 7,577 to be added to the Three Sisters Wilderness in the Oregon Wilderness Act of 1984. Since the release of these lands in 1984, approximately 85 acres have been affected in the Moolack parcel by development activities.

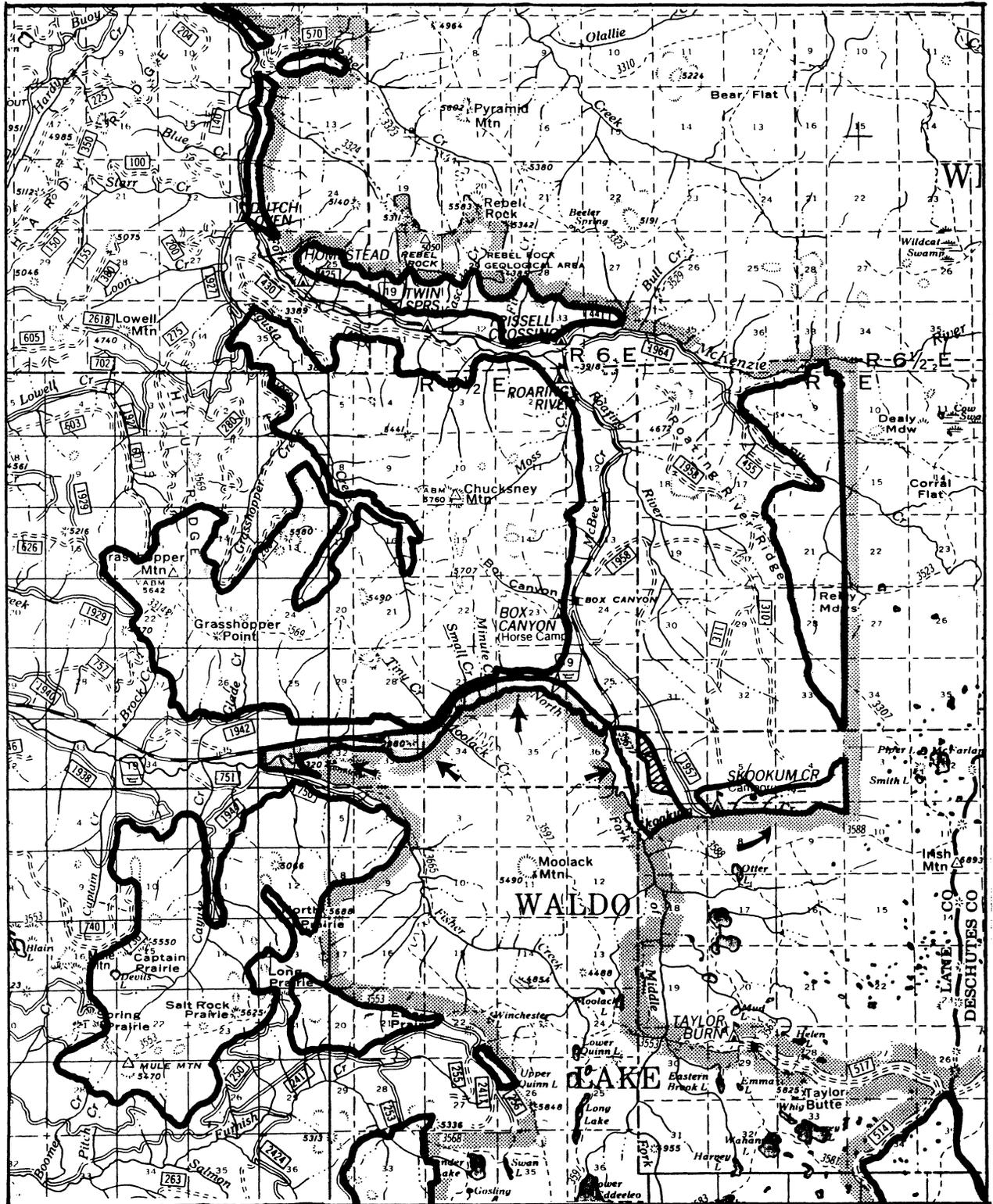
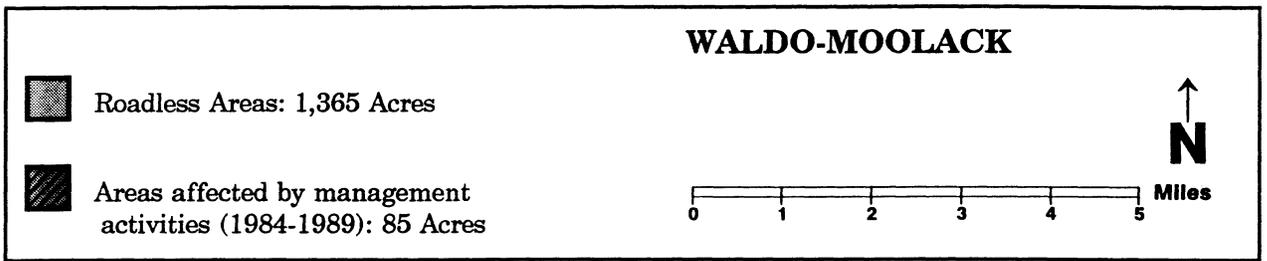
Location and Access The area includes portions of: T.19S., Rs.5, 5½, and 6E., and T.20S., R.6E., in Lane County on the Oakridge Ranger District. The Waldo-Moolack roadless area consists of two parcels. The first is a narrow strip between Forest Service Roads 19 (Aufterheide Drive) and 1944750 and Fisher Creek and the North Fork of the Middle Fork of the Willamette River which is adjacent to the newly created Waldo Wilderness Area. The second parcel is adjacent to the new addition to the Three Sisters Wilderness, east of Skookum Creek Campground, at the end of Forest Road 1957. These areas are approximately 20 miles northeast of the town of Oakridge.

Geography and Topography Elevations range from 2,150 to 5,600 feet. About half the area includes a fairly flat floodplain and glacial valley bottom along the North Fork. Another quarter includes fairly steep slopes above the North Fork and the remainder is on the High Cascades plateau that is, again, fairly flat.

Soil and Vegetation Type The flat areas along the North Fork provide deep, rocky soils of alluvial origin supporting medium aged Douglas-fir, western hemlock, and western red cedar. This same vegetation type, except red cedar extends up to about 4,500 feet in elevation. Soils on the High Cascade Plateau portion are shallow to deep, consisting of Mt. Mazama pumice, overlying glacial deposits. Vegetation is composed of mountain hemlock and true fir, with lodgepole pine occupying areas that were disturbed by fire in the recent past. For more soil information refer to *Willamette National Forest Soil Resource Inventory* (Legard and Meyer 1973).

Ecosystem There is one major potential vegetation zone and one vegetation community for this area according to classification systems by Bailey (1976) and Kuchler (1966). The vegetation zone is the Pacific Forest (M2410) zone. The vegetative community is Pacific silver fir/Douglas-fir (*Abies-Pseudotsuga*) forest (003).

Figure C-29-1



Current Uses Management direction is for extensive and intensive management for timber production. Fishing in the North Fork and Fisher Creek and auto sightseeing from Forest Road 19 are the main uses. In addition, some hiking occurs on Forest Trail 3567, which leads into the Waldo Lake and Three Sisters Wildernesses from Forest Road 19.

Appearance The dense stands of large trees along the North Fork of the Middle Fork of the Willamette River, which is designated as a scenic wild trout stream by the State of Oregon, make this area appear very scenic; however, the extensive timber salvage along the North Fork of the Middle Fork of the Willamette River has altered a small amount of the natural appearance.

Surroundings The area lies immediately north of the Waldo Lake Wilderness and south of the Chucksney Mountain Undeveloped Roadless Recreation Area. Several clearcuts exist along Forest Road 19 immediately north of the roadless area.

Attractions The main attraction is the North Fork of the Middle Fork of the Willamette River, managed as a wild trout stream by the Oregon Department of Fish and Wildlife, and designated as a scenic waterway by the Oregon Department of Parks and Recreation. Sightseers are attracted to Aufferheide Drive.

Capability

Manageability and Boundaries The long, narrow section (along the North Fork) would be difficult to manage for its natural character because of the impacts already made. The area around Skookum Lake may be difficult to manage because of the heavy influx of people to the trailhead at Skookum Campground. Both of these areas are contiguous with the Three Sisters and Waldo Lake Wildernesses.

Natural Integrity As of 1985, ninety-nine acres have been harvested or are under contract to be harvested. In addition, a small amount of timber salvage in the past has occurred which included the construction of network of primitive roads and/or skid trails. There are also about two miles of developed trail with associated minimal trailhead facilities adjacent to Forest Road 19.

Aside from the above mentioned developments, most of the long term ecological processes are functioning, except that fire has been excluded for the last 70 years. Little change has occurred due to this fire exclusion, since timber stands are relatively young and much of the area is a riparian habitat type with a low rate of fire frequency.

Natural Appearance The area near Forest Road 19 does not appear natural to most visitors because of the road. However, east of Skookum Creek Campground the area is away from any developments that would reduce naturalness.

Opportunity for Solitude The narrow strip along Forest Road 19 has little opportunity for solitude due to the impact and easy access of the road. The difficulty of the adjacent terrain, however, increases the solitude potential in the two larger portions.

Opportunity for Primitive Recreation The Shale Ridge Trail is very primitive and challenging as the dense growth often hides or obliterates the trail. The upper area near Skookum Lake offers an opportunity for challenging winter travel and exploration by cross-country skiing or snowshoeing.

Special Features Portions of the Old Box Canyon Road can be found in the lower portion, plus there is an archaeological site northwest of Skookum Lake. There have been spotted owl responses

along the North Fork. The North Fork of the Middle Fork Willamette River which has been designated as a state scenic waterway.

Sensitive plant species *Eburophyton austinae*, *Hemitomes congestum* and *Pleurospora fimbriolata* have been located here. No federally listed endangered or threatened plants or animals are known to be present.

Availability

Resource Potentials

Timber Resource The roadless area includes about 1,045 acres of land suitable for growing timber under managed conditions. Stands of mature Douglas-fir, true firs, and mountain hemlock occupy the area representing about 34 million board feet. If stands are converted to a managed condition, biological potential yield will be 125,000 cubic feet per year at culmination of mean annual increment. Site productivity ranges from Class III to Class V. The remaining area is unsuitable.

Wildlife Resource The Waldo-Moolack roadless area contains 21 acres of a Spotted Owl Habitat Area and 150 acres of floodplain-riparian zone of the North Fork of the Middle Fork Willamette River. This involves a state scenic waterway and a "blue ribbon" native trout fishery. There is big game winter range in and near the riparian zone, and summer range in the eastern segments. Future timber harvest in the winter range could significantly reduce optimum thermal cover. Management for development of late-successional stands could improve habitat for of both big game and old-growth dependant species.

Cultural Resources The Waldo-Moolack roadless area contains ground that could be classed as high potential for artifacts and sites. There is abundant water in most locations combined with a variety of upland food resources such as huckleberries, seeds, and game. This was likely a major resource catchment area during the summer and fall for many prehistoric people.

Only a small portion has been surveyed. Four basic types of cultural resources have been derived: 1) Upland prehistoric Native American lithic scatters along ridges and in saddles; 2) lithic scatters and "campsites" adjacent to lakes and springs; 3) historic sheepherding camps, trapping camps, and cabins; and 4) historic USDA Forest Service guard stations, shelters, and petroglyphs.

Recreation Resource Capacity estimates indicate that this area could provide 902 Recreation Visitor Days (RVDs) of Semiprimitive recreation use. Potential developed recreation sites have been identified, and there is good potential for recreation stock use.

Management Considerations

Fire There have been three spot fires since 1943. Fuel loadings range from five to 150 tons per acre.

Insect and Disease A large area around Skookum Lake has bark beetle damage.

Need

Nearby Wilderness and Its Use The Waldo-Moolack roadless area is adjacent to the Waldo Lake Wilderness (37,157 acres) and the Three Sisters Wilderness (283,593 acres). Refer to Chapter III for the amount of use these Wildernesses receive.

Distance from Population Centers The area is approximately 60 miles by road to the southeast of Eugene, Oregon.

Interest by Proponents The Waldo Lake roadless area generated a high amount of interest with 71% of the responses favoring inclusion of the roadless area into the inventory.

Environmental Consequences

As a consequence of implementing any of the proposed Alternatives there will be effects on the Waldo-Moolack roadless area. In Alternatives NC, K, A, J, and W, 56 to 70% of this area will become developed through road construction and timber harvest. Alternative D will develop 23% of the area and Alternative L develops 14%. As a result of this development, uses dependent on roadless conditions, such as semiprimitive recreation, will not be provided in portions of the area. Implementation of proposed management activities associated with all Alternatives may alter the suitability of this area for future Wilderness consideration. However, portions of this area contiguous to the Waldo Lake and the Three Sisters Wildernesses may remain suitable for consideration as Wilderness additions in the next cycle of Forest planning. Figure C-29-2 illustrates how this area has been allocated in each Alternative.

Based on the amount and distribution of management areas assigned to the Waldo-Moolack roadless area, an array of goods and services are provided. Emphasis on priced commodities such as wood products are provided in Alternatives NC, K, A, J, and W. Emphasis on amenity values such as dispersed recreation opportunities, high visual quality, and old-growth habitat are provided in Alternatives D and L. The amounts of other goods and services to be provided from the area for each Alternative are illustrated in Figure C-29-3. Additional information regarding the environmental consequences of the activities associated with these goods and services is located in Chapter IV of this FEIS.

Table T314. Management Area Acreage of Alternatives (C-29-2)

Management Areas	Alternatives						
	NC (No Change)	K (WFC)	A (No Action)	J (DEIS-PA)	W (PA)	D (Wildlife)	L (ONRC)
1 Wilderness							
Management Area 1a	--	--	--	--	--	--	--
Management Area 1b	--	--	--	--	--	--	896
Management Area 1c	--	--	--	--	--	--	--
Management Area 1d	--	--	--	--	--	--	--
2 Oregon Cascades Recreation Area							
Management Area 2a	--	--	--	--	--	--	--
Management Area 2b	--	--	--	--	--	--	--
3 Experimental Forest							
Management Area 3	--	--	--	--	--	--	--
4 Research Natural Area							
Management Area 4	--	--	--	--	--	--	--
5 Special Interest Area							
Management Area 5a	--	--	--	--	--	--	--
Management Area 5b	--	--	--	--	--	--	--
6 Wild and Scenic River							
Management Area 6a	--	--	--	--	--	--	--
Management Area 6b	235	235	235	171	85	235	235
Management Area 6c	43	43	43	21	43	43	43
7 Old-Growth Grove							
Management Area 7	--	--	--	--	--	--	--
8 T & E Species							
Management Area 8	--	--	--	--	--	--	--
9 Special Habitat ¹							
Management Area 9a	--	--	--	43	43	--	--
Management Area 9b	--	--	--	--	--	--	--
Management Area 9c	--	64	43	85	85	64	--
Management Area 9d	--	--	--	--	--	--	--
10 Dispersed Recreation							
Management Area 10a	--	--	--	--	--	--	--
Management Area 10b	--	--	--	--	--	--	--
Management Area 10c	--	--	--	--	--	--	--
Management Area 10d	--	--	--	--	--	--	--
Management Area 10e	235	--	235	--	--	661	--
Management Area 10f	--	--	--	--	--	--	--

Management Areas	NC (No Change)	K (WFC)	A (No Action)	J (DEIS-PA)	W (PA)	D (Wildlife)	L (ONRC)
11 Scenic							
Management Area 11a	--	--	--	832	811	277	--
Management Area 11b	--	--	--	--	--	--	--
Management Area 11c	--	--	--	--	--	--	21
Management Area 11d	149	--	107	85	85	--	--
Management Area 11e	--	--	--	--	--	--	64
Management Area 11f	43	--	43	--	--	--	64
12 Developed Recreation							
Management Area 12a	21	21	21	21	43	21	21
Management Area 12b	--	--	--	--	--	--	--
13 Special and Ad- ministrative Use							
Management Area 13a	--	--	--	--	--	--	--
Management Area 13b	21	21	21	21	21	21	21
14 General Forest							
Management Area 14a	619	896	576	--	--	--	--
15 Riparian ²							
Management Area 15	*	85	43	85	149	43	--

¹ Acres of network sites that overlap with other no harvest management areas are not included in MA9a, 9b, 9c acres.

² Only alternatives with acres assigned to no harvest prescriptions for riparian have acres allocated to MA15. In alternatives K, A, and J riparian acres follow Forest-wide standards and guidelines for riparian harvest rates. Riparian acres in NC are distributed throughout other management areas.

**Table C-29-3. Waldo-Moolack Roadless Area
Quantifiable Resources Outputs, Environmental Effects, and Activities by Alternative**

		Alternatives						
Output, Effects, or Activity	Unit of Measure	NC	K	A	J	W	D	L
Recommended Wilderness Recreation Use 1st Decade Area Recommended for Wilderness	RVDs	--	--	--	--	--	--	--
	Acres	--	--	--	--	--	--	896
Nonwilderness Dispersed Recreation Use in the 1st Decade								
Semiprimitive Nonmotorized	RVDs	137	--	137	--	--	716	--
	Acres	235	--	235	--	--	661	--
Semiprimitive Motorized	RVDs	--	--	--	--	--	--	--
	Acres	--	--	--	--	--	--	--
Roaded Natural	RVDs	4,199	4,718	4,619	5,459	5,706	4,298	5,187
	Acres	491	448	533	512	533	405	448
Roaded Modified	RVDs	2,677	2,981	2,506	2,696	2,601	380	95
	Acres	640	917	597	853	832	299	21
Trails								
Existing Trails								
Full Protection Level	Miles	2.0	1.0	2.0	1.0	2.0	1.0	2.0
Moderate Protection Level	Miles	1.0	1.0	1.0	1.0	--	1.0	1.0
Low Protection Level	Miles	--	1.0	--	1.0	--	1.0	--
Potential Trails								
Full Protection Level	Miles	--	--	--	0.0	2.0	1.0	0.0
Moderate Protection Level	Miles	2.0	2.0	2.0	2.0	--	2.0	2.0
Low Protection Level	Miles	1.0	1.0	1.0	1.0	1.0	--	0.0
Visual Quality Objectives								
Preservation	Acres	235	64	277	128	128	725	896
Retention	Acres	277	235	277	171	128	235	363
Partial Retention	Acres	213	149	213	213	277	107	85
Modification	Acres	21	21	21	853	--	299	21
Maximum Modification	Acres	619	896	576	--	832	--	--
1st Decade								
Road Construction	Miles	--	1.0	1.0	2.0	0.5	1.8	0.4
Area Harvested	Acres	--	102	210	240	95	248	25
Programmed Timber Harvest	MBF	--	772	1,783	2,175	826	2,816	73
Area Remaining Undeveloped	%	--	76	53	45	79	44	94
Lands by Timber Yield Levels								
Full Yield (95-100%)	Acres	448	640	427	576	491	171	21
75-94% of Full Yield	Acres	128	64	107	128	85	43	--
50-74% of Full Yield	Acres	277	256	277	192	43	235	342
30-49% of Full Yield	Acres	--	--	--	--	--	--	64

Cornpatch - 6,762 Acres

Description

History The Cornpatch roadless area was included in both RARE I and RARE II and was considered for Wilderness by the United States Congress. They released the area for multiple-use management in the Oregon Wilderness Act of 1984. Since the release of these lands in 1984, approximately 1,109 acres have been affected by development activities.

Location and Access The Cornpatch roadless area is in Tps.21 and 22S., R.5E., Lane County, within the Oakridge Ranger District, approximately 12 miles east of the City of Oakridge. It is accessed by a number of Forest Roads 5877352, 5800360, 5877, 2408, 2400259, 2420, 2421, 2421390, 5883378, and 5883379. The Bunchgrass Ridge/Eugene to Crest Trail also traverses the area from northwest to southeast.

Geography and Topography This area consists of a large ridge, Bunchgrass Ridge, that is moderately dissected on its southern side, and is quite steep with many large rock outcroppings. The northern side of this ridge is deeply dissected by many small to large glaciated drainages, the largest of which is the headwaters of Kelsey Creek. Topography on the north side is steep and very rugged to flat in the cirques of the drainage heads. Slopes in the roadless are even to concave. Elevations range from 2,400 to 5,800 feet.

Soil There is a wide variety of soil types, ranging from shallow to nonexistent dry soils in association with the many rock outcrops to deep, moist soils in the cirque basins at the heads of the main drainages, as well as along those drainages. There are about 4,053 acres that have potential for severe surface erosion; and approximately 149 acres of potentially severe surface erosion and unstable soil. For more soil information refer to *Willamette National Forest Soil Resource Inventory* (Legard and Meyer 1973).

Vegetation About 90 percent of the area is covered by dense forest. Medium to old-growth Douglas-fir forests cover most of the area below 4,500 feet in elevation. Western red cedar and western hemlock are associated with the Douglas-fir, especially on north slopes and along drainages. Above 4,500 feet the forest cover consists of old-growth noble fir and Pacific silver fir. There are many meadows above cliffs on the south side, along ridgetops, and in heads of drainages. The two largest open areas occupy several hundred acres each. Big Bunchgrass Meadows is a grass and forb meadow with a south aspect on top of Bunchgrass Ridge. At the head of Kelsey Creek is the second large opening, consisting of forbs and brush with scattered clumps of Alaska yellow cedar. Below this area there is a stand of old-growth Douglas-fir and western hemlock which contain many unusually large trees. There is also a large cedar/red alder swamp adjacent to Black Creek.

Ecosystem There is one major potential vegetation zone and two vegetation communities according to classification systems by Bailey (1976) and Kuchler (1966). The vegetation zone is the Pacific Forest (M2410) zone. The vegetative communities are fir/hemlock (*Abies-Tsuga*) forest (004) and Pacific silver fir/Douglas-fir (*Abies- Pseudotsuga*) forest (003).

Current Uses Current management direction (FLMP 1977) provides for varying intensities of commercial forest management. Approximately 540 acres of timber harvest have occurred involving construction of 4.2 miles of road since this area was first studied for Wilderness designation. Recreational use includes hiking and hunting. Since this area was inventoried in 1984 management activities are estimated to have affected 320 acres of the area.

Appearance The dense old-growth forest cover, large meadows, large extensive rock outcrops, and deeply dissected topography make this a very attractive area.

Surroundings This area is separated by roads and timber harvests from other roadless areas to the northwest, west, and south. Areas to the southwest, west, and north are being intensively managed for timber production.

Attractions This area holds many attractions of a scenic or ecological nature. There are many high waterfalls in the drainages that flow into Black Creek. Black Creek itself provides good trout fishing experiences. Kelsey Ridge is a very rugged and steep ridge that provides many spectacular views. Big Bunchgrass Meadows and the large meadow in Kelsey Creek provide wildlife viewing and unusual plant communities, and the south slopes of Bunchgrass Ridge provide a spectacular view from State Highway 58 as well as some of the most challenging cross-country travel in the area.

Capability

Manageability and Boundaries These boundaries could easily be adjusted to exclude the development that has occurred and would provide easily managed primitive character.

Natural Integrity There are harvest units along the borders at the lower elevation, and some small units at the higher elevations of the roadless area.

Apparent Naturalness Noise from harvest activities and State Highway 58 would be an intrusion at times. The roadless area is viewed as natural by many visitors, but unnatural impacts are apparent to some.

Opportunity for Solitude Very diverse topography contributes to solitude of the recreation experience by screening in at least half of the area.

Opportunity for Primitive Recreation There is opportunity for ski touring, backpacking, hiking, hunting, riding, rock climbing, and camping.

Challenging Experiences Cross-country hiking on the steep south slopes of Bunchgrass Ridge would provide excitement and adventure.

Special Features Big Bunchgrass Meadow is an interesting feature ecologically and historically. Several sensitive plant species occur in the area including *Calypso bulbosa*, *Eburophyton austinae*, and *Hypopitys monotropa*, with a high potential for others. Lithic scattering are found along the ridge and there is an archaeological site in the meadow area. Evidence of a prehistoric rock carin is located near

Cornpatch Prairie. Evidence of historic sheepherding activity is indicated by occasional debris and several tree carvings. Cornpatch Prairie is also the site of a historic trailway for sheep travel. Evidence of sheep grazing is apparent in both Big Bunchgrass Meadow and Cornpatch Prairie. No federally listed threatened or endangered species are known to be present.

Availability

Resource Potentials

Livestock Resource There is some potential for domestic livestock in Bunchgrass Meadows and good potential for recreation stock use.

Timber Resource The roadless area includes about 4,885 acres of land suitable for growing timber under managed conditions. Stands of mature Douglas-fir, true firs, and mountain hemlock occupy the area representing about 232 million board feet. If stands are converted to a managed condition, biological potential yield will be 638,000 cubic feet per year at culmination of mean annual increment. Site productivity ranges from Class IV to Class V. The remaining area is unsuitable.

Wildlife Resource Moderate big game winter use occurs on the south slopes above Salt Creek and the portions extending to the Black Creek floodplain. Heavy summer range use, involving at least two major elk herds, (100 to 125 animals) occurs along the Bunchgrass Ridge/Meadow complex and the headwaters of Kelsey Creek. Timber harvest in the summer range would increase forage, but steep terrain and added disturbance from new road systems would probably combine to create a net loss in available habitat. Thermal cover on the winter range has been impacted by prior timber management activities, and future harvests should be designed to alleviate imbalances of forage/cover ratios in the subdrainages involved. Old-growth dependent species habitat would be reduced by timber harvest.

Recreation Resource Capacity estimates indicate that this area could provide 4,401 Recreation Visitor Days (RVDs) of Semiprimitive recreation use. Potential trails have been identified and could provide access and disperse visitors. No potential developed recreation sites have been identified.

Cultural Resources Prehistoric sites have been identified. The majority of these sites are located along Bunchgrass Ridge. Most likely these represent upland seasonal camps and work stations along an aboriginal trail system. Potentially there is a high probability of finding more significant prehistoric sites on the ridges, alluvial flats, and benches. In addition, there are remnant artifacts of the late nineteenth century and early twentieth century sheepherding and Forest administrative activities.

Management Considerations

Fire There have been 18 spot fires since 1943. The fuel type spread rate is medium to high. Fuel loading ranges from five to 150 tons per acre.

Insect and Disease Two areas of bark beetle damage are located at Big Bunchgrass and along a three mile section of the Bunchgrass Trail.

Need

Nearby Wilderness and Its Use The Cornpatch roadless area is four miles west of Waldo Lake Wilderness (37,157 acres) and ten miles northwest of the Diamond Peak Wilderness (53,773 acres). Refer to Chapter III for the amount of use these Wildernesses receive.

Distance from Population Centers The area is approximately 50 miles by road to the southeast of Eugene, Oregon.

Interest by Proponents The Cornpatch roadless area generated a low amount of interest with 56% of the responses favoring inclusion of the roadless area into the inventory.

Environmental Consequences

As a consequence of implementing any of the proposed Alternatives there will be effects on the Cornpatch roadless area. In Alternatives NC, K, A, J, and D, 70 to 100% of this area will be affected by road construction and timber harvest. Alternative W develops 54% of the area and Alternative L develops 10%. As a result of this development, uses dependent on roadless conditions, such as semiprimitive recreation, will not be provided in portions of the area. Implementation of proposed management activities associated with all Alternatives except Alternative L, will alter the suitability of this area for future Wilderness consideration. Alternative L maintains the option of future Wilderness consideration for this area. Figure C-30-2 illustrates how this area has been allocated in each Alternative.

Based on the amount and distribution of management areas assigned to the Cornpatch roadless area, an array of goods and services are provided. Emphasis on priced commodities such as wood products are provided in Alternatives NC, K, A, J, D, and W. Emphasis on amenity values such as dispersed recreation opportunities, high visual quality, and old-growth habitat are provided in Alternative L. The amounts of other goods and services to be provided from the area for each Alternative are illustrated in Figure C-30-3. Additional information regarding the environmental consequences of the activities associated with these goods and services is located in Chapter IV of this FEIS.

Table T314. Management Area Acreage of Alternatives (C-30-2)

Management Areas	Alternatives						
	NC (No Change)	K (WFC)	A (No Action)	J (DEIS-PA)	W (PA)	D (Wildlife)	L (ONRC)
1 Wilderness							
Management Area 1a	--	--	--	--	--	--	--
Management Area 1b	--	--	--	--	--	--	5,887
Management Area 1c	--	--	--	--	--	--	--
Management Area 1d	--	--	--	--	--	--	--
2 Oregon Cascades Recreation Area							
Management Area 2a	--	--	--	--	--	--	--
Management Area 2b	--	--	--	--	--	--	--
3 Experimental Forest							
Management Area 3	--	--	--	--	--	--	--
4 Research Natural Area							
Management Area 4	--	--	--	--	--	--	--
5 Special Interest Area							
Management Area 5a	--	--	--	--	--	--	--
Management Area 5b	--	--	--	--	--	--	--
6 Wild and Scenic River							
Management Area 6a	--	--	--	--	--	--	--
Management Area 6b	--	--	--	--	--	--	--
Management Area 6c	--	--	--	--	--	--	--
7 Old-Growth Grove							
Management Area 7	--	--	--	--	192	--	21
8 T & E Species							
Management Area 8	--	--	--	--	--	--	--
9 Special Habitat ¹							
Management Area 9a	--	1,429	1,429	1,429	1,386	1,429	128
Management Area 9b	--	--	--	--	--	--	--
Management Area 9c	--	64	64	64	64	64	--
Management Area 9d	--	--	--	--	1,216	213	--
10 Dispersed Recreation							
Management Area 10a	--	--	--	--	--	--	--
Management Area 10b	--	--	--	--	--	--	--
Management Area 10c	--	--	--	--	--	--	--
Management Area 10d	--	--	--	--	--	--	--
Management Area 10e	--	--	--	--	--	--	--
Management Area 10f	--	--	--	--	--	--	--

Management Areas	NC (No Change)	K (WFC)	A (No Action)	J (DEIS-PA)	W (PA)	D (Wildlife)	L (ONRC)
11 Scenic							
Management Area 11a	--	747	--	533	512	--	--
Management Area 11b	--	--	--	--	--	--	--
Management Area 11c	--	1,024	--	640	1,216	640	469
Management Area 11d	299	384	299	1,152	--	1,130	--
Management Area 11e	533	--	256	--	--	--	192
Management Area 11f	341	--	149	--	--	--	--
12 Developed Recreation							
Management Area 12a	--	--	--	--	--	--	--
Management Area 12b	--	--	--	--	--	--	--
13 Special and Ad- ministrative Use							
Management Area 13a	--	--	--	--	--	--	--
Management Area 13b	--	--	--	--	--	--	--
14 General Forest							
Management Area 14a	5,588	2,816	4,266	2,666	1,941	2,986	--
15 Riparian ²							
Management Area 15	*	299	299	278	235	299	64

¹ Acres of network sites that overlap with other no harvest management areas are not included in MA9a, 9b, 9c acres.

² Only alternatives with acres assigned to no harvest prescriptions for riparian have acres allocated to MA15. In alternatives K, A, and J riparian acres follow Forest-wide standards and guidelines for riparian harvest rates. Riparian acres in NC are distributed throughout other management areas.

**Table C-30-3. Cornpatch Roadless Area
Quantifiable Resources Outputs, Environmental Effects, and Activities by Alternative**

		Alternatives						
Output, Effects, or Activity	Unit of Measure	NC	K	A	J	W	D	L
Recommended Wilderness Recreation Use 1st Decade Area Recommended for Wilderness	RVDs	--	--	--	--	--	--	--
	Acres	--	--	--	--	--	--	5,887
Nonwilderness Dispersed Recreation Use in the 1st Decade								
Semiprimitive Nonmotorized	RVDs	--	--	--	--	--	--	--
	Acres	--	--	--	--	--	--	--
Semiprimitive Motorized	RVDs	--	--	--	--	--	--	--
	Acres	--	--	--	--	--	--	--
Roaded Natural	RVDs	1,606	6,768	6,793	10,424	12,374	11,757	2,742
	Acres	1,173	3,200	2,496	3,562	4,309	3,775	875
Roaded Modified	RVDs	7,309	5,354	5,316	3,911	3,095	3,380	--
	Acres	5,588	3,562	4,266	3,199	2,453	2,986	--
Trails								
Existing Trails								
Full Protection Level	Miles	3.0	4.0	4.0	4.0	--	4.0	6.0
Moderate Protection Level	Miles	2.0	1.0	2.0	2.0	6.0	2.0	--
Low Protection Level	Miles	2.0	2.0	1.0	--	--	0.0	--
Potential Trails								
Full Protection Level	Miles	1.0	1.0	1.0	1.0	0.0	2.0	3.0
Moderate Protection Level	Miles	--	1.0	1.0	1.0	3.0	1.0	--
Low Protection Level	Miles	3.0	1.0	1.0	1.0	--	1.0	--
Visual Quality Objectives								
Preservation	Acres	--	1,493	1,493	1,493	1,642	1,493	6,036
Retention	Acres	875	--	405	--	1,216	213	192
Partial Retention	Acres	299	1,706	597	2,069	1,450	2,069	533
Modification	Acres	--	747	--	533	512	--	--
Maximum Modification	Acres	5,588	2,816	4,266	2,666	1,941	2,986	--
1st Decade								
Road Construction	Miles	--	4.0	4.0	2.0	2.2	6.9	0.3
Area Harvested	Acres	--	618	788	338	471	1,148	55
Programmed Timber								
Harvest	MBF	--	4,584	5,929	2,527	3,689	11,702	379
Area Remaining								
Undeveloped	%	--	72	64	85	79	48	97
Lands by Timber Yield Levels								
Full Yield (95-100%)	Acres	4,010	3,157	2,837	2,709	256	2,496	171
75-94% of Full Yield	Acres	640	363	619	811	43	747	--
50-74% of Full Yield	Acres	235	85	149	85	64	192	192
30-49% of Full Yield	Acres	--	--	--	--	--	--	--

Charlton Butte - 2,880 Acres

Description

History The Charlton Butte roadless area was studied in RARE I and RARE II on both the Willamette and Deschutes National Forests, and was considered for Wilderness by the United States Congress. On the Willamette National Forest, they released the area for multiple-use management in the Oregon Wilderness Act of 1984. The Deschutes National Forest's portion of the roadless inventory includes 7,243 acres which is adjacent to the Charlton Butte roadless area.

Location and Access This area includes portions of Tps.20 and 21S., R.6E., in Lane County. It is within the Oakridge Ranger District and is approximately 26 miles east of the town of Oakridge. The area is accessed by Forest Road 5897 and is northeast of Waldo Lake. The Pacific Crest Trail provides access into the interior.

Geography and Topography Elevations range from 5,100 to 6,600 feet above sea level. Slopes are gentle to moderate and even except near the summit of Charlton Butte. There are no permanent streams but there are numerous pothole lakes of glacial origin. The dominant feature is Charlton Butte, a moderate sized cinder cone.

Soil Soils are shallow to moderate in depth and are composed of glacially modified lava overlain by pumice. Fertility is low to moderate with 30% of the area containing rock outcrops. There are about 21 acres that have potential for severe surface erosion. For more soil information refer to *Willamette National Forest Soil Resource Inventory* (Legard and Meyer 1973).

Vegetation Vegetation is not diverse, being primarily stands of mountain hemlock and lodgepole pine with little understory vegetation.

Ecosystem There is one major potential vegetation zone and one vegetation community for this area according to classification systems by Bailey (1976) and Kuchler (1966). The vegetation zone is the Pacific Forest (M2410) zone. The vegetative community is fir/hemlock (*Abies-Tsuga*) forest (004).

Current Uses Current management direction provides unroaded recreational use. The area is used by hikers, primarily traversing the area via the Pacific Crest Trail. There is also some horse riding centered around a horse camp in the southwestern portion.

Appearance The area generally appears to be densely forested, with little variety in topography except for the relief of Charlton Butte.

Surroundings The Charlton Butte roadless area is separated on the west from the Waldo Lake and Three Sisters Wildernesses by a primitive road. The southern boundary is comprised of a paved access road into Waldo Lake. The area is contiguous with a roadless area on the Deschutes National Forest on the eastern boundary.

Attractions The Pacific Crest Trail is the main attraction.

Capability

Manageability and Boundaries This area could easily and efficiently be managed as Wilderness, especially if the adjacent roadless area on the Deschutes were also managed as Wilderness. Transportation access is provided by the Taylor Burn Road.

Natural Integrity There are five miles of developed trails in the roadless area. The area is snowbound nine months of the year. Natural processes continue to operate uninterrupted.

Natural Appearance This area appears natural to visitors once they are away from the roaded boundaries and the trail.

Opportunity for Solitude Though there is little in the way of topographic screening, the dense forest cover provides excellent screening for a short distance. The distance from the perimeter to the center is over three miles. Offsite intrusions in the form of road and railroad noise are occasionally perceptible, but relatively distant and generally not permanent.

Opportunity for Primitive Recreation In winter, there are good opportunities for snowshoeing or cross-country touring.

Challenging Experiences This area offers the challenge of orienteering through featureless terrain, as well as the ascending of Charlton Butte.

Special Features This area has no outstanding known features other than being adjacent to the Taylor Burn Road which was the early access route to Waldo Lake until 1967. No federally listed endangered or threatened species are known to be present. Researchers have used the area for several different studies of this typical mountain hemlock forest. Such studies include growth and yield of mountain hemlock stands, mortality in subalpine forest ecosystems, and the vegetation of Torrey Lake mire.

Availability

Resource Potentials

Water Resource An underground pipe through the southern corner carries drinking water from Charlton Lake, which is on the Deschutes National Forest, to North Waldo and Islet Campgrounds.

Livestock Resource There is no potential for grazing domestic stock. Recreation stock use has high potential, due to a horse camp located on the edge of the area, open woods, and developed trails in the area.

Timber Resource The roadless area includes about 2,858 acres of land suitable and available for growing timber under managed conditions. Stands of mature lodgepole pine, true firs, and mountain hemlock occupy the area representing about 95 million board feet. If stands are converted to a managed condition, biological potential yield will be 223,700 cubic feet per year at culmination of mean annual increment. Site productivity ranges from Class IV to Class V. The remaining 22 acres are unsuitable or unavailable.

Wildlife Resource The Charlton Butte roadless area provides moderately used summer range for big-game animals. Winter use by wolverine is likely.

Recreation Resource Capacity estimates indicate that this area could provide 2,124 Recreation Visitor Days (RVDs) of Semiprimitive recreation use. Potential trails have been identified and could provide for access and disperse visitors. Potential developed recreation sites have been identified.

Cultural Resources This area is virtually unknown archeologically or historically. Historically the area received use around the turn of the century by sheepherders. There are a few potential areas with high probability for locating prehistoric sites. These would occur near ponds that are scattered in the northern end of the area.

Management Consideration

Fire There have been only three fires since 1943. Spread rate for fuel type is medium. Fuel loading ranges from five to 30 tons per acre.

Insect and Disease Laminated root rot and hemlock rot disease are prevalent in all mountain hemlock stands of this area.

Need

Nearby Wilderness and Its Use The Charlton Butte roadless area is across the Taylor Burn Road to the east of the Waldo Lake Wilderness (37,157 acres), and south of the Three Sisters Wilderness (283,539 acres) just across the Irish and Taylor Lakes Road. Refer to Chapter III for the amount of use these Wildernesses receive.

Distance from Population Centers The area is approximately 75 miles by road to the southeast of Eugene, Oregon.

Interest by Proponents The Charlton Butte roadless area generated a low amount of interest with 83% of the responses favoring inclusion of the roadless area into the inventory.

Environmental Consequences

As a consequence of implementing any of the proposed Alternatives there will be effects on the Charlton Butte roadless area. In Alternative K, 7% of this area will be affected by timber harvest. The other Alternatives will develop less than 1%. As a result of this development, uses dependent on roadless conditions, such as semiprimitive recreation, will not be provided in portions of the area. All Alternatives maintain the option of future Wilderness consideration for most of the area, depending on the allocation of adjoining roadless lands in the Deschutes National Forest FEIS. Figure C-31-2 illustrates how this area has been allocated in each Alternative.

Based on the amount and distribution of management areas assigned to the Charlton Butte roadless area, an array of goods and services are provided. Emphasis on amenity values such as dispersed recreation opportunities, high visual quality, and old-growth habitat are provided in all Alternatives. The amounts of other goods and services to be provided from the area for each Alternative are illustrated in Figure C-31-3. Additional information regarding the environmental consequences of the activities associated with these goods and services is located in Chapter IV of this FEIS.

Table T314. Management Area Acreage of Alternatives (C-31-2)

Management Areas	Alternatives						
	NC (No Change)	K (WFC)	A (No Action)	J (DEIS-PA)	W (PA)	D (Wildlife)	L (ONRC)
1 Wilderness							
Management Area 1a	--	--	--	--	--	--	--
Management Area 1b	--	--	--	--	--	--	2,858
Management Area 1c	--	--	--	--	--	--	--
Management Area 1d	--	--	--	--	--	--	--
2 Oregon Cascades Recreation Area							
Management Area 2a	--	--	--	--	--	--	--
Management Area 2b	--	--	--	--	--	--	--
3 Experimental Forest							
Management Area 3	--	--	--	--	--	--	--
4 Research Natural Area							
Management Area 4	1,130	1,173	1,130	1,152	1,130	1,194	--
5 Special Interest Area							
Management Area 5a	--	--	--	--	--	--	--
Management Area 5b	--	--	--	--	--	--	--
6 Wild and Scenic River							
Management Area 6a	--	--	--	--	--	--	--
Management Area 6b	--	--	--	--	--	--	--
Management Area 6c	--	--	--	--	--	--	--
7 Old-Growth Grove							
Management Area 7	--	--	--	--	--	--	--
8 T & E Species							
Management Area 8	--	--	--	--	--	--	--
9 Special Habitat ¹							
Management Area 9a	--	--	--	--	--	--	--
Management Area 9b	--	--	--	--	--	--	--
Management Area 9c	--	--	--	--	--	--	--
Management Area 9d	--	--	--	--	--	--	--
10 Dispersed Recreation							
Management Area 10a	--	--	--	--	--	--	--
Management Area 10b	--	1,493	--	--	--	--	--
Management Area 10c	--	--	--	107	149	107	--
Management Area 10d	--	--	--	--	--	--	--
Management Area 10e	1,728	--	1,728	1,600	1,578	1,557	--
Management Area 10f	--	--	--	--	--	--	--

Management Areas	NC (No Change)	K (WFC)	A (No Action)	J (DEIS-PA)	W (PA)	D (Wildlife)	L (ONRC)
11 Scenic							
Management Area 11a	--	--	--	--	--	--	--
Management Area 11b	--	--	--	--	--	--	--
Management Area 11c	--	--	--	--	--	--	--
Management Area 11d	--	--	--	--	--	--	--
Management Area 11e	--	--	--	--	--	--	--
Management Area 11f	--	192	--	--	--	--	--
12 Developed Recreation							
Management Area 12a	21	21	21	21	21	21	21
Management Area 12b	--	--	--	--	--	--	--
13 Special and Ad- ministrative Use							
Management Area 13a	--	--	--	--	--	--	--
Management Area 13b	--	--	--	--	--	--	--
14 General Forest							
Management Area 14a	--	--	--	--	--	--	--
15 Riparian ²							
Management Area 15	*	*--	*--	*--	--	--	--

¹ Acres of network sites that overlap with other no harvest management areas are not included in MA9a, 9b, 9c acres.

² Only alternatives with acres assigned to no harvest prescriptions for riparian have acres allocated to MA15. In alternatives K, A, and J riparian acres follow Forest-wide standards and guidelines for riparian harvest rates. Riparian acres in NC are distributed throughout other management areas.

**Table C-31-3. Charlton Butte Roadless Area
Quantifiable Resources Outputs, Environmental Effects, and Activities by Alternative**

		Alternatives						
Output, Effects, or Activity	Unit of Measure	NC	K	A	J	W	D	L
Recommended Wilderness Recreation Use 1st Decade Area Recommended for Wilderness	RVDs	--	--	--	--	--	--	--
	Acres	--	--	--	--	--	--	2,858
Nonwilderness Dispersed Recreation Use in the 1st Decade								
Semiprimitive Nonmotorized	RVDs	3,366	1,377	3,366	3,240	3,189	3,240	--
	Acres	2,858	1,173	2,858	2,752	2,709	2,752	--
Semiprimitive Motorized	RVDs	--	4,539	--	324	454	324	--
	Acres	--	1,493	--	107	149	107	--
Roaded Natural	RVDs	243	2,470	247	247	247	247	247
	Acres	21	213	21	21	21	21	21
Roaded Modified	RVDs	--	--	--	--	--	--	--
	Acres	--	--	--	--	--	--	--
Trails								
Existing Trails								
Full Protection Level	Miles	6.0	10.0	6.0	6.0	6.0	6.0	6.0
Moderate Protection Level	Miles	--	1.0	--	--	--	--	--
Low Protection Level	Miles	--	8.0	--	--	--	--	--
Potential Trails								
Full Protection Level	Miles	2.0	4.0	2.0	2.0	2.0	2.0	2.0
Moderate Protection Level	Miles	--	--	--	--	--	--	--
Low Protection Level	Miles	--	4.0	--	--	--	--	--
Visual Quality Objectives								
Preservation	Acres	2,858	1,173	2,858	2,752	2,709	2,752	2,858
Retention	Acres	--	192	--	107	149	107	--
Partial Retention	Acres	21	1,514	21	21	21	21	21
Modification	Acres	--	--	--	--	--	--	--
Maximum Modification	Acres	--	--	--	--	--	--	--
1st Decade								
Road Construction	Miles	--	2.0	--	--	--	--	--
Area Harvested	Acres	--	179	--	--	--	--	--
Programmed Timber Harvest	MBF	--	1,355	--	--	--	--	--
Area Remaining Undeveloped	%	--	80	--	--	--	--	--
Lands by Timber Yield Levels								
Full Yield (95-100%)	Acres	--	--	--	--	--	--	--
75-94% of Full Yield	Acres	--	1,493	--	--	--	--	--
50-74% of Full Yield	Acres	--	192	--	--	--	--	--
30-49% of Full Yield	Acres	--	--	--	--	--	--	--

Maiden Peak - 11,070 Acres

Description

History The Maiden Peak roadless area was studied in RARE I and RARE II on both the Willamette and Deschutes National Forests, and was considered for Wilderness by the United States Congress. On the Willamette National Forest, they released the area for multiple-use management in the Oregon Wilderness Act of 1984. The Deschutes National Forest's portion of the roadless inventory includes 27,008 acres which is adjacent to the Maiden Peak roadless area.

Location and Access The Willamette's portion of the area is within Tps.21, 22, and 23S., R.6E., in Lane County on the Oakridge Ranger District. It is approximately 25 miles south and east from the city of Oakridge and is accessed by Forest Roads 5897, 5800500, and State Highway 58 and by the Pacific Crest Trail, as well as three other trails (Forest Trails 3663, 3677, and 3595) that leave from Forest Road 5897. From Gold Lake access is by Forest Trail 3681.

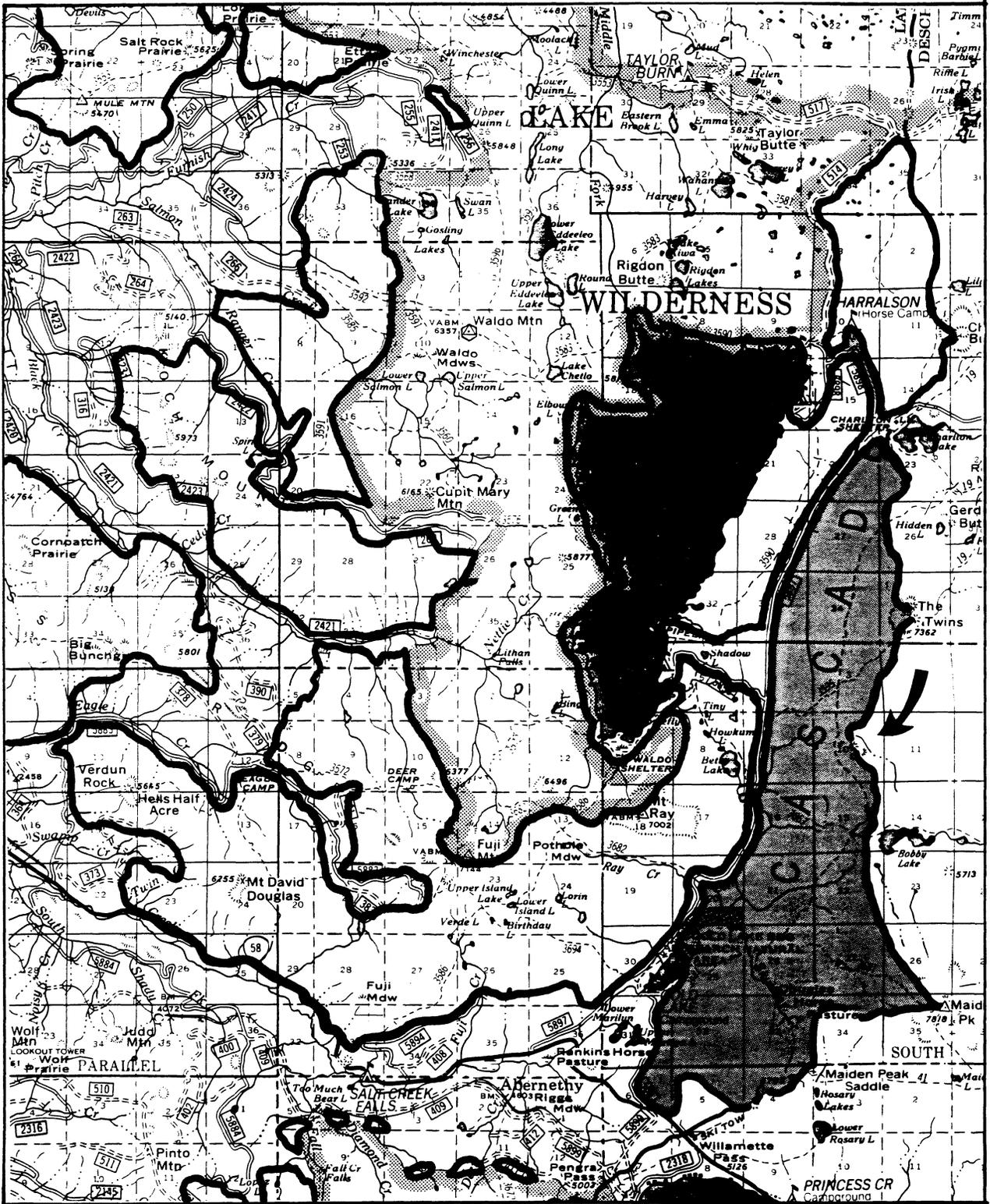
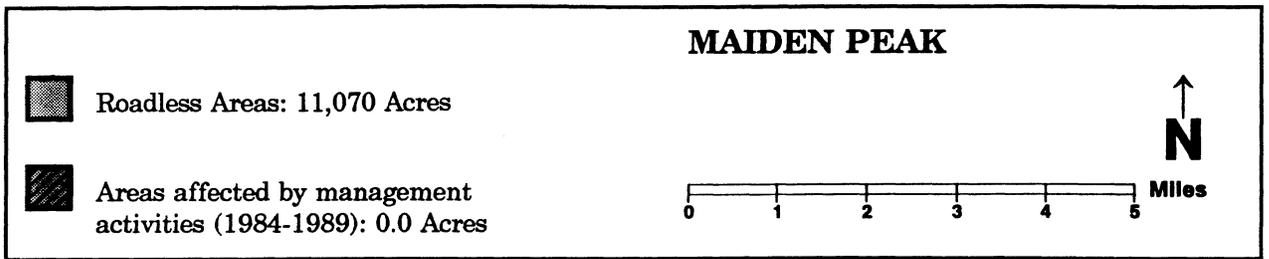
Geography and Topography This area borders the Pacific Crest and is part of the High Cascade Plateau. Topography is gentle and rolling with steep concave to even slopes occurring in the south end and on the upper portions of two quite recent volcanic peaks (Maiden Peak and the Twins). Elevations range from 5,040 to 7,820 feet at the summit of Maiden Peak. There are numerous streams and many small pothole lakes in the south half and a few in the northern portion.

Soil Soils are glacial material overlain by deposits of Mazama pumice. There are about 1,173 acres that have potential for severe surface erosion. For more soil information refer to *Willamette National Forest Soil Resource Inventory* (Legard and Meyer 1973).

Vegetation These soils support diverse vegetation types, depending upon ground water levels. The wettest areas support meadow vegetation, the biggest and most unique of which is Gold Lake Bog. Dense stands of true firs and Englemann spruce occupy the wetter forest area, mountain hemlock and lodgepole pine stands cover the drier slopes. Vegetation on the west side of the Twins has been influenced by several large prehistoric fires. These areas are occupied by young, open stands of lodgepole pine and mountain hemlock. Forests here are generally quite park like with little understory vegetation existing except along riparian areas.

Ecosystem There is one major potential vegetation zone and one vegetation community for this area according to classification systems by Bailey (1976) and Kuchler (1966). The vegetation zone is the Pacific Forest (M2410) zone. The vegetative community is fir/hemlock (*Abies-Tsuga*) forest (004).

Figure C-32-1



Current Uses Current management direction is for roadless recreation with a Recreation Opportunity Spectrum (ROS) class of Semiprimitive Nonmotorized. Primary uses include hiking, cross-country skiing, downhill skiing, and sight seeing along Road 5897. In addition, there is some hunting and trail bike riding. There is a Research Natural Area (RNA) established around Gold Lake Bog which has been used for scientific study. Since this area was inventoried in 1984 management activities have affected a small portion of the area near Willamette Pass Ski area.

Appearance The area is covered with an essentially unbroken forest cover. With the exception of a few lakes and meadows, it appears to be quite natural.

Surroundings The area is bordered on the east by roadless areas in the Deschutes National Forest and is separated by Forest Road 5897 from the Fuji and Waldo-Lake roadless areas. The south end is adjacent to State Highway 58 and the Willamette Pass Ski Area.

Attractions The major attractions are the Willamette Pass Ski Area, the Pacific Crest Trail, and Gold Lake Bog, which contains several unique plant and animal species. Maiden Peak is the highest point on the Oakridge Ranger District.

Capability

Manageability and Boundaries Existing boundaries can be easily and efficiently managed for wilderness resources. The entire eastern boundary is contiguous with the large roadless area on the Deschutes National Forest.

Natural Integrity A short stretch of buried water supply line in the northern tip, a weather station and associated access road (1/4 mile long), 24 miles of trail and 200 acres of the Willamette Pass Ski Area on the southern tip occur in the area. The area is snowbound and virtually undisturbed for nine months of the year, except for some snow oriented recreation.

Natural Appearance Most visitors find this roadless area apparently natural. Evidence of unnaturalness is apparent only in localized areas.

Opportunity for Solitude Opportunities for solitude are good. Though there is only a moderate amount of topographic screening to the generally gentle terrain, the vegetation is usually dense enough to screen objects and people within several hundred feet. The distance from the perimeter to its approximate center is three to five miles. Offsite intrusions, mostly in the form of road, highway, and railroad noise are occasionally perceptible but are relatively distant.

Opportunity for Primitive Recreation Ascent of Maiden Peak and traversing relatively featureless terrain provide the most challenging recreation opportunities. Abundant primitive recreation opportunities exist for back country travel, as well as winter travel by snowshoe or cross-country skiing.

Special Features Gold Lake Bog is the most unique feature and several scientific studies have resulted in designating the bog and its surroundings as a Research Natural Area. The Gold Lake sphagnum bog supports a number of uncommon and carnivorous plant species, including two species of sundew and three species of bladderwort. Two of these are on the 1985 review list for the State of Oregon. No federally listed threatened or endangered plants are known to be present.

Availability

Resource Potentials

Livestock Resource There is no potential for long term domestic livestock, but, good potential for recreation stock use.

Timber Resource The roadless area includes about 6,036 acres of land suitable and available for growing timber under managed conditions. Stands of mature true firs, lodgepole pine, and mountain hemlock occupy the area representing about 272 million board feet. If stands are converted to a managed condition, biological potential yield will be 564,900 cubic feet per year at culmination of mean annual increment. Site productivity ranges from Class IV to Class V. The remaining 5,034 acres are unsuitable or unavailable.

Wildlife Resource The Maiden Peak roadless area encompasses a Research Natural Area and a 747 acre portion of a Spotted Owl Habitat Area. Summer big game use is high. Occurring primarily in the Gold Lake-Douglas Horsepasture area. Substantial winter wolverine use has been documented in the same area. A moderate fishery and some waterfowl use occurs in the Gold Lake Bog. Occasional bald eagle and Northern spotted owl use has been noted around Gold Lake. The spotted frog also occurs in the bog.

Recreation Resource Capacity estimates indicate that this area could provide 6,981 Recreation Visitor Days (RVDs) of Semiprimitive recreation use. Potential trail locations have been identified.

Three potential developed sites have been identified including one observation site and two downhill skiing sites. The potential observation site is one acre in size and could accommodate 50 Persons-At-One-Time (PAOT) and provide 3,080 RVDs annually. Of the two downhill skiing sites, one represents expansion potential of the existing Willamette Pass Ski Area, and the other is a potential new site at Maiden Peak.

The Willamette Pass Ski Area site is 700 acres and could accommodate 4,517 PAOT and provide 216,816 RVDs annually. The potential Maiden Peak site is 600 acres and could accommodate 3,000 PAOT and provide 168,000 RVDs annually.

Cultural Resources The Maiden Peak roadless area contains high potential for artifacts and sites around prominent lakes and bogs in the area. There are numerous ponds throughout the area combined with a variety of upland food resources such as huckleberries, pond lilies (wocus), seeds, and game. Historic use centered around sheep herding and Forest Service administration. There is a reported obsidian source and lithic scatter in the area.

Surveys have been made in conjunction with the development of the ski area.

Management Considerations There have been 23 spot fires since 1943. Spread rate for the fuel type is low to medium. Fuel loadings range from five to 30 tons per acre.

Need

Nearby Wilderness and Its Use The Maiden Peak roadless area is within one mile of the Waldo Lake Wilderness (37,157 acres) and is three miles north of the Diamond Peak Wilderness (53,773

acres). Refer to Chapter III for the amount of use these Wildernesses receive. This roadless area is also adjacent to the Deschutes National Forest's Maiden Peak roadless area.

Distance from Population Centers The area is approximately 60 miles by highway to the southeast of Eugene, Oregon.

Interest by Proponents The Maiden Peak roadless area generated a moderate amount of interest with 85% of the responses favoring inclusion of the roadless area into the inventory.

Environmental Consequences

As a consequence of implementing any of the proposed Alternatives there will be effects on the Maiden Peak roadless area. In Alternatives NC, K, A, J, L, and W, 4 to 16% of this area will be affected by road construction and timber harvest. As a result of this development, uses dependent on roadless conditions, such as semiprimitive recreation, will not be provided in portions of the area. All Alternatives maintain the option of future Wilderness consideration for this area. Figure C-32-2 illustrates how this area has been allocated in each Alternative.

Based on the amount and distribution of management areas assigned to the Maiden Peak roadless area, an array of goods and services are provided. Emphasis on amenity values such as dispersed recreation opportunities, high visual quality, and old-growth habitat are provided in all Alternatives. The amounts of other goods and services to be provided from the area for each Alternative are illustrated in Figure C-32-3. Additional information regarding the environmental consequences of the activities associated with these goods and services is located in Chapter IV of this FEIS.

Table T314. Management Area Acreage of Alternatives (C-32-2)

Management Areas	Alternatives						
	NC (No Change)	K (WFC)	A (No Action)	J (DEIS-PA)	W (PA)	D (Wildlife)	L (ONRC)
1 Wilderness							
Management Area 1a	--	--	--	--	--	--	--
Management Area 1b	--	--	--	--	--	--	9,876
Management Area 1c	--	--	--	--	--	--	--
Management Area 1d	--	--	--	--	--	--	--
2 Oregon Cascades Recreation Area							
Management Area 2a	--	--	--	--	--	--	--
Management Area 2b	--	--	--	--	--	--	--
3 Experimental Forest							
Management Area 3	--	--	--	--	--	--	--
4 Research Natural Area							
Management Area 4	469	469	469	469	469	469	469
5 Special Interest Area							
Management Area 5a	--	--	--	--	--	--	--
Management Area 5b	--	--	--	--	--	--	--
6 Wild and Scenic River							
Management Area 6a	--	--	--	--	--	--	--
Management Area 6b	--	--	--	--	--	--	--
Management Area 6c	--	--	--	--	--	--	--
7 Old-Growth Grove							
Management Area 7	--	--	--	--	--	--	256
8 T & E Species							
Management Area 8	--	--	--	--	--	--	--
9 Special Habitat ¹							
Management Area 9a	--	--	--	--	--	--	--
Management Area 9b	--	--	--	--	--	--	--
Management Area 9c	--	--	--	--	--	--	--
Management Area 9d	--	--	--	--	--	--	--
10 Dispersed Recreation							
Management Area 10a	--	--	--	--	--	--	--
Management Area 10b	--	8,788	--	--	--	--	--
Management Area 10c	--	--	--	597	917	619	--
Management Area 10d	--	--	--	--	--	--	--
Management Area 10e	10,132	--	10,132	9,535	9,193	9,492	--
Management Area 10f	--	--	--	--	--	--	--

Management Areas	NC (No Change)	K (WFC)	A (No Action)	J (DEIS-PA)	W (PA)	D (Wildlife)	L (ONRC)
11 Scenic							
Management Area 11a	--	--	--	--	--	--	--
Management Area 11b	--	--	--	--	--	--	--
Management Area 11c	--	--	--	--	--	--	--
Management Area 11d	--	--	--	--	--	--	--
Management Area 11e	--	--	--	--	--	--	--
Management Area	--	1,344	--	--	21	21	--
12 Developed Recreation							
Management Area 12a	--	--	--	--	--	--	--
Management Area 12b	469	469	469	469	469	--	469
13 Special and Ad- ministrative Use							
Management Area 13a	--	--	--	--	--	--	--
Management Area 13b	--	--	--	--	--	--	--
14 General Forest							
Management Area 14a	--	--	--	--	--	--	--
15 Riparian ²							
Management Area 15	*	*--	*--	*--	--	--	--

¹ Acres of network sites that overlap with other no harvest management areas are not included in MA9a, 9b, 9c acres.

² Only alternatives with acres assigned to no harvest prescriptions for riparian have acres allocated to MA15. In alternatives K, A, and J riparian acres follow Forest-wide standards and guidelines for riparian harvest rates. Riparian acres in NC are distributed throughout other management areas.

**Table C-32-3. Maiden Peak Roadless Area
Quantifiable Resources Outputs, Environmental Effects, and Activities by Alternative**

		Alternatives						
Output, Effects, or Activity	Unit of Measure	NC	K	A	J	W	D	L
Recommended Wilderness Recreation Use 1st Decade Area Recommended for Wilderness	RVDs	--	--	--	--	--	--	--
	Acres	--	--	--	--	--	--	9,876
Nonwilderness Dispersed Recreation Use in the 1st Decade								
Semiprimitive Nonmotorized	RVDs	10,148	384	10,148	9,479	9,076	9,429	384
	Acres	10,601	469	10,601	10,004	9,662	9,961	469
Semiprimitive Motorized	RVDs	--	20,964	--	1,718	2,691	1,783	--
	Acres	--	8,788	--	597	917	619	--
Roaded Natural	RVDs	5,063	20,327	5,063	5,063	5,310	5,310	8,027
	Acres	469	1,813	469	469	491	491	725
Roaded Modified	RVDs	--	--	--	--	--	--	--
	Acres	--	--	--	--	--	--	--
Trails								
Existing Trails								
Full Protection Level	Miles	26	12	26	26	26	26	26
Moderate Protection Level	Miles	--	13	--	--	--	--	--
Low Protection Level	Miles	--	--	--	--	--	--	--
Potential Trails								
Full Protection Level	Miles	--	--	--	--	--	--	--
Moderate Protection Level	Miles	--	--	--	--	--	--	--
Low Protection Level	Miles	--	--	--	--	--	--	--
Visual Quality Objectives								
Preservation	Acres	10,601	469	10,601	10,004	9,662	9,961	10,601
Retention	Acres	--	1,344	--	597	939	640	--
Partial Retention	Acres	469	9,257	469	469	469	469	469
Modification	Acres	--	--	--	--	--	--	--
Maximum Modification	Acres	--	--	--	--	--	--	--
1st Decade								
Road Construction	Miles	--	4.0	--	--	0.1	0.1	--
Area Harvested	Acres	--	491	--	--	--	--	--
Programmed Timber Harvest	MBF	--	3,729	--	--	30	94	--
Area Remaining Undeveloped	%	--	86	--	--	--	--	--
Lands by Timber Yield Levels								
Full Yield (95-100%)	Acres	--	--	--	--	--	--	--
75-94% of Full Yield	Acres	--	4,415	--	--	--	--	--
50-74% of Full Yield	Acres	--	1,258	--	--	--	--	--
30-49% of Full Yield	Acres	--	--	--	--	--	--	--

Hardesty Mountain - 3,690 Acres

Description

History Hardesty Mountain roadless area was first studied in RARE II and was considered for Wilderness by the United States Congress. They released 4,031 acres for multiple use management in the Oregon Wilderness Act of 1984. Since the release of these lands in 1984, approximately 341 acres have been affected by development activities. The area is contiguous to 2,555 acres of Hardesty Mountain roadless area on the Umpqua National Forest making a total of 6,245 acres.

Location and Access This area is located in Lane County approximately 26 miles southeast of Eugene, on the Lowell Ranger District in T.20S., R.1E. The roadless area is accessible from State Highway 58 and by Forest Trails 3469 and 3463.

Geography and Topography Elevation ranges from 1,000 feet on the north to 4,279 feet on the top of Hardesty Mountain. The mountain is characterized by steep dissected slopes, high peaks, and ridges with some small bench areas on ridgetops.

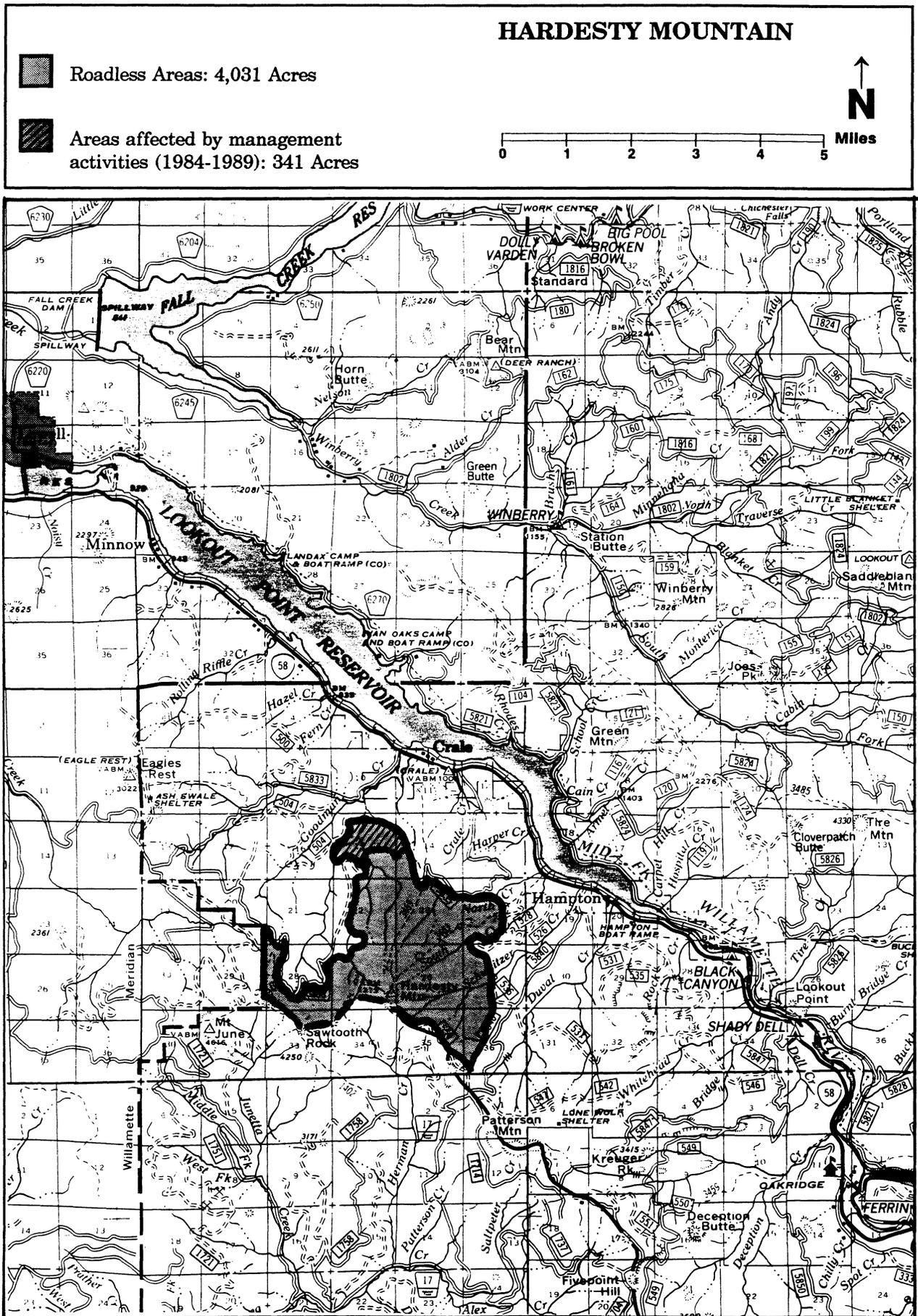
Soil The soils are shallow and locally coarse textured, low in fertility and moisture with local debris slides and channel scouring. There are about 3,157 acres that have potential for severe surface erosion; and approximately 384 acres of potentially severe surface erosion and unstable soil. For more soil information refer to *Willamette National Forest Soil Resource Inventory* (Legard and Meyer 1973).

Vegetation Most of the area has a continuous forest canopy of timber, principally of the Douglas-fir/western hemlock association. Upper elevations have the canopy broken occasionally by meadow openings and rock outcrops.

Ecosystem There is one major potential vegetation zone and one vegetation community for this area according to classification systems by Bailey (1976) and Kuchler (1966). The vegetation zone is the Pacific Forest (M2410) zone. The vegetative community is Pacific silver fir/Douglas-fir (*Abies-Pseudotsuga*) forest (003).

Current Uses The 1977 Forest Land Management Plan prescribed the majority of the area to be managed as General Forest; there is a 26 acre Old-Growth Grove on the west edge and a fringe of Scenic Influence II on the north edge. Recreation use is by hikers and hunters. The low elevation provides a year-round access to hiking trails such as the Eula Ridge Trail. Black-tailed deer and cougar utilize the area as winter range. Since this area was inventoried in 1984 management activities have affected 42 acres of the area.

Figure C-33-1



Appearance The coniferous forest canopy is broken only by an occasional small rock outcrop or meadow. Variation in canopy texture is subtle with a scattering of individual old-growth Douglas-fir and patches of old-growth in smaller timber.

Surroundings The area is bordered by lands being managed for timber productivity, which includes scattered plantations in various age classes on all sides except the south. To the south of the Forest boundary is the contiguous portion of the Umpqua National Forest's Hardesty roadless area. Other than the south, the surrounding area has been salvaged numerous times to remove trees that have blown down. North of the area, the Eula Ridge trailhead provides hiker parking along State Highway 58.

Attractions Hardesty Mountain, elevation 4,279 feet, is a destination point for hikers using the Hardesty and Eula Ridge Trails from the low elevation access on State Highway 58. This is a year round use area for the Willamette Valley population.

The area is drained by small streams such as North Creek, South Creek, and Schweitzer Creek which flow into Lookout Point Reservoir. Native cutthroat trout are found in the lower elevation portions of these streams.

Capability

Manageability and Boundaries Most of this roadless area boundary follows topographic features and roads, and could be efficiently administered for undeveloped recreation management. Adjustment of the boundary down to Forest Roads 5840526, 5840530, and 5840536, while still excluding existing clearcut units, would improve manageability of the northeast boundary.

Natural Integrity Spur roads, clearcuts, roadside salvage, trails, dispersed campsites, and a helispot are present. One spur road rehabilitation project, two helicopter clearcut units, and many roadside salvage areas have occurred near the boundary. Two trails bisect the full length of the area. Five dispersed campsites are located at the top of Hardesty Mountain as well as a helispot with a maintained clearing. Random lightning strikes, causing small fires, have been common. Air pollution in the form of smoke intermittently affects the area. Pheromone confusant (MCH) for bark beetles was applied to the middle section.

Natural Appearance Most viewers find the majority of the area to be apparently natural. Influence on apparent naturalness is evident in the harvested areas, although in time vegetation size would blend in with the surrounding stands of timber. The disturbed areas are located near the north edge.

Opportunity for Solitude Opportunities for solitude are low. Topographic screening is moderate and most of the area has dense vegetation. Use tends to concentrate on trails. Dense vegetation screens people from one another in less than a quarter of a mile. The distance from the perimeter of the roadless area to the approximate geographic center is from one to three miles. Offsite intrusions from roads and timber harvest activities are nearby but are intermittent. Offsite intrusions from railroad and highway noise are permanent because of the commercial nature of each.

Opportunity for Primitive Recreation Opportunities for primitive recreation are moderate with few features other than trails and peaks to experience. Orienteering through dense vegetation and on steep slopes can offer a challenge.

Special Features Both historic and prehistoric archeological sites have been identified. Remnants of the Hardesty Mountain Lookout still remain. No federally listed threatened or endangered species are known to be present.

Availability

Resource Potential

Mineral and Energy Resource As of 1985, three oil and gas leases occur within the Hardesty Mountain roadless area, but no activity is planned at this time. These leases are No. 20720, 20721, 20722. The potential for minerals and energy resources is unknown at this time.

Timber Resource The roadless area includes about 3,157 acres of land suitable for growing timber under managed conditions. Stands of mature Douglas-fir, true firs, and mountain hemlock occupy the area representing about 135 million board feet. If stands are converted to a managed condition, biological potential yield will be 455,000 cubic feet per year at culmination of mean annual increment. Site productivity ranges from Class IV to Class V. The remaining area is unsuitable.

Recreation Resource Capacity estimates indicate that Hardesty Mountain roadless area could provide 2,562 Recreation Visitor Days (RVDs) of Semiprimitive recreation use. Potential trails have been identified and could provide access and disperse visitors in the area. No potential developed recreation sites have been identified.

Cultural Resources Limited cultural resource surveys have been carried out as of 1985. Evidence of aboriginal travel routes and seasonally occupied camps indicate the area contains a relatively moderate percentage of high probability area where the potential for discovery of prehistoric sites remains high.

Management Considerations

Fire There have been no known large fires in recorded history. All recent fires have been caused by lightning and have been confined to single trees. There is evidence of large areas being burned hundreds of years ago. Fuel loading ranges from 15 tons per acre in the second growth stands to 180 tons per acre in the old-growth stands.

Insects and Disease This area has been infested with Douglas-fir bark beetle and gypsy moth. It was sprayed with biological control agents, BT for gypsy moths in 1985 and 1986 and MCH to interfere with the spread of the Douglas-fir bark beetle, in 1985. There are also pockets of root rot, *Phellinus weirii*, scattered throughout the area.

Need

Nearby Wilderness and Its Use More diverse primitive recreation use is provided by the Waldo Lake Wilderness (37,157 acres), Diamond Peak Wilderness (19,773 acres), and the Three Sisters Wilderness (189,346 acres). All are within 60 highway miles from the Eugene-Springfield area. Refer to Chapter III for the amount of use these Wildernesses receive.

Distance from Population Centers The area is approximately 26 miles by road to the southeast of Eugene, Oregon.

Interest by Proponents The Hardesty Mountain roadless area generated a moderate amount of interest with 60% of the responses favoring inclusion of the roadless area into the inventory. Hardesty Mountain has a lengthy history of public involvement. Since its inclusion in RARE II, the public has expressed a number of concerns. It received congressional attention when it was released for multiple-use management in the Oregon Wilderness Act of 1984. In October, 1984, the Willamette National Forest facilitated the formation of a consensus group. The group developed a proposal for future management

of the area by considering all resources and issues involved. The proposal was to be addressed in at least one alternative in this Plan.

Environmental Consequences

As a consequence of implementing any of the proposed Alternatives there will be effects on the Hardesty Mountain roadless area. In Alternatives NC, K, A, J, and W, 50 to 99% of this area will be affected by road construction and timber harvest. Alternative D will develop 31% of the area. As a result of this development, uses dependent on roadless conditions, such as semiprimitive recreation, will not be provided in portions of the area. Implementation of proposed management activities associated with all Alternatives, except Alternative L, would alter the suitability of this area for future Wilderness consideration. Alternative L maintains the option of future Wilderness consideration for most of the area, while Alternatives NC, K, A, J, and W maintain this option on a portion of the area, depending on the allocation of adjoining roadless lands in the Umpqua National Forest FEIS. Figure C-33-2 illustrates how this area has been allocated in each Alternative.

Based on the amount and distribution of management areas assigned to the Hardesty Mountain roadless area, an array of goods and services are provided. Emphasis on priced commodities such as wood products are provided in Alternatives NC, K, A, J, and W. Emphasis on amenity values such as dispersed recreation opportunities, high visual quality, and old-growth habitat are provided in Alternatives L and D. The amounts of other goods and services to be provided from the area for each Alternative are illustrated in Figure C-33-3. Additional information regarding the environmental consequences of the activities associated with these goods and services is located in Chapter IV of this FEIS.

Table T314. Management Area Acreage of Alternatives (C-33-2)

Management Areas	Alternatives						
	NC (No Change)	K (WFC)	A (No Action)	J (DEIS-PA)	W (PA)	D (Wildlife)	L (ONRC)
1 Wilderness							
Management Area 1a	--	--	--	--	--	--	--
Management Area 1b	--	--	--	--	--	--	3,626
Management Area 1c	--	--	--	--	--	--	--
Management Area 1d	--	--	--	--	--	--	--
2 Oregon Cascades Recreation Area							
Management Area 2a	--	--	--	--	--	--	--
Management Area 2b	--	--	--	--	--	--	--
3 Experimental Forest							
Management Area 3	--	--	--	--	--	--	--
4 Research Natural Area							
Management Area 4	--	--	--	--	--	--	--
5 Special Interest Area							
Management Area 5a	--	--	--	--	--	--	--
Management Area 5b	--	--	--	--	981	--	--
6 Wild and Scenic River							
Management Area 6a	--	--	--	--	--	--	--
Management Area 6b	--	--	--	--	--	--	--
Management Area 6c	--	--	--	--	--	--	--
7 Old-Growth Grove							
Management Area 7	21	--	21	--	--	--	--
8 T & E Species							
Management Area 8	--	--	--	--	--	--	--
9 Special Habitat ¹							
Management Area 9a	--	981	981	192	192	--	--
Management Area 9b	--	--	--	--	--	--	--
Management Area 9c	--	--	--	--	--	--	--
Management Area 9d	--	--	--	--	--	--	--
10 Dispersed Recreation							
Management Area 10a	--	--	--	--	--	--	--
Management Area 10b	--	--	--	--	--	--	--
Management Area 10c	--	--	--	--	--	--	--
Management Area 10d	--	--	--	--	--	--	--
Management Area 10e	--	--	--	1,664	661	2,432	43
Management Area 10f	--	--	--	--	--	--	--

Management Areas	NC (No Change)	K (WFC)	A (No Action)	J (DEIS-PA)	W (PA)	D (Wildlife)	L (ONRC)
11 Scenic							
Management Area 11a	--	107	--	704	--	--	--
Management Area 11b	--	--	--	--	--	--	--
Management Area 11c	--	--	--	--	--	235	--
Management Area 11d	--	--	--	85	--	--	--
Management Area 11e	--	--	--	--	--	--	--
Management Area 11f	--	--	--	--	--	--	--
12 Developed Recreation							
Management Area 12a	--	--	--	--	--	--	--
Management Area 12b	--	--	--	--	--	--	--
13 Special and Ad- ministrative Use							
Management Area 13a	--	--	--	--	--	--	--
Management Area 13b	--	--	--	--	--	--	--
14 General Forest							
Management Area 14a	3,669	2,453	2,538	917	1,728	917	21
15 Riparian ²							
Management Area 15	*	149	149	128	128	107	--

¹ Acres of network sites that overlap with other no harvest management areas are not included in MA9a, 9b, 9c acres.

² Only alternatives with acres assigned to no harvest prescriptions for riparian have acres allocated to MA15. In alternatives K, A, and J riparian acres follow Forest-wide standards and guidelines for riparian harvest rates. Riparian acres in NC are distributed throughout other management areas.

**Table C-32-3. Hardesty Mt. Roadless Area
Quantifiable Resources Outputs, Environmental Effects, and Activities by Alternative**

		Alternatives						
Output, Effects, or Activity	Unit of Measure	NC	K	A	J	W	D	L
Recommended Wilderness Recreation Use 1st Decade Area Recommended for Wilderness	RVDs	--	--	--	--	--	--	--
	Acres	--	--	--	--	--	--	3,626
Nonwilderness Dispersed Recreation Use in the 1st Decade								
Semiprimitive Nonmotorized	RVDs	--	--	--	263	263	356	--
	Acres	--	--	--	1,664	1,642	2,432	43
Semiprimitive Motorized	RVDs	--	--	--	--	--	--	--
	Acres	--	--	--	--	--	--	--
Roaded Natural	RVDs	--	1,753	1,753	914	420	1,235	--
	Acres	21	1,130	1,152	405	320	341	--
Roaded Modified	RVDs	2,467	1,766	1,766	1,044	1,234	570	95
	Acres	3,669	2,560	2,538	1,621	1,728	917	21
Trails								
Existing Trails								
Full Protection Level	Miles	2.0	4.0	5.0	7.0	5.0	8.0	9.0
Moderate Protection Level	Miles	--	--	--	1.0	4.0	--	--
Low Protection Level	Miles	6.0	4.0	4.0	2.0	--	1.0	--
Potential Trails								
Full Protection Level	Miles	0.0	0.0	0.0	1.0	1.0	1.0	2.0
Moderate Protection Level	Miles	--	1.0	1.0	1.0	1.0	1.0	--
Low Protection Level	Miles	2.0	1.0	1.0	--	--	1.0	--
Visual Quality Objectives								
Preservation	Acres	21	981	1,003	1,856	1,834	2,432	3,669
Retention	Acres	--	--	--	--	--	--	--
Partial Retention	Acres	--	149	149	213	128	341	--
Modification	Acres	--	107	--	704	--	--	--
Maximum Modification	Acres	3,669	2,453	2,538	917	1,728	917	21
1st Decade								
Road Construction	Miles	--	2.0	3.0	2.0	1.3	1.3	0.1
Area Harvested	Acres	--	398	478	502	326	239	61
Programmed Timber Harvest	MBF	--	2,848	4,105	4,490	2,899	2,867	546
Area Remaining Undeveloped	%	--	67	60	58	73	80	95
Lands by Timber Yield Levels								
Full Yield (95-100%)	Acres	3,136	2,261	2,240	1,002	896	1,088	21
75-94% of Full Yield	Acres	--	43	43	128	149	--	--
50-74% of Full Yield	Acres	--	85	85	85	--	43	--
30-49% of Full Yield	Acres	--	--	--	--	--	--	--

Bulldog Rock - 555 Acres

Description

History The Bulldog Rock roadless area was evaluated in RARE II. The area was considered for Wilderness by the United States Congress. They released the area for multiple-use management in the Oregon Wilderness Act of 1984. This 555 acre area is a portion of the 6,997 acre Bulldog Rock roadless area that includes 6,442 acres on the Umpqua National Forest.

Location and Access The Bulldog Rock roadless area is located in T.25S., R.3E. of Douglas County, approximately 21 miles south of Oakridge on the Rigdon Ranger District. The area is bordered on the east boundary and north boundary by Forest Road 5850. Forest Road 5850 accesses the eastern perimeter.

Geography and Topography The Bulldog Rock area contains a combination of meadows, rocky points, and timbered slopes at elevations of 4,800 feet to 5,800 feet. It is at the crest of the Calapooya Divide and has a variety of topographic features, ranging from gentle and rolling to very steep and precipitous.

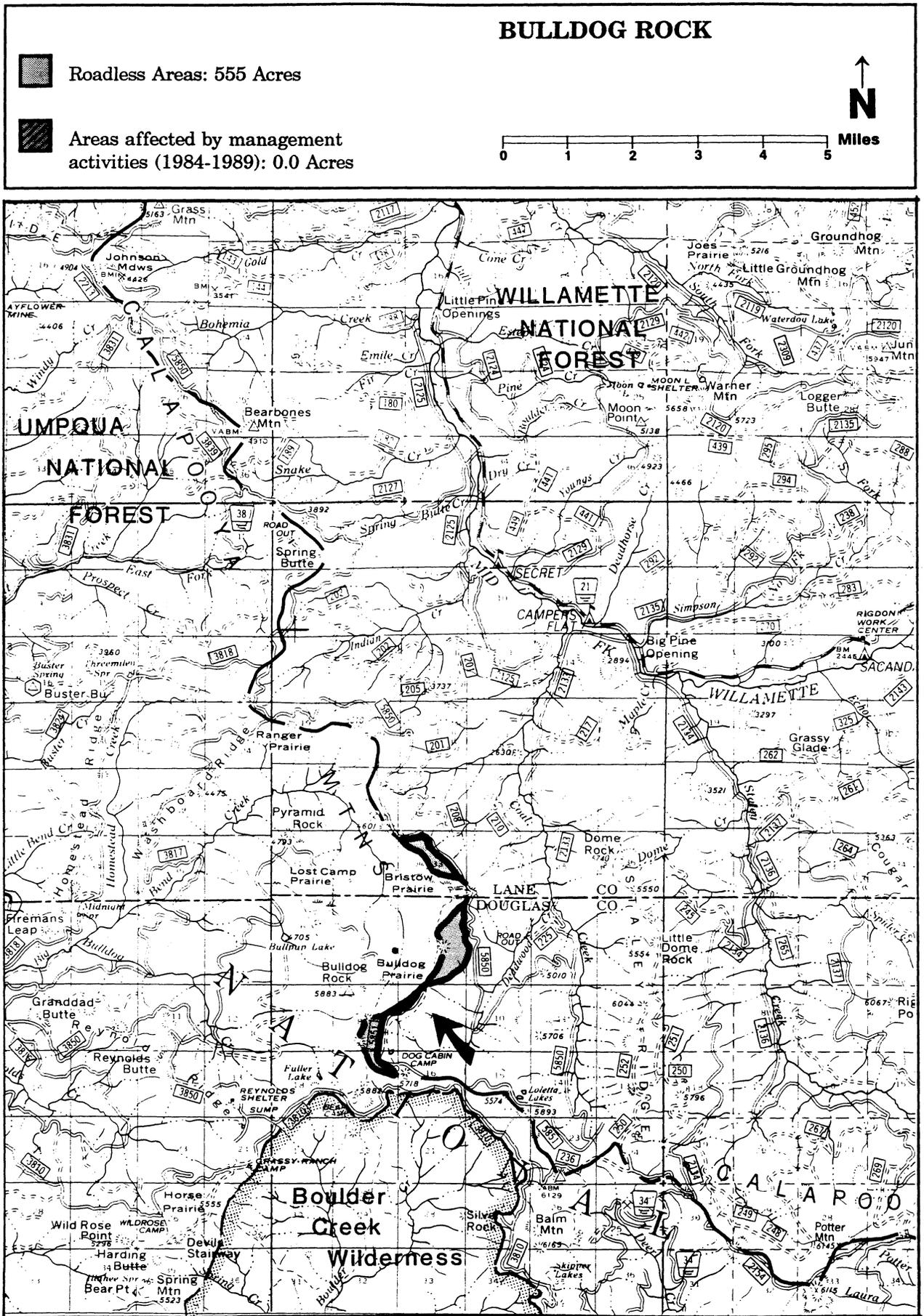
Soil Generally soils have low fertility, low moisture content, and are shallow and coarse textured with a short growing season. There are about 235 acres that have potential for severe surface erosion; and approximately 64 acres of potentially severe surface erosion and unstable soil. For more soil information refer to *Willamette National Forest Soil Resource Inventory* (Legard and Meyer 1973).

Vegetation The timber cover consists of about 30% Douglas-fir and 70% true fir (Shasta red, noble, and Pacific silver).

Ecosystem There is one major potential vegetation zone and two vegetation communities for this area according to classification systems by Bailey (1976) and Kuchler (1966). The vegetation zone is the Pacific Forest (M2410) zone. The vegetative communities are fir/hemlock (*Abies-Tsuga*) forest (004) and Pacific silver fir/Douglas-fir (*Abies-Pseudotsuga*) forest (003).

Current Uses There is very little use other than big-game hunting and a range allotment. The Recreation Opportunity Spectrum (ROS) class is Semiprimitive Nonmotorized. The area is part of the Bulldog Rock Roadless Area as allocated in the Umpqua Land Management Plan of 1978.

Figure C-34-1



Appearance A number of meadows are scattered throughout the area. The forested areas have a great variety of undergrowth ranging from dense vinemaple on the east slopes to huckleberry and queenscup bead lily on cold north slopes and the flatter areas near Forest Road 5851. The prominent old-growth noble fir dwarf the wildflowers that bloom vibrantly in the parklike stands of the flats. The Pacific silver fir and Alaskan yellow cedar are indicative of the harsh cold on the north slopes.

Surroundings The area to the north and east are allocated to timber management with a number of existing clearcuts. To the west is the Umpqua National Forest's portion of the Bulldog Rock roadless area and to the south is the Boulder Creek Wilderness established in 1984, both of which are on the Umpqua National Forest.

Attractions The meadows and surrounding old-growth are host to a great variety of wildflowers and wildlife.

Capability

Manageability and Boundaries The boundaries could be located on nonconforming use developments which serve as good barriers against future intrusions. No conflict is foreseen with current or future nonconforming structures or activities. Boundaries could be easily defined on the ground. Manageability would be somewhat difficult because of the easy access for off-road vehicles onto Bristow Prairie.

Natural Integrity Activities and facilities that are present include a 1/8 mile trail in Section 8, grazing distributed throughout the whole area, a salvage harvest of timber dispersed over a small area, a small weir to trap spring water, a broken down fence to protect the weir, a metal watering trough, intermittent air pollution effects over the entire area, and water pollution from grazing animal waste in a small Class III stream.

Trail, grazing, illegal off-road vehicles, and water pollution impacts are present and measurable but of only minor consequence. Processes continue to operate largely uninterrupted.

Natural Appearance The nearby clearcut would be perceptible to few visitors, because of the easy separability by ridges and Forest canopy. Air pollution is perceived on an intermittent basis. Visible trail, weir, fence, trough, ruts of a primitive road, and timber salvage evidence is minor.

Opportunity for Solitude Opportunities for solitude in the 555 acre area are low. Rolling-type terrain, limited diversity of topography offers limited screening potential. Vegetative screening is good in a least half the area, screening people easily within a quarter mile of one another. However, limited or no screening is available in Bristow Prairie. The distance from the perimeter of the roadless area to the approximate geographic center is more than one mile. Offsite intrusions are perceptible, but most are relatively distant.

Opportunity for Primitive Recreation Opportunities for primitive recreation are low with little variety.

Special Features A candidate plant of Federal concern has been sighted and documented in Bristow Prairie. It is a candidate for the Federal list of endangered or threatened plants. However, the taxa has proven to be more abundant or widespread than was previously believed. There are no federally listed endangered or threatened species known to be present.

Cultural features include several prehistoric and historic sites in and around the area.

Availability

Resource Potentials

Recreation and Range Resources Trail pack animals could be used on Bristow Prairie and on the more gentle areas. Capacity estimates indicate that this area could provide 332 Recreation Vehicle Days (RVDs) of Semiprimitive recreation use. No potential trail locations or developed recreation sites have been identified.

Timber Resources The roadless area includes about 342 acres of land suitable for growing timber under managed conditions. Stands of mature Douglas-fir, true firs, and mountain hemlock occupy the area representing about 14 million board feet. If stands are converted to a managed condition, biological potential yield will be 38,600 cubic feet per year at culmination of mean annual increment. Site productivity ranges from Class IV to Class V. The remaining 213 acres are unsuitable or unavailable.

Cultural Resources There is a high probability for sites as evidenced by existing recorded sites along the Calapooya Divide.

Wildlife Resource The Bulldog Rock roadless area is highly favored as summer range by elk from both the Umpqua and Willamette National Forest. Up to 100 elk use this area. On an observation flight, officials from the Oregon Department of Fish and Wildlife estimated 500 elk within a 10 mile strip along the Calapooya Divide in the vicinity of this roadless area.

Creating early successional stages would benefit big-game habitat by providing additional summer forage. Regulation of timber harvest and road traffic would ensure adequate cover and retention of quality habitat.

Range Resource The allotment will continue for grazing cattle.

Management Consideration Since human intervention with suppression, fire occurrence has been very low. Fuel loads range from 14 to 50 tons per acre.

Need

Nearby Wilderness and Its Use The Bulldog Rock roadless area is immediately north of Boulder Creek Wilderness (19,100 acres). Use is considered light compared to its carrying capacity. As of 1984 use was 3,145 RVDs with a carrying capacity of 23,055 RVDs per year. Also, within the vicinity are seven other roadless areas on the Umpqua National Forest. People concentrate their recreation on the trails and around the few lakes in the vicinity.

Distance from Population Centers The area is approximately 70 miles by road to the southeast of Eugene and 60 miles northeast of Roseburg.

Interest by Proponents The Bulldog Rock roadless area generated a low amount of interest with 60% of the responses favoring inclusion of the roadless area into the inventory.

Environmental Consequences

As a consequence of implementing any of the proposed Alternatives there will be effects on the Bulldog Rock roadless area. In Alternatives NC, A, and K, 50 to 73% of this area will be affected by road construction and timber harvest. As a result of this development, uses dependent on roadless conditions, such as semiprimitive recreation, will not be provided in portions of the area. Implementation of proposed management activities associated with Alternatives NC, A, and K, would alter the suitability of this area for future Wilderness consideration. Alternatives J, D, L, and W maintain the option of future Wilderness consideration for this area, depending on the allocations of adjoining roadless lands in the Umpqua National Forest FEIS, Figure C-34-2 illustrates how this area has been allocated in each Alternative.

Based on the amount and distribution of management areas assigned to the Bulldog Rock roadless area, an array of goods and services are provided. Emphasis on priced commodities such as wood products are provided in Alternative K, NC, and A. Emphasis on amenity values such as dispersed recreation opportunities, high visual quality, and old-growth habitat are provided in Alternatives L, D, W, and J. The amounts of other goods and services to be provided from the area for each Alternative are illustrated in Figure C-34-3. Additional information regarding the environmental consequences of the activities associated with these goods and services is located in Chapter IV of this FEIS.

Table T314. Management Area Acreage of Alternatives (C-34-2)

Management Areas	Alternatives						
	NC (No Change)	K (WFC)	A (No Action)	J (DEIS-PA)	W (PA)	D (Wildlife)	L (ONRC)
1 Wilderness							
Management Area 1a	--	--	--	--	--	--	--
Management Area 1b	--	--	--	--	--	--	--
Management Area 1c	--	--	--	--	--	--	--
Management Area 1d	--	--	--	--	--	--	--
2 Oregon Cascades Recreation Area							
Management Area 2a	--	--	--	--	--	--	--
Management Area 2b	--	--	--	--	--	--	--
3 Experimental Forest							
Management Area 3	--	--	--	--	--	--	--
4 Research Natural Area							
Management Area 4	--	--	--	--	--	--	--
5 Special Interest Area							
Management Area 5a	--	--	--	--	85	384	171
Management Area 5b	--	--	--	--	--	--	--
6 Wild and Scenic River							
Management Area 6a	--	--	--	--	--	--	--
Management Area 6b	--	--	--	--	--	--	--
Management Area 6c	--	--	--	--	--	--	--
7 Old-Growth Grove							
Management Area 7	--	--	--	--	--	--	--
8 T & E Species							
Management Area 8	--	--	--	--	--	--	--
9 Special Habitat ¹							
Management Area 9a	--	--	--	--	--	--	--
Management Area 9b	--	--	--	--	--	--	--
Management Area 9c	--	--	--	--	--	--	--
Management Area 9d	--	150	--	--	21	--	--
10 Dispersed Recreation							
Management Area 10a	--	--	--	--	--	--	--
Management Area 10b	--	--	--	--	--	--	--
Management Area 10c	--	--	--	--	--	--	--
Management Area 10d	--	--	--	--	--	--	--
Management Area 10e	277	--	277	555	448	171	384
Management Area 10f	--	--	--	--	--	--	--

Management Areas	NC (No Change)	K (WFC)	A (No Action)	J (DEIS-PA)	W (PA)	D (Wildlife)	L (ONRC)
11 Scenic							
Management Area 11a	--	--	--	--	--	--	--
Management Area 11b	--	--	--	--	--	--	--
Management Area 11c	--	--	--	--	--	--	--
Management Area 11d	--	--	--	--	--	--	--
Management Area 11e	--	--	--	--	--	--	--
Management Area 11f	--	--	--	--	--	--	--
12 Developed Recreation							
Management Area 12a	--	--	--	--	--	--	--
Management Area 12b	--	--	--	--	--	--	--
13 Special and Ad- ministrative Use							
Management Area 13a	--	--	--	--	--	--	--
Management Area 13b	--	--	--	--	--	--	--
14 General Forest							
Management Area 14a	277	405	277	--	--	--	--
15 Riparian ²							
Management Area 15	*	*..	*..	*..	--	--	--

¹ Acres of network sites that overlap with other no harvest management areas are not included in MA9a, 9b, 9c acres.

² Only alternatives with acres assigned to no harvest prescriptions for riparian have acres allocated to MA15. In alternatives K, A, and J riparian acres follow Forest-wide standards and guidelines for riparian harvest rates. Riparian acres in NC are distributed throughout other management areas.

**Table C-34-3. Bulldog Rock Roadless Area
Quantifiable Resources Outputs, Environmental Effects, and Activities by Alternative**

		Alternatives						
Output, Effects, or Activity	Unit of Measure	NC	K	A	J	W	D	L
Recommended Wilderness Recreation Use 1st Decade Area Recommended for Wilderness	RVDs	--	--	--	--	--	--	--
	Acres	--	--	--	--	--	--	--
Nonwilderness Dispersed Recreation Use in the 1st Decade								
Semiprimitive Nonmotorized	RVDs	191	--	191	393	371	152	238
	Acres	277	--	277	555	448	171	384
Semiprimitive Motorized	RVDs	--	--	--	--	--	--	--
	Acres	--	--	--	--	--	--	--
Roaded Natural	RVDs	--	469	--	--	198	2,347	1,457
	Acres	--	149	--	--	107	384	171
Roaded Modified	RVDs	817	1,329	817	--	--	--	--
	Acres	277	405	277	--	--	--	--
Trails								
Existing Trails								
Full Protection Level	Miles	--	3.0	--	--	--	--	--
Moderate Protection Level	Miles	--	4.0	--	--	--	--	--
Low Protection Level	Miles	--	--	--	--	--	--	--
Potential Trails								
Full Protection Level	Miles	2.0	2.0	2.0	2.0	--	2.0	2.0
Moderate Protection Level	Miles	--	--	--	--	--	--	--
Low Protection Level	Miles	1.0	--	1.0	--	2.0	--	--
Visual Quality Objectives								
Preservation	Acres	277	--	277	555	533	555	555
Retention	Acres	--	149	--	--	21	--	--
Partial Retention	Acres	--	--	--	--	--	--	--
Modification	Acres	--	--	--	--	--	--	--
Maximum Modification	Acres	277	405	277	--	--	--	--
1st Decade								
Road Construction	Miles	--	0.2	0.0	--	--	--	--
Area Harvested	Acres	--	9	9	--	--	--	--
Programmed Timber								
Harvest	MBF	--	39	84	--	--	--	--
Area Remaining								
Undeveloped	%	--	94	95	--	--	--	--
Lands by Timber Yield Levels								
Full Yield (95-100%)	Acres	171	277	171	--	--	--	--
75-94% of Full Yield	Acres	--	--	--	--	--	--	--
50-74% of Full Yield	Acres	--	--	--	--	--	--	--
30-49% of Full Yield	Acres	--	--	--	--	--	--	--

Diamond Peak North - 1,130 Acres

Description

History There were about 4,778 acres in the Diamond Peak North roadless inventory which is contiguous to the Diamond Peak Wilderness. The Oregon Wilderness Act of 1984 designated 3,520 acres to be added to Diamond Peak Wilderness and releasing 1,258 acres for multiple-use management. Since the release of these lands in 1984, approximately 128 acres have been affected by development activities.

Location and Access Diamond Peak North lies contiguous to the Diamond Peak Wilderness in two areas approximately 16 miles southeast of Oakridge. One is on the north end near Lopez and Vivian Lakes on the Oakridge Ranger District in T.23S., Rs.5 and 5½E. The second is on the west side near Pioneer Gulch and Emigrant Creek on the Rigdon Ranger District in T.24S., R.5E.

Forest Roads 5884409 and 5899411 access the north end. Another route is by Forest Road 2316510 near Pinto Mountain. The west side is accessed by Forest Road 2160 and 2160406. Forest Trail 3662 to Notch Lake and Fall Creek Falls access the north and Trail 3630 accesses a small portion of the westside.

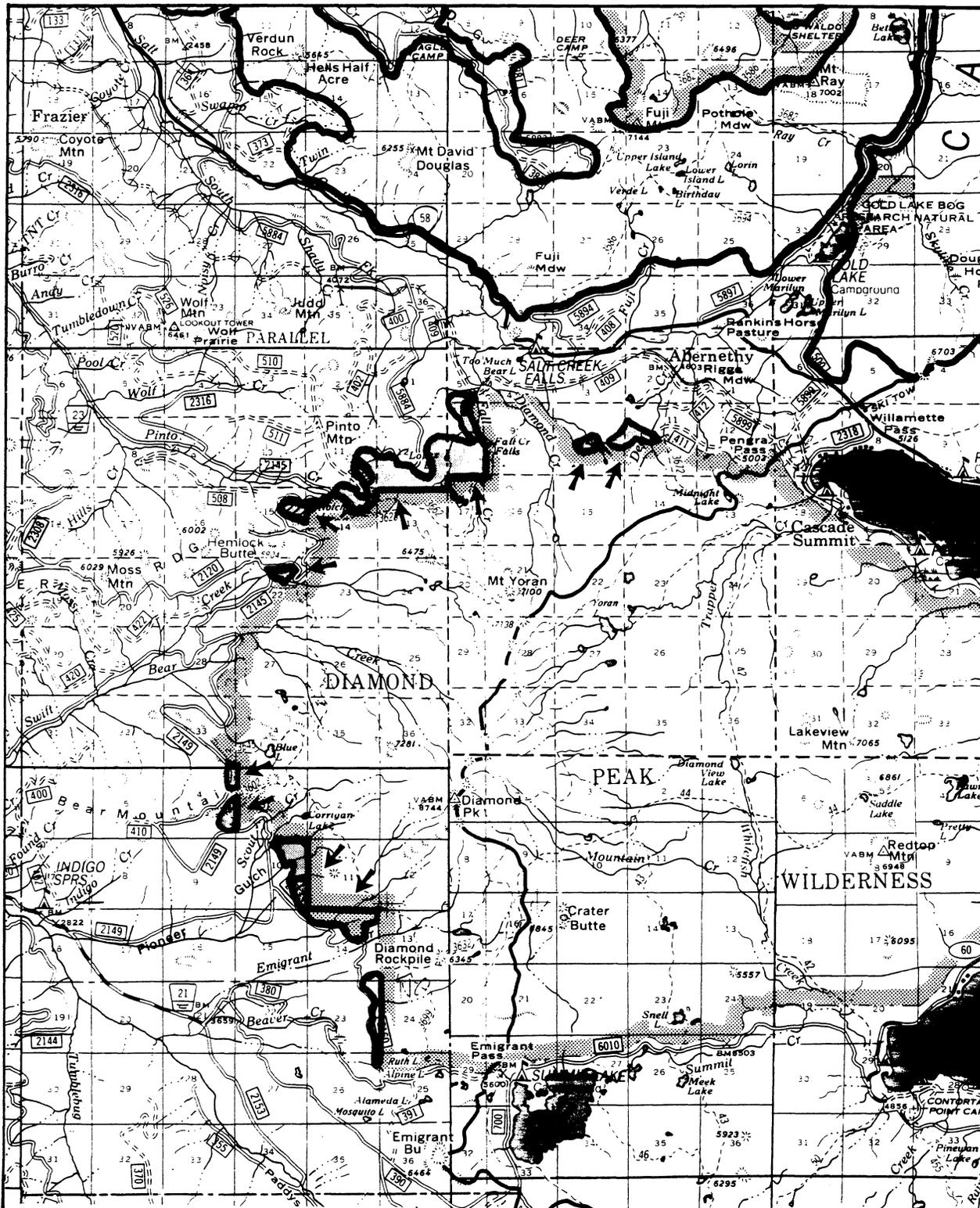
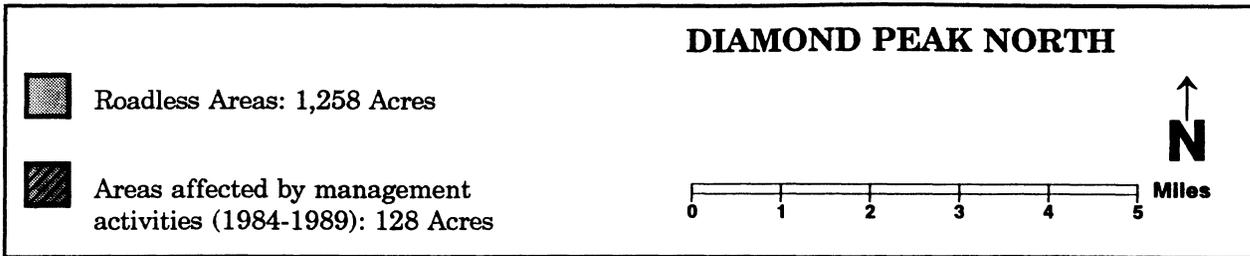
Geography and Topography The area is typical of the High Cascades where volcanization originally formed the lands of Diamond Peak and its surrounding territory. These lower slopes of Diamond Peak vary in their landform in that, very steep concave slopes give way to more gently rolling convex landforms. Springs tend to come to surface below the steep slopes and cause swamps and meadows to form on the flats. The west side is primarily convex and rolling.

Elevations range from a high of 6,240 feet near Pinto Mountain to 4,320 feet at the lowest point near the mouth of Fall Creek in the north. The terrain is highly varied from rolling ridges and flats around Lopez Lake to very steep west southwest of Lopez Lake. The western side is moderately steep and dissected.

Soil Soils are generally composed of coarse pumice and ash with low fertility and moisture. Subsoil ranges from sandy to stony loam. Soil is cold and has a short growing season. Depths range from six inches to six feet. Rock outcrops may occur along benches and on very steep slopes. There are about 256 acres that have potential for severe surface erosion. For more soil information refer to *Willamette National Forest Soil Resource Inventory* (Legard and Meyer 1973).

Vegetation True firs dominate 90% of the stands. Douglas-fir increases on warmer southerly aspects. Mountain hemlock and lodgepole pine increase on colder northerly aspects.

Figure C-35-1



Ecosystem There is one major potential vegetation zone and one vegetation community for this area according to classification systems by Bailey (1976) and Kuchler (1966). The vegetation zone is the Pacific Forest (M2410) zone. The vegetative community is fir/hemlock (*Abies-Tsuga*) forest (004).

Current Uses The area west of Lopez Lake is allocated to Scenic Influence I in the 1977 Forest Land Management Plan. The area east and north is allocated to Scenic Influence II. These allocations are for areas seen from State Highway 58. Lopez Lake has a natural population of brook trout that attracts a very small amount of fishing. The Vivian Lake trail attracts a greater number of hikers from the Salt Creek Falls side of the area. Visitor days have not been monitored except from the Notch Lake side where Recreation Visitor Days (RVDs) were 191 for the 1984 season. Oakridge District personnel estimated the RVDs to be over 200 for the trail from Salt Creek Falls. Pioneer Gulch Trail 3630 which goes through the west side has a Scenic Influence II allocation. The trail head which is the only destination point in this area is located on Forest Road 2160. The trail is an access point to other wilderness trails and receives limited use. RVDs were about 35 for the 1984 season. Roads have been built for timber harvest. Since this area was inventoried in 1984 management activities are estimated to have affected 43 acres of the area.

Appearance The west side is a continuous forest canopy with a light shrub cover. The forest tends to be plain without a break in texture. The north end has alder, willow, and vine maple growing in the meadows of the steep terrain. The meadows probably originated from snow avalanches and weathering of basalt outcroppings. The flat meadows below these steeper openings contain shrubs, forbs, and grasses. Conifers are pioneering their way into the meadows. The older established clumps of conifers break up the meadow and create a maze-like effect. The clearcut near Lopez Lake is not easily seen from the lake. The forest canopy beyond the meadows is thick and continuous with rhododendron being the major shrub.

Surroundings To the immediate north is a full yield potential forest which includes timber harvest units. Farther to the north is State Highway 58 and the Scenic Influence I corridor that faces the northern part. The west side is bordered by land allocated to full timber yield, which includes harvest units that border some of the area.

Attractions Vivian Lake Trail and Lopez Lake are the greatest attractions. Day hikes are common with fishing and hunting being the main interest.

Capability

Manageability and Boundaries The boundaries abut areas of nonconforming uses outside the boundary. These nonconforming activities make boundary location easier to establish on the ground. Roads have been developed into these nonconforming areas which provide access to possible future trail head development.

Natural Integrity The Diamond Peak North roadless area has 0.5 mile of trail located in the west portion, recreation around Lopez Lake, a small clearcut in the north portion, fire history dispersed over 60 to 70% of the area, and intermittent air pollution over the entire area. Sounds of the State Highway 58 and railroad corridor cannot be buffered and will intrude into the northern area.

Natural Appearance The clearcut is well hidden by the thick canopy of the forest and the long crowns of the islands of trees in the meadows. The clearcut is not seen by the user on the trail to Vivian Lake and is expected by those who go to Lopez Lake by way of Forest Road 5884405. Air pollution may be seen at times but is intermittent.

Opportunity for Solitude The sound of traffic from State Highway 58 on a quiet windless day breaks some of the solitude. The dense crown of the overstory to the brush in the understory creates a backdrop which screen people from each other.

Opportunity for Primitive Recreation There is opportunity for fishing, hiking, hunting, orienteering, and camping.

Special Features Near the turn of the century shepherders brought their flocks to graze and water at Lopez Lake. Blazes on trees around the lake are still evidence of their early entry to this high country. Other features are common. No federally listed threatened or endangered species are known to be present.

Availability

Resource Potentials

Recreation Resource Capacity estimates indicate that this area could provide 720 Recreation Visitor Days (RVDs) of Semiprimitive recreation use. No potential trail locations or developed recreation sites have been identified.

Timber Resource The roadless area includes about 768 acres of land suitable for growing timber under managed conditions. Stands of mature Douglas-fir, true firs, and mountain hemlock occupy the area representing about 23 million board feet. If stands are converted to a managed condition, biological potential yield will be 70,000 cubic feet per year at culmination of mean annual increment. Site productivity ranges from Class IV to Class V. The remaining area is unsuitable.

Cultural Resources There have been no sites identified in the area as of 1985. However, there are several nearby which indicate a high probability of sites in the area.

Wildlife Resource The area can be maintained as a travelway and cover for elk that travel between the Wilderness and Loggers Butte. The area is surrounded by plantations with trees that vary from one inch to four inches in diameter. In 10 to 15 years these plantations will supply more cover.

Management Considerations Since human intervention with suppression, fire occurrence is very low. Fuel loads range from 14 to 30 tons per acre.

Need

Nearby Wilderness and Its Use The Diamond Peak North roadless area is adjacent to the Diamond Peak Wilderness (53,773 acres), and 5 miles south of the Waldo Lake Wilderness (37,157 acres). Refer to Chapter III for the amount of use these Wildernesses receive.

Distance from Population Centers The area is approximately 60 miles by road to the southeast of Eugene, Oregon.

Interest by Proponents The Diamond Peak North roadless area generated a high amount of interest with 86% of the responses favoring inclusion of the roadless area into the inventory.

Environmental Consequences

As a consequence of implementing any of the proposed Alternatives there will be effects on the Diamond Peak North roadless area. In Alternatives NC, K, A, J, 62 to 100% of this area will be affected by road construction and timber harvest. Alternative W develops 34%, Alternative D develops 19%, Alternative L develops 4%. As a result of this development, uses dependent on roadless conditions, such as semiprimitive recreation, will not be provided in portions of the area. Implementation of proposed management activities associated with all Alternatives, except Alternative L, would alter the suitability of some of this area for future Wilderness consideration. However, portions of this area contiguous to the Diamond Peak Wilderness would remain suitable for consideration as Wilderness additions in the next cycle of Forest planning. Alternatives L and D maintain the option of future Wilderness consideration for most of this area. Figure C-35-2 illustrates how this area has been allocated in each Alternative.

Based on the amount and distribution of management areas assigned to the Diamond Peak North roadless area, an array of goods and services are provided. Emphasis on priced commodities such as wood products are provided in Alternatives NC, A, K, and J. Emphasis on amenity values such as dispersed recreation opportunities, high visual quality, and old-growth habitat are provided in Alternatives W, D, and L. The amounts of other goods and services to be provided from the area for each Alternative are illustrated in Figure C-35-3. Additional information regarding the environmental consequences of the activities associated with these goods and services is located in Chapter IV of this FEIS.

Table T314. Management Area Acreage of Alternatives (C-35-2)

Management Areas	Alternatives						
	NC (No Change)	K (WFC)	A (No Action)	J (DEIS-PA)	W (PA)	D (Wildlife)	L (ONRC)
1 Wilderness							
Management Area 1a	--	--	--	--	--	--	--
Management Area 1b	--	--	--	--	--	--	1,003
Management Area 1c	--	--	--	--	--	--	--
Management Area 1d	--	--	--	--	--	--	--
2 Oregon Cascades Recreation Area							
Management Area 2a	--	--	--	--	--	--	--
Management Area 2b	--	--	--	--	--	--	--
3 Experimental Forest							
Management Area 3	--	--	--	--	--	--	--
4 Research Natural Area							
Management Area 4	--	--	--	--	--	--	--
5 Special Interest Area							
Management Area 5a	--	--	--	--	--	--	--
Management Area 5b	--	--	--	--	--	--	--
6 Wild and Scenic River							
Management Area 6a	--	--	--	--	--	--	--
Management Area 6b	--	--	--	--	--	--	--
Management Area 6c	--	--	--	--	--	--	--
7 Old-Growth Grove							
Management Area 7	--	--	--	--	--	--	--
8 T & E Species							
Management Area 8	--	--	--	--	--	--	--
9 Special Habitat ¹							
Management Area 9a	--	171	171	--	--	--	21
Management Area 9b	--	--	--	--	--	--	--
Management Area 9c	--	--	--	--	--	--	--
Management Area 9d	--	21	--	--	128	--	--
10 Dispersed Recreation							
Management Area 10a	--	--	--	--	107	--	--
Management Area 10b	--	--	--	--	--	--	21
Management Area 10c	--	--	--	--	--	--	21
Management Area 10d	--	--	--	--	--	--	--
Management Area 10e	--	--	--	427	427	875	--
Management Area 10f	--	--	--	--	43	--	--

Management Areas	NC (No Change)	K (WFC)	A (No Action)	J (DEIS-PA)	W (PA)	D (Wildlife)	L (ONRC)
11 Scenic							
Management Area 11a	--	427	--	405	171	--	--
Management Area 11b	--	--	--	--	--	--	--
Management Area 11c	235	107	--	128	107	107	--
Management Area 11d	43	--	213	21	--	21	--
Management Area 11e	213	--	21	--	--	--	--
Management Area 11f	--	--	213	--	--	--	21
12 Developed Recreation							
Management Area 12a	--	--	--	--	--	--	--
Management Area 12b	--	--	--	--	--	--	--
13 Special and Ad- ministrative Use							
Management Area 13a	21	21	21	21	21	21	21
Management Area 13b	--	--	--	--	--	--	--
14 General Forest							
Management Area 14a	619	320	427	64	85	64	--
15 Riparian ²							
Management Area 15	*	64	64	64	43	42	21

¹ Acres of network sites that overlap with other no harvest management areas are not included in MA9a, 9b, 9c acres.

² Only alternatives with acres assigned to no harvest prescriptions for riparian have acres allocated to MA15. In alternatives K, A, and J riparian acres follow Forest-wide standards and guidelines for riparian harvest rates. Riparian acres in NC are distributed throughout other management areas.

**Table C-35-3. Diamond Peak North Roadless Area
Quantifiable Resources Outputs, Environmental Effects, and Activities by Alternative**

		Alternatives						
Output, Effects, or Activity	Unit of Measure	NC	K	A	J	W	D	L
Recommended Wilderness Recreation Use 1st Decade Area Recommended for Wilderness	RVDs	--	--	--	--	--	--	--
	Acres	--	--	--	--	--	--	1,003
Nonwilderness Dispersed Recreation Use in the 1st Decade								
Semiprimitive Nonmotorized	RVDs	--	--	--	327	313	558	--
	Acres	--	--	--	427	427	875	--
Semiprimitive Motorized	RVDs	--	--	--	--	--	--	26
	Acres	--	--	--	--	--	--	43
Roaded Natural	RVDs	3,385	3,705	5360	2,322	2,989	1,976	494
	Acres	491	363	683	213	427	171	64
Roaded Modified	RVDs	1,728	1,614	968	892	664	152	95
	Acres	640	768	448	491	277	85	21
Trails								
Existing Trails								
Full Protection Level	Miles	0.0	1.0	1.0	1.0	1.0	1.0	1.0
Moderate Protection Level	Miles	0.0	0.0	--	--	--	--	--
Low Protection Level	Miles	1.0	--	0.0	0.0	--	0.0	--
Potential Trails								
Full Protection Level	Miles	--	--	--	--	--	--	--
Moderate Protection Level	Miles	--	--	--	--	--	--	--
Low Protection Level	Miles	--	--	--	--	--	--	--
Visual Quality Objectives								
Preservation	Acres	--	171	171	427	427	875	1,024
Retention	Acres	213	21	213	--	171	--	43
Partial Retention	Acres	277	171	299	213	256	171	43
Modification	Acres	21	448	21	427	192	21	21
Maximum Modification	Acres	619	320	427	64	85	64	--
1st Decade								
Road Construction	Miles	--	0.5	0.8	1.0	0.5	0.5	0.1
Area Harvested	Acres	--	73	124	76	69	47	3
Programmed Timber Harvest	MBF	--	533	918	559	562	834	17
Area Remaining Undeveloped	%	--	80	66	78	81	87	99
Lands by Timber Yield Levels								
Full Yield (95-100%)	Acres	726	534	512	320	256	128	--
75-94% of Full Yield	Acres	43	43	21	43	--	21	--
50-74% of Full Yield	Acres	--	21	64	21	--	21	--
30-49% of Full Yield	Acres	--	--	--	--	--	--	21

Diamond Peak South - 149 Acres

Description

History There were about 597 acres in the Diamond Peak South roadless inventory contiguous to the Diamond Peak Wilderness. The Oregon Wilderness Act of 1984 designated 448 acres of the 597 acres as Wilderness, releasing 149 acres for multiple-use management.

Location and Access Diamond Peak South lies contiguous to the southwest portion of Diamond Peak Wilderness approximately 24 miles southeast of Oakridge. Geographically it is a half mile east of Beaver Marsh and south of Emigrant Creek on the Rigdon Ranger District in T.24S., R.5E. The area is entirely bordered on the west by Forest Road 2160.

Geography and Topography The area is typical of the High Cascades where volcanism originally formed the lands of Diamond Peak and its surrounding territory. The lower southwest slopes vary in their landform in that moderately steep convex slopes give way to more gently rolling convex terrain to flat landforms.

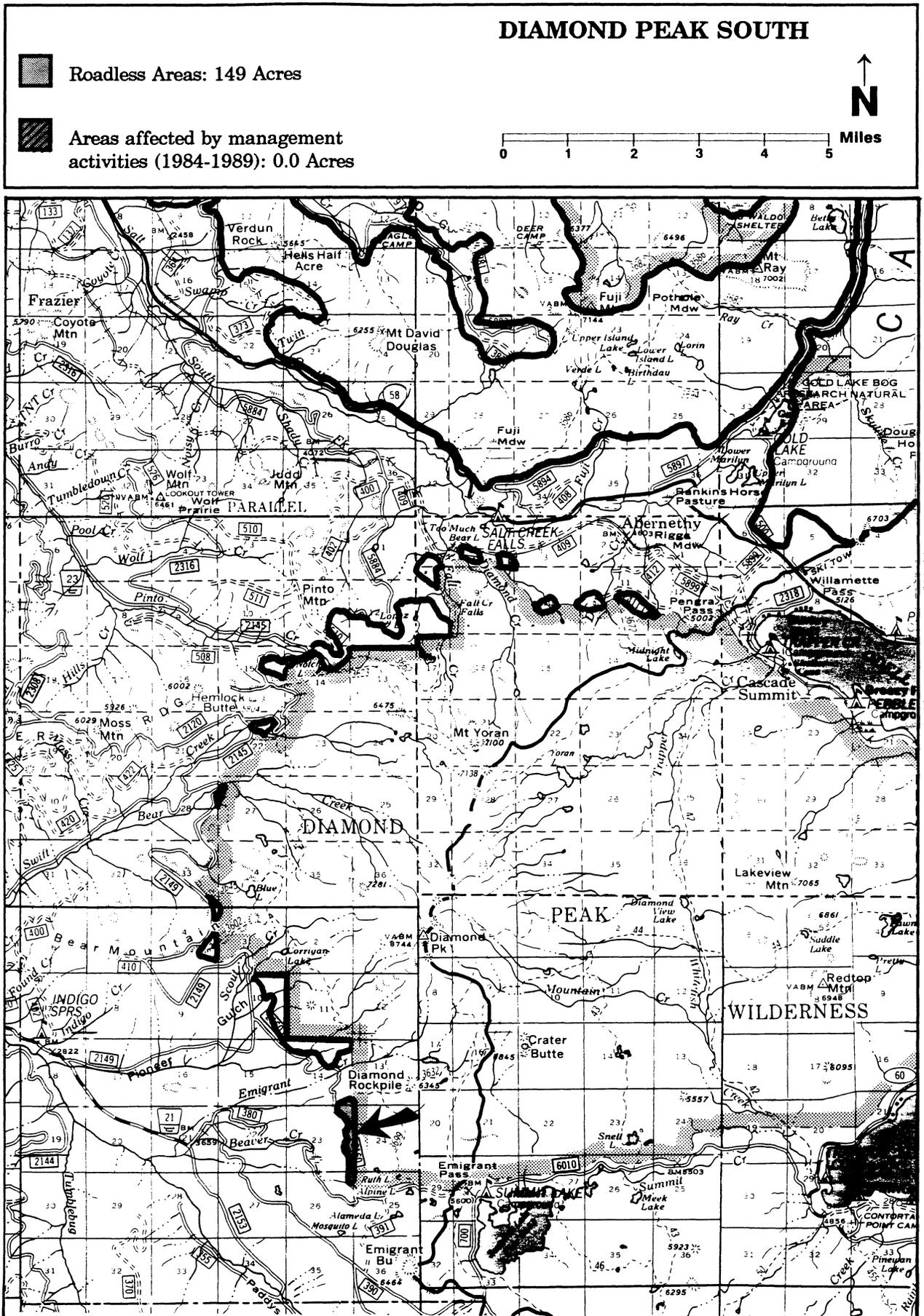
Elevations range from 5,480 feet near the northeast corner to 5,000 feet near a rock pit in the southern portion. The terrain moderates from steep rolling ridges in the north to rolling ridges with several rock outcrops in the south.

Soil Soils are generally composed of coarse pumice and ash with low fertility and moisture. Subsoil ranges from sandy loam to stony loam. Soil is cold and has a short growing season. There are about 43 acres that have potential for severe surface erosion. For more soil information refer to *Willamette National Forest Soil Resource Inventory* (Legard and Meyer 1973).

Vegetation True fir and mountain hemlock dominate 90% of the stands but may vary to Douglas-fir on warmer aspects. Mountain hemlock, white pine, true firs, and lodgepole pine occur on colder aspects (10%).

Ecosystem There is one major potential vegetation zone and one vegetation community for this area according to classification systems by Bailey (1976) and Kuchler (1966). The vegetation zone is the Pacific Forest (M2410) zone. The vegetative community is fir/hemlock (*Abies-Tsuga*) forest (004).

Figure C-36-1



Current Uses The area is allocated to full yield timber management in the 1977 Forest Land Management Plan with a Semiprimitive Nonmotorized Recreation Opportunity Spectrum (ROS) class. Signs of past salvaging of timber still remain. The trail head for the Rockpile Lake Trail (3230) is a few hundred feet north of the area. This trail had 235 Recreation Visitor Days (RVDs) use during the 1984 season.

Appearance The area is broken up by partially obscured skid roads, stumps, and a rock pit.

Surroundings Full yield timber management areas borders the nonwilderness sides.

Attractions There are no significant attractions.

Capability

Manageability and Boundaries The boundaries form along nonconforming uses outside the boundary. These nonconforming activities make boundary location easier to establish on the ground. Road 2160 is the developed nonconforming boundary on the west side.

Natural Integrity Timber salvage activity, skid roads, a rock pit, and intermittent air pollution are present.

Natural Appearance The disturbance of apparent naturalness is high from the skid roads, timber salvage, and the rock pit.

Opportunity for Solitude The sounds of traffic on Forest Road 2160 may be easily seen and heard. The nearness of the road takes away from any heightened awareness or spirit of adventure.

Special Features The area contains only common features. No cultural features or federally listed endangered or threatened species are known to be present.

Availability

Resource Potentials

Recreation Resource Capacity estimates indicate that this area could provide 110 RVDs of Semiprimitive recreation use. No potential trail locations or developed recreation sites have been identified.

Timber Resource The roadless area includes about 149 acres of land suitable for growing timber under managed conditions. Stands of mature white pine, true firs, and mountain hemlock occupy the area representing about 5 million board feet. If stands are converted to a managed condition, biological potential yield will be 14,400 cubic feet per year at culmination of mean annual increment. Site productivity ranges from Class IV to Class V.

Cultural Resources There have been no sites identified in the area as of 1985. However, there are several nearby which indicate a high probability of sites in the area.

Wildlife Resource Because this area is used as a travelway for elk, timber harvesting should provide for forage while ensuring linkage of adequate hiding cover.

Management Considerations

Fire Since human intervention with suppression, fire occurrence is very low. Fuel loads range from 14 to 30 tons per acre. Fuel loads may be slightly higher in stands associated with white pine.

Insects and Disease White pine blister rust is common on western white pine. Much of the salvaging that took place in the area harvested the severely infected white pine.

Need

Nearby Wilderness and Its Use The Diamond Peak South roadless area is adjacent to the Diamond Peak Wilderness (53,773 acres), and 4 miles north of the Oregon Cascades Recreation Area (6,122 acres). Refer to Chapter III for the amount of use these Wildernesses receive.

Distance to Population Centers The area is approximately 75 miles by road to the southeast of Eugene, Oregon.

Interest by Proponents The Diamond Peak south roadless area generated a high amount of interest with 83% of the responses favoring inclusion of the roadless area into the inventory.

Environmental Consequences

As a consequence of implementing any of the proposed Alternatives there will be effects on the Diamond Peak South roadless area. In Alternatives NC, A, and K, 100% of this area will be affected by road construction and timber harvest. Alternative L will develop 29% of the area. As a result of this development, uses dependent on roadless conditions, such as semiprimitive recreation, will not be provided in portions of the area. Implementation of proposed management activities associated with Alternatives NC, A, K, and L, will alter the suitability of this area for future Wilderness consideration. However, portions of this area contiguous to the Diamond Peak Wilderness in Alternative L will remain suitable for consideration as Wilderness additions in the next cycle of Forest planning. Alternatives J, D, and L maintain the option of future Wilderness consideration for this area. Figure C-36-2 illustrates how this area has been allocated in each Alternative.

Based on the amount and distribution of management areas assigned to the Diamond Peak South roadless area, an array of goods and services are provided. Emphasis on priced commodities such as wood products are provided in Alternatives NC, A, and K. Emphasis on amenity values such as dispersed recreation opportunities, high visual quality, and old-growth habitat are provided in Alternatives L, D, W, and J. The amounts of other goods and services to be provided from the area for each Alternative are illustrated in Figure C-36-3. Additional information regarding the environmental consequences of the activities associated with these goods and services is located in Chapter IV of this FEIS.

Table T314. Management Area Acreage of Alternatives (C-36-2)

Management Areas	Alternatives						
	NC (No Change)	K (WFC)	A (No Action)	J (DEIS-PA)	W (PA)	D (Wildlife)	L (ONRC)
1 Wilderness							
Management Area 1a	--	--	--	--	--	--	--
Management Area 1b	--	--	--	--	--	--	107
Management Area 1c	--	--	--	--	--	--	--
Management Area 1d	--	--	--	--	--	--	--
2 Oregon Cascades Recreation Area							
Management Area 2a	--	--	--	--	--	--	--
Management Area 2b	--	--	--	--	--	--	--
3 Experimental Forest							
Management Area 3	--	--	--	--	--	--	--
4 Research Natural Area							
Management Area 4	--	--	--	--	--	--	--
5 Special Interest Area							
Management Area 5a	--	--	--	--	--	--	--
Management Area 5b	--	--	--	--	--	--	--
6 Wild and Scenic River							
Management Area 6a	--	--	--	--	--	--	--
Management Area 6b	--	--	--	--	--	--	--
Management Area 6c	--	--	--	--	--	--	--
7 Old-Growth Grove							
Management Area 7	--	--	--	--	--	--	--
8 T & E Species							
Management Area 8	--	--	--	--	--	--	--
9 Special Habitat ¹							
Management Area 9a	--	--	--	--	--	--	--
Management Area 9b	--	--	--	--	--	--	--
Management Area 9c	--	--	--	--	--	--	--
Management Area 9d	--	--	--	--	--	--	--
10 Dispersed Recreation							
Management Area 10a	--	--	--	--	--	--	--
Management Area 10b	--	--	--	--	--	--	--
Management Area 10c	--	--	--	--	--	--	--
Management Area 10d	--	--	--	--	--	--	--
Management Area 10e	--	--	--	149	149	149	--
Management Area 10f	--	--	--	--	--	--	--

Management Areas	NC (No Change)	K (WFC)	A (No Action)	J (DEIS-PA)	W (PA)	D (Wildlife)	L (ONRC)
11 Scenic							
Management Area 11a	--	--	--	--	--	--	--
Management Area 11b	--	--	--	--	--	--	--
Management Area 11c	--	--	--	--	--	--	--
Management Area 11d	--	--	--	--	--	--	--
Management Area 11e	--	--	--	--	--	--	--
Management Area 11f	--	--	--	--	--	--	43
12 Developed Recreation							
Management Area 12a	--	--	--	--	--	--	--
Management Area 12b	--	--	--	--	--	--	--
13 Special and Ad- ministrative Use							
Management Area 13a	--	--	--	--	--	--	--
Management Area 13b	--	--	--	--	--	--	--
14 General Forest							
Management Area 14a	149	149	149	--	--	--	--
15 Riparian ²							
Management Area 15	*	*--	*--	*--	--	--	--

¹ Acres of network sites that overlap with other no harvest management areas are not included in MA9a, 9b, 9c acres.

² Only alternatives with acres assigned to no harvest prescriptions for riparian have acres allocated to MA15. In alternatives K, A, and J riparian acres follow Forest-wide standards and guidelines for riparian harvest rates. Riparian acres in NC are distributed throughout other management areas.

**Table C-36-3. Diamond Peak South Roadless Area
Quantifiable Resources Outputs, Environmental Effects, and Activities by Alternative**

		Alternatives						
Output, Effects, or Activity	Unit of Measure	NC	K	A	J	W	D	L
Recommended Wilderness Recreation Use 1st Decade Area Recommended for Wilderness	RVDs	--	--	--	--	--	--	--
	Acres	--	--	--	--	--	--	107
Nonwilderness Dispersed Recreation Use in the 1st Decade								
Semiprimitive Nonmotorized	RVDs	--	--	--	--	76	76	--
	Acres	--	--	--	--	149	149	--
Semiprimitive Motorized	RVDs	--	--	--	--	--	--	--
	Acres	--	--	--	--	--	--	--
Roaded Natural	RVDs	--	--	--	--	--	--	--
	Acres	--	--	--	--	--	--	43
Roaded Modified	RVDs	285	285	285	76	--	--	--
	Acres	149	149	149	149	--	--	--
Trails								
Existing Trails								
Full Protection Level	Miles	--	--	--	--	--	--	--
Moderate Protection Level	Miles	--	--	--	--	--	--	--
Low Protection Level	Miles	--	--	--	--	--	--	--
Potential Trails								
Full Protection Level	Miles	--	--	--	--	--	--	--
Moderate Protection Level	Miles	--	--	--	--	--	--	--
Low Protection Level	Miles	--	--	--	--	--	--	--
Visual Quality Objectives								
Preservation	Acres	--	--	--	--	149	149	107
Retention	Acres	--	--	--	--	--	--	43
Partial Retention	Acres	--	--	--	--	--	--	--
Modification	Acres	--	--	--	--	--	--	--
Maximum Modification	Acres	149	149	149	149	--	--	--
1st Decade								
Road Construction	Miles	--	0.2	0.5	--	--	--	0.1
Area Harvested	Acres	--	27	34	--	--	--	5
Programmed Timber Harvest	MBF	--	200	240	--	--	--	35
Area Remaining Undeveloped	%	--	44	27	--	--	--	--
Lands by Timber Yield Levels								
Full Yield (95-100%)	Acres	149	149	149	--	--	--	--
75-94% of Full Yield	Acres	--	--	--	--	--	--	--
50-74% of Full Yield	Acres	--	--	--	--	--	--	43
30-49% of Full Yield	Acres	--	--	--	--	--	--	--