## 8. ROADLESS AND WILDERNESS AREAS

## A. AFFECTED ENVIRONMENT

### 1. ROADLESS AREAS

A substantial inventory of roadless lands are located in the vicinity of the project area. Nearby designated Wilderness areas (Mountain Lakes, Sky Lakes, Mount Thielson) account for 194,471 acres, while another 166,149 acres within Crater Lake National Park are roadless and proposed for Wilderness designation. Non-wilderness roadless lands on the Forest inventoried for RARE II comprise another 32,218 acres. The Forest Plan describes each RARE II roadless area on the Forest, the range of alternative land uses studied, and the effects of management under each alternative. As a result of this analysis, some roadless areas were recommended for the retention of all roadless/wilderness characteristics, while all or portions of others were assigned various non-wilderness prescriptions. As a result of the Oregon State Wilderness Act of 1984, roadless areas not designated as wilderness or for special management pursuant to Section 4 of the Act were released for multiple use management. Three of these areas released for multiple use -- Sky Lakes-A, Sky Lakes-B, and Marsh Roadless Areas -- are proximate to Pelican Butte (Figure III-22).

For purposes of direct and indirect impacts analysis, roadless areas within the three watersheds comprising the analysis area are assessed. Roadless areas include RARE II areas and "Chapter 7" Roadless Areas (those areas less than 5,000 acres that are contiguous to existing RARE II areas -- ref. FSH 1909.12 -- Land and Resource Management Planning Handbook; 8/92; Chapter 7). For purposes of cumulative effects analysis, other adjacent wilderness and RARE II Roadless Areas are also considered.

## a. Sky Lakes-A Inventoried Roadless Area

The Sky Lakes-A Roadless Area consists of 3,958 acres which occur in scattered segments along the eastern edge of Sky Lakes Wilderness from near the northern District boundary to south of Fourmile Lake. These areas were inventoried during the Roadless Area Review and Evaluations of 1973 and 1977 (RARE I and RARE II), but were not included with the main block of Sky Lakes-A in the 1984 Oregon Wilderness Act. These areas were released for multiple use management. None of these areas provide any particularly significant or unique environmental features, although many of them have late seral stands representative of "old growth." Because of their small sizes, they provide little challenge, unconfined recreation activities, or special features that would characterize them as wilderness areas, and they lack the attributes for easy manageability. None of these areas are within the Pelican Butte project area.

The Forest Plan designates the main part of the roadless area as matrix timber production, riparian reserve, and scenic management. Two small blocks are designated as Late Successional Reserve.

The stands west and north of Big Meadows are primarily late seral Shasta red fir with large overstory trees and a relatively dense understory. South of Forest Road 3659, many of the stands are dominated by mature lodgepole pine interspersed with riparian areas and small wetlands. The two smaller blocks in LSR have late seral white fir habitat.

Past overstory removals have been conducted in 63 acres of the roadless area, and past high-grading of large Shasta red fir has occurred over an unknown amount of the area. Existing roads total .63 mile. The



recent Cold Springs/Switchback Decision Notice (DN) authorizes harvest adjacent to but not within the Sky Lakes-A Roadless Area.

## b. Sky Lakes-B Inventoried Roadless Area

The Sky Lakes-B Roadless Area was also inventoried during RARE I and RARE II. This area was not recommended for wilderness and was not included in the 1984 Oregon Wilderness Act. The Sky Lakes-B area is designated by the Forest Plan as the Pelican Butte Semiprimitive Recreation Area. The roadless area encompasses much of the upper half of Pelican Butte, but excludes Forest Road 980 and the electronic site at the top of the mountain. It comprises 10,900 acres, and extends west to the Sky Lakes Wilderness boundary. A total of 3,212 acres of Sky Lakes-B Roadless Area lie within the project area.

The Sky Lakes-B Roadless area represents approximately 30 percent of the Forest's total remaining roadless resource that has not been designated as wilderness.

The Sky Lakes-B Roadless Area does not provide any particularly significant or unique environmental features, although glacial activity has resulted in a cirque and moraine features on the northeast side that provide an example of typical alpine glaciation. This northeastern portion of the roadless area contains a few small lakes and wetland areas, but no managed trails exist. The north and west sides of the roadless area have moderate to gentle slopes, lack unique features, and do not provide opportunities for challenging experiences. However, because of the exposed lava flows and talus the area is difficult to traverse, making it undesirable to many visitors. The resulting opportunity for solitude for visitors is moderate. The access road to the top of the mountain tends to confine and diminish the primitive summer recreation experience. Primitive winter use is similarly confined because the road is groomed for snowmobile use. Snowmobilers periodically use all sides of the mountain, although most of the use is concentrated on the south and west sides. The recent Cold Springs/Switchback DN authorizes timber removal adjacent to but not within the roadless area.

The following summarizes the wilderness capability of the Sky Lakes-B Roadless Area (as assessed in the Forest Plan), based on six criteria established by the 1964 Wilderness Act.

*Natural Integrity* - The majority of the area is in a natural state and unaffected by human influences. Forest Road 3651 to the Cold Springs trailhead and trail 3709, which accesses the Sky Lakes Wilderness, have a moderate impact upon the immediate area. The natural processes have been most affected by the control and/or exclusion of wildfire. An existing range (grazing) allotment that supports 120 Animal Unit Months has some impact on the natural integrity. Though outside the roadless area, Forest Road 980 to the summit of Pelican Butte and multiple logging spurs to the west may diminish the natural integrity by providing access for mountain bikes, motorized vehicles, and snowmobiles.

*Natural Appearance* - Hiking trails and cattle paths have the greatest impact on the natural appearance within the roadless area, but affect only minor portions. As viewed from within the roadless area, Forest roads (i.e., 3651 and 980) and the electronics site on the Pelican Butte summit have a moderate effect on the natural appearance of the area.

*Solitude* – The opportunity for solitude in the area is perceived as moderate. The area can provide solitude, except for the sounds of civilization from adjacent developed road systems and timber harvest activities. The Semi-primitive Motorized Recreational Opportunity Spectrum (ROS) prescribed in the Forest Plan for the area increases the potential for intrusions on solitude (i.e., noise from snowmobiles, vehicles, chainsaws).

*Primitive Recreation Opportunities* - The opportunity for primitive recreation in the area is moderate to low due to nearby timber harvest activities, roads, and the development at the summit of Pelican Butte.

*Special or Unique Features* - There are no known threatened or endangered plant species in the area. Mazama collomia (Forest Sensitive species) occurs in similar habitats elsewhere in the Cascades. Shasta arnica (Forest Sensitive species) was found on the north rim of the bowl area during 1997 surveys. Northern spotted owl habitat occurs in the area at elevations generally below 6,000 feet. The area has an infrequent occurrence rating for the geologic and ecological features present (Forest Plan FEIS, p. C-43).

*Wilderness Manageability and Boundaries* - Forest roads adjacent to the area offer adequate opportunity for access and traveler facilities such as trailheads. The area would require posting, however, since it does not follow clear topographic or geographic lines. Additionally, because the option remains open for ski area development and other year-round recreation facilities, the potential for associated traffic, logging, and other operational noise would detract from a primitive recreation experience.

## c. Marsh Roadless Area

The Marsh Roadless Area (RARE No. 6208) occupies 1,195 acres of marshland, sandwiched between Westside Road (County Road 531) and the Upper Klamath National Wildlife Refuge. The area was not recommended for wilderness designation, and is now designated as riparian reserve (Management Area 18) in the Forest Plan. The topography is flat (elevation 4,100 feet) and no rare or unique ecosystems are known to exist in this area. The Marsh Roadless Area is not spacially connected to the Pelican Butte project area or the Sky Lakes-B Roadless Area, nor is it connected to the planning area by surface water flow. Groundwater originating from precipitation on Pelican Butte is believed to mix with the larger supply of deeper groundwater and surfaces in springs along the western edge of the marsh area. The Marsh Roadless Area is area because the eastern edge of the analysis area is at Recreation Creek which flows through the marsh.

The Marsh Roadless Area is adjacent to, and essentially identical to, habitats within the 14,400-acre Upper Klamath National Wildife Refuge. This entire area supports a marsh of tule, wocus, and cattails, interspersed with open waterways which provide habitat for Federally listed shortnose and Lost River suckers and foraging areas for bald eagles. The marsh and open water areas are popular for fishing, canoeing/boating, and waterfowl hunting.

The ROS is mapped as semiprimitive motorized, with fishing, canoeing, and water fowl hunting the primary recreation uses. Motorized boating use of Recreation Creek also occurs.

## d. Other Roadless Areas

In addition to inventoried roadless areas, there are 3,542 acres of roadless areas contiguous with Wilderness and the RARE II areas. These roadless areas are small, with the largest blocks located on the west slopes of Pelican Butte. Other pieces are scattered around the edges of Sky Lakes-A, Sky Lakes-B and the Sky Lakes Wilderness Area. These lands fit the definition in Chapter 7, FSH 1909.12. A total of 241 acres of these other roadless areas lie within the project area.

Because of their size, none of these blocks individually possess the wilderness characteristics necessary for future wilderness designation. They typically do not provide a feeling of solitude, a spirit of adventure, or a sense of self-reliance. None of these areas provide any particularly significant or unique environmental features, challenge, unconfined recreation activities, or special features that would characterize them as wilderness areas, and they lack the attributes for easy manageability.

#### e. Management Direction

As discussed in Section I.3.g, the Forest Service has adopted an interim rule to temporarily suspend road construction activities within roadless areas. The proposed rule exempts those portions of National Forests encompassed by the Northwest Forest Plan. Consequently, the roadless areas discussed above would be exempt from the temporary suspension of road construction and reconstruction.

In January 1997, Oregon Governor John Kitzhaber offered a "Proposed Consensus Approach to Eastside Ecosystem Health Restoration" to the U.S. House Agriculture Committee and to the Forest Service. One of the eleven points suggested included: "Plan and implement operations first in less controversial areas. In the short run, avoid operating in roadless areas, near fish habitat and old growth areas." In response, the Regional Forester has provided the following direction:

"I want to add my emphasis to the point that riparian, old growth, and roadless areas are vitally important to the character, productivity, and values for which so many treasure the National Forests. In restoring their health and reducing the danger of their catastrophic loss, we must expend extra effort to work with a broad spectrum of the public in gaining their understanding and support when we have compelling reasons to consider activities in these areas." (USDA Forest Service, Pacific Northwest Region, 1997).

## f. Roadless Area Connectivity

While the inventoried RARE II areas have been released for multiple use management, and the uninventoried "Chapter 7" roadless areas ususally do not possess wilderness characteristics, an issue about connectivity of roadless areas was raised during scoping. Table III-82 displays acres of adjacent roadless areas including the Sky Lakes Wilderness and roadless portions of Crater Lake National Park. These 331,308 acres of "connected" roadless areas provide recreational opportunities and habitat for wildlife. Large areas of unroaded or undeveloped lands are particularly useful to wide-ranging wildlife species, such as the wolverine. The Sky Lakes-B Roadless Area is at the southern end of this string of roadless areas.

Table III-82: Roadless Areas Adjacent to the Project Area (acres)						
<b>Roadless Areas</b>	RARE II (1)	Chapter 7 (2)	Sky Lakes Wilderness	Crater Lake National Park		
Crater Lake NP				183,180		
Rogue River NF		10,000	72,257 (3)			
Umpqua NF	3,184					
Winema NF	15,102 (3)	3,542	44,043 (3)			
TOTAL	18,286	13,542	116,300	183,180		
NP = National Park NF = National Forest (1) Sky Lakes-A, Sky Lakes (2) Uninventoried roadless a						

(3) Acres revised to correct mapping errors

Source: Cold Springs/Switchback EA; Pelican Butte Watershed Analysis

## 2. WILDERNESS

### a. Wilderness Areas Within the Analysis Area

There are three Wilderness Areas on the Forest, including Mount Thielson, Sky Lakes, and Mountain Lakes. Of these, roughly one-third of the Sky Lakes Wilderness (SLW) (40,605 acres) and all of the Mountain Lakes Wilderness (MLW) (23,071 acres) are located on the District and considered within the analysis area.

The SLW, which straddles the southern Oregon Cascades from Crater Lake National Park to OR Highway 140 comprises primarily volcanic and glacial landforms, with Mt. McLoughlin and Devils Peak the most prominent remnants of old glacier-carved volcanoes. More than 200 lakes, ranging in size from small ponds to 40 acres lie within the Wilderness and are the main attraction for visitors. The majority of visitors access the SLW from the Summit trailhead, utilizing the Pacific Crest National Scenic Trail (PCNST), or from the Mt. McLoughlin or Fourmile Lake trailheads. Other SLW access points on the District include the Cold Springs, Cherry Creek, Nannie Creek, and Sevenmile Marsh trailheads.

The MLW was one of Oregon's first primitive areas because of its outstanding scenic qualities and unique geology, which comprises a huge collapsed volcano that left more than 100 small glacial lakes or tarns. The area possesses easily traversed broad valleys and lake basins and steep, rugged peaks around the rim of the crater. The majority of use within the MLW occurs on the Mountain Lakes Loop Trail, which can be accessed from the Lake of the Woods area, as well as from the Varney Creek and Clover Creek trails.

### b. Management Direction

Wilderness is designated in the Forest Plan as Management Area 6 and managed to "preserve natural conditions as required by the Wilderness Act of 1964." The prescribed Visual Quality Objective (VQO) for the MLW and SLW is preservation (Forest Plan, p. 4-121). Specific standards and guidelines for the MLW and the SLW are generally aimed at minimizing or reducing resource impacts (i.e. protecting lakes and riparian areas) and providing expected levels of solitude (Forest Plan, pp. 4-125 to 4-127). For example, except by special permit, the maximum group size allowed in the MLW is 10 people and livestock in combination, while the maximum party size allowed throughout the SLW is eight people and 12 livestock.

Three Wilderness Resource Spectrum (WRS) classes are utilized for management direction within the MLW and the SLW, including semiprimitive, primitive, and pristine. The majority of the SLW provides for a semiprimitive WRS setting, while the MLW primarily provides for a primitive WRS setting. The distribution of WRS classes, current recreation use by activity type, and estimated capacities for the MLW and the SLW are summarized in Table III-83. In general, wilderness use has declined somewhat from 1988 when recreation use levels for the MLW and the SLW were roughly 72 and 96 percent of their estimated capacities. No capacity expansion (e.g., trail development) is proposed within the MLW or the SLW for the foreseeable future.

Table III-83: Wilderness Recreation Use,           Resource Constraints and Management Direction, Klamath Ranger District, FY 1996								
	Mountain Lakes Wilderness Sky Lakes Wilderness Total							
Recreation Use (RVDs)								
Camping	2,185	4,010	6,175					
Hiking/Mtn. Climbing	950	4,121	5,071					
Hunting Big Game	304	423	727					
Horseback Riding	267	378	645					

Nordic Skiing	17	12	29
Nature/Scenery Viewing	541	1,004	1,545
Swimming	81	129	210
TOTAL	4,572	10,199	14,771
Wilderness Capacity (RVDs)	16,800	16,200	33,000
Total Use as % of Capacity	27	63	45
WRS Class (acres/%)			
Semiprimitive	4,746/21	31,672/78	36,418/57
Primitive	15,041/65	8,527/21	23,568/37
Pristine	3,284/14	406/1	3,690/6
TOTAL	23,071/100	40,605/100	63,676/100
RVD = Recreational Visitor Days			

WRS = Wilderness Resource Spectrum

Source: Winema National Forest *Land and Resource Management Plan and FEIS*, pp. 3-128-129; RRIS Visitor Use Database FY 96.

# **B.** ENVIRONMENTAL CONSEQUENCES

## 1. ROADLESS AREAS

Consequences to roadless areas are analyzed both for impacts from additional recreational activity and for changes to the "roadless" character (i.e., effects on roadless designation and future wilderness consideration). Impacts on ecological values, an element of wilderness consideration, are analyzed within other resource sections of this EIS.

## a. Impacts Common to All Alternatives

The following recreational use impacts would be common to all alternatives, including Alternative 1. There would be no impacts related to roadless designation on future wilderness consideration common to all alternatives.

Recreational Use Impacts

#### Direct and Indirect Impacts

There would be no direct impacts common to all alternatives.

In all alternatives, recreational use growth in the form of nordic skiing, showshoeing, snowmobiling, hiking, hunting, and fishing would be expected to gradually increase within all roadless areas at varying levels due to general increases in population and outdoor recreational use in the Klamath Basin. The incidental use would be expected to be greater for action alternatives than for Alternative 1 because the addition of a ski area would make the area more publicized and better known. Accordingly, over the long term, the potential for deterioration of the natural integrity and appearance would likely increase, while the opportunity for solitude would likely diminish.

## Cumulative Effects

The roadless/wilderness characteristics and opportunity for primitive recreation in the Sky Lakes-A, Sky Lakes-B, Marsh and Chapter 7 roadless areas have been diminished by past and current management

decisions, development, and activities. These actions include recreation activities allowed by the management prescription of Semiprimitive Motorized, the development of roads adjacent or in close proximity to roadless areas, the continued use of the lookout and communications facilities on top of Pelican Butte, Civilian Conservation Corps (CCC) trail development, timber management and harvesting activities nearby and/or within the roadless areas, and suppression of wildfire. Additional impacts to the roadless/wilderness characteristics and opportunity for primitive recreation in these roadless areas would likely occur as a result of regional population growth and associated recreation demand from projects like the Running Y Ranch Resort, campground expansions and improvements, and other resort expansions.

The Cold Springs/Switchback EA authorizes the harvest of 1.5 percent of the Chapter 7 roadless areas adjacent to the Sky Lakes Wilderness. These timber harvesting activities would affect Sky Lakes-A Roadless Area directly, but could also affect Chapter 7 roadless areas adjacent to the roadless area.

## b. Impacts Common to All Action Alternatives

## Recreational Use Impacts

### Direct Impacts

There would be no direct impacts to the Sky Lakes A or Marsh roadless areas in any action alternative.

In all action alternatives, alpine and nordic skiing facilities, recreation trails, parking, and access and maintenance roads would be developed within the northeast quadrant of Pelican Butte, the majority of which lies within the Sky Lakes-B Roadless Area and a small area of Chapter 7 roadless area. These amenities would directly alter the physical landscape, thereby reducing the natural integrity and appearance of the area. However, the developed recreation facilities and trails would also serve to confine the majority of visitors to specific areas, which may reduce the potential for indiscriminate or random disturbance of the area's natural elements.

A number of the proposed MDP facilities, including day lodges, gondola or detachable quad, and interpretive trail segments, would be suitable for guests of all ages and abilities. The developed access and trails within the area would represent expanded opportunities for physically challenged persons in an area with relatively undisturbed semiprimitive character.

An estimated 288,000-390,000 recreation visits (i.e., alpine and nordic skiers, sightseers, hikers, etc.) annually would be generated within the project area by 2010, the majority (but not all) of which would occur within the Sky Lakes-B Roadless Area. These use levels equate to roughly 127,000-164,000 RVDs annually. In all action alternatives, a minor increase in scenic driving to the summit of Pelican Butte and wood-cutting use would be expected, while a minor decrease in hunting use would be expected. The built amenities and increased recreation use would reduce the relative remoteness and level of solitude attainable in the area. The opportunity for solitude in the area is currently perceived as "moderate". In all action alternatives, the opportunity for solitude would be reduced to "low" within the more intensely developed portions of the project area. This reduction would still meet the intent of the Forest Plan, which anticipated the potential for ski area development.

## Indirect Impacts

Sky Lakes-A and Chapter 7 Roadless Areas

Indirect impacts associated with increased recreational use would be as described under Impacts Common to All Action Alternatives.

#### Sky Lakes-B Roadless Area

In all action alternatives, most increases in dispersed uses would occur within one-quarter mile of developed amenities and trail systems. The opportunity for solitude would be moderate to low, depending on the type of developed facilities in close proximity. However, due to terrain and underbrush, hiking, skiing, or snowshoeing in the area is difficult off developed trails. Accordingly, it is expected that a moderate opportunity for solitude would remain elsewhere within the roadless area.

### Marsh Roadless Area

While the opportunity for solitude and primitive recreation in the Marsh Roadless Area is currently considered low, the significant increase in winter and summer traffic on Westside Road and the likelihood of minor increases in recreational use in the form of boating, fishing, and hunting would reduce the opportunity for solitude and primitive recreation in the Marsh Roadless Area in all action alternatives.

Due to increased recreation use within the Marsh Roadless Area, Forest Service, USFWS and the Oregon State Department of Fish and Wildlife management responsibilities and costs (i.e., hunting and fishing regulation) could increase. The action alternatives would have no significant effect on management of the area's boundaries.

## Impacts on Roadless Designation

Most of the Sky Lakes-B Roadless Area was allocated to recreation management with the option to develop a portion of the area to provide winter sports, interpretive and other recreation opportunities. To accomplish this goal, the roadless character would be changed on some portion of the roadless area with each of the action alternatives. Similarly, lands adjacent to Sky Lakes-B, which have roadless character and are allocated to various management prescriptions, would loose their roadless qualities.

Direct impacts on roadless character would result where a road or permanent structure is constructed, or where significant clearing occurs and recreational facilities are provided. Indirect impacts would result where undeveloped lands remain isolated between major facilities and are no longer part of the larger block of roadless area. For purposes of this analysis, both of these types of impacts are assumed to remove the roadless character and the area would no longer be designated as roadless. The effect of this would be to decrease the amount of land where the public could pursue primitive or semi-primitive experiences.

## Impacts on Future Wilderness Consideration

The Sky Lakes-A and B and Marsh roadless areas were not considered suitable for wilderness for inclusion in the 1984 Wilderness Act and were released for multiple use management. Sky Lakes-B is the only one of the three areas that would be directly affected by development associated with the action alternatives. Other lands that currently have no roads or where past management is not evident and qualify as Chapter 7 roadless areas, have not been considered for wilderness in the past. Some of these small roadless areas could also be impacted by proposed MDP development. Despite past legislation, some people feel these roadless areas should still be designated as wilderness. For this analysis, lands that would loose the roadless designation, either through direct or indirect roadless area impacts, are determined to no longer be suitable for wilderness consideration. Each action alternative would have a direct effect on different amounts of land, but the general area of impact would be located on the northeast side of Pelican Butte. Because the Chapter 7 roadless areas are scattered and boundaries do not follow topographic features or geographic lines, management as wilderness would be difficult.

The Sky Lakes-B Roadless Area has somewhat of a horseshoe shape around Forest Road 980 and the lookout at the top of the butte, and would be very difficult to manage as a wilderness area. However, implementation of any of the action alternatives would further fragment or split the Sky Lakes-B Roadless Area, resulting in two, much smaller, roadless land units. This would alter the capability of the area to provide a wilderness experience. The resulting land unit on the south side of Pelican Butte would not be suitable for future wilderness consideration without a drastic change in management, such as removing the lookout, closing Road 980, and rehabilitating the land. The potential management of this 3,686-acre roadless land unit would be complicated, requiring significant boundary posting. This isolated land unit would not function as a manageable wilderness. The indirect impact therefore, would be that the 3,686 acres would not be suitable for future wilderness consideration. The remaining portion of Sky Lakes-B, north of Forest Road 980 and the project area, would be narrow, with no unique values and would likely not attract wilderness viewers.

## Impacts on Roadless Area Connectivity

In all action alternatives, approximately 6,000 acres of the 331,000-acre block of connected roadless areas would lose their roadless character. This would result in a decrease of approximately 1.8 percent in total roadless areas. This impacts would not affect connectivity of the roadless block because impacts would be located along the very southern end (project area) or along the eastern fringes of the block.

## Cumulative Effects

In addition to the cumulative impacts described as common to all alternatives, portions of the Sky Lakes-B and Chapter 7 roadless areas would be impacted by the development of recreation trails and amenities. Approximately 3,212 acres (33 percent) of Sky Lakes - B and 241 acres (7 percent ) of Chapter 7 roadless areas would be included within the ski area permit boundary. Ski area development would vary by alternative within the permit area, but would reduce the roadless character of some of these areas and would limit future consideration for inclusion of a portion of these areas into the National Wilderness System. However, Wilderness consideration of some lands within the ski area permit boundary would remain possible.

While additional growth of the local area population and other off-site developments may be induced by the action alternatives, proposed MDP facilities would provide significant recreation visitor absorption capacity, which may reduce pressure on other recreation amenities in the area.

Timber management activities planned, proposed, or implemented this decade in roadless areas adjacent to the Sky Lakes Wilderness and Crater Lake National Park are displayed in Table III-85. Cumulatively, approximately eight percent of the roadless areas would receive some type of timber management treatment this decade.

Approximately 80 acres of partial removal by helicopter is planned in the Sky Lakes-B Roadless Area this decade by the Nannie-Rock Decision Notice (Helirock Sale). In addition, the Cold Springs/Switchback Decision authorizes precommercial thinning of 211 acres in the Sky Lakes-B Roadless Area. Both Decision Notices determined that these activities will not change the roadless character because no roads are being built in the harvest units. Consequently, these acreages are not included in the calculations of cumulative effects in Table III-84 below. Implementation of the two decisions could cause short-term changes in the remoteness quality of roadless areas directly adjacent to timber harvest units due to noise from equipment.

Project/Area	RARE	RARE II (2)		Roadless	All Ro	adless
	Acres	% (3)	Acres	<b>%</b> (3)	Acres	<b>%</b> (3)
Threemile/Sevenmile	0	0	90	2.5	90	0.5
Nannie/Rock	0	0	160	4.5	160	1
Cold Springs-Switchback	0	0	423	11.9	423	2.2
TOTAL IMPACTS	0	0	673	19	673	3.4
TOTAL ROADLESS AREAS	16,053		3,542		19,595	
NF= National Forest NA= Not Applicable (1) Timber management acti (2) Includes Sky Lakes-A, S (3) Percent of roadless area a	ky Lakes-B, a		-			Areas

Lands in other roadless or wilderness areas would not be affected by implementation of the action alternatives. Despite the close proximity, development of proposed MDP facilities would not contribute to cumulative effects on the Marsh Roadless Area.

#### c. Impacts By Alternative

#### Alternative 1

#### Recreational Use Impacts

Alternative 1 would have no direct impacts on patterns and trends of recreation use within the Sky Lakes-A, Sky Lakes-B, Marsh and Chapter 7 roadless areas, and no significant effects on the wilderness characteristics of these roadless areas or their manageability. By 2010, winter recreational use within the Sky Lakes-B Roadless Area Could reach 360 RVDs (240 RVDs for snowmobiling, 120 RVDs for nordic/backcountry skiing) and non-winter recreational use could reach 720 RVDs (360 RVDs for sight-seeing and hiking, 120 RVDs for woodcutting, 120 RVDs for hunting, and 120 RVDs for fishing). (Actual use may be lower, as these estimates assume that 100 percent of these uses would occur within the roadless portion of the project area.) By 2010, year-round recreational use within the Marsh Roadless Area would be expected to reach 241 RVDs for fishing and canoeing and 120 RVDs for water fowl hunting.

#### Impacts on Roadless Designation and Future Wilderness Consideration

Alternative 1 would have no effects on the designation and management of existing roadless areas. Most of the Sky Lakes-B is included within Management Area 1C and would continue to be managed for semiprimitive non-motorized recreation. The potential for future wilderness consideration would not be foregone.

#### Cumulative Effects

In addition to the cumulative impacts described for all alternatives, Alternative 1, as compared to the action alternatives, would result in somewhat greater pressure on other nearby recreation amenities, including wilderness trails (particularly trail segments readily accessed from OR Highway 140 in the

Lake of the Woods area), which could further impact the wilderness character of those areas. Alternative 1 would not diminish the opportunity for the Sky Lakes-B Roadless Area to be annexed into the National Wilderness System.

### Alternative 2

Impacts would include those described under both Impacts Common to All Alternatives and Impacts Common to All Action Alternatives, as well as the following specific impacts.

### Recreational Use Impacts

### Direct Impacts

MDP facilities in Alternative 2 would directly impact approximately 589 acres within the Sky Lakes-B Roadless Area. Five lifts, the majority of ski trails, 7.7 miles of maintenance and access roads, about 23 km of recreation trails (28 acres), and the mid-mountain lodge would be located within the roadless area. An additional 13 acres of runs and lift lines associated with the gondola and Lift 3 would be located in Chapter 7 roadless areas. No direct impacts to the Marsh Roadless Area would be expected.

Based upon recreation use assumptions outlined in Section III.10, Non-Alpine Skiing Recreation, by 2010, winter recreational use within the the Sky Lakes-B Roadless Area could total 132,340 RVDs (228 RVDs for snowmobiling, 123,850 RVDs for alpine skiing, 4,128 RVDs for nordic skiing, and 4,128 RVDs for other site visitors). Total summer use could reach an estimated 12,290 RVDs. Interpretive hiking and fishing could account for an estimated 1,688 and 269 RVDs, respectively. (Actual use may be lower, as these estimates assume that 100 percent of these uses would occur within the roadless portion of the project area.)

#### Indirect Impacts

Indirect impacts in Alternative 2 would include somewhat greater use of the Marsh Roadless Area, estimated at 260 RVDs for fishing and canoeing and 130 RVDs for water fowl hunting (i.e., additional use of 5-10 percent could be expected, as compared to Alternative 1).

#### Impacts on Roadless Designation

#### Direct Impacts

There would be no direct effects on the designation and management of Sky Lakes-A or Marsh roadless areas in Alternative 2.

In this alternative, 589 acres of the Sky Lakes-B Roadless Area would no longer qualify as "roadless", due to the concentration of MDP facilities. In the Chapter 7 Roadless areas, 11 acres of facilities (including 0.4 mile of road) would be constructed, affecting the roadless characteristics.

#### Indirect Impacts

Undisturbed land remaining between roads, lifts, etc. would not be of adequate size to provide the solitude or serenity typically associated with wilderness lands. Although still roadless, these areas would lack the characteristics of a roadless area. In Alternative 2, 1,123 additional acres would thus be indirectly impacted -- 1,080 acres in RARE II and 43 acres in other roadless areas. These acres would no longer be considered "roadless". Areas proposed for only nordic, snowshoe, or unsurfaced hiking and biking trails would still be considered roadless.

#### Impacts on Future Wilderness Consideration

### Direct Impacts

No direct impacts to the wilderness potential of the Sky Lakes-A or Marsh roadless areas would occur in Alternative 2. MDP development would alter the roadless character of the Sky Lakes-B Roadless Area to a degree that a part of this area would likely not be suitable for wilderness evaluation during future Forest Plan revisions. Both the primitive recreation value and the opportunities for solitude would be low within the proposed development area. This effect would include areas proposed for facilities and road construction, as well as small "islands" of undisturbed land between the facilities. A total of 1,723 acres would not be suitable for wilderness designation.

Clearings for individual summer and winter use trails would not constitute a change in roadless character and would not by themselves likely preclude future evaluation of this area for wilderness.

#### Indirect Impacts

The Sky Lakes Wilderness boundary is located about two miles northwest of the project area, with the Sky Lakes-A Roadless Area adjacent to the wilderness. Although recreation use in the roadless area is low, visitors to these areas could be indirectly affected by helicopter and blasting noise during construction. Due to topographical features, other construction noise and operations/maintenance noise would not be expected to be audible.

Portions of the Sky Lakes-B, Marsh and Chapter 7 roadless areas outside of the project area would still physically maintain their "undisturbed" character. However, noise from construction, operation and maintenance of the ski area would be audible in the adjacent Sky Lakes-B Roadless Area and the sense of remoteness would be decreased.

Solitude would be decreased slightly for the Sky Lakes - B and Chapter 7 roadless areas south of the "Wine Bottle" area and north of Lake Francis where the summer trail system is proposed. Increased use by ski area visitors leaving developed facilities and hiking into the remaining roadless areas could degrade the experience of other roadless area users.

## Cumulative Effects

Cumulative effects on all roadless areas in this alternative are displayed in Table III-85.

Table	III-85: Roadless Ai	rea Impacts, Alternative 2 (a	cres)
Type of Impact	RARE II	Chapter 7 Roadless	Total
Pelican Butte			
Direct	589	11	600
Indirect	1,080	43	1,123
SUBTOTAL	1,669	54	1,723 (1)
Cumulative	0	673	673
TOTAL	1,669	727	2,396
(1) This total also equals the	e acres of direct impacts	on wilderness consideration.	

The direct impact on 1,723 acres, plus the additional indirect impact on 3,686 acres and cumulative impacts on 673 acres, would result in 6,082 acres not being suitable for future wilderness consideration.

The overall effect of changing the roadless designation and wilderness values on these lands would be minimal because these lands were already found to be unsuitable for wilderness.

### Alternative 3

#### Recreational Use Impacts

#### Direct and Indirect Impacts

MDP facilities proposed in Alternative 3 would directly impact approximately 617 acres within the Sky Lakes-B Roadless Area. Five lifts, the majority of ski trails, 2.9 miles (10.4 acres) of the primary maintenance road, about 28 km of recreation trails (36 acres), the mid-mountain lodge, and the nordic day lodge would be located within the roadless area. Another 19 acres of gondola, road, and ski trail facilities would impact Chapter 7 roadless areas.

By 2010, total winter recreational use within Sky Lakes-B Roadless Area could reach an estimated 147,980 RVDs (228 RVDs for snowmobiling, 137,650 RVDs for alpine skiing, 5,510 RVDs for nordic skiing, 4,590 RVDs for other site visitors). Total summer use could reach an estimated 16,200 RVDs. Of these, interpretive hiking, other hiking, mountain biking, and fishing would account for an estimated 1,178, 2,357, 589, and 296 RVDs, respectively. (Actual use may be lower, as these estimates assume that 100 percent of these uses would occur within the roadless portion of the project area.)

In terms of total recreation use, Alternative 3 would represent slightly greater impacts to the Sky Lakes-B Roadless Area than in Alternatives 2, 4, 5, and 6. Compared to Alternative 2, Alternative 3 would represent greater opportunity for solitude for nordic skiers due to the separation of nordic and snowmobile uses on the southwest to northwest slopes of Pelican Butte and on the upper portion of Forest Road 980.

Indirectly, somewhat greater use of the Marsh Roadless Area would be expected, estimated at 260 RVDs for fishing and canoeing and 130 RVDs for water fowl hunting by the year 2010, approximately the same levels as in Alternative 2.

#### Impacts on Roadless Designation

#### Direct and Indirect Impacts

The effects of developing portions of roadless areas would be as described for Alternative 2. Specific impacts of Alternative 3 include direct impacts on 617 acres of Sky Lakes-B and 19 acres of Chapter 7 roadless areas. This alternative would indirectly impact 861 acres of Sky Lakes-B and 87 acres of Chapter 7 roadless areas. These acres would no longer be considered "roadless."

#### Impacts on Future Wilderness Consideration

#### Direct and Indirect Impacts

Development associated with this alternative would limit the option for designating the existing roadless areas as wilderness in the future. Areas within Sky Lakes-B and Chapter 7 roadless areas totalling 1,584 acres would be unsuitable for wilderness designation in the future.

#### Cumulative Effects

Cumulative effects on all roadless areas in Alternative 3 are displayed in Table III-86.

Table II	I-86: Roadless Are	a Impacts, Alternative 3 (ad	eres)
Type of Impact	RARE II	Chapter 7 Roadless	Total
Pelican Butte			
Direct	617	19	636
Indirect	861	87	948
SUBTOTAL	1,478	106	1,584 (1)
Cumulative	0	673	673
TOTAL	1,478	779	2,257
(1) This total also equals the	acres of direct impacts o	n wilderness consideration.	

The combination of direct impacts to 1,548 acres, indirect impacts to 3,686 acres, and cumulative impacts to 673 acres would result in 5,943 acres not being suitable for future wilderness consideration in Alternative 3. These acres were previously determined to not be suitable for wilderness, however.

#### Alternative 4

#### Recreational Use Impacts

#### Direct and Indirect Impacts

MDP facilities proposed in Alternative 4 would directly impact approximately 678 acres within the Sky Lakes-B Roadless Area. Base area facilities and parking, seven lifts, the majority of ski trails, 5.7 miles (19.8 acres) of access and maintenance roads, about 25 km of recreation trails (25.3 acres), the mid-mountain lodge, and the nordic day lodge would be located within the roadless area. Base area and ski trail facilities would impact another 12 acres of Chapter 7 roadless area.

By 2010, total winter recreational use within the Sky Lakes-B Roadless Area under Alternative 4 could reach an estimated 120,940 RVDs (235 RVDs for snowmobiling, 112,450 RVDs for alpine skiing, 4,500 RVDs for nordic skiing, 3,755 RVDs for other site visitors). Total summer use could reach an estimated 7,120 RVDs. Of these, interpretive hiking, other hiking, and fishing would account for an estimated 455, 1,300, and 164 RVDs, respectively. (Actual use may be lower, as these estimates assume that 100 percent of these uses would occur within the roadless portion of the project area.)

Indirectly, somewhat greater use of the Marsh Roadless Area would be expected, estimated to exceed 253 RVDs for fishing and canoeing and 126 RVDs for water fowl hunting (i.e., about five percent additional use as compared to Alternative 1).

#### Impacts on Roadless Designation

#### Direct and Indirect Impacts

The effects of developing portions of roadless areas would be as described under Impacts Common to All Action Alternatives and for Alternative 2. Alternative 4 would directly impact 678 acres of Sky Lakes-B and 12 acres of Chapter 7 roadless areas. This alternative would indirectly impact 1,155 acres of Sky Lakes-B and 95 acres of Chapter 7 roadless areas. These acres would no longer be considered "roadless."

### Impacts on Future Wilderness Consideration

### Direct and Indirect Impacts

The option for designating the existing roadless areas as wilderness in the future would be reduced on 1,940 acres. Additionally, the solitude would be reduced in areas just south of the "Wine Bottle" area and north of Lake Gladys and the base area at Snow Lakes.

### Cumulative Effects

Cumulative effects on all roadless areas in Alternative 4 are displayed in Table III-87.

Table III	-87: Roadless Are	a Impacts, Alternative 4 (a	cres)
Type of Impact	RARE II	Chapter 7 Roadless	Total
Pelican Butte			
Direct	678	12	690
Indirect	1,155	95	1,250
SUBTOTAL	1,833	107	1,940(1)
Cumulative	0	673	673
TOTAL	1,833	780	2,613
(1) This total also equals the a	acres of direct impacts of	on wilderness consideration.	

Future wilderness consideration would be lost on 6,299 acres, including 1,940 acres of direct impact for this alternative, 3,686 acres of indirect impact common to all action alternatives, and 673 acres of cumulative impacts. The overall effect of changing the roadless designation and wilderness values on these lands would be minimal because these lands were already found to bE unsuitable for wilderness.

## Alternative 5

#### Recreational Use Impacts

#### Direct and Indirect Impacts

Proposed MDP facilities in Alternative 5 would directly impact approximately 707 acres within the Sky Lakes-B Roadless Area. Eight lifts, the majority of ski trails, 4.6 miles (16.4 acres) of access and maintenance roads, about 25.6 km of nordic and snowshoeing trails (27.5 acres), the mid-mountain lodge, mountain restaurant, and the nordic warming huts would be located within roadless area. Another 29 acres of Chapter 7 roadless area would be affected by maintenance road P-1, the gondola, and ski trails.

By 2010, total winter recreational use within the Sky Lakes-B Roadless Area under Alternative 5 could reach an estimated 144,975 RVDs (235 RVDs for snowmobiling, 134,850 RVDs for alpine skiing, 5,394 RVDs for nordic skiing, 4,495 RVDs for other winter site visitors). Since summer operations would not occur in Alternative 5, it is expected that non-ski season recreation use within the area would be similar to Alternative 1. However, due to the general growth in recreational demand induced by Alternative 5, a minor increase in scenic driving to the summit of Pelican Butte, off-trail hiking, wood-cutting, and fishing use would be expected, with a minor decrease in hunting use.

In terms of total recreation use, Alternative 5 represents somewhat reduced impacts to the Sky Lakes-B Roadless Area, as compared to Alternatives 2-4 and 6 because no summer uses are proposed.

Indirectly, somewhat greater use of the Marsh Roadless Area for water fowl hunting would be expected, estimated at 125 RVDs by 2010. Fishing and canoeing use of the Marsh Roadless area would also increase, estimated at 250 RVDs by 2010.

#### Impacts on Roadless Designation

### Direct and Indirect Impacts

The effects of developing portions of roadless areas would be as described under Impacts Common to All Action Alternatives and for Alternative 2. Approximately 707 acres of Sky Lakes-B Roadless Area would be directly impacted and 894 acres indirectly impacted. In the Chapter 7 roadless areas, 29 acres would be directly impacted and 124 acres indirectly impacted. These areas would no longer be considered "roadless."

### Impacts on Future Wilderness Consideration

#### Direct and Indirect Impacts

The option for designating the existing roadless areas as wilderness in the future would be reduced on 1,754 acres. The opportunity for solitude in areas outside of developed areas would not be reduced measurably because no summer use program is proposed.

### Cumulative Effects

Cumulative impacts on all roadless areas in Alternative 5 are displayed in Table III-88.

Table III-88: Roadless Area Impacts, Alternative 5 (acres)					
Type of Impact	RARE II	Chapter 7 Roadless	Total		
Pelican Butte					
Direct	707	29	736		
Indirect	894	124	1,018		
SUBTOTAL	1,601	153	1,754 (1)		
Cumulative	0	673	673		
TOTAL	1,601	826	2,427		
(1) This total also equals the a	cres of direct impacts of	n wilderness consideration.			

Future wilderness consideration would be lost on 6,113 acres -- 1,754 acres of direct impacts in this alternative, 3,686 acres of indirect impact common to all action alternatives, and 673 acres of cumulative impacts. The overall effect of changing the roadless designation and wilderness values on these lands would be minimal because these lands were already found to be unsuitable for wilderness.

## Alternative 6

#### Recreational Use Impacts

#### Direct and Indirect Impacts

Proposed MDP facilities in Alternative 6 would directly impact approximately 590 acres within the Sky Lakes-B Roadless Area and 11 acres in Chapter 7 roadless areas. The facilities proposed within the roadless areas would from in the same facilities as described for Alternative 5, but significantly downsized. Road and trail impacts would be reduced and no permanent warming hut would occur in the Snow Lakes area.

By 2010, total winter recreational use within the Sky Lakes-B Roadless Area under Alternative 6 could reach an estimated 136,771 RVDs (235 RVDs for snowmobiling, 128,470 RVDs for alpine skiing, 3,776 RVDs for nordic skiing, 4,290 RVDs for other winter site visitors). Total summer use could reach an

estimated 14,260 RVDs. (Actual use may be lower, as these estimates assume that 100 percent of these uses would occur within the roadless portion of the project area.)

Somewhat greater use of the Marsh Roadless Area for water fowl hunting would be expected, estimated at 130 RVDs by 2010 (i.e., additional use of five to ten percent as compared to Alternative 1). It is expected that fishing and canoeing use of the Marsh Roadless area would be similar to Alternative 1, estimated at 260 RVDs by 2010.

#### Impacts on Roadless Designation

### Direct and Indirect Impacts

As in Alternative 5, the roadless character of both the Sky Lakes - B and Chapter 7 roadless areas would be diminished, but fewer acres would be affected. The effects of developing portions of these roadless areas would be as described under Impacts Common to All Action Alternatives and for Alternative 2. Impacts in Alternative 6 would include direct impacts to 590 acres of Sky Lakes-B and 11 acres of Chapter 7 roadless areas. This alternative would indirectly impact 1,080 acres of Sky Lakes-B and 43 acres of Chapter 7 roadless areas. These acres would no longer be considered "roadless."

### Impacts on Future Wilderness Consideration

### Direct and Indirect Impacts

Development associated with this alternative would limit the option on 1,724 acres of existing roadless areas for future designation as wilderness. Additionally, the solitude would be reduced by both on and off-trail hikers in the area north of Lake Francis. Differing from Alternatives 2-4, the solitude of the roadless areas south of the "Wine Bottle" area should not change, as no summer use is planned in that area.

#### Cumulative Effects

Cumulative impacts on all roadless areas in Alternative 6 are displayed in Table III-89.

Table II	I-89: Roadless Are	a Impacts, Alternative 6 (ad	eres)
Type of Impact	RARE II	Chapter 7 Roadless	Total
Pelican Butte			
Direct	590	11	601
Indirect	1,080	43	1,123
SUBTOTAL	1,670	54	1,724 (1)
Cumulative	0	673	673
TOTAL	1,670	727	2,397
(1) This total also equals the a	cres of direct impacts or	n wilderness consideration.	

Future wilderness consideration would be lost on 6,083 acres -- 1,724 acres of direct impacts in this alternative, 3,686 acres of indirect impact common to all action alternatives, 673 acres of cumulative impacts. The overall effect of changing the roadless designation and wilderness values on these lands would be minimal because these lands were already found to be unsuitable for wilderness.

### 2. WILDERNESS AREAS

### a. Impacts Common to All Alternatives

### Direct and Indirect Impacts

None of the alternatives would result in direct impacts to the Mountain Lakes Wilderness (MLW) or the Sky Lakes Wilderness (SLW) and no change in the wilderness supply would occur. No indirect impacts common to all alternatives would be expected.

### Cumulative Effects

Past NFSL management decisions, including timber harvest activities, road building, and trail construction, have contributed to the recreation use trends within the MLW and SLW, and therefore, have contributed to the current status of their wilderness characteristics in terms of natural integrity, natural appearance, remoteness, solitude, special features, manageability of boundaries, and opportunity for primitive recreation. The suppression of wildfire on adjacent forest lands has also altered natural processes and potentially affected the character of the MLW and SLW.

Over the long term, regional population growth, off-site development, (e.g., Running Y Ranch Resort, Kla-Mo-Ya Casino, Rocky Point Resort, and Lake of the Woods Resort) and management/legislative decisions that attract visitors to the area (e.g., Volcanic Legacy Scenic Byway), would be expected to result in additional recreation use of the MLW and SLW. For some wilderness users, any increase in use levels of the MLW and SLW may threaten or diminish the quality of their recreation experience. Nonetheless, it is expected that development and/or expansion of resorts in the project area vicinity would serve to meet the majority of the recreation demand generated by the resident population and overnight visitors attracted to the facilities, as well as absorb some existing dispersed and day use recreation demand. Also over the long term, proposed additions (over 150 miles) to the non-wilderness trail system on the Forest would reduce densities as compared to existing conditions. New trail networks within semi-primitive recreation areas would be expected to attract some of these future hikers and horseback riders, thus decreasing potential impacts on currently overcrowded wilderness trails and campsites.

No additional lands are expected to be added to the Wilderness System in the region for the foreseeable future. Based on current use trends, it is expected that the existing total Wilderness inventory would meet projected demand under all alternatives through the fifth decade, ending 2040 (Forest Plan FEIS, p. 2-93). Nonetheless, overuse and/or crowded conditions on wilderness trails emanating from near Lake of the Woods Resort (i.e., Summit and Mt. McLoughlin trailheads) would likely continue. Over the long term, the implementation of a wilderness permit system and/or new/improved alternative access routes to the wilderness areas may be required in order to minimize deterioration of the wilderness integrity in heavily used areas.

## b. Impacts Common to All Action Alternatives

## Direct Impacts

Implementation of any of the action alternatives would result in developed amenities and significant increases in winter recreational use of the Pelican Butte area. Nordic trails would be developed within about 1.5 miles of the SLW in all action alternatives, which could lead to increased nordic access to the wilderness. However, because the Pelican Butte nordic system would be fee-based, and since more convenient wilderness access points are available to nordic skiers who seek a primitive experience, it is expected that the incidence of SLW access from Pelican Butte would be minimal.

Lift and trail development on the south, southwest and southeast flanks of Pelican Butte and near the summit would be visible from some locations within the SLW and MLW. Development around Peak 7,600, in the bowl, and near the summit may also be visible from northern vantage points within the SLW. Although built facilities are currently evident on Pelican Butte (i.e., Forest Road 980, lookout and communications structures) and proposed mitigation would minimize the visual impact, evidence of the additional development could slightly diminish the wilderness experience for some users.

### Indirect Impacts

Winter recreation impacts could be expected primarily in the vicinity of Summit Snow Park. A small percentage of visitors attracted by the Ski Area, as well as new local residents, would participate in offsite nordic backcountry skiing opportunities in a non-motorized setting. This possible additional use in SLW would be small, but may be noticeable to skiers who currently use the area. An opposite effect of a very minor reduction in numbers of skiers in SLW could be realized, as nordic skiers who currently use the wilderness would be attracted to the groomed trail system at Pelican Butte.

Under all action alternatives, some small number of winter visitors may observe (and be attracted to the SLW, and to a lesser extent the MLW) and return in the summer for a wilderness experience, resulting in increased use of the SLW and MLW.

Summer use increases attributable to Pelican Butte development may also cause impacts on MLW and SLW. In addition to an increasing local population and general growth in the percentage of people seeking recreation experiences on NFSL, each action alternative would attract large numbers of people to the Pelican Butte area. With the exception of Alternative 5, most of these visitors would be accommodated at the ski area by proposed developed facilities. However, a portion of the visitors and residents to the area would seek less developed opportunities. A large percentage of these visitors would not typically seek out a wilderness experience, but rather a "nice" half-day activity. However, most of the attractions on the District that also fit this "less developed" criteria are located within existing wilderness areas. The lakes north of the Cold Springs and Fourmile Lake trailheads, which are easily accessed on well maintained, gently rolling trails, would be expected to be popular attractions and would realize moderate increases in users. Mt. McLoughlin, which already receives high numbers of visitors because of its visibility, closeness to the large campground developments of Lake of the Woods and Fish Lake, easy access to the trailhead (only four miles off of OR Highway 140), and only a five-mile hike to the top, would also realize increases in user. The effect on the "wilderness experience" would be diminished, as the number of visitor contacts increases in each of these parts of the Sky Lakes Wilderness.

Increased summer use of Westside Road would likely cause increased access to SLW from the less-used Cherry Creek, Nannie Creek, and Sevenmile Marsh trailheads. Similarly, minor increases in access to MLW could be expected with increasing visitation. To a minor extent, this may diminish the opportunity for solitude and the wilderness experience for some users on these access routes.

Because of the presence of the developed amenities, the need to suppress any wildfire (natural or humancaused) within or near ski area permit boundary would be increased. This could further inhibit the natural effects of fire on the SLW. Because of its more distant location and natural and man-made barriers (i.e., OR Highway 140), fire control in the vicinity of the Pelican Butte would have minimal effect on the MLW.

## Cumulative Effects

In addition to the cumulative effects described as common to all alternatives, the recreation and economic benefits derived from the action alternatives would likely induce somewhat higher local area population growth and faster build-out of other off-site developments that attract visitors to the area, which, in turn,

would likely result in increased demand for wilderness experiences. These developments include Rocky Point Resort, Lake of the Woods Resort, Crystalwood Lodge, and Running Y Ranch Resort.

## c. Impacts by Alternative

### Alternative 1

### Direct and Indirect Impacts

The No Action alternative would cause no changes to existing use trends within the MLW or the SLW or contribute to a change in forces that impact the natural integrity, natural appearance, remoteness, solitude, special features, manageability of boundaries, and opportunity for primitive recreation in the wilderness areas.

### Cumulative Effects

Over the long term, since Alternative 1 would not provide any additional recreational absorption capacity (i.e., additional trails), demand on other off-site recreation amenities and the MLW and SLW would increase. Accordingly, under Alternative 1, the incidence of crowded summer conditions on wilderness trails (i.e., emanating from near Lake of the Woods Resort, such as the Summit and Mt. McLoughlin and Cold Springs trailheads) would also increase.

### Alternative 2

### Direct and Indirect Impacts

Both winter and summer effects would be as described under Impacts Common to All Action Alternatives. Specifically, the Pelican Butte summer recreation amenities, scenic viewing opportunities, and two miles of hiking trails would likely absorb some visitors from other recreation opportunities in the area, including, to a minor extent, the heavily used wilderness access trails that emanate from the Summit, Mt. McLoughlin and Cold Springs trailheads.

#### Cumulative Effects

Overall, there would be a gradual increase in the number of wilderness users attributable to recreational development at Pelican Butte. With this increased growth, management controls may have to be implemented sooner than in Alternative 1.

## Alternative 3

#### Direct and Indirect Impacts

In summer, the Pelican Butte recreation amenities, scenic viewing opportunities, six miles of hiking trails, and two miles of mountain biking trails would likely absorb some visitors from other recreation opportunities in the area, including, to some extent, the heavily used wilderness access trails that emanate from the Summit, Mt. McLoughlin, Fourmile Lake and Cold Springs trailheads. Alternatives 3 and 6 are the only alternatives that would offer mountain biking opportunities within the project area. To a very minor extent, this added amenity could serve to reduce illegal wilderness intrusions by mountain bikers, helping to reduce impacts to the integrity of nearby wilderness areas.

#### Cumulative Effects

Based on projected annual visitation at Pelican Butte, Alternative 3 could increase wilderness demand. Over the long term, pressure on the MLW and could cause a need to implement management controls sooner than in Alternative 2.

#### Alternative 4

#### Direct and Indirect Impacts

In summer, the Pelican Butte recreation amenities, scenic viewing opportunities and 6.1 miles of hiking trails would likely absorb some visitors from other recreation opportunities, including, to some extent, heavily used wilderness access trails.

#### Cumulative Effects

Based on projected annual visitation at Pelican Butte, recreational demand would be expected to be lower than in other action alternatives, which would affect wilderness demand accordingly. Over the long term, pressure on the MLW and SLW would be lower than in Alternatives 2 and 3.

#### Alternative 5

#### Direct and Indirect Impacts

Summer recreation opportunities would not be provided at Pelican Butte under Alternative 5. Therefore, the recreation area could not help to draw users away from the MLW or SLW. Resulting increases in use in the wilderness could be greatest under this alternative.

#### Cumulative Effects

Based on projected annual visitation at Pelican Butte, demand for "less developed" experiences would increase, thus increasing wilderness demand accordingly. Since Alternative 5 would not provide any additional summer recreational absorption capacity (i.e., additional trails), summer demand on other offsite recreation amenities and the MLW and SLW would be greater than in Alternatives 1-4 and 6. Accordingly, under Alternative 5, the incidence of crowded summer conditions on wilderness trails (i.e., emanating from Summit, Mt. McLoughlin, Fourmile Lake, and Cold Springs trailheads) would likely be greater than in all other alternatives.

#### Alternative 6

#### Direct and Indirect Impacts

In summer, the Pelican Butte recreation amenities, scenic viewing opportunities and 11.8 miles of hiking trails (biking allowed on 9.3 miles) would likely absorb some visitors from other recreation opportunities, including, to some extent, heavily used wilderness access trails. This alternative would have the greatest potential to decrease illegal use of mountain bikes in the wilderness.

#### Cumulative Effects

Based on projected annual visitation to Pelican Butte, demand on wilderness resources would increase. The incidence of overcrowded conditions would be expected to be lower for this alternative than for Alternatives 3 and 5.

## 3. SUMMARY OF IMPACTS

### Recreational Use Impacts

Roadless areas would be impacted by increases in recreational use under all alternatives. The action alternatives would generate a substantial increase in recreational visits within and up to one-quarter mile outside of the MDP development area. This visitation would increase the chances for visitor contacts, thus reducing the opportunity for solitude within the existing semi-primitive and roaded natural settings on Pelican Butte. While this would mean a loss of opportunity for recreational users to experience a more undeveloped and uncrowded (or primitive) environment, the Forest Plan anticipated such an impact when it provided the option for development of a recreation area within this area.

Local population growth and a general increase in recreational demand for activities on NFSL would result in slightly higher use of Sky Lakes and Mountain Lakes Wilderness Areas. Each action alternative would create a substantial increase in annual visitation to the area. A small portion of the visitors would be seeking less developed settings, many of which are easily accessible within the wildernesses. Increases in wilderness use would be especially likely at locations originating from the Summit Snow Park area, and Mt. McLoughlin, Fourmile Lake and Cold Springs trailheads. This increased use would cause small increases in visitor contacts, thus decreasing the "primitive" experience that is typically sought after in wilderness. The amount of increased use induced by the alternatives would be small in comparison to existing use. The relative increase in use for each alternative is based on the total annual (especially summer) visitation. As a result, Alternatives 3 and 5 would reflect the greatest increase and Alternatives 2, 4 and 6 the lowest. Alternative 5 could result in greater impact than Alternative 3, even though it has a lower visitation, because it does not propose any on-site summer developed facilities to attract forest users away from other use areas.

#### Impacts on Roadless Designation

Roadless areas, including previously inventoried RARE II areas plus other roadless areas meeting FSH 1909.12, Chapter 7 definition, would be impacted by development proposed in all action alternatives. The areas proposed for MDP development (direct impacts), as well as the small islands remaining between MDP facilities (indirect impacts), would lose their natural integrity and primitive character to a point that they would no longer be designated roadless. Table III-90 displays effects on roadless designation by each alternative. The effect would be a reduction in acreage on the Forest where the public could pursue "primitive" opportunities in an undeveloped setting.

Ta	able III-90: Im	pacts (1) on De	signated Roadl	less Areas by A	lternative (acr	es)
Type of	Alternative					
Type of Impact	1	2	3	4	5	6
Direct	0	600	636	690	736	601
Indirect	0	1,123	948	1,250	1,018	1,123
TOTAL	0	1,723	1,584	1,940	1,754	1,724

#### Impacts on Future Wilderness Consideration

The loss in roadless character would also have a direct impact on future wilderness consideration. These land areas, all of which have previously been determine "not suitable", would be altered and would not be suitable for future wilderness consideration. In addition, the southern one-third of the Sky Lakes-B Roadless Area would become isolated due to MDP development in the middle of the roadless area.

Although it would remain roadless, this remaining 3,686-acre unit would likely not be suitable for wilderness because of poor manageability. Effects on future wilderness consideration by alternative are displayed in Table III-91. None of the alternatives would have a significant effect on actual future wilderness potential because these areas have previously been determined not suitable for wilderness.

III-91: Impac	ts (1) on Future	e Wilderness C	onsideration b	y Alternative (	acres)	
Alternative						
1	2	3	4	5	6	
0	1,723	1,584	1,940	1,754	1,724	
0	3,686	3,686	3,686	3,686	3,686	
673	673	673	673	673	673	
0	6,082	5,943	6,299	6,113	6,083	
	1 0 0	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	1         2         3           0         1,723         1,584           0         3,686         3,686           673         673         673	Alternative           1         2         3         4           0         1,723         1,584         1,940           0         3,686         3,686         3,686           673         673         673         673	1         2         3         4         5           0         1,723         1,584         1,940         1,754           0         3,686         3,686         3,686         3,686           673         673         673         673         673	

(1) Reduction in area suitable for future wilderness consideration.

#### 4. UNAVOIDABLE ADVERSE EFFECTS

Increased annual visitation, both on-site and off-site would alter the experience of forest visitors. Development associated with each alternative would alter the landscape through clearings and structures, resulting in a reduction in lands that could be designated "roadless." This, in turn, would cause the lands to not be suitable for future wilderness consideration.

### 5. RELATIONSHIP BETWEEN SHORT-TERM USE AND LONG-TERM RODUCTIVITY

Increases in annual visitation would not be a long-term change for the environment unless use was not managed and resource impacts resulted. Management guidelines are in place to assist in controlling negative environmental impacts.

#### 6. IRREVERSIBLE AND IRRETRIEVABLE COMMITMENTS OF RESOURCES

Although ski trail clearings and constructed facilities would be maintained for the life of the permit, they would not constitute a permanent encumbrance on the land. It is feasible that structures could be removed and the land rehabilitated, to the degree that the land could again be designated roadless and potentially suitable for wilderness consideration. Therefore, the development would not be considered an irreversible or irretrievable commitment of resources for roadless or wilderness character.

## C. MITIGATION AND MONITORING

The following proposed mitigation would be applicable to all action alternatives. (See Section II.D for information on the effectiveness, feasibility, administration and monitoring of these measures.)

• Discourage visitor use off of designated trails in remaining roadless areas through signing and education programs.