

1.0 PURPOSE AND NEED

1.1 INTRODUCTION

In compliance with the National Environmental Policy Act (NEPA) and other relevant federal laws and regulations, the USDA Forest Service (USFS) has prepared this Draft Environmental Impact Statement (DEIS) to analyze the proposed Master Development Plan (MDP) for The Summit at Snoqualmie Ski Area. A portion of The Summit at Snoqualmie is located on National Forest System Lands (NFSL), therefore, proposed projects cannot be implemented until an Environmental Impact Statement (EIS) has been completed for the MDP proposal. This DEIS is designed to:

- Inform the public of the Proposed Action and alternatives to the Proposed Action.
- Disclose the direct, indirect, and cumulative environmental effects of the Proposed Action and the alternatives to the Proposed Action.
- Indicate any irreversible commitment of resources that would result from each proposed alternative.
- Determine if the Forest Plans for the Mt. Baker-Snoqualmie National Forest (MBSNF) and Wenatchee National Forest (WNF)¹ should be amended to provide for the addition of 52 acres to the Special Use Permit (SUP).

This DEIS follows the format established by the Council on Environmental Quality (CEQ) Regulations for implementing NEPA (40 Code of Federal Regulations [CFR] Parts 1500-1508). The U. S. Fish and Wildlife Service is a cooperating agency in this NEPA process.

1.1.1 Background

The Summit at Snoqualmie is situated in the Cascade Mountain Range of western Washington, approximately 46 miles east of Seattle (see Figure 1.1.1-1 - Vicinity Map) and is accessed via Interstate 90 (I-90). The Summit at Snoqualmie is located on private land and NFSL within the Snoqualmie Ranger District (formerly North Bend Ranger District) of the MBSNF and the Cle Elum Ranger District of the WNF. The Study Area is defined as the geographic area within which the Proposed Action would be located (approximately 3,000 acres). However, the scope of the environmental analysis (assessment area) varies according to the resource topic assessed. The Summit at Snoqualmie's SUP is administered by the MBSNF (see Figure 1.1.1-2 - Existing Ownership and Land Allocation).

The Summit at Snoqualmie is owned and operated by Ski Lifts, Inc. (SLI), a subsidiary of Booth Creek Ski Holdings, Inc., and consists of four ski areas: Summit West (formerly Snoqualmie Summit); Summit

¹ The Okanogan and Wenatchee Forests have been combined and are now referred to as the Okanogan-Wenatchee National Forest (OWNF). A revised OWNF Forest Plan is in progress, as of this publication. For purposes of this document, the Wenatchee National Forest Plan is referenced and referred to as the Wenatchee National Forest Plan, or Wenatchee National Forest Plan, as Amended.

Central (formerly Ski Acres); Summit East (formerly Hyak); and Alpental². The Summit at Snoqualmie currently operates under a USFS SUP, encompassing approximately 1,834³ acres of NFSL. The Summit at Snoqualmie also operates on private lands within both King and Kittitas Counties.

The surrounding mountain environment and proximity to the Puget Sound Region support year-round visitation to The Summit at Snoqualmie. Year-round dispersed recreation activities and opportunities surrounding The Summit at Snoqualmie include photography, sightseeing, hiking, backcountry camping, and wildlife viewing. Hiking, horseback riding, mountain/road biking, rock climbing, fishing, and scenic chairlift rides are the primary summer activities throughout the Snoqualmie Pass region, with only mountain biking and scenic chairlift rides being directly supported by The Summit at Snoqualmie. The Summit at Snoqualmie's facilities are available for business meetings, small conferences, wedding receptions, and other special occasions throughout the summer. The Summit at Snoqualmie experiences its highest use during the winter months with alpine and Nordic skiing as the primary activities. Snow shoeing, ice climbing, and winter tubing are also enjoyed during the winter throughout the Snoqualmie Pass region, with only winter tubing being directly supported by The Summit at Snoqualmie. Over the past 5 years, skier visits have averaged roughly 485,000 annually⁴.

The Summit at Snoqualmie's local, regional, and destination market competition primarily includes Crystal Mountain, Stevens Pass, White Pass, Mission Ridge, Mt. Baker, Whistler/Blackcomb Resort, the Mount Hood ski facilities, and Mount Bachelor.

1.1.2 Purpose and Need for the Proposed Action

1.1.2.1 Overview

This DEIS responds to the proposal by Ski Lifts Inc. to upgrade and expand the recreational infrastructure and associated facilities, including a small adjustment of the SUP boundary for The Summit at Snoqualmie. The purpose of this proposal is to update The Summit at Snoqualmie's MDP for the long-range (10-15 years) management and development of The Summit at Snoqualmie. The purpose of the improvements in the MDP is to increase skier connectivity between Summit East and Summit Central, maintain long-term economic viability of the facilities at Summit East; take advantages of opportunities to restore conditions in the Upper South Fork Snoqualmie River and Coal Creek watersheds (may include removing culverts, revegetation efforts, stabilizing mass wasting slopes, wetland and stream restoration,

² The four ski areas (Summit West, Summit Central, Summit East, and Alpental) collectively, will hereafter be referred to as "The Summit at Snoqualmie". For discussion/planning purposes, Alpental is referred to as "Alpental" and Summit West, Summit Central, and Summit East are collectively referred to as "the Summit".

³ Calculated from GIS data used for the Summit at Snoqualmie MDP DEIS.

⁴ At ski areas, one may see people using alpine, snowboard, telemark, cross-country, and other specialized ski equipment, including those used by disabled and other winter "sliding" enthusiasts. Accordingly, the terms "skiers," "alpine skiing," etc. in this document encompass all lift-served sliding sports typically associated with ski area facilities.

etc.); and be consistent with the Forest Plans of the MBSNF and the WNF, as amended⁵ and the Snoqualmie Pass Adaptive Management Area Plan (USDA 1997).

1.1.2.2 The Proposed Action

Ski Lifts Inc. has submitted The Summit at Snoqualmie MDP (Sno.engineering, 1998a) for acceptance by the USFS; the MDP is disclosed as the Proposed Action in this DEIS. The Proposed Action (see Figures 1.1.2-1 - Alternative 2 Proposed Conditions – The Summit, and 1.1.2-2, Alternative 2 Proposed Conditions - Alpentel) includes the removal and installation of additional chair and surface lifts; development of a restaurant and year-round gondola at Alpentel; creation of additional ski terrain within the existing SUP boundary; as well as expanded night skiing at Summit Central and Alpentel. In addition, the Proposed Action includes the expansion and creation of day lodges, maintenance facilities, and utilities to support ski area operations and other recreational opportunities. The project also includes the implementation of the *Implementation, Operation, Restoration and Monitoring Plan* (SE GROUP, 2004 – Appendix F). This plan includes restoration projects, monitoring guidelines, road and facility construction and maintenance guidelines to guide ski area development and operation for the life of the MDP. The Proposed Action also includes a proposed, non-significant (under the National Forest Management Act [NFMA]) Forest Plan amendment to adjust the SUP boundary to include Hyak Creek and the egress area at the top of the *Silver Fir* chairlift (total of 53 acres) to provide for more appropriate egress trails between Summit East and Summit Central. The proposed amendment would also incorporate the existing cross-country hut at Grand Junction (an additional 0.01 acre, approximately 500 feet west of Hyak Lake) into the SUP. The Forest Plan amendment would also include reallocating a total of 433.01 acres of WNF lands from AMA (ST-1-Scenic Travel) to AMA (RE-1-Developed Recreation). These lands include 380 acres in the existing SUP area, 53 acres in the SUP adjustment, and 0.01 acre at the existing cross-country warming hut.

If implemented, the Proposed Action would increase the Comfortable Carrying Capacity (CCC)⁶ of The Summit from 7,920 to 10,710 skiers. The CCC at Alpentel would increase from 1,880 to 2,920 skiers.

⁵ Major amendments include *the Record of Decision for Amendments to Forest Service and Bureau of Land Management Planning Documents within the Range of the Northern Spotted Owl* (USDA, USDI, 1994), commonly referred to as the *Northwest Forest Plan*, the *Record of Decision Amending Resource Management Plans for Seven Bureau of Land Management Districts and Land and Resource Management Plans for Nineteen National Forests Within the Ranger of the Northern Spotted Owl* (USDA, USDI 2004a) and the *Record of Decision To Remove or Modify the Survey and Manage Mitigation Measure Standards and Guidelines in Forest Service and Bureau of Land Management Planning Documents Within the Range of the Northern Spotted Owl* (USDA, USDI, 2004b).

The need to resolve existing deficiencies of The Summit at Snoqualmie operations, coupled with the need to meet current and future public expectations for quality skiing and other mountain-oriented recreation experiences, is addressed through various facility and trail improvements proposed in The Summit at Snoqualmie MDP. Table 1.1.2-1 compares the existing and proposed capacities. The specific improvements proposed in the Proposed Action are outlined below.

**Table 1.1.2-1
The Summit at Snoqualmie Existing Facilities and Proposed Action**

Master Development Plan Components	Existing (No Action Alt 1)	Proposed Action (Alt 2)
Alpine Ski Area Capacity for The Summit (CCC)	7,920	10,710
Alpine Ski Area Capacity for Alpental (CCC)	1,880	2,920
Night Skiing Capacity for The Summit (CCC)	6,210	9,870
Night Skiing Capacity for Alpental (CCC)	1,550	2,170
Special Use Permit Acreage (FS Study Area)	1,834	1,886
Total Number of chairlifts for The Summit	16	18
Total Number of Surface Lifts for The Summit	3	3
Total Number of Magic Carpets for The Summit	1	3
Total Number of Magic Carpets for Alpental	0	1
Total Number of Chairlifts for Alpental	4	6
Total Number of Surface Lifts for Alpental	1	0
Number of Trails for The Summit	70	80
Number of Trails for Alpental	25	27
Formal Ski Terrain for The Summit (acres)	545	599
Formal Ski Terrain for Alpental (acres)	206	217
Formal Night Skiing Terrain for The Summit (acres)	420	544
Formal Night Skiing Terrain for Alpental (acres)	95	112
Food Service Seats for The Summit	1,386	4,234
Food Service Seats for Alpental	528	813
Roads (miles)	18.5	18.1
Parking – The Summit (acres)	39.6	49.4
Parking – Alpental (acres)	7.8	7.8
Total Parking (acres)	47.4	57.2

⁶ The CCC of a mountain resort is the number of skiers an entire resort can *comfortably* accommodate at any given time and still guarantee a pleasant recreation experience. A resort’s CCC does not reflect the number of skiers on the mountain at one time. Generally, 70 to 85 percent of a mountain’s total CCC will be active skiers, including those on the trails, riding lifts, and waiting in lift lines. The remaining 15 to 30 percent will be using guest service facilities or milling in areas near these facilities. It is common for ski areas to exceed their CCC during peak visitation times throughout the year (i.e., Thanksgiving, Christmas, New Years, etc.). The peak day capacity (110% of the CCC) is used to help design more critical aspects of the mountain resort (i.e., sewer system, water treatment and storage capacity, etc.) during peak visitation periods (10-15 days/year).

Lifts/Trails

Alpentel

Alpentel's existing lift network consists of four chairlifts and one surface tow. Under the Proposed Action, two chairlifts would be realigned and the surface tow would be removed. An additional chairlift would be constructed to access expert terrain in the northern Study Area, particularly Internationale Bowl, and a pulse gondola would be constructed to provide year-round, direct access to the summit at Alpentel from the base area.

The existing *St. Bernard* chairlift would be realigned to provide better access to the beginner terrain at Alpentel. As a result, *S-29 (Drei)* would be removed from Alpentel's existing lift network. A magic carpet would be utilized adjacent to the *St. Bernard* chairlift in order to provide a cohesive first-time beginner learning area at Alpentel.

The existing *Sessel* chairlift would be replaced and realigned to access the majority of intermediate terrain at Alpentel. The proposed alignment of the lower terminal would be designed to relieve congestion throughout the base area and improve overall mountain circulation.

The proposed *Internationale* chairlift would be constructed to provide mid-mountain round-trip access to expert terrain within Alpentel's existing northern SUP boundary. The proposed chairlift would keep guests on the mountain, helping to reduce congestion in the base area. *Internationale* would also improve ski patrol's ability to conduct avalanche control and search and rescue operations throughout Alpentel's northern Study Area.

The proposed *Pulse Gondola* would provide year-round, direct out-of-base access to the summit at Alpentel. The proposed gondola would be ADA-accessible and enhance interpretive, scenic viewing and dining opportunities, as well as improve out-of-base conveyance for all upper mountain resort operations, including avalanche control and ski patrol operations. The proposed gondola would be designed to provide four-season recreational opportunities.

Summit West

The existing lift network at Summit West consists of six chairlifts, one surface tow and one magic carpet. Under the Proposed Action, every lift/tow/magic carpet would be replaced, except for the *Pacific Crest* chairlift. Six chairlifts, two surface tows and one magic carpet would be constructed to replace the removed lifts. The proposed lift network would be designed to better utilize existing terrain (particularly beginner terrain) and increase overall mountain circulation.

The existing *Wildside* chairlift would be replaced and realigned to provide better access to the lower terminal while still providing access to the renovated Thunderbird Lodge. The proposed chairlift would access terrain currently served by four chairlifts.

The existing *Dodge Ridge* and *Pacific Crest* chairlifts access nearly identical terrain. Under the Proposed Action, the *Dodge Ridge* chairlift would be upgraded and realigned to take advantage of the natural fall line, improve overall mountain circulation, and relieve base area congestion at Summit West. The *Pacific Crest* chairlift would remain in place.

The existing *Little Thunder* chairlift would be realigned to better utilize beginner terrain at Summit West. The terrain accessed by *Little Thunder* would be regraded to eliminate cross-slope ski terrain. The lower terminal would be designed closer to base area facilities, to enhance the overall beginner experience at Summit West.

The proposed *Surface Lift I* would be a magic carpet constructed alongside the *Little Thunder* chairlift. In tandem with the realigned *Little Thunder* chairlift, *Surface Lift I* would be developed to provide a strong first-time beginner learning area at Summit West.

The existing *Julie's Chair* chairlift would be replaced and realigned to provide access to additional beginner terrain at Summit West. The lower terminal would be located closer to base area facilities to help increase mountain circulation and reduce base area congestion.

The existing *Snow Bowl* surface tow would be removed and one chairlift (*Baby Double*) and one surface tow would be constructed in its place. The proposed lift and tow would be constructed to accommodate all levels of beginner skiers, from the first-time beginner to the novice skier.

The proposed *Northside* chairlift would be constructed at mid-mountain, north of the existing *Pacific Crest* chairlift. The proposed lift would access advanced terrain in the northern portion of the SUP while helping to increase mountain circulation and reduce base area congestion.

The proposed lift construction and realignments at Summit West would provide several beginner lift bottom terminals within approximately 100 feet of the base area facilities. The proposed lift layout would be designed to better serve beginner terrain and provide a more structured learning area at Summit West, as well as increase overall skier circulation throughout the mountain.

Summit Central

The existing lift network at Summit Central consists of seven chairlifts, four surface tows (three located at the Summit Tubing Center) and one magic carpet. Under the Proposed Action, all chairlifts would be removed except for *Central Express*, the magic carpet, and surface tows at the tubing center. Five chairlifts would be constructed in their place. Connector trails would be constructed to provide better access, accommodating most ability levels, between Summit Central and Summit East. The proposed lift network would be designed to better utilize existing terrain, as well as create first-time beginner terrain at Summit Central.

Under the Proposed Action, the existing *Easy Street* chairlift would be replaced and realigned. The lower terminal would be located at the Silver Fir Base Area and would provide out-of-base access for beginner skiers. The proposed chairlift would access terrain currently served by the existing *Easy Street* and *Reggies's Chair* chairlifts, of which *Reggies's Chair* would be removed.

The existing *Triple 60* chairlift would be replaced and the lower terminal would be located further downslope, and closer to base area facilities.

The proposed *Holiday* chairlift would access terrain currently served by both the *Holiday* and *Gallery* chairlifts. The lower terminal of *Holiday* chairlift would be constructed closer to base area facilities than the current alignment. The *Gallery* chairlift would be removed.

The proposed *Ski School* chairlift would provide out-of-base access to beginner terrain from the resort core at Summit Central.

The proposed *Silver Fir* chairlift would be replaced and built along the existing alignment with a detachable quad chairlift.

The lift construction and realignment at Summit Central would be designed to provide more direct access to chairlifts accessing many ability levels from the base area, as well as more distinct intermediate and advanced terrain pods. The lift network would be constructed to compliment the proposed construction of a new base area at Summit Central, discussed in the Skier Support Facilities section.

Summit East

A key element of the Proposed Action is to provide for increased skier connectivity between Summit East and maintain the viability of facilities at Summit East.

Under the Proposed Action, all chairlifts/tows would be removed and/or realigned except for the *Mt. Hyak* chairlift⁷. Two chairlifts would be constructed/realigned to serve the existing terrain; two additional chairlifts would be constructed to access new terrain. The proposed lift/trail network would be developed to better utilize existing terrain at Summit East, provide terrain not currently available at Summit East, and increase skier connectivity between Summit East and Central and improve overall mountain circulation.

The existing upper terminal of the *Easy Gold* chairlift would be relocated approximately 300 feet downslope from its existing location in order to avoid conflicts with users of *Trails 60A* and *65*.

⁷ The Summit at Snoqualmie has received approval from the USFS to replace and realign the existing *Dinosaur* chairlift at Summit East with a new chairlift called *Mt. Hyak* (see the *Dinosaur Chairlift Replacement Decision Memo*, USDA, 2003). For analysis purposes, removal of the *Keechelus* and *Dinosaur* chairlifts and construction of the presently approved *Mt. Hyak* chairlift is considered an existing condition.

Under the Proposed Action, the existing *Backside* chairlift (currently not operational) would be replaced and renamed *Mill Creek*. The proposed *Mill Creek* chairlift would reintroduce skiing in the Mill Creek Watershed. Three additional ski trails would be created in conjunction with the proposed lift replacement.

The proposed *Rampart* chairlift would be built and located to capitalize on existing terrain at Summit East. Two existing trails would be extended along the natural fall line to the proposed lower terminal of the Rampart chairlift. The proposed chairlift and trail upgrades would be designed to provide more continuous fall line skiing, as well as improve overall mountain circulation at Summit East.

The proposed *Creek Run* chairlift would integrate existing terrain at Summit Central into the proposed trail network for the Creek Run pod.⁸ The proposed lift/trail network would be developed to access intermediate terrain and provide more continuous fall line skiing, as compared to existing conditions. The proposed Creek Run pod would be designed to increase mountain circulation at Summit East, as well as provide more challenging and diverse terrain for intermediate skiers at Summit East. An integral part of the trail network would include the creation of a crossover trail between Summit East and Central. The proposed trail would be designed to utilize more appropriate slope gradients for both skiers and snowboarders traversing from Summit East to Central. The existing crossover trail would be revegetated, but would continue to be used by snowshoers in winter and mountain bikers in the summer.

The proposed lift/trail upgrades would be developed to increase skier connectivity between Summit East and Central, provide new, diverse terrain at the Summit at Snoqualmie as well as help to increase the overall mountain circulation at Summit East.

Skier Support Facilities

Alpental

Under the Proposed Action, two new skier support facilities would be developed in order to accommodate the anticipated increase in skier visitation. Existing buildings would be renovated and space (restrooms, ski patrol, retail, lockers, etc.) reallocated to better comply with industry standards. In addition, several out-buildings would be removed to allow for safer circulation throughout the base area and lower-mountain trails (see Figure 2.2.3-2).

The proposed Visitor Services Building (approximately 14,000 square feet) would be located at the base of the mountain and would provide additional space for arrival services such as ticketing, ski school sales, retail, and public lockers. The proposed Mountaintop Restaurant (approximately 3,500 square feet and 285 restaurant seats), located at the upper terminal of the proposed Pulse Gondola, would provide on-mountain cafeteria-style dining and would be designed to keep guests on the mountain in order to reduce base area congestion.

⁸ The term “pod” is used to describe a chairlift and the ski trails served by that lift.

Summit West

The existing Alpenhaus Lodge and Slide Inn Lodge would be consolidated and expanded to include most guest service functions, including lift ticket and ski school sales, retail space, and restaurant seating, all in one distinct base area facility. The expansion/renovation of these would be incorporated into the heated plaza and decking associated with the existing Summit West Rental Building. The proposed facilities would provide an additional 410 restaurant seats (for a total of 1,463 seats) at the Summit West base area.

The existing Thunderbird Lodge (currently not in-use) would be renovated to provide 70 additional restaurant seats. The additional seating would help alleviate congestion of guest facilities throughout the Summit West and Central base areas.

Summit Central

Under the Proposed Action, both the existing Central Base Lodge (approximately 13,326 square feet and 284 restaurant seats) and rental shop/learning center/food-beverage building (approximately 7,202 square feet and 75 restaurant seats) would be removed and replaced with the proposed Summit Central Base Lodge (approximately 60,000 square feet and 1,700 restaurant seats). The proposed lodge would be situated downslope from the location of existing lodge, within closer proximity to the parking areas at Summit Central, and would consolidate all major support services including restaurant seating, restrooms, ski school, public lockers, retail and ticket sales, in one building. In addition, several small out-buildings would be removed.

The existing Silver Fir Base Lodge would be expanded by approximately 15,200 square feet to provide an additional 440 restaurant seats (approximately 19,818 total square feet and 490 total restaurant seats at full build-out). The proposed expansion would help accommodate the anticipated increased usage throughout the area as a result of the development of the proposed Creek Run and Rampart pods and increased capacity of surrounding lifts. The proposed lodge would provide most guest service functions, including lift ticket sales, lockers, restrooms, retail space, and restaurant seating.

Summit East

The proposed Mountaintop Restaurant (approximately 5,000 square feet) would be constructed adjacent to the upper terminal of the existing *Mt Hyak* chairlift in order to reduce congestion at within the Summit East base area and accommodate the anticipated increase in usage throughout the area as a result of the development of the proposed Creek Run and Rampart pods. The proposed facility would provide approximately 250 additional restaurant seats. Guest services would be consolidated with Summit Central.

Other Recreation Amenities

Alpental

Under the Proposed Action, alternative forms of recreation (e.g., Nordic skiing, snowshoeing, ice climbing, rock climbing, hiking, fishing, primitive camping, and road biking) would continue to be made available on NFSL within the Alpental Valley under the Proposed Action, although not directly supported by The Summit at Snoqualmie.

The proposed *Pulse Gondola* would provide year-round, ADA-accessible access to the summit of Alpental, and would be designed to provide access for activities such as scenic observation, photography, picnicking, walking, corporate retreats/conferences, and on-mountain dining (cafeteria-style food).

Summit Central

The *Silver Fir* chairlift would continue to be used during the summer months to provide scenic chairlift rides to Summit Central's upper elevation environment.

Parking and Shuttle Services

Alpental

Under the Proposed Action, a guest drop-off area would be constructed in front of the proposed *Visitor Service Building*. The drop-off area would be used by shuttles conveying guests from the upper parking lots at Alpental to the base area, as well as by shuttles transporting guests between Alpental and The Summit.

Although no additional parking is proposed at Alpental under the Proposed Action, all parking lots would be paved. Parking lots on NFSL (lots 3, 4, 5, 6, and 7) would incorporate stormwater management designed to comply with Forest Plan standards and guidelines.

The Summit

Approximately 9.9 additional acres of parking would be created in order to improve parking at Summit West, the proposed Silver Fir base area, and at Summit Central, adjacent to the proposed *Summit Tubing Center*. Similar to Alpental, all parking lots on NFSL would be paved and incorporate stormwater management design to comply with Forest Plan standards and guidelines.

The demand for shuttle service at The Summit is expected to decrease as a result of the proposed lift and trail connections between Summit East, Summit Central, and Summit West. As a result, The Summit at Snoqualmie would offer more frequent and consistent service between Alpental and The Summit, as needed.

Patrol/First-Aid Facilities

Alpental

Under the Proposed Action, Alpental would operate four ski patrol duty stations, including Alpental's ski patrol headquarters/first aid facility – located in the basement of the *Denny Mountain Lodge*.

Two up-mountain ski patrol duty stations would be constructed: one at the upper terminal of the proposed *Internationale* chairlift and one within the proposed mountain-top restaurant. The existing *Armstrong Express* duty station would be replaced and relocated, and the existing ski patrol headquarters/first aid facility would remain intact.

The proposed *Internationale* bump shack would be approximately 500 square feet in size, and would be equipped with avalanche control equipment, search/rescue equipment, toboggans, trail maintenance equipment, lift evacuation equipment, and the necessary medical equipment for treatment of minor injuries. This facility would include sewer and water under the Proposed Action.

The existing *Edelweiss* duty station would be converted to an equipment storage shed, and a new 400 square foot, *Edelweiss* duty station would be constructed within the proposed Mountain Top Restaurant. Restroom facilities and storage space would also be shared with this proposed mountaintop restaurant.

Summit West

Under the Proposed Action, Summit West would operate three ski patrol duty stations, including the first aid facility and ski patrol offices located in the base area.

The existing *Pacific Crest* duty station, located at the upper terminal of the *Pacific Crest* chairlift, would be expanded from 35 square feet to approximately 500 square feet. The expansion would provide requisite space for ski patrol dispatch and storage of toboggans, trail maintenance equipment, lift evacuation and medical equipment. The proposed facility would not include restrooms.

The existing ski patrol duty station, adjacent to the *Thunderbird Lodge*, would also be renovated.

Summit Central

Under the Proposed Action, Summit Central would operate three ski patrol duty stations, including an expanded facility at the Silver Fir base area and a renovated facility near the Summit Central base area.

The existing first aid facility at the Silver Fir base area would be expanded to approximately 600 square feet in order to accommodate the anticipated increased usage throughout the area. The proposed facility would include two beds, and would help alleviate the congestion that currently exists at Summit Central.

Summit East

Under the Proposed Action, Summit East would operate two on-mountain ski patrol duty stations and one small first aid facility. Administrative space would continue to be provided in the existing *Summit East Base Lodge*.

The proposed *Mountain Top Restaurant* would provide approximately 500 square feet of space for ski patrol operations. The proposed facility would be equipped with the standard inventory of ski patrol equipment and would serve skiers in the *Mill Creek*, *Mount Hyak*, and *Rampart* pods. This facility would not include restrooms.

The Summit at Snoqualmie also proposes the development of a ski patrol duty station (approximately 250 square feet) station at the upper terminal of the proposed *Creek Run* chairlift. The proposed facility would provide adequate space for ski patrol dispatch and storage of toboggans, trail maintenance equipment, search/rescue equipment, lift evacuation equipment, and medical equipment necessary for treatment of minor injuries. This facility would not include restrooms.

Maintenance and Facilities

Alpental

The Proposed Action includes the construction of a 2,400 square foot maintenance facility to replace the existing facility at Alpental located in *Parking Lot 3*. The proposed facility would be situated on private land, alongside the existing maintenance road, approximately 800 feet north of Alpental Road, and would be designed to withstand avalanche impacts. Along with space for maintenance activities and storage, the facility would include administrative offices and crew facilities.

Summit West

Under the Proposed Action, a 12,000 square foot maintenance facility would be constructed along Snake Road, adjacent to the existing maintenance shop (Maintenance Facility II). The Proposed maintenance facility would serve a central maintenance function for all vehicles (including tracked, rolling stock, and snow removal equipment) serving The Summit. The facility would feature six maintenance bays – equipped with 20-foot wide overhead doors and hydraulic lifts – an isolated space for welding, grinding, and painting, space for parts and supplies storage, a tool and oil room, administrative offices, a lunch room, restrooms, and a grooming/maintenance crew locker room.

The existing maintenance facility at Summit West (Maintenance Facility II) includes 6,000 square feet of usable space and is equipped with four maintenance bays. Under the Proposed Action, this facility would be re-tooled to serve as a lift and building maintenance (i.e., carpentry, electrical, and plumbing) facility. This building would include space for parts storage, employee lockers, restrooms, limited administrative space, and storage for lift maintenance operations.

Summit Central

No action is proposed to existing facilities at Summit Central under the Proposed Action.

Summit East

No action is proposed to existing facilities at Summit East under the Proposed Action.

Utilities

Alpental

Alpental's existing water supply is provided by two wells with an estimated combined flow of approximately 620,640 gallons per day (gpd). Currently, domestic water is stored in one 100,000 gallon concrete storage tank, in the northern portion of Parking Lot 6. It is anticipated that Alpental's domestic water demand, at full build-out, would be approximately 34,500 gpd. As such, Alpental's existing water supply would adequately accommodate the demand for water at full build-out.

Under the Proposed Action, Alpental would construct a pump station in the base area, and a booster pump station at mid-mountain in order to deliver water from the base area to a proposed storage tank, located adjacent to the proposed mountain top restaurant. Domestic water for the proposed *Internationale* duty station would be hauled in over the snow in order to avoid any environmental impacts associated with constructing a subsurface utility line. Subsurface utility lines would supply water to the proposed maintenance facility and guest services building.

Under the Proposed Action, restroom facilities at the proposed maintenance facility and visitor services building would be connected directly to Snoqualmie Pass Utility District's (SPUD's) existing infrastructure. Sewer lines would be installed in an above-ground utilidor to service the proposed mountain top restaurant and *Internationale* duty station. Estimated sewage volumes at full build-out are expected to be approximately 34,500 gpd. It is anticipated that SPUD's existing infrastructure would adequately accommodate the proposed facilities at Alpental.

Puget Sound Energy supplies electrical power to the Snoqualmie Pass area. Representatives indicate the existing power supply infrastructure feeding Alpental would adequately accommodate Alpental's proposed facilities at full build-out.

Alpental's existing fuel storage tank would be relocated adjacent to the proposed maintenance facility. The existing fuel tank contains one 500-gallon unleaded tank and one 1500-gallon diesel tank in one self-contained unit.

In addition, two 10-gallon propane tanks would be utilized - one located at the upper terminal of the proposed *International* chairlift and another at the proposed bump shack near the upper terminal of the existing *Armstrong Express* chairlift.

The Summit

Domestic water for facilities at The Summit is supplied by SPUD. SPUD also provides storage for domestic water at a combined storage capacity of approximately 465,000 gallons. Domestic water demand at full build-out is estimated to be approximately 135,000 gpd. It is anticipated that SPUD's water supply and storage capacity would adequately accommodate East-Central-West's demand for water at full build-out.

The Summit's sewer system is also serviced by SPUD. Estimated sewage volumes at full build-out are expected to be approximately 134,680 gpd. It is anticipated that SPUD's existing infrastructure would adequately accommodate the proposed facilities at East-Central-West. In addition, SPUD has proposed additional spray fields and reservoirs in order to accommodate development throughout the Snoqualmie Pass area.

Under the Proposed Action, pipelines for water supply and wastewater collection would be extended to the proposed *Mountaintop Restaurant* at Summit East and the existing *Thunderbird Lodge* at Summit West. At Summit East, a pump station and sewer connection (including a new manhole for the sewer connection and enclosure for the pump station) would be constructed at mid-mountain in order to deliver water from the existing network of waterlines to the proposed mountaintop facility. At Summit West, a lower pump station would be constructed adjacent to the existing maintenance facility. The proposed utility lines would be constructed within existing cleared areas and would be installed subsurface.

Puget Sound Energy supplies electrical power to the Snoqualmie Pass area. Representatives indicate the existing power supply infrastructure feeding East-Central West would adequately accommodate the proposed facilities at full build-out.

Currently, The Summit has fueling stations in shop yards adjacent to Summit West's and Central's maintenance facilities. Under the Proposed Action, the existing fueling station at Summit Central's maintenance facility would remain. An additional fueling station would be constructed adjacent to the proposed maintenance facility at Summit West, which would replace the existing fueling station at Summit West.

In addition, three 10-gallon propane tanks would be utilized at the upper terminals of the proposed *Creek Run*, *Rampart*, and *Northside* chairlifts.

Watershed Restoration

Under the Proposed Action, The Summit at Snoqualmie would implement the Summit at Snoqualmie MDP - Implementation, Operation, Restoration and Monitoring Plan (see Appendix F). This Plan includes more detailed descriptions of the specific restoration projects included (and analyzed) as part of the Proposed Action. The Plan also includes: a) monitoring guidelines to ensure that restoration projects would be implemented under USFS review, throughout the life of the approved MDP, and to determine

the success of restoration projects, BMPs, and other mitigation that would be implemented during the construction of various MDP components; and b) guidance for the construction and operations of roads, utilities, ski area facilities, and stream crossing culverts. In conjunction with the Draft Conceptual Stormwater Management Plan for the Summit at Snoqualmie (see Appendix G – Stormwater Management Plan), the Implementation, Operation, Restoration and Monitoring Plan would aid in assessing the cumulative effects of the MDP as well as other human-induced and natural disturbances within the Upper South Fork Snoqualmie and Coal Creek watersheds. Accordingly, USFS approval to begin project development of MDP projects would consider the success of previous restoration and mitigation projects, as determined through the monitoring program.

Forest Plan Amendment

The Proposed Action includes a Forest Plan amendment, which would add a total of 53.01 acres to the SUP area, including Hyak Creek and the egress area at the top of the *Silver Fir* chairlift (in Sections 16 and 17) and the cross-country hut at Grand Junction (approximately 500 feet west of Hyak Lake, occupying roughly 0.01 acre).⁹ The expansion would incorporate Hyak Creek into the SUP area and provide for construction and use of the proposed crossover trails between Summit East and Summit Central. The proposed Forest Plan amendment also includes reallocating a total of 433.01 acres of WNF lands from AMA (ST-1 - Scenic Travel) to AMA (RE-1 - Developed Recreation). These lands include 380 acres in the existing SUP area, 53 acres in the SUP adjustment, and 0.01 acre at the existing cross-country warming hut.

1.1.2.3 Purpose and Need

The purpose for the MDP proposal is to ensure the long-term economic viability of The Summit at Snoqualmie (particularly Summit East), and to maintain and/or enhance environmental resources and providing the public quality recreational opportunities in a natural outdoor setting on NFS lands, consistent with the Forest Plans for the MBSNF and WNF, other federal laws and regulation, other agency direction, and the Summit at Snoqualmie SUP.

There is great need to improve circulation between Summit East, Central and West and increase skier circulation efficiency at the ski areas. There is a need to improve the quality of the skiing experience, including improving skier circulation, existing skier support services and facilities. There is a need and an opportunity to restore and/or maintain the Upper South Fork Snoqualmie River and Coal Creek watersheds, consistent with the direction in the Forest Plans of MBSNF and WNF (see below for further elaboration of the need for action).

⁹ Prior to the acquisition of the ski area by Ski Lifts, Inc., Ski Acres and Hyak ski areas operated under separate SUPs that provided separate operations. The SUP areas were separated by Hyak Creek, which was not included in either permit area. With the purchase of Hyak and Ski Acres by Ski Lifts, Inc., the ski area operations were no longer separate. This expansion would “clean up” the SUP area along Hyak Creek.

The purpose or objective of the Proposed Action is maintaining and/or enhancing environmental resources and providing the public quality recreational opportunities in a natural outdoor setting on NFS lands, consistent with the direction in the Forest Plans of MBSNF and WNF. The basis for accomplishing this is contained in federal laws and Forest Service policy directives; the *MBSNF Forest Plan, as Amended*; the *WNF Forest Plan, as Amended*; and the Summit at Snoqualmie SUP. These laws and documents also provide the Forest Service the authority and direction pertaining to ski area management on NFS lands. The Summit at Snoqualmie's purpose focuses on improving the quality of the skiing experience. The Proposed Action would accomplish this by improving upon existing skier circulation, and improving existing skier support services and facilities.

The Forest Service and The Summit at Snoqualmie are connected through a committed long-term partnership to provide quality recreation opportunities on NFS lands. By satisfying their current and future visitors, The Summit at Snoqualmie would remain a healthy and competitive ski resort. This would help fulfill Forest Service policy, objectives, and management direction for ski areas as outlined on pages 4-182 and 4-183 of the *MBSNF Forest Plan* (Management Area 3C), page 4-159 of the *WNF Forest Plan* (RE-1) and page 144 of the *Alpine Lakes Area Land Management Plan* (DR) (also incorporated into the *MBSNF Forest Plan*).

In the following discussions, the need for action is described in detail, along with a summary of how proposed projects would address each need.

There is a need to improve circulation and dispersal of skiers and other site visitors in and out of the base area, and throughout the ski area

Currently at The Summit at Snoqualmie, physical constraints and facility limitations lead to base area congestion, which ultimately diminishes the efficiency of out-of-base access, and creates on-mountain congestion which ultimately reduces the amount of time spent on the mountain.

Under the Proposed Action, new and re-aligned lifts, in conjunction with upgrading existing facilities and construction of proposed facilities would be designed to increase the out-of-base efficiency of the ski area and reduce on mountain congestion.

There is a need to maintain the viability of Summit East by consolidation with Summit Central and Summit West

Summit East, the oldest ski facility at Snoqualmie Pass, has been operated intermittently since the 1930's by different owners and managers. Over the past 35 years, Summit East has failed to achieve its full potential, primarily due to undercapitalization, lack of skiable access to Summit Central and the turnover of ownership prompted by several bankruptcies. In 1997, Booth Creek became the primary owners and operators of all three ski areas at The Summit.

One of the Proposed Action's principle objectives is to integrate Summit East with Summit Central and Summit West by installing strategically designed and placed lifts and connector trails. The Proposed Action includes expanded guest service facilities at the Silver Fir base area, new lifts and ski terrain at Summit East, and a proposed cross-over trail for increased skier connectivity between Summit East and Summit Central. Crossover trails would be designed to improve skier circulation between Summit East and Silver Fir/Summit Central, which would allow for a wider spectrum of guests to traverse between the resorts, in turn, there would be less reliance on shuttle service between The Summit's three base areas.

Interconnectivity of base areas would help balance the utilization of the resort's terrain and facilities, improve operational efficiency, and would diversify the recreational experience. In addition, with enhanced skier connectivity between The Summit ski areas, the reliance on shuttle busses for access between the areas would be reduced, allowing for more efficient use of shuttle busses between The Summit and Alpental.

There is a need to balance the capacities of skier service facilities and lift/trail capacities

Guest Services/Building Space

Visitor service facilities should be designed to complement The Summit at Snoqualmie's overall CCC, and located so they accommodate the distribution of CCC throughout the various base area portals and on-mountain focal points.

The existing guest services and building space at The Summit reflects the time when the ski areas operated independently of each other. As a result, skier access to guest services across The Summit is limited due to a lack of on-mountain facilities and a lack of primary core areas for guest services. In addition, with the majority of guest services provided in the current base areas of Summit Central and Summit West, base area crowding occurs during the morning arrival and at lunch time. The Proposed Action calls for a significant change in skier/snowboarder circulation at The Summit (i.e., the installation and realignment of high-speed lifts coupled with improved crossover trails), which creates the opportunity to consolidate base area operations into two primary core areas (Summit West and Summit Central) and one secondary core area (Silver Fir). This consolidation has three principal benefits: (1) guests would have all services available to them at both primary base areas; (2) first-time guests would find the layout more understandable; and (3) the resort would realize operational efficiencies, which would result from more tightly grouped facilities. In order to provide enhanced skier circulation, the Proposed Action includes the construction of on-mountain at Summit West (renovation of the existing Thunderbird Lodge) and a proposed mountaintop restaurant at Summit East.

At Alpental, a commensurate increase in visitor service facilities would be required, in the base area and on the mountain top, in order to accommodate the increase in CCC. Upgrade to facilities would include construction of a visitor service building north of the Denny Mountain Lodge, and a new mountain top restaurant at the upper terminal of the proposed *Pulse Gondola*. The proposed base area visitor service

building would house arrival functions such as ticketing, ski school sales, retail, and public lockers. Renovations to existing building would be undertaken to allow for resizing of services that reflect the needs associated with an increased CCC. Out-buildings would be removed so that circulation within the base area and lower mountain trails is more safe and coherent.

Vehicular Circulation, Parking, and Shuttle Services

The Summit at Snoqualmie currently provides parking capacity for approximately 12,346 people at one time, which is lower than the total parking requirement, including the ski area CCC of 9,800, a capacity of 500 Nordic skiers, and 2,500 tubing area guests (a total of 12,800). In addition, The Summit at Snoqualmie realizes undocumented use by people who park at the area but do not purchase tickets, which further exacerbates the parking shortage.

Approximately 9.9 additional acres of parking would be created at Summit West, the proposed Silver Fir base area, and Summit Central adjacent to the proposed *Summit Tubing Center*. Due to the lack of guest services at Summit East, shuttle service would be available to transport guests from Summit East to other portals. Proposed cross-over trails between Summit East and Summit Central are intended to reduce reliance on shuttle services between base areas, as compared to the existing condition.

The Alpentel parking lots are parked out during weekends and holidays, requiring visitors in Lot 6 to walk over 1,200 feet to access base area facilities and chairlifts. During parked out conditions, Alpentel skiers are required to park at The Summit and ride the shuttle to Alpentel. While no expansion of parking is proposed, a guest drop-off area at Alpentel is proposed to alleviate the long walks currently experienced between the uppermost parking lots and the visitor service buildings. By providing for enhanced skier connectivity at The Summit, the Proposed Action would reduce the reliance of shuttle busses for access between The Summit areas, thereby allowing for more efficient shuttle service between The Summit and Alpentel. The Proposed Action also includes additional shuttles to provide for more efficient shuttle service between The Summit and Alpentel.

There is a need to provide a convenient and quality recreation experience for all site visitors on a year-round basis

Alpine Terrain

Skier circulation at The Summit is poor, with ill-defined trail boundaries and routes to chairlifts/facilities, largely due to the lack of trees and surrounding vegetation. Separation between beginner areas/trails and more advanced terrain is also poor and skiers are often required to traverse across active ski trails to reach their destination at Summit Central and Summit West. Both areas would benefit from reforestation, including the establishment of tree islands, which play an important role in controlling skier circulation patterns, disguising light poles and other on-mountain facilities, while increasing a guest's psychological sense of speed.

Trails 49 and 71 are currently used by skiers to traverse from Summit Central to East and Summit East to Central, respectively. Skiers must pole along the low-gradient portions of the trails and snowboarders often have to remove their equipment in order to traverse between Summit Central and Summit East. The relative inaccessibility of Summit East reduces skier interest in the Summit East facilities and the Summit East facilities remain underutilized, as compared to Summit Central and Summit West. The Proposed Action includes terrain upgrades at Summit East, providing development of new lifts and trails between Silver Fir and Summit East in order to provide better access to Summit East and to provide a greater diversity of terrain at Summit East.

The existing beginner terrain at The Summit at Snoqualmie includes terrain at Summit West with slope gradients that are too steep for beginners. The first-time beginner is an important guest for The Summit at Snoqualmie. As a result, under the Proposed Action, the lifts serving beginner terrain at Summit West would be realigned to provide more appropriate slope gradients and fall lines. At Summit Central, the Proposed Action includes the creation of first-time beginner terrain.

Throughout The Summit ski areas, intermediate and advanced intermediate terrain is lacking, mainly as a result of the steepness of the upper trail system (expert terrain) and the lower slope gradients along the lower terrain (beginner to low intermediate terrain). The introduction of lift-served terrain in the *Rampart* and *Creek Run* pods would address the deficit of intermediate and advanced-intermediate terrain. The *Rampart* and *Creek Run* pods would provide the most consistent fall-line intermediate and advanced-intermediate terrain throughout The Summit at Snoqualmie.

At Alpental, skiers wishing to ski the Internationale Bowl are required to ride two lifts and to cross through lower level terrain to access the bottom terminal of the *Armstrong Express*. As a result, the bottom of Alpental is often crowded and lift line wait times are excessive. The Proposed Action includes upgrades to the lift system to provide greater separation and appropriate slope gradients for skiers of all ability levels. Development of a lift in Internationale Bowl would provide round-trip skiing in this portion of the existing SUP area, thereby eliminating the need to access the bottom terminal of *Armstrong Express* or the need to ride two lifts to access the bowl.

Scenic Tram Rides

The Summit at Snoqualmie currently does provide summer recreation opportunities, particularly for elderly or physically challenged guests, or guests with small children. The Proposed *Pulse Gondola* at Alpental would provide an opportunity for elderly and physically challenged guests and families with small children, to access Alpental's upper elevation environment. An ADA-accessible¹⁰ trail near the proposed mountain top restaurant would provide the opportunity for educational and interpretive signage including information regarding the importance/delicacy of high elevation ecosystems, avalanche science and the behavior of snowpack, volcanology, and human's historical use of the Snoqualmie Pass area.

¹⁰ Would comply with the standards and guidelines established by the Americans with Disabilities Act (ADA).

There is a need to implement restoration projects to help improve the watershed condition

Lands at The Summit at Snoqualmie have been impacted by historic land use, including wildfire, mass wasting, floods timber harvest, earth grading, and facility development. The multiple, sometimes conflicting uses on land within the watershed has become one of the greatest challenges to ecosystem management on a watershed or landscape scale today.

If the Proposed Action is selected, the *Implementation, Operation, Restoration, and Monitoring Plan* (see Appendix F) would be implemented to restore previously disturbed areas and help maintain or improve the health of the aquatic and riparian ecosystems within the Upper South Fork Snoqualmie and Coal Creek watersheds in order to be consistent with Forest Plan Standards and Guidelines. Specific watershed restoration projects discussed in this plan include slope stabilization projects, stream and wetland restoration projects, revegetation projects and road decommissioning (see Appendix F).

There is a need to amend the WNF Forest Plan to correct the SUP boundaries and allocations within the existing SUP boundary for more efficient administration.

Prior to the acquisition of the ski area by Ski Lifts, Inc., Ski Acres and Hyak ski areas operated under separate SUPs that provided separate operations. The SUP areas were separated by Hyak Creek, which was not included in either permit area. With the purchase of Hyak (Summit East) and Ski Acres (Summit Central) by Ski Lifts, Inc., the ski area operations were no longer separate (see Figure 1.1.1-2). An amendment to the *WNF Forest Plan* is needed to incorporate the entire area along Hyak Creek between Summit East and Summit Central into the USFS SUP.

The existing crossover trail leading from Summit East to Summit Central does not yield suitable slope gradients for snowboarders and novice skiers to traverse from East to Central. Portions of the existing trail are either up-hill or too flat to accommodate the full range of skier abilities at The Summit. In addition, the existing crossover trail is a multi-use trail, used by snowshoers traveling in either direction. A new crossover trail, located to the west and south of the existing SUP boundary, is needed to utilize more appropriate slope gradients for both skiers and snowboarders traversing from Summit East to Central.

The existing cross-country hut is located on WNF lands which were acquired by the USFS during the Plum Creek Land Exchange. Cross-country skiers currently use the hut, however the location of the hut has not been allocated as AMA (RE-1). A Forest Plan amendment is needed to re-allocate the site (0.01 acre) to RE-1 to be consistent with the use of the facility.

Within the existing SUP area, 380 acres of WNF lands are allocated to AMA(ST-1), which is not consistent with their inclusion in the ski area SUP boundary. A Forest Plan amendment is needed to re-allocate the lands to AMA (RE-1) to be consistent with the inclusion of the lands in the SUP area.

1.2 TIERING, MANAGEMENT DIRECTION, U.S. FOREST SERVICE POLICY

The Summit at Snoqualmie’s proposal includes actions on both federal and private lands. Actions proposed on federal lands under USFS administration must be consistent with the direction, goals, objectives, and all standards and guidelines of the *MBSNF Forest Plan, as Amended* and the *WNF Forest Plan, as Amended*. Actions proposed on private lands are not under administration of the USFS, however, they are viewed as connected actions.

In evaluating and deciding upon The Summit at Snoqualmie’s proposal, the USFS is required to ensure that the proposal is consistent with management direction for the project area. There are a variety of laws and regulations that call for the agency to work with private industry to provide needed recreational facilities, including downhill ski areas, on suitable National Forest System Lands (NFSL). The major laws include the Organic Administrative Act of 1897, the Weeks Act of 1911, the Multiple-Use Sustained Yield Act of 1960, the Forest and Rangeland Renewable Resources Planning Act of 1974, the National Forest Management Act of 1976, and the National Forest Ski Area Permit Act of 1986. The USFS is authorized to provide recreational opportunities on NFSL funded through private enterprise (16 United States Code [USC] 497). Special Use Permits are to be administered for recreation uses that serve the public, promote public health and safety, and protect the environment.

Further, as directed by the National Forest Ski Area Permit Act of 1986 (16 USC 497 and 26 CFR 251), a ski area is defined as:

“a site and attendant facilities expressly developed to accommodate alpine or nordic skiing and from which the preponderance of revenue is generated by the sale of lift tickets and fees for ski rentals, for skiing instruction and trail passes for the use of permittee-maintained ski trails. A ski area may also include ancillary facilities directly related to the operation and support of skiing activities.”

Skiing is an important component of the recreational opportunities offered by NFSL. USFS policy also encourages year-round recreation opportunities at ski areas to serve the public, provide economic stability to local communities, and promote economic commercial ventures. *The Recreation Agenda* (USDA, 2000) details the USFS role in increasing outdoor recreation on NFSL through partnerships with other public and private entities (e.g., state agencies, the ski industry, and non-profit organizations).

1.2.1 Tiering to Previous NEPA Analyses

1.2.1.1 1990 Land and Resource Management Plan FEIS for the Mt. Baker-Snoqualmie National Forest

This DEIS tiers to the 1990, the *Land and Resource Management Plan FEIS for the Mt. Baker-Snoqualmie National Forest* (USDA, 1990b), which presents the environmental analysis of alternative strategies for future management of the land and resources of the Mt. Baker-Snoqualmie National Forest.

In this analysis, the long-term estimates of Forest resources and environmental conditions were considered, and the selected alternative was developed into the *Land and Resource Management Plan for the Mt. Baker-Snoqualmie National Forest* (i.e., the *MBSNF Forest Plan*).

1.2.1.2 1990 Land and Resource Management Plan FEIS for Wenatchee National Forest

This DEIS also tiers to the *Land and Resource Management Plan FEIS for the Wenatchee National Forest* (USDA, 1990c). This document presents the results of an environmental analysis of alternative strategies for future management of the land and resources of the Wenatchee National Forest. In this analysis, the long-term estimates of Forest resources and environmental conditions were considered, and the selected alternative was developed into the Land and Resource Management Plan for the Wenatchee National Forest (i.e., the *Wenatchee Forest Plan*).

1.2.1.3 1994 FEIS and Record of Decision, Amending Forest Plans

The 1994 *Record of Decision for Amendments to Forest Service and Bureau of Land Management Planning Documents within the Range of the Northern Spotted Owl* (USDA, USDI, 1994), amends Forest Service (and Bureau of Land Management [BLM]) Plans within the range of the northern spotted owl, including the *MBSNF Forest Plan* and portions of the *WNF Forest Plan*. This document, commonly referred to as the *Northwest Forest Plan*, includes additional forest-wide standards and guidelines, land allocations (including Late Successional Reserves and Riparian Reserves) with associated standards and guidelines, and an Aquatic Conservation Strategy.

1.2.1.4 2004 FEIS and Record of Decision Clarifying the Aquatic Conservation Strategy

In 2004, the *Record of Decision Amending Resource Management Plans for Seven Bureau of Land Management Districts and Land and Resource Management Plans for Nineteen National Forests Within the Range of the Northern Spotted Owl* (USDA, USDI, 2004a) was published. This ROD clarified the proper spatial and temporal scale for evaluating progress towards attainment of ACS objectives by stating that fifth-field watershed and larger scales, as well as long-term time frames, are appropriate for evaluating progress towards ASCO attainment. The amendment also sets project record requirements for projects within Riparian Reserve, to aid decision makers in determining if projects are designed to contribute to maintaining or restoring the fifth-field watershed over the long-term, even if short-term effects may be adverse.

1.2.1.5 2004 Record of Decision Removing and Modifying Survey and Manage

In 2004, the *Record of Decision To Remove or Modify the Survey and Manage Mitigation Measure Standards and Guidelines in Forest Service and Bureau of Land Management Planning Documents Within the Range of the Northern Spotted Owl* (USDA, USDI, 2004b) was published. While this

amendment removed the Survey and Manage Mitigation Measures, USFS and BLM Special Status Species Programs remain in place; qualifying survey and manage species have been added to these programs.¹¹

1.2.1.6 Snoqualmie Pass Adaptive Management Area Plan FEIS and Record of Decision

The *Snoqualmie Pass Adaptive Management Area Plan FEIS* (USDA, 1997a) identifies the preferred alternative and the standards and guidelines that will be used to manage the National Forest System Lands in the Snoqualmie Pass Adaptive Management Area (AMA). The Proposed Action in the FEIS is to adopt a majority of the Late-Successional Reserve (LSR) and Riparian Reserve (RR) Standards and Guidelines from the Record of Decision for *Amendments to Forest Service and Bureau of Land Management Planning Documents Within the Range of the Northern Spotted Owl (Northwest Forest Plan)*. All LSR and RR guidelines and standards apply to Connective Emphasis Areas (CEA) within the AMA. This document is also incorporated by reference.

1.2.2 Management Direction for Private Lands

Private lands account for approximately 1,034 acres at The Summit. Alpentel is located on public lands on the MBSNF and is surrounded by both private and public lands. Approximately four acres of private lands at Alpentel are analyzed in the resource sections of this EIS. Land use and zoning is administered by Kittitas County for The Summit, and King County for Alpentel.

Private land parcels at The Summit are zoned Forest and Range, except for an approximate 90 acre parcel at Summit Central (see Figure 1.1.1-2 - Existing Ownership and Land Allocation) which is zoned Planned Unit Development (PUD). The purpose and intent of PUD zone is "...to provide for and encourage a harmonious mixture of land uses with greater flexibility in land use controls...". Permitted uses include residential, hotels, condominiums, retail businesses, commercial-recreation businesses, restaurants, cafes, taverns, and cocktail bars.

The Forest and Range Zone is intended for lands "wherein natural resource management is the highest priority and where the subdivision and development of lands for uses and activities incompatible with resource management are discouraged." Although private lands at East-Central-West are not used to manage natural resources, according to 17.56.020 of the Kittitas County Zoning Regulations (Title 17), the current land use is allowed under the existing zoning, as the buildings and structures associated with the operation and maintenance of the ski area were in place prior to the adoption of the zoning ordinance. Kittitas County has acknowledged they would support rezoning the remaining private land parcels at East-Central-West to PUD.

¹¹ Any implications of a recent (August 2, 2005) U.S. District Court ruling are unknown at this time.

Private lands at Alpentel include three zoning designations: Commercial Business (CB), Residential - 4 Dwelling Units (DU) per acre (R-4), and Residential - 18 DU per acre (R-18). CB zoning (which encompasses all proposed activities on Booth Creek private land) is intended "...to provide convenience and comparison retail and personal services for local service areas which exceed the daily convenience needs of adjacent neighborhoods but which cannot be served conveniently by larger activity centers...". CB zoning allows for "...mixed use (housing and retail/service) developments...".

R-4 zoning allows "...for a mix of predominantly single detached dwelling units and other development types, with a variety of densities and sizes in locations appropriate for urban densities...". R-18 zoning provides "...for a mix of predominantly apartment and townhouse dwelling units and other development types, with a variety of densities and sizes in locations appropriate for urban densities...". There are no proposed activities on Booth Creek private lands within the R-4 or R-18 zoning designations.

1.2.3 Management Direction for National Forest System Lands

The *MBSNF Forest Plan, as Amended* and *WNF Forest Plan, as Amended* provide management direction for NFSL within the ski area, through forest-wide and resource goals and objectives, and standards and guidelines, and management area-specific goals, standards, and guidelines.

The *MBSNF Forest Plan, as Amended* recognizes that "developed recreation would continue to be an important program on the Forest" (USDA, 1990a, p. 4-20) and that "all ski areas that have expansion capacity under approved ski area master plans are expected to add development facilities. Expansion should be commensurate with expected improvements in service and permitted on the basis of actual need. It is anticipated that some ski areas will have base area expansion, particularly to enhance overnight and mid-week resort opportunities" (USDA, 1990a, p. 4-21). The *MBSNF Forest Plan, as Amended* also calls for the expansion of public information and interpretative services, including staffing, facilities, displays, equipment, and published materials. "Emphasis will continue towards sharing of information services with other agencies and partnerships with private outlets where possible" (USDA, 1990a, p. 4-21).

The *MBSNF Forest Plan FEIS* addressed future trends at ski areas on the MBSNF by stating that "there is evidence that the Cascade Ski Areas suffer some amount of competitive disadvantage without the ability to offer overnight accommodations. There is a market for local ski area vacationing, not as a substitute for the preferable weather of the Rockies, but to serve the skiers who might otherwise vacation in Oregon, Idaho, and British Columbia. USFS policy does not oppose overnight accommodations in ski areas, but does oppose financial arrangements that compromise the concept of full public access to such accommodations" (*MBSNF Forest Plan EIS*, 1990a, p. III-169).

1.2.3.1 Applicable Land Allocations

The Snoqualmie Pass Ski Area SUP and its surrounding area contain several land allocations (management areas) under the *MBSNF Forest Plan, as Amended* and *WNF Forest Plan, as Amended* (see Figure 1.1.1-2 - Existing Ownership and Land Allocation). These allocations and pertinent management direction are described below. For more detailed descriptions, standards, and guidelines associated with each allocation, refer to the *MBSNF Forest Plan, as Amended* and *WNF Forest Plan, as Amended*.

Congressionally Withdrawn

The Alpine Lakes Wilderness near the Summit at Snoqualmie SUP is administered by the MBSNF and the OWNF, and falls within the Congressionally Withdrawn land allocation (USDA USDI, 1994). In total, the Alpine Lakes Wilderness occupies approximately 394,000 acres in the MBSNF and OWNF. Wilderness areas are located adjacent to, and west of Alpental's Study Area, and fall within Management Area 10C, Wilderness—General Trailless (see Figure 1.1.1-2). The primary goal of MA 10C is to provide outstanding opportunities for isolation and solitude, mostly free from evidence of human activities and with very infrequent encounters with others. MA 10C lands are generally trailless areas within wilderness, although some user-made trails may exist.

Administratively Withdrawn Areas

As identified in the *ROD for Amendments to the Forest Service and Bureau of Land Management Planning documents Within the Range of the Northern Spotted Owl* (USDA, USDI 1994), Administratively Withdrawn Areas (AWAs) are lands that are excluded from planned or scheduled timber harvest through current forest plans or draft plan preferred alternatives. Examples include recreation sites, areas that are visually sensitive, unstable, or have special habitat or sensitive species, areas where reforestation cannot be ensured or other areas where management emphasis precludes scheduled timber harvest. Any timber harvested in these areas through salvage or other unscheduled harvest does not contribute to the allowable sale quantity. For purposes of this DEIS, the AWAs include all MBSNF system lands at and around Alpental and Summit West.

The *Alpine Lakes Area Land Management Plan (ALALMP)*, in accordance with the *Record of Decision Selected Alternative - Alpine Lakes Area Land Management Plan Final Environmental Impact Statement*, (USDA, 1981) provides management direction for National Forest System Lands in the Alpine Lakes Area. The 1990 *MBSNF Forest Plan* incorporates the management direction of the ALALMP (USDA 1990a, page 1-5). Land allocations in the Alpine Lakes Management Area have been incorporated into the 1990 Forest Plan allocations as Management Area 27; the following MA 27 allocations fall within Administratively Withdrawn:

MA 27 D - Developed Site

Developed sites are areas that are substantially modified for campgrounds, boating, ski areas, summer home tracts, administrative sites, etc. Sights and sounds of people are evident; concentration of users is often high. Roads, trails, and parking are managed to provide access to the site, with emphasis on non-motorized activity on the site. Developed sites are not scheduled for timber harvest, however, vegetative manipulation for enhancement or protection of the area is allowed. For purposes of this DEIS, areas allocated “developed site” within the MBSNF include Alpentel lands and Summit West lands within the MBSNF.

MA 27 DR - Dispersed Recreation

Land allocated the “dispersed recreation” should be managed in an unroaded condition with emphasis on dispersed recreation, scenic, wildlife or other amenity values. No new road construction is permitted, however, Off-Road Vehicular (ORV) use is permitted, depending on the ROS class. Scheduled timber harvest is not allowed. Exceptions include salvage harvest of catastrophic forest loss for the purpose of limiting damage on adjacent lands. The Visual Quality Objectives (VQOs) of Retention and Partial Retention apply. Concentration of recreation users is generally low, with relatively minimal contact with other users. If no alternative road access is available for intermingled lands, access may be granted for a non-public minimum standard road. For purposes of this DEIS, The Summit at Snoqualmie’s Study Areas allocated “dispersed recreation” include MBSNF lands east of Alpentel, abutting the Alpine Lakes Wilderness.

MA 27 SA - Special Area

MA 27 SA areas are protected for their uniqueness and natural conditions, and where appropriate, to foster public use, enjoyment, or study. Roads, facilities (i.e., parking, picnic areas, interpretive site, etc.) should enhance and protect the area. Additional resource manipulation, including removal of trees, should occur only for the enhancement or protection of the area. MA 27SA lands adjacent to The Summit at Snoqualmie’s Study Area, within the MBSNF include federal lands south of Alpentel’s SUP area, and west of Summit West and Summit Central (see Figure 1.1.1-2).

Adaptive Management Area

The Snoqualmie Pass Adaptive Management Area is part of a network of Adaptive Management Areas (AMAs) established under the *1994 amendment to the Forest Plan*. The purpose of these areas is to develop and test new management approaches that bring together ecological, economic, and community objectives, within the overall emphasis or goals established for each AMA (USDA, 1997b, pg. 1).

In April 1997, the USFS released the *Final Environmental Impact Statement for the Snoqualmie Pass Adaptive Management Area Plan* (USDA, 1997a). The FEIS evaluated alternative management strategies for the Snoqualmie Pass Adaptive Management Area (SPAMA). In November 1997, the Forest

Supervisors for the MBSNF and WNF (the responsible officials) selected Alternative 2 for this AMA. The decision adopted the Standards and Guidelines for Late-Successional Reserves and Riparian Reserves for lands designated as Connectivity Emphasis Areas (CEA) with modifications for recreational opportunities in areas designated as non-CEA. (USDA, 1997b).

The SPAMA was identified by the *1994 amendment to the Forest Plan* as a CEA; an area critical to maintaining connectivity of spotted owl populations and other organisms closely associated with late-successional forests, between the northern and southern Cascade Mountains (USDA, 1997b, pg. 3). Consequently, the standards and guidelines established for Late-Successional Reserves (LSR) and the Aquatic Conservation Strategy would serve as the baseline standards and guidelines for the SPAMA, with the exception that more restrictive standards and guidelines apply to recreational uses and facilities, and the expansion of special uses, such as ski areas and utility corridors, within CEAs (USDA, 1997b, pg. 5). As research and monitoring of projects within the SPAMA and in similar landscapes surface new information, these standards and guidelines can be adjusted, within the overall framework of the AMA goals and objectives (USDA, 1997b, pg. 3).

New recreation uses or facilities within the CEAs will be allowed if they are neutral or beneficial to late-successional habitat, do not negatively impact connectivity, and meet other Forest Plan standards and guidelines.

Adaptive Management Area (RE-1 - Developed Recreation)

Summit lands allocated RE-1 include OWNF lands at Summit West, at Summit Central in the vicinity of Divide Lake, and at Summit East. The RE-1 prescription encourages the development of partnerships with private providers (e.g., Ski Lifts, Inc.), through permits, joint ventures, and cooperative agreements in order to provide high quality recreation sites and facilities with development of activities and opportunities desired by the recreating public. All moderate to heavily used sites will be reconstructed with high quality facilities, and new recreation sites will be constructed where demand is high and overuse problems are occurring at existing sites.

The allocation of RE-1 is applicable to existing and potential developed recreation sites within the full spectrum of Recreation Opportunity Spectrum (ROS) settings. The areas allocated to this use include only the specific site on which development takes place (e.g., cross-country hut site). This prescription is also applicable to existing and potential Alpine (downhill) ski areas including runs, tows or lift facilities, shelters, lodges, services and parking lots. Associated developments such as skating rinks, toboggan runs, etc., may be present. Potential sites allocated to this prescription will be managed to protect or enhance the future values and conditions desired.

Adaptive Management Area (RE-3 - Dispersed Recreation, Unroaded, Non-Motorized)

Lands allocated to RE-3 include a parcel immediately east of Alpentel along the PCT. The goal of RE-3 is to provide dispersed recreation in an unroaded, semi-primitive non-motorized or primitive setting. This application applies to lands that are unroaded and in which trails are maintained for non-motorized users.

Adaptive Management Area (ST-1 - Scenic Travel – Retention)

Summit Lands allocated ST-1 include OWNF lands south of Summit Central, particularly Section 16 and east of I-90 across the interstate from Summit Central. The allocation of ST-1 is assigned to retain or enhance the viewing and recreation experience along scenic travel routes. Development and permitted uses would meet the “Retention” Visual Quality Objective in foreground and middleground areas viewed from developed recreation sites and designated roads and trails. Development and management activities within the allocation are generally not visually evident. New cutting units should be designed to give the viewer the perception that not more than three percent of the foreground area, and five percent of the middleground area in the viewshed has been disturbed within any one decade. Utility right-of-way clearings should blend with the natural vegetative pattern where possible, and buildings shall exhibit natural harmonious colors. The natural existing or established landscape would generally have vegetation on forested lands that is composed of large old growth trees in the overstory or in groves intermixed with a variety of age classes in the understory. The general perception of the landscape is a natural appearing environment.

Riparian Reserves

Riparian Reserves include areas along all streams, wetlands, ponds, lakes, and unstable or potentially unstable areas where the conservation of aquatic and riparian-dependent terrestrial resources receives primary emphasis (USDA, USDI, 1994, p. 7). Specifically, “Riparian Reserves include those portions of a watershed directly coupled to streams and rivers, that is, the portions of a watershed required for maintaining hydrologic, geomorphic, and ecologic processes that directly affect standing and flowing waterbodies such as lakes and ponds, wetlands, streams, stream processes, and fish habitats” (USDA, USDI, 1994, p. B-12-13).

Riparian Reserve standards and guidelines apply and are added to the standards and guidelines of all other designated areas (USDA, USDI 1994, p. C-1). For example, where Riparian Reserves occur within AWA, the standards and guidelines of both allocations apply.

Matrix

Areas designated as Matrix consist of lands outside of Congressionally Reserved Areas, LSR, AMA, Managed Late-Successional Areas, AWA and Riparian Reserves. “Most timber harvest and other silvicultural activities would be conducted in that portion of the matrix with suitable lands, according to standards and guidelines” (USDA, USDI, 1994, p. C-39). Within the Study Area for The Summit at

Snoqualmie, there is one matrix land allocation, MA 27 SF – Scenic Forest, part of the Alpine Lakes Management Area.

MA 27 SF - Scenic Forest

The primary objective of Scenic Forest is to retain or enhance viewing and recreation experiences. Developments and use in the visible area from recreation sites, roads, and trails within Scenic Forest should meet visual quality objectives. Use should be integrated with the natural landscape. Timber harvest is permitted; however, a full range of silvicultural prescriptions should be used to meet the visual and recreational objectives. Scenic Forest lands adjacent to The Summit at Snoqualmie’s Study Area, within the MBSNF, include federal lands west of The Summit, in Section 18 (see Figure 1.1.1-2)

1.2.4 Particularly Applicable Goals, Standards and Guidelines

The following section highlights some particularly-applicable forest-wide goals and objectives and standards and guidelines, as well as management area-specific standards and guidelines for recreation (developed and winter), social and economic factors, visual resources, and for the management of Riparian Reserves and the Snoqualmie Pass AMA.

Forest - Wide Recreation

The primary goal for recreation management on the MBSNF is to “Provide a broad spectrum of recreation opportunities and experiences, with an emphasis on those opportunities which require a natural setting.” As applicable to proposed development at The Summit at Snoqualmie, key *MBSNF Forest Plan* recreation management goals and guidelines are outlined below (USDA, 1990a, p. 4-2):

- “Provide a broad spectrum of recreation opportunities with an emphasis on those opportunities which require a natural setting.”
- “The Forest will be responsive to a greater diversity of forest customers by emphasizing the needs of the very young and old, the disabled, and those of culturally and economically diverse background.”
- “Encourage a sense of ownership through expanded Interpretation and Education activities; emphasize traditional values of “conservation,” and market the “special places,” special activities and special opportunities of the MBSNF.”
- “Provide a full spectrum of recreation facilities (from full service resorts to trailheads) to serve all of the recreation users, providing amenities (hot water, showers, trailer dumps) where necessary and appropriate, that allow the recreating customer to enjoy the natural setting while creating a sense of quality, comfort, and security.”
- “Encourage partnerships of public and private suppliers of recreation services and facilities and administer the partnerships to ensure an enduring relationship of mutual gain.”

Developed Recreation

Within the standards and guidelines for Forest-Wide recreation, the management goal for the MBSNF is to “Provide a broad spectrum of recreation opportunities and experiences on the MBSNF” (USDA, 1990a, p.4-84). Under the auspices of this goal, the *MBSNF Forest Plan* provides management guidelines for Developed Recreation on the MBSNF. Elements of these management guidelines that relate to the Proposed Action include the following (USDA, 1990a, p. 4-85):

- “Provide public information that informs the user about recreation opportunities and how to care for forest resources.”
- “Evaluate opportunities for private operation of MBSNF recreation facilities.”
- “Developed facilities will be administered and maintained to provide visitor safety and sanitation, protect facility and site resources, and provide for visitor recreation needs and convenience; while reducing unit costs.”
- “Encourage year-round recreation use at winter-sports sites. Permit summer facilities that are compatible with or enhance natural resource-based recreation opportunities and in keeping with the ROS.”

Winter Recreation

The Forest-wide Recreation Standards and Guidelines include management guidelines on the MBSNF for Winter Recreation. Among these guidelines, the following elements provide management direction for The Summit at Snoqualmie operation (USDA, 1990a, p. 4-91-92):

- “Patrol and safety may be provided through a combination of permittee and/or volunteer ski patrols. The USFS may provide leadership and training in such patrol activity.”
- “Different skill levels of users shall be provided for and considered when designing trails and related facilities. A spectrum of opportunities for winter recreation will be maintained, including primitive dispersed opportunities with no facilities.”
- “Alpine ski permittees will be encouraged to integrate winter dispersed recreation into their operations if and when the opportunity and demand exists.”
- “Winter recreation facilities, such as parking lots, groomed ski trails, motorized use zones, and cross country ski trails, should attempt to avoid south-facing aspects where significant wildlife winter use occurs.”

Social and Economic Factors

The primary *MBSNF Forest Plan* goal related to social and economic factors is to “Promote human resources, civil rights, and community development within the zone of influence of the MBSNF.” Key community and human resources management objectives that may be pertinent to The Summit at

Snoqualmie operations include complying with the Civil Rights Act of 1994, ensuring “that the needs of handicapped are considered in the design of forest facilities,” and participating “in human resources programs that support community and economic development” (USDA, 1990a, p. 4-96).

Visual Resources

The USFS has adopted a Visual Resources Management System (USFS, 1974) for NFSL to determine Visual Quality Objectives (VQOs). The system evaluates characteristics of the landscape and determines their overall importance to visual quality in the area. VQOs help define how the landscape will be managed and provide guidelines for acceptable modifications within an area. VQOs cannot always be met, nor are they requirements.

The portions of Summit Central and Summit East that lie on public lands are within the Snoqualmie Pass Viewshed. The existing Visual Condition for these lands is characterized as Heavily Altered, primarily due to land ownership patterns and uses (USDA, 1998b, Page IV-37).

VQO designation for WNF lands are based on existing land allocations (see Figure 1.1.1-2 - Existing Ownership and Land Allocation). A majority of WNF lands at The Summit at Snoqualmie are allocated RE1-Developed Recreation. The remainder of the lands within the Study Area (mostly within Section 16) are allocated ST1-Scenic Travel. All WNF lands at The Summit at Snoqualmie are prescribed a VQO of Retention.

The portions of Alpentel and Summit West that lie on public lands are within the South Fork Snoqualmie River Viewshed. The existing Visual Condition for these lands is designated “M”, which indicates a moderately altered landscape (USDA, 1990a). Management direction and VQOs for lands designated Moderately Altered include the following; changes are easily noticed by the average visitor and may attract attention, disturbances are apparent and correspond to a VQO of Modification (USDA, 1990a, Page IV-129). All MBSNF lands at The Summit at Snoqualmie are prescribed a VQO of Retention.

In addition, the *MBSNF Forest Plan* requires structures to comply with Cascadian architecture style guidelines which are characterized by the use of wood and other Forest resources, earth tone colors, and steep roof pitches of gable and hipped gable structure (USDA, 1990a, pp. 4-410-141).

The *MBSNF Forest Plan* discusses the effects of recreation on scenery:

“Ski area development will allow the removal, modification, or addition of vegetation, the shaping of slope, and the addition or modification of structures, but will be guided by Visual Quality Objectives” (USDA, 1990a, p. 4-130).

Riparian Reserves

The following are particularly-applicable standards and guidelines for the management of Riparian Reserves (USDA, USDI 1994, pp. C-34-38):

- RM-1. “New recreational facilities within Riparian Reserves, including trails and dispersed sites, should be designed to not prevent meeting Aquatic Conservation Strategy objectives. Construction of these facilities should not prevent future attainment of these objectives. For existing recreation facilities within Riparian Reserves, evaluate and mitigate impact to ensure that these do not prevent, and to the extent practicable contribute to, attainment of Aquatic Conservation Strategy objectives.”
- RM-2. “Adjust dispersed and developed recreation practices that retard or prevent attainment of Aquatic Conservation Strategy objectives. Where adjustment measures such as education, use limitations, traffic control devices, increased maintenance, relocation of facilities and/or specific site closures are not effective, eliminate the practice or occupancy.”
- FM-1. “Design fuel treatment and fire suppression strategies, practices, and activities to meet Aquatic Conservation Strategy objectives, and to minimize disturbance of riparian ground cover and vegetation. Strategies should recognize the role of fire in ecosystem function and identify those instances where fire suppression or fuels management activities could be damaging to long-term ecosystem function.”
- RA-1. “Identify and attempt to secure in-stream flows needed to maintain riparian resources, channel conditions, and aquatic habitat.”
- RA-2. “Fell trees in Riparian Reserves when they pose a safety risk. Keep felled trees on-site when needed to meet coarse woody debris objectives.”
- RA-3. “Herbicides, insecticides, and other toxicants, and other chemicals shall be applied only in a manner that avoids impacts that retard or prevent attainment of Aquatic Conservation Strategy objectives.”
- RA-4. “Locate water drafting sites to minimize adverse effects on stream channel stability, sedimentation, and in-stream flows needed to maintain riparian resources, channel conditions, and fish habitat.”
- WR-1. “Design and implement watershed restoration projects in a manner that promotes long-term ecological integrity of ecosystems, conserves the genetic integrity of native species, and attains Aquatic Conservation Strategy objectives.”
- WR-2. “Cooperate with federal, state, local, and tribal agencies, and private landowners to develop watershed-based Coordinated Resource Management Plans or other cooperative agreements to meet Aquatic Conservation Strategy objectives.”

- WR-3. “Do not use mitigation or planned restoration as a substitute for preventing habitat degradation.”
- FW-1. “Design and implement fish and wildlife habitat restoration and enhancement activities in a manner that contributes to attainment of Aquatic Conservation Strategy objectives.”
- FW-4. “Cooperate with federal, tribal, and state fish management agencies to identify and eliminate impacts associated with habitat manipulation, fish-stocking, harvest and poaching that threaten the continued existence and distribution of native fish stocks occurring on federal lands.”

AMA/LSR Standards and Guidelines

Both the SPAMA Plan (USFS, 1997a) and the *ROD for Amendments to the Forest Service and Bureau of Land Management Planning Documents Within the Range of the Northern Spotted Owl* (USDA, USDI 1994) contain standards and guidelines (S&G) specific to lands managed as Late-successional Reserves (LSR) and Adaptive Management Areas. The SPAMA Plan did not allocate the AMA as LSR, but indicated that LSR Standards and Guidelines apply to the AMA. The Standards and Guidelines that particularly apply to the Summit at Snoqualmie DEIS include:

1. “Relocate trails when necessary to prevent degradation to late-successional habitat and water quality.” (USDA, 1997b, p. 2-35).
2. “Road construction in LSRs/AMA for silvicultural, salvage, and other activities generally is not recommended unless potential benefits exceed the costs of habitat impairment. If new roads are necessary to implement a practice that is otherwise in accordance with these guidelines, they will be kept to a minimum, be routed through non-late-successional habitat where possible, and be designed to minimize adverse impacts. Alternative access methods, such as aerial logging, should be considered to provide access for activities in LSR/AMA.” (USDA, USDI 1994, p. C-16; USDA, 1997b, p. 2-52).
3. “Road maintenance may include felling hazard trees along rights-of-way. Leaving material on site should be considered if available coarse woody debris is inadequate. Topping trees should be considered as an alternative to felling.” (USDA, 1997b, p. 2-52).
4. “Proposals for new facilities and the expansion of existing facilities will be encouraged in non-Connectivity Emphasis Areas (CEA) rather than CEAs. New facilities and the expansion of existing facilities need to be neutral or beneficial to existing late-successional forest conditions.” (USDA, 1997b, p. 2-48).

5. “New recreational uses or facilities within the CEAs will be allowed if they are neutral or beneficial to late-successional habitat, do not negatively impact connectivity, and meet other Forest Plan standards and guidelines” (USDA, 1997b, p. 6)¹²
6. “Existing developments in LSRs, such as campgrounds, recreation residences, ski areas, utility corridors, and electronic sites are considered existing uses with respect to LSR objectives, and may remain, consistent with other standards and guidelines. Routine maintenance of existing facilities is expected to have less effect on old-growth conditions than development of new facilities. Maintenance activities may include felling hazard trees along utility rights-of-way, trails, and other developed areas.” (USDA, USDI 1994, p. C-17).
7. “Projects designed to improve conditions for fish, wildlife, or watershed should be considered if they provide late-successional habitat benefits or if their effect on late-successional associated species is negligible. Design and implement watershed restoration projects in a manner that is consistent with LSR objectives.” (USDA, USDI 1994, p. C-17).
8. “Dispersed recreational uses, including hunting and fishing, generally are consistent with the objectives of LSR. Use adjustment measures such as education, use limitations, traffic control devices, or increased maintenance when dispersed and developed recreation practices retard or prevent attainment of LSR objectives.” (USDA, USDI 1994, p. C-18).
9. “Maintain natural forest cover along riparian areas and ridge lines, thereby providing for wildlife movement and coarse woody debris recruitment and retention.” (USDA, 1997b, p. 2-37).
10. “Criteria have been established to guide the selection of land to be exchanged /acquired in the future. These criteria include: (1) land exchanges will be a “willing seller/willing buyer” basis, and (2) will provide benefits equal to or better than current conditions. Given these criteria, the priority for acquisitions will be to reduce fragmentation of late-successional habitat and provide connectivity now or in the future.” (USDA, 1997b, p. 2-51).
11. “Provide for retention of old-growth fragments in watershed where little remains.” (USDA, USDI 1994, p. C-44).
12. “Landscape areas where little late-successional forest persists should be managed to retain late-successional patches. This standard and guideline will be applied in Fifth Field Watersheds in which federal forest land is currently comprised of 15 percent or less late-successional forest.” (USDA, USDI 1994, p. C-44).

¹² On October 26, 2000, the Secretaries of Agriculture and Interior prepared a memorandum entitled “Interpretation of the NWFP Standards and Guidelines Regarding New Developments in Late Successional Reserves”. This memo speaks to the LSR and states that “New developments should not be placed in LSRs unless the development is designed and mitigated to a condition that is neutral or beneficial to the creation and maintenance of late-successional habitat at the appropriate spatial and temporal scales.” The memo also states that the nature and magnitude of public benefits are not factors to be used to determine a condition of neutral or beneficial.

13. “In AMAs, less than 15 percent of fifth field watershed in late-successional forest should be considered as a threshold for analysis rather than a strict standard and guideline, and the role of remaining stands of late-successional forests must be fully considered in watershed analysis before they can be modified.” (USDA, USDI 1994, p., D-11).
14. “Dead and down woody materials are recognized as important components of the forest environment. Goals of the guidelines are to leave a distribution of various size classes on site after management activities for short (20-50 years) and long-term (next 100 years or more) ecosystem functions. This includes moisture retention, hydrologic function, nutrient mobilization, mineral cycling and natural forest regeneration.” (USDA, 1997b, p. 2-58).
15. “Dead and partially dead trees have been recognized as important to many species of wildlife, lichens, and funge. Goals of the standard and guidelines are to leave a distribution of various diameter size classes to be suitable for a variety of cavity-nesting species.” (USDA, 1997b, p. 2-60).
16. “Nonnative species should not be introduced into LSR. If an introduction of nonnative species is proposed, complete an assessment of impacts and avoid any introduction that would retard or prevent achievement of LSR objectives. Evaluate impacts of nonnative species (plant and animal) currently existing within reserves, and develop plans and recommendations for eliminating or controlling nonnative species that are inconsistent with LSR objectives. These will include an analysis of the effects of implementing such programs to other species or habitats with LSRs.” (USDA, USDI, p., C-19).
17. “Each LSR will be included in fire management planning as part of watershed analysis. Fuels management in LSR will utilize minimum impact suppression methods in accordance with guidelines for reducing risks of large-scale disturbances. Plans for wildfire suppression will emphasize maintaining LSH. In LSRs a specific fire management plan will be prepared prior to any habitat manipulation activities. In all LSRs, watershed analysis will provide information to determine the amount of coarse woody debris to be retained when applying prescribed fire. Goal of wildfire suppression in LSRs is to limit the size of all fires.” (USDA, USDI 1994, p., C-17).

Discussion regarding these Standards and Guidelines appears in Section 4.6 – Wildlife in Table 4.6.2-1.

1.2.5 Invasive Plant Prevention: Executive Order 13112, Region 6 Policy, Forest Plan Standards and Guidelines

Executive Order 13112 (1999) and Regional policy (USFS, 2004a) direct that federal agencies identify those actions that may affect the status of invasive species, and not authorize, fund, or carry out actions likely to cause or promote the introduction or spread of invasive species. The Forest Service is to consider how its activities and those of its permittees, cooperators, and public uses can potentially cause or promote the introduction and spread of invasive plants. Where potential risks are identified, the Forest Service is required to take feasible and prudent action to minimize those risks.

In addition, each National Forest is to develop local Invasive Plant Prevention Practices. On the OWNF, this prevention strategy is outlined in *Okanogan & Wenatchee National Forests Weed Management and Prevention Strategy & Best Management Practices* (USFS, 2003a). On the MBSNF, the prevention strategy is described in *Prevention Strategies and Best Management Practices* (added to Forest Plan Standards and Guidelines via Plan Amendment #14, USDA, 1999a).

The Regional policy also requires that environmental analysis for ground disturbing activities assess invasive plant populations in the project areas; analyze the potential risks of the activities to introduce, favor establishment, or spread invasive plants; and incorporate prevention practices and follow-up inspections into the project design if needed.

The *MBSNF Forest Plan* also includes a *Strategy for New Invaders* (USDA, 2005), which allows rapid treatment of newly discovered, high-priority invasive plant sites (Forest Plan Amendment # 26).

USDA-FS, Pacific Northwest Region has released a Draft Environmental Impact Statement to evaluate the management of noxious weeds in the Region. Upon completion of the EIS and issuance of a ROD by the Region, The Summit at Snoqualmie would be required to comply with the management standards and guidelines of that decision.

1.2.6 The Recreation Agenda

The primary goal of *The Recreation Agenda* (USDA, 2000) is to provide quality recreation opportunities on NFSL in an ecologically sustainable manner. One of the purposes of this initiative is to promote local economic diversity by encouraging travel and tourism opportunities in collaboration with professionals in the private sector. Ski areas operated by the private sector provide a wide range of winter and summer outdoor recreation opportunities that can contribute to shaping local economies.

1.2.7 National Forest Ski Area Permit Act

The USFS is to provide recreational opportunities on NFSL funded through private enterprise. SUPs are to be administered for recreation uses that serve the public, promote public health and safety, and protect the environment (16 USC 497). The *National Forest Ski Area Permit Act* (16 USC 497b; Forest Service Manual [FSM] 2700-92-13) authorizes the issuance of ski area permits by the USFS for “the use and occupancy of suitable NFSL for Nordic and alpine skiing operations and purposes.” The act further states that a SUP “shall encompass such acreage as the USFS determines sufficient and appropriate to accommodate the permittee’s needs for ski operations and appropriate ancillary facilities.”

1.2.8 Other Analyses Incorporated into the EIS

This DEIS refers to several additional documents and technical appendices. Separate documents are available for review at the MBSNF Supervisor’s Office. Several documents are included as technical

appendices to the DEIS. Information from these documents has been incorporated by reference into this DEIS, as applicable. A brief discussion of the documents is provided below.

1.2.8.1 Resource Analyses and Assessments Incorporated by Reference

South Fork Snoqualmie and Yakima River Watershed Analyses

South Fork Snoqualmie River Watershed Analysis (USFS, 1995) and *Upper Yakima Watershed Analysis* (USFS, 1997) were developed in order to develop and document a scientifically-based understanding of the ecological structures, functions, processes, and interactions occurring within the watersheds, and to identify trends, conditions, and restoration opportunities. These documents serve as mechanisms to support the broad ecosystem management objectives at the watershed scale (20-200 square miles), according to the *Northwest Forest Plan*.

Upper South Fork Snoqualmie and Coal Creek Watershed Condition Assessment

The Upper South Fork Snoqualmie and Coal Creek Watershed Condition Assessment (Jones and Stokes Associates, 2001) was conducted in order to evaluate geomorphic and ecologic processes operating in the watershed to facilitate watershed planning that achieves Aquatic Conservation Strategy Objectives (ACSOs) for aquatic ecosystems. This assessment evaluates the Upper South Fork Snoqualmie and Coal Creek watersheds within and adjacent to The Summit at Snoqualmie SUP and integrates information on watershed characteristics, conditions, functions, and processes collected during 1994 and 1997 at The Summit at Snoqualmie. The Assessment serves as a comprehensive aquatic resource assessment for use in this DEIS.

Mill Creek Watershed Condition Assessment

The *Mill Creek Watershed Condition Assessment* (MCWCA - Jones & Stokes and SE GROUP, 2003) is intended to supplement the analyses developed in *The Upper South Fork Snoqualmie and Coal Creek Watershed Condition Assessment* (Jones and Stokes Associates, 2001). Similar to the South Fork/Coal Creek document, this analysis evaluates the Mill Creek Watershed, and serves as a comprehensive aquatic resource assessment for this DEIS.

Biological Assessment for the Determination of Effects to Proposed, Endangered, Threatened and Sensitive Species (PETS)

This document will be prepared pursuant to the requirements of Section 7 (c) of the Endangered Species Act (ESA). Any project with federal involvement that may affect an endangered species requires consultation between the involved agency (USFS) and the agencies charged with protecting endangered species (USFWS and NMFS). A Biological Assessment (BA), which will serve to document the determination of effects of an action on an endangered species, will be completed pursuant to the FEIS.

Mt. Baker-Snoqualmie National Forest Roads Analysis

Roads Analysis, a requirement of 36 CFR 212.5, has been completed (*Forest-wide Roads Analysis, Mt. Baker-Snoqualmie National Forest, July 2003*). The *Roads Analysis Management Matrix* for National Forest System roads within the SUP area may be reviewed in the project files (see the *Implementation, Operation, Restoration and Monitoring Plan* [SE GROUP, 2004 – Appendix F] for further detailed information on all roads within the SUP area).

Forest-Wide Late Successional Reserve Assessment - Mt. Baker-Snoqualmie National Forest

The objective of the *Forest-Wide Late Successional Reserve Assessment* (USDA, 2001) for the Mt. Baker-Snoqualmie National Forest was to “determine how well the portion of the LSR network” identified under the *Northwest Forest Plan* (USDA, USDI, 1994), “within the Mt. Baker Snoqualmie National Forest is functioning” (USDA, 2001, p. 1). The document is a mid-level planning document and is not project specific, nor is it a decision document. Along with a history and inventory of the overall condition of the Reserves and the associated species known to exist in the LSRs, the Assessment includes criteria for developing appropriate treatments and identification of specific areas that could be treated [following site-specific environmental analysis], along with a proposed implementation schedule and proposed monitoring and evaluation components.

Cultural Resources Technical Report

This document was prepared pursuant to Section 106 of the National Historic Preservation Act (NHPA), as implemented through the 1997 *Programmatic Agreement among the Forest Service Pacific Northwest Region, Advisory Council Historic Preservation, and the Washington State Historic Preservation Officer Regarding Cultural Resource Management on National Forests in the State of Washington (PA 1997)*. The Results are presented in the *Cultural Resource Investigations for the Summit at Snoqualmie* report (NWAA, 2004) for review by the SHPO, Tribes and interested persons [36 CFR 800.1(c)(1986)]. This report will include information collected from archival research, ethnohistorical and historical accounts, previous regional cultural resource investigations, informants, environmental documents and field investigations. The report provides recommendations for eligibility for the National Register of Historic Places (NRHP) and discusses the effects of the Proposed Action on historic properties.

All information gathered will be confidential and available only to appropriate Forest Service staff.

1.2.8.2 The Summit at Snoqualmie Planning Documents

The Summit at Snoqualmie Master Development Plan

The Summit at Snoqualmie Master Development Plan (Sno.engineering, Inc., 1998) was submitted to the Forest Service in August 1998. The MDP provides the basis for the existing ski facilities at The Summit at Snoqualmie, and provides detailed planning analysis of the proposed MDP components. Modifications to the existing conditions and the proposal have occurred since submittal to the Forest Service in 1998.

These revisions are addressed in Chapter 2 of this DEIS. Modifications to the MDP can be found in Appendix (see Appendix A – *Alternatives Considered and Modifications to the Summit at Snoqualmie MDP*).

1.2.8.3 Other Key Land Management Elements

Pacific Crest National Scenic Trail

The Pacific Crest National Scenic Trail (PCNST) is designated as part of the National Trails System. Section 7(a) of the 1968 Act established the relationship between the trail and the management of adjacent land:

“Management and development of each segment of the National Trails System shall be designed to harmonize with and complement any established multiple-use plans for that specific area in order to ensure continued benefits from the land.” (National Trails System Act – P.L. 90-543)

The selected management alternative in the *Comprehensive Management Plan for the Pacific Crest National Scenic Trail* (USDA, 1982) clarifies the relationship between the trail and management of adjacent lands and is consistent with Section 7(a) of the 1968 Act. Specifically pertaining to National Forest lands, the selected alternative states:

“The entire landscape and its scenic quality are important to the purposes of the Pacific Crest National Scenic Trail. Viewing and understanding resource management and other cultural activities are considered to be part of the normal character of the trail. The management of various resources will give due consideration to the existence of the trail and trail users within the multiple-use concept.” (USDA, 1982, p.17)

Management guidelines for public lands adjacent to the PCNST are also discussed in the *Comprehensive Management Plan for the Pacific Crest National Scenic Trail*. The management plan specifically states:

“Within Federal lands outside National Parks and Wilderness (57 percent of the trail) the trail must co-exist in harmony with all other resource uses and activities of the land as determined through the land management planning process. The trail will cross a mosaic of areas differing in primary management emphasis. This could be grazing, key wildlife habitat, special interest such as scenic or geologic, *Developed Recreation* [Emphasis Added], unroaded reaction, research, natural, or intensive timber management. Viewing and understanding this array of resources and management is one of the primary recreation opportunities to be made available over these portions of trail.....The agencies should look at this as an opportunity to explain the multiple-use concept....some resource activities may occur immediately adjacent to or across the trail, the agencies will protect the integrity of the trail proper by modifying management practices as needed. Timely

construction of and signing of temporary locations to avoid other resource activities....will do much to mitigate any negative feelings.” (USDA, 1982, p.22)

Some other management direction applicable to the PCNST in this area is outlined below:

- “In non-wilderness areas, manage to meet standards of the ROS zone that the trail passes through” (i.e., Developed Site - USDA, 1990a, p. 4-90).
- “Mountain bikes are not allowed on the PCT, as per Regional Forester closure notice, August 31, 1988” (USDA, 1990a, p. 4-90).
- “In the event of conflicts between the trail [PCNST] or its use, and the legislated purpose or planned objectives for these areas [i.e., developed recreation], the legislated purposes or area objectives will prevail” (USDA, 1982, p. 22).

1.3 DECISION FRAMEWORK

The USFS decision will be documented in a Record of Decision (ROD) signed by the Forest Supervisors of the MBSNF and the OWNF, who may elect to accept and authorize the Proposed Action or Action Alternatives analyzed in this DEIS, or adopt the No Action Alternative. The Forest Supervisors will decide which elements of each alternative will be permitted for development. The Forest Supervisors could approve all, part, or none of each element of the Proposed Action or alternatives to it.

The design of facilities, construction schedule and other details may then be addressed by routine submission of operational plans, but the actual decision would not be revisited once it is made.

The USFS assumes no responsibility for enforcing laws, regulations, or ordinances that are under the jurisdiction of other government agencies.

1.4 SCOPE OF THE PROPOSED ACTION

This DEIS analyzes the effects of developing new and expanded winter and summer developed facilities at The Summit at Snoqualmie, as described in the Purpose and Need section of this chapter. Five alternative plans for development of The Summit at Snoqualmie are analyzed, including a No Action alternative. If an action alternative is selected in the Record of Decision (ROD), it would serve as a Master Development Plan which would govern development of the ski resort for the next 10-15 years.

The scope of the DEIS is limited to the Proposed Action components analyzed in the range of alternatives.

1.5 SCOPING, SIGNIFICANT ISSUES, AND PUBLIC PARTICIPATION

The following sections present a description of the scoping process for The Summit at Snoqualmie's Proposed Action, issues raised through the public comment process, and the significant issues, as determined by the Forest Supervisors based on the scoping process.

1.5.1 Scoping and Public Involvement Process

Scoping is the process used to determine the scope of the environmental analysis to be conducted. It is used early in the NEPA process to identify, among other items: (1) the issues to be addressed; (2) the depth of the analysis; (3) alternatives to the Proposed Action; and (4) potential environmental impacts of the Proposed Action.

This DEIS has been developed with extensive public participation. Two informational meetings were held at the Cle Elum Ranger Station and the West Coast Bellevue Hotel on February 8 and February 10, 1999, respectively. These meetings had three purposes: (1) provide information to the public regarding The Summit at Snoqualmie's Proposed Action; (2) brief the public on the environmental analysis process used to decide which projects in the Proposed Action would be developed; and (3) allow the public to ask questions to the Forest Service and The Summit at Snoqualmie staff regarding the Proposed Action and the environmental analysis process.

The Notice of Intent (NOI) was published in the *Federal Register* on January 29, 1999. A scoping document was mailed to over 700 individuals, organizations, agencies and tribes; over 100 responses were received.

Additional public involvement activities included:

- Formal USFS correspondence with respective tribal leaders;
- Site tours by the ID Team and other interested agencies;
- A project update mailer mailed to scoping respondents, federal, state, and local agencies, and area Tribes (see Section 1.6.1 – Tribal Government Consultation for a detailed discussion about Tribal Government consultation).

**Table 1.5.1-1
Preliminary Issues**

Issue	How Addressed
Air Quality	
Would the project comply with the Clean Air Act?	Issue carried into Other Issues and addressed in Section 4.8 – Air Quality
What would be the effects on the Class 1 airshed of the Alpine Lakes Wilderness.	Issue carried into Other Issues and addressed in Section 4.8 – Air Quality
Soils	
What effect would the development of additional buildings, parking lots, ski lift/trails, including utilities, pipelines, etc. and associated tree/vegetation removal have on erosion/sedimentation?	Issue carried into Other Issues and addressed in Section 4.2 – Geology and Soils
Water Resources	
What effect would the project have on surface water quantity/quality as a result of runoff from parking lots and disturbed areas?	Issue carried into Other Issues and addressed in Section 4.3 – Watershed Resources
How much water is available for snowmaking purposes and what additional water rights are needed?	Issue carried into Other Issues and addressed in Section 4.3 – Watershed Resources
What effect would snow removal and potential fuel spills, etc. have on water resources?	Issue carried into Other Issues and addressed in Section 4.3 – Watershed Resources
Vegetation	
What effect would the proposal have on vegetation including Threatened and Endangered Species, and rare or sensitive plant species?	Issue carried into Significant Issues and addressed in Section 4.5 – Vegetation
What amount of disturbance to vegetation, by type, would be expected over the long-term?	Issue carried into Significant Issues and addressed in Section 4.5 – Vegetation
Wildlife and Fisheries	
What would be the specific impacts to Threatened and Endangered Species and wildlife Management Indicator Species (MIS)?	Issue carried into Other Issues and addressed in Section 4.6 – Wildlife
Would the project impact big game species in the area?	Issue carried into Other Issues and addressed in Section 4.6 – Wildlife
Would changes in water quality from potential increases in sediment/pollutants affect fish habitat and species?	Issue carried into Other Issues and addressed in Section 4.4 – Fisheries
Visual Resources	
What visual impacts would occur from additional development of parking lots, buildings, trails, lifts, etc., as seen from various viewpoints?	Issue carried into Other Issues and addressed in Section 4.15 – Visual Resources
How can existing visual quality be improved?	Issue carried into Other Issues and addressed in Section 4.15 – Visual Resources

**Table 1.5.1-1
Preliminary Issues**

Issue	How Addressed
Would the project comply with existing Forest Service Visual Quality Objectives (VQO's) for the area?	Issue carried into Significant Issues and addressed in Section 4.15 – Visual Resources
What would be the architectural design theme for the facilities? (Wilderness?)	Issue carried into Other Issues and addressed in Section 4.15 – Visual Resources
Heritage Resources	
Would the project affect the characteristics or use of historic properties listed or eligible for listing on the NRHP?	Issue carried into Other Issues and addressed in Section 4.9 – Heritage Resources and Reserved Treaty Rights
Would the project impact other heritage resources?	Issue carried into Other Issues and addressed in Section 4.9 – Heritage Resources and Reserved Treaty Rights
Treaty Resources and Tribal Interests	
Would the project impact areas, sites and/or streams that support treaty resources?	Issue carried into Other Issues and addressed in Section 4.9 – Heritage Resources and Reserved Treaty Rights
Recreation	
How would the proposal enhance recreational opportunities on a year-round basis?	Issue carried into Significant Issues and addressed in Section 4.11 – Recreation
What effects would the proposed project have on existing recreational opportunities, especially the backcountry skiing opportunity, the Denny Creek Recreational Area, and the Pacific Crest National Scenic Trail?	Issue carried into Significant Issues and addressed in Section 4.11 – Recreation
What specific impact would the project have on the Nordic Pass backcountry route?	Issue carried into Significant Issues and addressed in Section 4.11 – Recreation
How would recreational opportunities in the area relate to the new permit system for the Alpine Lakes Wilderness?	Issue carried into Significant Issues and addressed in Section 4.11 – Recreation
What impact would the proposed project have on the I-90 Greenway proposal?	Issue addressed in Section 4.11 – Recreation
Would the project provide recreational access for all people?	Issue addressed in Section 4.11 – Recreation
What are the potential impacts of the project on the wilderness (noise, air quality, visual resources, access, etc.)?	Issue carried into Other Issues and addressed in Section 4.15 – Visual Resources, Section 4.11 – Recreation, Section 4.16 – Noise, and Section 3.14 – Land Use
Would the project result in increased use of the wilderness?	Issue carried into Other Issues and addressed in Section 4.11 – Recreation
What effects would the project have on access to the wilderness (hiking, nordic/telemark skiing, etc.)?	Issue carried into Other Issues and addressed in Section 4.11 – Recreation
Socio-Economic	
Would the proposed project provide greater economic viability to the ski area and affect the economic stability of the surrounding community?	Issue carried into Other Issues and addressed in Section 4.10 – Social and Economic Factors

**Table 1.5.1-1
Preliminary Issues**

Issue	How Addressed
Would the project be consistent with the community planning direction identified by SNOPAC?	Issue carried into Other Issues and addressed in Section 4.14 – Land Use
What impact would the project have on highway maintenance (WA DOT) and the Snoqualmie Pass Sewer District?	Issue carried into Other Issues and addressed in Section 4.12 – Transportation and 4.13 - Utilities
Transportation	
Would sufficient parking be provided for all recreational users in the area?	Issue carried into Other Issues and addressed in Section 4.12 – Transportation
Would shuttle service be enhanced as a result of the project?	Issue carried into Other Issues and addressed in Section 4.12 – Transportation
Would the project impact vehicular circulation along roadways in the area?	Issue carried into Other Issues and addressed in Section 4.12 – Transportation
Land Use	
Would the project be consistent with management direction in the <i>MBSNF Forest Plan</i> , <i>WNF Forest Plan</i> , <i>Alpine Lakes Area Land Management Plan</i> , <i>SNOPAC Comprehensive Plan</i> , and other applicable land use plans?	Issue carried into Other Issues and addressed in Section 4.14 – Land Use
What effects would the project have on adjacent landowners, recreation clubs, etc.?	Issue carried into Other Significant Issues and addressed in Section 4.14 – Land Use
Would the project require the use of additional National Forest lands for parking, snowplay use, etc.?	Issue carried into Other Issues and addressed in Section 4.14 – Land Use
Would the project result in increased development on private lands within the area?	Issue carried into Other Issues and addressed in Section 4.14 – Land Use
Noise	
Would the proposal have noise impacts on the surrounding area?	Issue carried into Other Issues and addressed in Section 4.16 – Noise
Utilities	
Would the project impact the operation and maintenance of powerlines in the area?	Issue carried into Other Issues and addressed in Section 4.13 – Utilities
Would the proposal require the development of additional domestic water lines and storage facilities?	Issue carried into Other Issues and addressed in Section 4.13 – Utilities
Would the project require upgrading to the power supply system?	Issue carried into Other Issues and addressed in Section 4.13 – Utilities
Would the project require increasing the capacity of the sewage treatment plant?	Issue carried into Other Issues and addressed in Section 4.13 – Utilities
Would solid waste disposal needs increase as a result of the project?	Issue carried into Other Issues and addressed in Section 4.13 – Utilities

1.5.2 Significant Issues

NEPA requires federal agencies to focus analysis and documentation on the significant issues related to a proposed action. The IDT has identified the significant issues associated with the proposed action. These significant issues serve primarily as the basis for developing and comparing alternatives. While the EIS focuses on these significant issues, all issues identified through scoping are considered in the various resource analyses.

For each significant issue, a background statement has been prepared, along with a list of indicators (or measures), to be used in determining the effects of the alternatives. One of the purposes of this DEIS is to assess whether these effects would actually occur and, if so, define their nature and scope, as well as mitigation needed to avoid or minimize the effects.

1.5.2.1 Stream Channels and Floodplains

Issue: Potential exists for projects to impact stream channel and floodplain characteristics.

Background: The South Fork Snoqualmie and U. Yakima Watershed Condition Assessment describes the geomorphology of stream channels in the permit area and documents channel conditions and functions. Fire, debris flows, and other mass wasting events are natural disturbances influencing the condition of channels observed in the subwatershed. Anthropogenic influences from ski area development, timber harvest, and highway construction have further affected these streams.

Trends indicate a general improvement in channel conditions over historic conditions, but a number of desired future conditions (management goals) are not yet met. MDP proposals have the potential to further degrade channel conditions. For example, timber harvest, particularly in riparian areas, can weaken streambanks and reduce the Large Woody Debris (LWD) available to the streams. Increased vegetation removal, road construction, and slope modifications can concentrate water and increase the rate of runoff, resulting in subsequent increases in bank stress. The creation of near-stream erosion sources such as roads, regrade areas, and buried utility lines could result in increased sediment loading of streams and fish habitat.

Indicators: Length of stream channels with management concerns, changes in discharge, Large Woody Debris (LWD) recruitment potential, instream LWD, condition of riparian vegetation, substrate composition, floodplain connectivity, and types and extent of floodplain modifications.

1.5.2.2 Riparian Reserves

Issue: The proposed project has the potential to affect the extent and function of Riparian Reserves that are located within the ski area.

Background: The Upper South Fork Snoqualmie and Coal Creek Watershed Condition Assessment documented extensive alteration of designated Riparian Reserves within most of the permit area. Areas of Riparian Reserve that have been modified to a non-forest condition are as follows:

West Beaver: 68 percent; Ski Acres: 53 percent; Hyak Tunnel: 29 percent; Creek Run: 18 percent; Summit South: 59 percent; Source Lake: 32 percent; International: 44 percent; Upper Alpental: 27 percent; Summit North: 100 percent.

Indicators: (1) changes in the composition (acres) of vegetation within riparian areas resulting from alternatives, (2) changes in LWD within stream channels as well as LWD recruitment potential, (3) changes in stream shading, and (4) fragmentation and associated impacts on riparian dependent species (abundance and diversity).

1.5.2.3 Vegetation

Issue: The distribution and composition of vegetation communities would be altered as a result of the proposed ski area projects. The proposed projects may affect unique vegetation communities, such as wetlands, or special-status plants. Special-status plants include Proposed, Threatened, Endangered, and Sensitive vascular and non-vascular plant species.

Background: The permit area includes vegetation communities affected by human influence and other communities existing in a more natural condition. Timber harvests in the early and mid part of the 20th century, and ski area development have influenced the existing vegetation cover in portions of the permit area. Areas of “old growth” age (older than 180 years) forest with mature forest (older than 80 years) and smaller areas of relatively undisturbed subalpine forested and nonforested communities also occur in the permit area. Maintaining an adequate distribution of native vegetation cover supports other functions associated with vegetation cover (e.g., wildlife habitat, riparian processes, erosion control, and visual aesthetics).

Occurrence of the Forest Service Sensitive nonvascular plant species *Schistostega pennata* has been documented in the project area. The close association of this species with old-growth forests in the Pacific Northwest is an indication of specific ecological requirements and may reflect the inability of this species to become established or maintain viable populations in younger forests.

Methods of managing vegetation on existing trails and developing new trails are other elements that influence the distribution and composition of vegetation within the permit area.

Indicators: Acreage of vegetation communities by cover type, dominant forest species, and age class for forested species. Acreage of disturbance to unique vegetation communities such as wetlands, “old growth” age forest and special status vascular and non-vascular plant species.

1.5.2.4 Wetlands

Issue: The proposal would result in impacts to the number, size, and function of wetlands and their associated species within and adjacent to the project area.

Background: The *Snoqualmie Pass Adaptive Management Area (AMA) Plan* has identified wetlands along the crest as being high in plant species diversity. Some wetlands within the ski area have been altered through management activities. Wetlands are critical areas for numerous wildlife and plants species, many of which are rare, sensitive, or otherwise of concern. There are known sites of Forest Service sensitive plant species in wetlands and their associated riparian reserves adjacent to proposed projects.

Indicators: acreage and number of wetlands in the project area, acreage of effects to wetlands in the project area.

1.5.2.5 Wildlife Habitat Connectivity

Issue: The Proposal Action could impact wildlife habitat connectivity.

Background: The Snoqualmie Pass area has been identified in the *Snoqualmie Pass AMA Plan* as a Connectivity Emphasis Area (CEA). This CEA is considered critical for providing wildlife population and habitat connectivity within all elevation zones in the north central Cascades. Maintaining connectivity corridors is critical for the viability of subpopulations north and south of I-90 as documented in the Interagency Scientific Committee Report, *Northwest Forest Plan*, and the *Snoqualmie Pass AMA*. Within the AMA, Snoqualmie Pass is part of one of three potential connectivity corridors across Interstate-90. It is the only high elevation corridor across I-90 in the AMA and encompasses a different assemblage of plants and animals than is found in either of the other two corridors between Snoqualmie Pass and the eastern edge of National Forest lands.

Indicators: qualitative assessment of habitat connectivity for wide ranging species and low mobility species and its affect of species viability.

1.5.2.6 Wildlife Habitat Quantity and Quality

Issue: The Proposal Action could impact wildlife habitat quantity and quality through loss or conversion of habitat types or through an increase in the potential for disturbance from human activity.

Background: Existing habitat plays a role at both the micro and macro landscape scales. Habitat types include late successional, snags, LWD, riparian, cliff, talus, and non-forested. These habitat types may constitute an entire home range for some species or provide connectivity between habitat patches for others. Maintaining an adequate amount and distribution of habitat is essential to the viability of species found in the permit area. Projects proposed in the MDP may reduce the capability of the habitat of the identified species to function.

Several species of wildlife potentially occurring in the area are sensitive to human presence or are nocturnal. Increased human use, or use in new areas, may cause some species to avoid areas of otherwise suitable habitat. Also, the increased amount of area illuminated by night lighting may impact use of the permit area by nocturnal species. Artificial lighting may limit nocturnal species ability to forage and migrate.

Indicators: acreage of vegetation communities and existing wildlife habitats, acreage of habitat for special-status species qualitative assessment of potential impact to wildlife from construction and operation, including low mobility and wide ranging wildlife, qualitative assessment of the availability of coarse woody debris and snags.

1.5.2.7 Recreation

Issue: The development of additional Nordic and alpine return trails may negatively affect the existing dispersed recreation use of Nordic Pass. The Proposed Action may also affect the Alpine Lakes Wilderness and other dispersed recreation uses such as rock climbing. The Proposed Action would provide increased recreation opportunities for users of the ski area on a year round basis, within the existing permit boundary.

Background: Grooming of existing spur roads and openings for Nordic skiing and construction of return trails for alpine skiers and snowboarders would increase use of an area historically used by Nordic backcountry skiers accessing Nordic Pass and the Pacific Crest Trail system (south of I-90). The quality of the backcountry experience is based on solitude and increases in skier use may have an impact on this experience. The Nordic Pass route was built by volunteers on National Forest System lands within Section 16 as a safe place to go when avalanche activity in the area is high. Currently the trail is crossed in two places for connector trails, built by the ski area in order to connect Summit Central and Summit East. The Nordic Pass route is also crossed several times by groomed cross-country trails.

According to the 1998 Summit at Snoqualmie MDP, the facilities at the ski area need to be modernized in order to remain competitive and meet the public's demand for ski opportunities. In addition, the base area facilities do not adequately support existing or proposed visitation. As a result, base area crowding and long lift lines occur, degrading the quality of the guest's experience at The Summit at Snoqualmie during the skiing season.

The proposed increased use in the summer season at Alpental may affect Wilderness through increased use or other effects upon Wilderness along with affecting other dispersed users such as rock climbers.

Indicators: Qualitative effects of each alternative on existing and proposed recreation allocations, estimated amount and type of skier use in the area and qualitative effects of each alternative on dispersed recreation, projected visitation.

1.5.2.8 Socio-Economic

Issue: Implementation of the Proposed Action may have social and economic effects on areas and communities within and adjacent to National Forest lands.

Background: The anticipated increased use and capacity of the project area, as a result of the Proposed Action may result in increased traffic and use in the Snoqualmie Pass area. Emergency services, criminal activity, and traffic within the area may be affected. Emergency service providers (police, fire, medical) of King and Kittitas Counties and the state of Washington may also be affected. New facility construction, and increased recreation and visitor use of the ski area, could increase business activity in local and regional communities, providing additional income and employment throughout the area.

Indicators: population and economic characteristics of surrounding communities and other unincorporated population centers that may be affected by the project proposal (Snoqualmie Pass, Cle Elum, North Bend and Easton), market share of western Washington skiers (skier visits and other visits) and the origin of expected additional visits, Costs to local, county and State entities providing emergency, law enforcement and transportation services, total costs of mitigation measures and restoration projects, additions to infrastructure (roads, water, sewer, electric) and associated costs, financial viability of the ski area, effects on local employment and income during facility construction, effects on local (Snoqualmie Pass, Cle Elum, North Bend, and Easton) and Puget Sound area employment and income from increased spending by additional skiers; increased spending by the ski area for utilities, supplies and services; and increased spending by additional ski area staff, additional local, county, and State taxes generated.

1.6 GOVERNMENT AND INTERAGENCY COORDINATION

1.6.1 Tribal Government Consultation

The federal government has a trust and legal responsibility to American Indian tribes, which comes from commitments made by the United States in treaties, executive orders, and agreements. Upholding these tribal rights specified in the treaties, executive orders, statutes and agreements constitutes the federal government's legal responsibility. For the Forest Service, trust responsibilities are essentially those duties that relate to the reserved rights and privileges of Federally Recognized Indian Tribes as found in treaties, executive orders, laws and court decisions that apply to the national forests and grasslands. For Forest Service activities, the trust responsibilities are defined primarily by the authorities listed in FSM 1563.01 and by treaties that apply to specific areas of the National Forest System. Treaty rights on National Forest System lands are interpreted and applied by the court.

The Forest Service also has a responsibility to consult with Indian Tribes whenever its actions may affect them. In consulting with Tribes, including Government to Government consultation and/or consultation with traditional cultural or spiritual leaders, the Forest Service fulfills responsibilities that arise from the NEPA, NHPA, The American Indian Religious Freedom Act (AIRFA), the Native American Graves

Protection and Repatriation Act (NAGPRA), the Archaeological Resources Protection Act (ARPA), Executive order 13007 (Indian Sacred Sites) and E.O. 13084 (Consultation with Indian Tribal Governments).

As described in Section 1.5.1 – Scoping and Public Involvement Process, a Notice of Intent (NOI) was published in the *Federal Register* on January 29, 1999. A scoping document was mailed to Indian tribes, including the Lummi, Muckleshoot Indian Tribe, Nooksack, Sauk-Suiattle, Samish, Snohomish Tribe of Indians, Snoqualmie Tribe, Stillaguamish Board of Directors, Suquamish Tribal Council, Swinomish Indian Tribal Community, Tulalip, Yakama Indian Nation, and the Upper Skagit Tribe. No comments from these tribes were received by the USFS in response to the NOI or scoping mailer. As a result, no additional government to government consultation or informal meetings with the tribes has taken place.

1.6.2 Interagency Coordination and Consultation

Under NEPA regulations, any agency, other than the lead agency, that has jurisdiction or special expertise relative to a proposed action is to be a cooperating agency in the NEPA process, at the request of the lead agency. Any such agency may also request to be designated as a cooperating agency. The USFWS is a cooperating agency in this NEPA process.

U.S. Fish and Wildlife Service

The USFWS is a cooperating agency in this NEPA process and has Endangered Species Act (ESA) jurisdiction over non-marine fish, wildlife and plant species, such as the northern spotted owl and marbled murrelet, that are listed or proposed for listing as threatened or endangered. The Forest Service must consult with USFWS concerning the effects of proposed Forest Service actions on listed species and species proposed for listing under USFWS jurisdiction. Because endangered species concerns will be significant issues for the MDP EIS, the USFWS is a key participant in the NEPA process.

The USFWS will be involved in reviewing activities and technical contributions as well as participating in ESA functions. USFWS participation includes, but is not limited to the following specific activities:

- Review and comment on the MDP proposal
- Participation in IDT trips and IDT Meetings
- Review and comment on the draft study plan
- Provide technical advice on any field surveys for listed species, and on data collection and analysis for subjects within USFWS expertise
- Review and comment on the draft EIS
- Review the Biological Evaluation (BE) prepared by the Forest Service on the MDP Preferred Alternative, and provide a Biological Opinion (BO) in response

- Review and comment on the final EIS

Environmental Protection Agency

The EPA has national jurisdiction over water quality through the Clean Water Act. While specific responsibility for water quality programs in Washington has been delegated to the Washington Department of Ecology, the EPA maintains an active review role over regulatory activities and NEPA documents. The EPA will provide oversight in the preparation of NEPA documentation for The Summit at Snoqualmie MDP.

State Historic Preservation Officer and the Advisory Council on Historic Preservation

The Regional Forester has entered into a Programmatic Agreement with the Washington State Historic Preservation Officer and the Advisory Council on Historic Preservation regarding activities subject to Sections 106 and 110 of the NHPA (PA 1997). In accordance with the PA, the Forest Service must consult with the SHPO in the evaluation of properties that may be affected by an undertaking, and on determination of “No Adverse Effect”. The FS must consult with both the SHPO and ACHP on findings of “Adverse Effect”. If a previously unidentified property is discovered during project implementation, the Forest Service must provide the ACHP an opportunity to comment, which may involve consultation with the SHPO [PA 1997 III B(4) and (5)].

1.7 PERMITS, APPROVALS, AND CONSULTATIONS REQUIRED

Many Federal, State, and County laws and regulations affect development, land use, and operation of The Summit at Snoqualmie. The Summit at Snoqualmie is currently under a Special Use Permit (SUP) from the MBSNF, which authorizes the occupancy and use of the National NFSs. The Summit at Snoqualmie is required by its SUP to comply with all present and future State and local laws, ordinances, and regulations applicable to the area of its operations to the extent that they are not in conflict with Federal law or policy. The Forest Service assumes no responsibility for enforcing laws, regulations, or ordinances that are under the jurisdiction of other governmental agencies. The Summit at Snoqualmie must obtain all other required permits during design, development, and prior to expansion. Permits that may be required, among others, are outlined in Table 1.7-1.

**Table 1.7-1
Summary of Permits, Approvals and Consultation**

Agency	Action/Regulation	Description of Permit/Action
Federal		
U.S. Army Corps of Engineers (USACE)	USACE Permit under Section 404 of the Clean Water Act (U.S.C. 1344)	Authorization for discharge of dredged/fill material into wetlands and other waters of the U.S.
Environmental Protection Agency (EPA)	Clean Air Act, as amended, 42 U.S.C.A. Section 7410-762 (PL 95-604, PL 95-95) Federal Water Pollution Control Act, as amended by the Clean Water Act (U.S.C. 1344) Safe Drinking Water Act, 452 U.S.C.A. Section 300F-300J-10 (PL 93-523)	Provide review and comments on the “federal action.” Provide information and technical assistance in the environmental analysis.
U.S. Fish and Wildlife Service (USFWS)	Section 7 Consultation and Biological Opinion USACE Section 404 Permit Consultation	Protection of Threatened and Endangered Species (see Interagency coordination – Section 1.6.2). Consultation under the Fish and Wildlife Act.
State		
Washington Department of Ecology	Stormwater Permit	Control of stormwater discharges at construction sites.
Washington Department of Fish and Wildlife	Hydraulic Project Approval	Authorize development projects and in State waters (i.e., culverts).
Local		
King and Kittitas County Code Compliance	Building Permit	Authorize construction of buildings
Snoqualmie Pass Utility District (SPUD)	Utility Connection Permits	Hookups to water and sewer for new facilities proposed under the MDP.