

**TIMBERLINE SKI AREA  
ENVIRONMENTAL ASSESSMENT  
FOREST PLAN AMENDMENT #12**

**PROJECT LOCATION AND DESCRIPTION:**

The Salmon River watershed is 116 square-miles in area and is located to the west of the Cascade Range and to the south of Columbia River in north central Oregon. The Salmon River watershed drains from its headwaters on Mt. Hood 33 miles to its confluence with the Sandy river. Timber Lodge is located in the northeast portion of the Salmon River watershed.

*the ↓ and Ski AREA*  
Timberline Lodge and the Wy'east Day Lodge are publicly owned and operated by the RLK and Company under a Forest Service (USFS) Special Use Permit (SUP). The USFS is responsible for the management of all publicly owned buildings while RLK and Company owns and operates the ski facility in "partnership" with the USFS. RLK and Company, as operators of Timberline Lodge and Ski Area, are required as a condition of the SUP to prepare and submit changes in the Master Development Plan (MDP) and prepare and submit site and development schedule by December 31, 1998. This proposal includes individual projects that are either proposed and funded jointly by the USFS or by RLK and Company or individually. Under the proposed action, Timberline Ski Area's 1975 Master Development Plan (MDP) would be amended and updated to allow future upgrading of the facility. A programmatic decision would amend Timberline Ski Area's 1975 MDP to incorporate the Timberline Lodge Historic Building Preservation Plan as well as amend the Mt. Hood National Forest Land and Resource Management Plan to designate Timberline Lodge as a Special Interest Area (A-4 Land Allocation) from the existing Winter Recreation Area (A-11). In addition to the programmatic proposals, several site specific improvement projects to Timberline Lodge and Ski facility are proposed. A detail description to the proposed changes to the lodge can be found in the Timberline Ski Area Environmental Assessment Forest Plan Amendment #12.

Under the proposed action within the Timberline Lodge SUP area, one mile of pedestrian trail would be constructed and approximately one mile of an existing trail would be reconstructed. A single lane paved asphalt service road would be built. A segment of road located in the main Pucci and Upper Thunder ski trails would be obliterated and restored with native vegetation. In addition, a 10,000 square foot maintenance shop would be constructed south of the existing maintenance facility. A replacement parking lot would be built next to the proposed building site. The existing Salmon River parking lot would be paved and appropriate pollution control components would be installed (for a detailed description of the proposed projects, see Chapter II-Description of Alternatives in the EA).

**SPECIES DISCUSSION:**

Winter Steelhead  
(*Oncorhynchus mykiss*)

**HABITAT:**

Productive habitat for rearing salmonids contains adequate water quantity and quality, invertebrate food, cover and a diversity of water depths, velocities and substrate materials (Chapman and Bjornn, 1969). Native steelhead rear and spawn in most of the accessible reaches of the Sandy Basin and its tributaries. Primary habitat for winter steelhead is above Marmot Dam at river mile (RM) 30. Salmon River (below Final Falls) and Still Creek contain the highest quality habitat for winter steelhead. Glacial sediments in the Muddy Fork of the Sandy

## DOCUMENTATION FOR ENVIRONMENTAL BASELINE AND EFFECT OF PROPOSED ACTION ON RELEVANT INDICATORS

### ZIGZAG WATERSHED

The following information was gathered from the Zigzag River Stream Survey (Mt. Hood National Forest, 1991) and Zigzag Watershed Analysis (Mt. Hood National Forest, 1996).

#### Water Quality

### Timberline 6a

#### **Temperature: Properly Functioning.**

Zigzag stream temperatures measured in August and September of 1991 ranged between 42° and 49° with an average temperature of 47°.

#### **Sediment: At Risk.**

The 1988 Oregon Department of Environmental Quality assessment of nonpoint pollution indicates moderate problems with sediment and erosion for Camp Creek, Still Creek and Zigzag River. These problems are attributed to glacial runoff, unstable channels, loss of woody structure, road cuts, and highway sanding (WA, pg. 6-38).

#### **Chem. Contam./Nutrients: At Risk**

Salting of the Palmer snowfield appears to be causing increased levels of sodium and chloride in Still Creek. Conductivity and chloride levels are well above those for adjacent streams and the Bull Run River. Monitoring indicates that these levels are within EPA standards for acceptable levels of chloride concentrations. However, the levels appear to be above background levels with the potential to bring water quality above the range that benefits the biological, physical and chemical integrity of the system (WA pg. 6-39).

Additionally, there have been 8 incidents (six in 1993; two in 1994) of high fecal coliform discharges of short duration from sewage treatment effluent entering Camp Creek.

#### Habitat Access

#### **Barriers: Not Properly Functioning**

On the mainstem Zigzag, there is a natural series of barrier falls at river mile 9.0. Several tributaries to Still Creek have culverts that