

Mount Hood Wilderness Air Quality Report

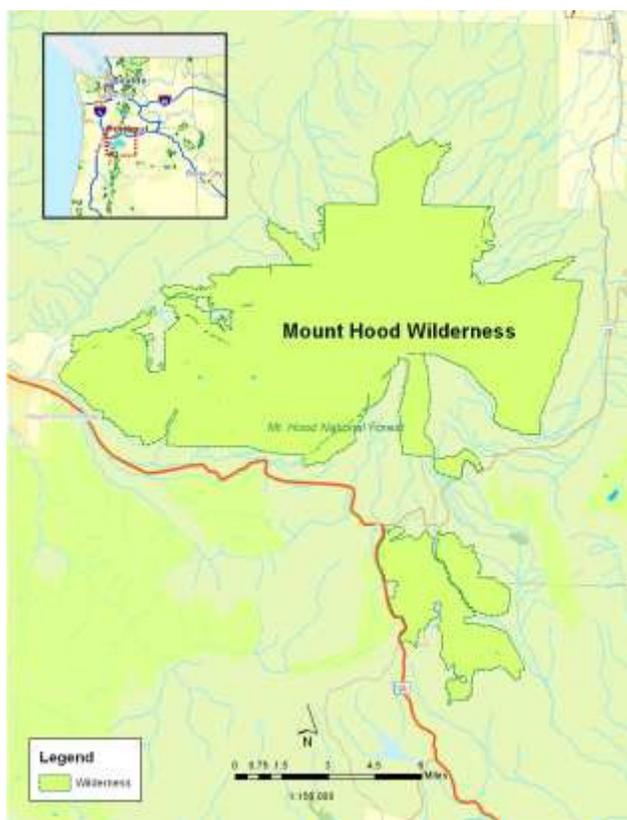
National Forest: Mount Hood National Forest

State: OR

Counties: Clackamas, Hood River, Wasco

General Location: Northern Oregon Cascade Range

Acres: 63,177



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Wilderness ID: 208

Wilderness Name: Mount Hood Wilderness

Wilderness Categories	Information Specific to this Wilderness
Year Established	1964
Establishment Notes	105-76, Endangered American Wilderness Act of 1978, The Wilderness Act of September 3, 1984
Designation	Clean Air Act Class 1
Administrative	Mount Hood National Forest
Unique Landscape Features	<p>Mount Hood, Oregon's highest summit at 11,240 feet, is a dormant volcano covered with 11 active glaciers. This snow covered peak lies at the heart of the Wilderness and is covered with forested slopes and alpine meadows. More than 10,000 climbers a year come seeking the top of the state, making Mount Hood's summit the most visited snowclad peak in America. The "easier" southside climbing route from Timberline Lodge is still a technical climb with crevasses to cross, falling rocks, and often inclement weather. Ropes, crampons and other technical gear is necessary. Climbing season is generally from April to mid-June due to melting snow and rockfall hazards later in the season. Fatalities on the mountain average at least one a year. Other routes on the mountain are much more difficult. Dormant but not dead, Mount Hood still vents sulfurous steam near the summit.</p> <p>Much of the area's annual precipitation of 150 inches falls as snow between October and April. A forest of Douglas fir covers much of the lower elevations, supported by an understory of Oregon grape, salal, rhododendron, and huckleberries (they ripen deliciously in August). More than a dozen waterfalls brighten river valleys that lie in the shade of the deep forest. Listen for the chirps and whistles of pikas and marmots on the rocky slopes at the tree line.</p> <p>The majestic and very popular Timberline Trail encircles the mountain for 38 miles, often crossing panoramic alpine meadows painted with summer wildflowers and through the many glacial creeks and rivers that flow from the mountain flanks. Crossing the unbridged glacial creeks and rivers during snowmelt in early to mid-summer, or when heavy or sustained rains fall, can be dangerous. Hikers should use caution and have a backup plan if rivers are too high to cross. At least 21 trails zig and zag their way through the Wilderness to join the Timberline Trail.</p>
Lakebed Geology Sensitivity	High
Lakebed Geology Composition	gneiss quartzite schist granite (4%), andesite dacite diorite phyllite (94%), amphibolite hornfels paragneiss undifferentiated metamorphic roc (2%), GC 1+2 (98%), GC 1+2+3 (94%), GC 4+5+6 (2%)
Visitor Use	Not reported in the database.
Mean Annual Precipitation	Not reported in the database.
Elevation Range	472 - 3416 (meters)
Mean Max Aug Temp	Not reported in the database.
Mean Min Dec Temp	Not reported in the database.
Lake Acres	9
Pond Acres	17
Lake Count	2
Pond Count	21

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TES Flora	Botrychium lanceolatum, Calamagrostis breweri, Calicium glaucellum, Cyphelium inquinans, Gastroboletus ruber, Gastroboletus subalpinus, Helvella crassitunicata, Hypogymnia oceanica, Leucogaster citrinus, Lobaria hallii, Lycopodium complanatum, Peltigera pacifica, Phlox hendersonii, Pseudocyphellaria rainierensis, Ptilidium californicum, Ramaria aurantiisiccescens, Tholurna dissimilis
TES Wildlife	Not reported in the database.
TES Fish	Not reported in the database.
Ozone Sensitive Plants	Blue elderberry, California black oak, Evening primrose, Jeffery pine, Mugwort, Ninebark, Ponderosa pine, Quaking aspen, Red alder, Red elderberry, Scoulers willow, Skunkbush, Thinleaf huckleberry
Air Quality Sensitive Lichens	Alectoria sarmentosa, Bryoria capillaris, Bryoria glabra, Bryoria trichodes, Cavernularia hultenii, Cladonia ochrochlora, Hypogymnia apinnata, Kaernefeltia merrillii, Nodobryoria abbreviata, Nodobryoria oregana, Parmelia squarrosa, Parmeliopsis ambigua, Parmeliopsis hyperopta, Platismatia norvegica
Cultural Resources	Not reported in the database.
Status/Trends: Acid Deposition:	Not reported in the database.
Status/Trends: Nutrient Enrichment:	Not reported in the database.
Status/Trends: Ozone Impacts:	Not reported in the database.

AQRV's

Fauna

Fauna Priority: Medium

Fauna Receptor: Fish

Fauna Indicator: Concentration of methyl mercury

Fauna Trends: Not reported in the database.

Fauna Actions:

Sample resident fish for mercury concentrations, particularly in the most heavily fished waters.

Flora

Flora Priority: High

Flora Receptor: Lichens

Flora Indicator: Changes in community composition

Flora Trends: Not reported in the database.

Flora Priority 2: High

Flora Receptor 2: Lichens

Flora Indicator 2: Concentrations of N, S, P, Cd, Cr, Pb, Hg, Ni, Ti, V and Zn

Flora Trends 2: Not reported in the database.

Flora Priority 3: Medium

Flora Receptor 3: Ozone

Flora Indicator 3: Visible injury on ozone-sensitive plants

Flora Trends 3: Not reported in the database.

Flora Actions:

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Repeat visits to lichen plots once every 10 years. While at plots, also survey sensitive vegetation for signs of injury due to ozone.

Visibility

Visibility Priority: High

Visibility Receptor: Scenic Views

Visibility Indicator: Regional haze

Visibility Trends: Decrease

Visibility Actions

An IMPROVE visibility monitor is located on top of Mt. Hood Ski Bowl (MOHO1), and a visibility camera is located at Timberline lodge. Refer to the Oregon Regional Haze Plan and IMPROVE monitoring reports for more details.

Water

Water Priority: High

Water Receptor: Water Chemistry

Water Indicator: ANC

Water Trends: Not reported in the database.

Water Priority 2: High

Water Receptor 2: Water Chemistry

Water Indicator 2: DIN: TP

Water Trends 2: Not reported in the database.

Water Priority 3: Medium

Water Receptor 3: Diatoms

Water Indicator 3: Community Composition

Water Trends 3: Not reported in the database.

Water Actions:

Repeat visit to Burnt Lake for ANC and nutrient ratios.

Challenge Points

Fauna Challenge Points: Not reported in the database.

Flora Challenge Points: 8

Total Plots: 9

Desired Plots: 3

Additional Plots Needed: -6

Data Type: Trends

Round 1 Visits: 8

Round 2 Visits: 6

Baseline %: 285

Trends %: 158

Visibility Challenge Points: Not reported in the database.

Water Challenge Points: 8