

## **Norse Peak Wilderness Air Quality Report**

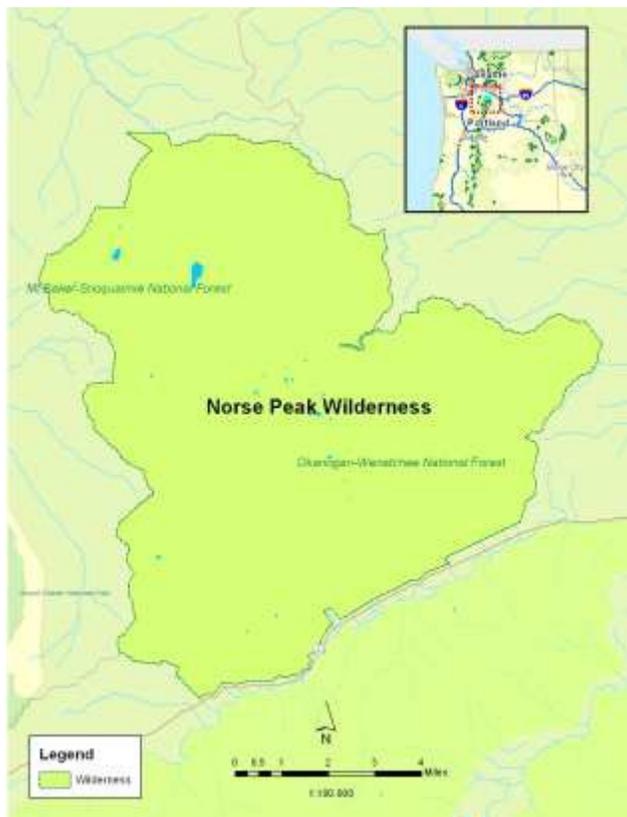
National Forest: Snoqualmie National Forest

State: WA

Counties: Pierce, Yakima

General Location: Central Washington Cascade Range

Acres: 52,315



# Norse Peak Wilderness Air Quality Report

Wilderness ID: 238

Wilderness Name: Norse Peak Wilderness

Wilderness Categories	Information Specific to this Wilderness
Year Established	1984
Establishment Notes	Washington State Wilderness Act of 1984
Designation	Clean Air Act Class 2
Administrative	Naches Ranger District, Okanogan-Wenatchee National Forests, White River Ranger District
Unique Landscape Features	<p>Just northeast of Mount Rainier National Park, Norse Peak Wilderness reaches down both sides of the crest of the Cascade Mountain Range. Narrow drainages below rockbound ridges slice deeply into the area, which opens here and there into scenic basins dotted with lakes. A typical western Cascades forest of Douglas fir, western hemlock, and cedar understoried with ferns and mosses characterizes the western side of the crest, giving way to mountain hemlock, subalpine fir, and lovely meadows before dropping down on the eastern side to drier country and a forest of larch, spruce, and pine. Remnants of the old gold-seeking days recall the past in the southwest corner: mine shafts, tailings, derelict cabins. The bold faces of Fifes Peaks in the southeast portion attract rock climbers. Only the corridor of State Highway 410 and the American River separate Norse Peak from William O. Douglas Wilderness to the south.</p> <p>Norse Peak (6,856 feet) anchors the southwestern boundary. Hike the 5.2-mile Trail 1191 (also known as the Norse Peak Trail) that leads to the summit and you will be rewarded with panoramic views. Carry water and you can pitch a tent on top and watch the sunrise. The Pacific Crest Trail (PCT) crosses the Wilderness in a north-south direction for about 27 miles. Other trails enter from all four sides of the Wilderness to join the PCT.</p>
Lakebed Geology Sensitivity	High
Lakebed Geology Composition	gneiss quartzite schist granite (2%), andesite dacite diorite phyllite (76%), basalt gabbro wacke argillite undifferentiated volcanic rocks (16%), amphibolite hornfels paragneiss undifferentiated metamorphic roc (6%), GC 1+2 (78%), GC 1+2+3 (94%), GC 4+5+6 (6%)
Visitor Use	Not reported in the database.
Mean Annual Precipitation	Not reported in the database.
Elevation Range	897 - 2109 (meters)
Mean Max Aug Temp	Not reported in the database.
Mean Min Dec Temp	Not reported in the database.
Lake Acres	77
Pond Acres	48
Lake Count	2
Pond Count	37
TES Flora	Calicium viride, Chaenactis thompsonii, Cladonia norvegica, Cudonia monticola, Cypripedium fasciculatum, Mycena monticola, Ptilidium californicum, Rhizomnium nudum, Schistostega pennata, Scribneria bolanderi
TES Wildlife	Gray Wolf, Northern Spotted Owl
TES Fish	Not reported in the database.

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Ozone Sensitive Plants	Thinleaf huckleberry
Air Quality Sensitive Lichens	Alectoria sarmentosa, Cavernularia hultenii, Hypogymnia apinnata, Hypogymnia occidentalis, Nodobryoria oregana, 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:*

Collect fish from most frequently visited lakes. Sample for mercury. While on-site also collect water samples.

### 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: Low

Flora Receptor 3: Ozone

Flora Indicator 3: Visible injury on ozone-sensitive plants

Flora Trends 3: Not reported in the database.

### *Flora Actions:*

Increase number of lichen plots from 2 to 3 to meet desired spatial density of one plot/20,000 acres. Conduct repeat visits to monitor trends at all three sites, once every 10 years.

### Visibility

Visibility Priority: Medium

Visibility Receptor: Scenic Views

Visibility Indicator: Regional haze

Visibility Trends: Not reported in the database.

### *Visibility Actions*

The nearest, most representative IMPROVE visibility monitor is located at Snoqualmie Pass (SNPA1). Refer to the Washington Regional Haze Plan and the IMPROVE monitoring reports for more information.

## **Water**

Water Priority: Medium

Water Receptor: Water Chemistry

Water Indicator: ANC

Water Trends: Not reported in the database.

Water Priority 2: Medium

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:***

Sample lakes for anions, cations, and nutrients.

## **Challenge Points**

***Fauna Challenge Points: Not reported in the database.***

***Flora Challenge Points: 5***

Total Plots: 2

Desired Plots: 3

Additional Plots Needed: 1

Data Type: Baseline

Round 1 Visits: 0

Round 2 Visits: 2

Baseline %: 76

Trends %: 0

***Visibility Challenge Points: Not reported in the database.***

***Water Challenge Points: Not reported in the database.***