

Diamond Peak Wilderness Air Quality Report

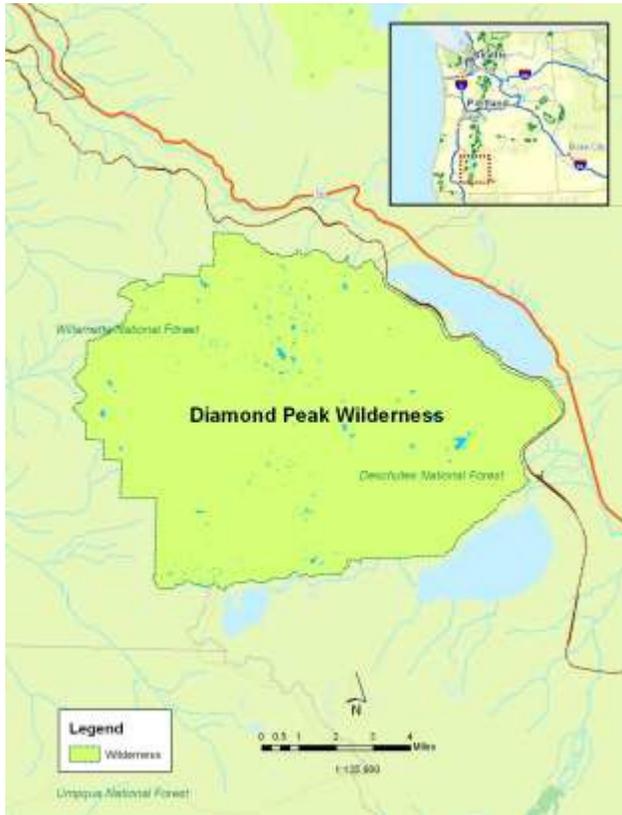
National Forest: Deschutes National Forest, Willamette National Forest

State: OR

Counties: Klamath, Lane

General Location: Central Oregon Cascade Range

Acres: 52,611



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Wilderness ID: 064

Wilderness Name: Diamond Peak Wilderness

Wilderness Categories	Information Specific to this Wilderness
Year Established	1964
Establishment Notes	Oregon Wilderness Act of 1984, The Wilderness Act of September 3, 1964
Designation	Clean Air Act Class 1
Administrative	Deschutes National Forest, Willamette National Forest
Unique Landscape Features	Great glaciers carved Diamond Peak after volcanic activity created the mountain. Today, at 8,744 feet, it surpasses every other summit in this region of the Cascade Mountains. Diamond Peak Wilderness, which straddles the crest of the Cascades, rests largely beneath a dense forest of mountain hemlock, lodgepole and western pine, and silver, noble, and other true firs. Snowfields remain most of the year in pockets above the tree line, and dozens of small lakes, one to 28 acres in size, bejewel the high country. Pikas and marmots scurry about the numerous scree slopes, along with Roosevelt elk, at least until November snows drive them out. Stinging hordes of mosquitoes hatch from the first of July through much of August. Excluded from Wilderness designation but on the eastern and southern boundaries you'll find three large scenic lakes: Summit, Crescent, and Odell.
Lakebed Geology Sensitivity	Low
Lakebed Geology Composition	andesite dacite diorite phyllite (57%), amphibolite hornfels paragneiss undifferentiated metamorphic roc (43%), GC 1+2 (57%), GC 1+2+3 (57%), GC 4+5+6 (43%)
Visitor Use	Not Reported
Mean Annual Precipitation	Not Reported
Elevation Range	1305 - 2651 (meters)
Mean Max Aug Temp	Not Reported
Mean Min Dec Temp	Not Reported
Lake Acres	135
Pond Acres	363
Lake Count	8
Pond Count	473
TES Flora	Agoseris elata, Albatrellus caeruleoporus, Allotropa virgata, Gastroboletus subalpinus, Lycopodiella inundata, Mycena overholtsii, RAMA10, Ramaria amyloidea, Ramaria rubrievanescens, Rhizopogon atroviolaceus, Scheuchzeria palustris, Tomenthypnum nitens, Utricularia minor
TES Wildlife	Bald Eagle, Gray Wolf, Northern Spotted Owl
TES Fish	bull trout
Ozone Sensitive Plants	Snowberry, Thinleaf huckleberry
Air Quality Sensitive Lichens	Alectoria imshaugii, Alectoria sarmentosa, Bryoria fremontii, Bryoria fuscescens, Bryoria glabra, Bryoria trichodes, Cladonia fimbriata, Cladonia ochrochlora, Hypogymnia apinnata, Hypogymnia occidentalis, Kaernefeltia merrillii, Nodobryoria abbreviata, Nodobryoria oregana, Parmelia squarrosa, Parmeliopsis ambigua, Parmeliopsis hyperopta, Vulpicida canadensis
Cultural Resources	Not Reported
Status/Trends: Acid Deposition:	Not Reported

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Status/Trends: Nutrient Enrichment:	Not Reported
Status/Trends: Ozone Impacts:	Not Reported

AQRV's

Fauna

Fauna Priority: Low
Fauna Receptor: Fish
Fauna Indicator: Concentration of methyl mercury
Fauna Trends: Not Reported

Fauna Actions:

Consider sampling fish for mercury at lakes which are frequented by humans or fish-eating wildlife.

Flora

Flora Priority: High
Flora Receptor: Lichens
Flora Indicator: Changes in community composition
Flora Trends: Not Reported
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
Flora Priority 3: Low
Flora Receptor 3: Ozone
Flora Indicator 3: Visible injury on ozone-sensitive plants
Flora Trends 3: Not Reported

Flora Actions:

Waiting for evaluation of trends. Continue to visit lichen plots at ten year intervals.

Visibility

Visibility Priority: High
Visibility Receptor: Scenic Views
Visibility Indicator: Regional haze
Visibility Trends: Decrease

Visibility Actions

The IMPROVE monitor at Crater Lake National Park represents conditions at this wilderness.

Water

Water Priority: Medium
Water Receptor: Water Chemistry
Water Indicator: ANC
Water Trends: Not Reported
Water Priority 2: Medium
Water Receptor 2: Water Chemistry
Water Indicator 2: DIN: TP

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Water Trends 2: Not Reported

Water Priority 3: Low

Water Receptor 3: Diatoms

Water Indicator 3: Community Composition

Water Trends 3: Not Reported

Water Actions:

Repeat visit to Diamond View Lake for ANC and nutrient ratios. Identify which water bodies are N-limited.

Challenge Points

Fauna Challenge Points: Not Reported

Flora Challenge Points: 8

Total Plots: 8

Desired Plots: 3

Additional Plots Needed: -5

Data Type: Trends

Round 1 Visits: 7

Round 2 Visits: 5

Baseline %: 304

Trends %: 152

Visibility Challenge Points: Not Reported

Water Challenge Points: 5