

Strawberry Mountain Wilderness Air Quality Report

Wilderness ID: 072

Wilderness Name: Strawberry Mountain Wilderness

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National Forest: Malheur National Forest

State: OR

Counties: Grant

General Location: Eastern Oregon

Acres: 69,568



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Wilderness Categories	Information Specific to this Wilderness
Year Established	1964
Establishment Notes	The Wilderness Act of September 3,1964, Oregon Wilderness Act of 1984
Designation	Clean Air Act Class 1
Administrative	Blue Mountain Ranger District, Malheur National Forest, Prairie City Ranger District
Unique Landscape Features	This high-country rugged Wilderness contains five of the seven major life zones in North America. Glaciation hollowed out beds in U-shaped valleys that today hold seven alpine lakes. Elevation ranges from about 4,000 feet to 9,038 feet atop Strawberry Mountain in the east-central portion. Large numbers of larch, the only conifer to lose its needles, turn to gold in fall, highlighting a forest of spruce, pine, and fir. Accenting the gold hues are wild strawberries that ripen to juicy redness in July, and mountain basins blooming with summer wildflowers. A native population of Rocky Mountain elk reside here with mule deer, antelope, black bears, cougars, mink, and beavers. Martens and hawks watch the wildlife action from on high.
Lakebed Geology Sensitivity	Medium
Lakebed Geology Composition	andesite dacite diorite phyllite (45%), basalt gabbro wacke argillite undifferentiated volcanic rocks (40%), amphibolite hornfels paragneiss undifferentiated metamorphic roc (15%), GC 1+2 (45%), GC 1+2+3 (85%), GC 4+5+6 (15%)
Visitor Use	Not reported in the database.
Mean Annual Precipitation	Not reported in the database.
Elevation Range	1233 - 2752 (meters)
Mean Max Aug Temp	Not reported in the database.
Mean Min Dec Temp	Not reported in the database.
Lake Acres	54
Pond Acres	5
Lake Count	5
Pond Count	5
TES Flora	Cymopterus nivalis, Helodium blandowii, Luina serpentina, Meesia uliginosa, Preissia quadrata
TES Wildlife	Not reported in the database.
TES Fish	Not reported in the database.
Ozone Sensitive Plants	Ponderosa pine, Scoulers willow, Snowberry, Thinleaf huckleberry, Western wormwood
Air Quality Sensitive Lichens	Not reported in the database.
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.

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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 from most frequently fished lakes. Collect water quality samples from same lakes during site visits.

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:

Need to add one more lichen plot (from 2 to 3) to obtain the 1 plot/20,000 acre spatial density. Lichens already collected need to be scored for community composition. Repeat visits once every 10 years. While on site, survey veg. for ozone injury.

Visibility

Visibility Priority: High

Visibility Receptor: Scenic Views

Visibility Indicator: Regional haze

Visibility Trends: Decrease.

Visibility Actions

The IMPROVE visibility monitor at Starkey (STAR1) is representative of this wilderness.

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: Low

Water Receptor 3: Diatoms

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Water Indicator 3: Community Composition

Water Trends 3: Not reported in the database.

Water Actions:

Obtain water quality samples from high elevation lakes. If sampling fish for mercury, collect water quality samples at these locations as well. Water should be analyzed for anions, cations, and nutrients.

Challenge Points

Fauna Challenge Points: Not reported in the database.

Flora Challenge Points: 4

Total Plots: 2

Desired Plots: 3

Additional Plots Needed: 1

Data Type: Baseline

Round 1 Visits: 0

Round 2 Visits: 2

Baseline %: 257

Trends %: 0

Visibility Challenge Points: Not reported in the database.

Water Challenge Points: Not reported in the database.