

# Neither Cascades nor Rockies, but With Attributes of Both

## Blue Mountains Ecoregion

Extending from Oregon's East Cascades Slopes and Foothills to the intersection of Oregon, Idaho and Washington, the 15.3 million acres of the Blue Mountains Ecoregion in Oregon are a conglomeration of mountain ranges, broad plateaus, sparse valleys, spectacular river canyons and deep gorges. The highest point is the Matterhorn that rises to 9,832 feet in the Wallowa Mountains. The ecoregion extends into southeastern Washington and west central Idaho.

Most of the mountain ranges in the Blue Mountains Ecoregion are volcanic. The Crooked River separates the Maury Mountains from the Ochoco Mountains, which are separated from the Aldrich Mountains by the South Fork John Day River. The Aldrich Mountains are separated from the Strawberry Mountain Range by Canyon Creek. These ranges generally run east-west. North of the Strawberry Range are the Blue Mountains themselves, which extend to the northern edge of the ecoregion. The Greenhorn Mountains are part of the Blue Mountains, but are sometimes described separately due to their unique geology. This is also true of the Elkhorn Range and the Wallowa Mountains, which are both ranges of intrusive granitic rocks that rise above the surrounding lava plains. Summit Ridge, over 50 miles long, is tall and rugged enough to be called a mountain range, but its precipitous drop into Hells Canyon causes one to think "canyon!" rather than "mountains." The ash from eruptions of Mount Mazama affected most of the ecoregion's soils.

Much of this ecoregion is tree-free. Most of its lower elevations are sagebrush-steppe and grasslands where the climate is too arid to support tree species. Where forests do occur at higher elevations, grand fir, lodgepole pine, Douglas-fir and ponderosa pine dominate, with Engelmann spruce and subalpine fir common at even higher elevations. The highest diversity of rare plants in the region is found in the Wallowa Mountains, an area generally unaffected by volcanism.

The region's various habitats are shaped by fire, with natural fire intervals ranging from frequent (ten to fifteen years) on the drier sites, to infrequent (100 to 300 years) in the cooler, wetter sites. Precipitation here ranges from nine to eighteen inches annually in the low valleys to 70 to 110 inches in the mountains. The growing season ranges

from 30 to 130 days depending on elevation. The forests are home to Rocky Mountain elk, mule deer, black bear, cougar, bobcat, coyote, beaver, marten, raccoon, fisher, pileated woodpecker, golden eagle, chickadee and nuthatch, as well as various species of hawks, woodpeckers, owls and songbirds. Wolves, long absent from Oregon, are making their return to the state in this ecoregion. Individuals from packs reintroduced in nearby Idaho are dispersing into Oregon. Fish species include bull and rainbow trout, along with numerous stocks of Pacific salmon species.

Depending on precipitation, aspect, soil type, elevation, fire history and other factors, one generally finds various combinations of Douglas-fir, ponderosa pine, lodgepole, western larch, juniper and Engelmann spruce throughout the Blue Mountains.

Beginning approximately at the Lower Deschutes River and rising eastward, the lower elevations of the Blue Mountains Ecoregion are a jumble of **Juniper/Low Sage**, **Juniper/Big Sage**, **Juniper/Mountain Big Sage**, **Juniper/Grassland** and **Juniper/Bitterbrush** woodlands.

At the mid-elevations are vast forests of predominantly **Ponderosa** pine. These park-like stands are threatened by logging, livestock grazing and fire suppression. Also found throughout the Ochoco, Blue and Wallowa Mountains are various types of forests associated with ponderosa, such as **True Fir/Douglas-fir**, **Ponderosa/Douglas-fir/True Fir**, **Douglas-fir/Ponderosa/True Fir** and **True Fir/Lodgepole/Western Larch/Douglas-fir**, which are all typically at higher elevations than **Ponderosa/Douglas-fir/Western Larch/Lodgepole** forests.

**Western Larch/Douglas-fir/Ponderosa/Lodgepole** stands are found in the heart of the Blue Mountains and on the lower slopes of the Wallowa Mountains. Also found in the Blue Mountains, sometimes as monocultures, are **Lodgepole** and **Subalpine Lodgepole**.

**Western Larch/Douglas-fir/True Fir** is found in the lower Grande Ronde River drainage. A variant of the Western Larch/Douglas-fir/True Fir and Western Larch/Douglas-fir/Ponderosa/Lodgepole forest is the **Lodgepole/Western Larch** type, which is found in limited areas in the Blue Mountains and Wallowa Mountains.

**Lodgepole/True Fir** is found west of the Elkhorn Range. In the absence of fire,

the grand fir (of the true firs) will eventually replace the lodgepole.

At higher elevations in the Wallowas, Elkhorns and Strawberry Mountains is the **Subalpine Fir/Engelmann Spruce Parkland**, the western outlier of a Rocky Mountain forest type. At the highest elevations, **Alpine Barren Fell Fields** are often snow-covered and usually, but not always, devoid of vegetation.

In the Hells Canyon and Grande Ronde areas are **Ponderosa/Grasslands** where ponderosa pine are usually in a mosaic of stringers among the grasslands. Another mosaic of vegetation is formed by the **Ponderosa/Shrub** community, found along the northwest edge of the Blue Mountains. Also scattered throughout the region, but most common in Hells Canyon are **Montane Shrublands**, where mountain mahogany, snowberry and serviceberry are the dominant plants.

Where there are **Marsh/Wet Meadows** in the Blue Mountains, tufted hairgrass and sedge usually dominate.

At some time in their existence, most forest communities will be set back to early successional forest and are classified as **Cutover/Burned** forest. This can occur naturally — from lightning-caused wildfires, native insect or disease events, or blow-down by wind — or unnaturally, by way of logging, human-caused fire, human-caused blowdown (due to unnatural and vulnerable forest edges caused by clearcuts), non-native disease and insects, or aggressive fire-fighting. Particularly troubling are “backburns,” where firefighters intentionally burn the forest in front of an oncoming wildfire. In many cases, the backburns are far more intense and destructive than the natural burn would have been.

Many of the roadless wildlands proposed for Wilderness protection in the Blue Mountain Ecoregion have been identified by The Nature Conservancy as vital to protect biodiversity in the area.

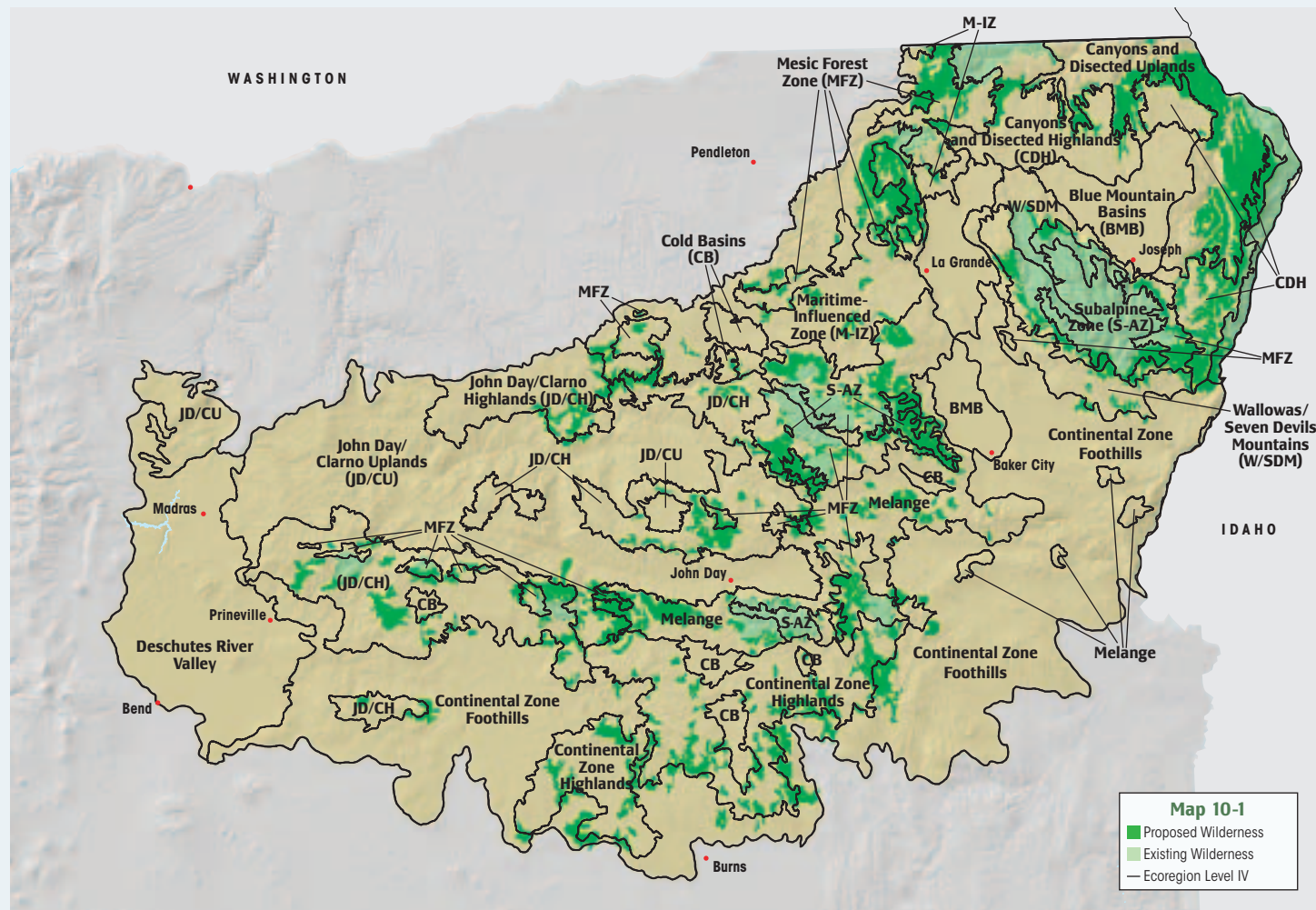
Currently, 51 percent of Blue Mountains Ecoregion in Oregon is publicly owned and managed by the federal government. All of the Ochoco, Malheur, Umatilla and Wallowa-Whitman National Forests, as well as the western portions of the BLM Vale, Burns and Prineville Districts lie within the region.

Currently there are ten Wilderness areas in Oregon’s Blue Mountains: Mill Creek, Bridge Creek, Black Canyon, Strawberry Mountain, Monument Rock, North Fork John Day, North Fork Umatilla, Wenaha-Tucannon, Eagle Cap and Hells Canyon. These comprise 5.3 percent of the ecoregion.

Conservationists propose ten additional multi-unit Wilderness areas for the ecoregion: Blue Mountains, Grande Ronde, Hells Canyon Additions, Malheur Basin, Malheur Canyons, North Fork John Day-Elkhorns, Ochoco Mountains, South Fork John Day, Upper John Day and Wallowa Mountains. If designated, a total 17.8 percent of the ecoregion would be formally protected as Wilderness.







The semiarid **John Day/Clarno Uplands** form a ring of dry foothills surrounding the western perimeter of the Blue Mountains. Highly dissected hills, palisades and colorful ash beds flank the valleys of the John Day and Crooked Rivers. This ecoregion has a continental climate moderated somewhat by marine influence. Juniper woodland has expanded markedly into the sagebrush-grassland during the 20th Century due to a combination of climatic factors, fire suppression and grazing pressure.

The low mountains of the **John Day/Clarno Highlands** are uniformly covered by ponderosa pine forest with a grass and shrub understory. The continental climate is tempered by a marine influence; it is not as dry, nor are temperature extremes as great, as in the Continental Zone

## Oregon's Blue Mountains Ecoregion

The Blue Mountains Ecoregion is a complex of mountain ranges that are lower and more open than the neighboring Cascades and Northern Rockies. Like the Cascades, but unlike the Northern Rockies, the Blue Mountains are mostly volcanic in origin. However, the core of the Blue Mountains and the highest ranges, the Wallowa and Elkhorn Mountains, are composed of granitic intrusives, deep sea sediments and metamorphosed rocks. Much of the Blue Mountains Ecoregion is grazed by cattle, unlike the Cascades and Northern Rockies.

Further refining the ecoregion, scientists divide Oregon's Blue Mountains Level III Ecoregion into fourteen Level IV ecoregions:

Highlands. Historically, frequent low intensity fires reduced fuel loading in forests of widely spaced old-growth ponderosa pine. Today, after years of fire suppression and high grade logging, land managers attempt to emulate historical fire regimes to reverse the trend toward dense thickets of young growth that carry hot, stand-replacing fires.

The **Maritime-Influenced Zone** is the portion of the Blue Mountains ecoregion that directly intercepts marine weather systems moving east through the Columbia River Gorge. In addition, loess and ash soils over basalt retain sufficient moisture to support forest cover at lower elevations than elsewhere in the Blue Mountains. A dense and diverse shrub layer grows beneath the relatively open canopy of ponderosa pine and Douglas-fir which may delay tree regeneration following logging.

The **Melange** ecoregion has a complex geology, composed of ocean sediments, granitic intrusions and metamorphosed sediments. Soils are droughty and high in magnesium, creating a poor medium for plant growth; reforestation problems limit logging. Placer mining for gold altered the structure of many stream channels and left extensive tailings piles in riparian areas.

The **Wallowas/Seven Devils Mountains** ecoregion occupies the mid-elevation zone between the Subalpine-Alpine Zone and the Continental Zone Foothills. It is not as complex geologically as the Melange ecoregion, although it is also composed of ocean sediments. The character of its xeric forest of ponderosa pine and Douglas-fir varies between moister maritime-influenced and drier continental areas, particularly in the diversity and extent of the shrub understory. Streams following fault lines have eroded deep canyons and mountain water is diverted or impounded for irrigation and drinking water.

In the **Canyons and Dissected Highlands** ecoregion the uplifted Columbia Plateau basalt has been eroded to a series of knife-edge ridges flanked by deep canyons. This ecoregion occupies the elevational zone above the unforested Canyons and Dissected Uplands; it is drier than the marine-influenced Mesic Forest Zone that exists at similar elevations to the west. Moisture retaining loess and ash soils support Douglas-fir, larch and grand fir on relatively level benches and Douglas-fir in unstable colluvial soils on steep canyon slopes. The steep terrain limits human activities.

In Oregon, the **Canyons and Dissected Uplands** include the Snake, Grande Ronde and Imnaha river canyons that have cut 2,000 to 5,000 feet through the Columbia Plateau basalt and underlying metamorphic rocks. Stony colluvial soils retain little moisture and support bunch grasses and arid land shrubs. Grazing and recreation occur in Hells Canyon National Recreation Area. The canyons provide a refuge for elk, bighorn sheep, mountain goats and a concentration of wintering bald eagles. Of the major historic Snake River salmon stocks, the coho and sockeye are extinct, the chinook are threatened and summer steelhead are in decline.

The mountainous **Continental Zone Highlands** experience seasonal temperature extremes and low annual precipitation. The predominant forest cover is ponderosa pine with a shrub or bunchgrass understory. As in the John/Day Clarno Highlands, frequent fires once influenced the open character of the forest. This ecoregion lacks a zone of true firs found in other highland areas in the Blue Mountains. Many of its perennial streams flow south to end in the alkaline basins of the High Desert Wetlands in the Northern Basin and Range.

The **Continental Zone Foothills** lie in the rainshadow of the Cascade Range and Blue Mountains. Plants experience wide temperature variations, high evapotranspiration rates and high early-season moisture stress in the continental climate of this ecoregion. The distribution of desert shrubs varies with soil depth, texture and elevation. Mountain mahogany and bitterbrush provide winter cover and forage for mule deer. Rodents, songbirds and upland game birds also use the fruits of bitterbrush.

The **Blue Mountain Basins** ecoregion includes the Wallowa, Grande Ronde and Baker valleys. All three valleys are fault-bounded grabens or depressions filled with sediments. The Wallowa and Grande Ronde valleys have a marine-moderated climate and moisture retaining loess soils. The Baker Valley, located in the rainshadow of the Elkhorn Mountains, is drier and has areas of alkaline soil. All three valleys receive stream flow from the surrounding mountains. Most of the floodplain wetlands have been drained for agriculture, but a remnant exists in the Grande Ronde Basin at Ladd Marsh National Wildlife Refuge.

The disjunct **Mesic Forest Zone** includes the highest forested areas in the western Wallowas and the Blue Mountains. This ecoregion is marine-influenced with higher precipitation than other forested Blue Mountains ecoregions (such as the John Day/Clarno Highlands, Melange and Mesic Forest Zone). The ashy soil holds moisture during the dry season and supports a productive spruce-fir forest. The boundaries of this ecoregion correspond to the distribution of true fir forest before the modern era of fire suppression and high grade logging.

The **Subalpine-Alpine Zone** begins where the forest cover becomes broken by alpine meadows and continues through alpine meadowland to include the exposed rock and snowfields of the highest mountain peaks. Subalpine fir, Engelmann spruce and white-bark pine tolerate the cold soils, deep snowpack and extremely short growing season near timberline. Historically, green fescue and sedges covered high alpine meadows and ridges particularly in the Wallowas; but, following intense sheep grazing in the early 20th Century, many alpine plant associations reverted to seral or exotic species on rocky subsoil.

The **Deschutes River Valley** is a broad intermountain sagebrush-grassland. The climate of this ecoregion has a marine influence and is not as arid as in the botanically similar High Lava Plains of the Northern Basin and Range to the southeast. Because of the proximity of the High Cascades to the west, stream density and water availability are high. As a result, human population density is much higher than in the High Lava Plains. Canals carry river water to irrigated farms on floodplains and terraces.

The **Cold Basins** ecoregion contains high, wet meadows. The high meadows are often alluvial and have a high water table and silt or clay soils. Streams, if not channelized, are meandering and have a dynamic interaction with their flood plains. These unconstrained streams provide pool habitats that are important to salmonids. The short growing season and saturated soil make these basins unsuitable for most crops, except hay, but they are heavily grazed by cattle and elk.

*Text gratefully adapted from Thor D. Thorson, Sandra A. Bryce, Duane A. Lammers, Alan J. Woods, James M. Omerik, Jimmy Kagan, David E. Pater, Jeffrey A. Comstock. 2003. Ecoregions of Oregon (color poster with map, descriptive text, summary tables and photographs). USDI-Geological Survey. Reston, VA (map scale 1:1,500,000).*



## Proposed Blue Mountains Wilderness

### Plateaus and Ridges, Canyons and Meadows, Elk and Fish

The proposed Blue Mountains Wilderness extends from near Fossil to the Washington border. The lands mainly drain northward and westward into the Umatilla River, Walla Walla River and Willow Creek basins. What doesn't drain into these three basins drains into the North Fork John Day River.

While this area includes some classic mountainous terrain, most of the proposed Wilderness is comprised of scenic narrow basalt ridges or plateaus that have been deeply incised and highly dissected by v-shaped stream valleys. Basalt outcroppings also dot the area. These dramatic elevational changes create dynamic microclimates that produce stringers of forests, brushfields and grasslands. Interstate 84 generally divides the drier southern from the wetter northern portion of the proposed Wilderness. In both parts, the cooler north-facing slopes include grand fir, Douglas-fir and other mixed conifers with some western larch. The warmer south-facing slopes feature open ponderosa pine, western juniper woodlands and grasslands. The higher elevations include subalpine fir. There are also occasional thick stands of lodgepole pine.

The Blue Mountains are centers of concentration of species rarity and endemism for both plants and animals. Numerous at-risk species live here, such as redband trout, wolverine, bull trout and several plant species, which prompted the Oregon Biodiversity Project to identify the Umatilla-Walla Walla Headwaters Conservation Opportunity Area as a priority for protection. In recognition of the important habitat for whitefish, bull trout, redband trout, spring chinook salmon and summer steelhead, the American Fisheries Society has also identified several aquatic diversity areas within the proposed Wilderness.

Almost 200 species of songbirds, birds of prey, wading birds and migratory birds can be found within the proposed Wilderness, including the three-toed woodpecker, black-backed woodpecker, pileated woodpecker, great gray owl, flammulated owl, western tanager, mountain bluebird, bald eagle and Steller's jay.

Rocky Mountain elk and mule deer are very common, as is the cougar that preys upon them. The proposed Wilderness contains large areas of both winter and summer range for these species. Other major mammal species include black bear, marten, bobcat and coyote. The proposed Wilderness is within a major wildlife corridor and contains habitat that could accommodate the return of lynx and wolf.

Recreational opportunities here include big game hunting, fishing, hiking, backpacking, birding, horseback riding, cross-country skiing or simply taking in the views.

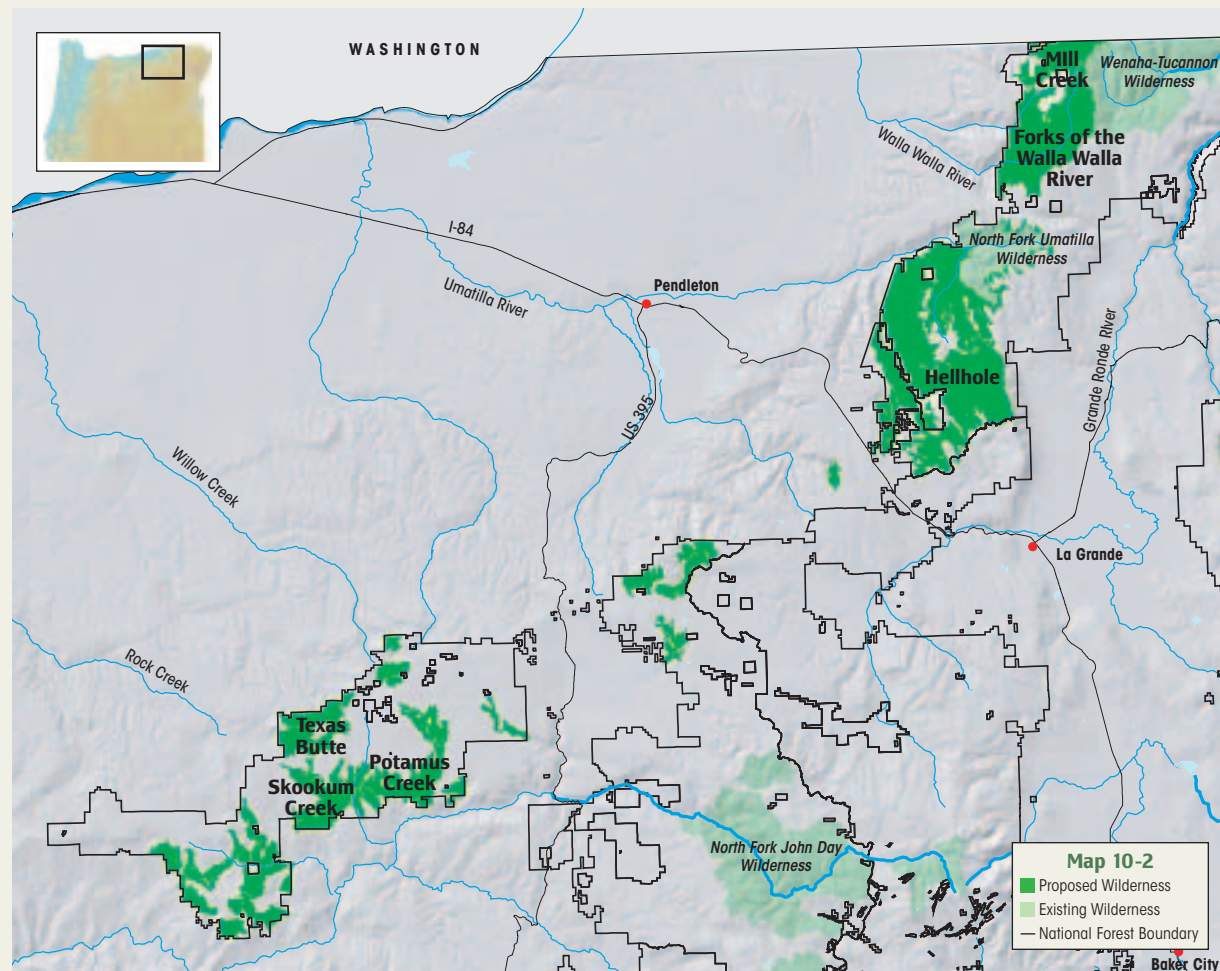
The South Fork of the Umatilla River in the proposed Blue Mountains Wilderness. ►

GEORGE WUERTNER





## Proposed Blue Mountains Wilderness



Some of the units of the proposed Wilderness are highlighted below.

The **Forks of the Walla Walla** unit is summarized on page 178.

**Hellhole** is far from being one, but one has to love the name. Rather, it is an oasis of “island-in-the-sky” forests and intimate enclosed canyons, and features magnificent views from its steep, grass-covered slopes. It includes the North Fork of Meacham Creek and the South Fork of the Umatilla River.

**Mill Creek** is closed to the public to protect the drinking water supply for the city of Walla Walla, except during elk hunting season. This unit extends into Washington.

**Potamus Creek** features bald eagles and is winter and summer range for big game. It is a center of concentration of species rarity and endemism for plants.

**Skookum Creek** contains the Utah thistle (*Cirsium utahense*), more common in the Great Basin desert.

**Texas Butte** is important summer range for Rocky Mountain elk and mule deer.

### LEVEL IV ECOREGIONS

Maritime-Influenced Zone (41%), Mesic Forest Zone (36%), John Day/Clarno Highlands (17%), John Day/Clarno Uplands (4%), Canyons and Dissected Highlands (1%), Canyons and Dissected Uplands (<1%), Subalpine-Alpine Zone (<1%); Columbia Basin Level III Ecoregion: Deep Loess Foothills (<1%)

### VEGETATION TYPES

Ponderosa (19%), Ponderosa/Douglas-fir/Western Larch/Lodgepole (16%), Western Larch/Douglas-fir/Ponderosa/Lodgepole (13%), True Fir/Douglas-fir (11%), True Fir/Lodgepole/Western Larch/Douglas-fir (9%), Ponderosa/Douglas-fir/True Fir (8%), Douglas-fir/Ponderosa/True Fir (7%), Juniper/Grasslands (5%), Ponderosa/Shrub (5%), Western Larch/Douglas-fir/True Fir (3%), Subalpine Fir/Engelmann Spruce Parklands (1%), Subalpine Lodgepole (1%), Big Sagebrush (<1%), Cutover/Burned (1%), Grasslands/Bunchgrass (<1%), Juniper/Mountain Big Sage (<1%), Lodgepole/Western Larch (<1%), Low Sagebrush (<1%), Montane Shrublands (<1%), Other Sagebrush (<1%), Ponderosa/Grasslands (<1%)

### DRAINAGE SUBBASINS

North Fork John Day, Umatilla, Walla Walla, Willow

### ELEVATION RANGE

1,798-5,780 feet

### UNITS

Black Mountain, Blue Kettle Ridge, Bologna Basin, Crow Ridge, Dark Canyon, Doghouse, Dry Creek, Five-mile Creek, Forks of the Walla Walla, Happy Jack, Hellhole, Horse Heaven Ridge, Horseshoe Ridge, Indian Creek, Jones Canyon, Jussard Creek, Keith Canyon, Kelly Mountain, Klondike Springs, Lane Creek, Mahogany Butte, Mill Creek, North Fork Umatilla Additions (North Headwaters Additions, South Headwaters Additions), Owsley Creek, Potamus Creek, Skookum Creek, Short Canyon, Sugarloaf Mountain, Tamarack Creek, Texas Butte, Thompson Falls, Thorn Spring, Tiger Creek, Turner Mountain, Upper Potamus Creek, West Birch Creek, Wildhorse Springs, Willow Springs

### EXISTING WILDERNESS INCORPORATED

North Fork Umatilla

### SIZE

253,770 acres (397 square miles, not including 20,435 acres of currently protected Wilderness)

### COUNTIES

Grant, Morrow, Umatilla, Union, Wallowa, Wheeler

### FEDERAL ADMINISTRATIVE UNITS

Umatilla and Wallowa-Whitman National Forests; BLM Prineville and Vale Districts

### CONGRESSIONAL DISTRICT

2nd

PROPOSED WILDERNESS

Blue Mountains

LOCATION

15 miles east-southeast of Milton-Freewater

LEVEL IV ECOREGIONS

Mesic Forest Zone (76%), Maritime-Influenced Zone (24%); Columbia Plateau Level III Ecoregion: Deep Loess Foothills (<1%)

VEGETATION TYPES

True Fir/Douglas-fir (56%), Western Larch/Douglas-fir/Ponderosa/Lodgepole (14%), Subalpine Lodgepole (8%), Ponderosa/Douglas-fir/Western Larch/Lodgepole (7%), Cutover/Burned (5%), Subalpine Fir/Engelmann Spruce Parklands (4%), Ponderosa/Douglas-fir/True Fir (3%), Western Larch/Douglas-fir/True Fir (2%), Douglas-fir/Ponderosa/True Fir (1%), Montane Shrublands (1%), Lodgepole/Western Larch (<1%)

TERRAIN

River canyons and high ridges.

DRAINAGE SUBBASIN

Walla Walla

ELEVATION RANGE

2,398-5,670 feet

SIZE

36,265 acres

COUNTIES

Umatilla, Wallowa

FEDERAL ADMINISTRATIVE UNITS

Umatilla National Forest (Walla Walla Ranger District); BLM Vale District (Baker Resource Area)

USGS 7.5' QUAD MAPS

Big Meadows, Bone Spring, Jubilee Lake, Tollgate

GEORGE WUERTNER



The Forks of the Walla Walla Unit of the proposed Blue Mountains Wilderness.

FEATURED UNIT

# Forks of the Walla Walla

A few miles upstream of Milton-Freewater, the North and South Forks of the Walla Walla River join to create the river's mainstem. About 12 miles up each fork is the boundary of the Umatilla National Forest, which is also the western boundary of the Forks of the Walla Walla unit.

The unit has deeply incised canyons with very steep slopes. The southern slopes include forested stringer draws interspersed with grasslands on the upper portions. Stands of ponderosa pine and mixed conifer dominate the lower elevations. On the north slopes are grand fir and mixed conifer at the lower elevations and subalpine fir at the higher elevations.

Mule deer and Rocky Mountain elk are numerous, as are hunters in the fall. White-tailed deer are also present. Upland game bird hunting is popular here. Streams support spring chinook salmon, summer steelhead, bull trout and redband trout, and also serve as the water supply for Milton-Freewater.

Classified as sensitive in Oregon and threatened in Washington, Sabin's lupine (*Lupinus sabinii*) probably grows in the unit, as it has been inventoried nearby.

There are over 35 miles of trails within the unit. A 30-mile multi-day backpacking trip is possible by descending from the headwaters of either the North or South Forks to near the western boundary where a connector trail crosses the ridge between them. After crossing a high divide, one then proceeds up the trail of the other fork. Unfortunately, at the end of this trip one must hike cross-country through some logged hillsides to return to one's point of departure.



Threats to the proposed Wilderness include off-road vehicles, mining, livestock grazing and the ever-present risk of logging.

## **Proposed Grande Ronde Wilderness**

# Wild Rivers, Beautiful Canyons, Elk-Filled Forests and Fish-Filled Streams

The proposed Grande Ronde Wilderness would protect stretches of the Grande Ronde River and its tributaries. Beginning at tiny Grande Ronde Lake at the north end of the Elkhorn Mountains, the Grande Ronde River cascades, twists and turns for 185 miles before joining the Snake River in Washington. After leaving the Blue Mountains, the river meanders through the pastoral Grande Ronde River Valley before entering the deep and rugged Grande Ronde Canyon with its dense coniferous forests and grasslands. Below the mouth of Wildcat Creek, the river canyon opens to exposed ridges and grasslands, then enters another rocky (and arid) canyon before reaching the Snake River. Along the way, the Wenaha (rhymes with “Imnaha”) River joins the Grande Ronde. A segment of the Grande Ronde, from its confluence with the Wallowa River to the Washington border, is a unit of the National Wild and Scenic Rivers System.

Major tree species here include Douglas-fir, ponderosa pine, western larch, lodgepole pine, grand fir and Engelmann spruce. Riparian species include mock orange, cottonwood and alder.

Rocky Mountain elk, mule deer, Rocky Mountain bighorn sheep and the less common (in eastern Oregon) white-tailed deer are the major game species found in the proposed Wilderness. Other mammals include black bear, cougar, coyote, marten, mink, muskrat, beaver, river otter and raccoon.

Bird species include bald eagle, golden eagle, peregrine falcon, northern goshawk, Cooper’s hawk, sharp-shinned hawk, great gray owl, blue grouse and ruffed grouse.

The Grande Ronde and tributaries is a center of concentration of species rarity and endemism for animals. The Oregon Biodiversity Project’s Joseph-Imnaha Plateau Conservation Opportunity Area includes extensive grasslands in and around the Joseph Creek portion of the proposed Wilderness. At least ten at-risk plant species, as well as wolverine and possibly lynx, are found in the area.

Recognizing important bull trout, redband trout, summer steelhead and spring/summer chinook habitat, the American Fisheries Society has identified several

Grande Ronde Lake in the unit of the same name in the proposed Grande Ronde Wilderness. ►





**LEVEL IV ECOREGIONS**

Mesic Forest Zone (32%), Canyons and Dissected Uplands (31%), Canyons and Dissected Highlands (21%), Maritime-Influenced Zone (15%), Subalpine-Alpine Zone (<1%), Blue Mountain Basins (<1%)

**VEGETATION TYPES**

Ponderosa/Grasslands (31%), Ponderosa/Douglas-fir/Western Larch/Lodgepole (22%), Western Larch/Douglas-fir/Ponderosa/Lodgepole (24%), Ponderosa/Douglas-fir/True Fir (8%), True Fir/Lodgepole/Western Larch/Douglas-fir (4%), True Fir/Douglas-fir (3%), Cutover/Burned (2%), Lodgepole/Western Larch (2%), Ponderosa (1%), Grasslands/Bunchgrass (1%), Lodgepole (<1%), Douglas-fir/Ponderosa/True Fir (<1%), Lodgepole/True Fir (<1%), Subalpine Fir/Engelmann Spruce Parklands (<1%), Subalpine Lodgepole (<1%)

**DRAINAGE SUBBASINS**

Upper Grande Ronde, Lower Grande Ronde

**ELEVATION RANGE**

1,604-7,532 feet

**UNITS**

Bally Mountain, Beaver Creek, Big Sink Ridge, Boner Gulch, Cottonwood Creek-Broady Creek, Courtney Creek, Davis Creek, East Fork Grande Ronde River, Five Points Creek, Fly Creek, Fly Ridge, Forks of the Walla Walla, Gordon Creek, Grande Ronde Canyon, Grande Ronde Lake, Huckleberry Mountain, Indiana Creek, Joseph Canyon, Joseph Creek, Jussard Creek, Klondike Springs, Limber Jim Meadows, Little Fly Creek, Little Lookingglass Creek, Little Phillips Canyon, Lookingglass Creek, Lower Beaver Creek, Meadow Creek, Moonshine Canyon-North Mount Emily, Mount Emily, Mount Emily Creek, Red Bridge, South Fork Cabin Creek, Starkey Creek, Sugarloaf Mountain, Sumac Creek, Tope Creek-Mud Creek, Upper McCoy Creek, Waucup Creek, *Wenaha-Tucannon Additions* (Wenaha River Headwaters), White Pine Knob, Whitehorse Ridge, Wildcat Creek, Yew Wood Springs

**EXISTING WILDERNESS INCORPORATED**

Wenaha-Tucannon

**SIZE**

234,641 acres (366 square miles, not including 66,417 acres of currently protected Wilderness)

**COUNTIES**

Grant, Umatilla, Union, Wallowa

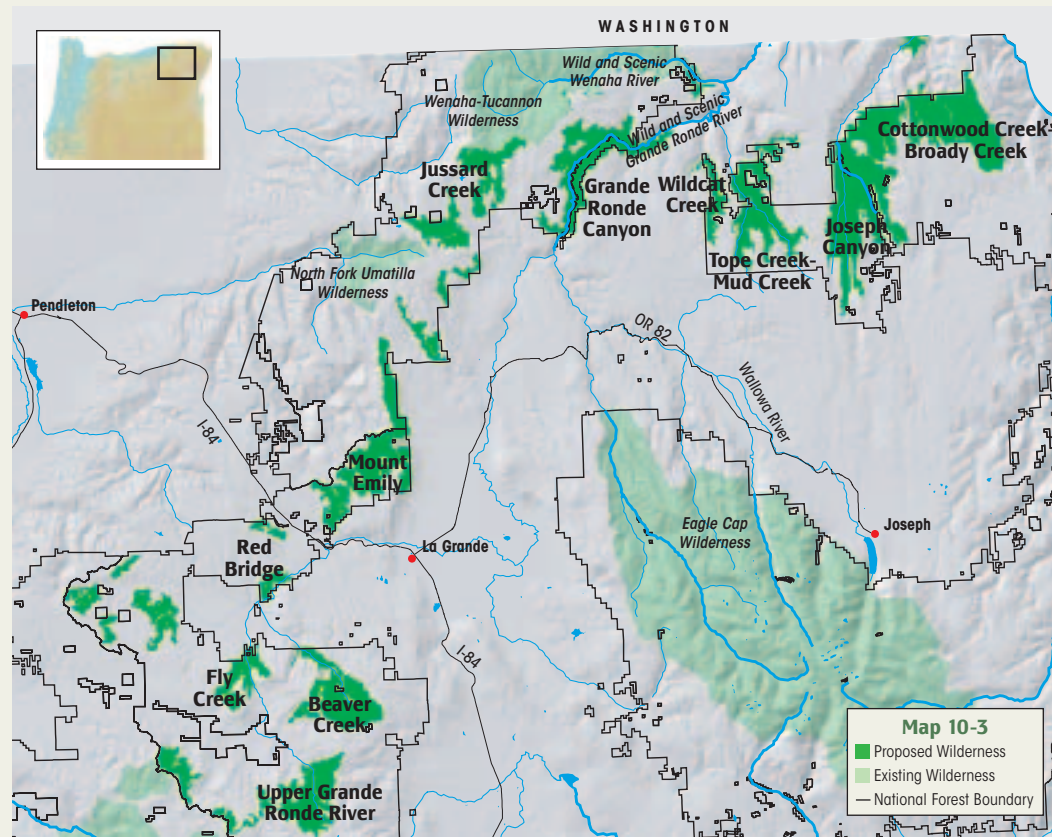
**FEDERAL ADMINISTRATIVE UNITS**

Umatilla and Wallowa-Whitman National Forests; BLM Vale District

**CONGRESSIONAL DISTRICT**

2nd

## Proposed Grande Ronde Wilderness



Some of the units in the proposed Wilderness are highlighted below.

**Beaver Creek** is a secondary water supply for the city of La Grande.

The unit's northwest-facing slope allows it to receive more precipitation than the surrounding forestlands. Old Glory, an 800-foot high precipice, overlooks the watershed that is also excellent marten habitat. The area is closed to livestock grazing.

**Grande Ronde Lake, Fly Creek and Red Bridge** all include free-flowing segments of the Grande Ronde River, as well as small streams, spruce bogs, springs and meadows.

**Grande Ronde Canyon** is the centerpiece of the Grande Ronde federal Wild and Scenic River and Oregon Scenic Waterway. It is heavily boated in the spring until water levels recede to impassable levels.

**Joseph Canyon** is featured on page 181.

**Mount Emily** provides fantastic views of and from the Grande Ronde Valley and Wallowa Mountains. *Oregon Geographic Names* cites two possible sources for the naming of Mount Emily. It was either named for a married Emily of great mass or for a single — but very popular — Emily loved by masses of young males from La Grande who often went up to mount Emily.

**Wenaha-Tucannon**

**Additions** units include roadless lands that should have been included in the adjacent Wilderness when it was designated in 1978. Although they are important habitat for spawning salmon and steelhead, as well as Rocky Mountain bighorn sheep, they were

not included because they contained some commercially valuable timber. Some of the lower Wenaha River is also included in the additions.

The North End units (**Wildcat Creek, Tope Creek-Mud Creek and Cottonwood Creek-Broady Creek**) are important tributaries to the lower Grande Ronde River, providing both habitat for spawning fish and clean, cold water to the mainstem.

LEON WEIDINGER



Joseph Creek in the Joseph Canyon Unit of the proposed Grande Ronde Wilderness.

## FEATURED UNIT

# Joseph Canyon

The 2,000-foot deep Joseph Canyon is a textbook example of Columbia River basalt being transformed by a down-cutting stream to create steep side slopes with exposed dikes and basalt layers.

Joseph Creek is a tributary to the Grande Ronde River. The portion of the creek that runs upstream for eight miles from the Wallowa-Whitman National Forest boundary is part of the National Wild and Scenic Rivers System. This management corridor, however, is narrow and does not adequately encompass — or protect — the unit's wildness. Spring and summer chinook salmon and summer steelhead spawn in the creek, where resident trout are also present.

On the wetter north- and east-facing slopes, the vegetation is classic stringer forests of Douglas-fir and ponderosa pine, which

meets open native bunchgrass grasslands on the drier south- and west-facing slopes. Precipitation here averages just 15 inches annually and it gets quite hot in the summer.

Rocky Mountain elk, Rocky Mountain bighorn sheep, mule deer, white-tailed deer and cougar are all found in the unit. Mink, muskrat, beaver, river otter and raccoon are common small mammals. Birds of note include both golden and bald eagles, northern goshawk, both Cooper's and sharp-shinned hawks, great gray owl and both blue and ruffed grouse.

Chief Joseph of the Nez Perce was born in Joseph Canyon, most likely in one of several caves near the mouth of Joseph Creek. Petroglyphs are found on the steep canyon walls.

Most visitors view this unit from the very impressive Joseph Canyon overlook on Oregon Highway 3. Those with more time can hike deep into the canyon on one of several trails. Backpacking, birding, kayaking, sightseeing and photography are other popular activities. However one experiences Joseph Canyon, it is a memorable experience.

## PROPOSED WILDERNESS

Grande Ronde

## LOCATION

5 miles southeast of Flora

## LEVEL IV ECOREGIONS

Canyons and Dissected Uplands (82%),  
Canyons and Dissected Highlands (18%)

## VEGETATION TYPES

Ponderosa/Grasslands (87%),  
Ponderosa/Douglas-fir/Western  
Larch/Lodgepole (9%), Cutover/Burned (3%),  
Ponderosa (1%), Western Larch/Douglas-  
fir/Ponderosa/Lodgepole (1%)

## TERRAIN

Deeply incised basalt canyons.

## DRAINAGE SUBBASIN

Lower Grande Ronde

## ELEVATION RANGE

2,497-4,968 feet

## SIZE

39,884 acres

## COUNTY

Wallowa

## FEDERAL

## ADMINISTRATIVE UNITS

Wallowa-Whitman National Forest  
(Wallowa Valley Ranger District); BLM Vale  
District (Baker Resource Area)

## USGS 7.5' QUAD MAPS

Roberts Butte, Shamrock Creek, Sled  
Springs, Table Mountain



aquatic diversity areas within the proposed Wilderness. Pacific lamprey also spawn in the area.

Recreational opportunities here include rafting, canoeing, big game and upland bird hunting, fishing, horseback riding, hiking, backpacking and sunning one's self at the edge of the river.

The proposed Wilderness is threatened by road building, logging, livestock grazing and mining. The Forest Service is currently using the "forest health" crisis as an excuse to road and log entire swaths of pristine, roadless forests.

## **Proposed Hells Canyon Wilderness Additions**

# Rocky Mountain Bighorn Sheep, Pacific Salmon, Deep Canyons and Long Trails

Hells Canyon is the deepest river gorge in North America.

Vast, rugged and stunningly beautiful, the landscape here is intoxicating. After visiting the Hells Canyon country, one is changed forever. More than merely picturesque, Hells Canyon is a landscape of critical ecological importance. Defined by the Snake and Imnaha (rhymes with "Wenaha") Rivers, the Hells Canyon country is one of Oregon's and the world's most wild, magical and remote places.

The proposed Wilderness features, in close proximity to one another, dense old-growth boreal forests, open bunchgrass slopes, lush stream zones with deciduous vegetation, alpine snowfields, desert lands with cactus, wildflower meadows and wet marshes.

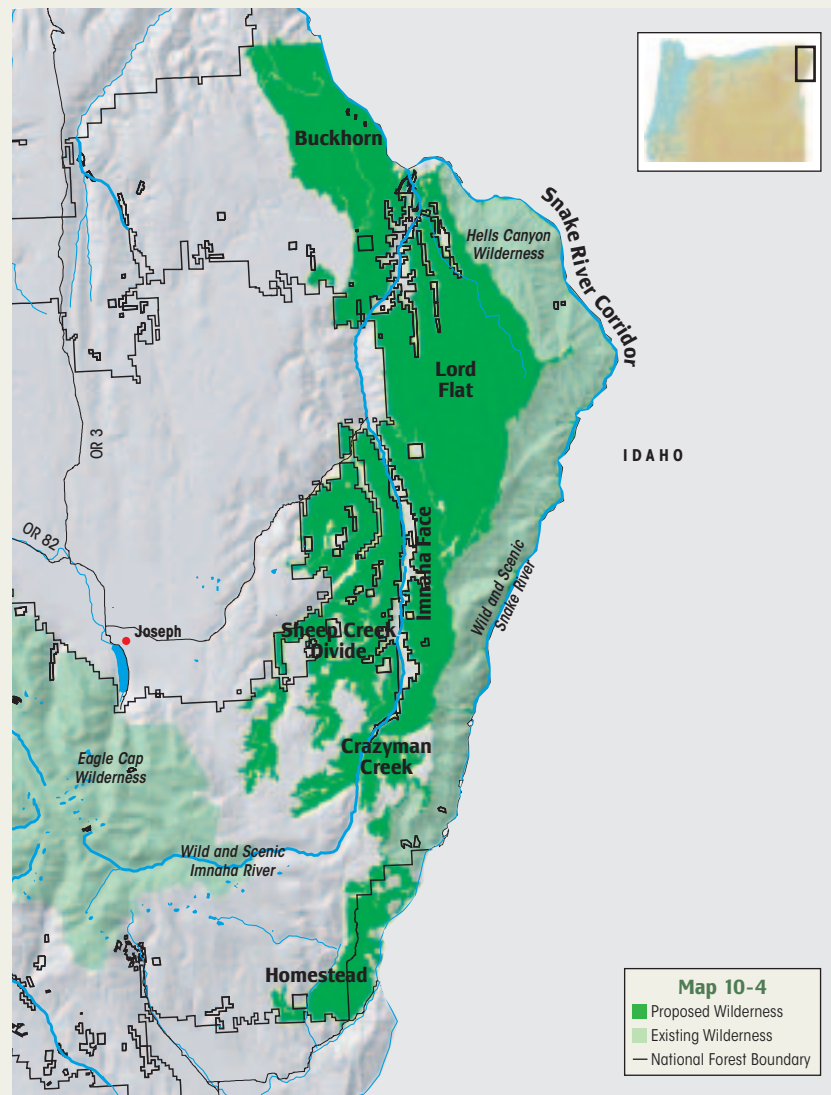
Though much of these wildlands is included in the Hells Canyon National Recreation Area, established by Congress in 1985, the designation offers less than full protection for the area that has, in fact, been badly mismanaged by the Forest Service. While Wilderness designation protects some of Oregon's side of Hells Canyon, Congress stopped short of designating the river itself as Wilderness and skipped entirely much of the adjacent wildland plateaus and canyons that continue into Idaho.

The Oregon Biodiversity Project's Joseph-Imnaha Plateau Conservation Opportunity Area includes the lower and middle Imnaha Canyon in the proposed Hells Canyon Wilderness Additions. It includes extensive grasslands both on public and private land. At least ten at-risk species of plants, as well as wolverine and possibly

A Wild and Scenic River designation alone has not protected the Snake River from motorized intrusion. The current Hells Canyon Wilderness boundary begins where the Snake Wild and Scenic River boundary ends. The Wild and Scenic corridor itself needs to be designated Wilderness. ►



## Proposed Hells Canyon Wilderness Additions



Some of the units in the proposed Wilderness are highlighted below.

**Buckhorn** includes over 20 miles of the free-flowing Snake River, four miles of the Imnaha River and several tributaries. It is now the state's only wildland that supports white sturgeon — some of which are 15 feet long.

At the south end of the 40-mile long Summit Ridge, tumbling **Crazyman Creek** feeds into the Imnaha River.

The **Homestead** unit has not one foot of hiking trail, but is home to beautiful old-growth Douglas-fir, ponderosa pine and bald eagles.

**Imnaha Face** lies between the Imnaha River and Summit Ridge and includes numerous tributaries that provide the river with very clean, cold water.

**Lord Flat** is featured on page 185.

When driving to Imnaha, many first time visitors mistake the knife-ridged and deep canyons of **Sheep Creek Divide** units for Hells Canyon or the Imnaha River Canyon.

The **Snake River Corridor** contains the wildlands within the Snake Wild and Scenic River corridor, adjacent to the existing Hells Canyon Wilderness. Wilderness designation for the river would finally end the use of loud, polluting jet boats.

### LEVEL IV ECOREGIONS

Canyons and Dissected Uplands (69%), Canyons and Dissected Highlands (27%), Continental Zone Foothills (4%), Mesic Forest Zone (<1%), Blue Mountain Basins (<1%)

### VEGETATION TYPES

Ponderosa/Grasslands (44%), Ponderosa/Douglas-fir/Western Larch/Lodgepole (20%), Grasslands/Bunchgrass (19%), Douglas-fir/Ponderosa/True Fir (10%), Western Larch/Douglas-fir/Ponderosa/Lodgepole (5%), Subalpine Lodgepole (1%), Cutover/Burned (<1%), Montane Shrublands (<1%), Ponderosa (<1%), Subalpine Fir/Engelmann Spruce Parklands (<1%)

### DRAINAGE SUBBASINS

Asotin, Hells Canyon, Imnaha, Pine

### ELEVATION RANGE

997-6,982 feet

### UNITS

Bear Gulch, Big and Little Sheep Creeks, Buckhorn, Chesnimus Creek Headwaters, Echo Canyon, Fish Creek, Gumboot Butte, *Hells Canyon Additions* (Buckhorn, Crazyman Creek, Homestead, Imnaha Face, Lord Flat, Snake River Corridor), Lake Fork Creek, Morgan Creek, North Cold Spring Mountain, North Fork Dry Creek, Stickney Gulch, Thomason Meadows

### EXISTING WILDERNESS INCORPORATED

Hells Canyon

### SIZE

313,017 acres (489 square miles, not including 131,133 acres of currently protected Wilderness)

### COUNTIES

Baker, Wallowa

### FEDERAL ADMINISTRATIVE UNITS

Wallowa-Whitman National Forest; BLM Vale District

### CONGRESSIONAL DISTRICT

2nd



**PROPOSED WILDERNESS**

Hells Canyon Additions

**LOCATION**

2 miles east of Imnaha

**LEVEL IV ECOREGIONS**Canyons and Dissected Uplands (78%),  
Canyons and Dissected Highlands (22%)**VEGETATION TYPES**Ponderosa/Grasslands (56%), Douglas-fir/Ponderosa/True Fir (29%),  
Grasslands/Bunchgrass (11%), Subalpine Lodgepole (4%), Montane Shrublands (<1%),  
Ponderosa/Douglas-fir/Western Larch/Lodgepole (<1%), Cutover/Burned (<1%)**TERRAIN**

Deeply dissected tablelands.

**DRAINAGE SUBBASINS**

Hells Canyon, Imnaha

**ELEVATION RANGE**

1,201-6,640 feet

**SIZE**

103,944 acres

**COUNTY**

Wallowa

**FEDERAL ADMINISTRATIVE UNIT**

Wallowa-Whitman National Forest (Hells Canyon Ranger District)

**USGS 7.5' QUAD MAPS**

Cactus Mountain, Deadhorse Ridge, Hat Point, Fingerboard Saddle, Lord Flat, Sleepy Ridge, Temperance Creek

ELLEN MORRIS BISHOP



The Lord Flat Unit of the proposed Hells Canyon Wilderness Additions.

**FEATURED UNIT**

## Lord Flat

By Oregon standards, the Lord Flat Unit is huge. It extends from the Imnaha River on the west to Summit Ridge (the west rim of Hells Canyon) on the east, from Hat Point on the south and to the Dug Bar “road” on the north. Lord Flat is a large plateau that declines gently at first and then precipitously for over a mile in elevation. The unit features Columbia River basalt (dramatically incised by deep canyons), lush meadows, knife-edged ridges, rimrock canyons, forested benches, old-growth ponderosa pine forests, marshes, rock outcroppings and grassland slopes.

Cow, Horse and Lightning Creeks, and their tributaries, are awesome spectacles, dissecting the upland plateau and providing

habitat for endangered spring and summer chinook salmon.

Rocky Mountain bighorn sheep, marten and peregrine falcon are a few of the rare species found in the unit. Rocky Mountain elk, mule deer and cougar are some of the area's other charismatic megafauna.

More than 100 miles of trails are available for horse and foot travel. The Western Rim National Recreation Trail follows Summit Ridge for over 30 miles. The Nee Mee Poo National Historic Trail is part of the route taken by Chief Joseph when he attempted to lead 400 of his people from the Wallowa Valley to Canada to escape the U.S. Army in 1877. After crossing the Snake River in spring flood (with horses, livestock, women, children and elders), fleeing 1,800 miles and engaging in 25 battles and skirmishes with up to 2,000 Army troops, the Nez Perce were finally captured within a mere 30 miles of the Canadian border in Montana.

ELLEN MORRIS BISHOP



From Jim Creek Butte in the Buckhorn Unit of the proposed Hells Canyon Wilderness Additions.

lynx, are found in the opportunity area.

The American Fisheries Society has identified several aquatic diversity areas within the proposed Wilderness, in recognition of the bull trout, redband trout, summer steelhead and spring/summer chinook salmon habitats. Pacific lamprey also spawn in the area.

Conservation biologists have identified Hells Canyon as one of the most critical areas for biodiversity in the western United States, linking the Northern Rockies with the Blue Mountains, the Cascades and Great Basin. Much of the proposed Wilderness addition along Summit Ridge is a center of concentration of species rarity and endemism for plants.

Major tree species here include ponderosa pine, subalpine fir, lodgepole pine, Engelmann spruce, Douglas-fir, western larch, grand fir, cottonwood and willow.

Over 350 species of wildlife, including 239 birds, 69 mammals and dozens of amphibians and reptiles can be found in the wildlands of Hells Canyon. Major predator species include cougar, black bear, bobcat, coyote, marten, fisher, lynx, river otter and occasionally wolf and grizzly bear.

The Hells Canyon ecosystem harbors the largest free-roaming Rocky Mountain elk herd in North America. (The Jackson Hole herd in Wyoming is human-fed.) Rocky Mountain bighorn sheep have been reintroduced, but are vulnerable to massive die-offs due to disease spread by domestic sheep that graze in the area.

Bird species of interest include both bald and golden eagles, northern goshawk, peregrine and prairie falcons, ferruginous hawk, great gray owl, western tanager, lazuli

bunting, probably spruce grouse and an endemic subspecies of gray-crowned rosy finch (*Leucosticte tephrocotis wallowa*). (See the proposed *Wallowa Mountains Wilderness*, pages 204-207.) Ruffed grouse are faring well here. Spruce grouse are trying to hang on but are suffering from logging and roading. Sharp-tailed grouse are trying to come back but are hampered by livestock grazing.

Thirty at-risk plant species are found in the Hells Canyon country, including some that are found nowhere else. The botanically diverse landscape includes the legally protected (though still vulnerable to livestock grazing) Macfarlane's four-o'clock (*Mirabilis macfarlanei*) and Snake River goldenweed (*Pyrrocoma radiata*). Prickly pear cactus (*Opuntia polyacantha*) is found in the driest parts of Hells Canyon.

Recreational opportunities include river rafting, big game and upland bird hunting, fishing, birding, hiking, backpacking, horseback riding and staring down into one of the deepest gorges on earth.

Roading, logging, livestock grazing, invasive weeds and off-road vehicles threaten to defile this vast and unique natural landscape.

## Proposed Malheur Basin Wilderness

### Redband Trout, Old Forests and Wet Meadows

The proposed Malheur Basin Wilderness lies within the Silver Creek and Silvies River basins. Silver Creek drains into Harney Lake, while the Silvies River flows into Malheur Lake. During periods of high water, Malheur Lake subsumes Harney Lake to become Oregon's largest lake. The two basins are at the northern edge of the Great Basin, a huge expanse of the western United States that has no outlet to an ocean.<sup>1</sup>

The primary life zone of the proposed Wilderness is lower montane forest. At the highest elevations and on cooler north and east slopes are mixed conifer stands of Douglas-fir, western larch and grand fir. On the drier south- or west-facing slopes, ponderosa pine is the dominant species. Often lodgepole pine is also present. At middle to lower elevations, where the forest transitions to sagebrush-steppe, one finds open park-like stands of large ponderosa pine. This species is known for its distinctive orange-red (also known as "yellow-bellied"), jigsaw plate bark. The ponderosa pine understory is often bitterbrush, snowberry and/or bunchgrass. Where the pine gives way to the desert, western juniper is common. Large sagebrush prairies are also common, sometimes interspersed with wet meadows, mountain grasslands and scablands. Hardwoods such as willow, quaking aspen, black cottonwood and alder are



**LEVEL IV ECOREGIONS**

Continental Zone Highlands (65%), Continental Zone Foothills (28%), Cold Basins (5%), John Day/Clarno Uplands (2%); Northern Great Basin Level III Ecoregion: High Lava Plains (<1%)

**VEGETATION TYPES**

Ponderosa (66%), Ponderosa/Shrub (8%), Juniper/Grasslands (7%), Juniper/Mountain Big Sage (6%), Low Sagebrush (6%), Big Sagebrush (5%), Cutover/Burned (3%), Juniper/Big Sage (<1%), Juniper/Low Sage (<1%)

**DRAINAGE SUBBASINS**

Silvies, Silver Creek

**ELEVATION RANGE**

4,255-6,695 feet

**UNITS**

Badger Canyon, Black Rock, Bulger Creek, Calamity Butte, Chapin Table, Chickahominy Creek, Coffeepot Creek, Cow Creek, Devine Canyon, Dipping Vat Creek, Dry Mountain, Emigrant Creek, Garret Basin Spring, Gibbons Mill Canyon, Gradon Canyon, Green Butte, Hay Creek, House Creek, Hughet Valley, Johnnie Creek, King Mountain, Linda Driskil, Link Bar Spring, Lost Creek, Lower Buck Mountain, Lower Divine Canyon, Mineral Canyon, Myrtle Creek-Silvies River, Myrtle Park Meadows, Parasol Butte, Pine Spring Basin, Professor Spring, Rail Creek, Rice Spring, Sage Hen Creek, Sawtooth Creek, Scotty Creek, Sharff Cabin Creek, Silver Creek, Stancilffe Creek, Stinger Creek, Sundown Ridge, Upper Jump Creek, Upper Mill Creek, Upper Mountain Creek, West Fork Silvies River

**EXISTING WILDERNESS INCORPORATED**

portion of Strawberry Mountain

**SIZE**

143,191 acres (224 square miles, not including 1,794 acres of currently protected Wildernesses)

**COUNTIES**

Crook, Grant, Harney

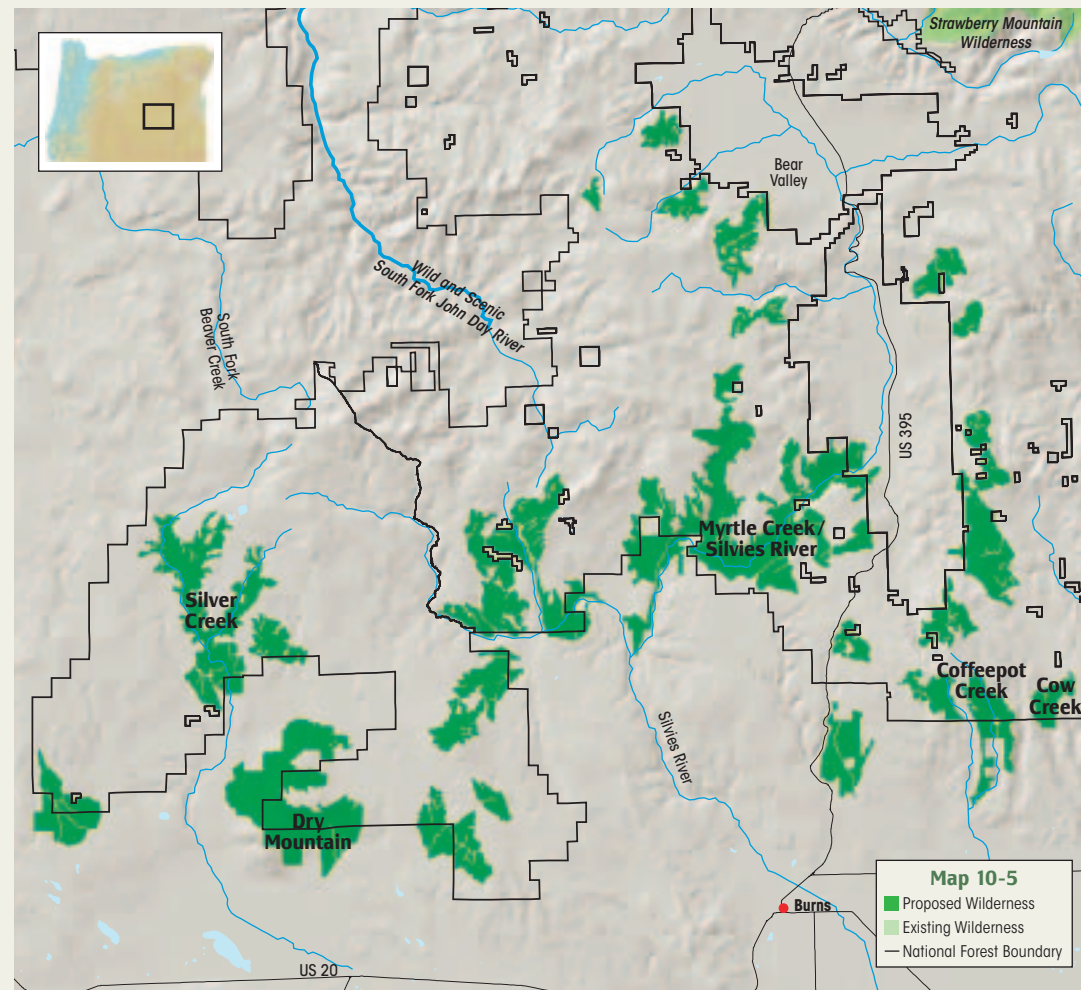
**FEDERAL ADMINISTRATIVE UNITS**

Malheur and Ochoco National Forests; BLM Burns District

**CONGRESSIONAL DISTRICT**

2nd

## Proposed Malheur Basin Wilderness



Some of the units in the proposed Wilderness are highlighted below.

The **Coffeepot Creek** and **Cow Creek** units support a wintering population of bald eagles. The eagles roost in old-growth ponderosa pine along the streams and hunt in the wetlands of the Malheur Lake Basin to the south.

**Dry Mountain** is of scientific interest for its various combinations of western juniper, big sagebrush, bitterbrush, ponderosa pine, mountain mahogany, bunchgrass, big sagebrush and bluebunch wheatgrass.

The **Myrtle Creek-Silvies River** unit is featured page 187.

**Silver Creek** features gently sloping plateaus dissected by steep canyons partially rimmed by rock outcrops. Eleven distinct plant communities are found in the unit, including moist meadows, various sagebrush communities, ponderosa pine and mixed conifer communities. Soda Spring is an interesting geological feature with algae growth that is greater than in other springs located throughout the Malheur National Forest. Patches of riparian vegetation in the unit are in excellent condition.



The Silvies River in the Myrtle Creek-Silvies River Unit of the proposed Malheur Basin Wilderness.

## FEATURED UNIT

# Myrtle Creek-Silvies River

This unit contains two 600-foot deep canyons that are approximately a mile wide at the top and 50 to 200 feet wide at the bottom. Some of the steep slopes are a series of benches, while others are smooth from top to bottom. Prominent rock outcroppings are abundant. The plateau tablelands atop the canyon rims are composed of a resistant 30- to 50-foot thick cap of welded tuff. Below the cap is a 40- to 60-foot layer of ash. Below that is a layer of hard basalt that forms ledges. And below that is another layer of welded tuff and another ash deposit. These layers are all water permeable, except the basalt. Wherever the water finally reaches an impermeable layer of basalt,

a spring forms. The remaining 400 to 500 feet of canyon wall is a series of tuffaceous layers. While geologically interesting, the unit is also very beautiful.

About seven-tenths of the unit is forested with old-growth ponderosa pine, including some specimens up to seven feet in diameter at the base. Douglas-fir and western juniper are the other prevalent tree species. Mountain mahogany is also present. Understory species include sagebrush, bunchgrass and wildflowers.

Rocky Mountain elk thrive in the area year-round. Mule deer use the unit in spring, summer and fall. Black bear and bobcat roam the forest, while Canada geese may be found along the streams. Prairie falcon and turkey vulture patrol the skies above.

Recreational opportunities here include fishing, big game hunting, picnicking and hiking. Trails are gently sloped and easy going. The Silvies River may be successfully boated at spring flood. In summer, the water levels drop and fishing or lounging along its banks are the best recreation.

**FEATURED UNIT**  
Myrtle Creek-Silvies River

**PROPOSED WILDERNESS**  
Malheur Basin

**LOCATION**  
20 miles south-southwest of Seneca

**LEVEL IV ECOREGIONS**  
Continental Zone Highlands (87%),  
Continental Zone Foothills (13%)

**VEGETATION TYPES**  
Ponderosa (82%), Low Sagebrush (14%),  
Cutover/Burned (4%), Juniper/Grasslands (<1%)

**TERRAIN**  
Deep canyons.

**DRAINAGE SUBBASIN**  
Silvies

**ELEVATION RANGE**  
4,400-5,870 feet

**SIZE**  
17,121 acres

**COUNTIES**  
Grant, Harney

**FEDERAL ADMINISTRATIVE UNITS**  
Malheur National Forest (Emigrant Creek  
Ranger District); BLM Burns District (Three  
Rivers Resource Area)

**USGS 7.5' QUAD MAPS**  
Landing Creek, Mosquito Flat, Myrtle Park  
Meadows, West Myrtle Butte





BLUE MOUNTAINS ECOREGION





The Oregon Basin redband trout (*Oncorhynchus mykiss newberrii*) has strongholds in the proposed Malheur Basin Wilderness.

found in the riparian zones.

White-headed woodpecker, northern goshawk and pygmy nuthatch are common residents of the ponderosa pine forests. In the higher forests, three-toed woodpecker, snowshoe hare and golden-crowned kinglet are common. Vesper sparrow, Ord kangaroo rat and the Great Basin pocket mouse inhabit the juniper, sage and grassland plant communities. In the wetter open areas, one may see sandhill cranes, while in the open drylands, upland sandpipers may be found. Other major bird species include pileated woodpecker, black-backed woodpecker, flammulated owl and bald eagle.

Mule deer and Rocky Mountain elk are the most visible large mammals in the proposed Wilderness. Other mammals include black bear, cougar, marten, fisher, wolverine, bobcat, beaver and northern flying squirrel. Pronghorn numbers are increasing in the open sagebrush. Most of the units in the proposed Malheur Basin Wilderness are within a center of concentration of species rarity and endemism for animals.

The Oregon Biodiversity Project has identified an area of extensive wetlands located primarily on private lands as the Bear Valley Conservation Opportunity Area. Adjacent publicly owned roadless uplands in the proposed Wilderness contribute significantly to the water quality and quantity in these wetlands and to their continued function and restoration. In recognition of important redband trout habitat in the area, the American Fisheries Society has also identified several aquatic diversity areas that include portions of the proposed Wilderness.

Recreational opportunities include hunting, fishing, hiking, backpacking, horse-back riding, cross-country skiing and birdwatching. On a crisp autumn afternoon, one

can doze against the sunny-side of an old-growth western larch that is just beginning to turn golden above the drying grass, while listening to the sound of rustling quaking aspen leaves. Some canoeing or kayaking is also possible during spring high water on certain streams.

Threats to the proposed Wilderness include logging, road building, livestock grazing and off-road vehicles.

## Proposed Malheur Canyons Wilderness

### Stunning Rimrock Canyons, Larch and Pine Forests and Trout-Filled Streams

The proposed Malheur Canyons Wilderness contains numerous springs, streams and river segments. Several streams rise on the slopes of the Strawberry Mountain Range and flow south to meet in the Logan Valley where they form the Malheur River. East of the Strawberries, the North Fork of the Malheur River forms and flows southward. After leaving the national forest, the North Fork is joined by the Little Malheur River, which begins in the Monument Rock Wilderness. The North Fork itself joins the mainstem Malheur at Juntura in the Oregon Desert (that has already been joined by the South Fork, which rises in the Sagebrush Sea), which eventually empties into the Snake River. Segments of the mainstem and North Fork Malheur rivers are units of the National Wild and Scenic Rivers System.

The Malheur River Basin ranges from high mountain peaks to high desert, from high-elevation Engelmann spruce and subalpine fir forests, to mid-elevation pine and larch forests, to low-elevation desert scrub. The wildest parts of the basin tend to be those lands with steep canyons. An additional 328,000 acres of the proposed Malheur Canyons Wilderness is within Oregon's portion of the Sagebrush Sea.<sup>2</sup>

Forest species include Engelmann spruce, subalpine fir, Douglas-fir, grand fir, western larch, ponderosa pine, lodgepole pine, western juniper, mountain mahogany, black cottonwood, quaking aspen and alder. Understory species include grouse or big huckleberry, currant bitterbrush, bunchgrass and sagebrush. Major bird species here include American pipit, white-crowned sparrow, Clark's nutcracker, Lincoln's sparrow, three-toed woodpecker, golden-crowned kinglet, pygmy nuthatch, white-headed woodpecker, vesper sparrow, osprey, golden eagle and bald eagle.

Major wildlife species here include Rocky Mountain elk, mule deer, pronghorn,



**LEVEL IV ECOREGIONS**

Continental Zone Highlands (41%), Continental Zone Foothills (40%), Mesic Forest Zone (14%), Subalpine-Alpine Zone (2%), Melange (2%), Cold Basins (<1%); Northern Great Basin Level III Ecoregion: High Lava Plains (<1%)

**VEGETATION TYPES**

Ponderosa (44%), Juniper/Grasslands (12%), True Fir/Douglas-fir (9%), Ponderosa/Douglas-fir/True Fir (7%), Ponderosa/Douglas-fir/Western Larch/Lodgepole (6%), Ponderosa/Shrub (4%), Low Sagebrush (4%), Subalpine Fir/Engelmann Spruce Parklands (3%), Big Sagebrush (2%), Cutover/Burned (2%), Juniper/Low Sage (2%), Lodgepole/Western Larch (2%), Marsh/Wet Meadow (1%), Other Sagebrush (1%), Subalpine Lodgepole (<1%), Juniper/Big Sage (<1%)

**DRAINAGE SUBBASINS**

Burnt, Upper Malheur, Willow

**ELEVATION RANGE**

3,629-8,032 feet

**UNITS**

Black Butte, Calamity Creek, Cottonwood Creek, Craft Point, Deardorff Creek, Deardorff Mountain, Duck Creek Headwaters, Elbow Canyon, Flag Creek, Gabe Spring, Glacier Mountain, Goodwater Spring, Gunbarrel Creek, Huckleberry Creek, Last Chance Creek, Little Bear Meadow, Little Muddy Creek, Logan Valley, Long Creek, Maggie Table, Malheur River Canyon, Middle Willow, *Monument Rock Additions* (Bullrun Creek, Camp Creek, Elk Flat, Little Malheur River, Lookout Spring), North Fork Malheur River, Pine Creek, Ragged Rock Spring, Reynolds Creek, Sheep Gulch, Schurtz Creek, Skull Springs, Spring Creek, *Strawberry Mountain Additions* (Meadow Fork), Summit Rock, Upper Blue Bucket Creek, Upper Malheur River, Van Gulch

**EXISTING WILDERNESSES INCORPORATED**

Monument Rock, portion of Strawberry Mountain

**SIZE**

168,442 acres (263 square miles, not including 19,686 acres of currently protected Wildernesses)

**COUNTIES**

Baker, Grant, Harney, Malheur

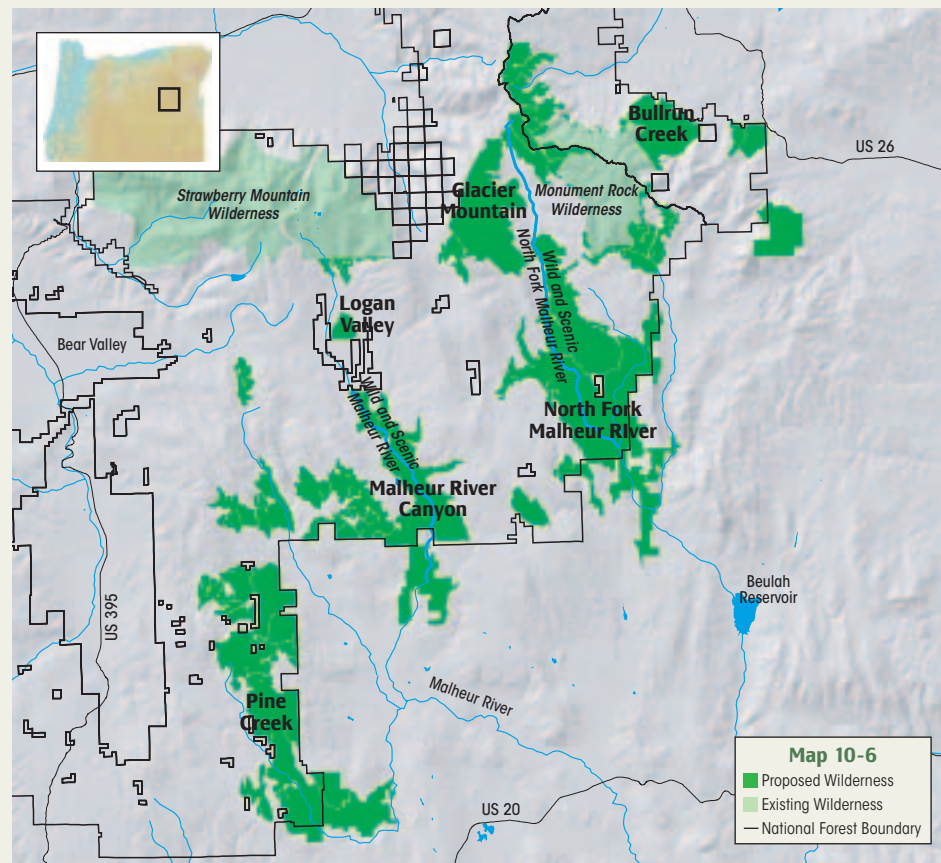
**FEDERAL ADMINISTRATIVE UNITS**

Malheur and Wallowa-Whitman National Forests; BLM Burns, Prineville and Vale Districts

**CONGRESSIONAL DISTRICT**

2nd

## Proposed Malheur Canyons Wilderness



Some of the units in the proposed Wilderness are highlighted below.

**Bullrun Creek** and the adjacent Bullrun Mountain (part of the Burnt River Basin) should have been included in the Monument Rock Wilderness when it was designated in 1984. However, the low elevation old-growth forest here sits atop mineral deposits that were coveted by mining companies at the time.

**Glacier Mountain** has no glaciers now, but once did. Streams rising in the unit support redband and bull trout. In the alpine zone, one logically finds the alpine fleecflower, alpine Idaho fescue, alpine big sagebrush and alpine sedge.

**Logan Valley** is part of a large montane wetland/wet meadow/upland habitat that features wildflowers in the spring and orange-yellow quaking aspen in the fall. It is one of four known

nesting sites for long-billed curlew and upland sandpiper in Oregon. Bull trout and sandhill cranes are also present. Approximately 1,768 acres of the private land in Logan Valley was recently acquired for the Burns Paiute Tribe, which is restoring the area for ecological purposes.

**Malheur River Canyon** features outstanding trout fishing, virgin ponderosa pine forests and a 1,000-foot deep canyon. A segment of the Malheur River that flows through the unit is part of the National Wild and Scenic Rivers System.

The **North Fork Malheur River** is featured on page 191.

**Pine Creek** is a tableland with deeply incised canyons and slopes covered with ponderosa and mixed-conifer forests and native fish in the streams.

## FEATURED UNIT

# North Fork Malheur River

The North Fork Malheur River unit — from Elk Creek in the north to the North Fork's confluence with the Little Malheur River in the south and from Crane Creek in the west to Bear Creek in the east — includes both dense forest and open desert.

Huge old-growth ponderosa pines line the dry canyon bottoms that range in depth from 250 to 800 feet. The North Fork has cut through numerous layers of volcanic material, exposing rock outcroppings, talus and cliffs. Adjacent to the deep canyons are tablelands featuring a mosaic of conifer forest, quaking aspen, sagebrush and meadows. Western juniper and mountain mahogany become more prevalent as the land slopes southward and downward.

The river's exceptional water quality supports both endangered bull trout and declining redband trout. The entire length of the river within the proposed Wilderness unit is a component of the National Wild and Scenic Rivers System. However, the Wild and Scenic River management zone is far too narrow to adequately protect the surrounding wildness of the unit.

Big game hunting for Rocky Mountain elk and mule deer are major recreational activities. Fishing is also popular here. The twelve-mile North Fork Malheur River trail makes for easy access to the deep canyon. As one hikes the trail, the cry of osprey may often be heard above one's head and over the sounds of the river.

SANDY LONSDALE



The North Fork Malheur River Unit of the proposed Malheur Canyons Wilderness.

## PROPOSED WILDERNESS

Malheur Canyons

## LOCATION

19 miles south-southwest of Unity

## LEVEL IV ECOREGIONS

Continental Zone Foothills (60%), Continental Zone Highlands (40%)

## VEGETATION TYPES

Juniper/Grasslands (49%), Ponderosa (48%), Low Sagebrush (3%)

## TERRAIN

Tablelands dissected by canyons.

## DRAINAGE SUBBASIN

Upper Malheur

## ELEVATION RANGE

3,629-5,801 feet

## SIZE

24,615 acres

## COUNTIES

Baker, Grant

FEDERAL  
ADMINISTRATIVE UNITS

Malheur National Forest (Prairie City Ranger District); BLM Vale District (Malheur Resource Area)

## USGS 7.5' QUAD MAPS

Castle Rock, Crane Prairie, Clevenger Butte, Flag Prairie





black bear and cougar. Some more enigmatic creatures include heather vole, pika, marten, snowshoe hare, Great Basin pocket mouse and Ord kangaroo rat.

Several dams currently block salmon from returning to the Malheur River Basin to spawn. However, in recognition of important populations of bull trout and redband trout, the American Fisheries Society has identified several aquatic diversity areas within the proposed Wilderness. These aquatic areas could again be prime salmon habitat if the dams were modified or removed.

The Oregon Biodiversity Project's Malheur River Conservation Opportunity Area includes three priority habitats in the area: ponderosa pine woodlands, grand fir forests and extensive mid-elevation wetlands.

Recreational opportunities include hunting, fishing, hiking, backpacking, cross-country skiing, horseback riding and dozing at the base of an old-growth ponderosa pine on a hot summer day.

Major threats to the proposed Wilderness include logging, road building, livestock grazing and off-road vehicles.

## **Proposed North Fork John Day-Elkhorns Wilderness**

# Rocky Mountain Elk, Salmon, Steelhead, Granite Ridges, Ponderosa Pine and Western Larch

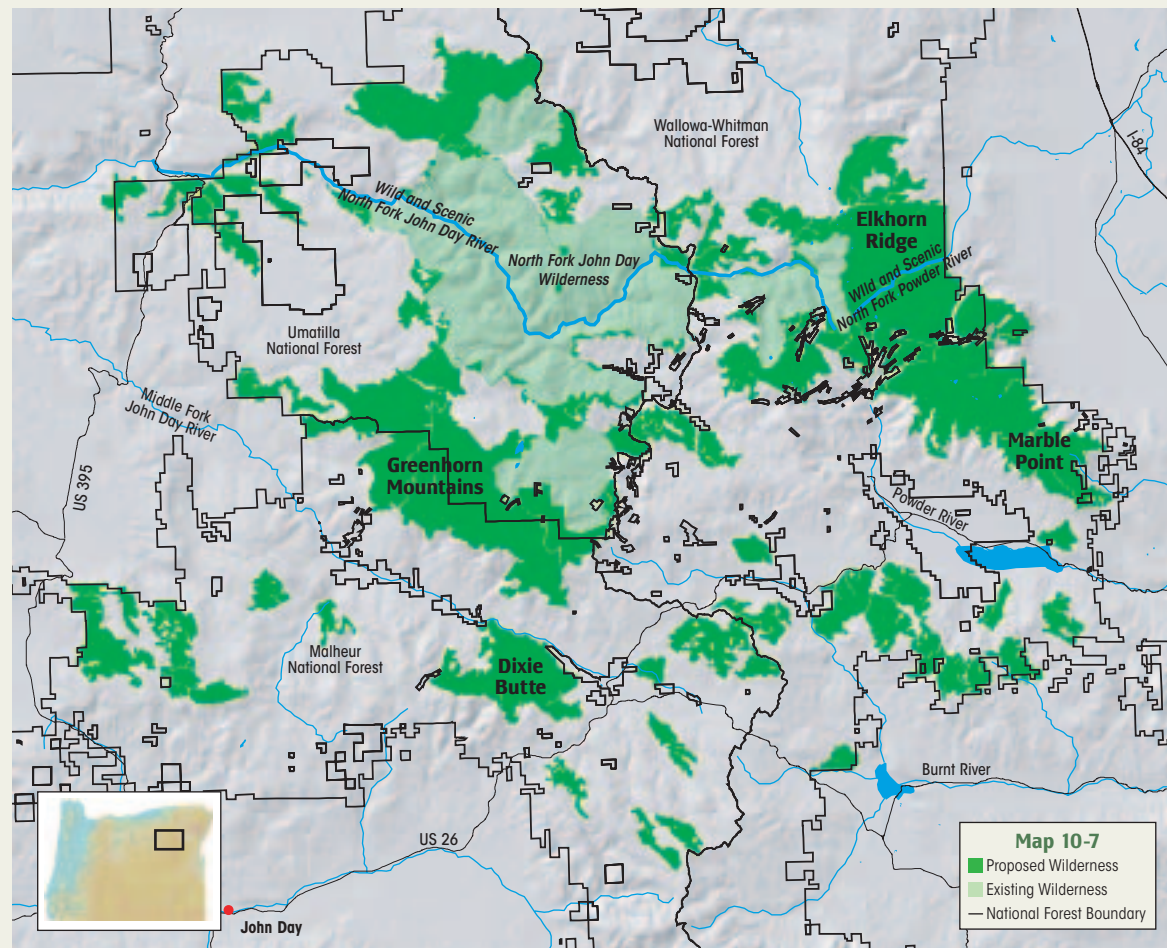
The proposed North Fork John Day-Elkhorns Wilderness includes wildlands in the Burnt, Powder, North Fork and Middle Fork John Day (a tributary to the North Fork John Day) basins. Dams now block salmon runs in the Burnt and Powder rivers, but the John Day tributaries remain strongholds of anadromous fish populations. The proposed Wilderness includes the municipal drinking water supplies for Baker City and Long Creek.

Granite outcroppings, rolling benches, tablelands, deep canyons, alpine lakes, dark fir forests and open pine forests all characterize the area.

Major wildlife species here include Rocky Mountain elk, mule deer, black bear, cougar, coyote, bobcat, wolverine, mink, beaver, marten and possibly lynx. Major bird species include pileated woodpecker, northern goshawk, great gray owl, Clark's nutcracker, Lincoln's sparrow, white-crowned sparrow, golden-crowned kinglet, white-headed woodpecker, pygmy nuthatch and bald eagle. The Middle John Day River is the center of a concentration of species rarity and endemism for animals. Of particular note



## Proposed North Fork John Day-Elkhorns Wilderness



Some of the units of the proposed Wilderness are highlighted below.

**Dixie Butte** is the featured unit for the proposed Upper John Day Wilderness (see pages 201-204).

The **Elkhorn Ridge** is featured on page 194.

The **Greenhorn Mountains** units include a diverse landscape of glacially carved granite and Columbia basalt outcroppings surrounded by alpine and upland meadows, spruce bogs, cliffs and forests. They include Vinegar Hill, Indian Rock, Jumpoff Joe Peak and other landmarks along the divide between the North and Middle Forks of the John Day River. Views of the surrounding landscapes are spectacular.

Pine grosbeak and three-toed woodpecker can be found in this unique habitat. The area is suitable for the reintroduction of peregrine falcon. Most of the alpine flower types that grow west of the Rockies are found here.

**Marble Point** is located on the southern end of the Elkhorn Range and includes part of the watershed for Baker City. The water is so pure and the watershed so pristine that no filtering is required before the water is piped to the taps of over 10,000 Baker City residents. The municipal watershed is closed to public entry except during hunting season.

### LEVEL IV ECOREGIONS

Mesic Forest Zone (47%), Melange (21%), Subalpine-Alpine Zone (19%), John Day/Clarno Highlands (12%), Cold Basins (<1%), Maritime-Influenced Zone (<1%), John Day/Clarno Uplands (<1%), Continental Zone Foothills (<1%)

### VEGETATION TYPES

Ponderosa (44%), Juniper/Grasslands (12%), True Fir/Douglas-fir (9%), Ponderosa/Douglas-fir/True Fir (7%), Ponderosa/Douglas-fir/Western Larch/Lodgepole (6%), Low Sagebrush (4%), Ponderosa/Shrub (4%), Subalpine Fir/Engelmann Spruce Parklands (3%), Big Sagebrush (2%), Cutover/Burned (2%), Juniper/Low Sage (2%), Lodgepole/Western Larch (2%), Marsh/Wet Meadow (1%), Other Sagebrush (1%), Subalpine Lodgepole (<1%), Juniper/Big Sage (<1%)

### DRAINAGE SUBBASINS

North Fork John Day, Middle Fork John Day, Powder

### ELEVATION RANGE

2,979-9,106 feet

### UNITS

Antone Creek, Arch Rock, Battle Creek, Bear Butte, Bear Wallow Springs, Beaver Dam Creek, Big Creek, Big Springs, Black Mountain, Bone Point, Bridge Creek, Case Ridge, China Creek, Clear Creek, Cornet Creek, Crawford Creek, Czar Springs, Davis Creek, Dean Creek, Deep Canyon, Desolation Creek, Dixie Butte, Fly Creek, Forks of Cable Creek-Hidaway Meadows, Fox Creek, *Greenhorn Mountain Unit Additions* (Greenhorn Mountains), Hinton Creek, Horse Canyon, Hunt Mountain, Idaho Creek, Indian Creek, Jumpoff Joe Peak, Keeney Meadows, Lamb Creek, Long Creek Municipal Watershed, Long Meadow, Lost Boy, Lunch Creek, Marble Point, *Middle North Fork John Day River Unit Additions* (Granite Creek Headwaters, Howard Creek, Martin Creek, Moon Meadow, Rabbit Creek Headwaters, Silver Butte, Upper North Fork John Day River), Mud Spring, Mulkey Springs, Nipple Butte, Pasture Creek, Patrick Creek, Pogue Mountain, Pole Bridge Creek, Resiliency Butte, Rock Creek Butte, Skinner Creek, South Fork Long Creek, Stices Creek, Thompson Gulch, Tope Spring, Trail Creek, Trout Creek, Twisted Rush, Upper China Creek, Upper Frosty Gulch, *Upper North Fork John Day River Unit Additions* (Cabell Meadow, Elkhorn Ridge, South Mount Ireland, South Columbia Hill), White Pine Knob

### EXISTING WILDERNESS INCORPORATED

North Fork John Day

### SIZE

283,474 acres (443 square miles, not including 121,352 acres of currently protected Wilderness)

### COUNTIES

Baker, Grant, Umatilla, Union

### FEDERAL ADMINISTRATIVE UNITS

Malheur, Umatilla, Wallowa-Whitman National Forests; BLM Prineville and Vale Districts

### CONGRESSIONAL DISTRICT

2nd



**PROPOSED WILDERNESS**

North Fork John Day-Elkhorns

**LOCATION**

8 miles west of Baker City

**LEVEL IV ECOREGIONS**

Subalpine-Alpine Zone (57%), Mesic Forest Zone (37%), Melange (7%)

**VEGETATION TYPES**

Subalpine Fir/Engelmann Spruce Parklands (39%), Ponderosa/Douglas-fir/True Fir (24%), Lodgepole/True Fir (16%), Western Larch/Douglas-fir/Ponderosa/Lodgepole (9%), Douglas-fir/ Ponderosa/True Fir (7%), Alpine Barren Fell Fields (3%), True Fir/Lodgepole/Western Larch/Douglas-fir (2%), Ponderosa (1%)

**TERRAIN**

Rugged granite and basalt.

**DRAINAGE SUBBASINS**

North Fork John Day, Powder

**ELEVATION RANGE**

4,734-9,106 feet

**SIZE**

51,569 acres

**COUNTIES**

Baker, Grant

**FEDERAL****ADMINISTRATIVE UNITS**

Wallowa-Whitman National Forest (Baker Ranger District); BLM Vale District (Baker Resource Area)

**USGS 7.5' QUAD MAPS**

Anthony Lakes, Bourne, Elkhorn Peak, Rock Creek

SANDY LONSDALE



The Elkhorns Unit of the proposed North Fork John Day-Elkhorns Wilderness.

**FEATURED UNIT**

## Elkhorn Ridge

While cartographers and others differ as to whether the Elkhorns should be called a “ridge,” “mountains” or a “range,” there is no dispute that this formation of craggy peaks is the centerpiece of the proposed North Fork John Day-Elkhorn Wilderness. The highly scenic range of granite peaks runs northwest to southeast and includes the headwaters of the North Fork John Day, Grande Ronde (see *proposed Grande Ronde Wilderness*, pages 179-182) and Powder rivers.

The second largest geologic batholith in Oregon, the Elkhorns were carved by glaciers, leaving beautiful cirques and valleys. As the glaciers receded, the range remained high enough to support

communities of whitebark pine. Elkhorn Ridge is a center of concentration of species rarity and endemism for plants.

Rocky Mountain elk can often be seen in the Elkhorns. Even if one doesn't see them, one may hear them bugling in autumn. Mountain goats, while highly charismatic megafauna, are nonetheless alien exotics to the range, having been transplanted decades ago. Even though mountain goats ranged the Elkhorns prior to the last ice age, they have not been native to the range since then.

Panoramic views of much of northeastern Oregon, from the Wallowa Mountains to the Strawberry Mountains, are visible from most sections of the Elkhorns crest. The 23-mile long Elkhorn Crest National Recreational Trail is the best way to enjoy the unit. Several other trails follow the area's rivers and creeks up to high alpine lakes.

Recreational opportunities include hunting, fishing, hiking, backpacking, horseback riding, cross-country skiing and sightseeing.





GEORGE WÜERTHNER

is an endemic subspecies of gray-crowned rosy finch that lives here (*Leucosticte tephrocotis wallowa*). (See the proposed *Wallowa Mountains Wilderness*, pages 204-207.)

The higher forests (above 6,000 feet in elevation) are dominated by lodgepole pine, subalpine fir and whitebark pine, interspersed with open slopes, low shrublands and rockslides. Below 6,000 feet, major tree species include western larch, Douglas-fir, grand fir, lodgepole pine, ponderosa pine and Engelmann spruce. Huckleberry is a common understory species. Riparian species include willow, quaking aspen, black cottonwood and alder. Fire is an active sculptor of this landscape.

Segments of the North Fork of the John Day and North Fork of the Powder River are units of the National Wild and Scenic Rivers System. However, the narrow protective corridors are not adequate to fully protect the adjacent wildlands.

Recognizing the critical importance of bull trout, redband trout, summer steelhead and spring chinook salmon habitat in the area, the American Fisheries Society has identified several aquatic diversity areas within the proposed Wilderness. Pacific lamprey also spawn in the North Fork John Day River. The North Fork John Day watershed now supports 70 percent of the total spring chinook and 43 percent of the summer steelhead runs in the John Day basin, the largest wild runs of these types left in the Columbia River system.

Hundreds of miles of hiking trails crisscross the proposed Wilderness. Hiking, camping, horseback riding, backpacking, hunting, cross-country skiing, fishing, birding, nature study, wildflower viewing and salmon watching are popular pursuits.

Major threats to the proposed Wilderness are logging, livestock grazing, mining and off-road vehicle use.

## **Proposed Ochoco Mountains Wilderness** Old Forests, Green Meadows and Wild Rivers

The Ochoco Mountains are a string of volcanoes, much older than those in the nearby High Cascades to the west. From near Prineville to near Dayville, the range runs 60 miles east-west. Much of the landscape has been roaded and logged, but a remarkable variety of wildlands still exists. The proposed Ochoco Mountains Wilderness contains “yellow-bellied” old-growth ponderosa pine (often more than 400 years old), thick mixed-conifer forests, high mountain sagebrush meadows full of wildflowers, lava flows, dry and wet meadows, cliffs, colorful rock outcroppings of welded tuff and small streams with native trout.

◀ Dutch Flat Lake in the Elkhorns Unit of the proposed North Fork John Day-Elkhorns Wilderness.



**LEVEL IV ECOREGIONS**

John Day/Clarno Highlands (69%), John Day/Clarno Uplands (21%), Mesic Forest Zone (9%), Cold Basins (1%)

**VEGETATION TYPES**

Ponderosa (49%), Ponderosa/Douglas-fir/True Fir (19%), Big Sage (15%), Cutover/Burned (5%), Juniper/Mountain Low Sagebrush (4%), Juniper/Grasslands (4%), Ponderosa/Douglas-fir/Western Larch/Lodgepole (3%), Juniper/Big Sage (1%), Juniper/Low Sage (<1%), Marsh/Wet Meadow (<1%), True Fir/Douglas-fir (<1%) Big Sagebrush (<1%)

**DRAINAGE SUBBASINS**

Lower Crooked, Lower John Day, South Fork Crooked, Trout, Upper Crooked

**ELEVATION RANGE**

3,199-6,929 feet

**UNITS**

Ashley Ridge, Badger Creek, Begg Creek, Bellworm Canyon, *Bridge Creek Additions* (East Point, Maxwell Creek), Broadway Lava, Bull Mountain, Cottonwood Creek, Cougar Creek, Deer Creek, Dingus Springs, Dodds Creek, Dutchman Flat, Grassy Butte, Green Mountain, Hammer Creek, Hardscrabble Ridge, Hickey Creek, Indian Creek, Little Round Prairie, Lookout Mountain, *Mill Creek Additions* (Fintcher Creek, Wildcat Creek Headwaters), Mount Pisgah, North Bear Creek, North Fork Crooked River, Ochoco Divide, Peterson Lava, Rough Canyon, Round Mountain, Salt Butte, Steins Pillar, Tamarack Creek, Williams Prairie, Zany Fox

**EXISTING WILDERNESSES INCORPORATED**

Bridge Creek, Mill Creek

**SIZE**

110,192 acres (172 square miles, not including 22,800 acres of currently protected Wilderness)

**COUNTIES**

Crook, Grant, Wheeler

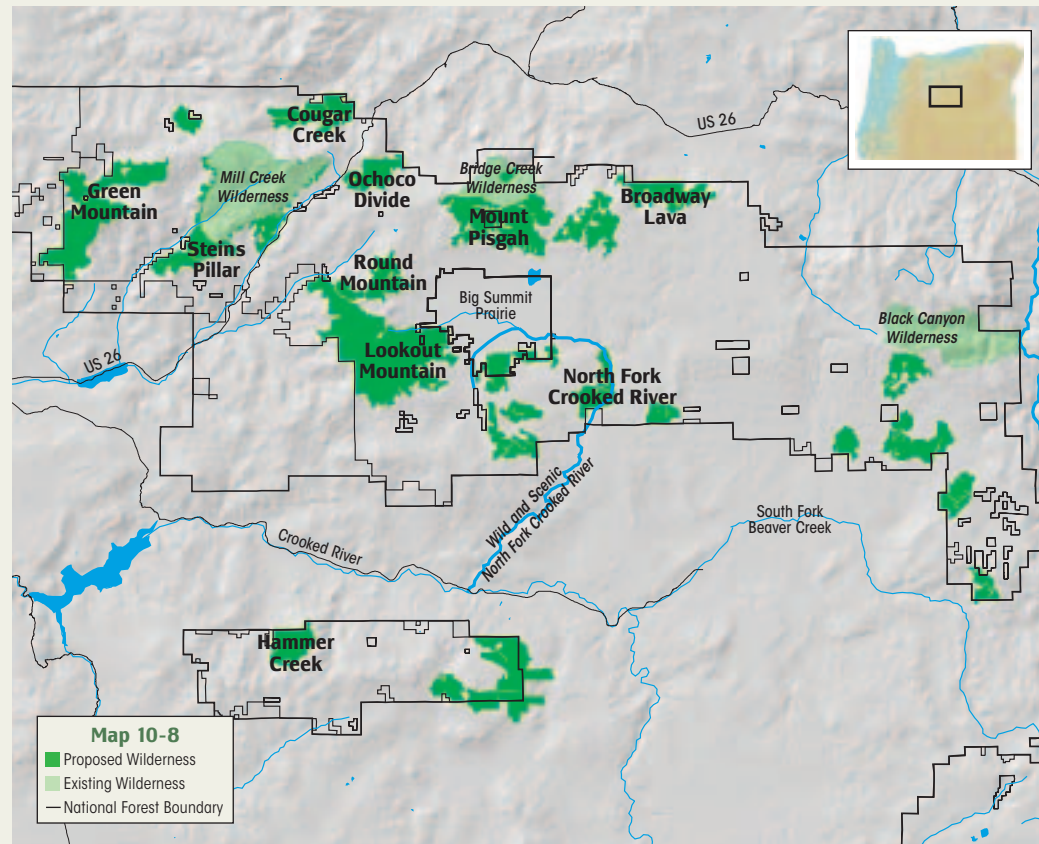
**FEDERAL ADMINISTRATIVE UNITS**

Ochoco National Forest; BLM Prineville District

**CONGRESSIONAL DISTRICT**

2nd

## Proposed Ochoco Mountains Wilderness



Some of the units in the proposed Wilderness are highlighted below.

**Broadway Lava** contains one of the few visible lava flows in the forest. Since the lava flows in this area are relatively old geologically, most are covered by vegetation and mixed conifer forest.

**Cougar Creek** offers mountain meadows and many scenic vistas in a variety of forest types.

**Green Mountain** is excellent mule deer and Rocky Mountain elk range, has prominent, colorful, rock pillars and harbors the elusive wolverine.

**Hammer Creek** contains the largest remaining stands of unlogged forest in the Maury Mountains, a small east-west mountain range to the south of the Ochoco Mountains and an island in the desert Sagebrush Sea.

**Lookout Mountain** is featured on page 196.

**Ochoco Divide** is recognized for its Douglas-fir/pine-grass community.

The **Mill Creek Additions** units include wildlands directly adjacent to the Mill Creek Wilderness. These lands are primarily old-growth forests left out of previous Wilderness designations because the timber industry coveted them for logging.

**Mount Pisgah** features the highly scenic Indian Prairie dotted with wild flowers, quaking aspen, old-growth ponderosa pine and western larch. From the summit are spectacular views north to the John Day River country.

**North Fork Crooked River** flows through a high scenic canyon with rimrock cliffs,

old-growth ponderosa pine forest and excellent trout fishing. A narrow strip on both sides the river (but not the entire canyon) is designated under the National Wild and Scenic Rivers System. The lower (Bureau of Land Management) portion of the unit lies in the Sagebrush Sea and is proposed as the Crooked River Wilderness of nearly 137,000 acres.<sup>3</sup>

**Round Mountain** offers scenic views to the north and is a wildlife corridor between Lookout Mountain and the main Ochoco Mountain divide.

**Steins Pillar** is a spectacular 200-foot high rock monolith that is wider at the top than at the base and towers above the surrounding forest.

LARRY N. OLSON



Old-growth ponderosa pine (*Pinus ponderosa*) in the Lookout Mountain Unit of the proposed Ochoco Mountains Wilderness.

## FEATURED UNIT

# Lookout Mountain

Lookout Mountain stands out from the surrounding forested landscape because of its mountaintop meadows. The mountain is outstanding as the most ecologically diverse landscape with the largest intact old-growth forest on the Ochoco National Forest. It includes nearly all the ecological zones found in the larger proposed Wilderness and at least 28 distinct plant communities in a variety of successional stages.

Nearly two-thirds of the area is old-growth forest. Scenic meadows are found both at the lower elevations and on the mountain's summit. The unit contains one of the finest remaining park-like ponderosa pine forests left in the state and it is remarkably easy to enjoy. After hiking upward through the forest, one is rewarded at the summit with outstanding views of the Cascades from Diamond Peak to Mount Hood.

Notable wildlife species here include black bear, bobcat,

ruffed grouse, marten, badger, wolverine, pronghorn, a variety of hawk species, pileated woodpecker and the occasional bald or golden eagle.

Dry and wet meadows exist here, both with tufted hair grass. The moist meadows contain ovalhead sedge and California catgrass. At lower elevations, plant communities include bluegrass scabland, bunchgrass, stiff sagebrush scabland and low sagebrush-bunchgrass. Western juniper woodlands are found in distinct association with bunchgrass, stiff sage, low sagebrush and big sagebrush.

The magnificent ponderosa pine forests are found in distinct associations with wheatgrass, fescue, bitterbrush, Ross sedge,

blue wildrye and Douglas-fir-snowberry-oceanspray. As elevation increases, mixed conifer forests of ponderosa pine, grand fir, western larch and Douglas-fir are found in association with pine-grass on both ash and residual soils. The forests are found in association with grouse huckleberry, twinflower and/or Columbia brome. Even higher up, the forest becomes lodgepole pine, Engelmann spruce and subalpine fir, with grouse huckleberry and pine-grass in the understory. Near timberline, subalpine fir and Engelmann spruce dominate with a grouse huckleberry or big huckleberry understory. Groves of quaking aspen are found at various elevations. On the mountain's top are meadows of sagebrush, sedge and yarrow surrounding rock outcroppings.

A well-developed network of trails, including a seven-mile trail from the ranger station to the summit, provides easy access.

Trophy-sized mule deer and Rocky Mountain elk inhabit Lookout Mountain. Redband trout are found in the streams, making for great fishing. Other recreational opportunities include hiking, backpacking, cross-country skiing, snowshoeing, horseback riding and birding.

## PROPOSED WILDERNESS

Ochoco Mountains

### LOCATION

14 miles north-northwest of Post

### LEVEL IV ECOREGION

John Day/Clarno Highlands

### VEGETATION TYPES

Ponderosa/Douglas-Fir/True Fir (54%), Cutover/Burned (8%), Big Sagebrush (<1%)

### TERRAIN

Gentle slopes, then rising steeply to a gentle broad summit.

### DRAINAGE SUBBASINS

Lower Crooked, Upper Crooked

### ELEVATION RANGE

3,199-6,929 feet

### SIZE

19,220 acres

### COUNTY

Crook

### FEDERAL

#### ADMINISTRATIVE UNITS

Ochoco National Forest (Lookout Mountain Ranger District); BLM Prineville District (Central Oregon Resource Area)

### USGS 7.5' QUAD MAPS

Gerow Butte, Lookout Mountain, Whistler Point





Mixed conifer forests of predominantly ponderosa pine, Douglas-fir, grand fir and western larch dominate much of the landscape. Pure stands of park-like old-growth ponderosa pine occupy lower elevation south- and west-facing slopes. At higher elevations, major tree species include lodgepole pine, Engelmann spruce and subalpine fir. Stands of quaking aspen dot the forest. Western juniper is found both at the lowest elevations and at over 5,000 feet elevation, where it grows tall and thin, resembling fir trees. In the open prairies, you'll find blue-flag iris, Indian paintbrush, camas and various sunflower species.

The old-growth forest in the proposed Wilderness is critical habitat for several species including marten, pileated woodpecker and white-headed woodpecker. Both bald and golden eagles are present. Predators include black bear, cougar and coyote. Mule deer and Rocky Mountain elk are abundant, attracting hunters in the fall.

Summer steelhead spawn in the tributaries of the John Day River and native redband trout are found in numerous streams in the proposed Wilderness.

Recreational opportunities here include hunting, fishing, birding, hiking, backpacking, snowshoeing, cross-country skiing, horseback riding and just strolling through open old-growth forests.

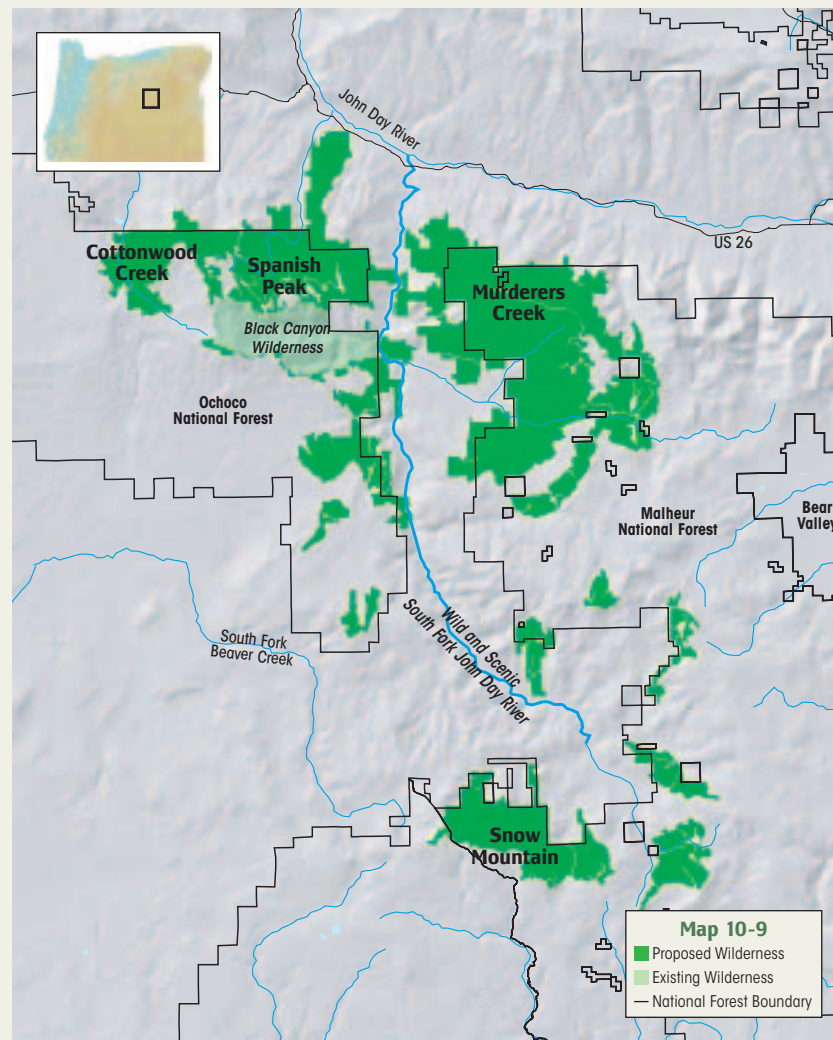
Unfortunately, much of the remaining wildlands in the proposed Wilderness is slated for roading and logging. Other threats include livestock grazing and mining.

## ***Proposed South Fork John Day Wilderness*** California Bighorn Sheep, Pacific Salmon and Unique Wildflowers

In spite of the road that runs nearly its entire length, the South Fork of the John Day River — from where it begins in the Malheur National Forest to its confluence with the mainstem John Day River at Dayville — remains an ecological treasure. Much of the South Fork is included in both the Oregon Scenic Waterways and National Wild and Scenic Rivers Systems in recognition of its outstanding scenery, fisheries, hunting, hiking and camping. The high quality and quantity of these and other natural values in the watershed depend upon the associated wildlands upslope.

The Oregon Biodiversity Project has identified the South Fork John Day River Conservation Opportunity Area because the region is a center of concentration of species rarity and endemism for plants. The South Fork watershed includes eight aquatic diversity areas recognized by the American Fisheries Society for their important habitat for spring chinook salmon, summer steelhead, redband trout and Pacific

## Proposed South Fork John Day Wilderness



Some of the units in the proposed Wilderness are highlighted below.

Steelhead spawn in **Cottonwood Creek**.

**Murderers Creek** is featured on page 200.

**Spanish Peak** is immediately north of the Black Canyon Wilderness and contains a variety of conifer species. Wolverine and lynx are believed to inhabit the unit.

**Snow Mountain**, which features the highest elevation lands in the proposed Wilderness, is year-round elk habitat and spring, summer and fall range for mule deer. Mountain mahogany can be found under ponderosa pine and near western juniper on primarily south-facing slopes. Alder, willow and some mountain ash can be found along the streams.

### LEVEL IV ECOREGIONS

John Day/Clarno Uplands (27%), Continental Zone Highlands (22%), John Day/Clarno Highlands (22%), Melange (17%), Mesic Forest Zone (10%), Continental Zone Foothills (2%)

### VEGETATION TYPES

Ponderosa (49%), Ponderosa/Douglas-fir/True Fir (13%), True Fir/Douglas-fir (11%), Ponderosa/Shrub (9%), Low Sagebrush (9%), Big Sage (3%), Other Sagebrush (2%), Juniper/Low Sage (2%), Cutover/Burned (1%), Douglas-fir/Ponderosa/True Fir (<1%), Juniper/Big Sage (<1%), Juniper/Grasslands (<1%), Juniper/Mountain Marsh/Wet Meadow (<1%), Ponderosa/Douglas-fir/Western Larch/Lodgepole (<1%), Big Sage/Shrub (<1%), Big Sagebrush (<1%)

### DRAINAGE SUBBASINS

South Fork John Day

### ELEVATION RANGE

2,398-7,190 feet

### UNITS

Antelope Creek, Ashley Ridge, Bear Tree Springs, Begg Creek, *Black Canyon Additions* (Bear Skull-Kelsey Spring, Cottonwood Creek, Wolf Mountain), Blue Ridge Spring, Burnt Mountain, Cougar Creek, Cougar Mountain, Devils Creek, Gilbert Ridge, Hardscrabble Ridge, Horse Mountain, Johnnie Creek, Lewis Officer Creek, Lower Murderers Creek, Murderers Creek, Sharff Cabin Creek, Snow Mountain, South Fork Deer Creek, Spanish Peak, Upper Murderers Creek, Venator Creek, Wildcat Gulch, Wind Creek

### EXISTING WILDERNESS INCORPORATED

Black Canyon

### SIZE

134,880 acres (211 square miles, not including 13,400 acres of currently protected Wilderness)

### COUNTIES

Harney, Grant, Wheeler

### FEDERAL ADMINISTRATIVE UNITS

Malheur and Ochoco National Forests; BLM Burns and Prineville Districts

### CONGRESSIONAL DISTRICT

2nd



**PROPOSED WILDERNESS**

South Fork John Day

**LOCATION**

10 miles south-southwest of Dayville

**LEVEL IV ECOREGION**

John Day/Clarno Highlands (39%), Melange (39%), Mesic Forest Zone (15%), Continental Zone Highlands (7%)

**VEGETATION TYPES**

Ponderosa (49%), True Fir/Douglas-fir (21%), Low Sagebrush (13%), Juniper/Mountain Big Sage (7%), Ponderosa/Douglas-fir/True Fir (5%), Juniper/Low Sage (3%), Big Sage/Shrub (&lt;1%), Douglas-fir/Ponderosa/True Fir (&lt;1%), Juniper/Grasslands (&lt;1%)

**TERRAIN**

Generally steep and broken terrain.

**DRAINAGE SUBBASIN**

Upper John Day

**ELEVATION RANGE**

2,720-6,991 feet

**SIZE**

51,503 acres

**COUNTY**

Grant

**FEDERAL****ADMINISTRATIVE UNITS**

Malheur National Forest (Blue Mountain Ranger District); BLM Prineville District (Central Oregon Resource Area)

**USGS 7.5' QUAD MAPS**

Aldrich Mountain North, Aldrich Mountain South, Big Weasel Springs

SANDY LONSDALE



The Murderers Creek Unit of the proposed South Fork John Day Wilderness.

**FEATURED UNIT**

## Murderers Creek

**M**urderers Creek is one of the most productive areas for wildlife in eastern Oregon. California bighorn sheep, mule deer and Rocky Mountain elk comprise the major big game species in the watershed. Cougar and black bear are also abundant.

Steelhead spawn and native redband trout live in the creek and its major tributaries: Cow, Cabin, Bark Cabin and Thorn Creeks. Murderers Creek's cool, clean water contributes significantly to the water quality and volume in the South Fork John Day River, which is especially important for salmon.

The lower portion of the Murderers Creek watershed is managed by the Oregon Department of Fish and Wildlife as the Phillip W. Schneider Wildlife Management Area. The upper portion of the watershed is Forest Service and Bureau of Land Management lands.

The roadless portions of the watershed are mostly forested

with old-growth ponderosa pine and various fir species at the middle and higher elevations, sagebrush steppe at the lower elevations and western juniper in the transition zones. The varied elevations and diversity of vegetation support a diversity of wildlife species.

Scientists have recognized the importance of some natural combinations of vegetation found in the watershed's unforested areas. Among these are western juniper, low sagebrush, bunchgrass, Idaho fescue, sagebrush, Sandberg's bluegrass scabland and bitterbrush.

The unit contains a rare stand of Alaska yellow cedar, far disjunct from the rest of the species' range that generally occurs only in cold wet areas of the central Oregon Cascades and northward.

The steep and broken terrain is incredibly scenic. Big game hunting, fishing, hiking, horseback riding, game bird hunting and sightseeing are favorite recreational pursuits. Over 45 miles of trails lace the unit. A hiking trail has been proposed that would traverse the unit to connect the Pacific Crest National Scenic Trail along the Cascade Crest with the Desert Trail to the east (which is also under development).

EDWIN FLORANCE



As the name implies, the South Fork John Day milk-vetch (*Astragalus diaphanus* var. *diurnus*) is endemic to that watershed.

lamprey. Many of these areas lie within the proposed Wilderness.

The proposed South Fork John Day Wilderness spans both forest and desert, but the dividing line between these two different landscapes is not always clear. For example, desert-loving California (not Rocky Mountain) bighorn sheep are found in the area, even in the generally forested landscapes. Only the forested portion of the proposed Wilderness is discussed here. However, the proposed South Fork John Day Wilderness also includes nearly 77,000 additional acres of generally tree-free-wildlands within its borders to protect associated desert lands.<sup>4</sup>

Major tree species in the proposed Wilderness include ponderosa pine, western larch, Douglas-fir, grand fir and lodgepole pine. Understory vegetation can include huckleberry, pine-grass and Columbia brome. Subalpine fir, along with alpine sage, is found at the highest elevations. The drier slopes are covered with western juniper, sagebrush, mountain mahogany and some scattered ponderosa pine. Understory species include wheatgrass, fescue and bluegrass.

The signature big game animal here is California bighorn sheep. Rocky Mountain elk and mule deer are also quite abundant in the area, as are the cougar that prey upon them. Other mammals of note include black bear, wolverine, lynx, pronghorn, flying squirrel, vole, marmot and chipmunk.

Major bird species include pileated woodpecker, Lewis' woodpecker, northern goshawk, blue grouse, mountain quail, bald eagle and golden eagle.

The spotted bat, perhaps America's — and certainly Oregon's — rarest mammal, is found in the area. The western toad and Columbia spotted frog are local at-risk

amphibian species.

A unique plant species here is the South Fork John Day milk-vetch (*Astragalus diaphanus* var. *diurnus*) that occurs only in riparian and loose-soil exposed habitats.

The area is very scenic, with park-like stands of forest in a mosaic of shrub, grass and rock habitats. Recreational opportunities include big game and game bird hunting, fishing, hiking, backpacking and horseback riding. The most crowded time of the year is during big game hunting seasons.

The major threats to the proposed Wilderness include logging, roading and livestock grazing.

## Proposed Upper John Day Wilderness

### Westslope Cutthroat Trout, Salmon, Steelhead and Big Pines

At over 300 miles, the John Day River is the longest undammed river in Oregon. It also doesn't have any damn fish hatcheries. The river contains excellent fish habitat, primarily where there are adjacent roadless areas. The South Fork John Day (see pages 198-201) and North Fork John Day (see pages 192-195) are the major tributaries. The Middle Fork is a tributary to the North Fork.

The proposed Upper John Day Wilderness includes wildlands on both sides of the John Day Valley. On the south side are the east-west oriented Aldrich Mountains and Strawberry Mountains. The north side of the John Day Valley is mountainous as well, but has a less well-defined ridgeline than the high, long ridge on the south side. The varying elevations and aspects within the proposed Wilderness contribute to the area's significant ecological diversity. The area is also exceptionally scenic with vistas both awesome and sublime.

Tree species here include Engelmann spruce, subalpine fir, Douglas-fir, grand fir, western larch, ponderosa pine, lodgepole pine, western juniper, mountain mahogany, black cottonwood, quaking aspen and alder. Understory species include grouse huckleberry, bitterbrush, bunchgrass and sagebrush.

Of particular note is the occurrence of the rare silver colonial luina (*Luina serpentina*). Easily mistaken for rabbitbrush, it grows on the steeper talus corridors of upper Field Creek on the slope of Aldrich Mountain.

The area's major bird species include American pipit, white-crowned sparrow, Clark's nutcracker, Lincoln's sparrow, three-toed woodpecker, golden-crowned kinglet, pygmy nuthatch, white-headed woodpecker, vesper sparrow, osprey, sandhill crane,



**LEVEL IV ECOREGIONS**

Melange (52%), John Day/Clarno Highlands (29%), Mesic Forest Zone (15%) Subalpine-Alpine Zone (3%), John Day/Clarno Uplands (2%), Continental Zone Highlands (<1%)

**VEGETATION TYPES**

Ponderosa (53%), Douglas-fir/Ponderosa/True Fir (22%), Ponderosa/Douglas-fir/True Fir (11%), Cutover/Burned (2%), Juniper/Big Sage (<1%), Juniper/Grasslands (<1%), Juniper/Mountain Big Sage (<1%), Lodgepole/Western Larch (<1%), Marsh/Wet Meadow (<1%)

**DRAINAGE SUBBASINS**

Burnt, Upper John Day

**ELEVATION RANGE**

3,425-7,610 feet

**UNITS**

Belshaw Creek, Cottonwood Creek, Cummings Creek, Deardorff Creek, Dixie Butte, Fall Mountain, Grouse Creek, Hanscomb Mountain, Huckleberry Creek, Johnson Saddle, Keeney Meadows, Laycock Creek, McClellan Mountain, Nipple Butte, Reynolds Creek, Sagebrush Springs, South Fox Creek, *Strawberry Mountain Additions* (Crescent Creek, Frazier Nichol, Little Canyon Mountain, Little Indian Creek, Pine Creek, Sheep Gulch, Strawberry Creek), Vance Creek, Wickiup Creek, Wildcat Canyon

**EXISTING WILDERNESS INCORPORATED**

portion of Strawberry Mountain

**SIZE**

104,057 acres (163 square miles; not including 56,870 acres currently protected Wilderness)

**COUNTIES**

Baker, Grant

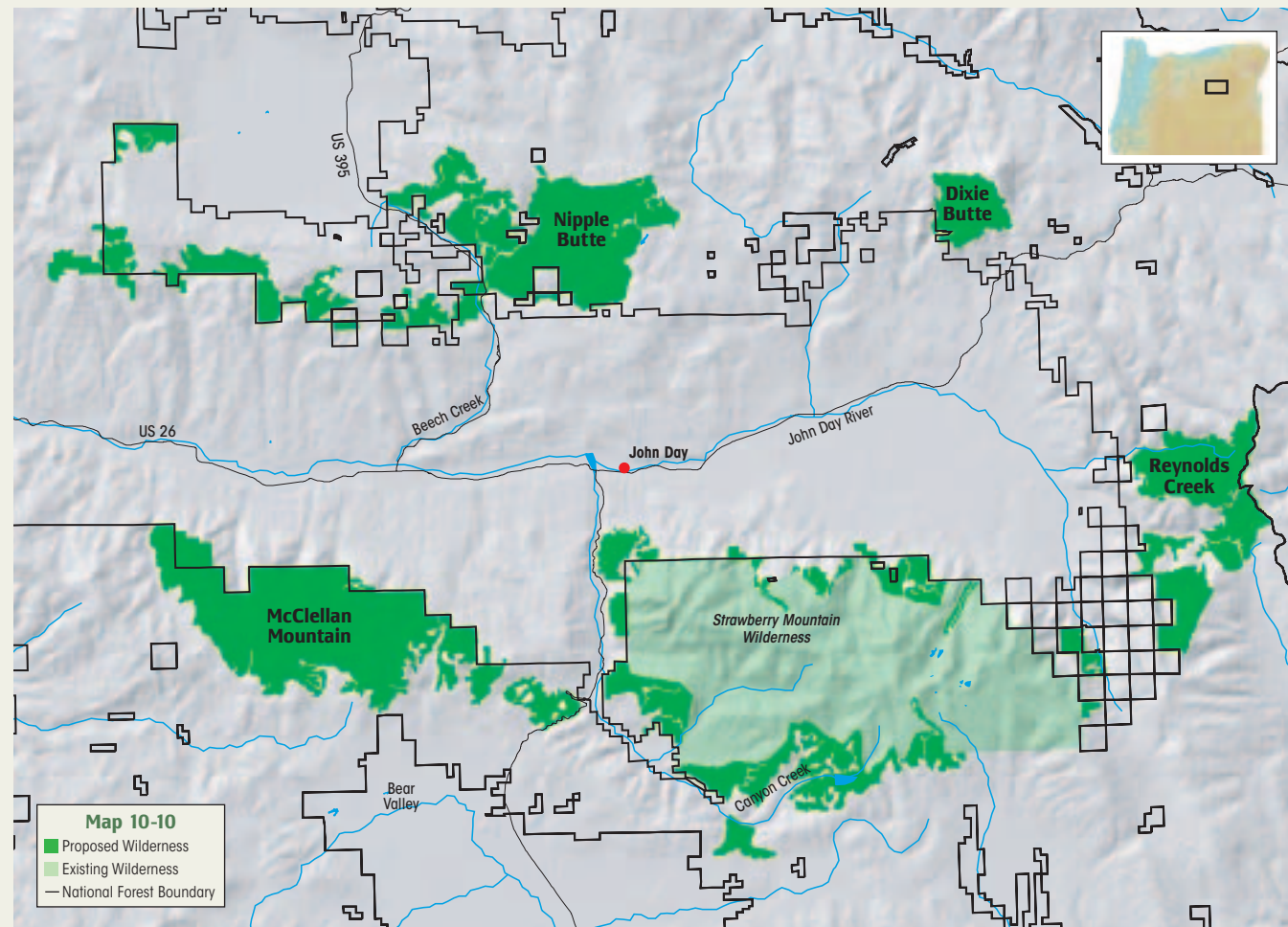
**FEDERAL ADMINISTRATIVE UNITS**

Malheur and Wallowa-Whitman National Forests; BLM Prineville District

**CONGRESSIONAL DISTRICT**

2nd

## Proposed Upper John Day Wilderness



Some of the units in the proposed Wilderness are highlighted below.

**Dixie Butte** is featured on page 203.

**McClellan Mountain** has a growing population of California bighorn sheep, which are being returned after local extirpation in the last century.

**Nipple Butte** is heavily forested with ponderosa pine and contains steelhead and trout habitat.

**Reynolds Creek** has a beautiful trail (lined with mushrooms in the spring) that leads to a natural rock arch with Indian pictographs.

The **Strawberry Mountain Additions** include lower elevation forested areas left out of the Strawberry Mountain Wilderness expansion in 1984 due to timber conflicts.

## FEATURED UNIT

## Dixie Butte

One can drive to the summit of Dixie Butte and enjoy the panoramic views of two proposed Wilderness areas: the broad valley of the Upper John Day River and the narrower and more canyonesque Middle Fork John Day River. The road to the top of this prominent, cone-shaped landmark is generally passable in a high-clearance highway vehicle, but its precipitous route with a long, steep drop-off is not for the faint of heart. The Dixie Mountain unit is part of both the proposed Upper John Day and the North Fork John Day-Elkhorns Wilderness areas. Butte, Little Butte, Deerhorn and Davis Creeks flow northward through the unit into the Middle Fork of the John Day, while Standard and Dixie Creeks flow southward into the mainstem of the river.

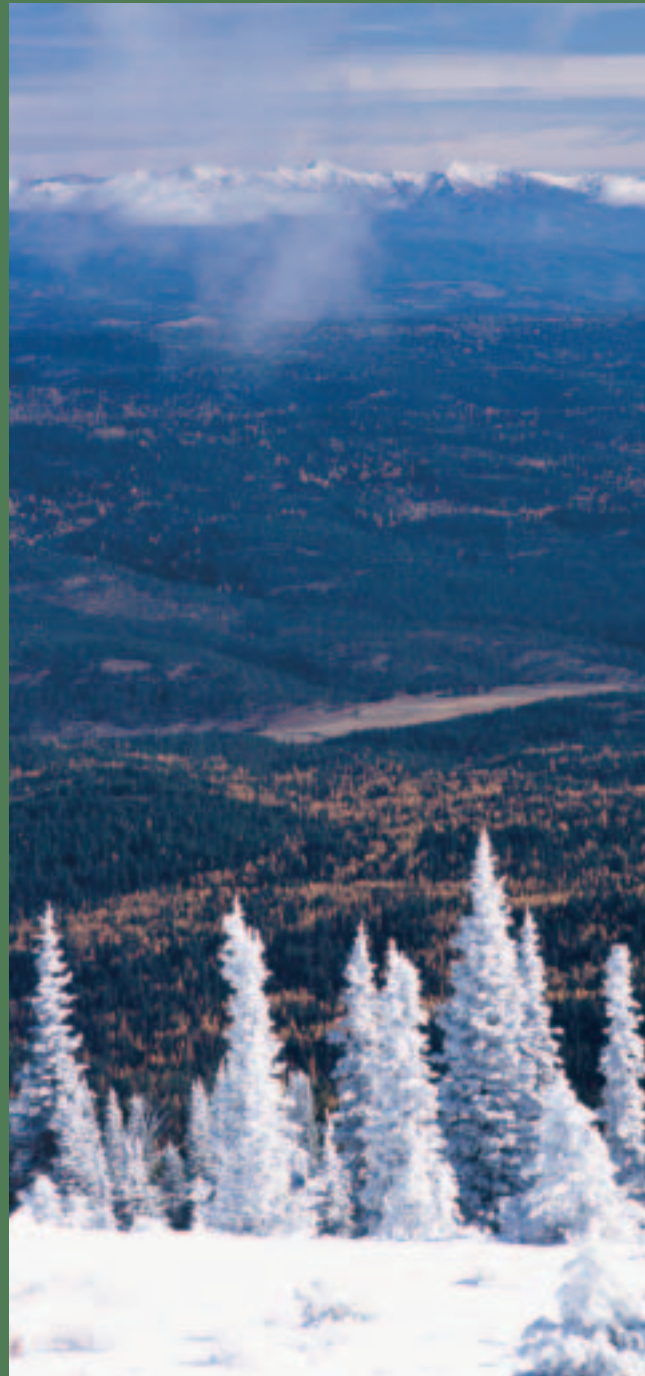
The volcanic butte is covered with a thin (less than two-feet deep) layer of ash from the explosion of the late Mount Mazama. The top of the butte is steep terrain with subalpine and alpine habitats. Whitebark pine and subalpine fir are the major tree species. There is some mountain mahogany here and the ground cover is primarily mountain big sagebrush, elk sedge and fleece flower. Of particular interest are yellow and cream buckwheats, Richardson's penstemon, Lyall rockcress, Sierra-hare sedge and alpine prickly currant.

Skirting the lower slopes on more bench-like terrain is an old-growth Douglas-fir, true fir, western larch and ponderosa pine forest. Elk sedge and pine-grass are found in the understory.

The area's intact streams, with their clear, cold water, are important spawning and rearing areas for steelhead, trout and chinook salmon. Rocky Mountain elk, mule deer, cougar, bobcat and marten also thrive in this habitat.

A ten-mile recreation trail following the forested northern slopes of Dixie Butte is the best way to enjoy this unit. Cross-country skiing, hiking, horseback riding, hunting and fishing are other popular recreational pursuits.

SANDY LONSDALE



From the summit in the Dixie Butte Unit of the proposed Upper John Day Wilderness.

## PROPOSED WILDERNESS

North Fork John Day-Elkhorns and Upper John Day

## LOCATION

8 miles northeast of Prairie City

## LEVEL IV ECOREGIONS

Melange (45%), Mesic Forest Zone (32%), John Day/Clarno Highlands (23%)

## VEGETATION TYPES

Ponderosa/Douglas-fir/True Fir (62%), Ponderosa (20%), True Fir/Douglas-fir (11%), Cutover/Burned (7%), Willow Riparian (<1%)

## TERRAIN

Steep and beautiful.

## DRAINAGE SUBBASINS

Middle Fork John Day, Upper John Day

## ELEVATION RANGE

3,799-7,592 feet

## SIZE

18,387 acres

## COUNTY

Grant

## FEDERAL

## ADMINISTRATIVE UNITS

Malheur National Forest (Blue Mountain Ranger District); BLM Prineville District (Central Oregon Resource Area)

## USGS 7.5' QUAD MAPS

Bates, Dixie Meadows





Paintbrush (*Castilleja* spp.) and other species on Fields Peak in the McClellan Mountain Unit of the proposed Upper John Day Wilderness.

golden eagle and bald eagle.

Rocky Mountain elk and mule deer are common. Other major wildlife species include black bear and cougar. More enigmatic residents include pika, bobcat, wolverine, marten, snowshoe hare and the occasional gray wolf.

The American Fisheries Society has identified several aquatic diversity areas within the proposed Wilderness in recognition of their importance for bull trout, redband trout, westslope cutthroat trout, spring chinook salmon and summer steelhead. Pacific lamprey also spawn in the headwaters of the Upper John Day basin.

Of particular note are the area's westslope cutthroat trout. The species is the native trout once common to the west slopes of the Rocky Mountains in Idaho, Montana, Alberta and British Columbia. In Oregon, westslope cutthroat trout are found only in the Upper John Day River Basin, perhaps left there 10,000-15,000 years ago after one of the many times ancient Lake Missoula drained itself during Pleistocene times. Unlike other subspecies of cutthroat trout, the westslope do not prey on other fish. This lack of predatory instinct probably evolved because the westslope co-evolved with two other fish-eating species: bull trout and northern pikeminnow. By specializing in the ingestion of invertebrates, the westslope has avoided direct competition with these

other species, which might otherwise be inclined to eat it for lunch. Sensitive to changes in water quality and temperature, the majority of westslope trout are now found in roadless areas. In the John Day Basin, westslope cutthroat trout are now absent from the North Fork and Middle Fork subbasins. The species resides in only 73 of the 179 miles of its original stream habitat in Oregon, a decline caused by competition from introduced exotic fish and habitat destruction.

Recreational opportunities here include hunting, fishing, backpacking, horseback riding, birding, cross-country skiing or just walking leisurely among some giant "pumpkins," also known as old-growth ponderosa pine.

Threats to the proposed Wilderness include roading, logging, livestock grazing, mining and off-road vehicle use.

## **Proposed Wallowa Mountains Wilderness** Lower-Elevation Old Forests, Mountain Meadows and Intact Streams

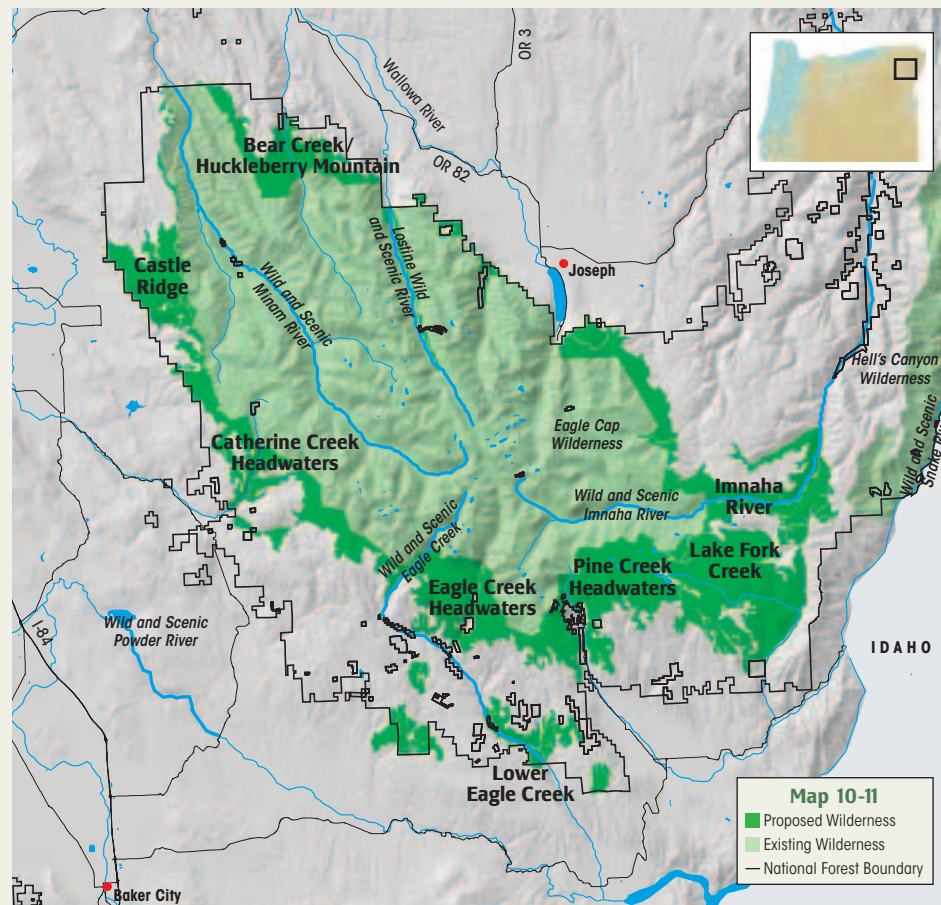
The unprotected wildlands of the proposed Wallowa Mountains Wilderness include open parklands, boulder-strewn meadows, dense forests, grassy slopes, wet and dry meadows, granite peaks, glaciated valleys, alpine lakes, basalt outcroppings, roaring creeks, towering cliffs and deep canyons.

The Wallowa Mountains are breathtakingly beautiful, even to area residents and frequent visitors. A sizable, but ecologically inadequate portion of the range is already protected in the highly popular Eagle Cap Wilderness. The area is so popular that some have taken to calling the mountain range the "Eagle Caps" in reference to the Wilderness, even though the Wilderness area was named after "Eagle Cap," the seventh highest peak in the range.

The Wallowa Mountains are a combination of granite and basalt. Granite dominates the higher elevations, basalt the lower. In between are combinations of both. Glaciation, volcanism, faulting, folding and erosion are all on full display in the Wallowa Mountains.

The waters that flow off the Wallowas end up in the Snake River, though by widely varying routes. The Wallowa River and its two major tributaries, the Lostine and Minam, drain the northern part of the range. Tributaries of the Grande Ronde River, which also includes the Wallowa, flow from the western slopes. Tributaries of the

## Proposed Wallowa Mountains Wilderness



Some of the units in the proposed Wilderness are highlighted below.

**Bear Creek-Huckleberry Mountain** contains nearly four miles of trail in de facto wilderness before reaching the current Eagle Cap Wilderness boundary.

**Castle Ridge** features large outcroppings of monadnocks that rise above the surrounding forest. It is also a mountain hemlock research area.

**Catherine Creek Headwaters** is prime steelhead spawning habitat.

**Eagle Creek Headwaters** features several tributaries to the main Eagle and East Eagle Creeks. A steep, rugged and little-used trail traverses the unit.

**Imnaha River** includes a portion of the Imnaha Wild and Scenic River. The Imnaha River is one of the last strongholds of salmonids in the Snake River Basin.

**Lake Fork Creek** is featured on page 206.

Visitors can walk the length of the **Lower Eagle Creek** unit on a river-side trail near slopes with grassy openings, open parklands of ponderosa pine and unusual rock formations. The stream is of substantial volume and varies between deep pools, rapids, swift glassy-smooth stretches and pretty little waterfalls. This segment of Eagle Creek is designated as a unit of the National Wild and Scenic Rivers System.

**Pine Creek Headwaters** features granite outcroppings and glaciated valleys.

### LEVEL IV ECOREGIONS

Mesic Forest Zone (49%), Wallows/Seven Devils Mountains (21%), Canyons and Dissected Highlands (14%), Subalpine-Alpine Zone (13%), Continental Zone Foothills (3%), Blue Mountain Basins (<1%)

### VEGETATION TYPES

Western Larch/Douglas-fir/Ponderosa/Lodgepole (38%), Ponderosa/Douglas-fir/Western Larch/Lodgepole (20%), Subalpine Lodgepole (11%), Ponderosa/Douglas-fir/True Fir (10%), Subalpine Fir/Engelmann Spruce Parklands (4%), Cutover/Burned (3%), Douglas-fir/Ponderosa/True Fir (3%), Lodgepole/Western Larch (2%), Ponderosa (2%), True Fir/Douglas-fir (2%), Ponderosa/Grasslands (2%), Big Sagebrush (1%), Western Larch/Douglas-fir/True Fir (1%), Alpine Barren Fell Field (<1%), Ponderosa/Shrub (<1%), Grasslands/Bunchgrass (<1%), Quaking Aspen (<1%)

### DRAINAGE SUBBASINS

Imnaha, Pine, Powder, Upper Grande Ronde, Wallowa

### ELEVATION RANGE

2,480-8,618 feet

### UNITS

Castle Ridge, Cougar Creek, *Eagle Cap Additions* (Bear Creek-Huckleberry Mountain, Catherine Creek Headwaters, Eagle Creek Headwaters, Lick Creek, Lostine River, Lower McCully Creek, Northeast Additions, Northwest Additions, Pine Creek Headwaters, South Imnaha Slope), Goose Creek, Grave Creek-Deer Creek, Lake Fork Creek, Lick Creek, Lower Eagle Creek, Mount Howard, Mud Lake, Sawmill Creek, Skull Creek, South Fork Catherine Creek, Summit Creek, Upper Summit Creek

### EXISTING WILDERNESS INCORPORATED

Eagle Cap

### SIZE

173,786 acres (272 square miles, not including 349,897 acres of currently protected Wilderness)

### COUNTIES

Baker, Union, Wallowa

### FEDERAL ADMINISTRATIVE UNITS

Wallowa-Whitman National Forest; BLM Vale District

### CONGRESSIONAL DISTRICT

2nd



PROPOSED WILDERNESS  
Wallowa Mountains

LOCATION  
12 miles north-northeast of Halfway

LEVEL IV ECOREGIONS  
Mesic Forest Zone (52%), Canyons and Dissected Highlands (35%), Wallowa/Seven Devils Mountains (12%), Subalpine-Alpine Zone (<1%)

VEGETATION TYPES  
Western Larch/Douglas-fir/Ponderosa/Lodgepole (43%), Ponderosa/Douglas-fir/Western Larch/Lodgepole (24%), Ponderosa/Douglas-fir/True Fir (17%), Subalpine Lodgepole (12%), Ponderosa/Grasslands (3%), Ponderosa (<1%)

TERRAIN  
Enticingly rugged.

DRAINAGE SUBBASIN  
Pine Creek

ELEVATION RANGE  
2,799-6,824 feet

SIZE  
32,153 acres

COUNTY  
Baker

FEDERAL ADMINISTRATIVE UNIT  
Wallowa Whitman National Forest (Pine Ranger District)

USGS 7.5' QUAD MAPS  
Deadman Point, Duck Creek

FEATURED UNIT  
Lake Fork Creek

Lying between the high Wallowa Mountains to the west and the high rim of Hells Canyon to the east, the mixed-conifer forests of the Lake Fork Unit receive more precipitation than anywhere else in Oregon east of the Cascade Crest. The land rises steeply in the lower elevations, sloping more gently higher up.

The unit is 90 percent forested with Douglas-fir, various true firs, western larch, ponderosa pine, lodgepole pine, quaking aspen and mountain maple. The rest is open grassy slopes. Since this is a wetter forest, the natural frequency of wildfire is comparably less than elsewhere in the region.

Lake Fork Creek is a tributary to North Pine Creek, which joins Pine Creek that flows into the Snake River. All of the streams in the unit are home to native redband trout. Lake Fork Creek and its major tributary, Elk Creek, are also strongholds for endangered bull trout.

Rocky Mountain elk and mule deer thrive in the alternately open and dense forests and their grass-shrub understory. The unit provides both summer and winter range for these species. Blue, ruffed and spruce grouse, along with black bear and cougar are found in the unit. Evidence of wolverine and lynx has also been documented.

The excellent fish and wildlife habitat is also visually pleasing to the human eye. Most recreation in the unit is big game hunting, followed by upland bird hunting, fishing and hiking. A portion of the unit is within the Hells Canyon National Recreation Area.

RIC BAILEY



Trail in the Lake Fork Unit of the proposed Wallowa Mountains Wilderness.

ALEX P. BROWN



In Oregon, spruce grouse (*Falciapennis canadensis franklinii*) are found only in the proposed Wallowa Mountains Wilderness and Hells Canyon Wilderness Additions.

Powder River drain much of the southern end of the range, while Pine Creek and its tributaries flow from the southeastern corner. The Imnaha River drains the remainder of the range's eastern parts. The Powder River, Pine Creek, Imnaha River and Grande Ronde River all eventually empty into the Snake River.

Nearly all of the unprotected wildlands in the proposed Wallowa Mountain Wilderness are contiguous with the existing Eagle Cap Wilderness. Since establishing the area in 1964, Congress has expanded the Eagle Cap Wilderness twice. However, large expanses of both high and low elevation forestlands remain unprotected.

The northern additions to the proposed Wallowa Mountains Wilderness are centers of concentration of species rarity and endemism for plants and animals. The American Fisheries Society has identified several aquatic diversity areas within the proposed Wilderness in recognition of important bull trout, redband trout, spring/summer chinook salmon and summer steelhead populations that live and spawn in the area's many streams.

Major tree species here include Engelmann spruce, lodgepole pine, subalpine fir, whitebark pine, grand fir, Douglas-fir, western larch, ponderosa pine, quaking aspen and mountain maple.

Major bird species include bald eagle, prairie falcon, northern goshawk, red-tailed hawk, Cooper's hawk, osprey, ferruginous hawk, Clark's nutcracker, three-toed woodpecker and white-headed woodpecker. Of particular note is an endemic subspecies of the gray crowned rosy finch (*Leucosticte tephrocotis wallowa*), which is less tawny and

red-brown in color than *L. t. littoralis* found in the Cascades and Blue Mountains. During the breeding season, the subspecies can be found at the edges of receding snow.

The Wallowa Mountains (and perhaps the nearby Hells Canyon country) are home to the spruce grouse. Although it once ranged in the northern Oregon Cascades, the spruce grouse is now very rare in the state. The grouse is a more common resident of the northern boreal forests, mostly in Canada. The subspecies found in Oregon is *Dendragapus canadensis franklinii*. Spruce grouse favor mature conifer forests above 5,000 feet. While some of Oregon's habitat for this species is already protected in the Eagle Cap Wilderness, much of it is not. Many of the area's high elevation forests remain vulnerable to roading and logging. Closing certain roads and allowing logged forests to grow old again would provide more habitat for the bird. Given their limited distribution and natural unwariness of humans, spruce grouse are protected from hunting. However, often mistaken for blue grouse, many spruce grouse are still shot during hunting season.

Of the approximately 70 mammal species found in the Wallowa Mountains, the most notable are Rocky Mountain elk, mule deer, Rocky Mountain bighorn sheep, black bear, wolverine, fisher, river otter, cougar, lynx, beaver and coyote. A highly charismatic, but nonetheless alien exotic megafauna, is the mountain goat, which was transplanted by humans to the Wallowa Mountains a few decades ago. While mountain goats ranged the Wallows before the last ice age, they have not been native to the range since the last glaciers receded.

Recreational opportunities include big game and upland bird hunting, fishing, hiking, whitewater boating, horseback riding, nature study, birding, berry picking, sightseeing and marveling at the alpine geology.

Major threats to the area are logging, livestock grazing, off-road vehicle use and mining. ♦

## Notes

<sup>1</sup> The proposed Malheur Lake Wilderness of over 92,000 acres is described in Andy Kerr. 2000. OREGON DESERT GUIDE: 70 HIKES. The Mountaineers. Seattle, WA: 128-129.

<sup>2</sup> For more information, see Andy Kerr. 2000. OREGON DESERT GUIDE: 70 HIKES. The Mountaineers. Seattle, WA: 209-219.

<sup>3</sup> For more information, see Andy Kerr. 2000. OREGON DESERT GUIDE: 70 HIKES. The Mountaineers. Seattle, WA: 186-191.

<sup>4</sup> For more information, see Andy Kerr. 2000. OREGON DESERT GUIDE: 70 HIKES. The Mountaineers. Seattle, WA: 108-170.