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Umatilla National Forest
Review of
Areas with Wilderness Potential

Asotin Creek Roadless Area (#14016)
16,180 Acres

Overview

History: The Asotin Creek Roadless Area was inventoried for study as a potential wilderness during the development of the 1977 Oregon Butte Unit Plan Environmental Impact Statement. At that time, it contained 16,100 acres and was allocated to nonwilderness use. Timber sales on the west and south sides reduced the unroaded portion of the area; however, the addition of the area north of Bracken Ridge increased its size to 16,900 acres.

Since the 1990 Umatilla National Forest Plan, additional timber sales and 1.16 miles of new road construction, primarily on the south end, have further reduced the unroaded portion. Additional acreage was removed from roadless status to facilitate moving the boundary 300 feet away from existing open roads. This was done to make the roadless area consistent with existing access travel management plans and allow for increased flexibility in maintenance of the existing transportation system. With refinements in mapping and the removal of some portions from roadless status, the current area is approximately 15,050 acres.

Location and access: The Asotin Creek area is located in Garfield and Asotin counties, Washington, and includes the headwaters of the North Fork Asotin Creek. Almost the entire drainage is within the Forest Boundary. Bounded on the east by the Forest Boundary, this area may be accessed from numerous local roads emanating from Forest Road 41 on the north side, Road 40 on the west side, and Road 44 on the south side. Flooding in 1996 eliminated road access to the National Forest. The trailhead for Trail 3125 is located 5 miles downstream on State protected lands. These 5 miles is currently restricted to non-motorized vehicles.

Geography/Topography: The area is in the northern Blue Mountains of northeastern Oregon and southeastern Washington. Elevation varies from 2,450 feet where the North Fork Asotin Creek leaves the Forest to 6,000 feet on Devil's Tailbone Ridge on the southern boundary of the roadless area. Two-thirds of this area is composed of slopes greater than 60 percent while only 2 percent is on slopes less than 30 percent. Topography is very mountainous with steep slopes and deeply incised canyons.

Vegetation/Ecosystem: North aspects are timbered, primarily with white fir and mixed conifer at the lower elevations, and subalpine fir at the higher elevations; while south aspects are predominantly timbered stringer draws interspersed with grasslands on the upper slopes, giving way to stands of ponderosa pine and mixed conifer in the riparian area of the forks of the North Fork Asotin Creek. The predominant ecosystems, in the order of their dominance, are grass, mixed conifer, and white fir. Soil associations are described in the Forest Soil Resource Inventory. Bedrock over the entire area is basalt flows and feeder dikes of the Miocene age Columbia River Group (Swanson and others 1980).

Mean annual precipitation varies from 35 to 70 inches. Summer temperatures may reach 100º F.

One threatened plant species, Spalding's catchfly (*Silene spaldingii*) occurs in several scattered subpopulations in the grassland ecosystem that dominates the northeast quarter of the roadless area. About 5 percent of the roadless area is riparian area that includes habitat for both anadromous and resident fish.

About 9 percent of the area supports old growth wildlife habitat.

Current Uses: There are no active mining claims or oil and gas leases in this area. Minor upland game bird and heavy big game hunting (deer and elk) takes place within this area. Fishing is restricted in this area to protect Threatened and Endangered aquatic species.

About 42 percent of the area lies within two grazing allotments. Most of this area is in the Peola C&H Allotment, which lies north of the north fork of the North Fork Asotin Creek. The grazing season is annually from June 1^{t} to September 30 with 222 cow/calf pairs. A minor amount of this area is in the Asotin C&H Allotment, which lies along the southern edge of the roadless area. Grazing season is rotated between early use (June 15 to August 14) to late use (August 15 to October 15).

Treaty rights may be exercised in this area.

Appearance and surroundings: The look, or outward aspect, of the Asotin Creek area is that of a series of deep rugged canyons, which combine into the three major forks of the North Fork Asotin Creek. These forks are the North Fork, the Middle Branch, and the South Fork. These three forks merge at about the center of the roadless area, and leave the Forest along the northeast edge as the North Fork Asotin Creek. Each of these canyons is vegetated primarily with grasses on the south facing slopes and with forest vegetation on the north facing slopes. Along the northeastern edge of the roadless area, roughly 2,100 acres lie in Sheep Gulch. This drainage also joins the North Fork Asotin Creek, but outside the Forest Boundary. Sheep Gulch has very little forest vegetation and is dominated by grassy slopes.

Conditions surrounding the Asotin Creek area are varied. To the north, west, and southeast, the terrain is heavily forested, gentle to rolling plateau country which has been accessed for timber harvest and other purposes. To the northeast are open rolling grasslands with timber stringers in the draw.

Other roadless areas are very near. From the southwest corner of the Asotin Creek area, the Upper Tucannon area is about I.5 miles to the west across Forest Road 40, the Wenatchee Creek area is less than 1.0 mile to the south across Forest Road 44, and the Wenaha-Tucannon Wilderness is about 2 miles to the southwest across Forest Road 40.

Key Attractions: The primary attraction to this area is its early spring access to public lands for hiking, solitude and wildlife viewing with its close proximity to Lewiston-Clarkston Valley residents. Its primary attribute is its proximity to the Wenaha-Tucannon Wilderness. The rare plant diversity in the grassland ecosystem above Lick creek is unique to the Umatilla National Forest.

Inventory Criteria

The roadless area meets the inventory criteria for areas with wilderness potential.

Capability

Naturalness and Undeveloped Character: Human influences have had limited impact on the natural appearance or long-term ecological processes of the area. The area is free of disturbances, and natural balances are intact and operating. While these intangible values may have been disrupted in the past by activities such as fire and grazing, the activities are minimal in both extent and duration. Fire has been, and most likely will continue to be, the factor with the most potential to impact the naturalness of the area. However, fire has been the key to the long-term ecological changes and vegetative succession of the area. Effects can vary by intensity and extent; duration is limited to the period of vegetative recovery.

Opportunities for primitive recreation exist for horseback riding, hiking, fishing, and hunting. The recreation opportunity spectrum (ROS) for the area is fairly evenly divided between Semi-primitive Nonmotorized, Roaded Natural, and Roaded Modified.

Opportunities for a feeling of solitude, the spirit of adventure and awareness, serenity, and self-reliance can exist within this area due to its size. However, because of its long and narrow shape with development on the ridges between the canyons, the roads and timber harvest activities to the north, west, and south present nonconforming sights and sounds to parts of the roadless area.

Primitive, Recreational Opportunities and Challenges: The opportunities for challenging experiences within this area are relative to the experience and ability of the recipient. For the person in reasonable physical condition who is familiar with mountain hiking, this area offers limited opportunities. Trail 3125 follows the North Fork Asotin Creek and the north fork of the North Fork for 6.5 miles, before leaving the creek bottom and heading to Pinkham Butte on the ridge above. All other foot travel is cross-country.

Special Features: The grassland in the northeastern portion of the area is unique to the Umatilla. It includes a cluster of rare grassland forb species more common to the ecosystems of Hell's Canyon and the Snake River Canyon than to the western Blue Mountains. Four species of currently listed sensitive plants are known to inhabit this area. Arthur's milkvetch (*Astragalus arthurii*), Nez Perce mariposa lily (*Calochortus macrocarpus* var. *maculosa*), and Rollins' biscuitroot (*Lomatium rollinsii*) are scattered over Bracken, Sourdough and Sheep Ridges, and the mariposa lily also occurs at a higher elevation on Count Chute Ridge. Porcupine sedge (*Carex hystericina*) grows along the North Fork Asotin Creek. One local endemic that is considered a species of potential concern in Washington is Garfield lupine (*Lupinus garfieldensis*) which also occurs on Sheep Ridge. Several populations of historically sensitive species (*Cirsium utahense* and *Orobanche pinorum*) are known from other ridges within the roadless area.

The opportunities for outdoor education and scientific study are limited to the ecosystems contained herein. There are no research natural areas existing within or planned for this area, although the grasslands of Bracken, Sheep, and Sourdough Ridges have potential for designation as a Botanical Area of Special Interest.

Three ESA listed aquatic species are known to occupy waters in this watershed; Snake River spring/summer Chinook salmon (*Oncorhynchus tshawytscha)* Snake River steelhead (*Oncorhynchus mykiss)*, Columbia River bull trout (*Salvelinus confluentus)* are currently listed as "Threatened."

Manageability and boundaries: The Asotin Creek area is large enough to be managed in an undeveloped state. The current boundary is manageable; most of it follows clear topographic or geographic lines. No conflict occurs between existing or potential public uses outside which would result in demands for invasion of the natural setting, and affect values within the unroaded area. The current boundary does constitute a barrier to most prohibited use and protects the environment inside from the sights and sounds of civilization outside the area. Most of the area surrounding the roadless area is at higher elevations outside the canyons. However, while the Asotin Creek area has a maximum length of about 9.5 miles, northeast to southwest, and its width is only 3.5 miles at the widest point and less than 1.0 mile in some of its fingers.

Availability

Recreation: Same as Outdoor Recreation Opportunities.

Wildlife: The northeast half of the roadless area is within big game winter range, and the entire area provides habitat for bighorn sheep. A small amount of potential habitat for Canada lynx is found in the most southern area. Old growth habitat is well distributed, primarily along Asotin Creek. About 20 acres of old growth habitat was harvested in 1991.

Lack of roads in this area does provide seclusion opportunities for wildlife species dependent on limited human access. Maintaining roadless areas can provide refugia habitat when surrounding areas become roaded, managed, and increasingly utilized by recreation and other uses.

Water/Fish: Water quality is at potential in this roadless area. Three ESA listed aquatic species are known to occupy waters in this watershed; Snake River spring/summer Chinook salmon (*Oncorhynchus tshawytscha)* Snake River steelhead (*Oncorhynchus mykiss)*, Columbia River bull trout (*Salvelinus confluentus)* are currently listed as "Threatened."

Range: Potential is present and is being used and developed under the current Asotin C&H and Peola C&H allotments. There is a total of 536 acres within the roadless area with moderate livestock use and development under the Asotin C&H Allotment. There are 6,350 acres of the Peola C&H Allotment within the roadless area, but only 2,646 acres currently grazed.

Timber/vegetation: Major tree species are mixed conifer and white fir.

Minerals: This area is within the old Asotin mining district, but contains no known mineralization. The area is classed as prospectively valuable for oil and gas (Smith 1976).

Cultural: Heritage resource inventories have been done throughout this area. One historic site, associated with grazing activity, was recorded, and eight prehistoric sites.

Land use/Special Uses: There is no land or special uses in this area.

Fire: Fire occurrence within this area has historically been frequent with return intervals of 5 to 25 years. The area experienced a low severity fire regime. Fire suppression in this ecosystem has created stands and forest conditions that differ from those in the past. The altering of the natural disturbance regimes has changed stand structure, tree species composition, tree stocking levels, and fuel loadings. The stands have a higher risk of large-scale high intensity wildfire occurrence due to increased ground fuels and understory ladder fuels.

Insects and disease: This area has the usual amount of insect and disease problems found in unmanaged natural stands of timber. There is a potential of spread to adjacent managed stands.

Private lands: State-owned lands within and adjacent to this area have been minimally developed and were purchased from a rancher. Chances for Federal acquisition are very limited.

Grande Ronde Roadless Area (#14125) and (#6267)

12,990 + 5,580 = 18,570 Acres (total)
Administratively shared with the Wallowa Whitman NF

Overview

History: The Grande Ronde Roadless Area was inventoried as a potential wilderness during the RARE II process. At that time, it contained 18,400 acres and was allocated to nonwilderness. By1990 timber sales had reduced the unroaded portion.

The 1979 FEIS for the Elgin Planning Unit Land Management Plan included the Wallowa-Whitman portion and allocated most of the Grande Ronde canyon to scenic recreation. The remainder of the area, the side drainages of Elbow, Bear, Alder, Meadow, and Sheep Creeks, were allocated to the production of the best general forest wildlife habitat, represented by elk as the indicator species, while managing for timber and domestic livestock

The Grande Ronde River forms the boundary between the Umatilla and Wallowa-Whitman National Forests. The river has been designated a wild river under the Omnibus Oregon Wild and Scenic Rivers Act of 1988. Boundary adjustments occur due to 300-foot buffers from major roads, Forest Roads 62 and 6222.

Location and access: The Grande Ronde area is located in Oregon's Union and Wallowa counties. This section of the river begins about 15 miles north of its confluence with the Wallowa River at Rondowa, and flows north and east for about 17 miles to a point about one-half mile east of Grossman Creek. Principal access is by river craft because of the steep canyon walls. There are no trails maintained in the Grande Ronde Canyon.

Geography/Topography: The unroaded area is in the Blue Mountains of northeastern Oregon and southeastern Washington. It includes portions of the Ochoco, Blue, and Wallowa physiographic provinces. Elevation varies from 1,900 feet, where the river leaves the Forest, to almost 5,000 feet near Lookout Mountain. The canyon walls bordering the Grande Ronde River and its major tributaries have slopes greater than 60 percent, with only an occasional interspersed bench. Basalt outcrops along steep side slopes create a bench and cliff topography. Soil associations are described in the Forest Soil Resource Inventory. Basalt flows and interbedded fluvial sediments of the Miocene age Columbia River Group are found over the entire area. Late Tertiary faults control the course of the northerly-flowing portion of the Grande Ronde River, and the east-west trend of Bear Creek (Walker 1973). Mean annual precipitation varies from 15 to 40 inches. Summer temperatures occasionally exceed 100^{o} F.

Vegetation/Ecosystem: The character of the Grande Ronde area is that of a deep, rugged, sparsely vegetated canyon cut into a plateau well covered by conifers. Distinguishing features are very steep slopes covered either with grass, or a mosaic of grass and conifers, both interspersed with basalt outcrops. These physical details vary little, with the exception of the riparian area, which is heavily vegetated with conifers, hardwoods, and brush.

Conditions surrounding the area contrast sharply with the steep, roadless portion. The plateau on all sides is heavily forested with coniferous timber which has been accessed for timber harvest and other purposes. Some timber harvest has provided a mosaic of patch cuts where the vegetation varies a few decades in age. To the east, and most to the south, is industrial forest land. The Wenaha-Tucannon Wilderness is situated over the ridge to the northwest, less than 1 mile from the head of Bear Creek. About 11 miles down the Grande Ronde (to the northeast) is the town of Troy, Oregon. From Troy on downstream, the river has a much broader valley bottom and the slopes support fewer trees and more grass. The predominant ecosystems are grass and mixed conifer. North slopes are covered primarily with mixed conifer and white fir. South slopes are open, steep grasslands, forming the alternating timber/grass pattern common to much of the canyon country in northeast Oregon. The grasslands contain a minor amount of scabland vegetation such as ninebark and oceanspray. The riparian area includes a few moist meadows, cottonwood clumps, alder, blackberry, and other shrubs

Current Uses: There are no mining claims or oil and gas leases within this area. On the Umatilla National Forest side of the Grande Ronde, about 19 percent of the roadless area is technically in the Eden C&H Allotment, which extends up the river (from the Forest Boundary) to Bear Creek. Only incidental use is made along the river, however, because the steep slopes below the breaks provide an effective barrier. A total of 339 cow/calf pairs are permitted annually from July 16 to October 20.

A portion of the Indian Point grazing allotment is within Grande Ronde Roadless Area on the Wallowa-Whitman National Forest side of the river. The allotment has not been stocked since 1993 and there are no plans to restock this allotment in the future.

Moderate deer and elk hunting, as well as minor upland bird hunting, take place along the lower slopes of the Grande Ronde and in the major side drainages. Hunting access is from campsites along the river and from the roaded canyon breaks. The dominant use of the area, though, is for float trips by boat, raft, or canoe. The river has a rating between two and three on the international scale of difficulty (six being not navigable). Views of the rugged scenery and wildlife are abundant. Excellent trout fishing and primitive camping round out the float trip. Recreational use is about 5,000 RVD's per year with boating accounting for 75 percent. Treaty rights may be exercised in this area.
Appearance and surroundings: The primary attractions of the Grande Ronde area are the varied recreation opportunities associated either with the river itself or accessed by the river. Being able to drift by boat, experience three rapids but gentle gradients, view steep canyon walls, encounter other persons only occasionally, and hear only the river, is a unique experience in northeast Oregon.
Key Attractions: The outstandingly remarkable values (ORVs) of the Grande Ronde River identified in support of the Congressional Record for designation as a Wild & Scenic River include: wildlife, fisheries, recreational and scenic values. These ORVs are key attractions.

Inventory Criteria

The roadless area meets the inventory criteria for areas with wilderness potential

Capability

Naturalness and Undeveloped Character: Human influences have had little impact on the natural appearance or ecology of the Grande Ronde area. The area is free of disturbances, and natural balances are intact and operating. While these intangibles may have been disrupted in the past by activities such as fire, the activities were minimal in both extent and duration. Fire has been, and most likely will continue to be, the factor with the most potential to impact the quality of the area. Nearly all human activity takes place near the canyon bottom, all the fuels are upslope and have a high rate of spread, and the steep, rocky slopes make control difficult. However, fire has been the key to the long-term ecological changes and vegetative succession of the area. Duration of the effects of wildfire would be limited to the period of vegetative recovery, which can vary with intensity and extent.

A float trip down the Grande Ronde provides a true sense of solitude, except for those occasions when other users are encountered. Screening from vegetation and the abrupt rise of the banks away from the river make the upper canyon slopes difficult to view from most campsites along the river. Trips away from the river for hunting also provide a feeling of solitude because the only signs of human activity would be vegetation alteration on the distant skyline

The related recreation opportunities associated with floating on the Grande Ronde River are picnicking, camping, fishing, hunting, and sightseeing due to the limited access into the canyon. The upper canyon walls provide big game and bird hunting opportunities from access roads located near the rim of the canyon.

Primitive, Recreational Opportunities and Challenges: “Running” the Grande Ronde in the spring when it is at flood stage provides plenty of adventure. Later, in early summer, beginners and families will find the same adventure on a relatively gentle river, with the realization that the only way out is either downriver or to the plateau above.

Special Features: Bald eagles (*Haliaeetus leucocephalus*) occur primarily as a winter migrant in the area. One population of Back’s sedge (carex backii) and one of prickly phlox (Leptodactylon pungens var. hazeliae) both of which are sensitive in Oregon exist along the Grande Ronde River. Habitat similar to that required for MacFarlane’s four-o’clock (Mirabilis macfarlanei Const. and Roll.) and Spalding’s silene (Silene spaldingii Wats), both Federally-listed species, is also present. Habitat for a number of State of Oregon listed T&E and rare plants exist in the river area, and the likelihood of occurrence of listed plants is fairly high.

Manageability and boundaries: The unroaded portion of the area is well defined. The boundary between the plateau and the steep canyon slopes forms the boundary on the Umatilla National Forest. Exceptions are where the boundary crosses a side drainage or exempts private land or past timber sales. The boundary on the Wallowa-Whitman National Forest is composed of a series of land survey lines, in the proximity of the break between the steep canyon slopes and the plateau. Some of this boundary is on section lines, because it is also the Forest boundary with industrial forest land. This unroaded area varies from less than 1 mile to more than 2 miles in width, winds in several directions for about 17 miles, and includes the land between the Grande Ronde River and the plateau on each side. All area boundaries, identified on the included map, are either survey lines or physiographic features.

Travelers within the river corridor are removed from the world outside the canyon, though not so much by distance as by the vegetative screening and the noise of the river. The only access into the area is down the river 9.5 miles from Minam or 1.5 miles from Rondowa. Access to Rondowa is across Boise Cascade land and is permitted only outside of hunting seasons. The road is part of a cooperative hunting closure with the Oregon Department of Fish and Wildlife. Access at Minam is either at the Minam Motel or 1.5

miles downstream at Minam State Park. Exits from the river lie below the Grande Ronde area at Wildcat Creek (10.5 miles) or at Troy (18.5 miles). The 45-mile float trip usually takes 2 or 3 days.

The current boundary is manageable. Little conflict is expected between existing or potential public uses which would result in unacceptable impacts.

Availability

Recreation: Opportunity for change in type of use is limited, even though there is some potential for total use increases. While there is little potential for roading this area, trail development could increase use of the upper canyon and, particularly, the river itself.

Boating, with associated activities, is the dominant use. Floating provides the incentive for using the area in almost all cases. Fishing and hunting are the only other significant reasons for entering the area.

Wildlife:
The Grande Ronde River Canyon is an important wintering area for deer and elk. The lower elevations along the river are critical range during severe winters. The northeast section of this roadless area is within the range of the Wenaha bighorn sheep herd. Black bear and river otters are common along the stream bottoms, and an occasional cougar is observed in the canyon. Bird nesting densities appear to be quite high along the river. Wintering bald eagles are occasionally seen foraging near the river, and peregrine falcons may occur in the area. Old forest habitat is found in the moister draws and north slopes throughout the area, but due to topography is not extensive.

The Grande Ronde Roadless Area provides habitat for a diverse array of wildlife species. Disturbance from potential roading is unlikely due to the steepness of the area.

Water/Fish: Mean annual discharge of the Grande Ronde River, as measured at the Rondowa Gauging Station, is 2146 cfs. More than half of this flow is spring runoff. This entire segment of the Grande Ronde was identified as a USGS power site, however, the Wild and Scenic legislation prevents hydro power development in designated corridors and the power site classification was vacated when this segment of the Grande Ronde was designated as a Wild and Scenic River. Upstream of this segment, irrigation is the dominant use of Grande Ronde River water, and downstream it supports power generation in the Snake River.

Steelhead and redband/rainbow trout fisheries are important Grande Ronde River recreational values. Many professional outfitters also float the river commercially. The river is highly important to downstream anadromous fishery interests.

Fish bearing Grande Ronde tributaries in this roadless area include Sheep, Meadow, Alder, Bear and Elbow Creeks on the north and west side of the Grande Ronde River, and Clear and Grossman Creeks on the east side. All of these streams host resident redband/rainbow trout and all, except perhaps Meadow Creek, probably have the occasional steelhead spawn in them.

These tributary streams are not Chinook salmon spawning habitat, but they do provide juvenile rearing habitat for Chinook spawned farther upstream. Chinook are not known to spawn in the Grande Ronde within the roadless area, but Snake River Fall Chinook do spawn a little farther downstream, near Troy, Oregon.

Bull trout have been observed in Bear Creek, but it is not an important bull trout producer.

The Grande Ronde River within this roadless area serves primarily as migratory and overwintering habitat for steelhead, bull trout and spring Chinook salmon. Since it becomes quite warm in summer, it would not be good rearing habitat for bull trout or juvenile Chinook salmon.

Improvements of the aquatic habitat in this river segment would depend on improvements in upstream management of the river. Management changes to keep the river colder and at a higher flow level would benefit fish in this part of the Grande Ronde River.

Range: The area would make suitable early season sheep range. However, conflicts with deer and elk winter use and year-round bighorn sheep use prevent this allocation.

Timber/vegetation: Portions of this land are suitable for timber production. Major tree species are white fir, Douglas-fir, ponderosa pine, and larch with less than 2 percent of the acreage in lodgepole pine and alpine fir. Trees are concentrated on north slopes and near the Grande Ronde River. Some timber adjacent to the plateau could be cable yarded to the plateau. Most of the timber in the Grande Ronde would be very costly to access with roads and prohibitive to harvest with aerial systems

Minerals: This area has no known locatable mineral potential. Studies have identified a new coal field within fluvial interbeds in the Columbia River Basalt in northern Wallowa County, containing the most extensive lignite beds in Oregon. The thickness of the seam varies up to 40 feet under the Troy Basin. Further studies will be necessary to determine the commercial value of the deposit (Ferns 1985). These lignite-bearing beds are known to occur within this area. The area is also considered prospectively valuable for oil and gas (Smith 1976).

Cultural: Heritage resource inventories have been done throughout the area (those portions on the UNF), resulting in the recordation of two historic sites.

Land use/Special Uses: Commercial outfitters, who conduct float trips down the Grande Ronde River, are the only special-use permit holders in the area.

Fire: The post settlement fire occurrence within this area has been low. Subsequently fuel loads in timber stands have become high. Heavy surface fuels, the presence of ladder fuels and stand density can be expected to contribute to crown fire and high severity fire.

Insects and Disease: Insect and disease problems are typical of those found in unmanaged, natural forest stands. There is always a potential of spread to adjacent managed stands, but this is not currently predicted.

Private lands: Section 36, T.4N , R.40E., W M. was acquired with the Fry Meadows LEX in 1993. The Forest Land Ownership Adjustment Plan also lists the E 1/2, SE 1/4 of Section 11 and the N 1/2, SW 1/4 of Section 12, T.3N., R.40E., W.M , as Group II, Special Interest. These are lands to be acquired as the opportunity occurs.

Hellhole Roadless Area (#14132)

67,130 Acres

Overview

History: Inventoried for study as a potential wilderness during the RARE II process, the Hellhole Roadless Area was allocated to non-wilderness use by the RARE II decision in January 1979. Its southeast corner includes 500 acres of Wallowa-Whitman National Forest lands.

A 1979 FEIS Land Management Plan for the Elgin Planning Unit allocated most of the area to general forest wildlife habitat. The allocation allowed uses for managing wood fiber, domestic livestock, and semi-remote recreational experiences and in the northeast part of the area, developed and dispersed recreation were allowed.

The current forest plan, implemented in 1990, designated 80 percent of the area as “Grass Tree Mosaic”, which provides high levels of big game habitat with no scheduled timber harvest. An area around Huckleberry Mountain was designated “Wildlife Habitat,” which allows timber harvest and other resource activities to benefit big game and wildlife. Since the Forest Plan was adopted, management activities have been limited to grazing and prescribed fire to enhance forage for big game.

Location and Access: The Hellhole area is located in Umatilla and Union counties, Oregon, in T.1N., R.37 E., and includes the watersheds of the South Fork Umatilla River, Ryan Creek, Camp Creek, and North Fork Meacham Creek. It is bounded by Forest Roads 31 and 32 on the east; by the Forest Boundary and Umatilla County Road 900 to the north; by a railroad on the west; and by Forest Roads 31 and 3113 to the south.

Forest Road 3128 to Black Mountain penetrates the middle of the roadless area. Several trails provide access to the major drainages and ridges, but much of the area lacks a developed trail system. Seasonal roads access the Forest boundary west from Stumbough Ridge, and a closed road goes west from Johnson Ridge. Steep canyons limit access to stream bottoms in the interior.

Geography and Topography: The roadless area ranges from 2,000 to 5,800 feet in elevation within the western slopes of the Blue Mountains. Topography is very mountainous with steep slopes and numerous deeply incised canyons. Eighty-nine percent of the area has slopes greater than 30 percent with 34 percent of them steeper than 60 percent.

Vegetation and Ecosystem: Grass and white fir predominate in this high-ridge ecosystem that captures between 30-45 inches of precipitation a year. At lower elevations, northern slopes are timbered with white fir and mixed conifer. Higher elevations support sub-alpine fir. South-facing slopes are predominantly timbered with brushy draws interspersed by grasslands on the upper slopes. Lower elevation riparian areas contain ponderosa pine and mixed conifer.

Current Uses: No mining claims or oil and gas leases are within the area. Treaty rights may be exercised. There are two domestic grazing allotments; in portions of Spring and North Fork Meacham Creeks. The Spring Mountain Allotment covers about one-quarter of the roadless area’s south end. The North End Transitory Sheep Allotment covers two small areas on study area’s eastern edge.

With 71 percent of the area nonmotorized, big game hunting is light to moderate. Upland game bird hunting is also light to moderate.

Appearance and Surroundings: The Hellhole Roadless Area is near two other roadless areas: Horseshoe Ridge to the west and North Mt. Emily Roadless Area to the southeast across Forest Road 31. The North Fork Umatilla Wilderness lies to the northeast (across Forest Road 32).

The North Fork Meacham Creek area, an area of about 22,000 acres to the west, contains several large and deep rugged canyons (North Fork Meacham, Bear, and Pot creeks) separated by Huckleberry and Thimbleberry mountains. This area is nearly half grassland, and has the configuration of a bowl draining to the west. The 40,500-acre Umatilla River-Meacham-Thomas creeks area to the northwest includes parts of three separate drainages that feed the Umatilla River. Ryan Creek, a long and narrow drainage running north, is included in this area.

To the northeast lie the rugged North Fork Umatilla Wilderness and the remainder of the Thomas Creek Canyon. To the east lies high plateau, to the southeast lies the steep east facing slope of the Grande Ronde Valley and the North Mt. Emily Roadless Area. To the south lies the high plateau country near Wilbur and Green mountains.

Key Attractions: The area's primary attributes are: its location in regard to the North Fork Umatilla Wilderness and the Umatilla Indian Reservation; its size; its value as part of the Umatilla big game winter range; and its remoteness and difficulty to access. Other than big game hunting and limited sightseeing, there are no outstanding primary attractions within the Hellhole Roadless Area.

Inventory Criteria

The Roadless Area meets the inventory criteria for areas with wilderness potential.

Capability

Naturalness and Undeveloped Character: Human influences have had little impact on the natural appearance and long-term ecology of the area. With the exception of wheel tracks that enter or traverse the area in a number of locations, the Duncan Guard Station cabin and a small dam in Camp Creek are the only signs of an altered appearance. A major east-west railroad line through Meacham Canyon provides a break from the otherwise natural landscape. Fire has been, and will likely continue to be the factor with the most potential to impact the naturalness of the area, and remains the key to the long-term ecological changes and vegetative succession of the area. The duration of its effects would be limited to the period of vegetative recovery, which varies with the intensity and extent of fire.

Hiking, camping, fishing, hunting, and horseback riding all provide primitive and semi-primitive recreation in the area, which includes four low-standard Forest trails. Despite roads and timber harvest activities to the east, south, and in the middle, and railroad traffic through Meacham Canyon, the spirit of adventure and awareness, serenity, and self-reliance exists in places of the roadless area.

Primitive, Recreational Opportunities and Challenges: This area offers moderately challenging opportunities to persons who are familiar with mountain hiking and are in reasonably good physical condition.

Special Features: Three regional sensitive plant species have been found within the area: two moonworts (*Botrychium lanceolatum* and *B. pinnatum*) occur on Goodman Ridge, and Back's sedge (*Carex backii*) grows northwest of Graves Butte, across the Umatilla River from Corporation Guard Station. Sabin's lupine (*Lupinus sabinio*), classified as limited but stable in Oregon and threatened in Washington, has been inventoried near Thomas Creek. No research natural areas currently exist or are planned for this area.

Manageability and Boundaries: The southern portion (North Fork Meacham Creek area) of the Hellhole Roadless Area has definable natural and artificial boundaries with the natural boundaries extending to the plateau edge except in the Thimbleberry Mountain area on the east side, and the North Fork Meacham Creek Canyon on the west. The dimension of the area (6 miles northwest-southeast by 7 miles southwest-northeast) supports the concept of a natural unit. This part of the roadless area could be a unified management area. The northern portion along the Umatilla River-Meacham-Thomas creeks area also has natural and artificial boundaries that are currently manageable. This area includes low elevation winter ranges.

Current boundaries of the North Fork Meacham Creek area constitute a barrier to most prohibited uses and protect the environment inside the boundary from the sights and sounds of civilization. The same cannot be said for the Umatilla River-Meacham-Thomas creeks area. Slight boundary changes would add areas in Spring Creek and along the Umatilla River for roadless consideration. The plantations in Spring Creek have matured since the area was harvested in the 1960s, and streamside roads were obliterated in the mid-1990s to provide habitat for steelhead. The Spring Creek extension provides a wildlife corridor over McDonald Ridge between sections of the roadless area.

Availability

Recreation: The Hellhole Roadless Area's recreation values are similar to adjacent Forest areas and include hunting, hiking, sightseeing, and camping. Generally, each activity occurs during a specific time of year with big game hunting producing the heaviest use. The quality of the hunting experience has improved under the limited permit system.

Wildlife: The area serves as the major year-round range for the Umatilla elk herd. This area is expected to increase in importance in place of traditional winter range on private land. Old forest habitat includes eight Dedicated Old Growth areas and is well-distributed in the area.

Water and Fish: The Hellhole Roadless Area contains at least 11 streams identified as fish-bearing. Most of the streams suspected of supporting fish have been surveyed by USFS aquatic habitat survey crews, but a few have not and their status is unverified. Streams that go dry in summer may support spawning steelhead in the spring with juvenile fish moving to perennial water as streams recede.

Non-ESA-listed whitefish, dace, and shiners inhabit many of these streams. Sculpin are listed as a sensitive species in Region Six.

The quality and character of aquatic habitat varies widely due to aspect, topography, soils, and past management. Some streams have been altered by roads while others in more remote areas, such as Upper North Fork of Meacham Creek, are natural or very near natural condition. Favorable conditions makes the Upper North Fork Meacham and its tributaries, Pot Creek and Bear Creek, important refuges for aquatic species.

Even though most of its main stem has been disturbed by flood-control work, Meacham Creek and its tributaries are the strongest annual producers of steelhead in the entire Umatilla River system. The burden of steelhead production rests with the tributary streams, many of which lie within this roadless area. Fish habitat improvement projects were implemented along the main stem and South Fork Umatilla River, Thomas Creek, and Meacham Creek, but their effectiveness has not yet been determined.

A site on North Fork Meacham Creek has been identified for water impoundment but a proposed project has not been put in action. Some stream channels were affected by flooding in 1996 but water quality is near-natural in respect to temperature and sediment in roadless-area tributaries to Meacham Creek and the Umatilla River.

Range: The area includes two sheep allotments with a third, the Goodman, proposed for the north end for use by the Confederated Tribes of the Umatilla Indian Reservation.

Timber and Vegetation: Approximately 54 percent of the area is classified as land suitable for timber harvest. Tentatively suitable areas are interspersed by grasslands and open meadows and are less productive than the higher-site Forest lands. The species mix is dominated by white fir and Douglas-fir and includes sub-alpine fir and ponderosa pine.

Minerals and Soils: The area has no known locatable mineral potential, but is considered prospectively valuable for oil and gas.

Cultural: Inventories of heritage resources on the Umatilla NF portion of the area recorded 19 prehistoric sites and 22 prehistoric isolated occurrences; and six historic sites and four historic isolated occurrences.

Land Use and Special Uses: The Bureau of Reclamation has proposed constructing an earth-fill and tuck embankment dam, approximately 1,100 feet long and 220 feet high, on the North Fork of

Meacham Creek on private land downstream from the junction of Bear Creek with North Fork Meacham Creek west of the Hellhole Roadless Area. Water from winter storage and early spring runoff would provide for steelhead enhancement, a reservoir trout fishery, power generation, and municipal and industrial water. A trail would be developed from Bear Camp Spring to Huckleberry Mountain to provide access to the reservoir for fishing. Potential reservoir drawdowns make the value of this recreational opportunity questionable.

Fire: The area has a history of wildfire, which poses potential hazards to plant and animal populations. Although fire can be hazardous it can also be an agent to help initiate the regeneration of certain plant species. A lookout tower in the area is generally occupied during periods of critical fire danger. The railroad traversing Meacham Creek presents another fire hazard.

Insects and Disease: Insect and disease problems are typical for unmanaged natural stands of timber, and pose a long-range potential of minor concern for spreading to adjacent managed stands

Private Lands: Approximately 1,730 acres of private lands are intermingled with Forest lands in the roadless area. The majority are located on the western edge adjacent to the railroad in Meacham Canyon and is owned by individuals and private concerns. One section of private land lies within the interior.

Horseshoe Ridge Roadless Area (# 14033)

6,270 Acres

Overview

History: The Horseshoe Ridge Roadless Area was allocated to non-wilderness use when inventoried for study as potential wilderness during the RARE II process.

A 1979 Land Management Plan for the Elgin Planning Unit allocated the entire area to best general forest wildlife habitat.

The current forest plan, implemented in 1990, designated 90 percent of the area “Grass-Tree Mosaic,” and the rest “Dedicated Old Growth”. To demonstrate the ability to harvest timber and meet wildlife objectives, the plan provided an exception that would allow scheduled harvest in the Grass-Tree Mosaic until the year 2000 if no harvest occurred or harvest didn’t meet objectives. No harvest occurred and the area reverted to standard management direction for the classification. The proposed Blue Mountain Land Exchange would add approximately 4,458 acres to National Forest lands in the roadless area. A break in slope naturally isolates the added area and restricts vehicle access. Vegetation in the area has not been managed.

Location and Access: The Horseshoe Ridge Roadless Area is located in Umatilla County, Oregon, T.1N., R36E., on the western boundary of the Umatilla National Forest. It is bounded on the northwest by the Umatilla Indian Reservation; on the east by the Oregon-Washington Railroad and Navigation Company (Union Pacific); and by Forest Road 3030 to the south and west. No serviceable trails access the interior.

Geography and Topography: The Horseshoe Ridge Roadless Area is within the northern Blue Mountains (Ochoco, Blue, and Wallowa Mountains physiographic province) of northeastern Oregon and southeastern Washington. The area is characterized by steep mountainside ridges and deeply incised canyons. Elevation varies from 2,000 feet on the northern boundary to 4,000 feet along the western edge. About 29 percent of the area is composed of slopes greater than 60 percent, while about 1 percent has slopes less than 30 percent. Basalt flows of the Miocene-age Columbia River Group are found over the entire area. A late Tertiary fault parallels the area’s western margin (Walker 1973).

Vegetation and Ecosystem: Northern aspects are timbered with white fir and mixed conifers; southern aspects are grassland with brushy stringer draws. The ecosystems are mostly grass and white fir. Mean annual precipitation varies from 30 to 40 inches. Summer temperatures may exceed 100°F.

Current Uses: There are no mining claims or oil and gas leases within this area. About 50 percent of the area lies within the Butcher Creek Sheep and Goat Grazing Allotment. Hunting activity is moderate for big game (deer and elk) and minor for upland game birds. Treaty rights may be exercised.

Appearance and Surroundings: The primary feature of Horseshoe Ridge is a steep, east-facing slope, about 8 miles long and ½ to 1½ miles wide. Areas to the south, southwest, northwest, and east are similar with the exception of a railroad in the bottom of Meacham Creek Canyon to the east. Landowners along the stream have harvested timber and realigned the channel. The Hellhole Roadless Area is east of the railroad right-of-way. Terrain to the west is gentle and covered with mixed conifer, interspersed with grass scablands.

Key Attractions: The area serves as big game winter range. There are no primary attractions.

Inventory Criteria

The Roadless Area meets the inventory criteria for areas with wilderness potential. The land exchange acreage is not included as part of this area until the decision for that land exchange has been completed.

Capability

Naturalness and Undeveloped Character: Human impacts have had little impact on the natural appearance and ecological processes of the area. The area is free of disturbances, and natural balances are intact and operating. Roads and timber harvest activities to the west and the railroad to the east present nonconforming sights and sounds to the entire area.

The opportunities for primitive recreation are limited to cross-country hiking and hunting. The area has no Forest-system trails.

Primitive, Recreational Opportunities and Challenges: Opportunities for physically challenging experiences are relative to the experience and ability of the recipient. They are very limited for persons in reasonably good physical condition who are familiar with mountain hiking.

Special Features: None.

Manageability and Boundaries: The long, narrow roadless area lacks size and isolation that would shield the inside environment from the sights and sounds of civilization. The current boundary is manageable as most of the perimeter follows clear topographic or geographic lines and the lower boundary is 300 feet from the railroad grade. No conflict occurs between existing or potential public uses that would impact the natural setting nor affect values within the unroaded area. A break in slope limits vehicle access to the ridge-top road system.

Availability

Recreation: No developed campgrounds exist in the area, nor is there any potential for them. Distance and poor access limits most recreational use to big game hunting, and snowmobile use in the winter.

Wildlife: The entire area provides winter range for big game. Two old-growth areas are identified but, because of topography, are not well-connected to old stands in adjacent areas.

Water and Fish: Streams in the Horseshoe Ridge Roadless Area are not known to have fish, but none have been surveyed by USFS field biologists. Duncan Canyon Creek is the only named stream on USFS maps and it is shown as an intermittent stream. A proposed land exchange would add Short Canyon Creek and Tie Creek to the roadless area. USFS biologists have not confirmed that either of these intermittent streams lack fish.

Range: There is little opportunity for increasing range resources. Approximately 50 percent of the area lies within the Butcher Creek Sheep and Goat Allotment.

Timber and Vegetation: Timber is concentrated in north-slope stringers dominated by white fir and mixed conifer. Timber near the breaks of Meacham Creek is accessible for logging, but other areas would require roads or aerial systems.

Minerals and Soils: The area has no known potential for mining, but is considered prospectively valuable for oil and gas.

Cultural: Resource inventories recorded one prehistoric lithic scatter site. Other sites identified in the Cultural Resource Overview of the Umatilla National Forest, Volume 11, include the post office in the old settlement of Ruddock, a corral, portions of the Whitman Trail, and an old Native American trail.

Land Use and Special Uses: None.

Fire: The occurrence of wildfire within this area after settlement has been moderate. Fuel loads in timber stands have become high. Heavy surface fuels, the presence of ladder fuels and stand density can be expected to contribute to crown fire and high severity fire.

Insects and Disease: Insect and disease problems are typical for unmanaged natural stands of timber, and pose a long-range potential of minor concern for spreading to adjacent managed stands

Private Lands: Oregon-Washington Railroad and Navigation Company (Union Pacific) owns the right-of-way along the eastern boundary. Its northeast Oregon main line and a parallel work road, used by the company to maintain its facilities, are located in this right-of-way. Several other private tracts abut the railroad right-of-way. Owners have harvested accessible timber and UP has realigned the stream channel.

Jaussaud Corral Roadless Area (#14023)

0 Acres

History: This area was first inventoried late in the RARE II process. It was assigned to further planning in a Unit Environmental Impact Statement. This roadless area does not meet the criteria for potential wilderness area due to harvests, roads, road buffers, and other developments.

Lookingglass Roadless Area (#14028)
5,710 Acres

Overview

History: The Lookingglass Roadless Area was allocated to non-wilderness use when inventoried for study as potential wilderness during the RARE II process. Since then, timber sales, predominately on the southeast side, have reduced the unroaded portion.

The 1979 Land Management Plan for the Elgin Planning Unit allocated the entire area to best general forest wildlife habitat. The allocation allowed uses for managing wood fiber, domestic livestock, and semi-remote recreational experience.

The 1990 Forest Plan designated 95 percent of the area in the Lookingglass drainage as "OHV Recreation," which does not allow scheduled timber harvest. Nearly 65 percent of the Eagle Creek portion of the roadless area is designated "Wildlife and Timber."

Location and Access: The Lookingglass Roadless Area is located in Union and Umatilla counties, Oregon, at the intersection of Townships 4 and 5 North and Ranges 39-40 East, northeast of the Spout Springs Ski Area. It lies in the northern Blue Mountains (Ochoco, Blue, and Wallowa Mountains physiographic province) and includes nearly the entire Lookingglass Creek Canyon. The area is accessed from the northwest by Forest Road 64; from the northeast by Forest Road 63; the southeast by Forest Road 3701; and from the southwest via State Highway 204. A 2-mile section of Trail #3232 is the only maintained trail in the roadless area. The North Fork Umatilla Wilderness lies less than 1 mile to the west across State Highway 204, while the Walla Walla River Roadless Area lies less than 2 miles north across Forest Road 64. Ownership of the area east of the Forest boundary is private land. A Pacific Power and Light Company power transmission line forms 2.5 miles of boundary on the northeast side.

Geography and Topography: Basalt flows of the Miocene-age Columbia River Group are found over the entire area. A late Tertiary fault cuts through the western portion of the area. Elevation ranges from 3,000 feet where the Lookingglass Creek leaves the Forest, to 5,200 feet on the northwest edge of the unit at Bald Mountain. A little more than half of the area is composed of slopes greater than 60 percent, while about 11 percent has slopes less than 30 percent.

Vegetation and Ecosystem: White fir, grass, and subalpine fir comprise the predominant ecosystems in the unit, which has a mean annual precipitation of 45-55 inches. North-facing slopes are primarily timbered with white fir and mixed conifer at lower elevations and subalpine fir at higher elevations. Higher elevation south-facing slopes are marked by timbered stringer draws and grasslands. Riparian areas along Lookingglass and Eagle creeks contain stands of ponderosa pine and mixed conifer.

Current Uses: The entire roadless area lies within the North End Transitory Sheep and Goat grazing allotment. There are no mining claims or oil and gas leases. Hunting activity is minor for upland game birds and moderate for big game deer and elk. Some trout fishing occurs. Trail 3232 receives moderate use from hikers, motorcyclists, mountain bikers, and horseback riders.

Appearance and Surroundings: The Lookingglass Roadless Area is characterized by the long, narrow, rugged and deep Lookingglass Creek Canyon, which is joined by the equally rugged Eagle Creek drainage to the east.

Key Attractions: There is no primary attraction within the Lookingglass area. Its primary attribute is its location adjacent to the Spout Springs Ski Area and Luger Springs Campground, upriver (5 miles) from the State of Oregon's Lookingglass salmon hatchery.

Inventory Criteria

The Roadless Area meets the inventory criteria for areas with wilderness potential.

Capability

Naturalness and Undeveloped Character: Human influences have had limited impact on the natural appearance and long-term ecological processes of the Lookingglass area. Natural balances, even where altered in the past, are intact and operating. While these intangible values may have been disrupted in the past by activities such as fire and grazing, the activities are minimal in both extent and duration. Fire has been, and most likely will continue to be, the factor with the potential to impact the naturalness of the area. However, fire has been the key to the long-term ecological changes and vegetative succession of the area.

The spirit of adventure and awareness, serenity, and self-reliance exist within the area. With the exception of motorcycles traveling Trails #3232 and #3231, nonconforming sights and sounds are nonexistent within the deep canyons. Primitive recreation opportunities include cross-country hiking, motorcycle riding, mountain biking, horseback riding, and hunting.

Primitive Recreational Opportunities and Challenges: The opportunities for challenging experiences within this area are relative to the experience and ability of the user.

Special Features: Sabin's lupine (*Lupinus sabinianus*), listed as limited but stable in Oregon and threatened in Washington, has been inventoried near Bald Mountain.

Manageability and Boundaries: The current boundary is manageable as most of the boundaries follow clear topographic or geographic lines, but the area lacks unity. The steep east-west canyon of Lookingglass Creek extends approximately 6.5 miles and varies from ½ to 1½ miles wide. The other portion consists of the steep, south-facing slope of Eagle Creek Canyon.

Little conflict occurs between existing or potential public uses outside the area that would affect values within the unroaded area. The development of one or more additional ski runs from the Spout Springs Ski Area into Lookingglass Canyon has been considered. The current boundary does not constitute a barrier to any prohibited use or protect the environment inside from the sights and sounds of civilization outside the area.

Availability

Recreation: No established campgrounds exist in the area, and there is no potential for developing any sites. Several dispersed campsites are located on the perimeter and on Lookingglass Creek near the trail bridge, which receives moderate use during the fall hunting season. The roadless area is adjacent to the Spout Springs Ski Area and has limited opportunities for future winter recreational experiences.

Wildlife: The area provides excellent summer range for big game, has extensive old-growth habitat, and contains high levels of dead and down woody habitat. The west half provides habitat for threatened Canada lynx as listed by the U.S. Fish and Wildlife Service.

Water and Fish: The Lookingglass Roadless area contains most of Lookingglass Creek within the Forest Boundary; from near the mouth of Eagle Creek upstream to near its headwaters at Langdon Lake. It includes the lower portions of Summer and Lost creeks as well as the area where the

springs arise from the banks and streambed to increase streamflow forty-fold over a distance of a few hundred yards. Water temperature in this section of the creek stays in the mid-40s year-round. Lookingglass Creek has a cooling effect on the Grande Ronde River, decreasing the temperature by about 10 degrees at their confluence in mid-summer.

ESA-listed (Threatened) Snake River steelhead, Snake River spring Chinook salmon, and bull trout use this part of Lookingglass Creek. Most bull trout spawning happens in this part of Lookingglass Creek, which is also very important for spawning steelhead. It may become important as spawning habitat for re-introduced Snake River spring Chinook. The cold, clean water is also important for operation of the Lookingglass fish hatchery.

Range: The entire roadless area lies within the North End Transitory Sheep and Goat Allotment.

Timber and Vegetation: Approximately 81 percent of the area is classified as tentatively suitable lands for harvest. Major tree species are white fir, subalpine fir, and mixed conifer.

Minerals and Soils: This area has no known locatable mineral potential but is considered prospectively valuable for oil and gas.

Cultural: No known cultural resources have been inventoried.

Land Use and Special Uses: None at this time.

Fire: Fire occurrence has been moderate to high. Fuel loads in timber stands have become high. Heavy surface fuels, the presence of ladder fuels, and dense stand conditions can be expected to contribute to severe fires.

Insects and Disease: This area has the usual amount of insect and disease problems found in unmanaged natural stands of timber. An outbreak of balsam wooly adelgid has caused severe mortality of subalpine fir.

Private Lands: There are no intermingled private lands within the area. Two parcels of private land are located on the northern boundary.

Meadow Creek Roadless Area (#14018)

1,780 Acres

Overview

History: The Meadow Creek Roadless Area was inventoried for study as potential wilderness during the development of the Oregon Butte Unit Plan Environmental Impact Statement. At that time, was allocated to non-wilderness use by the Record of Decision signed in April 1977. Prior to the 1990 Umatilla Land and Resource Management Plan timber sales, predominately on the west and south sides, reduced the unroaded portion of the area.

Since the 1990 Umatilla National Forest Plan, additional harvest has occurred throughout the area. However, since no additional roads were constructed this has not affected the total acreage within this area. Additional acreage has been removed from roadless status to provide for a 300-foot buffer from open existing roads. This was done to make the roadless area consistent with existing access travel management plans and allow for increased flexibility in maintenance of the existing transportation system.

Location and access: The Meadow Creek area is located in Columbia County, Washington, and lies against the northwest boundary of the Wenaha-Tucannon Wilderness. This area may be accessed on the west side by Forest Road 46, on the north side by Forest Roads 47 and 4712, on the east side by Forest

Road 4713, and on the south side by Trail #3123. Trail #3123 consists of 8.1 miles of maintained ATV trail that runs from the end of Forest Road 4713 to Forest Road 46. This new trail construction connected Trail #3123 with Middle Point Ridge in Spangler. A parking facility and campground were constructed adjacent to the roadless area at the trailhead.

Geography/Topography: The area is in the northern Blue Mountains of northeastern Oregon and southeastern Washington. Elevation varies from 2,880 feet, where the Little Tucannon River joins the Tucannon River, to 5,200 feet at the boundary of the roadless area and the Wenaha-Tucannon Wilderness on Big Turkey Trail Ridge. The Meadow Creek Roadless Area forms the east facing slope of the Meadow Creek-Panjab Creek drainage for about 6.5 miles south of the Little Tucannon River. About 72 percent of this area is composed of slopes greater than 60 percent, while only about 10 percent has slopes less than 30 percent. Topography is very mountainous with steep slopes and deeply incised canyons.

Vegetation/Ecosystem: North aspects are timbered primarily with mixed conifers at the lower elevations, giving way to subalpine fir at the higher elevations; while south aspects are predominantly timbered stringer draws interspersed with grasslands on the upper slopes, giving way to stands of ponderosa pine and mixed conifers in the riparian area. The predominant ecosystems, in the order of their dominance, are white fir and mixed conifer. Soil associations are described in the Forest Soil Resource Inventory. Bedrock over most of this area is basalt flows of the Miocene age Columbia River Group. Undifferentiated metamorphic rocks of Paleozoic and Mesozoic age outcrop along Panjab Creek extending upstream from the Tucannon River (Swanson and others 1980). Mean annual precipitation varies from 40 to 55 inches. Summer temperatures may reach 100º F.

Current Uses: There are no active mining claims or oil and gas leases in this area. Minor upland game bird and heavy big game hunting (deer and elk) takes place within this area. Heavy trout fishing takes place along the Tucannon and Little Tucannon Rivers, and Meadow and Panjab creeks.

Treaty rights may be exercised in this area.

Appearance and surroundings: The look, or outward aspect, of the Meadow Creek Roadless Area is that of a steep, east facing slope, about 8 miles long and 0 5-1.5 (average 1 25) miles wide.

Conditions surrounding the Meadow Creek area are varied. To the west the terrain is quite gentle and heavily forested with coniferous timber which has been accessed for timber harvest and other purposes. The area to the northwest is similar to the Meadow Creek Roadless Area, but has been accessed for timber harvest. To the northeast across the Tucannon River lies the Willow Springs Roadless Area. To the east of Panjab Creek and Big Turkey Trail Ridge, in the Wenaha-Tucannon Wilderness, the terrain is very similar to the Meadow Creek area. To the south are the headwaters of Meadow Creek. This area includes heavily timbered, steep slopes and has been accessed for timber harvest and other purposes.

Key Attractions: There is no primary attraction within the Meadow Creek area. Its primary attribute is that it shares about 2.5 miles of common boundary with the Wenaha-Tucannon Wilderness.

Inventory Criteria

This area meets the criteria for inventoried areas with wilderness potential.

Capability

Naturalness and Undeveloped Character: Human influences have had limited impact on the natural appearance of long-term ecological processes of the Meadow Creek area. The area is free of disturbances; and natural balances, even where altered in the past, are intact and operating. While these intangible values may have been disrupted in the past by activities such as fire and grazing, the activities were minimal in both extent and duration. Fire has been, and most likely will continue to be, the factor

with the most potential to impact the naturalness of the area. However, fire has been the key to the long-term ecological changes and vegetative succession of the area.

Due to its shape and the way the Meadow Creek area lies, the opportunities for a feeling of solitude, the spirit of adventure and awareness, serenity, and self-reliance do not really exist within this area. Roads to the east, north, and west, and timber harvest activities to the north, west, and south present nonconforming sights and sounds to nearly the entire roadless area.

Primitive recreation is limited to cross-country hiking and hunting. There are approximately 8.1 miles of ATV Trail No. 3123 within the area. The recreation opportunity spectrum (ROS) for the area is identified as Roaded Modified over 51 percent of the area. The remaining area is Roaded Natural.

Primitive Recreational Opportunities and Challenges: The opportunities for challenging experiences within this area are relative to the experience and ability of the recipient. For the person in reasonable physical condition who is familiar with mountain hiking, this area offers very limited opportunities

Special Features: There is unusually moist habitat with good potential for rare mosses and lichens in the lower elevation riparian corridors along the Tucannon and Little Tucannon Rivers. Three ESA listed aquatic species are known to occupy waters in this watershed; Snake River spring/summer Chinook salmon, Snake River steelhead, and Columbia River bull trout are currently listed as “Threatened.”

There are no research natural areas existing within or planned for this area.

Manageability and boundaries: The current boundary is manageable; most of the boundaries follow clear topographic or geographic lines. Little conflict occurs between or potential public uses outside which would result in demands or invasion of the natural setting, and affect values within the unroaded area. However, the current boundaries do not constitute a barrier to any prohibited use or protect the environment inside from the sights and sounds of civilization outside the area.

Availability

Recreation: Same as Outdoor Recreation Opportunities.

Wildlife: Mule deer and Rocky Mountain elk are two of the big game species that occur within the area. On the north end, about 20 percent of the roadless area is within the Tucannon big game winter range. On the south end, about 20 percent is considered potential habitat for Canada lynx. Old growth wildlife habitat is scattered throughout but is somewhat fragmented. Timber harvest in 1991 and 1993 reduced the value of this area as wildlife habitat; however, no roads were built.

Water/Fish: Spangler Creek provides between one-third and half of the base flow of the North Fork Touchet River at their confluence. Water quality is at potential in this roadless area. Three ESA listed aquatic species are known to occupy waters in this watershed; Snake River spring/summer Chinook salmon, Snake River steelhead, and Columbia River bull trout are currently listed as “Threatened.”

Range: The roadless area is primarily limited to recreation stock use. There are no permitted grazing allotments within the roadless area.

Timber/vegetation: Major tree species are white fir and mixed conifer.

Minerals: - Mineral and energy resource: This area is within the old Tucannon mining district. Argillically altered basalt is found near the northern tip of the adjacent Tucannon Wilderness. Samples from propylitically altered and bleached basalt near the northern tip of the Wilderness showed anomalous concentrations of gold, silver, and copper. Outcrops of quartz monzonite and diorite are found within the area, indicating a pluton at depth, and possibly a mineralized system (Munts 1983). The area is classed as prospectively valuable for oil and gas (Smith 1976), but the likelihood of such occurrences is reduced by the indications of a pluton which would most likely have driven off any hydrocarbons.

Cultural: Heritage resource inventories have been done throughout this roadless area except for a small section in the southern portion. However, this area generally consists of terrain with greater than 15 percent slope and is unlikely many, if any sites would be discovered. Within the surveyed portion, no sites were located.

Land use/Special Uses: Wild and Scenic River Classification. The section of the Tucannon River on the northeast boundary, approximately 2.0 miles from its junction with the Little Tucannon River to its junction with Panjab Creek, is being considered for classification under the Wild and Scenic Rivers Act. It meets the eligibility criteria for recreational river classification.

Fire: Fire occurrence within this area has historically been frequent with return intervals of 5 to 25 years. The area experienced a low severity fire regime. Fire suppression in this ecosystem has created stands and forest conditions that differ from those in the past. The altering of the natural disturbance regimes has changed stand structure, tree species composition, tree stocking levels, and fuel loadings. The stands have a higher risk of large-scale high intensity wildfire occurrence due to increased ground fuels and understory ladder fuels.

Insects and disease: This area has the usual amount of insect and disease problems found in unmanaged natural stands of timber. There is a potential of spread to adjacent managed stands.

Private lands: State and private lands within and adjacent to this area have been minimally developed. Possibilities of acquisition are very low.

Mill Creek Roadless Area (# 14021)

24,030 Acres

Overview

History: The Mill Creek Watershed Roadless Area was inventoried as a potential wilderness area during the development of the Oregon Butte Unit Plan Environmental Impact Statement. This area was allocated to non-wilderness use in 1977. Management direction of the Oregon Butte Plan allocated the Burnt Fork area to the production of forage for elk and domestic livestock, and timber for wood fiber.

In keeping with a 1918 cooperative agreement between the City of Walla Walla and the U.S. Department of Agriculture, the Mill Creek Watershed Roadless Area was managed to protect the City's municipal water supply. Protections for the watershed were continued in the 1990 Forest Plan. Half the Mill Creek portion was designated for watershed protection and the other half was designated a Research Natural Area. Ninety-five percent of the Burnt Fork portion was allocated to "Wildlife and Timber." There have been no vegetation management activities in the roadless area. Public travel into the Mill Creek Watershed is controlled and limited to an annual special elk hunt.

Location and Access: The Mill Creek Watershed Roadless Area is located in Walla Walla and Columbia counties, Washington, and in Umatilla and Wallowa counties, Oregon, Townships 6 and 7 North, Range 39 East. The primary access point is south from Walla Walla via Forest Road 65. The other major access is provided by Forest Road 64 (Kendall Skyline Road), located along the area's eastern edge. This road affords access from Dayton, Washington, to the north, and Tollgate, Oregon, to the south. Forest Trail 3211 forms the boundary between the Burnt Fork and Mill Creek drainages. Additional trails provide access to the interior of the Mill Creek Municipal Watershed for administrative purposes. Public access is prohibited by agreement with the City of Walla Walla. Access is unrestricted in the Burnt Fork drainage.

Geography and Topography: Geography of the area primarily consists of a large deeply eroded basalt uplift with rugged canyons. Steep canyon slopes contain numerous ledges of exposed basalt. The Hite Fault, a normal fault of late Tertiary age, cuts through the western portion of the area (Swanson and others 1980). Bedrock over the entire area is basalt flows of the Miocene-age Columbia River Group.

Elevation ranges from 2,400 feet where Mill Creek exits the National Forest to 6,250 feet at Table Rock Lookout. Approximately 79 percent of the area is composed of slopes greater than 60 percent, while only about 7 percent has less than 30 percent slope.

Vegetation and Ecosystem: The predominant ecosystems, in the order of their dominance, are grass, white fir, and mixed conifer. Northern aspects are mostly covered with white fir and mixed conifer at lower elevations, changing to subalpine fir and brush at the higher elevations. Southern aspects are predominantly forested draws interspersed with grasslands. Riparian areas in the bottoms of draws contain stands of ponderosa pine and mixed conifer.

The area is often subjected to intense, short-duration storms. Mean annual precipitation varies from 40 to 70 inches with most in the form of winter snow. Summer temperatures often exceed 90°F.

Current Uses: The predominant use of the Mill Creek drainage is for the production of domestic water for the City of Walla Walla, Washington. The area has no mining claims or oil and gas leases. The watershed is patrolled and access and use is restricted by permit only. A special elk hunt is permitted in both the Oregon and Washington portions of the Mill Creek Watershed each fall to control the population and prevent damage. No other hunting or fishing is permitted. The Burnt Fork area is open to hunting and fishing as allowed under the states' regulations.

Appearance and Surroundings: The area has the appearance of a very rugged series of canyons that are densely forested on the north and open on the south. The area is generally viewed as a large bowl-shaped drainage with access basically from the top. Areas to the north, south, and east appear very similar. Areas to the west are a mix of private forested and agricultural lands.

Key Attractions: The key attraction is the elk population.

Inventory Criteria

The area is larger than 5,000 acres, and meets the inventory criteria for areas with wilderness potential.

Capability

Naturalness and Undeveloped Character: Natural processes have been unimpeded for the past 50 years or so in the Mill Creek Watershed. Natural balances are intact and operating. Wildfire has been, and will likely continue to be, the factor with the greatest potential for impacting the area. Natural processes in the Burnt Fork drainage have largely been allowed to proceed, with domestic cattle use (past permitted use and current trespass use) in some areas.

Human influences have had limited impact on the natural appearance or long-term ecological processes of the Mill Creek Watershed. Native grassland plant communities are being lost to advancing yellow star thistle, spreading up the watershed. In the 1990s spruce budworm reached epidemic proportions. Mortality from defoliation places the upper watershed at risk for a major stand replacement event such as catastrophic fire.

Opportunities for a feeling of solitude, the spirit of adventure and awareness, serenity, and self-reliance exist within this area. Roads to the east and south, and timber harvest activities to the west, may present nonconforming sights and sounds to some of the roadless area, but all are at a higher

elevation, either on or beyond the rim of the watershed. The Burnt Fork area lacks the opportunity for a feeling of solitude or the realization of a primitive experience. Primitive recreation in the watershed is limited to elk hunting which is controlled by regulation and management objectives.

Primitive Recreational Opportunities and Challenges: Other than seasonal entry for permit-only elk hunting, the Mill Creek Watershed area does not offer opportunities for challenging experiences to the public, but the area is rugged and considered challenging. The Burnt Fork area does not offer much opportunity for challenging experiences due to its size and location.

Special Features: A population of subalpine spiraea (*Spiraea densrflora var splendens*) is found near Deadman Peak in the northern part of the roadless area. Currently, opportunities for outdoor education and scientific study are limited to the ecosystems contained herein. No established research natural areas exist within the area, however, one is being proposed.

Manageability and Boundaries: The Mill Creek Watershed is bounded by well-defined ridge crests, which provide a logical management boundary and effective barrier to most internal and adjacent uses. The Burnt Fork area lacks this unity. The Forest boundary forms the western- northwestern boundary (traversing numerous major ridges and canyons), while the eastern boundary is formed by a mixture of roads and ridge crests. There is very little opportunity to mitigate the situation by changing boundaries.

Availability

Recreation: Recreation within the Mill Creek Watershed is limited and controlled by permit to hunt elk. The adjacent Wenaha-Tucannon Wilderness attracts numerous recreationists (especially fall elk hunters). The wilderness and roadless area are separated by Forest Road 64 with very limited opportunity to enter either area from this narrow ridgetop road.

Fishing is prohibited in the watershed. Fishing access to the upper Burnt Fork area is difficult due to restricted access through private land in the drainage bottom.

The Forest Table Rock Lookout and Watershed Rider's Cabin are located on top of Table Rock Mountain on the eastern edge of the Mill Creek Watershed. These will be maintained and/or improved as necessary.

Wildlife: About 30 percent of the area provides well-distributed old growth habitat. Habitat for "threatened" Canada lynx is available at higher elevations on roughly the east half of the area. Big game winter range is found on the west side at lower elevations.

The Mill Creek Roadless Area contains large stands of undisturbed forest habitat immediately adjacent to the Wenaha-Tucannon Wilderness, and nearby the Walla Walla River Roadless Area. Maintaining roadless areas in addition to or in association with wilderness provides refugia habitat when surrounding areas become highly roaded, heavily managed, and increasingly impacted by recreation and other uses. Private land to the west have been heavily impacted by roading and timber harvest.

Wisdom et al. (2000) identifies 13 factors associated with roads that are found consistently detrimental to more than 70 percent of the 91 "broad scale species of focus" in the interior Columbia Basin. The lack of roads in this area provides seclusion for wildlife species dependent on limited human access.

Water and Fish: Approximately 2 percent of the area is classified as riparian. Mill Creek provides high quality water to the City of Walla Walla and is affected primarily by natural processes. The 1996 floods caused several shallow slumps and channel adjustments that have since recovered.

Mill Creek currently hosts native bull trout and rainbow/redband trout. Historically, it was also used for spawning by steelhead and Chinook salmon. Biologists studying fish movements into the watershed over the last 5 years through trapping and radio telemetry have not observed any steelhead entering the watershed. The Confederated Tribes of The Umatilla Indian Reservation recently stocked adult Chinook salmon in Mill Creek below the watershed and some have spawned within the municipal watershed. It remains to be seen if channel alterations downstream will prove too much for the long-term persistence of the newly introduced Chinook to survive in upper Mill Creek.

Aquatic habitat within streams in the Mill Creek watershed is mostly excellent with clear and cold water. Habitat is complex and shade is abundant.

The upper portions of the Burnt Fork and the Green Fork of the Touchet River within the Mill Creek Roadless Area are neither as cold nor as un-impacted by human activities as Mill Creek and its tributaries. Historically, these streams hosted the same fish species as Mill Creek, although Chinook salmon probably never went as far upstream as the Forest boundary. Bull trout are less common in these streams, probably because the water is not as cold as Mill Creek.

Range: The Walla Walla cattle and horse allotment is restricted to a small portion of the southern rim of the roadless area and is currently vacant. There are no plans to restock it.

Timber and Vegetation: Major tree species are white fir, mixed conifers, and subalpine fir.

Minerals and Soils: The Oregon and Washington Wilderness Acts of 1984 withdrew mining as a permitted use from the Mill Creek watershed. This area has no known locatable mineral potential, but is considered prospectively valuable for oil and gas.

Cultural: No known cultural resources.

Land Use and Special Uses: The Mill Creek Watershed is protected and restricted to use as a municipal watershed for the City of Walla Walla.

Fire: The post-settlement occurrence of fire has been moderate. Fuel loads in timber stands have become high. Heavy surface fuels, the presence of ladder fuels, and dense stands can be expected to contribute to crowning fires and fires of high severity.

Insects and Disease: This area has severe insect and disease problems found in unmanaged natural forests. An outbreak of balsam wooly adelgid caused widespread mortality of subalpine fir. The north end of the area has high mortality and heavy fuel loadings due to downed wood. The risk of loss, including large-scale damage from insects and fire, will increase over time. A long-range potential of insect spread to adjacent managed stands exists, but is of minor importance at this time.

Private Lands: The roadless area contains approximately 2,100 acres of private or non-national forest land in four parcels. Land along the lower reach of Mill Creek is owned by the City of Walla Walla and contains municipal water facilities.

North Fork John Day Additions Roadless Areas (#6353)

Acres to be determined

This area write up is currently under development.

North Fork Umatilla Additions (#6263)
970 Acres

Overview

History*:*
The North Fork Umatilla Wilderness is 20,144 acres located in Umatilla and Union counties in Oregon. During this update to the Forest Plan public comments indicated that 5 areas adjacent to the wilderness had potential to be added totaling 977 acres.

Location and access:
The areas can be placed into three groups.

- The northern 40 acres is near McDougall Camp contains a portion of Bear Creek to the break in slope; a quarter mile to the east are cabins. Access to this portion from the top would be through private lands. This piece is connected to the wilderness via Bear Creek.
- An eastern grouping of two pieces totaling approximately 450 acres located 1.25 miles north and a mile west of Horseshoe Prairie. Both pieces contain the motorized rim trail. The piece north of Horseshoe Prairie would move the boundary of the wilderness onto a flat above the break in slope, the current boundary. Timber harvest has occurred in much of the area (40 percent).
- A southern grouping totaling approximately 490 acres would move the boundary from section lines to predominately a break in slope avoiding a few pieces of midslope roads. A portion of the Buck Mountain Road, FR 3150 might need decommissioning. A portion of this road was decommissioned when the wilderness was created. Helicopter logging occurred in portions of the area in the early 1990s.

Geography/Topography:
Northern 40: This area is steep stream side canyon ranging in elevation from 4,000 feet at the Bear Creek to 4,200 feet on the rim.
Eastern Group: The parcel north of Horseshoe Prairie is a bench above the rim of the canyon at about 5,200 feet elevation. The other parcel is steep canyon lands at the head of Johnson Creek.
Southern group: Includes lands below the break in slope avoiding existing roads and motorized trails. Elevation to the rim is 4,600 feet. About 70 percent of the area is southern exposures.

Vegetation/Ecosystem:
Northern 40: Vegetation is characterized by moist forest, predominately white fir.
Eastern Group: Forest vegetation is moist and cold forest types, predominately white fir with subalpine fir.
Southern Group: Predominately grasslands with stringers of moist forest in the draws and the few areas of northern exposure. Shallow soils dictate vegetation conditions.

Current Uses:
Northern 40: This area likely receives little use because public access is only from Bear Creek without any developed trail.
Eastern Group: This area contains a popular motorized trail that receives moderate use.
Southern Group: Much of the area is steep, open slopes on southern exposure that receives little recreation use. Hunters use the area during different times of the year.

Appearance and surroundings:
Northern 40: This is canyon lands along a stream with no distant views.
Eastern Group: About 60 percent of the area is a bench above the canyon rim composed of a forested landscape. The other 40 percent is interior canyon lands along an intermittent stream.
Southern Group: About 75 percent of the area is grasslands on southern slopes. Drainages have moist and dry forest types in stringers. There is a small about of northern exposure forest however the shallow soils maintain grasslands.

Key Attractions:
Northern 40: Bear Creek.
Eastern Group: The motorized trail is near the rim and provides the user with distant views and a feeling of remoteness.
Southern Group: The steep southern exposure to Thomas Creek provides open ridges with scattered ponderosa pine and views into the Thomas Creek Canyon and as well as Spring Creek. Evidence of old harvest units across canyon is visible across the canyon. The adjustment would help contain ecosystems.

Inventory Criteria

Although the area is less than 5,000 acres, it meets the criteria for inventoried roadless areas in that it includes portions of lands that are adjacent to wilderness.

Capability

Naturalness and Undeveloped Character:
Northern 40: Natural integrity is high largely because of the lack of access.
Eastern Group: The area is roaded and has numerous entries for timber harvest. The motorized trail is well established. If portions of the trail are relocated to continue to accommodate motorized use and mountain bikes, it would likely be in close proximity to the area boundary. Motorized trespass will be difficult to curtail on account of the relatively flat topography
Southern Group: Natural integrity is high. Evidence of old harvest units across canyon are visible.

Opportunities for solitude in all three areas would be moderate to low due primarily to close proximity to existing roads. Recreation opportunities in these small areas would be similar to those available in the adjacent wilderness. Opportunities for hunting and hiking in a non-motorized setting would increase slightly.

Eastern Group: While there is little that is unique to this area, the existing motorized rim trail would provide relatively easy access through portions of it. Single-track motorized activities and mountain bike riding currently available on the Rim trail would be displaced. There are few alternative opportunities to ride outside of the immediate area, especially in a similar quality setting. If portions of the trail are relocated to continue to accommodate motorized use and mountain bikes, it would likely be in close proximity to the area boundary.

Primitive Recreational Opportunities and Challenges:
Northern 40: Steep terrain and lack of access presents a high degree of challenge to all forms of recreational activities.
Eastern Group: Challenges are more limited due to the relatively flat topography and history of timber harvest.
Southern Group: Steep ridges with southern open exposures offer a high degree of challenge to all forms of recreation activities.

Special Features:
Northern 40: Continuation of Bear Creek which is already within the wilderness.
Eastern Group: None
Southern Group: The grass tree mosaic that is characteristic of the Blue Mountains.

Manageability and boundaries:
Northern 40: The area is bounded by Forest boundary.
Eastern Group: The area is close to roads. A motorized trail would have to be rerouted but the terrain provides easy access by motorized vehicles. The location of this proposed extension is distant from trailheads and would be hard to enforce.
Southern Group: There are a few areas of midslope boundary near roads that would be hard to define, but overall the boundary would follow the rim. Boundaries would be easily defined and manageable.

Availability

Recreation:
All three areas currently provide semi-primitive non-motorized opportunities similar to the adjacent Wilderness.

Single track motorized and mountain biking are popular activities on the Rim trail that currently crosses through portions of the Eastern group. A possibility would be to reroute a portion of the Rim trail to avoid the Eastern Area. Depending upon the alternative location, opportunities for solitude may be diminished.

Wildlife:
Northern 40: This area would include like habitat found in the rest of the canyon associated with Bear Creek.
Eastern Group: This grouping includes habitat not found in the canyon lands of the North Fork Umatilla. It is associated with the high elevation forests adjacent to the canyon which is different that steep lands found in the wilderness.
Southern Group: This area provides extension of like habitat found in the wilderness.

Water/Fish:
Northern 40: Fisheries habitat is found in Bear Creek. The lower reaches of Bear Creek have steelhead.
Eastern Group: No Fisheries habitat.
Southern Group: No fisheries habitat.

Range:
Northern 40: The area is within the North End Sheep and Goat Allotment.
Eastern Group: The area is within the North End Sheep and Goat Allotment.
Southern Group: The area is within the North End Sheep and Goat Allotment.

Timber/vegetation:
Northern 40: White fir forest within steep canyon lands.
Eastern Group: White fir and subalpine fir on flat uplands beyond the rim of the canyon.
Southern Group: Steep grasslands and forest stringers.

Minerals:
This area has no known locatable mineral potential

Cultural:
Much of the area has been surveyed and there are no known historical or cultural sites.

Land use/Special Uses:
Northern 40: None
Eastern Group: None
Southern Group: None

Fire:
Northern 40: This area is within the Upper 204/Tollgate Wildland Urban Interface identified in the Umatilla County Community Fire Protection Plan.
Eastern Group: This area has been maintained with low fuels by past harvest.
Southern Group: This area is characterized by grassland and dry forest along the southern exposures and moist forest and grasslands on northern exposures.

Insects and disease:
Northern 40: Spruce budworm was active in the past in this area but defoliation has not heavy.
Eastern Group: Spruce budworm defoliated was severe enough to cause areas of stand mortality. There have also been several severe wind events.

Southern Group: Endemic insect levels.

Private lands:
None of the areas contain internal private lands; however, the northern parcel is adjacent to private lands.

North Mt. Emily Roadless Area (#14135) and (#6262)
4,620 + 730 = 5,350 Acres (total)

Overview

History: The North Mt. Emily Roadless Area was inventoried for study as a potential wilderness during the RARE II process, and was allocated to non-wilderness use.

A 1979 Land Management Plan for the Elgin Planning Unit allocated the entire area to best general forest wildlife habitat. The allocation allowed uses for managing wood fiber, domestic livestock, and semi-remote recreational experience. The area on the Wallowa-Whitman Forest was allocated to big game winter range in the 1978 FEIS for the Grande Ronde Planning Unit.

Under the 1990 Forest Plan, 95 percent of the roadless area was designated “Roaded Natural” with 5 percent designated as “Big Game Winter Range”. An important consideration is visual quality as a backdrop for the Grande Ronde Valley. No timber harvest has occurred in the roadless area. In 2003 a decision was made to reduce understory fuels along the Forest boundary by hand-piling surface and non-merchantable trees. A portion of the 800 acres on the Wallowa-Whitman National Forest is being proposed for timber harvest in support of the community fire plan to reduce fuels and fire behavior in the area.

Location and Access: The North Mt. Emily area is located in Umatilla and Union counties, Oregon, and lies across the eastern boundary of the Umatilla National Forest and onto the Wallowa-Whitman National Forest along the western edge of T.1N., R.38E. The area is bounded on the west by Forest Road 31, and can be accessed on the north and northeast by spurs from Forest Roads 31 and 32. No trails access the interior.

Geography and Topography: The North Mt. Emily Roadless Area forms the east side of the Forest for about 7.5 miles to a point near Mt. Emily.

Topography is marked by a series of steep mountainside ridges, separated by deeply incised canyons. Elevation varies from 3,400 feet where Rail Canyon leaves the Forest in the southeast corner of the roadless area to 5,800 feet at the head of Smith Canyon on the west. Nineteen percent of this area is composed of slopes greater than 60 percent, while 9 percent has slopes less than 30 percent. Basalt flows of the Miocene-age Columbia River Group are found over most of the area. Fanglomerate, talus and alluvium are found along the base of Mt. Emily. The northeastern portion of the area includes late Tertiary north-northwesterly-trending normal faults, which are responsible for the configuration of the mountain and valley.

Vegetation and Ecosystem: Northern aspects are timbered with mixed conifer and white fir. Southern aspects are grassland interspersed with brush and mixed conifers. The predominant ecosystems are mixed conifer, grass, and white fir. Mean annual precipitation varies from 40 to 45 inches. Summer temperatures may reach into the 90s.

Current Uses: Primary recreational use is big game hunting for elk and deer with a minor amount of upland game bird hunting for blue and ruffed grouse. About 17 percent of the area lies within the North End Sheep and Goat Allotment. There are no mining claims or oil and gas leases in the area.

Appearance and Surroundings: The look, or outward aspect, of the North Mt. Emily Roadless Area is that of a steep, east-facing slope dissected by several rugged canyons. The slope extends to the south onto private land. To the east, the topography changes from gentle timberland to rolling farmland in the Grande Ronde Valley. Slopes to the north become gradual and are more heavily timbered with evidence of timber harvest.

Key Attractions: The key attraction in this area is the view of the Upper Grande Ronde Valley. There is no primary attraction within the North Mt. Emily Roadless Area. Its primary attribute is its location as a backdrop to the westward view of the Blue Mountains as seen from Elgin, Oregon, and its ability to provide a splendid view of the northern Grande Ronde Valley and the Eagle Cap Wilderness beyond from a ridge just east of the junction of Forest Roads 31 and 3120.

Inventory Criteria

The Roadless Area meets the inventory criteria for areas with wilderness potential.

Capability

Naturalness and Undeveloped Character: Human influences have had limited impact on the natural appearance or long-term ecological processes of the area. The area is free of disturbances; and natural balances, even where altered in the past, are intact and operating. Fire has been, and most likely will continue to be, the factor with the most potential to impact the natural appearance of the area. Fire has been the key to the long-term ecological changes and vegetative succession of the area.

Due to its shape and location, opportunities for a feeling of solitude, the spirit of adventure and awareness, serenity, and self-reliance do not really exist within this area. Roads and timber harvest activities to the west and north, and private land to the east and south, present nonconforming sights and sounds to the entire area. Opportunities for challenging experiences within this area are relative to the experience and ability of the recipient. This area offers very limited opportunities for persons in reasonably good physical condition who are familiar with mountain hiking.

The opportunities for primitive recreation are limited to cross-country hiking, nordic skiing, and hunting. There are no Forest trails within the area. The recreation opportunity spectrum (ROS) for the area is identified as Roaded Natural over 87 percent of the area due to the proximity of road systems. The remaining area is evenly divided between Roaded Modified and Semi-primitive Motorized.

Primitive Recreational Opportunities and Challenges: There is very little opportunity for challenging recreational experiences in the area.

Special Features: This area's special feature is the scenic view of the upper Grande Ronde River valley between Elgin and La Grande, Oregon, east of the area.

Manageability and Boundaries: Most of the boundaries follow clear topographic or geographic lines and are considered manageable. No conflict occurs between existing or potential public uses outside, which would result in demands or invasion of the natural setting, and affect values within the unroaded area.

The current boundary does not constitute a physical barrier to any prohibited use or protect the environment inside from the sights and sounds of civilization outside the area. While the North Mt. Emily area has a maximum length of about 7.5 miles, north to south, the area is less than 1½ miles in width and faces the towns of Elgin, Summerville, and Imbler, and the surrounding farms of the Grande Ronde Valley.

Availability

Recreation: No established Forest campgrounds exist in the area and there is no potential for campground construction. The opportunities for primitive recreation are limited to cross-country hiking, nordic skiing, and hunting. There are no Forest trails within the area.

Wildlife: This area provides summer and winter hiding and thermal cover for deer and elk. There are no identified stands of old-growth forest habitat present in the area. As existing stands mature, old-growth forest and dead tree habitat levels will increase.

Water and Fish: Virtually the entire roadless area is situated on a very steep east-facing escarpment and is dissected by many steep narrow ravines, all east-facing as well. Most of these are mapped as intermittent streams, but three, Fir Creek, Strapping Creek, and Smith Canyon, are shown as perennial within the boundaries of the roadless area. These though, are on such steep terrain that it is unlikely that they would support fish.

Range: Approximately 17 percent of the area lies within the Forest North End Transitory Sheep and Goat Allotment. There is little potential to increase grazing.

Timber and Vegetation: Approximately 74 percent of the area is classified as suitable for harvest. The major tree-dominated plant communities are mixed conifers and white fir.

Minerals and Soils: This area has no known locatable mineral potential, but is considered prospectively valuable for oil and gas.

Cultural: Heritage resource inventories have recorded two historic sites and six prehistoric sites.

Land Use and Special Uses: None at this time.

Fire: Post-settlement fire occurrence has been moderate. Fuel loads in timber stands have become high. Heavy surface fuels and the presence of ladder fuels in dense stands contribute to conditions for crowning fires of high severity.

Insects and Disease: This area has the usual amount of insect and disease problems found in unmanaged natural stands of forest. There is a long-range potential of spread to adjacent managed stands.

Private Lands: None.

Owsley Roadless Area (#6259)

7,620 Acres

Overview

History: The Owsley Roadless Area was allocated to non-wilderness under the RARE II process in 1979, and the 1979 Land Management Plan for the Elgin Planning Unit allocated the entire area to best general forest wildlife habitat.

When the area was evaluated during the development of the current Umatilla National Forest Plan, the area appeared to be less than 5,000 acres and was determined to not meet the inventory criteria for roadless areas with wilderness potential.

The Cliffhanger Project analysis indicated that the Owsley Roadless Area was actually large enough to meet inventory criteria and land acquisitions had further added to the amount of undeveloped

lands. The current Forest Plan designated 90 percent of the area “Grass-Tree Mosaic” with dedicated old-growth along stream bottoms.

Location and Access: The Owsley Roadless Area is located in the Meacham Creek watershed in Umatilla County, Oregon, primarily in the SE quarter of T.1S., R.36E. Forest Road 3113 forms the northeast boundary. Forest Road 3100090 provides access into the East Meacham Creek area; Spring Mountain Road (FR 3109) accesses the center of the area between Owsley and Meacham creeks. Forest Road 3102 provides access on the western boundary.

Geography and Topography: The roadless area is located in the northern Blue Mountains in the portion that extends from northeast Oregon to southeast Washington. Elevation ranges from 2,600 feet in East Meacham Creek to 4,800 feet along Summit Ridge. More than 80 percent of the area has slopes greater than 60 percent.

The topography is mountainous with steep slopes and deeply incised canyons that drop into Meacham, Owsley, and East Meacham creeks. There are no unique geologic features and very few basalt formations that characterize landscapes to the north or like that found on Spring Mountain. Steep canyonlands and ridges with shallow soil restrict development of roads.

Vegetation and Ecosystem: Grasslands are the dominant ecosystem associated with shallow soils. The landscape supports a grass/tree mosaic with grand fir predominant along the drainage bottoms, turning to mixed conifer and pine farther away from streams. The north and west slopes of Spring Mountain contain the majority of forest with a nearly continuous cover.

Current Uses: The entire roadless area contains the Spring Mountain Sheep and Goat Allotment; however, actual grazing is confined to upper open slopes. An old, unmaintained trail along Owsley Hogback Ridge accesses Owsley Creek but it is no longer part of the Forest’s trail system. The rugged terrain limits hunting for Rocky Mountain elk, black bear, and deer that exist in the area. There are no mining claims or oil and gas leases within this area.

The area provides important fisheries habitat that supports the Confederated Tribes of the Umatilla Indian Reservation’s successful reintroduction of salmon in Meacham Creek. Treaty rights may be exercised in this area. Habitat exists for Endangered Species Act -listed bull trout and Mid- Columbia steelhead.

Appearance and Surroundings: The area appears natural with no roads. Less than 15 acres of timber have been harvested since the Forest Plan was adopted. Owsley provides a user with a sense of remoteness and isolation in one of the two creek bottoms with other human activity limited to the sound of the railroad in Meacham Creek Canyon. The road system can be seen as one descends into the canyons and from the only ridgetop within the roadless area. The area is not unique. The North Fork Umatilla Wilderness and the Hellhole Roadless Area offer similar and larger landscape.

Key Attractions: None

Inventory Criteria

The Roadless Area meets the inventory criteria for areas with wilderness potential.

Capability

Naturalness and Undeveloped Character: The area appears natural with no roads. The opportunities for primitive recreation include cross-country hiking, and big game and upland bird hunting.

Primitive Recreational Opportunities and Challenges: The opportunities for challenging experiences within this area are relative to the experience and ability of the recipient. This area offers moderate opportunities for a person in moderately good physical condition.

Special Features: None.

Manageability and Boundaries: The boundaries are manageable as they follow the break in slope or are defined by roadside buffers.

Availability

Recreation: The Hellhole Roadless Area has recreation values similar to adjacent areas in this part of the Forest. Important recreational attributes and characteristics include hunting, hiking, sightseeing, and camping. Generally, each form of recreational activity occurs during a specific time of year. Hunting big game produces the heaviest volume of activity and has historically been very important. The quality of the hunting experience has been improved with the change to the limited permit system.

Wildlife: Roughly the west half of this roadless area is big game winter range. Old-growth habitat occurs as a continuous riparian corridor along Owsley and Meacham creeks.

Water and Fish: This roadless area includes three fish-bearing streams: East Meacham Creek, Owsley Creek, and a western tributary of Owsley Creek. It could be enlarged to include part of fish-bearing Butcher Creek.

Redband/steelhead, dace, and sculpins were inventoried in East Meacham Creek in 2002. The surveyors found and photographed a very large *O. mykiss*, which was presumed to be a steelhead, and had been trapped by declining water flows. In Owsley and the Owsley tributary, only redband/steelhead and sculpins were found. Butcher Creek has not been inventoried, but would be expected to hold redband/steelhead and sculpins, and possibly dace. A road parallels Butcher Creek for nearly its full length, and would be expected to degrade aquatic habitat.

Range: The entire roadless area lies within the Spring Mountain Sheep and Goat Allotment, which has limited potential for increased use. Trespassing cattle have been a problem is some areas but enforcement is made difficult by a lack of access.

Timber and Vegetation: Timber resources are not easily available. The area is very difficult to road and canyon walls provide no landing areas. Timber is located in stringers away from existing roads and was not affected by spruce budworm defoliation in early 1990s. Stands of Douglas-fir and ponderosa pine are becoming overstocked but opportunities for harvesting them are limited.

Minerals and Soils: No mineral opportunities exist

Cultural: One isolated prehistoric site has been inventoried.

Land Use and Special Uses: None.

Fire: Post-settlement fire occurrence has been moderate. Fuels are becoming more complex and prescribed fire treatments are suggested to control ladder fuels and reduce the risk of severe wildfires.

Insects and Disease: This area has the usual amount of insect and disease problems found in unmanaged natural stands of forest. There is a long-range potential of spread to adjacent managed stands, but this is of minor importance at this time.

Private Lands: None.

Potamus Roadless Area (#14041)
6,360 Acres

Overview

History: When the Potamus Roadless Area was inventoried for study as a potential wilderness during the RARE II process, it was allocated to non-wilderness use. In 1979, the Heppner Planning Unit allocated most of the area to the production of the best general forest wildlife habitat. The north half was managed for a semi-remote recreational experience, while the northern 1½ miles of Potamus Creek were allocated to the production of wood fiber and domestic livestock.

The 1990 Umatilla National Forest Land and Resource Management Plan allocated most of the area to Grass-Tree Mosaic to provide high levels of potential habitat and high-quality forage for big game wildlife species, visual diversity, and soil protection. Timber harvest is only permitted to meet big game or other wildlife habitat objectives. Approximately 800 acres was allocated to old-growth management to provide suitable habitat for wildlife species dependent upon mature and/or overmature forest stands; and about 150 acres in the southwest corner was allocated to manage winter range for big game.

No timber harvest or road construction has taken place in the Potamus Roadless Area since the Forest Plan was signed in 1990.

Location and Access: The Potamus area is located in Morrow County, Oregon, and lies against the southern boundary of the southwestern part of the Forest in T.5S., R.45E. Forest Roads 2104 and 2106 provide access on the west and north, and Forest Road 5316 provides access from the east. There are no trails to the interior of this unit.

In 2001 the Bureau of Land Management acquired land immediately adjacent to the southern boundary of the Potamus inventoried roadless area. BLM was expected to begin planning for that area in October 2005. The land had been privately owned and managed primarily for livestock.

Geography and Topography: The area is in the northern Blue Mountains (Ochoco, Blue, and Wallowa Mountains physiographic province) of northeastern Oregon. Elevation varies from 2,600 feet where Potamus Creek leaves the unit on the southern boundary to 4,400 feet along the plateau on the northern edge. Thirty-six percent of this area is composed of slopes greater than 60 percent, while only 1 percent has less than 30 percent slopes.

Topography is characterized by a series of steep mountain ridges, separated by the deeply incised canyons of Mallory, Wickiup, Little Potamus, and Potamus creeks. Soil associations are described in the Forest Soil Resource Inventory. Basalt flows of the Miocene-age Columbia River Group are found over the entire area (Walker 1973). Mean annual precipitation is 15 inches. Summer temperatures may exceed 100° F.

Vegetation and Ecosystem: Northern slopes are timbered with mixed conifer, while southern slopes are grasslands with brushy stringer draws. The predominant ecosystems are grass and mixed conifer.

Current Uses: Treaty rights may be exercised in this area. There are no mining claims. A total of four oil and gas lease applications have been made within this area. One was withdrawn, one went to lease and has since terminated, one is current, and one is pending. Hunting activity for upland game bird and big game is minor. The area west of Potato Hill lies within the Ditch Creek cattle and horse grazing allotment.

Appearance and Surroundings: The appearance of the Potamus Roadless Area is that of several steep fingered canyons, generally south-facing, about 4 miles wide, extending about 5 miles in Potamus Canyon, and averaging less than a mile wide. The northern plateau is densely covered with ponderosa pine and other coniferous species. The same plateau supports mixed conifer species interspersed with juniper grasslands to the east and west. Outside the Forest boundary to the south, juniper grasslands cover all sites except some timbered stringer draws. The area south of the roadless area drops sharply to the North Fork of the John Day River.

Primary attraction(s): The primary attractions of the area are scenic views of the canyon from Potamus Point on the eastern edge and the Little Potamus Creek waterfall accessed from Forest Road 2106070. Its primary attributes are its contributions as part of the Monument big game winter range, its riparian habitat for anadromous fish, and old-growth wildlife habitat.

Inventory Criteria

The Roadless Area meets the inventory criteria for areas with wilderness potential.

Capability

Naturalness and Undeveloped Character: Opportunities for feeling solitude, the spirit of adventure and awareness, serenity, and self-reliance do not really exist within this area as roads and timber harvest activities to the west, activities to the north and east present nonconforming sights and sounds.

Human influences have had limited impact on the natural appearance or long-term ecological processes of the area. The area is free of disturbances, and natural balances, even where altered in the past, are intact and operating. Fire has been, and most likely will continue to be, the factor with the most potential to impact the naturalness of the area. However, fire has been the key to the long-term ecological changes and vegetative succession of the area.

The opportunities for primitive recreation are limited to cross-country hiking and hunting. There are no Forest trails.

Primitive Recreational Opportunities and Challenges: Opportunities for challenging experiences within this area are relative to the experience and ability of the user. The area offers limited opportunities for persons in reasonably good physical condition who are familiar with mountain hiking.

Special Features: Opportunities for outdoor education and scientific study are limited to those available from the ecosystems contained herein. No research natural areas exist or are planned.

Manageability and Boundaries: The current boundary is manageable as most of the boundaries follow clear topographic or geographic lines. No conflict occurs between existing or potential public uses outside that would result in demands or invasion of the natural setting and affect values within the unroaded area. The current boundary does not constitute a barrier to any prohibited use or protect the environment inside from the sights and sounds of civilization outside the area. While the Potamus area has a maximum length of about 5 miles, north to south, the area is less than 1½ miles wide.

Availability

Recreation: Big game hunting provides the primary recreational use but it is greatly restricted by the steep, inaccessible terrain. Some hiking and fishing occurs along Potamus Creek. Scenic viewing is popular and will probably increase around the perimeter in the future. Some off-highway vehicle use

occurs but probably will never be a significant impact due to the steep landscape. No recreational developments are planned.

Wildlife: Almost all the area is within the Monument big game winter range area with 92 percent classified as range for elk and deer, but cover is limited. This roadless area needs to be designated as a California bighorn sheep management area after 21 bighorns were relocated to the Potamus drainage in January 2003. About 23 percent of the area supports old growth wildlife habitat with most of the stands designated old-growth to meet management requirements for indicator species. No inventoried threatened or endangered animals or plants inhabit the area.

Water and Fish: Potamus, Mallory, and Little Potamus creeks are Class 1 streams and contain habitat for threatened Mid-Columbia steelhead. Potamus Creek, along with the portions of Mallory and Little Potamus creeks within the area boundary, are anadromous fish streams in excellent condition. No impoundments exist or are planned for the area or immediately downstream. About 9 percent of the roadless area is riparian and includes habitat for both anadromous and resident fish. There are limited opportunities for habitat improvement. Maintenance or improvement of water quality are of primary importance from a fisheries standpoint and will be a reflection of upstream activities.

Range: About 500 acres at the western edge lies within the Ditch Creek cattle and horse allotment, which is grazed during June or early July. The steep, rugged nature of the terrain is not suitable for cattle grazing elsewhere. The spread of non-native plant species is ongoing. The current strategy to protect the watershed includes educating land users, treating non-native invasive plants and identifying/inventorying possible non-native, invasive species.

Timber and Vegetation: The major tree-dominated plant community is mixed conifer with timber limited to stands in north- and east-facing canyon slopes and side draws. The land is suitable for timber production but with little opportunity to increase output as timber is primarily allocated to dedicated old-growth under the Umatilla Forest Plan. A small amount of timber may be included for harvest in stands outside of these old growth patches around the boundary.

Minerals and Soils: This area has no known locatable mineral potential, but is considered prospectively valuable for oil and gas. Most of the area is under oil and gas leases, but no drilling has occurred and none is anticipated in the near future. No mining activity has occurred and none is expected.

Cultural: Seven prehistoric sites and eight prehistoric isolated occurrences have been recorded, and two historic isolated occurrences were documented.

Land Use and Special Uses: None.

Fire: Fire occurrence has historically been very low. Fuel loads are low to moderate. This area is entirely within an area that is identified as a wildland urban interface in the Morrow County Community Wildfire Protection Plan. There is a need to maintain fuels treatment options in regards to communities at high risk in the upper reaches of the watershed. The area is also adjacent t private lands where state protection agencies emphasize protection of resources (minimizing acres of burned and resources lost).

Insects and Disease: This area has the usual amount of insect and disease found in unmanaged natural stands of timber.

Private Lands: None.

Skookum Roadless Area (#14040)

9,440 Acres

Overview

History: The Skookum Roadless Area was inventoried as potential wilderness during the RARE II process and allocated to non-wilderness use in January 1979.
A 1979 FEIS plan for the Heppner Planning Unit allocated nearly the entire area to best general forest wildlife habitat. A section on the north half was managed for a semi-remote recreational experience, while the northern mile of Skookum Creek was allocated to wood fiber and domestic livestock.
The 1990 Umatilla Forest Plan allocated approximately 5,100 acres to high-quality forage for big game wildlife, visual diversity, and soil protection under the "Grass-Tree Mosaic". Timber harvest is permitted only when needed to meet big game and wildlife habit objectives. Approximately 1,700 acres was allocated to big game winter range with timber harvest and road construction permitted when needed to meet big game and other wildlife objectives. Approximately 800 acres was allocated to old-growth with no harvest allowed.

Location and Access: The Skookum area is located in Morrow and Grant counties, Oregon, straddling Townships 6 and 7 South in Range 27 East along the southern boundary of the southwestern part of the Forest. The area can be accessed from the north by Forest Road 2115, on the west by Forest Roads 2120 and 2202, and on the east by Forest Road 2110.

In 2001, the Bureau of Land Management acquired private that had been managed primarily for livestock adjacent to the south. BLM was expected to begin the planning process for that area in October 2005.

Geography and Topography: The area is in the northern Blue Mountains (Ochoco, Blue, and Wallowa Mountains physiographic province) of northeastern Oregon. Elevation varies from 2,400 feet where Skookum Creek leaves the unit on the southern boundary to 4,000 feet along the plateau edge on the northeastern edge. Seventy-two percent of the area is steep with slopes between 30-60 percent, and very steep slopes (60 percent-plus) on 8 percent of the area. The remaining area is nearly flat.

The Skookum Roadless Area includes a portion of the Little Wall Creek Canyon, and most of Skookum Creek Canyon within the Forest Boundary. Topography is a long, dendritic, deeply incised canyon (Skookum Creek) cut into a scabland plateau. Basalt flows of the Miocene-age Columbia River Group are found over the entire area (Walker 1973; Brown and Thayer 1966). Mean annual precipitation varies from 15 to 20 inches. Summer temperatures may exceed 100°F.

Vegetation and Ecosystem: Northern canyon slopes are timbered with mixed conifers and ponderosa pine, while southern aspects are juniper grasslands. Shrub and mixed conifer are predominant throughout.

Current Uses: Treaty rights may be exercised in this area. There are no mining claims. A total of four oil and gas lease applications have been made; two were withdrawn, and two went to lease and have terminated. Hunting for big game is moderate and minor for upland game birds. The entire area lies within two grazing allotments -- Swale Creek on the east and Little Wall Creek on the west.

Appearance and Surroundings: The area is marked by several steep, generally south-facing finger-shaped canyons, about 10 miles long and ½ - to 1½ miles wide, surrounded by scabland plateaus. Lands to the north are more densely covered with forest vegetation, while juniper grasslands cover all sites except some timbered stringer draws on the south. South of the Forest boundary, topography gently slopes away for about 10 miles to the North Fork of the John Day River.

Key Attractions: There is no primary attraction within the Skookum Roadless Area. Its primary attributes are its contribution as part of the Monument Big Game Winter Range, and as riparian habitat for anadromous fish.

Inventory Criteria

The Roadless Area meets the inventory criteria for areas with wilderness potential.

Capability

Naturalness and Undeveloped Character: Opportunities for a feeling of solitude, the spirit of adventure and awareness, serenity, and self-reliance do not really exist within this area. Roads and timber harvest activities to the west, north, and east present nonconforming sights and sounds. Human influences have had limited impact on the natural appearance or long-term ecological processes of the area. The area is free of disturbances; and natural balances, even where altered in the past, are intact and operating. While these intangible values may have been disrupted in the past by activities such as fire and grazing, the activities are minimal in both extent and duration. Fire has been, and most likely will continue to be, the factor with the most potential to impact the naturalness of the area. However, fire has been the key to the long-term ecological changes and vegetative succession of the area. Duration of the effects of fire would be limited to the period of vegetative recovery, which can vary with intensity and extent.
The opportunities for primitive recreation are limited to hiking, mostly cross-country, and hunting. If the area remains unroaded, recreational activity would remain essentially the same.

Primitive Recreational Opportunities and Challenges: Limited and relative to the experience of the user.

Special Features: The opportunities for outdoor education and scientific study are limited to those available from the ecosystems contained herein. There are no current or planned Research Natural Areas.

Manageability and Boundaries: There would be management challenges in maintaining the boundary since it does not follow a logical terrain break around the perimeter. No conflict occurs between existing or potential public uses outside that would result in demands or invasion of the natural setting, and affect values within the unroaded area, though the current boundary does not constitute a barrier to any prohibited use or protect the environment inside the boundary from the sights and sounds of civilization outside the area. While the Skookum area has a total length of about 10 miles, all of the area is less than 1½ miles wide.

Availability

Recreation: Big game hunting is the primary recreational use. Some snowmobiling occurs, and the area may need to be closed to this use if it conflicts with wintering big game. No recreational developments are planned.

Wildlife: The area provides key winter range for deer and elk, though most of the area lacks thermal cover. Most of the timber has been allocated to old-growth to meet management objectives. The area contains California bighorn sheep habitat and will eventually be occupied with sheep from a herd relocated to the Potamus area during the winter of 2003. This area should be designated as a California bighorn sheep management area.

Water and Fish: Skookum, Little Wall, Bear, and Swale Creek are all Class 1 streams. Little Wall, Skookum, and Swale creeks are all important anadromous fish streams, and are in excellent condition for steelhead trout. The Skookum area contains occupied habitat for threatened Mid-Columbia steelhead. There are no existing or planned impoundments for the area or immediately

downstream. Maintenance or improvement of water quality and quantity are important primarily from a fishery standpoint. Some improvement of the riparian area and fishery habitat may be possible, but will be limited by accessibility to non-motorized/mechanical methods.

Range: The Skookum Roadless Area contains the Little Wall Creek and Swale Creek allotments. Pastures are grazed under different prescription rotations. Grazing areas in the Skookum Roadless Area continue to meet current Land Management Grazing Standards and Guides, and additional standards that are mandated in the future will be met as well. The spread of non-native plants continues to be an ongoing concern. The current strategy to protect the watershed includes educating land users, treating non-native invasive plants, and identifying/inventorying possible non-native, invasive species.

Timber and Vegetation: Mixed conifer dominates in timbered areas, which are primarily limited to the north- and east-facing canyon slopes. Some harvest is possible for areas outside the old-growth patches, primarily in the northern quarter of the area.

Minerals and Soils: The area has no known locatable mineral potential, but is considered prospectively valuable for oil and gas.

Cultural: Seven prehistoric sites and eight prehistoric isolated occurrences have been recorded. Two historic isolated occurrences were documented.

Land Use and Special Uses: None.

Fire: Fire occurrence within this area has been historically very low and helped maintain ecosystems prior to suppression. Fuel loads are low to moderate.

This area is entirely within an area that is identified as a wildland urban interface in the Morrow County Community Wildfire Protection Plan. There is a need to maintain fuels treatment options in regards to communities at high risk in the upper reaches of the watershed.

Insects and Disease: This area has the usual amount of insect and disease activity found in unmanaged natural stands of timber.

Private Lands: None.

South Fork Tower Roadless Area (#14143)

15,850 Acres

Overview

History: The South Fork-Tower Roadless Area was inventoried as two separate areas and allocated to non-wilderness during the RARE II process in 1979. Forest Road 5448 separated South Fork and Tower. In February 1984 the 2½-mile section of Forest Road 5448 separating the South Fork and Tower areas was closed to full-sized vehicles but remained part of the OHV system.

In the Oregon Wilderness Act of 1984 (Public Law 98-328) 8,100 acres in the southeastern corner became the Tower Unit of the North Fork John Day Wilderness.

The 1990 Umatilla Forest Plan allocated the area to old growth and special fish management. The Wallowa-Whitman Forest Plan allocated its portion of the area to timber production.

Location and Access: The South Fork-Tower roadless area is located in Umatilla County, Oregon, in T.6S., R.34E., and lies across the headwaters of Hidaway and North Fork Cable Creek. The area

is bounded on the northwest by Forest Roads 5450 and 5445, on the northeast by Forest Road 5226, and on the south by Forest Road 52. There are several OHV trails that access the interior of this area.

Geography and Topography: The roadless area is in the northern Blue Mountains (Ochoco, Blue, and Wallowa Mountains physiographic province) of northeastern Oregon. The roadless area generally faces northwest with all streams draining into Camas Creek. The area is characterized by a number of gentle ridge tops separated by the moderately deep canyons of Hidaway, North Fork Cable, and South Fork Cable creeks. Elevation ranges from 4,200 feet on the northwest to 6,700 feet north of Tower Mountain. Almost half of the area is composed of slopes less than 35 percent. Most of this area has been mapped as Oligocene- and Miocene-age tuffs, with tuffaceous sedimentary rocks and interbedded flows. Some basalt flows of the Miocene-age Columbia River Group are found at the west end of the area (Walker 1973). Mean annual precipitation varies from 20 to 35 inches, and summer temperatures may reach 100^{o} F.

Vegetation and Ecosystem: In 1996, 99 percent of the roadless area was burned in the Tower Fire. The acres allocated to old-growth management were burned, destroying more than half (577 acres) of old-growth structure. The remaining acres still provide old-growth habitat.

The predominant ecosystems are warm, dry, and cool moist plant association groups. Regenerating stands consist predominantly of lodgepole pine, interspersed with mixed conifer and grand fir. In 2002, 1,290 acres of uplands were replanted with western larch, ponderosa pine, Douglas-fir, and western white pine to provide a mix of species in the future.

The entire roadless area is big game summer range for mule deer and Rocky Mountain elk. About 23 percent of the area is riparian habitat; although fire burned much of the riparian vegetation and overstory in the Cable Creek drainage. Riparian hardwoods and conifers were replanted in all burned drainages.

Habitat for both anadromous and resident fish is present in Hidaway, North Fork Cable, and South Fork Cable creeks. Threatened mid-Columbia steelheads are present in Hidaway, North Fork Cable, and South Fork Cable creeks. Unconfirmed reports of “threatened” gray wolves have occurred in the vicinity and potential habitat exists within the roadless area for “threatened” Canada lynx. No other inventoried threatened or endangered species of fish, animals, or plants are known to inhabit the area.

Current Uses: There are no current mining claims. Two oil and gas lease applications have been terminated. Treaty rights may be exercised in this area. The entire South Fork-Tower Roadless Area is located within the Texas Bar and Hidaway cattle and horse grazing allotments.

Big game hunting for deer and elk is heavy but will decrease in the next 5 years as post-fire lodgepole continues to grow.

The area contains approximately 21.8 miles of trail with much of it within the heavily used Winom-Frazier OHV Complex.

Appearance and Surroundings: The South Fork-Tower Roadless Area appears as a gentle rolling tableland divided by three moderately deep drainages and numerous side drainages. These drainages flow into Camas Creek about 8 miles to the north of the roadless area. The 1996 Tower Fire burned 54 percent of the area with low severity, 32 percent with moderate severity, and 14 percent with high severity.

Terrain varies from gently rolling to moderately steep plateau. Areas to the southeast and east also burned, though there was no associated salvage nearby. Forested areas to the north, west, and southwest have been heavily impacted by insects and disease and have been logged.

Key Attractions: The Winom-Frazier OHV Complex is a key attraction. Another attraction is the 7-mile stretch of common boundary with the North Fork John Day Wilderness.

Inventory Criteria

The Roadless Area meets the Inventory criteria for areas with wilderness potential.

Capability

Naturalness and Undeveloped Character: Due to its shape, the way the area lies, and current use as an OHV Complex, the opportunities for a feeling of solitude, the spirit of adventure and awareness, serenity, and self-reliance do not really exist within this area. Roads and timber harvest activities to the north, west and southwest present nonconforming sights and sounds to almost all of the roadless area.

Human influences have had limited impact on the natural appearance or long-term ecological processes of the area. Exotic brook trout has been introduced into Hidaway and South Fork Cable creeks, and have become dominant in those headwaters restricting the range of native steelhead. Trails in this area have long been used by motorcyclists, and this use has grown with the designation of the OHV Complex. Associated trails became more apparent when the 1996 fire removed most of the vegetative cover. Fire and OHVs are the factors with the most potential to impact the naturalness of the area. Fire has been the key to the long-term ecological changes and vegetative succession of the area.

Opportunities for primitive recreation are limited and separated from the wilderness by motorized trails. There has been a steady increase in the use of the OHV complex, which will likely continue.

Primitive Recreational Opportunities and Challenges. This area offers limited challenging experiences for persons in reasonably good physical condition who are familiar with mountain hiking. The roadless area is narrow and, even where it adjoins the wilderness, could be traversed in a day. Opportunities to use special skills do not exist.

Special Features: There are no special features or unique ecosystems.

Manageability and boundaries: The South Fork-Tower Roadless Area has a long, narrow, and gently sloped shape. The area is about 11.5 miles by 2 miles wide. Boundaries follow clear roads and landforms. Forest Road 5226 for high-clearance vehicles defines the eastern border and provides access to the Tower Fire Lookout, which is staffed during the fire season. The road provides the only fire escape route for the lookout and recreationists using the area.

The proposal to move the roadless area boundary west, away from Road 5226, to allow fuels management within the escape route corridor would create a more manageable configuration. At a minimum, the boundary should be moved 300 feet west of the road for its entire length of the roadless area to be consistent with the district's Access and Travel Management Plan. The southern boundary of this roadless area should also be moved to the ridge north of Forest Road 52 where the ridge flattens into Moon Meadows.

On the southwest finger, the original boundary does not follow any definable features and should be moved east to the unnamed tributary to South Fork Cable Creek (in section 17) for about 1½ miles to the confluence with South Fork Cable Creek. The boundary would turn west about ½-mile at South Fork Cable Creek to meet the National Forest Boundary. Also, on the western boundary north of the finger in the northwest quarter of the northwest quarter of Section 7, an irregular 20-acre projection of the boundary should be moved across the unnamed tributary to connect with an old ridgeline road and the existing boundary.

With these changes, the boundaries will better restrict prohibited use, though sights and sounds of human activity would still be evident within the roadless area due to other factors.

Availability

Recreation: The area is heavily used each fall by big game hunters and during the summer season by OHV riders who use 16 miles of trails. OHV riders have expanded the existing trail system and use continues to increase with greater awareness through partnerships and State OHV funding for operation and maintenance.

Wildlife: This area encompasses a major spring and fall migration route used by as many as 1,500 elk. The Bridge Creek Biological Unit Management Plan, a 1979 agreement between the Forest Service and the Oregon Department of Fish and Wildlife, established protections for elk habitat. The 1996 fire greatly reduced old growth habitat and reduced and converted big game cover to forage. Forage will be reduced and cover is expected to become marginal in 5 to 10 years. It will be a century or more before old-growth develops.

Unconfirmed sightings of “threatened” gray wolves have been reported nearby. There are 1,198 acres of potential foraging habitat and 1,504 acres of potential denning habitat for “threatened” Canada lynx, although they are not known to be in the area. Spotted frog (listed as “sensitive” regionally) is present within most streams.

Water and Fish: The roadless area provides the only remaining unroaded headwaters within the Camas Creek drainage and, therefore, is important relative to water temperature and turbidity. Hidaway Creek is an important cold water resource to Camas Creek. After the 1996 fire, stream temperatures increased in the north and south forks of Cable Creek due to a combination of long-term drought and the removal of shade by the fire. Upper North Fork and South Fork Cable Creek experienced channel-altering floods in 1997 and 1998. Riparian hardwoods and conifers have been replanted in portions of these forks. There are approximately 10 miles of spawning and rearing habitat for “threatened” mid-Columbia steelhead within the area. Regionally “sensitive” redband trout are also found throughout.

Range: The roadless area has limited grazing for livestock due to dense accumulation of fallen trees, remoteness, and/or lack of roads for access. Hidaway and Texas Bar cattle and horse grazing allotments include the entire roadless area. Current allotment management plans do not provide for additional AUM’s.

Timber/Vegetation: Ninety-eight percent of the roadless area is considered suitable for timber production. The area consists mostly of warm-dry and cool-moist plant association groups. Current stage is characterized by standing and felled dead trees and ground that is thick with saplings and seedlings.

Minerals: Perlite deposits are known to occur near this area, and the silicic volcanic rocks may be worthy of exploration for epithermal gold deposits. The area is considered prospectively valuable for oil and gas.

Cultural: Resource inventories have documented three prehistoric sites and one historic site associated with early grazing activities.

Land Use and Special Uses: The Pearson Recreational Residences (5 homes) and Pearson Guard Station are immediately south of the roadless area. The guard station is seldom used by the Forest Service. The recreational summer homes are used by special-use permittees, who also use the OHV trail system and avail themselves of other roadless opportunities in the South Fork-Tower area.

Fire: Fire occurrence within this area has been historically low to moderate with occasional seasons of high occurrence. The 1996 fire reduced the short-term potential for wildfire. Fuel loads are

expected to increase substantially as the dead overstory falls and the regenerating understory grows. Fires have historically helped to maintain the ecosystems.

Insects and Disease: The 1996 fire eliminated the concern with insects and disease for the short term.

Private Lands: None.

Spangler Roadless Area (#14017)
5,710 Acres

Overview

History: The Spangler Roadless Area was inventoried as a potential wilderness during the development of the 1977 Oregon Butte Unit Plan and was allocated to non-wilderness use. The Oregon Butte Plan allocated the entire area to the production of forage for elk and domestic livestock, and wood fiber. Timber sales, predominately on the north and south sides, reduced the area.

The Umatilla Forest Management Plan allocated most of the remaining area to off-road recreation and as a viewshed. No harvest has taken place since implementation of the Umatilla Plan. The area was further reduced when the boundary was moved 300 feet back from existing open roads to maintain existing roads. Mapping refinements and the removal of these portions have reduced the area to approximately 5,710 acres.

Location and Access: The Spangler Roadless Area is located in Columbia County, Washington, east of the North Fork of the Touchet River in T.8N., R.40E., against the northern boundary of the Forest. Forest Road 64 provides access from the west; Forest Road 46 provides access from the east. Middle Point Ridge OHV trail was added as part of the Spangler Creek trail complex.

Geography and Topography: The area is in the northern Blue Mountains of southeastern Washington. Elevation ranges from 3,000 feet, where the North Fork Touchet River leaves the Forest, to 5,760 feet at the Godman Campground in the southeast corner. The Spangler Roadless Area includes the Spangler Creek drainage and about 5 miles of the west-facing slope of the North Fork Touchet River canyon adjacent to the Forest Boundary. About 64 percent of the area is composed of slopes greater than 60 percent, while only about 9 percent has slopes less than 30 percent.

Topography is mountainous with steep slopes and deeply incised canyons.

Vegetation and Ecosystem: White fir and mixed conifer are the predominant ecosystems. Northern aspects are primarily white fir and mixed conifer at lower elevations and subalpine fir at higher elevations. Timbered draws on the southern aspects are interspersed with grasslands on the upper slopes. The riparian areas of the North Fork Touchet River and Spangler Creek contain stands of ponderosa pine and mixed conifer. Bedrock over the entire area is basalt flows of the Miocene-age Columbia River Group (Swanson and others 1980). Mean annual precipitation varies from 45 to 55 inches. Summer temperatures may reach 100º F.

About 2 percent of the roadless area is riparian area, which includes habitat for anadromous and resident fish. Mid-Columbia steelhead (*Oncorhynchus mykiss)* and Columbia River bull trout (*Salvelinus confluentus)* are currently listed as “threatened” species under ESA. Mountain buttercup (*Ranunculus populago*), found about a mile north of Godman Spring, is listed as “sensitive” for Washington in Region Six. About 38 percent of the area supports old-growth wildlife habitat.

Current Uses: There are no active mining claims or oil and gas leases in this area. Hunting for deer and elk is moderate and minor upland game birds. Some trout fishing occurs along the North Fork Touchet River and Spangler Creek. The Middle Point Ridge OHV trail was added as part of the Spangler Creek trail complex. Treaty rights may be exercised in this area.

Appearance and Surroundings: The Spangler Roadless Area is characterized by the densely forested, deep and rugged North Fork Touchet River Canyon and the equally dense 4-mile-long Spangler Creek drainage.

The roadless area generally follows the ridgetop to the north and east. The ridge tops and drainages beyond Spangler have been accessed for timber harvest and other purposes. The Wenaha-Tucannon Wilderness lies over the ridge to the southeast approximately ¼-mile across Forest Road 46. Along the continuation of the east slope of the densely forested Touchet drainage, the area to the southwest has been accessed for timber harvest and other purposes. West, across Forest Road 64, lies the undeveloped east-facing slope of the North Fork Touchet drainage. Private land lies beyond the Forest boundary to the northwest.

Key Attractions: There is no primary attraction within the Spangler area. Its main attribute is its location to the Wenaha-Tucannon Wilderness, and proximity to the Bluewood Ski Area 1 mile to the southwest.

Inventory Criteria

The Roadless Area meets the Inventory criteria for areas with wilderness potential.

Capability

Naturalness and Undeveloped Character: Human influences have had limited impact on the natural appearance and long-term ecological processes of the Spangler area. The area is free of disturbances; and natural balances, even where altered in the past, are intact and operating. Fire has been, and most likely will continue to be the factor with the most potential to impact the naturalness of the area. However, fire has been the key to the long-term ecological changes and vegetative succession of the area.

Opportunities for a feeling of solitude, the spirit of adventure and awareness, serenity, and self-reliance do not really exist within this area. Roads to the east and west and timber harvest activities to the north, east, and south present nonconforming sights and sounds to nearly the entire roadless area.

Primitive recreation is limited to cross-country hiking, fishing, and hunting.

Primitive Recreational Opportunities and Challenges. This area offers limited opportunities for persons in reasonably good physical condition who are familiar with mountain hiking.

Special Features: A population of mountain buttercup (*Ranunculus populago*), listed as “sensitive,” exists about a mile north of Godman Spring. Mid-Columbia steelhead (*Oncorhynchus mykiss)* and Columbia River bull trout (*Salvelinus confluentus),* currently listed as “threatened,” inhabit the watershed.

Manageability and Boundaries: The current boundary is manageable as most of the boundaries follow clear topographic or geographic lines. The western two-thirds is a steep, northwest-facing canyon slope that extends approximately 5 miles from Forest Road 64 to the ridge line or edge of the plateau above. The remaining third of this area includes the entire Spangler Creek drainage, which is bounded by FR 46 on the east and south. Private lands, which have been logged, lie immediately downstream, outside the Forest Boundary.

Little conflict occurs between existing or potential public uses outside the area which would result in demands or invasion of the natural setting. Any proposed expansion of the Bluewood Ski Area would be to the southwest, away from the Spangler area. However, the current boundaries do not constitute a barrier to any prohibited use or protect the environment inside from the sights and sounds of civilization outside the area.

Availability

Recreation: Same as Outdoor Recreation Opportunities.

Wildlife: Mule deer and Rocky Mountain elk are inhabit the area of which about 5 percent, the northern tip, lies within the Touchet big game winter range. The south half is considered potential habitat for Canada lynx, listed as "threatened" by the U.S. Fish and Wildlife Service. About 60 percent of the area provides old-growth wildlife habitat, most of which is in large, contiguous blocks. The North Fork Touchet River provides undisturbed coniferous riparian habitat.

The Spangler roadless area contains large stands of contiguous old growth forest, a condition that is uncommon in surrounding areas. This area is providing high quality habitat for northern goshawk and refugia habitat for wolverine and many other wildlife species.

Maintaining roadless areas can provide refugia habitat when surrounding areas become roaded, managed, and increasingly utilized by recreation and other uses

Water/Fish: Spangler Creek provides one-third to half of the base flow of the North Fork Touchet River at their confluence and makes this area an important watershed for Dayton and Columbia County. Water quality is at potential. Mid-Columbia steelhead (*Oncorhynchus mykiss)* and Columbia River bull trout (*Salvelinus confluentus)* are currently listed as "threatened."

Range: The roadless area is primarily limited to recreation stock use as there are no permitted grazing allotments within the roadless area.

Timber/vegetation: Major tree species are white fir, subalpine fir, and mixed conifer.

Minerals: This area has no known locatable mineral potential. It is classed as prospectively valuable for oil and gas (Smith 1976).

Cultural: One prehistoric lithic scatter and seven historic sites associated with trails and Forest Service administration have been recorded.

Land use/Special Uses: None.

Fire: Fire occurrence within this area has historically been frequent with return intervals of 5 to 25 years. The area experienced a fire regime of low severity but suppression has created stands and forest conditions that differ from those in the past. This has changed stand structure, composition, stocking levels, and fuel loading, and created a higher risk of large-scale, high-intensity wildfire occurrence.

Insects and disease: This area has the usual amount of insect and disease problems found in unmanaged natural stands of timber. There is a potential of spread to adjacent managed stands.

Private lands: Private lands within and adjacent to this area have been minimally developed.

Squaw (Little Fly) Roadless Area (#14145) and (#6601)

2,580 + 3,540 = 6,120 Acres (total)
Administratively shared with the Wallowa Whitman NF

Overview

History: The Squaw Roadless Area was allocated to non-wilderness during the RARE II process in 1979. By 1990, timber sales, predominately on the east side, reduced the area to 7,400 acres. Improved mapping technology and road buffering has changed the size of the area to 6,123 acres with 2,580 on the Umatilla and 3,540 on the Wallowa-Whitman.

The 1990 plans for both forests established non-wilderness allocations for the area with the Umatilla's portion designated as a special fish management area, and Wallowa-Whitman portion designated for timber production. All projects have been analyzed under the direction of the two forest plans along with NEPA requirements.

Location and Access: The Squaw Roadless Area is located in Umatilla, Grant, and Union counties, Oregon, in T.6N., R.35E., and lies across the headwaters of Lookout and Little Fly creeks (Grande Ronde drainage), and Squaw, White, and Big creeks (North Fork John Day drainage). The area is bounded on the west by Forest Road 5226 and on the south by paved Forest Road 52. It can be accessed on the east from numerous local roads emanating from Forest Road 5182. There are several OHV trails that access the interior of this unit.

Geography and Topography: The roadless area is in the northern Blue Mountains of northeastern Oregon. The roadless area is generally northeast-facing on the north half, and south-facing on the south half with several gentle ridges separated by moderately deep canyons. Elevation ranges from 5,100 to 6,700. Just over half of this area is composed of slopes less than 35 percent.

Most of the area has been mapped as Oligocene and Miocene-age tuffs, tuffaceous sedimentary rocks, and interbedded flows. Volcanics of Eocene to Miocene age are composed mainly of andesite flows, but include flow rocks ranging in composition from basalt to rhyolite as well as some tuffs and volcanic mudflows at the southern end (Walker 1973, Brown and Thayer 1966.)

Vegetation and Ecosystem: Two high-intensity fires burned most of the area over the past 11 years. The 1994 Boundary Fire burned (89 percent) of the area, and a portion burned again in 1996. Regenerating stands consist predominantly of lodgepole pine, interspersed with mixed conifer and grand fir. About 611 acres of uplands were replanted with western larch, ponderosa pine, Douglas-fir, and western white pine to provide a mix of species in the future. Many of the 634 acres designated as old-growth in the 1990 forest plans were burned by the Boundary Fire, which effectively eliminated the old-growth structure. The predominant ecosystems are warm/dry and cool/moist plant association groups. Mean annual precipitation varies from 35 to 40 inches, and summer temperatures may reach 100°F.

The entire area provides summer range for mule deer and Rocky Mountain elk). Approximately 9 percent of the roadless area is riparian habitat, including for threatened fish. Lookout Creek provides habitat for anadromous and resident fish, and resident fish inhabit Squaw, White, and Upper Little Fly creeks. The area includes habitat for threatened terrestrial wildlife (grey wolf and Canada lynx). There are no threatened, endangered, or sensitive plants in the area.

Current Uses: There are no mining claims and no oil or gas lease applications within the area. Treaty rights may be exercised in this area.

Hunting for deer and elk is heavy, but is expected to decline with the increased growth of dense post-fire lodgepole. Hunting for upland game birds is minor. The area contains 11.4 miles of trail (7.7 miles on the Umatilla; 3.7 miles on the Wallowa-Whitman), including a number of motorized trails associated with the Umatilla's popular Winom-Frazier OHV Complex. The Wallowa-Whitman portion is currently not closed to cross-country OHV travel.

The entire roadless area is located within the Chicken Hill and Sheep Ranch grazing allotments on the Wallowa-Whitman, and Trout Meadows and Texas Bar allotments on the Umatilla. Trout Meadows has not been used for several years.

Appearance and Surroundings: The appearance of the area is of a gentle rolling tableland divided by five moderately deep drainages that flow into Big Creek to the southwest and Fly Creek to the northeast. Much of the roadless area was severely burned in 1994 by the Boundary Fire, resulting in the salvage harvest activities on the Wallowa-Whitman. Adjacent terrain ranges from gently rolling to moderately steep plateau country. Areas south and southwest of the roadless area remain unburned, but everything else was burned by the Boundary and Tower fires. Areas to the north, east, and south have been accessed for timber harvest and other purposes. The Tower Mountain Lookout lies west of the roadless area.

Key Attractions: Big game hunting is the key attraction of the roadless area.

Inventory Criteria

The Roadless Area meets the Inventory criteria for areas with wilderness potential.

Capability

Naturalness and Undeveloped Character: Opportunities for a feeling of solitude, the spirit of adventure and awareness, serenity, and self-reliance do not really exist within this roadless area. A popular, high clearance road (which accesses a seasonally active fire lookout) borders the entire west side, while a paved road (the Blue Mountain Scenic Byway) defines the south border. A number of roads occur to the north and east as well, and there are five motorized trails within the roadless area. Sounds that do not conform to wilderness character are present throughout. Timber harvest activities in the northern half and just outside the area to the east and south present nonconforming sights to the entire area.

Salvage harvest has impacted the natural appearance on the northern half of the roadless area and motorized trails are dispersed throughout. Fire and OHVs are the factors with the most potential to impact the naturalness of the area. Fire has been key to the long-term ecological changes and vegetative succession of the area. The opportunities for primitive recreation are limited. An open, well-used road separates this area from the wilderness. Use of the OHV complex has steadily increased and will likely continue.

Primitive Recreational Opportunities and Challenges. The area offers limited opportunities for challenging experiences. The roadless area is narrow and could be easily traversed in a day. Opportunities to use special skills do not exist.

Special Features: None.

Manageability and Boundaries: The maximum length is about 6 miles, north to south, and most of the area is about 1½ miles wide. Boundaries on the south and west follow roads or private land; however, the east and north boundaries are not manageable because there are no clear geographic features. The east portion is open to cross-country OHV travel, which also makes this difficult to manage.

Forest Road 5226, a popular high-clearance access to the Tower Lookout, defines the western boundary. For road maintenance purposes, the boundary would be moved 300 feet east of Forest Road 5226 from its junction with the northern boundary, south to the Tower Fire Lookout. The boundary would then cross over to the ridgeline east of the fire lookout and continue south along the ridge to Forest Road 52. The District proposes moving the southern boundary to the ridge north of Forest Road 52. Open roads will also be buffered 300 feet to provide a consistent boundary.

With the changes, the boundary would more readily restrict prohibited use, though sights and sounds of human activity would still be evident within the roadless area due to other factors.

Availability

Recreation: The area is heavily used by big game hunters each fall and by OHV riders during the summer. There are 11.4 miles of trail open to OHV use in the roadless area. OHV riders have volunteered to expand the system and use has increased through greater awareness and partnership with state organizations and local clubs. The OHV complex has received state funding for maintenance and operation.

Wildlife: The entire area serves as summer range for deer and elk. The 1994 and 1996 fires greatly reduced and converted most the big game cover to forage. In about 5 to 10 years cover will become marginal, but forage will be reduced.

Potential habitat for threatened gray wolves exists though none are known to inhabit the area. Potential habitat includes 420 acres for foraging and 253 acres of denning habitat for threatened Canada lynx, though they are also not known to inhabit the area. Spotted frog (listed as regionally "sensitive") inhabits the majority of the streams.

Water and Fish: Lookout Creek provides approximately 1 mile of spawning and rearing habitat for endangered Snake River steelhead. Regionally "sensitive" redband trout and other resident fish are found in all streams throughout the roadless area.

Range: The area includes portions of four grazing allotments, two on the Wallowa-Whitman, and two on the Umatilla. The Trout Meadows Allotment has not been used for several years and has been recommended for closure in the revised Forest Plan. The roadless area does not contain a significant portion of any one allotment. Livestock use is limited by densely spaced standing or fallen trees, remoteness, and/or lack of access.

Timber and Vegetation: Ninety-seven percent of the roadless area is considered suitable for supporting commercial stands of timber. Half the dead overstory has fallen to the ground and the current structural stage is characterized by saplings with approximately 500 to 2,000-plus trees per acre.

Minerals and Soils: Perlite deposits are known to occur near this area, and the silicic volcanic rocks may be worthy of exploration for epithermal gold deposits. The area is considered prospectively valuable for oil and gas (Smith 1976).

Cultural: One prehistoric lithic scatter site, one historic site, and two historic isolated occurrences are documented with potentially more sites existing in the unsurveyed portion.

Land Use and Special Uses: The adjacent Tower Mountain Lookout includes a cabin that is occupied throughout the summer fire season. The lookout tower also serves as a popular vantage point for visitors.

Fire: Fire occurrence within this area has historically been moderate. The 1994 and 1996 fires reduced the short-term potential for wildfire. Fuel loads are expected to increase substantially as the

dead overstory falls and the regenerating understory grows. Fires have historically helped to maintain the ecosystems.

Insects and Disease: The 1994 and 1996 fires have eliminated the concern with insects and disease for the duration of this document.

Private Lands: None.

Texas Butte Roadless Area (#14037)

7,950 Acres

Overview

History: During the RARE II inventory process, the 16,400-acre Texas Butte Roadless Area was allocated to non-wilderness use in the 1979 Heppner Unit Plan. Since then, timber sales, predominately on the south and east, have reduced the area. The Heppner Unit Plan allocated the entire area to best general forest wildlife habitat, represented by elk as the indicator species, while managing for wood fiber, domestic livestock, and a semi-remote recreational experience.

The 1990 Umatilla Forest Plan allocated the majority of the Texas Butte area to wildlife habitat. Timber harvest and road construction are permissible if they meet wildlife habitat objectives. Three areas were allocated to old-growth management to provide and protect habitat for wildlife species dependent upon mature and/or overmature forest with no harvest permitted. Riparian management areas were also included along prominent streams.

Two timber sales, both partially within the roadless area, harvested in the 1990s, removed dead trees along Forest Road 2119033, an open road running through the northwest portion of the roadless area.

Location and Access: The Texas Butte area is located in Morrow County, Oregon, approximately 15 miles southeast of Heppner in Township 5 South, Range 27 East, along the Madison Butte-Texas Butte ridge. Forest Road 21 provides access from the south and east. A few trails access the unit's interior.

Geography and Topography: The area is in the northern Blue Mountains of northeastern Oregon. Elevation ranges from 4,000 feet where Copple Creek leaves the unit on the northeast to 5,700 feet at Madison Butte Lookout. Seventy-three percent of this area has slopes in the 30-60 percent range with the remainder less than 30 percent.

Topography consists of several rounded ridges separated by moderately deep canyons. With the exception of the Skookum drainage, the area generally faces north. The Blue Mountain Anticline runs through the area (Walker 1973). Most of this area has been mapped as Oligocene- and Miocene-age tuffs, tuffaceous sedimentary rocks, and interbedded flows (Walker 1973). It roughly corresponds with a zone of hydrothermally altered silicic volcanic rocks, and includes siliceous sinter on Madison Butte (Ferns 1988, verbal communication). Altered andesite flows of Eocene and Oligocene age surround the area, and continental sedimentary rocks of similar age, including sandstones, siltstones, and shale, are found near the extreme eastern edge. Mean annual precipitation varies from 25 to 30 inches. Summer temperatures may reach 100° F.

Vegetation and Ecosystem: All aspects are predominantly timbered with white fir and mixed conifer.

Current Uses: Treaty rights may be exercised in this area. There are currently no mining claims. Of five oil and gas lease applications, three went to lease and have terminated, and two are current.

The area is heavily used for hunting big game and includes some hunting for upland birds. About 70 percent of the area – the western portion – lies within the Little Wall Creek grazing allotment. The remainder is within the Swale Creek allotment. A paired watershed study area in the southwestern portion is fenced.

Appearance and Surroundings: The area appears as rolling tableland dominated by Madison Butte and divided by four moderately deep drainages. The entire area is forested appearance.

The roadless area is the western end of a heavily timbered mountain ridge, which is surrounded on three sides by more open and developed lands at lower elevations. The area to the northeast is heavily forested with gentle to rolling plateaus that have been accessed for limited timber harvest and other purposes. Topography to the south and southeast is gentle, rolling, north-south scabland ridges separated by shallow timbered draws. Industrial forestland to the west and north is intensively managed for timber production.

Key Attractions: Madison Butte Lookout and the view of the surrounding countryside is the primary attraction. The area's primary attribute is its contribution as summer range for deer and elk and high-quality timber growing sites.

Inventory Criteria

The Roadless Area meets the inventory criteria for areas with wilderness potential.

Capability

Naturalness and Undeveloped Character: Opportunities for a feeling of solitude, the spirit of adventure and awareness, serenity, and self-reliance do not really exist within this area. Roads and timber harvest activities on all sides present nonconforming sights and sounds to nearly the entire area.

Human influences have had moderate impact on the natural appearance and long-term ecological processes of the area. With the exception of several sets of wheel tracks that enter the roadless area from various sides, and the Madison Butte Lookout, the area is free of disturbances. Natural balances, even where altered in the past, are intact and operating. While these intangible values may have been disrupted in the past by activities such as fire, such activities are both minimal in extent and duration. Fire has been the key to the long-term ecological changes and vegetative succession of the area. The recreation opportunity spectrum (ROS) for the area is identified as motorized semi-primitive over 37 percent of the area. The remaining area is primarily nonmotorized semi-primitive.

Primitive Recreational Opportunities and Challenges. Opportunities for challenging experiences within this area are relative to the experience and ability of the recipient, and are very limited for persons in reasonably good physical condition who are familiar with mountain hiking.

Special Features: The area provides great opportunities for wildlife viewing.

Manageability and Boundaries: The current boundary is manageable and mostly follows clear topographic or geographic lines. The current boundary does not constitute a barrier to any prohibited use or protect the environment inside from the sights and sounds of civilization outside the area. Texas Butte area is about 7 miles long but about half of the area is less than 1 mile wide.

Boundary changes overall have increased the area. The boundary was changed to exclude recently logged areas and the travel corridor along Forest Road 2119033. An area south of Forest Road 2119033 that was selectively logged more than 50 years ago was added, as was an area to the

northeast that also meets the inventory criteria. Evidence of past logging and roading in that area has largely disappeared.

Availability

Recreation: No recreational developments are planned. Historically, big game hunting has been and will continue to be the area's primary recreational use. Trails that were constructed 40 to 50 years ago are heavily used and maintained to standards. The area is currently included in the Texas Butte road closure during all big game seasons. An outfitter/hunting guide service has operated in the area. Forest Road 2119033 along the western edge provides access and is heavily used in the summer and fall, as well as in winter.

Wildlife: The area provides key summer range and fall refuge for deer and elk. Approximately 800-1,000 elk inhabit the area during the summer and during the hunting season. The area is important for the propagation of large trophy buck deer, wild turkeys, blue and ruffed grouse, and a few black bear. Populations of elk appear to be decreasing; however, this might only be the result of animals traveling to other areas. Private timberlands to the north and west have been heavily logged and hunting rights leased for both deer and elk. Animals might seek solitude in these areas because of other activities on the forest. Some stand thinning or logging could potentially improve habitat and create more forage areas. High-elevation wet meadows and sizeable thickets of yew are also found here.

Water and Fish: The area contains the headwaters of Skookum Creek, which flows south, and several small streams that flow to the north and west. No impoundments exist or are planned for the area or immediately downstream. Water quality is an important consideration for all alternatives. Skookum Creek is an important anadromous fishery downstream. Higher elevation drainages to the south produce water of high quality for steelhead and trout fisheries in Skookum, Little Wall, and Big Wall creeks, and the North Fork John Day River. Threatened Mid-Columbia steelhead inhabits the area immediately below and possibly within the Texas Butte area. Drainages to the north produce good quality water for trout fisheries and irrigation in Rhea and Rock creeks.

Range: About two-thirds of the area is included in the Little Wall Creek cattle allotment while the remaining one-third is within the Swale Creek cattle allotment. Cattle are permitted to graze both allotments from late spring to late summer. Currently the permittee on the Little Wall Creek Allotment chooses not to put cattle in the Texas Roadless Area because dead and down fuel make it difficult to manage livestock. Increased recreational stock use has occurred since 1990 due to trail improvements.

The spread of non-native plant species continues to be a concern. The current integrated pest management strategy to protect watersheds involves educating land users, and identifying, inventorying, and treating possible non-native, invasive plants.

Timber and Vegetation: Some of the most productive timber growing sites in the southern Blue Mountains occur here. The entire area is suited for timber management on a long-term, sustained-yield basis. Ponderosa pine grows on south- and west-facing slopes, but most of the area contains a mixed forest complex of predominantly young-to-mature sawtimber.

Minerals and Soils: Extensive hydrothermal alteration and old hot springs deposits provide attractive targets to explore for epithermal gold deposits. Continental sediments and the Blue Mountain Anticline provide reservoir rocks and favorable structure for oil and gas deposits, although such deposits may have been removed by intense volcanism and hydrothermal activity. There are no active mining claims.

Cultural: Two prehistoric sites and two isolated prehistoric occurrences have been recorded, and 19 historic sites associated with Forest Service administration, homesteading, grazing, and mining activities, have been documented.

Land Use and Special Uses: The Madison Butte Lookout normally operates from July 1 through October 15. The Oregon State Forestry Department and Morrow County Sheriff's Office each have a solar-powered radio relay site on the summit. Additional permits may be issued in the future, but the lack of commercial power along with limited space precludes extensive site development. The USDA-Natural Resource Conservation Service operates a snow telemetry (SNOTEL) site to the west of Madison Butte just outside the roadless area boundary. An annual day-use permit for guided hunting has been issued for this area the past five years. Tupper Guard Station and Work Center is located about 1 mile south of the area on Forest Road 21.

Fire: Fire occurrence has been very low historically. Fuel loads range from light to heavy, depending on the extent of mortality from insects. Catastrophic fires are unanticipated except under extreme burning conditions. Prior to suppression, fire historically helped maintain ecosystems.

This area is entirely within an area that is identified as a wildland urban interface in the Morrow County Community Wildfire Protection Plan. There is a need to maintain fuels treatment options in regards to communities at high risk in the upper reaches of the watershed.

The area is also adjacent to private lands where state protection agencies emphasize protection of resources (minimizing acres burned and resources lost). Fuel loading along these boundaries is high on Forest Service lands.

Insects and Disease: A severe and widespread outbreak of western spruce budworm in the late 1980s and early '90s inflicted heavy losses upon Douglas-fir and grand fir. Defoliation led to ensuing attacks by bark beetle. Insect and disease activity is currently typical of unmanaged natural stands.

Private Lands: None.

Tiger Creek Roadless Area (#6566)

5,570 Acres

Overview

History*:* This area was not included in the 1990 Forest Plan and never studied for Wilderness potential. Through a land exchange, the Forest acquired lands increasing the area to 5,567 acres. The primary use of the area has been by hunters with several old hunter camps just south of Mill Creek and old four-wheel drive access onto the Forest. To reach the lower slopes from Mill Creek requires crossing private lands. The area has had limited harvest using helicopters requiring long walks out ridges or personnel having to be flown in.

Location and access: The Tiger Creek Roadless Area is located in Umatilla County, Oregon. The area is reached via the Mill Creek Road (CR 582) south from the City of Walla Walla to Forest Roads 65 and 6511. The roadless area is located along the Forest boundary, south of Mill Creek. The primary access from National Forest system lands is from Forest Road 6511 from above. The Tiger Ridge Trail, 3224, which is an extension of the North Fork Walla Walla Trail, accesses a ridge top in the eastern portion. Much of the area is not accessible by trails; however, hunters use the stream bottoms and ridge systems for access.

Geography/Topography: The terrain is mainly-north south tributaries to Mill Creek. The landscape is heavily dissected by streams including Henry Canyon, Webb Creek and Tiger Creek. The area is bounded by ridge top to the south and Mill Creek to the north. Elevation ranges from 2,400 feet along the Forest boundary to 4,600 feet along Forest Road 6511. Soil associations are described in the Forest Soil Resource Inventory. Bedrock over the entire area is basalt flows of the Miocene age Columbia River Group.

Vegetation/Ecosystem: Southern and western exposed slopes are grasslands making up approximately 20 percent of the area. Forests are predominately moist forest white fir with some subalpine fir along the ridge top. Mixed conifer forest occurs along the lower elevations with mid-slope inclusions of western larch. Mean annual precipitation varies from 40 to 70 inches with most of this coming in the form of winter snow. Streams flow year round. Summer temperatures often exceed 90 degrees.

Current Uses: Recreational use is limited because of limited access from Mill Creek and the rugged nature of the area. Access to streams requires crossing private lands along Mill Creek. There is a short section of Tiger Creek (about a half mile) that is accessed from Forest Road 65; however, the trail system disappears when it moves from the stream to the ridge system. Since the primary access is from a ridge top road to steep terrain the area does not receive much use. The predominant use occurs in the fall with hunting when people can be dropped off on top and walk out the bottom. Motorized use is allowed on the upper portion of the Tiger Ridge Trail. Motorcycle and ATV travel on this portion of the trail is popular.

Appearance and surroundings: The area is approximately 3.5 miles east to west and 2.5 miles north to south. The Mill Creek road is a county road across the bottom that is a primary access road to the Forest. The landscape of grasslands and forest is background for the Tiger Canyon Road, Forest Road 65, with little evidence of harvest except near the ridge top. The terrain is steep with year round streams. It is typical of the west slopes of the Blue Mountains with a predominant north exposure. The year round streams create complex riparian vegetation, sometimes like that seen in the Cascades.

Key Attractions: The area provides a remote hunting experience that is close to town. Though the area is not very large, dropping into any of the numerous streams canyons offers a high degree of solitude. From the upper ridges, views of the Mill Creek Canyon can be seen and in some places to the distant Walla Walla landscape past the base of the canyon.

Inventory Criteria

This area meets the inventory criteria for areas with wilderness potential.

Capability

Naturalness and Undeveloped Character: The natural integrity in the northern portions of the area and in drainage bottoms is generally very high. Evidence of logging activities is readily apparent in the south eastern and south western portions of the area and from any of the predominant ridge lines. While the area is relatively small, opportunities for solitude are high in localized areas. Opportunities for primitive recreation experiences are largely limited to the canyon bottoms. Evidence of human activity and development are readily apparent from most ridge tops. The rugged nature in the heart of the area offers high quality hunting. Most of the area is physically very demanding to hikers and hunters. Access is via primitive trails or by overland travel. There are no developed recreation facilities.

Primitive Recreational Opportunities and Challenges. Steep terrain and lack of road access presents challenge to all forms of recreational activities. The Tiger Ridge trail dissects the area, offering a challenging experience.

Special Features: There are no particularly special features within the area. The landscape is typical of the northern Blue Mountains.

Manageability and boundaries: The boundary is easily defined using the Forest boundary to the west and north, Forest Road 65 to the north and east, and Forest Road 6511 to the south.

Availability

Recreation: The area currently provides roaded natural and semi primitive non-motorized recreation opportunities.

Wildlife: The South Fork Walla Walla River has been identified as vacant bighorn sheep habitat, and may be the site of future transplants and the Tiger Creek Roadless Area could provide a connective corridor to the north on private lands. Deer and elk winter at the lower elevations and calve at the higher elevations. Habitat for Canada lynx is present at higher elevations.

Water/Fish: Mill Creek hosts native bull trout and rainbow/redband trout and historically was also used by steelhead and Chinook salmon. The Confederated Tribes of The Umatilla Indian Reservation have recently stocked adult Chinook salmon in Mill Creek below the Mill Creek Watershed and some Chinook have spawned in Mill Creek within the municipal watershed. The tributaries of Mill Creek within the Tiger Creek Roadless area are habitat for redband trout. Both Henry and Tiger Creeks have known populations.

Aquatic habitat within the streams is mostly excellent with portions of the lower reaches going dry during late summer. Water is clear and cold and remains so year-round, habitat is complex, and shade is mostly abundant.

Range: Portions of the area is within the Walla Walla C&H Allotment which is vacant and there are no plans to restock this allotment in the future.

Timber/vegetation: Major tree species are white fir, mixed conifers, and subalpine fir.

Minerals: This area has no known locatable mineral potential. It is not an area of known wind potential and access to the area would be difficult.

Cultural: There are no known cultural resources present within the area

Land use/Special Uses: The Edwards water development special use permit is within the roadless area. There is no motorized access.

Fire: The post settlement fire occurrence within this area has been moderate. Fuel loads in timber stands have become high. Heavy surface fuels, the presence of ladder fuels and stand density can be expected to contribute to crown fire and high severity fire. The private lands along Mill Creek increase the risk of wildfire coming onto the National Forest. The area is designated as wildland urban interface areas within two Community Wildfire Protection Plans; The Umatilla County CWPP and the Mill Creek, Oregon and Washington CWPP.

Insects and disease: This area has not had the insect epidemic concerns found in other white fir stands on the Walla Walla District.

Private lands: There are no private inholdings within the roadless area. There are private lands along Mill Creek that have cabins and year round residences.

Upper Tucannon Roadless Area (#14014)

13,190 Acres

Overview

History: The 28,700-acre Upper Tucannon Roadless Area was studied for its potential as wilderness during the development of the Oregon Butte Unit Plan Environmental Impact Statement. The plan was approved in 1977 but allocations for the area were delayed by ongoing wilderness debates.

The Endangered American Wilderness Act of 1978 included 13,200 acres of the central portion of this area in the Wenaha-Tucannon Wilderness Area, leaving the remaining acreage in two pieces. The House of Representatives Conference Committee Report on the Endangered American Wilderness Act of 1978 directed the Secretary of Agriculture to manage the remaining two areas for multiple-use, and to identify the prescriptions for harvesting timber and managing roads. This committee report created a management dilemma based on the common boundary between the Wenaha-Tucannon Wilderness and Upper Tucannon Roadless Area. The boundary placed a portion of the Tucannon River Trail (3135) in the wilderness area, thereby eliminating motorized vehicle use of that trail. By putting the boundary between Clover Spring and Diamond Peak, road construction access to the 4,800 acres west of Bear Creek has been effectively eliminated and motorized vehicle use of the Jelly Springs Trail #6144 is prohibited.

Since the passage of the Endangered American Wilderness Act of 1978, the Upper Tucannon Roadless Area has been managed according to the direction identified in the House Conference Report.

Since the Umatilla Forest Plan in 1990, timber sales and new road construction have further reduced the area. Additional acres were removed to buffer the open roads in the area and meet travel management plans.

Location and Access: The Upper Tucannon Roadless Area is located in Columbia and Garfield counties, Washington, in T.8N., R.42E. It abuts the northeast boundary of the Wenaha-Tucannon Wilderness and includes the headwaters of the Tucannon. The area is accessed from the southeast via the Blue Mountain Trail #6144; from the south by Forest Road 4030; from the west by Forest Road 4712 and Tucannon Trail #3135; and from the northwest by Forest Road 40.

Geography and Topography: The area is in the northern Blue Mountains of southeastern Washington. Elevation ranges from 3,560 to 6,320 feet. Topography is mountainous with steep slopes and deeply incised canyons. Two-thirds of the area is composed of slopes greater than 60 percent, while a much smaller portion has slopes less than 30 percent.

Vegetation and Ecosystem: Grand fir and subalpine fir are predominant in the ecosystems of the Lower Tucannon Roadless Area. Northern aspects are timbered primarily with grand fir and mixed conifer at the lower elevations, and subalpine fir at the higher elevations. Southern aspects are predominantly timbered stringer draws, interspersed with grasslands on the upper slopes and stands of ponderosa pine and mixed conifer in the riparian area of the Tucannon River. Bedrock over the entire area is basalt flows of the Miocene-age Columbia River Group (Swanson and others 1980). Mean annual precipitation varies from 45 to 70 inches. Summer temperatures may reach 100°F.

Current Uses: The area has no active mining claims or oil and gas leases. Treaty rights may be exercised in this area. Hunting use is heavy for deer and elk and minor for upland game birds. Fishing is restricted to protect threatened and endangered “critical habitat” for salmonids.

About 70 percent of the 7,000 recreation visitor days per year within the area are associated with the Tucannon Trail, which eventually terminates at either Hunter Spring or Diamond Peak. Hunting and hiking are the primary uses and Trails #3110 (Bear Creek) and #3135 (Tucannon) have been converted to nonmotorized.

Appearance and Surroundings: The Upper Tucannon Roadless Area appears as a deep, rugged canyon with heavily forested slopes south of the Tucannon River and steep, grassy slopes north of the river. Across the ridge to the Wenaha-Tucannon Wilderness to the southwest, slopes are more rugged and sparsely vegetated. Terrain to the north and east is gentle and heavily timbered.

Key Attractions: The Karl Urban Special Botanical Area is the primary attraction of the Upper Tucannon Roadless Area. Located on the northwest boundary ½-mile from the confluence of Sheep Creek and the Tucannon River, the botanical area features an ecological niche for plants and

animals normally associated with a high-moisture environment, typically encountered west of the Cascade Mountain range. This phenomenon was formed by the cutting action of Sheep Creek that created two small but spectacular waterfalls in the narrow boxed canyon. Constant seepage and the canyon's steep moss-covered basalt walls have created the cool, humid climactic conditions to sustain the unique ecological community. It is totally foreign to the comparatively dry ponderosa pine-bunchgrass communities found along the south-facing slopes of the Upper Tucannon River drainage.

The area's primary attribute is its proximity to the Wenaha-Tucannon Wilderness.

Inventory Criteria

The Roadless Area meets the Inventory criteria for areas with wilderness potential.

Capability

Naturalness and Undeveloped Character: Human influences have had little impact on the natural appearance and long-term ecological processes of the Upper Tucannon area. The area is free of disturbances; and natural balances, even where altered in the past, are intact and operating. While these intangible values may have been disrupted in the past by activities such as fire and grazing, the activities were both minimal in extent and duration. Fire has been, and most likely will continue to be, the one factor with the potential to impact the naturalness of the area. However, fire has been the key to the long-term ecological changes and vegetative succession of the area. Duration would be limited to the period of vegetative recovery, which can vary with intensity and extent of fire.

Forest Road 40, the primary route between Pomeroy, Washington, and Troy, Oregon, during the summer, lies high on the ridge to the east of the roadless area and for several miles serves as the boundary. Sights and sounds associated with this road can affect much of the roadless area. Timber harvest operations to the northwest and southeast are visible from parts of the roadless area. Opportunities for primitive recreation exist for hiking, horseback riding, fishing, camping, and hunting. The recreation opportunity spectrum (ROS) for the area is identified as Semi-primitive Nonmotorized, Roaded Natural, and Roaded Modified.

Primitive Recreational Opportunities and Challenges: The opportunities for challenging experiences within this area are relative to the experience and ability of the recipient. This area offers limited opportunities for persons in reasonably good physical condition who are familiar with mountain hiking.

Special Features: There are currently no listed sensitive plant species within the roadless area. The unusual riparian community in the Karl Urban botanical area supports devil's club and a wide variety of mosses, including the uncommon "bug-on-a-stick". Snake River spring/summer Chinook salmon, Snake River steelhead and Columbia River bull trout occupy the watershed and are currently listed as "threatened."

Manageability and boundaries: The Upper Tucannon area is large enough to be managed in an undeveloped state even if it were not contiguous to the Wenaha-Tucannon Wilderness. The current boundary is manageable. With the exception of boundary locations identified under History, most of the boundaries do follow clear topographic or geographic lines.

Availability

Recreation: Same as Outdoor Recreation Opportunities.

Wildlife: The entire area is summer range for big game. Mule deer, Rocky Mountain elk, bighorn sheep, and black bear occur within the area. This entire area is considered potential habitat for Canada lynx, listed as “threatened” by the U.S. Fish and Wildlife Service. About 30 percent of the area provides well-distributed old-growth habitat.

The Upper Tucannon Roadless Area contains large stands of undisturbed forest habitat immediately adjacent to the Wenaha-Tucannon Wilderness. Maintaining roadless areas in addition to or in association with wilderness provides refugia habitat when surrounding areas become roaded, managed, and increasingly utilized by recreation and other uses. Areas to the north and east of this roadless area have been altered through past timber harvest.

Lack of roads in this area provides seclusion opportunities for wildlife species dependent on limited human access.

Water/Fish: Sheep Creek and Bear Creek are important to the temperature regime of the Tucannon River and to the supply downstream. Water quality is at potential.

“Threatened” Snake River spring/summer Chinook salmon (*Oncorhynchus tshawytscha),* Snake River steelhead (*Oncorhynchus mykiss)*, and Columbia River bull trout (*Salvelinus confluentus)* inhabit the watershed.

Range: The roadless area is primarily limited to recreation stock use. Approximately 96 acres of the Upper Pataha pasture (Pomeroy cattle and horse allotment) are within Upper Tucannon.

Timber/vegetation: Major species are white fir, subalpine fir, and mixed conifer.

Minerals: The area is prospectively valuable for oil and gas (Smith 1976). There is no known locatable mineral potential.

Cultural: Five sites and 11 isolated occurrences have been recorded. The majority consist of lithic scatters, which are associated with Native American use. Other sites are associated with grazing. One sign interprets historic grazing in the area.

Land use/Special Uses: None at this time.

Fire: Fire occurrence within this area has historically been frequent with return intervals of 5 to 25 years. The area’s fire regime is of low severity. Fire suppression has changed the structure, composition, stocking levels, and fuel loadings of the forest and created a higher risk for large-scale high-intensity wildfire.

Insects and disease: This area has the usual amount of insect and disease problems found in unmanaged natural stands of timber. There is a potential of spread to adjacent managed stands.

Private lands: None.

Walla Walla River Roadless Area (#14022)

34,790 Acres

Overview

History: When the Walla Walla River Roadless Area was inventoried for study as a potential wilderness during the RARE II process, it contained 34,500 acres of National Forest land and was allocated to non-wilderness use in 1979.

The 1979 Elgin Plan allocated most of the area to non-roaded commercial timber resource while providing semi-remote recreation opportunities and elk habitat. A corridor encompassing about 11 miles of the South Fork Walla Walla River was allocated to primitive recreation. The Elgin Plan was appealed and was resolved in April 1980 with the Chief's decision not to implement the Walla Walla Watershed portion of the plan pending additional information. Subsequently, no timber harvest has occurred in this roadless area.

The area was designated as a municipal watershed in the 1990 Forest Plan, and guidelines were developed to ensure production of high-quantity and quality of water and elk habitat. These guidelines protect water discharge from May 1 to September 30. Ten percent of the area was considered suitable logging and was the only portion managed for harvest, but no harvest or vegetation management has occurred.

Recreation has been the primary focus of the roadless area, which is used by residents from nearby Milton-Freewater, Oregon, and Walla Walla, Washington for hiking, bicycling, driving, and horseback riding on a developed trail system. Changes proposed for the Forest Plan Revision include moving the boundary 300 feet off major forest roads along slope breaks and ridgelines.

Location and Access: The Walla Walla River Roadless area is located in Umatilla and Wallowa counties, Oregon, (Townships 4 and 5 North, Ranges 38 and 39 East) and includes most of the south and north forks of the Walla Walla River that are within the Forest boundary.

Several local roads provide access to the North Fork from the west, and Forest Road 65 accesses the North Fork from the north from Mill Creek off of County Road 582. County Road 600 provides access to the South Fork from the west. Forest Roads 64 runs north-south on the ridge separating the Walla Walla and Wenaha drainages and provides access to the upper reaches of both forks. Several trails access the interior of this unit, particularly Trail 3225, which runs from the Forest boundary for 16.5 miles along the South Fork Walla Walla River to Forest Road 55.

Geography and Topography: The area is in the Blue Mountains of northeastern Oregon. Elevation varies from 2,400 feet to 5,780 feet. It is mountainous with steep slopes and deeply incised canyons. Over half of this area is composed of slopes greater than 60 percent. Bedrock over the entire is basalt flows of the Miocene-age Columbia River Group. A normal fault of late Tertiary age cuts through the western portion of the area (Walker 1973; ibid. 1979). Mean annual precipitation varies from 45 to 60 inches. Summer temperatures often exceed 90° F.

Vegetation and Ecosystem: Predominant ecosystems are white fir and grass. Northern aspects are timbered with white fir and mixed conifer at lower elevations and subalpine fir at higher elevations. Southern aspects are predominantly timbered draws interspersed with grassland. Riparian areas contain stands of mixed conifer and ponderosa pine.

Current Uses: There are no mining claims or oil and gas leases. A 5-year Special Use Permit was issued to Utah State University in 2003 to establish a bull trout monitoring station.

Hiking and trail riding with mountain bikes, motorcycles, and horses are the dominant recreational uses of the Walla Walla Roadless Area. Other uses include big game hunting, fishing, camping, and upland game bird hunting.

About 55 percent of the area lies within the vacant Walla Walla grazing allotment, which covers most of the North Fork of the Walla Walla River.

Appearance and Surroundings: The Walla Walla River Roadless Area appears as two deep, rugged canyons that join about 10 miles outside the Forest Boundary to become the Walla Walla

River. Areas to the south and southeast and north are heavily forested and have been harvested. Downriver to the west, the landscape becomes grassier and more open.

Human influences have had limited impact on the natural appearance or long-term ecological processes of the area. With the exception of the Bear Creek Cabin, just inside the Forest boundary on the South Fork Walla Walla River, the area is free of disturbances and natural balances are intact and operating. While these intangible values may have been disrupted in the past by activities such as fire and grazing, the activities are minimal in both extent and duration. Fire has been, and most likely will continue to be, the factor with the most potential to impact the naturalness of the area.

The Mill Creek Roadless Area is less than ½-mile north. For approximately 1 mile, these two roadless areas are separated only by Forest Road 55. The Jaussaud Corral Roadless Area is less than ½-mile east across Forest Road 64. The Wenaha-Tucannon Wilderness lies less than ½-mile to the northeast across Forest Road 64. The North Fork Umatilla Wilderness lies about 2.5 miles to southwest across State Highway 204.

Key Attraction: There are no key attractions in this area.

Inventory Criteria

The Roadless Area meets the Inventory criteria for areas with wilderness potential.

Capability

Naturalness and Undeveloped Character: The opportunities for a feeling of solitude, the spirit of adventure and awareness, serenity, and self-reliance do exist within this area due to its size. However, roads and timber harvest activities to the north, west, and south may present nonconforming sights and sounds to parts of the roadless area. Encounters with motorbikes on the trails would limit the opportunity for solitude and a primitive experience.

Opportunities for dispersed recreation exist for horseback riding, motorcycle riding, mountain bike riding, camping, hiking, fishing, and hunting. These recreational activities, with the exception of hunting, are all closely associated with the trail system of 40 plus miles within this roadless area. The recreation opportunity spectrum (ROS) for this area is divided roughly 3 to 1 in favor of Semi-primitive Motorized over Roaded Natural. Due to the area's characteristics, recreation use would increase with established trends, but not likely accelerate over general trends unless an improved loop trail system is established in the area for motorcycles.

Primitive Recreational Opportunities and Challenges: The opportunities for challenging experiences within this area are relative to the experience and ability of the recipient. The opportunities are good for persons in reasonably good physical condition.

Special Features: Sabin's lupine, which is classified as endangered in Washington, has been inventoried near Bear Creek, Tollgate, and Bald Mountain. One small population of the regionally sensitive plant species Mingan moonwort grows near the South Fork Walla Walla trail. The opportunities for outdoor education and scientific study are limited to the ecosystems contained herein. There are no research natural areas existing within or planned for this area.

Manageability and Boundaries: The Walla Walla River Roadless Area is of sufficient size to be managed as a minimum development area. The current boundary is manageable; most of the boundaries do follow clear topographic or geographic lines. No conflict occurs between existing or potential public uses outside which would result in demands or invasion of the natural setting, and affect values within the unroaded area.

The current boundary does constitute a barrier to most prohibited use and protects the environment inside from the sights and sounds of civilization outside the area, because most of the area surrounding the roadless area is at higher elevations outside the canyons. However, even though the Walla Walla River area has a maximum length of about 14 miles northeast to southwest and an average width of 6 miles, the uppermost 2 miles of each major drainage is less than 1 mile in width. In addition, the ridge between the two drainages effectively separates the roadless area into two distinct drainage areas.

Availability

Recreation: There are no developed campgrounds and no sites have been identified for campground development. There are numerous dispersed sites within this area, most of which are used during the hunting season. There is very limited potential for additional dispersed campsites because the desirable sites are already being used.

The area contains approximately 40 miles of developed trails. Usability could be enhanced by developing loops for hikers, bikers, and horseback riders. Motorbike and mountain bike use appears to be increasing disproportionately to other uses, possibly as a result of being displaced by the creation of the Wenaha-Tucannon Wilderness to the northeast and the North Fork Umatilla Wilderness just to the south.

Wildlife: Large stands of old growth habitat are well distributed. The South Fork Walla Walla River has been identified as vacant bighorn sheep habitat and may be the site of future transplants. Deer and elk winter at lower elevations and calve at the higher elevations. Habitat for Canada lynx, a species listed as “threatened” by the U.S. Fish and Wildlife Service is present at higher elevations, mainly in the northern half of the area.

Water/Fish: The watershed is an important source of high-quality water for downstream fisheries and irrigation.

The South Fork of the Walla Walla River supports healthy populations of redband/rainbow trout, bull trout, mountain whitefish, sculpins, and anadromous steelhead and re-introduced Chinook salmon. This is a strong flowing stream with excellent aquatic habitat and clear water, which remains very cool year-round. It is widely recognized as an important bull trout stream as evidenced by several studies currently under way and by its designation as critical habit by the U.S. Fish and Wildlife Service. Bull trout and steelhead have also been reported in at least four of its tributaries.

The South Fork also contains wild stocks of ESA -listed “threatened” Mid-Columbia steelhead and USFS Region Six “sensitive” redband trout, and provides excellent aquatic habitat for native fish species with woody debris, pools, spawning gravel, cover, and good quantities of cool, clean water.

Previous withdrawals for irrigation reduced downstream flows and made the lower river uninhabitable to native salmonids. Recent agreements with irrigators have partially restored downstream summer flows, which have persisted through the past two summers.

Private cabins at the Forest boundary are accessed by fording the river at 10 different locations, including driving up the riverbed 300 feet at two of the fords. The fords are all located downstream of the roadless area.

A recreational trail parallels the river for almost its full length, but its impacts on the aquatic habitat are insignificant. The trail does not ford the stream and is not closely adjacent to the water for most of its length. Two bridges cross the river at connecting trails.

The North Fork of the Walla Walla River is a much smaller stream, but it hosts redband/steelhead, sculpins, and at least occasionally, a few bull trout.

The Walla Walla River has high-quality water, which has been maintained at potential by the current management strategy. The South Fork is spring-fed and maintains temperatures of less than 60 degrees throughout the year.

Range: Approximately 55 percent of the roadless area lies within the vacant Walla Walla grazing allotment. There are no plans to restock it.

Timber: Major tree species are white fir and subalpine fir.

Minerals: This area has no known locatable mineral potential, but is considered prospectively valuable for oil and gas (Smith 1976).

Cultural: One unverified cultural resource site is known. The area was used by Indians for hunting and as a migration route so the potential for discovering other cultural sites is moderately good.

Land use/Special Uses: This area produces large quantities of water for downstream irrigation in the Walla Walla Valley. Good flows are maintained well into the summer months.

Fire: Post-settlement fire occurrence within this area has been moderate. Fuel loads in timber stands have become high. Heavy surface fuels, the presence of ladder fuels, and stand density can be expected to contribute to crown fire and high severity fire.

Insects and disease: This area has the usual amount of insect and disease problems found in unmanaged natural stands of timber. There is a long-range potential of spread to adjacent managed stands, but this is of minor importance at this time.

Private lands: None.

Wenatchee Creek Roadless Area (#14020)

18,910 Acres

Overview

History: The Wenatchee Creek Roadless Area was inventoried during development of the Oregon Butte Environmental Impact Statement and allocated to non-wilderness use in 1977. The Oregon Butte Plan allocated the entire area to the production of forage for elk and domestic livestock, and of wood fiber.

Since the 1990 Umatilla National Forest Plan, timber sales and new road construction on the south reduced the unroaded portion.

Location and Access: The Wenatchee Creek area is located in Asotin and Garfield counties, Washington, and lies east of the Wenaha-Tucannon Wilderness Area in T.7N., R.43E. This area is

accessed from the west by Forest Road 40, and on the north by Forest Roads 43 and 4304. Several Forest trails (3137 and 3130) access the bottoms of the major drainages within the area.

Geography and Topography: The area is in the northern Blue Mountains (Ochoco, Blue, and Wallowa Mountains physiographic province) of southeastern Washington. Elevation varies from 1,900 to 5,800 feet with deep canyons and steeply sloped, mountainous terrain. The Wenatchee Creek Roadless Area includes nearly all of the Wenatchee Creek drainage and its major tributary, the West Fork. About 79 percent of this area is composed of slopes greater than 60 percent, while only about 8 percent is on slopes less than 30 percent.

Vegetation and Ecosystem: Grass and mixed conifer are predominant in this ecosystem. North slopes are timbered with white fir and mixed conifers at lower elevations and subalpine fir at higher elevations. Southern aspects have timbered draws interspersed with grasslands on the upper slopes. Riparian areas include stands of ponderosa pine and mixed conifer. Bedrock over most of this area is basal flows of the Miocene-age Columbia River Group. Undifferentiated metamorphic rocks of Paleozoic and Mesozoic age outcrop along Wenatchee Creek near the mouth of Ranger Creek (Swanson and others 1980). Mean annual precipitation varies from 25 to 60 inches. Summer temperatures often exceed 100^{o} F. About 6 percent of the area supports old-growth wildlife habitat.

Current Uses: There are no active mining claims or oil and gas leases. Treaty rights may be exercised. Hunting is moderate for deer and elk and minor for upland game birds. Trout fishing is limited along Wenatchee Creek. The southeast edge of the roadless area lies within the Brushy pasture of the Wenatchee grazing allotment, which is grazed every other year from June 1 to July 15. Most of the remaining area lies within the Asotin grazing allotment, which is grazed annually from June 15 to October 15.

Appearance and Surroundings: Wenatchee Creek appears as a bowl-shaped drainage containing several large, deep and rugged converging canyons. The Wenaha-Tucannon Wilderness Area with similar terrain lies immediately west across Forest Road 40. Similar country lies east of the unit. A timbered plateau lies immediately north of the drainage. Grassy benchland lies to the southeast and southwest.

Key Attractions): There is no primary attraction. Wenatchee Creek's primary attribute is its proximity to the Wenaha-Tucannon Wilderness Area.

Inventory Criteria

The Roadless Area meets the inventory criteria for areas with wilderness potential.

Capability

Naturalness and Undeveloped Character: Human influences have had limited impact on the natural appearance and long-term ecological processes of the Wenatchee Creek area. Natural balances, even where altered in the past, are intact and operating. While these intangible values may have been disrupted in the past by activities such as fire and grazing, the activities were both minimal in extent and duration. Fire has been, and most likely will continue to be, the factor with the most potential to impact the naturalness of the area. However, fire has been the key to the long-term ecological changes and vegetative succession of the area.

Opportunities for a feeling of solitude, spirit of adventure and awareness, serenity, and self-reliance exist in this area. Roads to the east and west, and timber harvest activities to the north and south, may present nonconforming sights and sounds to a minor portion of the roadless area, but all are at a higher elevation, ether on or beyond the rim of the Wenatchee Creek drainage.

The opportunities for primitive recreation exist for horseback riding, motorcycle riding, camping, hiking, fishing, and hunting. If the area remains unroaded, this type of recreational activity would stay essentially the same, and use would likely increase with, but not over, established trends due to the area's characteristics.

Primitive Recreational Opportunities and Challenges: The opportunities for challenging experiences within this area are relative to the experience and ability of the recipient. This area offers limited opportunities for persons in reasonably good physical condition who are familiar with mountain hiking.

Special Features: Two sensitive plant species, Cusick's milkvetch and Nez Perce mariposa lily, occur on the slopes above the West Fork Wenatchee Creek. Snake River spring/summer Chinook salmon, Snake River steelhead, and Columbia River bull trout inhabit the drainage and are currently listed as "threatened." Opportunities for outdoor education and scientific study are limited to the ecosystems contained herein.

Manageability and Boundaries: In addition to its size, the area has very natural boundaries extending as they do from ridge line to ridge line (east-west) and plateau edge to plateau edge (north-south). The current boundary is manageable, following clear topographic and geographic lines, or the Forest boundary. Little conflict occurs between existing or potential public uses outside that would result in demands or invasion of the natural setting and affect values within the unroaded area. The current boundaries constitute a barrier to most prohibited use and protect the environment inside from most of the sights and sounds of civilization outside the area.

Availability

Recreation: Same as Outdoor Recreation Opportunities.

Wildlife: Mule deer, Rocky Mountain elk, and possibly some California bighorn sheep inhabit the area. The southeast half of this roadless area is part of the Wenatchee big game winter range, and the entire area provides habitat for bighorn sheep. The area includes a bighorn sheep lambing area (Washington Department of Game 1988). The western boundary provides a small amount of potential habitat for Canada lynx, a listed species. About 10 percent of the area supports old-growth wildlife habitat. Large contiguous blocks of old-growth are found in the headwaters of main Wenatchee Creek and along the west fork of Wenatchee Creek.

Lack of roads in this area provides seclusion opportunities for wildlife species dependent on limited human access. Maintaining roadless areas can provide refugia habitat when surrounding areas become roaded, managed, and increasingly utilized by recreation and other uses.

Water and Fish: Water quality is at potential. Snake River spring/summer Chinook salmon, Snake River steelhead, and Columbia River bull trout – all listed as "threatened" – inhabit the drainage.

Range: A total of 263 acres receive moderate use by livestock under the Wenatchee grazing allotment. Approximately 12,091 acres of the Asotin grazing allotment are comprised of three pastures (Wenatchee: 11,179 acres; George: 658; and Hogback: 254). Potentially, 413 cow/calf pairs could graze the Wenatchee pasture every 5 years, however, the pasture has not been used in more than 10 years.

Timber and Vegetation: Mixed conifer is predominant.

Minerals and Soils: The area is on the south end of the old Asotin mining district, but contains no known locatable mineral potential. The area is considered prospectively valuable for oil and gas.

Cultural: Two prehistoric lithic scatters have been recorded.

Land Use and Special Uses: None.

Fire: Fire occurrence within this area has historically been frequent with return intervals of 5 to 25 years. The area experienced a low severity fire regime. Fire suppression has changed the structure, composition, stocking levels, and historic fuel loads, and created a higher risk for large-scale, high-intensity wildfire.

Insects and Disease: This area has the usual amount of insect and disease problems found in unmanaged natural stands of timber. There is a potential of spread to adjacent managed stands.

Private Lands: Privately-owned lands within and adjacent to this area have been minimally developed with limited access. Possibilities for acquiring them are low.

Willow Springs Roadless Area (#14015)

9,490 Acres

Overview

History: The Willow Springs Roadless Area was inventoried for potential wilderness during the development of the Oregon Butte EIS and was allocated to non-wilderness use in April 1977. The Oregon Butte Plan allocated the northern half of the west-facing slope of the Tucannon River to the production of wood fiber and livestock forage. The remainder included forage for elk as well as livestock. Since implementation of the 1990 Forest plan, timber sales and new road construction on the east side in addition to road buffers have further reduced the size of the area. Roads to the east have been removed, and the area has grown in that direction.

Location and Access: The Willow Springs area is located in Columbia and Garfield counties, Washington, approximately 17 miles south of Pomeroy in T.9N., R.41E., against the northern boundary of the Forest. This area may be accessed on the northwest and southwest sides from Forest Road 47, on the southeast side from Trail #3139 and Forest Road 4022, and on the east side from Forest Roads 40 and 4018. The area has no maintained trails.

Geography and Topography: The area is in the northern Blue Mountains of southeastern Washington. It is very mountainous with steep slopes and deeply incised canyons. About 85 percent of this area is composed of slopes greater than 60 percent, while the remainder has slopes greater than 30 percent. Elevation ranges from 2,320-5,200 feet. The Willow Springs Roadless Area is bounded by the west-facing slope of the Tucannon River Canyon for about 7 miles. The remaining third of the area lies to the east over the ridge into Cummings Creek.

Vegetation and Ecosystem: Mixed conifer and grass are predominant in this ecosystem. Timbered northern aspects are mixed conifer at lower elevations with subalpine fir at higher elevations. South-facing aspects contain timbered draws interspersed with upper slope grasslands. Riparian areas along the Tucannon River and Cummings Creek contain a mix of ponderosa pine and conifer. Bedrock over most of this area is basalt flows of the Miocene-age Columbia River Group. Undifferentiated Mesozoic and Paleozoic metamorphic rocks outcrop near a branch in the upper portion of Cummings Creek, and along the western margin of the area between Big Four Canyon and Grub Canyon (Swanson and others 1980). Mean annual precipitation varies from 35 to 40 inches. Summer temperatures often exceed 100° F.

Current Uses: There are no active mining claims or oil and gas leases. Treaty rights may be exercised in this area.

Hunting is moderate for deer and elk and minor for upland game birds. The Tucannon River provides some fishing opportunities but is closed from Panjab Bridge upstream to protect threatened species.

Approximately 44 percent of the roadless area lies within the Pomeroy grazing allotment, which provides for 83 cow/calf pairs each June 10 to October 10.

Appearance and Surroundings: The Willow Springs Roadless Area contains one slope of the rugged and deep Tucannon River Canyon to the west, and the Cummings Creek Canyon to the north, both of which are sparsely timbered.

Terrain to the east is gently sloped and heavily timbered with forestland that has been logged. To the north outside the Forest boundary lie grasslands and the wooded riparian area of Cummings Creek. The Wenaha-Tucannon Wilderness Area lies to the south across Forest Road 4712.

Key Attractions: There is no primary attraction within the area. Its primary attribute is its location as a backdrop for several fishing lakes, the Camp Wooten Environmental Learning Center and to Camp Wooten State Park to the west, and its proximity to the State of Washington's Tucannon River Fish Hatchery in the Wooten Wildlife Area, approximately 2 miles downstream from the Forest boundary.

Inventory Criteria

The Roadless Area meets the Inventory criteria for areas with wilderness potential.

Capability

Naturalness and Undeveloped Character: Human influences have had limited impact on the natural appearance and long-term ecological processes of the Willow Springs area. Evidence of temporary roads and limited timber harvest exists in both forks of Cummings Creek, and in Grub Canyon, Big Four Canyon, and Hixon Canyon. With the exception of Hixon Canyon, these roads have almost entirely re-vegetated. OHV travel is restricted.

Natural processes, even where altered in the past, are intact and operating. While these intangible values may have been disrupted in the past by activities such as fire and grazing, the activities were minimal in both extent and duration. Fire has been, and most likely will continue to be, the factor with the potential to impact the naturalness of the area. However, fire has been the key to the long-term ecological changes and vegetative succession of the area. Duration of its effects would be limited to the period of vegetative recovery, which can vary by intensity and extent.

Opportunities for a feeling of solitude, spirit of adventure and awareness, serenity, and self-reliance do not really exist within this area. Roads to the east and west and timber harvest activities to the east present nonconforming sights and sounds to nearly the entire roadless area. Primitive recreation is limited to cross-country hiking and hunting.

Primitive Recreational Opportunities and Challenges: The opportunities for challenging experiences within this area are relative to the experience and ability of the recipient. This area offers limited opportunities for persons in reasonably good physical condition who are familiar with mountain hiking.

Special Features: There are no threatened, endangered, or sensitive species of plants or animals known to inhabit this area. Snake River spring/summer Chinook salmon, Snake River steelhead, and Columbia River bull trout inhabit the watershed and are currently listed as "threatened."

Opportunities for outdoor education and scientific study are limited to the ecosystems contained herein. There are no existing or planned research natural areas.

Manageability and boundaries: The Willow Springs area lacks unity. The western two-thirds of the area are composed of a steep, northwest-facing Tucannon River Canyon slope. The Tucannon River corridor annually receives approximately 14,000 recreation visitor days. The remaining third of this

area includes the lower elevations of the Cummings Creek drainage within the Forest boundary. Harvested private timberlands lie outside the Forest boundary.

The current boundary is manageable as it mostly follows clear topographic and geographic lines. However, the current boundary does not constitute a barrier to any prohibited use, nor does it protect the environment inside from the sights and sounds of civilization outside the area.

Availability

Recreation: Same as Outdoor Recreation Opportunities.

Wildlife: Most of this roadless area is considered big game winter range. Bighorn sheep and Rocky Mountain elk are have a high level of public interest and inhabit the area. The few old-growth areas lack connectivity. About 25 acres of old-growth habitat was harvested in 1993.

Lack of roads in this area does provide seclusion opportunities for wildlife species dependent on limited human access. Maintaining roadless areas can provide refugia habitat when surrounding areas become roaded, managed, and increasingly utilized by recreation and other uses.

Water/Fish: The section of the Tucannon River within the Willow Springs Roadless Area is being considered for classification under the Wild and Scenic Rivers Act.

The riparian area of the Tucannon River is owned by Washington Department of Fish and Wildlife (WDFW) and has numerous constructed fishing lakes and campgrounds. Tributaries from National Forest Service lands provide relatively cool water to the Tucannon mainstem. Hixon Creek, downstream of the roadless area was diverted into a constructed channel and passes through the Tucannon Campground. Roads adjacent to Hixon Creek and Cummings Creek and remnants of roads adjacent to Grub Canyon Creek and Big Four Canyon Creek are visible components of the near channel area. Culverts remain in these roadbeds and create a risk of sedimentation.

Snake River spring/summer Chinook salmon, Snake River steelhead, and Columbia River bull trout inhabit the watershed and are currently listed as “threatened.”

Range: 4,621 acres are within the Pomeroy grazing allotment.

Timber/vegetation: Major tree species are mixed conifers.

Minerals: This area is within the old Tucannon mining district. Argillically altered basalt is found near the northern tip of the Tucannon Wilderness. Samples from propylitically altered and bleached basalt near the northern tip of the Wilderness showed anomalous concentrations of gold, silver, and copper. Outcrops of quartz monzonite and diorite are found within the area, indicating a plution at depth, and possibly a mineralized system (Munts 1983). The area is classed as prospectively valuable for oil and gas (Smith 1976), but the likelihood of such occurrences is reduced by the indications of a plution, which would most likely have driven off any hydrocarbons.

Cultural: Five historic sites associated with mining and homesteading, and three prehistoric sites have been recorded.

Land use/Special Uses: Camp Wooten Environmental Learning Center, operated by Washington State, uses part of the area.

Fire: Fire occurrence within this area has historically been frequent with return intervals of 5 to 25 years. The area experienced a low severity fire regime. Fire suppression has changed the structure, composition, stocking levels, and historic fuel loads, and created a higher risk for large-scale, high-intensity wildfire.

Insects and disease: This area has the usual amount of insect and disease problems found in unmanaged natural stands of timber. There is a potential of spread to adjacent managed stands.

Private lands: State-owned lands within and adjacent to this area have been minimally developed with limited access for recreation and fishing. Possibilities of acquisition are very low.

W-T Three Roadless Area (#14027)

1,860 Acres

Overview

History: Most of the W-T Three Roadless Area was inventoried for study as a potential wilderness during the development of the Oregon Butte Plan Environmental Impact Statement. The three areas composing the roadless area were included in the Saddle Creek and Wenaha Breaks Roadless Areas, and were allocated to non-wilderness, primitive recreation use in April 1977.

Subsequently named W-T Three, the roadless area was inventoried as potential wilderness and allocated to non-wilderness by the RARE II decision of January 1979. The Wenaha River was designated a wild river by the Omnibus Oregon Wild and Scenic Rivers Act of 1988.

Timber sales prior to the 1990 Umatilla Forest Plan reduced the unroaded portion within the Wenaha River Canyon to 2,000 acres. The Triangle Land Exchange added 147 acres.

Since 1990, a small harvest unit was placed on the north side that slightly degraded wilderness potential for an undetermined period, but did not permit roads.

Location and Access: The W-T Three area is located in Wallowa County, Oregon, in T.6N., R.42E. It begins at the Forest Boundary about 2.5 miles west of Troy, Oregon, and continues up the Wenaha River for 3.5 miles to the boundary of the Wenaha-Tucannon Wilderness. Steep canyon walls and slopes limit overland foot travel to Forest Trail 3106, which lies just north of the Wenaha River throughout this section.

Geography and Topography: The area is located in the northern Blue Mountains of northeastern Oregon. Elevation ranges from 1,750 to 3,000 feet. Sixty-nine percent of this area is composed of slopes greater than 60 percent. The canyon walls bordering the Wenaha River and its major tributary, Dry Gulch, are composed of slopes greater than 60 percent. Basalt outcrops along steep sideslopes create bench-and-cliff topography.

Vegetation and Ecosystem: North slopes south of the Wenaha River are primarily covered with mixed conifer and white fir. South-facing slopes are open grasslands. The riparian area contains conifer interspersed with hardwood and brush. North of the Wenaha River all slopes are open grasslands. Basalt flows with some interbedded fluvial sediments of the Miocene-age Columbia River Group are found over the entire area (Walker 1979). Mean annual precipitation is about 25 inches. Summer temperatures often exceed 100° F.

Current Uses: There are no active mining claims or oil and gas leases. Treaty rights may be exercised. Deer and elk hunting is moderately heavy, primarily during special late season hunts. Fishing opportunities for resident trout are limited along the Wenaha River and its tributaries.

The area south of the river lies within the Eden grazing allotment. The area is moderately grazed every other year from June 1 to July 15 by 239 cow/calf pairs.

Appearance and Surroundings: The W-T Three area appears as a deep, rugged, sparsely vegetated canyon cut into a timbered plateau. It is distinguished by steep grassy slopes and basalt outcrops.

The canyon is shouldered by timbered benches and open agricultural land (Grouse Flat) to the north. Downstream the canyon and river empties into the Grande Ronde River west of Troy. Upstream, the canyon climbs into the Wenaha-Tucannon Wilderness.

Key Attractions: The panoramic view of this area from Forest Road 62 near the Forest Boundary above the canyon to the southwest is a key attraction. The roadless area contributes to riparian habitat along the Wenaha River and is a logical extension of the Wenaha-Tucannon Wilderness Area of which it shares about ¾-mile of common boundary.

Inventory Criteria

The Roadless Area meets the Inventory criteria for areas with wilderness potential.

Capability

Naturalness and Undeveloped Character: Human influences have had limited impact on the natural appearance and long-term ecological processes of the W-T Three area. The area is free of disturbances; and natural balances, even where altered in the past, are intact and operating. While these intangible values may have been disrupted in the past by activities such as fire and grazing, the activities were minimal in both extent and duration. Fire has been, and most likely will continue to be, the factor with the most potential to impact the naturalness of the area because of the fact that nearly all human activity takes place near the canyon bottom while all the fuels are higher in elevation, have a high rate of spread, and because steep, rocky slopes are difficult to control. However, fire has been the key to the long-term ecological changes and vegetative succession of the area. Duration of its effects would be limited to the period of vegetative recovery, which can vary by intensity and extent; duration

A trip along the Wenaha River provides a true sense of solitude, except for those occasions when other persons are encountered. In the canyon bottom, the combination of vegetation and the very abrupt rise of the slopes away from the river make the upper canyon slopes difficult or impossible to view from along the river. Due to its size, the opportunities for a feeling of the spirit of adventure and awareness, serenity, and self-reliance do not exist within this primary portal to the Wenaha-Tucannon Wilderness Area; however, it contains these opportunities when viewed together with the wilderness.

The opportunities for primitive recreation include horseback riding, camping, sightseeing, hiking, fishing, and hunting. If the area remained unroaded, this type of recreational activity would remain essentially the same, and use would likely increase with, but not over, general trends due to the area's characteristics.

Primitive Recreational Opportunities and Challenges: The opportunities for challenging experiences within this area are relative to the experience and ability of the recipient. This area offers limited opportunities for persons in reasonably good physical condition who are familiar with mountain hiking.

Special Features: Snake River spring/summer Chinook salmon, Snake River steelhead, and Columbia River bull trout are currently listed as "threatened" and inhabit the watershed. There are no inventoried federally-listed threatened and endangered plant species. The Nez Perce mariposa lily, a sensitive plant species, is scattered throughout grasslands on the northeast side of the Wenaha River.

The opportunities for outdoor education and scientific study, both formal and informal, have not been identified, but are limited to those available from like acreages of the ecosystems contained herein.

Opportunities for activities in the river corridor are good due to its undisturbed state. The canyon's steep slopes, on the other hand, limit opportunities to those physically able to participate.

Manageability and boundaries: The W-T Three unroaded area is well defined with natural boundaries extending from ridge line to ridge line (northeast-southwest). With a few exceptions, the boundary is formed by the transition from plateau to steep canyon slopes. The area is less than a mile wide and about 3½ miles long, and includes the canyonland on either side of the river.

The current boundary is manageable with little conflict between existing or potential public uses. The boundary is easily definable and recognizable on the ground, and shields the interior Wenaha River environment.

Availability

Recreation: Same as Outdoor Recreation Opportunities.

Wildlife: This area is along the lower Wenaha River and provides valuable wintering habitat for bald eagles. Three miles downstream, the Wenaha River joins with the Grande Ronde River. The area is capable of supporting a bald eagle nesting territory, although none have yet been established to our knowledge. There is also a possibility that prairie falcons and peregrine falcons utilize the area.

Nearly all of this roadless area is considered big game winter range, and the entire area provides habitat for bighorn sheep. The adjacent Wenaha Wildlife Management Area provides winter range for a heavy concentration of elk that seasonally use Moore Flat and often are forced down into the canyon by winter weather.

This roadless area is unique in that it has protected a low elevation, riverine habitat. Bald eagles and other species utilizing the river corridor have benefited from the seclusion the area provides. As winter range for big game continues to become unavailable on private land, maintaining this habitat on public lands becomes more important. The WT-Three is a small roadless area; however, it is immediately adjacent to a state owned wildlife management area. Together, these areas provide important wintering habitat for a variety of wildlife that would otherwise be disturbed by motorized use.

Water/Fish: Water quality is at potential in this roadless area.
Three ESA listed aquatic species are known to occupy waters in this watershed; Snake River spring/summer Chinook salmon (*Oncorhynchus tshawytscha)* Snake River steelhead (*Oncorhynchus mykiss)*, Columbia River bull trout (*Salvelinus confluentus)* are currently listed as "Threatened."

Range: Approximately 908 acres are being used and developed under the Eden C&H allotment. This area represents 53 percent of the entire roadless area.

Timber/vegetation: The major tree species are mixed conifer.

Minerals: This area has no known locatable mineral potential. Recent studies have identified a new coal field within fluvial interbeds in the Columbia River Basalt in northern Wallowa County, containing the most extensive lignite beds in Oregon. The thickness of the seam varies up to 40 feet under the Troy Basin. Further studies will be necessary to determine the commercial value of the deposit (Ferns 1985). These interbeds are known to occur within this area, although their lignite content is not known. The area is also considered prospectively valuable for oil and gas.

Cultural: Heritage resource inventories have been done throughout this area. No sites were recorded.

Land use/Special Uses: - Wild and Scenic River Designation: This section of the Wenaha River was designated a wild river under the Wild and Scenic Rivers Act.

Fire: Fire occurrence within this area has historically been frequent with return intervals of 5 to 25 years. The area experienced a low severity fire regime. Fire suppression in this ecosystem has created stands and forest conditions that differ from those in the past. The altering of the natural disturbance regimes has changed stand structure, tree species composition, tree stocking levels, and fuel loadings. The stands have a higher risk of large-scale high intensity wildfire occurrence due to increased ground fuels and understory ladder fuels.

Insects and disease: This area has the usual amount of insect and disease problems found in unmanaged natural stands of timber. There is a potential of spread to adjacent managed stands.

Private lands: Private land that had occurred within the area has been transferred to the Forest Service with the Triangle Land Exchange 2001.

Bibliography

Ferns, Mark L., 1985, Preliminary Report on Northeastern Oregon Lignite and Coal Resources, Union, Wallowa, and Wheeler Counties, Oregon Department of Geology and Mineral Industries Open-File Report 0-85-2, 19 p.

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