Wallowa-Whitman National Forest
Review of
Areas with Wilderness Potential

March 2010

Note: Roadless Areas located within the Hells Canyon National Recreation Area begin on page 63.

Beaver Creek Roadless Area (#6276)

- 12,530 Acres

Overview

History: The Beaver Creek Roadless Area was inventoried during RARE II and was allocated to non-wilderness uses. Timber sales and associated road construction has reduced the area from 23,100 acres to its present size.

The remaining undeveloped area includes the La Grande Watershed, which was protected by a 1938 agreement, amended in 1945, between the Secretary of Agriculture and the City of La Grande. It was supplemented by a Memorandum of Understanding in 1984 between the City of La Grande and the Wallowa-Whitman National Forest. Effective January 1992, the City of La Grande and the Wallowa-Whitman National Forest agreed to protect and manage the watershed for future use.

The 1990 Wallowa-Whitman Forest Plan allocated this area to non-wilderness uses with 192 acres in timber, 11,190 in wildlife/timber, and 1,585 as old-growth.

Location and access: This area lies in Township 5 South, Range 37 East, 12 miles southwest of La Grande within the Grande Ronde River/Beaver Creek Watershed. Both Jordan and Beaver Creeks are tributaries to the Grande Ronde River. The main access to the area is from the north via Forest Road 4305.

The majority of the Beaver Creek Wildland Urban Interface (WUI) boundary is within the Beaver Creek Roadless area. The WUI area was identified through a collaborative effort as part of the Community Wildfire Protection Plan (CWPP).

Geography and topography: Soils have originated primarily from basalt and volcanic ash. The topography is characterized as a series of rolling ridges, 90 percent of which are heavily timbered. Elevations range from 4,000-6,500 feet.

Vegetation and ecosystems: Approximately 75 percent of the roadless area consists of subalpine fir and grand fir plant associations, with lodgepole pine the predominant tree species. Over 80 percent of the merchantable lodgepole pine, killed by the mountain pine beetle during the 1970s, has fallen and is strewn like jackstraws across the forest.

There are no known locations for any currently listed threatened, endangered, proposed or candidate plant species within the area, however, sites of *Botrychium* (grapefern), a sensitive species within the Pacific Northwest Region of the Forest Service, are present.

There are several documented sites for tansy ragwort, which have been eradicated. Other weed species known to occur within or immediately adjacent to the area include spotted knapweed, diffuse knapweed, Canada thistle, and sulfur cinquefoil. Inventoried noxious weed sites within the area total 0.68 acres. There are likely more weeds within the area than are currently inventoried.

There are no threatened or endangered animal species within the Beaver Creek Roadless Area, however, it does contain mapped habitat for threatened Canada lynx (2000 mapping).

Current uses: The area provides for semi-primitive non-motorized recreation opportunities with big game hunting dominant. All of the area is considered important summer range for Rocky Mountain elk. The La Grande Reservoir opened to fishing and boating with non-motorized craft in 2002.

The area includes trails for pack stock and hikers. A majority of the hunting parties use pack stock to access the roadless area. There is some snowmobile cross-country travel during the winter months. Existing roads and trails are being used for fire response and suppression activities.

The old Jordan/Melon grazing allotment was located in the area; however, it has been vacated and omitted. There are no current allotments or livestock grazing within the area.

Although not currently used for drinking water by the City of La Grande, the La Grande Reservoir is the backup source, and surrounding land within the municipal watershed is under national forest management.

Appearance and surroundings: About 60 percent of the area is within the semi-primitive nonmotorized component of the recreation opportunity spectrum. The remaining 40 percent of the area is considered roaded natural nonmotorized.

Located to the north of the Elkhorn Range of the Blue Mountains, the area is primarily surrounded by national forest land, with some adjacent parcels belonging to the City of La Grande.

Key attractions: There are no scenic landmarks or geologic formations of importance. The area offers backcountry big game hunting opportunities.

Inventory Criteria

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

Capability

Naturalness and undeveloped character: Although a forest visitor can seldom get more than 1½ miles from a road, a sense of solitude is available largely because of the extensive dense stands of trees. The area is devoid of unusual scenic or unique features. The overall impression is one of vast stands of lodgepole pine with high-surface fuel loadings.

Recreation for other than fall hunting is likely to remain low due to the lack of recreational attractions or scenic variety. There are no encumbrances that would preclude designating the area for unroaded recreational use.

Primitive recreational opportunities and challenges: The opportunity for challenging experiences or use of special skills does not occur within the Beaver Creek Roadless Area.

Special features: The area does not have any unusual or scenic unique features, nor are there known opportunities for historical or archaeological study.

Although the La Grande Reservoir (a backup water storage facility for the City of La Grande) is outside the roadless area, the area lies within the municipal watershed. A native surface road provides to the reservoir along the perimeter of the roadless boundary.

The area contains habitat for threatened Canada lynx, although lynx are not known to inhabit the area. The entire area serves as summer range for elk.

Manageability and boundaries: The boundary is defined by roads or lands where minor timber harvest has occurred. The Beaver Creek WUI lies in the northern center of the area; however, it is not included within the roadless area perimeter.

Proposed boundary changes include a minor tweaking of the existing boundary in the southeastern corner (T.5S., R.37E., Section 27) to follow the decommissioned Forest Road 4300300, and the private

boundary line. A more significant boundary change is in the northwestern corner to follow the watershed boundary and would remove the Hoodoo Creek area, which is part of the Limber Jim Fuel Reduction Corridor project, and will receive future maintenance treatments.

Availability

Recreation: The area contains approximately 7.3 miles of pack stock/hiking trails. Most hunting parties use pack stock to access the roadless area. At this time there is the Dry Beaver/Ladd Canyon year-round motorized vehicle closure which limits off-highway vehicle access to the roadless area. There are also designated snowmobile routes adjacent to the roadless area, which may allow some snowmobile cross-country travel during the winter months.

Wildlife: Approximately two-thirds of the area is mapped (2000 mapping) habitat for threatened Canada lynx. The northeastern third of the area is non-lynx habitat.

High-quality, contiguous cover, and low human intrusion create high-quality security habitat for elk. This area is entirely within the Dry Beaver/Ladd Canyon Elk Habitat Enhancement Area.

There are seven allocated old-growth areas, totaling approximately 1,585 acres that lie partially to entirely within the roadless area. The majority of forest structure outside of allocated areas does not provide habitat suitable to support old-growth dependant wildlife species that occur in northeastern Oregon.

Water: The majority of the area is located in the Upper Beaver Creek Subwatershed. A small portion is located in the southwest edge of Jordan Creek, and another small portion runs along Hoodoo Creek in the southeast portion of Lower Beaver Creek. The major streams in the area are Beaver Creek and intermittent Jordan Creek, both tributaries to the Grande Ronde River, and West Fork Beaver Creek and Hoodoo Creek, tributaries to Beaver Creek. All are fish-bearing. West Fork Beaver has a fish barrier near its mouth.

Beaver Creek is the only stream with a reach (below the reservoir to the Forest Road 4305 crossing) that was listed for sedimentation problems on the Oregon Department of Environmental Quality (ODEQ) 1998 303(d) list of "Water Quality Limited Streams." In 2000, a Total Maximum Daily Load (TMDL) – Water Quality Management Plan (WQMP) for the Upper Grande Ronde Subbasin was developed and approved to address all of the listed streams in the subbasin.

Water quality and stream habitat conditions are important for aquatic species. The generally good quality of the streams draining this area is maintained by minimal disturbance afforded by the roadless area and municipal watershed.

Streamflow discharges or runoff in the Beaver Creek Watershed are characteristic of a snowmelt hydrograph, with late spring and fall rains contributing to the annual average flows of 398 cubic feet per second (cfs) of the Grande Ronde River at La Grande (USGS Water Report 1989). Peak flows usually occur in March and April with flows gradually decreasing to minimum discharges in August and September.

Rain-on-snow events, although relatively uncommon for the drainage, are highly influential on peak flows. These events have been responsible for several of the highest flows on record, originating from mid-elevation ranges of 3,000-4,500 feet.

Currently the City of La Grande is not using water from the municipal watershed for drinking water. The Forest Service continues to manage the municipal watershed, in cooperation with the City of La Grande, as a backup supply.

Fish: The fish-bearing streams within the roadless area are Beaver Creek, the West Fork of Beaver Creek, Beatty Creek, and Jordan Creek. Jordan Creek contains spawning and rearing habitat for summer steelhead, listed as threatened under the Endangered Species Act. All other fish-bearing streams contain

resident redband trout. Beaver Creek and the West Fork of Beaver Creek contain brook trout, an invasive species.

The dam at La Grande Reservoir is a barrier to upstream migration of anadromous and resident fish. An additional barrier to upstream fish migration for anadromous and resident fish exists on the West Fork of Beaver Creek. This barrier, near the mouth, consists of multiple culverts at a road crossing. These culverts are scheduled to be replaced with a bridge to allow summer steelhead to access upstream spawning and rearing habitat. Favorable stream habitat conditions are being maintained by current management direction.

Range: The area is not grazed by livestock at present and there are no plans to permit grazing in the near future. Grazing is not compatible with the municipal watershed. The roadless area is bordered to the east by the Lobo Grazing Allotment. Incidental livestock use has occurred due to poor boundary fences, which have recently been improved. When found in the area, livestock are immediately removed and returned to permitted areas.

Timber and vegetation: Productive forest land, suitable for timber management, occupies 9,887 acres with 25.4 MMBF of standing timber. Timber treatment is not precluded by the La Grande Watershed agreement.

Minerals: There are no known mineral operations within the roadless area.

Cultural: There are historic sites and materials associated with the first water developments of the City of La Grande.

Land use and special uses: The special-use permit with the City of La Grande for a municipal watershed does not preclude other uses of the land by either the city to manage and use the reservoir or the Forest Service to respond and suppress fires. Special-use permits allow outfitter guided big game hunting.

Insects and disease: Mountain pine beetle damage primarily occurs in mature or overly mature overstocked stands of lodgepole pine. Outbreak frequencies average about one every 60-80 years with the last occurring in the 1970s.

Fire: The area has heavy surface fuel loads and an above average fire occurrence rate. Wilderness classification would limit fire suppression options and increase the risk of an escaped wildfire. It would also limit fuels reduction treatment options in the Beaver Creek area.

Private lands: No private lands are included within the boundaries of this roadless area.

Boulder Park Roadless Area (#6282)

– 12,930 Acres

Overview

History: This roadless areas is a remnant of larger areas that were added to the Eagle Cap Wilderness through the Oregon Wilderness Act of 1984.

The remaining roadless areas consist of three segments in Boulder Park of approximately 9,600 acres, 700 acres, 2,000 acres each. The 9,600-acre portion contains Bennett Peak, Two Color Lake, and the headwater areas tributary to Eagle Creek. The 2,000-acre segment is located near West Eagle Meadow at the headwaters of West Eagle Creek and includes portions of Fake Creek, at an elevation of about 5,600 feet. The smallest segment, about 700 acres, is next to Two Color Campground and near Cougar Meadow.

The segments of the Boulder Park Roadless Area are at lower elevation and are more heavily timbered than the 729 acres added to the Eagle Cap Wilderness. They were not included in the original RARE study, but were a part of RARE II study.

Under current forest plan allocations, 7,229 acres are managed as “backcountry” with snowmobile use allowed; 1,148 acres are managed for timber, but no harvest has occurred, and 3,192 acres are big-game summer range, where some timber harvest has occurred.

Location and access: Boulder Park roadless area borders the Eagle Cap Wilderness on the south and the southwest. They lie about 17 miles northwest of the town of Halfway, Oregon, in township 6 South, Range 43 & 44 East.

Geography and topography: The area ranges from 4,400 feet elevation near the east fork of Eagle Creek to over 7,000 feet at Bennett Peak and is accessed from Forest Roads 7745 and 7755. Soils are predominantly of granitic origin.

Vegetation and ecosystems: Boulder Creek Roadless Area is a mixed conifer forest land, grassland, and some rock outcrops.

Current uses: Recreation use is estimated at around 3,000 visitor days per year, mostly in association with fall big-game hunting. Other use includes snowmobiling, hiking, and backpacking. The area is adjacent to Two Color Campground and Boulder Park recreation residences.

Appearance and surroundings: Approximately 2,700 acres of the Boulder Park Roadless Area are within the roaded natural component of the recreation opportunity spectrum (ROS) while 7,000 acres are considered semi-primitive motorized and 2,600 are in the semi-primitive nonmotorized component..

Key attractions: Scenic views attract many users

Inventory Criteria

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

Capability

Naturalness and undeveloped character:
There are no developed recreation sites within these areas. Most of the recreation that occurs is dispersed semi-primitive use, such as hiking, riding, backpacking, big-game hunting, and camping. Some opportunities exist for mountain climbing. This is a very popular snowmobile use area. Open meadow areas, interspersed with forested land, offer opportunities for scenic vistas.

Primitive recreational opportunities and challenges: These roadless areas are easily accessed by hikers, packers, or off-highway vehicle users and contain a trail system that provides little or moderate challenge for the majority of the public. The portion of Boulder Creek Roadless Area contains some high-clearance roads that allow vehicle access. The northwest portion of the Little Eagle Roadless Area along the breaks of East Eagle Creek is largely untouched and difficult to access. This area provides many of the same challenges found in the adjacent Eagle Cap Wilderness.

Special features: There are areas that are extremely steep with rock outcroppings and bluffs. Other areas consist largely of high elevation meadows. At times the entire roadless area contains large numbers of elk. The scenic views from the area attract many users.

Manageability and boundaries: The boundaries of these parcels of the roadless areas vary on elevation lines; some on topographic features. Some portions are close to roads and a campground; some are

isolated and provide feelings of solitude to the user. They are generally surrounded by national forest land, with the exception of patented mining claims, private land, and recreation residences along Eagle Creek and the east fork of Eagle Creek.

Availability

Recreation: Most of these lands have been managed for preservation and enhancement of dispersed recreation opportunities.

Wildlife: Lynx habitat, elk summer range, travel corridors and old growth habitat.

Water/Fish: No fish-bearing streams exist within these roadless areas, but water quality in the streams significantly affects the overall quality of main Eagle Creek, which has bull trout and rainbow trout.

Range: Several range allotments are within these roadless areas, providing late summer forage for domestic livestock**.**

Timber and vegetation: A small portion of the Boulder Park Roadless Area has been harvested.

Minerals: The areas are mineralized, adjacent to a number of patented placer mines along Eagle Creek and include a number of unpatented lode claims in the interior Gold King area. Structures associated with mining claims are scattered through the larger segment of the Boulder Park Roadless Area. The Cornucopia Mining District, containing the largest gold-producing mine in Oregon, lies about 6 miles east of the eastern boundary of the Boulder Park Roadless Area and is immediately adjacent to the eastern boundary of Little Eagle Meadows Roadless Area.

Cultural: The area is rich in mining history Documented sites include the Schneider Cabin located in Little Eagle meadow, the Amalgamated Mine located just south east of the meadow, and the Carnahan Sheep camp located at the head of Sullivan Cr.
Fire: The area is best characterized by Fire Regime 4. There has been some recent large wild fire activity within the area (Trout Creek fire 2007, Mule Peak 2005). The area receives several small (less than 1 acre) lightning fires annually.

Ladder fuels exist throughout the area increasing potential for fire to reach the crowns, causing clump torching and spotting or a crown fire.

Insects and disease: A western pine beetle epidemic in the late 1960's killed many large pines. The mountain pine beetle epidemic of the late 70's killed mature lodgepole and ponderosa pine. The watershed is at risk of damage from defoliators such as western spruce budworm and Douglas-fir Tussock Moth

Land Use and special uses: Summit Point Lookout is located within the area and requires vehicle access, as does a communication site for the State of Oregon and the Forest Service.
Private Land: None

Castle Ridge Roadless Area (#6278)
– 8,790 Acres

Overview

History: This area was inventoried during the second Roadless Area Review and Evaluation (RARE II) process and was allocated to non-wilderness uses. The area was not included in either Senate or House wilderness proposals of 1984.

The 1990 *Wallowa-Whitman Forest Plan* allocations for this area were: 1,041 acres to timber, 2,364 to wildlife and timber, 3,024 to backcountry, and 1,121 to Research Natural Areas.

Location and access: The Castle Ridge Roadless area is located within the Grande Ronde River /Mill Creek Watershed and Grande Ronde River/Indian Creek Watershed. The area lies north of Mt. Fanny, about 4 miles northeast of Cove, Oregon. Access is via the Forest Road 6220 along the eastern perimeter, and the Forest Roads 6205 and 6210 to the north. The area is dissected by off-road vehicle trails.

The Cove Wildland Urban Interface (WUI) boundary lies along the western perimeter of the Castle Ridge Roadless Area and goes east up to the Catherine Creek/Conley Lake Subwatershed. The interface was identified through a Community Wildfire Protection Plan.

Geography and topography: The area is bounded by private land on the west, where approximately one-third of the acreage is dissected by draws with steep slopes. Topography is relatively flat over the remaining area, which gradually slopes to the north. Elevations range from 5,100 feet to just over 7,000 feet. Soils primarily originating from basalt are comprised of ash and a mix of parent materials.

Vegetation and ecosystems: The lower elevation portion is considered a good timber growing site and contains stands of Douglas-fir, white fir, lodgepole pine, Engelmann spruce, and western larch. The higher elevations are dominated by dense stands of subalpine fir, lodgepole pine, and mountain hemlock.

The southeast corner of the area contains the Indian Creek Research Natural Area (RNA) which covers 974 acres of the roadless area. The established RNA includes vernal subalpine ponds, the headwaters of Indian Creek, and a pure stand of mountain hemlock, rocks and cliffs. A proposed research natural area, the Point Prominence RNA, is also within the roadless area. The potential natural vegetation includes stands within the cool to cold air, dry biophysical environment, with cool, moist to cool, wet biophysical environments associated with the stream corridors. The timbered stands are broken with areas of bed rock, cliffs, and meadows.

There are no known locations for any currently listed threatened, endangered, proposed or candidate plant species. There are numerous species and locations for *Botrychium* (grapeferns), and *Carex interior* (inland sedge) within the roadless and surrounding area. Both of these plant species are listed as sensitive by the Pacific Northwest Region of the Forest Service.

In the southeast portion is several small, high-elevation sedge meadows associated with riparian areas of Indian Creek. The west side is predominantly steep south-facing slopes that historically had been bunchgrass-dominated ecotypes. Much of this area is infested with yellow star thistle, which was introduced more than 40 years ago.

There are 18 inventoried noxious weed sites totaling 376.1 acres within the area. This is specifically the Cove yellow star thistle infestation. There are likely more weeds within the area than are currently inventoried.

Current uses: Current recreation use is nearly all related to big-game hunting. Some off-highway vehicle and snowmobile cross country travel may occur.

Existing roads and trails are being used for fire suppression, and other motorized use of trail systems occurs in the roadless area.

The area is partially included in and bordered to the north by the Indian Creek Grazing Allotment and bordered on the south by the Mill Creek Grazing Allotment. Incidental use by livestock has occurred within the area due to the lack of boundary fences on either allotment. Livestock, when found, are immediately removed and placed back within permitted areas.

Appearance and surroundings: The area is naturally appearing but its topography and dense, almost continuous lodgepole stands are somewhat monotonous and make cross-country travel difficult. The roadless area is comprised of approximately 70 percent semi-primitive nonmotorized, 25 percent semi-primitive motorized, and 5 percent roaded natural motorized of the recreational opportunity spectrum.

Key attractions: Scattered throughout the area are large rock outcrops referred to as monadnocks that rise above the surrounding timber stands. These formations provide a degree of variety in an area that otherwise is relatively lacking in scenic or geologic features.

Inventory Criteria

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

Capability

Naturalness and undeveloped character: Forest roads provide access from the Grande Ronde Valley. The area is separated from the Eagle Cap Wilderness on the east by forest road 6220 which is unobtrusive, and the Dunns Bluff Roadless Area.

Wildlife provides the primary recreation attraction, especially deer and elk, which are found throughout the area during spring, summer, and fall seasons. Recreational use of the area for other than fall hunting is likely to remain low. There are no encumbrances that would preclude designating the area for unroaded recreational use.

Primitive Recreational Opportunities and Challenges: There are ample opportunities for solitude and unconfined recreation activities, and the dense, extensive tree canopy would provide a certain navigational challenge.

Special Features: No threatened and endangered animal species are known to be in the roadless area, nor are there known opportunities for historical or archaeological study.

The Castle Ridge Roadless Area does contain habitat for threatened Canada lynx, and potential nesting habitat for peregrine falcon a regional sensitive species.

This area is summer range for big game and provides security habitat, except where off-highway vehicle trails exist.

There is one (established) Research Natural Area and at least portions of two allocated old-growth areas within this roadless area. The Indian Creek RNA, located in the southeast corner of the roadless area, provides opportunities for scientific study.

There is also opportunity to establish the proposed Point Prominence RNA, located at the northern end of the roadless area, which features stands of subalpine fir, with successional lodgepole following fire, in various successional stages.

Manageability and boundaries: The area is bordered on the west by the national forest/private land boundary. It is bordered on the east by a narrow strip of national forest land, and the narrow Dunns Bluff Roadless Area (approximately ½-mile wide), where the terrain changes at the breaks created by the high-elevation headwaters of the Minam River, at the Eagle Cap Wilderness boundary.

The eastern half of the area is comprised of backcountry, old-growth, and Research Natural Areas. Because of its compact shape and easily defined boundaries, management of the area as wilderness would not be particularly difficult; however, motorized use of the trail systems that cross the area would be a non-conforming use.

Proposed changes to boundary are recommended for the northern portion of the area. They include relocating the northwestern boundary to follow Trail 1903 and Trail 1936, which are currently inside the roadless area. This would occur in Township 2 South, Range 40 East, Sections 25, 26, 36, and Township 2 South, Range 41 East, Section 31. Other changes involve relocating the boundary to more recognizable features, such as stream locations, in Township 2 South, Range 40 East, Sections 30 and 32, and Township 2 South, Range 41 East, Sections 18, 29, and 20.

Availability

Recreation: The Mt. Fanny trail system consists of approximately 16½ miles and is located within the roadless area. There are currently 13 miles of off-highway vehicle and 3½ miles of hiking/mountain biking trails that are heavily used in the spring and fall for recreational off-highway vehicle riding, huckleberry picking, and hunting.

Wildlife: The entire Castle Ridge Roadless Area is mapped as habitat for Canada lynx. The area also contains large rock features that provide potential nesting habitat for peregrine falcons. One of the major rock outcrops within this area was used as a hack site for peregrine falcons from the early to mid-1990s.

This roadless area is in summer range for deer and elk, and provides areas of high-quality security habitat. An off-highway vehicle trail system exists within this area which has compromised the security habitat within approximately a half mile either side of the trails. The trails introduce noise and easy access by people which influences distribution of elk within the area.

Approximately 460 acres of allocated old-growth exists in two areas in this roadless area, but quality is marginal, according to a 1995 inventory. This roadless area contains contiguous conifer cover capable of supporting breeding populations of northern goshawk, American marten, and other high-elevation old-growth-associated wildlife species.

Water: More than half of the area is located in the Upper Indian Creek Subwatershed. Indian Creek is a perennial fish-bearing stream and a major tributary to the Grande Ronde River. Several streams flow off the face of Mt. Fanny, including Warm Creek, Murphy Creek, Eckesley Creek and Boswell Creek, into drainage ditches that flow into Catherine Creek.

The reach of Indian Creek located within the roadless area was listed was listed for high water temperatures under bull trout criteria on the Oregon Department of Environmental Quality (ODEQ) 1998 303(d) list of "Water Quality Limited Streams." Seven-day average maximum stream temperatures recorded in Indian Creek run from 50° F to low 60°s Fahrenheit just downstream of the roadless area near the confluence with Camp Creek. In 2000, a Total Maximum Daily Load (TMDL) – Water Quality Management Plan (WQMP) for the Upper Grande Ronde Subbasin was developed and approved to address all of the listed streams in the subbasin.

Water quality and stream habitat conditions are important for the maintenance of aquatic. The water quality in the upper headwaters of the streams that drain this area is good and is being maintained by topography, and minimal disturbance afforded by roadless characteristics.

Streamflow discharges or runoff in Upper Indian Creek and Catherine Creek/Conley Lake subwatersheds are characteristic of a snowmelt hydrograph, with late spring and fall rains contributing to the annual average flows of Catherine Creek. Peak flows usually occur in May and June with flows gradually decreasing to minimum discharges in August and September.

Fish: The fish-bearing streams within the roadless area are Indian Creek, East Fork of Indian Creek, and Camp Creek. All three streams provide spawning and rearing habitat for bull trout, which are listed as threatened under the Endangered Species Act. The East Fork of Indian Creek contains very little bull trout habitat within the roadless area since the known upper distribution of fish ends immediately inside of the roadless boundary. Indian Creek, within the roadless area, provides rearing habitat for juvenile summer steelhead, which is also listed as threatened under the Endangered Species Act.

Historic grazing practices may have had some impact on habitat conditions. Favorable stream habitat conditions are being maintained by current management direction.

Range: The area is partially within the Indian Creek grazing allotment but dense timber precludes significant use by livestock. Several of the motorized trails permit livestock to access areas outside the allotment.

Timber and vegetation: The area has 8,371 acres of productive forest land, containing approximately 13.7 MMBF of timber. The Camp Creek Timber Sale harvested approximately 50 acres on the northeast edge of the roadless area in the early 1990s.

Minerals: The area is not believed to be mineralized and there are no gas or oil leases.

Cultural: There is one isolated pre-historic site within the roadless area.

Land use and special uses: There are no power withdrawals, proposed impoundments, or other encumbrances, water-related or otherwise.

Fire: The Castle Ridge Roadless Area is characterized by moderate/high-surface fuels and continuous fuel beds. Most of the acreage is within Fire Regimes 3 and 4. The majority of the fires that have occurred within this area have been lightning-caused. The potential for a large wildfire is good due to combination of fuels and topography.

Insects and disease: Endemic levels of insect and disease provide diversity to forest stands and the landscape; however, many mixed conifer stands in the Blue Mountains have been damaged by a variety of insects and diseases, compounded by protracted drought, overstocking, and inappropriate past management (Schmitt and Scott, 1993). The major insects in the area are mountain pine beetle, Douglas-Fir beetle, fir engraver, and spruce beetle (R6 2002, 2003 Aerial Pest Survey).

Many factors affect tree and stand susceptibility to insects and diseases. Both inherited and environmental factors play a role in predisposition to insects and diseases. The availability of growing space to tree in a stand is an important factor-governing tree and stand vigor (Cochran and others 1994).

Private lands: There is no private land within the area; the national forest boundary forms the western edge of the roadless area.

Deadhorse Roadless Area (#G08)

– 17,890 Acres

Overview

History: This area was inventoried during the Roadless Area Review and Evaluation (RARE) and allocated to nonwilderness uses. The area was scrutinized by the public during RARE II and was not recommended for wilderness designation.

In the current Wallowa Whitman National Forest Plan, the entire area is allocated to wildlife and timber emphasis.

Location and access: The area is approximately 20 miles east of Enterprise, Oregon, in the Sheep Creek-Imnaha River drainage in Township 1 South, Range 47 & 48 East. It can be reached by traveling State Highway 350 (Imnaha Highway) from Joseph to Bear Gulch. Jeep trails provide access to several points in the roadless area.

Geography and Topography: These landscape patterns are very regular in the basalt landforms, with vertically oriented timbered stringers alternating with grassland. Surface micro relief is mostly convex to smooth, but undulating in the lower portions of the steep draws. Rock outcrops are common and unconsolidated rock material may extend well beyond the soil depth. Surface soils have slit loam textures with greater than 15 percent rock fragments by volume.

Vegetation and ecosystems: Existing timber stand structures and associated species composition vary with landform, elevation, and aspect, soil conditions, precipitation gradients, and in response to disturbance patterns encountered within the area. Douglas hackberry and the occasional ponderosa pine are the most typical tree species found on exposed stream sides. Native hardwood shrubs such as chokecherry and bitter cherry are common components of the understory. Streamside terraces may support bluebunch wheatgrass communities as potential vegetation. However, much of it was severely disturbed by early grazing activities and now supports cheatgrass brome. Lower to mid-slope positions (2,500-5,500 feet) are characterized by patterned landscapes. Northerly aspects are dominated by timbered communities consisting of Douglas-fir in association with ninebark. They are confined at the upper and mid-slope positions by the topographic configuration of the steep canyon drainages but tend to widen toward the canyon bottoms. Persistent seral brush fields resulting from fire have replaced some timbered stands. Interspersed grasslands consist of bluebunch wheatgrass and sandberg bluegrass or occasionally, bluebunch wheatgrass and Idaho fescue.

Current uses: The area is approximately evenly split between semi-primitive motorized and semi-primitive non-motorized recreation opportunity spectrum classes. Recreation use is limited to big-game hunting and bird hunting but use is low, estimated to be no more than 200 recreation visitor days per year.

Appearances and surroundings: Other than hunting attractions, the area offers interesting views of the deep canyon country. It offers potential hiking and horseback riding use.

Key Attractions: There are no special features or notable opportunities for scientific, historical, or archaeological study.

Inventory Criteria

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

Capability

Naturalness and undeveloped character: Because of its shape, a visitor can see the extent of the entire area from ridge top views. One only has to go downhill in any direction to find a road, so the sense of solitude and spirit of adventure and self-reliance are low.

The interior of the area remains natural appearing except for fences, livestock water facilities, and livestock trails. There are no special features or notable opportunities for scientific, historical, or archaeological study, nor are there threatened or endangered species of plants or animals.

The area is approximately evenly split between the semi-primitive motorized and semi-primitive nonmotorized recreation opportunity spectrum classes. Recreation use is limited to big-game hunting and bird hunting but use is low.

Primitive recreational opportunities and challenges: The area is dominated by steep, non-timbered, grass-covered ridges interspersed with basalt rimrock. Opportunities for solitude, primitive recreation, and challenging recreation experience are the same as those of the Hells Canyon Wilderness Area, but on a much smaller scale.

Special features: There are no unique special features.

Manageability and boundaries: The area is bounded on all sides by private land containing roads and scattered structures that are visible from the interior of the roadless area. Because of its narrow, irregular configuration, and many miles of boundary, manageability of the area as wilderness could be difficult. There is virtually no way to adjust the boundary to effectively shield a sizeable area from the sights and sounds of human activity.

Availability

Recreation: Recreation opportunities and probable use would remain essentially unchanged by wilderness classification. The current recreation opportunity spectrum classes would be unchanged.

Wildlife: This roadless area is within the Sheep Creek-Imnaha River drainage. This area is mainly grassland with timbered and shrub draws. This entire area provides winter range for elk and deer. This area offers a connective corridor between the Imnaha River and the Eagle Cap Wilderness.

This area provides escapement for elk, deer and bear during hunting seasons as well as movement corridors. The many rock cliffs provide nesting for avian species, roosting sites for bats, and unique habitats for other wildlife species (such as cougars, rodents, etc.). Peregrine falcons have been noted foraging within the area, but there are no suitable cliffs for nesting. Spotted bats prefer roosting sites in crevices in cliffs or canyon walls. This species has not been noted in this area, although no recent surveys have been conducted. Older surveys have noted other species of bats within the area. Wolverines have been sighted near this area.

The rock rims provide excellent habitat for snakes and lizards and the riparian zones provide ample habitat for these species as well.

Water and fish: Bear Gulch, located along the eastern boundary of the area, contains Snake River steelhead, which were listed under the Endangered Species Act as threatened. Wilderness designation would have no effect on the status of these fish.

Range: The roadless area intersects two active grazing allotments which provide 2,361 head months of grazing use and 3,086 AUMs (animal unit months) of annual forage. Range improvements found within the roadless area include miles of wire fence and several spring developments.

The various forage-producing plant communities range from early seral to late seral. Generally, during the 120-year history of domestic livestock grazing in the area, the impacts on plant communities found on the gentler-sloped terrain were greatest in unmanaged areas. Because the majority of acres within the roadless area are steep to very steep, the impacts of livestock grazing have been regulated to some degree by slope preference of animals. Historically, the steep and very steep slopes were allocated as sheep and goat allotments and the gentler sloped range was allocated to cattle and horses. Today vegetative trends on the steep-sloped sheep range are stable to upward since sheep grazing has not been practiced for the past ten years or more. Historic vegetative trends on the cattle ranges tend to be trending upward more slowly from the lows of the 1920s when stocking rates came off of the historic highs following World War I. Vegetative trends on cattle ranges rose at a steeper rate in the late 1950s and 1960s as a result of changing from season-long grazing to deferred and rest rotation methods. This divided vast open rangelands into smaller units or pastures, which allowed a higher degree of control. During the late 1970s and 1980s, vegetative trends within riparian zones began to move in a positive direction when rangeland ecologists introduced an initiative to improve the ecological status of western riparian zones.

Timber and vegetation: Historic disturbance mechanisms operating within the Douglas-fir/ninebark communities included cyclic bark beetle infestations, localized windthrow events, enlarging root rot and mistletoe infection centers, and periodic, low to moderate fires. Recurring low- to moderate-intensity surface fires and endemic insect and disease episodes functioned to control species composition,

maintain sustainable stocking levels, and favor the retention of the intolerant conifers such as ponderosa pine.

The absence of fire over the last 100 years has resulted in the widespread development of dense, simplified timber stand structures dominated by sapling to small-sized, late seral Douglas-fir. Fire regimes have been significantly altered and the probability of a stand replacement event exceeding historic patterns by fire, insects, or pathogens is high given the predominance of continuous layered, late seral structures.

This area has had no botanical inventory. There are no known regional sensitive plant species within this area.

Minerals: There is no evidence of mineralization.

Cultural: No sites are currently identified within the Deadhorse Roadless Area, however, two sites are nearby on private in-holdings: the Fulton Creek shearing area, and a multi-component historic homestead and a prehistoric Lithic scatter associated with two springs. The potential is reasonably high that additional sites exist within the designated roadless area as surveys and historic data from Big Sheep (east of the area) and Little Sheep (north and west of the area) creeks indicate numerous winter villages immediately below the rim of Deadhorse Ridge.

Land use and special uses: None.

Fire: Fire Regimes 1 and 2 with a Mixed Condition Class of 2 and 3 represent the majority of the area. Condition Class 3 reflects change in the grassland as a result of severe grazing and now supports cheatgrass brome, and with timbered stands being converted to brush fields after past fire events. Fuel models 2 and 8 are present.

Insects and Disease: Historic disturbance mechanisms operating within the Douglas-fir/ninebark communities included cyclic bark beetle infestations, enlarging root rot, and mistletoe infection centers.

Private lands: Private lands are immediately adjacent to much of the boundary and scattered parcels lie within the area.

Dunns Bluff Roadless Area (#WWI)
– 750 Acres

Overview

History: The Dunns Bluff Roadless Area was added to the roadless area inventory after RARE II. It was not considered during the drafting of the 1984 Oregon Wilderness Bill.

The 1990 Wallowa-Whitman National Forest Plan allocated 654 acres to backcountry and 1.7 acres to a Research Natural Area and designated 61 acres for potential annual timber harvest.

Location and access: This sliver of undeveloped land is located seven miles northeast of the community of Cove, Oregon. It lies between the Eagle Cap Wilderness and Forest Road 6220 in Township 3 North, Range 41 East. The area is three-quarters of a mile at its widest and averages a quarter of a mile as it crosses back and forth between the Minam River and Indian Creek watersheds.

Geography and topography: Most of the area is flat and slopes gently to the west. Elevation ranges from 6,400 – 7,000 feet. Soils are derived from basalt bedrock and volcanic ash.

Vegetation and ecosystems: Most of this roadless area is subalpine plant association with lodgepole, spruce, and mountain hemlock as associated species. The area contains 365 acres of productive forest land.

The area includes several small, high-elevation sedge meadows associated with the riparian areas of Indian Creek and springs within the Little Minam River watershed.

There are no known locations for any currently listed threatened, endangered, proposed, candidates or regional sensitive plant species, and no inventoried noxious weed sites within the area.

There are no known occurrences for any threatened or endangered animal species. The area contains lynx habitat, but no allocated old-growth areas.

Current Uses: Current recreation use is almost exclusively by deer and elk hunters during fall hunting season. The terrain allows off-highway vehicle and snowmobile riders to drive cross-country to many locations within the area.

Existing roads and trails are being used for fire suppression activities.

The area partially includes and is bordered to the south by the Mill Creek Grazing Allotment. Incidental livestock use has occurred within the area due to the lack of boundary fences. When discovered, livestock are immediately removed from the area and placed back within permitted areas.

Appearance and surroundings: The area appears natural with timbered stands and rock outcrops. The entire area is within the semi-primitive motorized component of the recreation opportunity spectrum.

Key attractions: None.

Inventory Criteria

Although this roadless area is less than 5,000 acres, it is adjacent to the Eagle Cap Wilderness Area, and meets the inventory criteria for roadless areas with wilderness potential.

Capability

Naturalness and undeveloped character: The area appears natural. It consists of a narrow undeveloped strip of land that separates the Castle Ridge Roadless Area from the Eagle Cap Wilderness to the east.

There are opportunities for solitude and primitive recreation in this roadless area with 91 percent of the area classified as backcountry.

Primitive recreational opportunities and challenges: There are no opportunities for challenging experiences or a need for special tools within the roadless area.

Special features: There are no special features or unique ecosystems located within the area. There are no known opportunities for historic or scientific study, nor are there known significant cultural resources.

The area provides high-quality summer range and security habitat for deer and elk. The Dunns Bluff Roadless Area contains habitat for threatened Canada lynx and peregrine falcon, a regional sensitive species.

Manageability and boundaries: The long, narrow sliver of land is approximately half a mile wide and bounded by the Eagle Cap Wilderness on the east and a sliver of national forest land to the west, between the existing Castle Ridge and Dunns Bluff Roadless Areas.

Because it lies adjacent to the existing wilderness, the size of the area is irrelevant, and could be added to the wilderness. However, the area is not a good candidate for wilderness designation due to the narrow shape, flat terrain, its location along Forest Road 6220, and the frequent breeches by vehicles.

Portions of the eastern edge that drain into the Minam Watershed of the Eagle Cap Wilderness could be considered for addition to the wilderness. However the majority of that acreage is primarily flat, allowing vehicle access at several points.

Availability

Recreation: Mount Fanny Spring is a popular spot for hunting camps within the area. Some wood cutting for domestic use occurs along Forest Road 6022, which forms the western edge of the roadless area. With wilderness classification, the current types or amount of wilderness use would be unlikely to change. Fall hunting would continue to be the primary use. Current off-road vehicle use would be prohibited.

Wildlife: The entire Dunns Bluff Roadless Area is mapped as habitat for threatened Canada lynx. This area is relatively narrow, but is contiguous with abundant lynx habitat on all sides. Several major rock features provide potential nesting habitat for peregrine falcons. Peregrines have been observed using the area around Dunns Bluff, but no nests have been identified.

This relatively narrow strip of habitat is summer range for big game and contains small pockets of security habitat that are difficult to access by humans. This area is surrounded on all sides by high-quality summer range and security habitat.

This area is naturally fragmented by rock outcrops and small shrub/hardwood openings. There are relatively small pockets of old growth habitat, but no allocated old-growth areas. The old-growth that exists in this area, when considered in the context of adjacent habitat, is capable of supporting breeding populations of northern goshawk, American marten, and other old-growth-associated wildlife species that use high-elevation forests.

Water/Fish: The major streams in the area are the uppermost drainage of the Little Minam River and the East Fork of Indian Creek. These drainages are mostly intermittent, and are not fish-bearing.

These drainages were not listed on the Oregon Department of Environmental Quality (ODEQ) 1998 303 (d) list of "Water Quality Limited Streams. In 2000 a Total Maximum Daily Load (TMDL) – Water Quality Management Plan (WQMP) for the Upper Grande Ronde Sub-basin (UGRS) was developed and approved to address all of the streams on the 303 (d) list in the UGRS.

Water quality and stream habitat conditions are important for the maintenance of aquatic species present and utilizing these drainage systems. In general, the water quality in these upper headwaters draining this area is good and is being maintained by roadless characteristics, topography, and minimal disturbance.

Streamflow discharges or runoff in Little Minam River SWS and Upper Indian Creek SWS are characteristic of a snowmelt hydrograph, with late spring and fall rains contributing to the annual average flows of Catherine Creek. Peak flows usually occur in May and June with flows gradually decreasing to minimum discharges in August and September.

Range: The area is partially within the Mill Creek Grazing Allotment. The majority of the area is not utilized by livestock due to dense timber and lack of forage. Most use occurs within the vicinity of Mount Fanny Spring. Livestock use would continue within permitted areas.

Timber and vegetation: Some wood cutting for domestic use occurs along the road which forms the western edge of the roadless area. There has been no recent timber harvest within the roadless area.

Minerals: There are no known mineral deposits.

Cultural: There are no known historic or prehistoric sites within the roadless area.

Land use and special uses: There are no gas or oil leases, nor are there any permits for special land uses.

Fire: The Dunns Bluff Roadless Area is characterized by moderate to high-surface fuels and continuous fuel beds. Most of the acreage is within Fire Regimes 3 and 4. The majority of the fires that have occurred within this area have been caused by lightning.

Insects and disease: Endemic levels of insect and disease provide diversity to forest stands and the landscape; however, many mixed conifer stands in the Blue Mountains have been damaged by a variety of insects and diseases, compounded by protracted draught, overstocking, and inappropriate past management (Schmitt and Scott 1993). The major insects in the area are mountain pine beetle, Douglas-fir beetle, fir engraver, and spruce beetle (R6 2002, 2003 Aerial Pest Survey).

Many factors affect tree and stand susceptibility to insects and diseases. Both inherited and environmental factors play a role in predisposition to insects and diseases. The availability of growing space to trees in a stand is an important factor-governing tree and stand vigor (Cochran and others 1994).

Private lands: There are no private lands within or along the perimeter of the area.

Grande Ronde Roadless area is administratively shared with the Umatilla National Forest, and the write up is located in the Umatilla's Areas with Wilderness Potential document.

Greenhorn Mountain Roadless area is administratively shared with the Malheur National, and the write up is located in the Malhuer's Areas with Wilderness Potential document.

Hellhole Roadless area is administratively shared with the Umatilla National Forest and the write up is located in the Umatilla's Areas with Wilderness Potential document.

Huckleberry Roadless Area (#6289)

10,770 Acres

Overview

History: More than half of the original Huckleberry Roadless Area was placed in the Eagle Cap Wilderness by the Oregon Wilderness Bill of 1984. It was included in RARE II and was considered by Congress in adjusting the Eagle Cap Wilderness boundary in 1972 and again in 1984. During each adjustment, acres were added to the Eagle Cap Wilderness. The wilderness additions of 1972 and 1984 reduced the area to less than 30 percent of its original size. The remaining area is mostly heavily timbered and includes major portions of the Bear Creek, Little Bear Creek, Big Creek and Deer Creek drainages.

Current land management allocations for the area are: 56 percent wildlife/timber, 24 percent backcountry, 8 percent timber/wildlife, 8 percent timber, and 4 percent old growth.

Location and Access: The area lies on the north flanks of the Wallowa Mountains, T.1S., R.42 & 43E., about 8 miles south of the town of Wallowa, Oregon. Primary access is provided by Forest Roads 8270000 and 8270050. Adjacent land ownership includes private lands generally on the north and east sides of the roadless area.

Geography/Topography: Elevations range from 5,000 to over 7,000 feet at Huckleberry Mountain and Fox Point.

Vegetation/Ecosystem: The mountainous terrain is predominantly forested and characterized by over-stocked, multi-storied, stagnant stands of late-seral true fir. Competition-induced mortality of the remaining early seral, large-diameter ponderosa pine, western larch, and Douglas-fir has allowed numerous age classes of grand fir to establish beneath the senescing residual overwood. The stands are representative of the late stage of development (early seral species, such as ponderosa pine and western larch constitute less than 30 percent of the remaining specie composition).

Current Uses: Recreation use is dominated by elk and deer hunting, but the area also provides berry picking, hiking and horseback riding. Approximately 2,100 acres of the area is within the roaded natural component of the recreation opportunity spectrum (ROS), while 1,700 acres are considered semi-primitive motorized and 6,300 acres are in the semi-primitive non-motorized component.

Appearances and surroundings: The area is characterized by ridges and canyons but is much less rugged than the Lower Minam area to the west, and existing wilderness to the south.

Key Attractions: Three trailheads (Bear Wallow, Cougar Ridge, Huckleberry Mt.) and three trails (1667 (Huckleberry Mt.), 1653 (Bear Creek), 1677 (Bear Wallow) are within the area. Mountain hemlock, a rare tree in the Wallowas, can be found in a narrow band in the Huckleberry Mountain area.

Inventory Criteria

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

Capability

Naturalness and Undeveloped Character: There are opportunities for solitude and for primitive and challenging recreation activities although not of the caliber that exists in the present wilderness. There are no known threatened or endangered species nor are there opportunities for historic or scientific study. There are no known cultural resources of special significance.

There are opportunities for solitude and for primitive and challenging recreation activities although not of the caliber that exists in the present wilderness.

Primitive Recreational Opportunities and Challenges: There are opportunities for solitude and for primitive and challenging recreation activities although not of the caliber that exists in the present wilderness.

Special features: There are no ecosystems or features of interest found in the area that are not found more abundantly within the Eagle Cap Wilderness.

Manageability and boundaries: Open roads have been removed from the area, and the area can be feasibly managed as a wilderness.

Availability

Recreation: Recreation use is dominated by elk and deer hunting, but the area also provides berry picking, hiking and horseback riding. Approximately 2,100 acres of the area is within the roaded natural component of the recreation opportunity spectrum (ROS), while 1,700 acres are considered semi-primitive motorized and 6,300 acres are in the semi-primitive non-motorized component.

Wildlife: This roadless area borders the Eagle Cap Wilderness southeast of Wallowa. There are several drainages within this area including Bear, Little Bear, Big, Doe, Deer and Sage Creeks. This area is heavily timbered by mainly late-seral, true fir stands.

This roadless area provides travel corridors for many wildlife species and habitat for Canada lynx and wolverine denning and foraging. Other unique species that may be found within this area are pine martens, pacific fisher, white-tailed ptarmigan, and Wallowa rosy finches. Mountain goats also use this area. There have also been some sightings and possible nesting by prairie falcons within or adjacent to this area. There is a peregrine falcon nest adjacent to this area and foraging could occur. This area is unique because of higher elevation communities and its use by elk and deer for summer range. This area provides many avenues of escapement for elk and deer during hunting seasons and has heavy hunting pressure.

Botany: This area has not received any botanical inventory work and no known Region Six sensitive plant species (2005) occur within this area.

Water/Fish: Two streams within this roadless area are found on the Oregon State 303(d) list of Water Quality Limited Streams: Bear Creek, from the mouth of Little Bear Creek to the headwaters, for temperature greater than 50 degrees Fahrenheit (bull trout); and Little Bear Creek, from the mouth to headwaters for temperatures greater than 50 degrees Fahrenheit (bull trout). Columbia River bull trout, listed under ESA as threatened in 1998, are found in Bear, Deer, Doc and Fox creeks. Snake River spring/summer Chinook salmon, listed as threatened under ESA in 1992, are found in Bear Creek and the lower portion of Doc Creek. Wilderness designation would have no effect on the status of these fish.

Range: The area is closed to commercial grazing of domestic livestock. Currently there is no livestock grazing within this area.

Timber/Vegetation: Historically, periodic disturbance events functioned to maintain horizontally diverse stand structures within the cool/dry biophysical environment dominating the Huckleberry Roadless Area. However, the existing horizontal distribution of age/size classes and species diversity does not reflect historic patterns. Natural disturbance events operating within the environment were cyclic, variable in intensity, and gave rise to a mosaic pattern of stand structures. As a result, age and size classes and species diversity were high given the varied disturbance regimes. Fire was a relatively frequent visitor to a large extent of this environment as evidenced by residual overstory ponderosa pine, western larch, and Douglas-fir. Frequent low-intensity surface fires favored canopy dominance by these species. The probability of a stand-replacing fire event within areas dominated by fire resistant species was low because of the light fuel loadings and lack of vertical fuel. Common cyclic events such as group bark beetle mortality, localized wind-throw, and enlarged root rot centers provided sufficient fuel to sustain discrete crown fire events. Locations of such past episodes are evidenced by even-aged groups of mixed conifers included within the multi-layered matrix.

In contrast, the existing homogenous vertically layered late seral structures are very susceptible and vulnerable to sustained, widespread damage due to insects, pathogens, and catastrophic fire.

Minerals: There are no known mineral deposits, gas or oil leases.

Cultural: The Huckleberry Roadless Area has documented four sites and two isolated finds. Three of the sites are prehistoric lithic scatters and the others consist of historic aspen art (dendroglyph). There has been little previous survey in this, but predictive modeling would suggest that additional sites may exist along traditional trail locations and in the vicinity of springs and perennial streams.

Land use/Special use: None.

Fire: Fire regimes 3 and 4 with a Mixed Condition Class of 1 and 3 represent the majority of the area. Fuel Models 2, 8, and 10 occupy most of the area

Insects and Disease: Over the past two decades, many conifer trees within the area have been killed by insect and disease outbreaks. The spruce budworm, Douglas-fir tussock moth, scolytus fir engraver beetle, and the Douglas-fir bark beetle continue to cause severe losses.

Private Land: None.

Hurricane Creek Roadless Area (#6288)
1,710 Acres

Overview

History: This former RARE II area now consists of five separate parcels, ranging from 40 to 450 acres. They are what remain of the former 6,200-acre roadless area after additions to the Eagle Cap Wilderness in the Oregon Wilderness Bill of 1984. These remnant areas result from the attempt to establish the new wilderness boundary along less irregular, more easily managed lines.

The entire area is managed as backcountry.

Geography/Topography: The areas lie at 6,000 feet elevation within the mid- to upper reaches of Reavis, Murray, Alder and Scotch creeks on the steep, north-facing upper forest slopes

Location and Access: The area overlooks the Wallowa Valley southwest of Enterprise, Oregon, in T.2S., R.44E.

Vegetation/Ecosystem: This fragmented roadless area is best classified as subalpine fir habitat type. The multi-layered stands are dominated by medium diameter ponderosa pine, western larch and Douglas-fir, vertically arranged over an understory of pole to small diameter subalpine fir, Douglas-fir, grand fir and lodgepole pine. Canopy closures exceed 80 percent. All but approximately 200 acres are timbered.

Current Uses: The area primarily serves as part of the scenic backdrop for the town of Enterprise. Primary on-site use is big-game hunting, which is limited by the difficult access and dense vegetation.

Approximately 400 acres of the area are within the semi-primitive motorized component of the recreation opportunity spectrum (ROS) while the remaining 1,200 acres are within the semi-primitive non-motorized component.

Appearances and surroundings: The areas are natural appearing with no man-made features.

Key Attractions: A paved road along Hurricane Creek accesses a trailhead and two campgrounds. Although the road and developed recreation sites are not part of the roadless area, it creates easy access and the area is very heavily used by both residents and visitors for summer hiking into the Eagle Cap Wilderness. The paved road itself is popular for cross-country skiing when snow gets deep enough to prevent vehicular traffic from the last house along the road to the trailhead and beyond. Falls Creek falls is a popular attraction ¼-mile above the trailhead. The Murray Saddle Trail passes through the portion of this roadless area containing Alder Creek.

Inventory Criteria

Though the area is small, it is adjacent to the Eagle Cap Wilderness Area, and meets the inventory criteria for areas with wilderness potential.

Capability

Naturalness and Undeveloped Character: Sights and sounds from the valley below are apparent from any of the five pieces of land. There is little sense of solitude and low sense of self-reliance because of the proximity to fields and roads below. If the areas were added to the wilderness, it would create an

irregular boundary that would mix wilderness lands with off-Forest lands, which have uses that do not conform to wilderness standards.

The areas are natural appearing with no man-made features. There are no special features or notable opportunities for scientific, archaeological, or historical study, nor are there known threatened or endangered species of plants or animals.

Because the area forms part of the scenic backdrop for the town of Enterprise, and is popular as a portal to the Eagle Cap Wilderness and for hiking and cross-country skiing.

Primitive Recreational Opportunities and Challenge: Use is limited by difficult access from private land and dense vegetation.

Special features: None.

Manageability and boundaries: The southern-most portion of this roadless area contains a paved road which follows Hurricane Creek, two campgrounds, and a trailhead – all of which receives heavy use and has been buffered out of the area. While they are buffered, management of the area is difficult due to the heavy developed uses near by.

Availability

Recreation: Primary on-site use is big-game hunting, which is limited by access and dense vegetation.

Wildlife: This roadless area is high-elevation (6,000 feet) within the mid to upper reaches of Reavis, Hurricane, Murray Alder and Scotch creeks. The area is dominated by mixed conifer stands, including subalpine fir and lodgepole pine.

These areas provide travel corridors for many wildlife species and include habitat for Canada lynx denning and foraging. Other unique species that may be found within this area are pine martens, pacific fisher, wolverine, white-tailed ptarmigan and Wallowa rosy finches. There have also been some sightings and possible nesting by prairie falcons adjacent to this area. This area is unique because of higher elevation communities and its use as summer range by elk and deer. This area provides many avenues of escapement for elk and deer during hunting seasons. Currently there is no livestock grazing within this area.

Water/Fish: All streams within the area are steep-gradient snow-fed systems that contain wilderness-like characteristics. High-flow events, involving spring runoff, rain-on-snow occurrences, and high intensity spring/summer rainfall, often result in large quantities of debris (rocks, soil, and trees) being transported downstream. As a result fish habitat is in a constant state of flux due to frequent substrate and wood movement, and sediment input from chronically unstable streambanks.

Columbia River bull trout, listed as threatened under ESA, (1998) reside in Hurricane Creek. This is a small population that has been substantially hybridized with brook trout.

Range: The area is closed to commercial grazing of domestic livestock.

Timber/Vegetation: Historically, fire intervals within this habitat type ranged from 70 to 150 years with moderate to high-intensity effects (often resulting in stand replacement due to severe fire weather conditions, above 90^{th} percentile, on 70-100 percent of the affected area). The existing structures and specie compositions are representative of the historic range of variation. Successive years of moisture stress coupled with excessive stocking conditions have predisposed the late seral subalpine fir-dominated stands to insect infestations.

This area has received very little plant inventory.

Region Six sensitive plant species (2005) known to occur within this area:

- *Plantanthera obtusata* – one known occurrence – very wet marshy areas and riparian zones.

- Also, very close to the boundary as currently drawn is an occurrence of FS-sensitive *Cryptogramma stelleri* (moist cliffs) on private ground directly adjacent to FS land by Falls Creek falls.

Just within the current wilderness boundary, directly adjacent to the roadless area boundary is an occurrence of the U.S. Fish & Wildlife Service-candidate species *Botrychium lineare* (openings in subalpine meadows). It is probable that these species could also be located within similar habitats contained in the roadless area.

A cursory look at the aerial photo coverage and GIS vegetation data suggests that it is likely that this area contains potential habitat for additional rare plants as well as unique plant communities/associations. The area also has potential for a number of Wallowa Mountain endemic species. At this time there is insufficient information to determine the extent to which they occur within this area.

Minerals: None.

Cultural: There are no identified heritage resources within the Hurricane Creek Roadless Area.

Land use/Special use: None

Fire: Fire regimes 1 and 4 with a Condition Class 3 represent the majority of the area. Fire Regime 4 areas are lower priority for management treatments and where land management direction and appropriate conditions exist are candidates for the management of natural ignitions. Fuel models consist of 8 and 10.

Insects and Disease: The following insects contribute to tree mortality within the Hurricane Roadless Area: mountain pine beetle, spruce beetle, fir engraver, and the Douglas-fir bark beetle. In addition, the potential exists for the balsam wooly adelgid (currently active on the north face of Mt. Howard) to infest these dense stands.

Private Lands: Two parcels, totaling 120 acres, within T.2S., R.44E., Section 28, are being considered for exchange in the Blue Mountain Land Exchange Proposal. The isolated parcel in T.2S. R.44E., Sections 19 and 20, envelops private in-holdings.

Joseph Canyon Roadless Area (#G04)

6,750 Acres

Overview

History: The Joseph Canyon Roadless Area was inventoried during the first Roadless Area Review and Evaluation and allocated to non-wilderness uses through the Wallowa Valley Plan of November 1975 with a commitment to retain the area's roadless character.

Timber sales within the area have been appealed, but the appeals have not resulted in withdrawing the sales. Efforts to gain the interest of U.S. Congressmen were successful in 1983 when the area was included as a part of HB 1149, a wilderness bill sponsored by Congressmen Weaver, Wyden, and AuCoin. It was not, however, included in the Senate version of the 1984 Oregon wilderness bill sponsored by Senator Hatfield.

In 1988, the northernmost 8.6 miles of Joseph Creek was designated as a Wild River by the Omnibus Oregon Wild and Scenic Rivers Act. Some 2,800 acres are within the Wild River Corridor.

Current land management allocations are 80 percent wildlife/timber, 9 percent Wild and Scenic River, 5 percent timber, 3 percent research natural area, and 3 percent old-growth.

Location and Access: The Joseph Canyon Roadless Area lies adjacent to State Highway 3 on the northern boundary of the Forest, 20 miles north of Enterprise, Oregon, in T.5N., R.45E. It contains the upper reaches of the Joseph Creek drainage, including the tributaries Swamp Creek, Peavine Creek, Rush Creek, and Davis Creek. Joseph Creek continues in a northerly direction and empties into the Grande Ronde River about 15 miles north of the roadless area.

Geography/Topography: Elevations range from 2,600 feet in the northern part of the area to near 5,000 feet on some of the southern ridges.

Vegetation/Ecosystem: Lower to mid-slope positions (2,500-5,500 feet) are characterized by patterned landscapes. Prior to the stand-replacement fire of 1986, northerly aspects were dominated by timbered communities consisting of pole-sized to small Douglas-fir in association with a scattered ponderosa pine overstory and a ninebark understory. The vertically oriented timbered stringers alternated with bluebunch wheatgrass/Idaho fescue communities on the southern aspects. These structures remain intact on approximately 25 percent of the timbered stringers. The remaining stringers are characterized by scattered residual ponderosa pine predominates over brush fields minimally stocked with ponderosa pine and Douglas-fir seedlings and saplings.

Current Uses: The area exemplifies the rugged topography in northeast Oregon, which is characterized by deep canyons with very steep, grass-covered side slopes interspersed with numerous exposed basalt layers. It is well-known, largely because of its proximity to State Highway 3 and a popular roadside viewpoint that overlooks the 2,000-foot depths of Joseph Canyon.
Approximately 1,600 acres of the area is within the roaded natural component of the recreation opportunity spectrum (ROS) while 12,600 acres are considered semi-primitive motorized, and 9,400 acres are in the semi-primitive non-motorized component. Primary recreation activities are big-game hunting and scenic viewing, but some hiking, horseback riding, and camping by individuals and organized groups occur. Joseph, Davis, and Peavine creeks have the potential for trout fishing. Total recreation use amounts to an estimated 4,000 RVDs per year.

Appearances and surroundings: The area is noted as an example of the rugged topography in northeast Oregon, characterized by deep canyons with very steep, grass-covered side slopes interspersed with numerous exposed basalt layers. Typical of the region, southern and western slopes are non-timbered with native bunchgrass ecosystems, while many northern and eastern slopes are heavily forested with Douglas-fir and ponderosa pine being the dominant tree species.

Key Attractions: Because of its proximity to State Highway 3, deep canyons, local history, and scenic viewpoints, Joseph Canyon is popular with tourists.

Inventory Criteria:

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

Capability

Naturalness and Undeveloped Character: Many of the more picturesque portions of the canyon lie on private lands north of the inventoried roadless area and outside the National Forest.

In addition to evidence of timber harvest, there are scattered examples of human activity. These include abandoned fields and remains of buildings within the isolated private land parcels along Joseph Creek. Old railroad grades and skid trails in the lower reaches of Davis and Swamp Creeks were the result of

logging activities from 1920s and ‘30s. About 50 livestock watering facilities, 30 miles of fence, and 6 miles of jeep road are found within the area.

The area includes a number of non-wilderness trails, which create the possibility of mountain and trail (motor) biking. The area includes the following trails: Davis Creek (1660), Swamp Creek (1678), Driveway (1678B), Chico (1658), Joseph Creek (1714), Horsepasture Ridge (1712), and Vawter (unnumbered). All but the Swamp, Davis, Joseph, and part of Horsepasture Ridge trails are very steep, and access canyon bottoms by following ridges or draws. These trails are lightly used for hiking, mountain biking, and some motorized trail biking. They are also used by grazing permittees to access this vast terrain.

Primitive Recreation Opportunities and Challenge: Because of the steep sideslopes and deep canyons, the area provides opportunity for physically challenging experiences of hiking into and out of the area. The depths of the canyons provide opportunities for solitude; hiking the rugged terrain would contribute to a sense of reliance. This would be diminished, however, by the knowledge that roads would always be within a relatively short distance.

Special features: The area does not posses any special features.

Manageability and boundaries: Because of its relatively small size, irregular configuration and many miles of boundary, manageability as wilderness would be difficult. Adjusting the boundary to shield a sizable portion of the area from the sounds of vehicles on State Highway 3 does not appear to be possible. Because of its shape a visitor can perceive the entire size of the area from several points, including the Highway 3 viewpoint. The area is bounded on the west, south, and east by national forest land. To the north, off-forest, parcels are either privately held, managed by the BLM or have been recently purchased by the Nez Perce Tribe.

Availability

Recreation: Approximately 1,600 acres of the area is within the roaded natural component of the recreation opportunity spectrum (ROS) while 12,600 acres are considered semi-primitive-motorized, and 9,400 acres are in the semi-primitive nonmotorized component. Primary recreation activities are big-game hunting and scenic viewing, but some hiking and camping by individuals and organized groups occurs. Joseph, Davis, and Peavine Creeks provide trout fishing. Total recreation use amounts to an estimated 4,000 Recreation Visitor Days (RVDs) per year.

Wilderness recommendation would not result in a change to the recreation opportunity spectrum classes but because the area is readily accessible, the publicity associated with recommendation may increase use, especially for hiking and viewing. If the area continues to be allocated to non-wilderness uses that emphasize primitive and semi-primitive non-motorized recreation, use would not be expected to increase appreciably over present levels.

Wildlife: The Joseph Canyon Roadless Area is comprised of three main drainages: Swamp, Davis and Joseph Creeks. At least half of this area is grassland or grassland shrub with east- and west-facing timbered draws. Joseph Creek has many rock walls and rims and the northern portion within the roadless area is in the wild and scenic river section. Over half of this roadless area is within designated elk winter range.

This roadless area provides travel corridors for many wildlife species. This area also provides escapement for elk, deer and bear during hunting seasons. The northern part within Joseph Creek is used by a herd of bighorn sheep. The herd, numbering approximately 40-head, mainly uses the canyon area by Table Mountain with movements into Cougar Creek up to Sled Springs on the Joseph Canyon side. Cattle graze throughout most of the area.

The many rock cliffs provide nesting for avian species, roosting sites for bats, and unique habitats for other wildlife species (such as cougars, rodents, etc.). Peregrine falcons and bald eagles have been

observed foraging within the area. Spotted bats prefer roosting sites in crevices of cliffs or canyon walls, which are abundant in this area. This species has not been observed, although no recent surveys have been conducted. Older surveys have noted other species of bats within the area.

Water/Fish: Joseph Creek is a designated wild river within the roadless area. Fish habitat in Joseph Creek and the other fish-bearing streams is characterized by stable streambanks, plentiful deciduous riparian vegetation, and warm summer temperatures. Both Joseph and Davis creeks are on the Oregon State Water Quality Limited Streams (303(d)) List for summer temperatures that exceed the steelhead-rearing standard of 64 degrees Fahrenheit. Swamp Creek, though not listed, also exceeds the threshold. The Joseph Creek system is home for a large population of native Snake River steelhead, listed as threatened under ESA in August 1998. There are currently no hatcheries in this system and no hatchery fish have been documented within it. The following streams contain habitat for these fish: Joseph, Swamp, Davis, Peavine, Rush, and Lupine creeks.

Forty-one in-stream structures were installed in Swamp Creek in the 1980s. These log wiers were installed perpendicular to the stream flow to create pools and improve fish habitat. They did not accomplish their desired function in most cases, and some are barriers to juvenile fish during low flows. These structures are scheduled for modification in 2006.

Beavers are found within the Swamp Creek system and seem to be associated with non-native willows that were planted in the vicinity of the log wiers

Range: The roadless area intersects four active allotments which provide 7,889 HMs (head months) of grazing use and 10,403 AUMs (animal unit months) of annual forage. Range improvements found within the roadless area include 1½ miles of primitive two-track roads, 19 miles of wire fence, 43 spring developments, and 17 ponds.

The various forage-producing plant communities range from early seral to late seral. Generally, during the 120-year history of domestic livestock grazing in the area, the impacts on plant communities found on the gentler-sloped terrain were greatest in unmanaged areas. Because the majority of acres within the roadless area are steep to very steep, the impacts of livestock grazing have been regulated to some degree by slope preference of animals. Historically, the steep and very steep slopes were allocated as sheep and goat allotments and the gentler sloped range was allocated to cattle and horses. Today vegetative trends on the steep-sloped sheep range are stable to upward since sheep grazing has not been practiced for the past 10 years or more. Historic vegetative trends on the cattle ranges tend to be trending upward more slowly from the lows of the 1920s when stocking rates came off of the historic highs following World War I. Vegetative trends on cattle ranges rose at a steeper rate in the late 1950s and 60s as a result of changing from season-long grazing to deferred and rest rotation methods. This divided vast open rangelands into smaller units or pastures, which allowed a higher degree of control. During the late 1970s and ‘80s, vegetative trends within riparian zones began to move in a positive direction when rangeland ecologists introduced an initiative to improve the ecological status of western riparian zones.

Timber/Vegetation: Recurring surface fires of low-to-moderate intensity and endemic insect and disease episodes controlled species composition, maintained sustainable stocking levels, and favored the retention of the intolerant conifers such as ponderosa pine.

The absence of fire over the last 100 years (prior to 1986) resulted in the widespread development of dense forest dominated by sapling to small-sized, late seral Douglas-fir. The probability of a stand replacement event exceeding historic patterns, whether by fire, insects, or pathogens, was quite high due to the predominance of continuous layered, late seral structures. These expected consequences were realized during the Joseph Canyon Fire of 1986. Most of the timbered stringers (approximately 75 percent) were converted to the stem initiation stage of stand development. Salvaged stands were either seeded aerially or planted with conifer seedlings. Sites are marginally stocked with ponderosa pine and Douglas-fir seedlings and saplings.

The area's plant inventory is limited.
Region Six Sensitive Plant species (2005) known to occur within this area:

- *Erigeron engelmannii* – three known occurrences – dry grassland habitat
- *Leptodactylon pungens* ssp *hazeliae* acqd – one known occurrence – steep canyon slopes, rock outcrops
  Botanical Species-of-Interest* within this area:
  *(Plant species found frequently enough within their own range and/or without significant threats, such that they would warrant inclusion on the Region 6 (or 1) sensitive species list, but they are of unique habitats and/or very limited distribution within the Wallowa-Whitman National Forest.)
- *Bolandra oregana* – three known occurrences: seeping cliffs and steep slopes in warm canyons

A cursory look at aerial photos and GIS vegetation data suggests that it is likely that this area contains potential habitat for additional rare plants as well as unique plant communities/associations.

There is not enough information to determine the extent to which they occur within this roadless area.

Minerals: Soils are of basalt origin. The southern part of the area is considered prospectively valuable for oil and gas by the U.S. Geological Survey.

Cultural: The Joseph Canyon Roadless Area has one of the highest site densities of the RARE II study areas. Thirty-eight sites and two isolated occurrences have been documented within the area. Prehistoric sites consist mostly of lithic scatters and rock shelters. The isolates were flake stone artifacts. One proto-historic site consists of trees peeled to the cambium. The 15 historic sites are comprised of historic trash, log structures including collapsed cabins, cairns and corrals. Some of the six cairns documented could be prehistoric, proto-historic or historic. Site locations vary from valley bottoms to ridge tops and edges with few recorded on the steeper slopes.

The presence of so many identified lithic scatters and peeled trees suggest relatively long-term use by the Nez Perce people. Joseph Creek drainage is known to have been an important travel route for the Nez Perce as they made their seasonal treks between their winter villages along the Grande Ronde and Snake rivers and summer encampments throughout the Wallowa Valley. The name, Joseph, is said to have been derived from the fact that the younger Chief Joseph was born in a cave along the lower reaches of the canyon. Currently it is believed that the cave is located to the north and outside of the designated roadless area.

Land use/Special use: Although power site withdrawals exist within the roadless area on Joseph Creek, there are no active plans to develop the site. The site was not recommended for further study by the Corp of Engineers. There are no other existing or planned impoundments on any of the streams within the area. There are no other energy withdrawals such as pipelines, powerlines, or electronic sites. There is no evidence of mineralization within the area.

Fire: Fire regimes 1 and 2 with a Mixed Condition Class of 1 and 3 represent the majority of the area. Fuel Models 2 and 8 occupy most of the area.

Insects and disease: Historic disturbance mechanisms operating within the Douglas-fir/ninebark communities included cyclic bark beetle infestations, enlarged root rot, and mistletoe infection centers.

Private Lands: There are two small parcels of private land within the area, totaling 401 acres. These parcels lie within the heart of the area, immediately below the Joseph Canyon viewpoint on the State Highway (see map). The unoccupied lands are used for grazing and are accessed by jeep trail.

Little Creek Roadless Area (#6280)
2,590 Acres

Overview

History: This area was not a part of the RARE II evaluation. It was considered for further wilderness study during the development of the management plan for the Grande Ronde Planning Unit (FEIS published April 1978). As a result of that analysis, the area was allocated to nonwilderness uses.

The Wallowa-Whitman National Forest Land and Resource Management Plan (Forest Plan, April 1990) allocated this area to non-wilderness uses under Management areas 1, 3, and 15 in the preferred alternative and identified a potential annual timber harvest from the area. Acreages by Management strategy are as follows: MA 1 (Timber Production Emphasis) 1446.40 acres, MA 3 (Wildlife/Timber) 1365.96 acres, and MA 15 (Old-Growth Preservation) 0.52 acres.

Location and access: The Little Creek Roadless Area is 19 lies southeast of La Grande, Oregon, and 23 miles southwest of Enterprise, Oregon. It is located to the North of Bald Mountain, due east of High Valley, immediately adjacent to the western edge of the Eagle Cap Wilderness boundary. The area is accessed from the North by Forest Road 6620 and from the south by Forest Road 2036.

A portion of the area lies within the Minam River Watershed (17006010505), formerly referred to as the Minam River Watershed (17060105-10), with the remainder of the area in the Catherine Creek Watershed (1706010406 and 1706010405) and Grande Ronde River/Mill Creek Watershed (1706010407), all formerly referred to as the Catherine Creek Watershed (17060104-12).

Geography/Topography: Soils are dominantly of basalt origin with surface volcanic ash deposits. Uplift and erosion have exposed granite sedimentary and volcanic rock in the eastern portion of the Catherine Creek Watershed. The headwater drainages are steep and highly dissected, flowing to a topographic break along the western edge of the area. Elevations range from 5,800 feet at the Forest boundary to 6,800 feet at Bald Mountain, along the wilderness boundary.

Vegetation/Ecosystem: A dominant feature of the roadless area is its extensive uniform lodgepole pine canopy. Scattered, open, grassy ridges and meadows are also found.

There are no currently listed threatened, endangered, proposed, candidate or Region Six sensitive plant species known to occur within the roadless area. There area no known noxious weed sites within the area, however there may be sites within the area which have not been inventoried.

The western half of the area has been identified as big-game winter range and the entire Little Creek roadless area is mapped as habitat for Canada lynx.

Current Uses: A majority of the recreation use is in the area is associated with big-game hunting. Some OHV and snowmobile cross country travel does occur at this time.

Small portions of two historic ditches used for downstream irrigation also lie within the area, one of which is still under permitted use.

The entire roadless area is located within either of two active allotments, Catherine Creek C&H (cattle and horse) and Mill Creek C&H. Trails are used by permittees to move and gather livestock.

Existing roads and trails are being used for fire suppression activities.

Appearance and surroundings: Recreation opportunity is dominantly semi-primitive nonmotorized (about 80 percent) with the remaining being roaded natural motorized 15 percent, roaded natural 5 percent and semi-primitive 5 percent.

Harvested units occur to the North and adjacent non-Forest lands to the west, with large cutover areas located to south. The IRA is approximately 1 ½ - 2 miles wide by 4 miles in length, with the eastern boundary contiguous with the Eagle Cap Wilderness Boundary.

Key Attractions: There are no scenic landmarks and the area is primarily used for nonmotorized and big game hunting activities.

Inventory Criteria

Due to its proximity to Eagle Cap Wilderness area, this area meets the inventory criteria needed to be considered an area with wilderness potential.

Capability

Naturalness and Undeveloped Character: The area provides a feeling of solitude to the users; however, it does not provide the scenic views typical of areas with more vegetative or topographical variation. Recreational opportunities are limited to hiking, horseback riding, backpacking, and big-game hunting.

Primitive Recreation Opportunities and Challenge: The area does not have potential for more challenging activities such as mountain climbing or river rafting.

Special Features: There are no known unusual opportunities for historical or scientific study.
There are no threatened or endangered species known to inhabit the area, although numerous wildlife species can be found. The area contains habitat for Threatened Canada lynx and summer and winter range for deer and elk. The un-fragmented conifer cover with little human intrusion provides high quality security habitat for wildlife. There are no allocated old growth areas within this roadless area, but old growth habitat exists over much of the area.

Manageability and boundaries: The boundaries of the roadless area, except on the western edge where it reaches the Forest/Private land boundary, are generally on distinct topographic features.

Availability

Recreation: The area includes sections of Trail 1920 (hiker/stock), totaling approximately 2 miles.

Wildlife: The entire Little Creek Roadless Area is mapped as habitat for Canada lynx. This area would likely function as an important north/south connection for lynx travel if lynx were to re-inhabit this area in the future. This area also represents the western extent of lynx habitat along the Grande Ronde Valley border.

Approximately half of this roadless area is MA 3 winter range. The western half along the private land boundary is the winter range portion. The eastern half is high quality summer range that is contiguous with the Eagle Cap Wilderness Area. Little Creek contains high quality security habitat due to un-fragmented conifer cover, adjacency to a wilderness area, and the low level of human intrusion.

Much of this roadless area is old growth forest structure, but there are no allocated old growth areas. The old growth habitat within Little Creek is capable of supporting breeding populations of northern goshawk, American marten, and pileated woodpecker, as well as a host of other old growth associated wildlife species.

Water/Fish: The area crosses back and forth between subbasins with two small portion in the Little Minam River SWS (170601050505), formerly referred to as the Little Minam River SWS (17060105-10C), which is in the Wallowa Subbasin (17060105), a sliver in the Mill Creek SWS (170601040701), formerly

referred to as Mill Creek SWS (17060104-12B), another small portion in Little Catherine Creek SWS (170601040507), formerly referred to as Little Catherine Creek SWS (17060104-12I), and the majority and remainder in Little Creek SWS (170601040607), formerly referred to as Upper Little Creek (17060104-12F). The major streams in the area are the headwaters of Little Creek, a tributary to Catherine Creek, Potters Creek, a tributary to Little Creek and Fireline Creek, a tributary to Little Minam Creek. The reaches in the roadless area are dominantly intermittent, non fish bearing.

These drainages were not listed on the Oregon Department of Environmental Quality (ODEQ) 1998 303 (d) list of "Water Quality Limited Streams. In 2000 a Total Maximum Daily Load (TMDL) – Water Quality Management Plan (WQMP) for the Upper Grande Ronde Subbasin (UGRS) was developed and approved to address all of the streams on the 303 (d) list in the UGRS. This plan states that all management activities on federal lands managed by the USDA Forest Service in the UGRS must follow standards and guidelines (S&Gs) as listed in LRMP, as amended by PACFISH (USFS 1995), Best Management Practices (BMPs) as defined in various Federal and State laws such as the Implementation Plan for 208 (Water Pollution Control Act, PL 92-500, as amended), and Specific Stand Management Unit (SMU) Constraints and Mitigation Measures identified in the Wallowa-Whitman NF Watershed Management Handbook to maintain and improve water quality and comply with the Clean Water Act. The TMDL – WQMP is currently being developed for the Wallowa Subbasin that includes the Little Minam River and its drainages.

Water quality and stream habitat conditions are important for the maintenance of aquatic species present and utilizing these drainage systems. In general, the water quality in these upper headwaters draining this area is good and is being maintained by roadless characteristics, topography and minimal disturbance.

Streamflow discharges or runoff in the Little Minam River, Little Catherine and Little Creek SWSs are characteristic of a snowmelt hydrograph, with late spring and fall rains contributing to the annual average flows of Catherine Creek. Peak flows usually occur in May and June with flows gradually decreasing to minimum discharges in August and September.

Range: The Mill Creek C&H and Catherine Creek C&H Allotments cover the entire area. For the most part the area has limited use by livestock due to dense timber, steep slopes and lack of access. Use of the area by domestic livestock would not change appreciably regardless of wilderness or non-wilderness classification.

Timber/vegetation: The roadless area includes 1,785 acres of productive forest land dominated by lodgepole pine. The standing volume is 4.6 MMBF. There has been some past harvest activities that have taken place on the northeast edge of the roadless area. The project that was harvested was the Potters Mill Timber Sale. Approximately 50 acres was harvested in the early to mid 1990’s.

Minerals: The area has no known mineralization of commercial value.

Cultural: There are two small portions of historic irrigation ditch, and a few lithic scatters within the area.

Land use/Special Uses: There is one historic drainage ditch that is under permitted use.

Fire: The Little Creek Roadless area is characterized by moderate to high surface fuels and continuous fuel beds. Most of the acreage within the Roadless area is within Fire Regimes 3 and 4. The majority of the fires that have occurred within this area have been caused by lightning. The potential for large wildfire is good due to combination of fuels and topography.

Insects and disease: Endemic levels of insect and disease provide diversity to forest stands and the landscape; however, many mixed conifer stands in the Blue Mountains have been damaged by a variety of insects and diseases, compounded by protracted draught, overstocking, and inappropriate past management (Schmitt and Scott, 1993). The major insect in this area are Douglas-fir beetle and spruce beetle (R6 2002, 2003 Aerial Pest Survey).

Many factors affect tree and stand susceptibility to insects and diseases. Both inherited and environmental factors play a role in predisposition to insects and diseases. The availability of growing space to tree in a stand in an important factor-governing tree and stand vigor (Cochran, et al, 1994).

Private lands: There are no private land holdings within the Little Creek IRA.

Little Eagle Meadow Roadless Area (#6283)

6,830 Acres

Overview

History: This roadless areas is a remnant of larger areas that were added to the Eagle Cap Wilderness through the Oregon Wilderness Act of 1984.

The 2,000-acre segment is located near West Eagle Meadow at the headwaters of West Eagle Creek and includes portions of Fake Creek, at an elevation of about 5,600 feet. The smallest segment, about 700 acres, is next to Two Color Campground and near Cougar Meadow.

Under current forest plan allocations, 7,229 acres are managed as “backcountry” with snowmobile use allowed; 1,148 acres are managed for timber, but no harvest has occurred, and 3,192 acres are big-game summer range, where some timber harvest has occurred.

Location and access: The Little Eagle Meadows Roadless Areas border the Eagle Cap Wilderness on the south and the southwest. They lie about 17 miles northwest of the town of Halfway, Oregon, in township 6 South, Range 43 & 44 East.

Geography and topography: The area ranges from 4,400 feet elevation near the east fork of Eagle Creek to over 7,000 feet at Bennett Peak and is accessed from Forest Roads 7745 and 7755. Elevations of the Little Eagle Meadows, 7,100 acres, range from 4,400 feet near the east fork of Eagle Creek to 7,500 feet near the headwaters of Sullivan Creek. Soils are predominantly of granitic origin.

Vegetation and ecosystems: The Little Eagle Meadows and Boulder Creek Roadless Areas are mixed conifer forest land, grassland, and some rock outcrops.

Current uses: Recreation use is estimated at around 3,000 visitor days per year, mostly in association with fall big-game hunting. Other use includes snowmobiling, hiking, and backpacking. The area is adjacent to Two Color Campground and Boulder Park recreation residences.

Appearance and surroundings: Within Little Eagle Meadows Roadless Area, approximately 1,400 acres are roaded natural, while 1,700 acres are considered semi-primitive motorized and 4,000 acres are considered semi-primitive nonmotorized.

Key attractions: Scenic views attract many users

Inventory Criteria

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

Capability

Naturalness and undeveloped character: The east side of East Eagle Creek is extremely steep with rock outcroppings and bluffs similar to those found within the Eagle Cap Wilderness. The remaining portion is high-elevation meadows and pockets of timber.

There are no developed recreation sites within these areas. Most of the recreation that occurs is dispersed semi-primitive use, such as hiking, riding, backpacking, big-game hunting, and camping. Some opportunities exist for mountain climbing. This is a very popular snowmobile use area. Open meadow areas, interspersed with forested land, offer opportunities for scenic vistas.

Primitive recreational opportunities and challenges: These roadless areas are easily accessed by hikers, packers, or off-highway vehicle users and contain a trail system that provides little or moderate challenge for the majority of the public. The northwest portion of the Little Eagle Roadless Area along the breaks of East Eagle Creek is largely untouched and difficult to access. This area provides many of the same challenges found in the adjacent Eagle Cap Wilderness.

Special features: There are areas that are extremely steep with rock outcroppings and bluffs. Other areas consist largely of high elevation meadows. At times the entire roadless area contains large numbers of elk. The scenic views from the area attract many users.

Manageability and boundaries: The boundaries of these parcels of the roadless areas vary on elevation lines; some on topographic features. Some portions are close to roads and a campground; some are isolated and provide feelings of solitude to the user. They are generally surrounded by national forest land, with the exception of patented mining claims, private land, and recreation residences along Eagle Creek and the east fork of Eagle Creek.

Availability

Recreation: Most of these lands have been managed for preservation and enhancement of dispersed recreation opportunities.

Wildlife: Lynx habitat, elk summer range, travel corridors and old growth habitat.

Water/Fish: No fish-bearing streams exist within these roadless areas, but water quality in the streams significantly affects the overall quality of main Eagle Creek, which has bull trout and rainbow trout.

Range: Several range allotments are within these roadless areas, providing late summer forage for domestic livestock**.**

Timber and vegetation: There are two past harvests that abut the Little Eagle Meadows area on the south.

Minerals: The areas are mineralized, adjacent to a number of patented placer mines along Eagle Creek and include a number of unpatented lode claims in the interior Gold King area. Structures associated with mining claims are scattered through the larger segment of the Boulder Park Roadless Area and the Little Eagle Meadows Roadless Area. The Cornucopia Mining District, containing the largest gold-producing mine in Oregon, lies about 6 miles east of the eastern boundary of the Boulder Park Roadless Area and is immediately adjacent to the eastern boundary of Little Eagle Meadows Roadless Area.

Cultural: The area is rich in mining history Documented sites include the Schneider Cabin located in Little Eagle meadow, the Amalgamated Mine located just south east of the meadow, and the Carnahan Sheep camp located at the head of Sullivan Cr. The East Eagle drainage has a number of old mines and was once a fairly populated area during that period.

Fire: The area is best characterized by Fire Regime 4. There has been some recent large wild fire activity within the area (Trout Creek fire 2007, Mule Peak 2005). The area receives several small (less than 1 acre) lightning fires annually.

Ladder fuels exist throughout the area increasing potential for fire to reach the crowns, causing clump torching and spotting or a crown fire.

Insects and disease: A western pine beetle epidemic in the late 1960's killed many large pines. The mountain pine beetle epidemic of the late 70's killed mature lodgepole and ponderosa pine. The watershed is at risk of damage from defoliators such as western spruce budworm and Douglas-fir Tussock Moth

Land Use and special uses: There are several spring developments for private cabins in the East Eagle Creek drainage that are under special use permit.

Private Land: None

Little Sheep Roadless Area (#6286)

5,490 Acres

Overview

History: The Little Sheep Roadless Area was inventoried as part of RARE II and was allocated to non-wilderness uses in 1979. It was reconsidered in the Oregon Wilderness Bill of 1984, which added approximately one-third of the area to the Eagle Cap Wilderness.

Location and access: The area wraps around the northeast corner of the Eagle Cap Wilderness 6 miles southeast of Joseph, Oregon, in T.3S., R.45E.

Geography/Topography: The roadless area is uniformly steep and is predominantly timbered with elevations ranging from 5,000 to over 8,000 feet near Mt. Howard

Vegetation/Ecosystem: Timbered stands on Mt. Howard are generally multi-layer structures dominated by whitebark pine, intermingled with lodgepole pine and subalpine fir. Large, grassy ridges and meadows characterize the upper flats and exposed aspects. Stands comprising the eastern aspects of Wing Ridge within the roadless area incurred considerable mortality following the Canal Fire of 1989. Approximately 80 percent of the small diameter lodgepole pine and subalpine fir stands were consumed in the fire and now are composed of lodgepole pine seedlings and saplings. The area was excluded from subsequent salvage harvest (except for about 30 acres just west of Salt Creek Summit). The dead overwood remains on the site and is gradually contributing to an extensive accumulation of downed woody material. The remaining 20 percent of the stands exist in isolated blocks within the matrix of the burned landscape and consist of layered structures of pole-sized to small diameter lodgepole pine associated with a seedling and sapling understory of subalpine fir. The East Fork of the Wallowa River and McCully, Redmont, Little Sheep, and Cabin creeks all cross the area and contribute water for irrigation in the Wallowa Valley.

Current Uses: Nearly all the area is within the semi-primitive non-motorized component of the recreation opportunity spectrum (ROS) and forms part of the scenic backdrop from the Wallowa Loop Road, a popular recreational drive. Sixty-two acres are "rural" in the ROS system because of its proximity to Wallowa Lake State Park.

Appearances and surroundings: The only significant evidence of human activity are those found at the inactive Transvaal Mines, where two caved-in adits and a small pit are visible and near Royal Purple Creek on the edge of the roadless area where remains of adits are found.

Key Attractions: Approximately 7 miles of non-wilderness trails offer popular mountain biking opportunities. This is also a high-use winter recreation area for backcountry and cross-country skiers.

Inventory Criteria

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

Capability

Naturalness and Undeveloped Character: The boundary tends to follow contours with indistinct features, but the boundary, were the area recommended as wilderness, would be no more difficult to manage than the current wilderness boundary.

Evidence of human activity includes the inactive Transvaal Mines, where two caved-in adits and a small pit are visible, and near Royal Purple Creek on the edge of the roadless area where remains of adits can be found and a 100-foot-wide dozer-constructed fire line adjoins road 3920-012.

The area is popular for fall elk and deer hunting, which are the primary recreational uses. The portion east of Mt. Howard is heavily used for winter recreation by backcountry and cross-country skiers. Use increases with proximity to the Salt Creek Summit Sno-Park. Two winter backcountry guides operate in the area – one accessing the McCully Basin via Forest Trail 1812, and the other accessing two winter huts (both located in the roadless area) out of Salt Creek Summit Sno-Park. The Eagle Cap Nordic ski club also has a winter hut located in the roadless area. There are also approximately 7 miles of maintained ski/mountain bike trail. Current recreational use is by skiers and mountain bikers, chainsaws are used to maintain trails and huts, and the area has close proximity to a groomed snowmobile route.

Primitive Recreation Opportunities and Challenge: The rough terrain offers a challenging hiking experience. The sights and sounds from the Wallowa Loop Road, Mount Howard gondola, and the valley below would detract from the sense of self-reliance and solitude.

Special features: None

Manageability and boundaries: Because of its relatively small size, irregular configuration, and many miles of boundary, manageability as wilderness would be difficult, especially considering that a groomed snowmobile route is located very close to the east boundary of the roadless area. Adjusting the boundary to shield a sizable portion of the area from the sounds of vehicles on Forest Road 39 does not appear possible.

Availability

Recreation: The area is popular for fall elk and deer hunting, which are the primary recreational uses. The portion east of Mt. Howard is heavily used for winter recreation by backcountry and cross-country skiers.

Wildlife: The Little Sheep Roadless Area is comprised of forested areas south of Mt. Howard and around the lower face of the Eagle Cap Wilderness. This roadless area is mainly timbered with large, grassy ridges and meadows. The timbered areas are composed of lodgepole pine, subalpine fir and in some areas, whitebark pine.

The area contains all the wildlife species that are found in the Wallowa Mountains except those associated with lakes and ponds. This roadless area provides travel corridors for many wildlife species and habitat for Canada lynx and wolverine denning and foraging. Other unique species that may be found within this area are pine martens, pacific fisher, white-tailed ptarmigan and Wallowa rosy finches. Prairie falcons have been sighted and could nest within or adjacent to the area. This area is unique for its high-elevation communities and use as summer range for elk and deer. This area provides many avenues of

escapement for elk and deer during hunting seasons. There is currently no livestock grazing within this area.

Water/Fish: All streams within this area are steep-gradient snow-fed systems and contain wilderness-like characteristics. High-flow events, involving spring runoff, rain-on-snow occurrences, and high-intensity spring/summer rainfall, often result in large quantities of debris (rocks, soil, and trees) being transported downstream. As a result, fish habitat is in a constant state of flux due to frequent substrate and wood movement, and sediment input from chronically unstable streambanks. Wilderness designation would have no effect on the condition of these systems.

There is one federally listed fish species present in the roadless area. Columbia River bull trout, listed as threatened in 1998, are found in McCully, Ferguson, Canal, Redmont, Little Sheep, Cabin, and Salt creeks.

Range: The area is closed to commercial grazing of domestic livestock.

Timber/Vegetation: Historic fire regimes occurring within the subalpine fir zone are infrequent, and can be high-intensity, and extensive when they occur under severe weather conditions (above 90th percentile). Under these conditions subalpine forests will exhibit sustained runs, especially on steep slopes or under the influence of strong winds, and result in large stand-replacement fires combined with long-range spotting. The Canal Fire substantiated these anticipated effects. When fires occur in subalpine fir under average fire weather conditions (less than 90th percentile) the fire behavior is often single-tree or clump-torching with short to moderate range spotting resulting in a patchy or “dirty” burn pattern. Future trends in natural disturbance events within this habitat type would be expected to exhibit similar fire regime patterns.

Plant inventory for this area is limited.
Region Six sensitive plant species (2005) known to occur within this area:

- *Botrychium minganense* –one known occurrence – riparian areas and small openings in mesic timbered stands.
- *Lomatium greenmanii* – one known occurrence – alpine grasslands and gravely slopes.
- *Primula cusickiana* – two known occurrences – moist rock outcrops and open slopes at mid elevations.

A cursory look at aerial photos and GIS vegetation data suggests that it is likely that this area contains potential habitat for additional rare plants as well as unique plant communities/associations. The area also has potential for a number of Wallowa Mountain endemic species. Current information is insufficient to determine the extent to which they occur.

Minerals: Although there is some evidence of silver and molybdenum ore in the Transvaal Mines area, the potential for operable mineral deposits is apparently low.

Cultural: Three historic sites have been recorded within the Little Sheep Roadless Area. Two are historic cabin remains and the third is the location of the Tenderfoot Road camp.

Land use/Special use: Two winter backcountry guides operate in the area – one accessing the McCully Basin via Forest Trail 1812, and the other accessing two winter huts (both located in the roadless area) out of Salt Creek Summit Sno-Park. The Eagle Cap Nordic ski club also has a winter hut located in the roadless area.

Fire: Fire regimes 3 and 4 and a Condition Class 3 represent the majority of the area. Fuel models 2, 8 and 10 occupy most of the area.

Insects and Disease: Endemic levels of insect and disease provide diversity to forest stands and the landscape; however, many mixed conifer stands in the Wallowa Mountains have been damaged by a

variety of insects and diseases, compounded by protracted draught, overstocking, and inappropriate past management (Schmitt and Scott, 1993). The major insect in this area is the tussock moth.

Private Lands: None.

Marble Point Roadless Area (#6271)

7,180 Acres

Overview

History: This area was not inventoried in RARE but was included in RARE II where it was recommended for non-wilderness uses. It was unaffected by the Oregon Wilderness Bill of 1984. The eastern two-thirds of the area are entirely within the Baker City Municipal Watershed.

Location and Access: The area lies 8 miles west of Baker City on the southern end of the Elkhorn Range in T.9S., R.38E., and is separated from the Twin Mountain Roadless Area by the Marble Pass road, and by a powerline that parallels the road.

Geography/Topography: Elevations range from 5,000 feet to over 7,900 feet. Soils have formed from granodiorite riparian material and volcanic ash. Sensitive soils and a lack of forage are common to part of the area.

Vegetation/Ecosystem: The area within the watershed is mostly timbered with some harvest. The southwestern slopes are largely non-timbered and form a scenic backdrop above Phillips Lake. The northeast slopes form a backdrop from the Baker Valley. Marble Creek, Elk Creek, and Salmon Creek all originate in the area.

Current Uses: Big game hunting, hiking, horseback riding and some unauthorized off-highway vehicle use occurs. Because a large portion of the area is within the Baker City Municipal Watershed, most recreational activities are permitted only on existing roads and trails.

Appearance and Surroundings: Approximately 1,000 acres of the area are within the roaded natural component of the recreation opportunity spectrum (ROS), 2,800 in semi-primitive and the remaining 3,300 acres within the semi-primitive motorized component.

Key Attractions (if any): None

Inventory Criteria

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

Capability

Naturalness and Undeveloped Character: The area appears natural and is similar in character to the adjacent Twin Mountain Roadless Area. However, being on the south end of the mountain range it lacks the degree of ruggedness found in the central Elkhorns. There are opportunities for solitude but, because the sights and sounds of humans are near, the sense of adventure and self-reliance is less than that found in the Twin Mountain Area or other large roadless areas.

The area is popular for fall big-game hunting. Marble Pass Trailhead and Elkhorn Crest National Recreation Trail start at the northwest edge of this roadless area and are both used by hikers and packers. Motorized recreation activities are discouraged. The access to the Marble Pass Trailhead, which

accesses the southern end of the Elkhorn Crest National Recreation Trail, is quite rugged, and mainly used by hikers headed north to the Twin Mountain Roadless Area or Anthony Lakes.

Primitive Recreation Opportunities and Challenge: Opportunities for adventure and challenge exist but, because the sights and sounds of humans are near, the sense of adventure and self-reliance is less than that found in the Twin Mountain Area or other large roadless areas. It provides some opportunity for adventure and challenge.

Special Features: The Elkhorn Ridge provides some viewing opportunities. There are no known special scenic features.

Manageability and Boundaries: Marble Pass Road and a powerline serve as the boundary to the northwest. A road parallels the area to the northeast. Elkhorn Ridge is the boundary to the southwest, and private land bounds the southeast.

Availability

Recreation: Big-game hunting, hiking/packing use occurs in the area, and motorized use is limited to existing roads and trails to protect the municipal watershed.

About 1,100 acres of “roaded natural” and 6,000 acres of “semi-primitive motorized” settings occur within the roadless area. This is based on the Recreation Opportunity Spectrum system which describes various levels of remoteness and degree of management activities that combine to create settings for recreation opportunities on National Forest.

Wildlife: The area provides elk summer range and feeding stations, elk travel corridors, and old-growth habitat.

Water/Fish: Salmon and Marble creeks contribute to the municipal water supply. Salmon, Marble and Elk creeks provide downstream irrigation. Bull trout have been identified in these streams.

Range: The area is not often grazed by domestic livestock due in part to sensitive soils and lack of forage. The western one-third is part of an active grazing allotment, Stovepipe, and a small portion of the southern tip is part of the Blue Gulch Range Allotment.

Timber/Vegetation: After 70-100 years of fire exclusion many pine-dominated stands (warm/dry grand fir, ponderosa, Douglas-fir biophysical environments) from ones that were fairly “open and park-like” to having several layers, including dense understories of grand fir. This is typical of this roadless area.

Minerals: The eastern and southwestern margin of this area are mineralized as indicated by the Stub Mine that is within the area, and the fact that gold has been found at lower elevations in the old Minersville district near the roadless area boundary. The north end of the area contains limestone deposits.

Cultural: Historic and prehistoric properties have been identified in the watershed.

Land Use/Special Uses: Baker City Watershed.

Insects and Disease: Conditions are conducive for defoliator outbreaks in the mixed conifers stands, i.e., Douglas-fir tussock moth, western spruce budworm and outbreaks of various bark beetles.

Private Land: 168 acres.

Monument Rock Roadless Area (#6240)

5,850 Acres

Overview

History: This roadless area was evaluated during the RARE II process, and further studied prior to the passage of the 1984 Oregon Wilderness Bill. It was recommended for non-wilderness use.

Location and access: This area is surrounded on all sides by National Forest land and abuts the Monument Rock Wilderness on the southwest in T.14S., R.36E. The roadless area is located 5 miles south of Unity, Oregon, and about 24 miles southeast of Prairie City. Nearly the entire area is in the Bullrun Creek watershed, with Bullrun Mountain on the southeast and Miners' Ridge on the northwest.

Geography/Topography: Elevation ranges from 5,200 feet at Bullrun Creek to about 7,300 feet at Bullrun Mountain. Soils are of volcanic origin.

Vegetation/Ecosystem: The north slopes of the area were mixed conifer tree stands with Douglas-fir predominating; south slopes were grass with scattered stands of ponderosa pine. No known threatened or endangered plants exist here. Plant succession in the area has been altered by grazing.

Current Uses: Recreation opportunities consist primarily of fall big-game hunting, hiking, and equestrian trail riding. Table Rock Lookout, adjacent to this area, receives many visitors in the summer. Snowmobile use in winter months and OHV use in summer are concentrated mostly to the north and outside the roadless area.

Appearance and surroundings: Approximately 1,950 acres are within the roaded natural component of the recreation opportunity spectrum (ROS); 1,000 acres are considered semi-primitive motorized and 3,000 acres are in the semi-primitive non-motorized component.

Key Attractions: None

Inventory Criteria

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

Capability

Naturalness and Undeveloped Character: The Koski Basin and ridge above provide scenic opportunities. There are no known special features or rare and endangered plant and animal species.

The area is popular for big-game hunting, backpacking, hiking, riding, and horse/packing. The developed trail system connects to Monument Rock Wilderness and the trail system on the Malheur National Forest, Prairie City District.

Primitive Recreation Opportunities and Challenge: This is a small area that is easily accessible by the hiker or packer. It is fairly steep in places but accessible.

Special Features: The area has "backcountry" recreational value and could provide opportunity for outdoor education. Wildlife does travel through the area but more readily seen at the higher elevations, such as in the Monument Rock Wilderness.

Manageability and boundaries: The roadless area is adjacent to the Monument Rock Wilderness. The historic Eldorado Ditch goes through the north end of the area. Open roads are adjacent to the area on three sides. User built roads and old logging roads are evident. Changing the boundary would not enhance the wilderness characteristics.

Availability

Recreation: Recreation opportunities consist primarily of fall big-game hunting, backpacking, hiking, and horse/packer use on developed trails. Use has remained static for several years but there is opportunity for increased use. The ROS classifications for this area are about one-third Roaded natural and about two-thirds semi-primitive.

Wildlife: The area provides elk summer range travel corridors, and old-growth habitat. The area has been managed for conditions favorable to semi-remote big-game hunting opportunities.

Water/Fish: Bullrun Creek and its tributaries run from south to north through the middle of the area. Water is diverted into irrigation ditches just outside the roadless area. Further downstream, the creek goes underground in mining tailings for several hundred yards before resurfacing.

Range: Stock control fences are in place throughout the area, primarily in the active Bullrun Range Allotment.

Timber/Vegetation: Most of the area has burned and some timber harvest has occurred within the roadless area. Extensive horse logging took place in the 1940s immediately to the north of the roadless area, and timber management has taken place since. The 1989 Monument Rock Fire burned the majority of the roadless area. A large portion of the burned timber was logged, which changed the natural appearance. A fire break constructed during the fire continues to be used especially during fall big-game hunting season.

Minerals: Hundreds of lode mining claims exist throughout 3,500 acres of this roadless area. The area has potential for deposits of gold, copper and molybdenum. Old mining structures are scattered through the area, as are old wheel tracks.

Cultural: Cultural resource sites, primarily old mining structures and ditches, are widespread.

Land Use/Special Uses: Irrigation ditches are north of the roadless boundary.

Fire: The 33,000-acre 1969 Rough Ridge Burn is about 2 miles to the southeast. The 1939 Big Cow Burn is a few miles to the northwest. The 1989 Monument Rock Fire burned most of the roadless area.

Insects and Disease: Endemic levels of insect and disease provide diversity to forest stands and the landscape; however, many mixed conifer stands in the Wallowa Mountains have been damaged by a variety of insects and diseases, compounded by protracted draught, overstocking, and inappropriate past management (Schmitt and Scott, 1993). The major insect in this area is the tussock moth.

Private Lands: None

Mt. Emily Roadless Area (#6277)

7,960 Acres

Overview

History: This area was inventoried in the first Roadless Area Review and Evaluation. Because of local interest in the roadless recreation qualities and the timber resources involved, the Forest Service initiated a special study in 1972 to resolve the potential wilderness question. This study was abandoned in 1973 in favor of including it in the Grande Ronde Plan, which allocated it to non-wilderness uses in 1978.

However, a large part of the area was designated as a special management unit to retain its backcountry qualities and was removed from the timber harvest base.

The 1990 Wallowa-Whitman Forest Plan also allocated this area to non-wilderness uses with approximately some timber production, but mostly as wildlife/timber management.

Location and access: The area is located 6 miles north of La Grande in T.1S., R.37E., and can be accessed from several routes. The area can be reached from the Grande Ronde Valley to the south via the Fox Hill (Landfill) Road and National Forest Road 3120. It is reached from Interstate 84, to the west, at the Mt. Emily exit and Forest Road 3100. Open roads have been buffered out of the area, but some OHV trails are located within the interior of the roadless area.

It includes the Grande Ronde River/Five Points Creek Watershed and contains the upper reaches of Five Points Creek, which drains the area and flows southwest to the Grande Ronde River approximately 6 miles outside the roadless area.

A small piece of the Mt. Emily Wildland Urban Interface (WUI) boundary is within the Mt. Emily Roadless Area. The WUI area was recently identified through a collaborative effort as part of a Community Wildfire Protection Plan (CWPP).

Geography/Topography: The area is a heavily dissected plateau. Remnants of the plateau amount to approximately one-quarter of the area. The remainder consists of the steep canyon landscape of upper Five Points Creek. Soils are of volcanic origin, derived either from local bedrock or of ash from Cascade Range eruptions. Soils on the steep slopes tend to be unstable. Elevations range from 3,200-5,400 feet.

Vegetation/Ecosystem: The tablelands and north slopes are timbered while most south and west slopes are untimbered grasslands. The predominant timber species are Douglas-fir, grand fir, and ponderosa pine.

Approximately 50 (or more) acres of the Mt. Emily Roadless Area are within the Proposed Mt. Emily Fuels Reduction Project (Signed 12/15/2004), which is scheduled for implementation in 2005-2007.

There are no known locations for any currently listed threatened, endangered, proposed, candidate or sensitive plant species in the area. There are no inventoried noxious weed sites within the area.

This roadless area contains mapped (2000) habitat for threatened Canada lynx, however, there are no known threatened or endangered animal species within the area.

The area includes a 374-acre old-growth allocation, about 54 percent forested and 46 percent grasslands. The forested portions of the old growth contains high-quality mixed conifer habitat, but it is highly fragmented by natural openings. This fragmentation precludes interior habitat conditions necessary for some old-growth-associated wildlife species. The area includes abundant, high-quality old-growth forest structure capable of supporting dependant wildlife species. The entire area serves as summer range for Rocky Mountain elk.

Fiddlers Hell Creek, in the southeastern portion of the area, contains nesting habitat for prairie falcons and potential nesting habitat for peregrine falcons.

Current Uses: Recreational use other than fall hunting is likely to remain low due to the lack of recreational attractions or scenic variety. The area is popular for hunting big game and grouse, and for woodcutting and berry picking. There are no encumbrances that would preclude designating the area for unroaded recreational use.

There are no current livestock grazing allotments within the Mt. Emily Roadless Area, however, incidental sheep grazing, under the adjacent Spring Mountain sheep allotment on the Umatilla National Forest, has been observed at the far northern end of the roadless area.

Fuel reduction treatment units associated with the Mt. Emily WUI are scheduled for implementation within the roadless area to establish a defensible space along the ridgetop for strategic fire suppression activities and firefighter safety. Existing roads and trails are being used for fire suppression activities.

Appearance and surroundings: Approximately 75 percent of the area is in the semi-primitive motorized component of the recreation opportunity spectrum, while the remaining 25 percent is considered roaded natural.

Although the western slopes of Mt. Emily are included within the roadless area, the ridge and escarpment known locally as Mt. Emily is approximately 1 mile east of the roadless area. This escarpment is adjacent to and overlooks the Grande Ronde Valley. The area is bounded on the east, west and north by National Forest System lands.

Key Attractions (if any, such as sensitive wildlife or scenic landmarks): 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 the exception of old railroad grades in the drainage bottoms. These grades were used to remove timber from portions of the area in the 1920s and ‘30s. With the exception of some damage that occurred to the stream channels and the grades themselves, the logging activity is not readily noticeable. There are several miles of jeep trails within the area and, in some instances, the jeep trails follow the old railroad grade.

Because of its relatively small size, the visitor can perceive the entire area from many points along the perimeter and within the interior. However, because of its compact shape, there are opportunities for solitude not found in many similar-sized areas. For many, the knowledge that roads are never more than 2 miles away detracts from a sense of self-reliance or adventure.

Recreation other than fall hunting is likely to remain low due to the lack of recreational attractions or scenic variety. There are no encumbrances that would preclude designating the area for unroaded recreational use.

Primitive Recreation Opportunities and Challenge: There are no outstanding opportunities for unusual adventure, excitement, or challenge. However, steep, rock outcrops within Fiddlers Hell are used for rock climbing.

Special Features: There are no special features or unique ecosystems located within the area.

Manageability and boundaries: More than 90 percent of the perimeter is surrounded by National Forest land. The remaining 10 percent is contiguous to small private land parcels. Boundaries generally follow along ridge top roads, section lines, or random lines, which marked the edge of previous timber harvesting. However, locating the boundaries on the ground, as delineated, is somewhat difficult, as they tend to follow the breaks in topography.

Therefore, proposed boundary changes for the Mt. Emily roadless area primarily involve relocating the perimeter to follow roads, which are more easily recognized and definable, than the topographical breaks. This is the case for the eastern half of the northern boundary (T.1S., R.37E., Sections 11 and 12) to follow FS Road 3100; and along the northeastern corner (T.1S., R.38E., Section 7) and southeastern edge (T.1S., R.38E., Sections 19 and 30 to the 3120-300 Junction) to follow Forest Road 3120.

Along the northeastern edge in the southern portion of Section 7 and 18 (of T.1S., R.38E.) the perimeter has been re-delineated to exclude Forest Road 3120-050.

Minor changes in the southeastern corner (T.1S., R.37E., Sections 24 and 25) include relocating the boundary to follow the harvest unit and stream. An additional recommendation is to use the section line between Sections 35 and 36 (of T.1S., R.37E.) as the perimeter, so as to exclude a parcel located in the southeast quarter-section of Section 36 where we have surface rights, but not subsurface rights which were retained by the previous landowner.

Final changes involve relocating the boundary in the southern end (T.2S., R.37E., Section 2) to follow Forest Road 3120-650; and moving the western perimeter upslope from the breaks to follow the 3112 Road, up to the Forest Road 3100 junction, with additional minor tweaks in the northwestern corner.

Availability

Recreation: If the area were designated for wilderness, the types of recreation occurring now would be affected. The roadless area currently has approximately 3.7 miles of pack stock/hiker trail and 5.5 miles of OHV trails. The roadless area receives fairly high OHV cross-country travel during hunting seasons. The roadless area is also bordered by designated snowmobile routes, which may allow some snowmobile cross-country travel during the winter months.

Wildlife: The eastern one-third of the area is mapped (2000) habitat for threatened Canada lynx and the entire area provides high-quality summer range for elk. Much of the area is difficult to access by humans due to steepness, down-log accumulations, and dense vegetation, which contributes to the security qualities for elk. Fiddlers Hell Creek in the southeastern portion of the area contains a prairie falcon eyrie. There is also abundant, high-quality old-growth forest structure capable of supporting Vaux's swifts, all primary cavity excavators found in this area, and other large tree-dependent species.

Water/Fish: The designated roadless area is located in the Upper Five Points Creek Subwatershed. The major streams in the area are Middle Five Points Creek, a tributary to the Grande Ronde River, and Mt. Emily Creek, Tie Creek, and an unnamed tributary, all draining into Five Points Creek. All are perennial and fish-bearing. All of these streams contain spawning and rearing habitat for summer steelhead, listed as threatened under the Federal Endangered Species Act.

Historic timber harvest may have had some impact on habitat conditions within the roadless area. Favorable stream habitat conditions are being maintained by current management direction.

Stream temperatures measured at the Middle Five Points Creek-Mt. Emily Creek confluence from 1991 through 2004 average less than 64° F. Temperatures are in compliance with the Clean Water Act stream temperature criteria resulting in no streams from the roadless area being listed on Oregon Department of Environmental Quality (ODEQ) 1998 303 (d) list of "Water Quality Limited Streams." In 2000 a Total Maximum Daily Load (TMDL) – Water Quality Management Plan (WQMP) for the Upper Grande Ronde Subbasin (UGRS) was developed and approved to address all of the streams on the 303 (d) list in the UGRS.

Water quality and stream habitat conditions are important for the maintenance of aquatic species present and utilizing these stream systems. The generally good water quality in the upper headwaters of the streams draining the area is maintained by roadless characteristics, topography, and minimal disturbance.

Streamflow discharges or runoff in Upper Five Points Subwatershed are characteristic of a snowmelt hydrograph, with late spring and fall rains contributing to the annual average flows of the Grande Ronde River of 389 cfs at La Grande (USGS Water Report 1989). Peak flows usually occur in March and April with flows gradually decreasing to minimum discharges in August and September.

Rain-on-snow events, although relatively uncommon for the drainage, are highly influential on peak flows. These events have been responsible for several of the highest flows on record, originating from mid-elevation ranges of 3,000-4,500 feet.

A potential source of water power is located near the Middle Five Points Creek-Mt. Emily Creek confluence in T.1S., R.37E. Section 14. A site for potential water storage development is located downstream of the designated roadless area in T.2S., R.37E., Section 3. There are no plans at this time to develop these sources.

Range: The area is not grazed by livestock at present and there are no plans to permit grazing in the near future.

Timber/vegetation: The area contains 6,858 acres of productive forest land with 17.6 MMBF of timber. Approximately 50 acres of fuels reduction are planned for this roadless area under the Mt. Emily Fuels Reduction project.

Minerals: Although there are no known locatable mineral deposits, the area is considered prospectively valuable for oil and gas by the U.S. Geological Survey. There were five oil and gas leases that covered the entire Township (1 South) and Range (37 East), all of which expired and were closed in 1982. There are no known geothermal opportunities.

Cultural: Although there are no known significant cultural or historic values, there are historic railroad grades located in the southern end of the roadless area.

Land use/Special Uses: Current special use includes permits for an outfitter/guide. There are no plans at this time to develop potential water sources as previously described.

Fire: The area has moderate/heavy surface fuel loads and an above average fire occurrence rate. The combination of fuels and topography in this area are conducive to large wildfire development. Due to close proximity of private property and improvements on that property a very aggressive fire suppression strategy program is warranted within this roadless area.

Insects and disease: Many factors affect tree and stand susceptibility to insects and diseases. Both inherited and environmental factors play a role in predisposition to insects and diseases. The availability of growing space to tree in a stand in an important factor-governing tree and stand vigor (Cochran, et al, 1994).

Endemic levels of insect and disease provide diversity to forest stands and the landscape; however, many mixed conifer stands in the Blue Mountains have been damaged by a variety of insects and diseases, compounded by protracted draught, overstocking, and inappropriate past management (Schmitt and Scott, 1993). Severe root disease centers exist in the area including armillaria (Armillaria ostoyae), laminated root rot (Phellinus weirii), annosus (Heterobasidion annosum) and black stain root disease (Leptographium wagerneri).

Private lands: The roadless area previously contained one 160-acre parcel of private land, all of which is timbered and undeveloped. Although the Forest Service has surface rights to this parcel, the subsurface rights were not turned over. Therefore, recommended boundary changes involve excluding this piece from the roadless area.

North Mount Emily Roadless area is administratively shared with the Umatilla National Forest, and the discussion is located in the Umatilla's Areas with Wilderness Potential document.

Reservoir Roadless Area (#6284)
15,300 Acres

Overview

History: The Reservoir Roadless Area was partially within the Eagle Cap Wilderness prior to 1972 when it was removed to make more manageable boundaries and to exclude four irrigation reservoirs of importance to a number of ranches outside the Forest boundary.

In the current Wallowa-Whitman Forest Plan, 12,400 acres were designated to backcountry use, and currently allow snowmobile use. Another 1,006 acres were designated summer range. Some harvest has occurred and there are open roads are in this area.

Location and Access: The area is about 12 miles north of the town of Halfway, Oregon, and several miles northeast of the old mining community of Cornucopia. Fish Lake and Fish Lake Campground are a half-mile east of the eastern boundary of Reservoir Roadless Area and are accessed by Forest Road 66. The area adjoins the southeast boundary of Eagle Cap Wilderness. East Pine Creek, Clear Creek and the east fork of Pine Creek all drain from the area.

Geography/Topography: The area has varied topography, ranging from steep Sugarloaf and Russell Mountain (both over 7,400 feet) to 5,000 feet elevation at the creeks draining the area. Soils are of granitic origin combined with volcanic ash in timbered areas.

Vegetation/Ecosystem: Granite outcroppings and glaciated valleys typical of the south faces of the Wallowa Mountains make up the northern portion of this area, which gradually slopes off to the south with intermixed patches of high-elevation forest and meadows. Ecosystems here are typical of the mid- to high-elevation levels of the Wallowa Mountains in the Eagle Cap Wilderness.

Current Uses: Recreation use is mostly associated with fall big-game hunting, berry picking, fishing, and snowmobiling.

Appearance and Surroundings: Approximately 7,800 acres are considered to be within the semi-primitive non-motorized portion of the recreation opportunity spectrum (ROS), 2,800 in semi-primitive motorized and 2,900 in roaded natural.

Key Attractions (if any): none

Inventory Criteria

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

Capability

Naturalness and Undeveloped Character: The Reservoir Roadless Area is bounded on all sides by National Forest land. Sights and sounds of human activities would be noticeable on the eastern and western boundaries due to its proximity to mining areas and a campground. The central and northern portions offer opportunities for primitive hiking, and serve as buffer for the Eagle Cap Wilderness.

Fish Lake Campground is near the area. Most of the recreation that occurs in the area is dispersed semi-primitive use, such as hiking, riding, hunting, and camping. The area is very popular for snowmobile use in the winter.

Primitive Recreation Opportunities and Challenge: This roadless area is easily accessed by hikers or packers and contains a user-friendly trail system for the majority of the public regardless of age or

physical condition. The western portion of the area provides a small degree of challenge for the user but is still easily accessed.

Special Features: There are no outstanding geological features in the area, however at times there are a large number of elk. The spectacular scenic views into the Eagle Cap Wilderness attract many users.

Manageability and Boundaries: Eagle Cap Wilderness is immediately to the north. The Oregon portion of Hells Canyon Wilderness is 13 miles to the east. The area to the south and west is roaded and include some private property.

Availability

Recreation: The main recreation opportunity is for primitive big-game hunting. Roads and jeep trails into the area are generally closed during big-game hunting season. Portions of the area have moderate to heavy snowmobile use.

Wildlife: The area provides lynx habitat, elk summer range, travel corridors, and connectivity for several species, and old-growth habitat.

Water/Fish: No anadromous fish runs have existed in the area since construction of Hells Canyon Dam. Native populations of rainbow, eastern brook trout and bull trout are in the Pine Creek watershed. Tributaries from this area substantially contribute to the water quality of the entire watershed.

Four irrigation reservoirs and several miles of ditch lines exist within the area, as well as a number of trails. Wheel tracks exist in the more gradually sloped areas, and are used by permit for repair and maintenance of the dams and ditches.

Range: The roadless area is within the West Pine Valley grazing allotment. There are four separate grazing units currently in use.

Timber/Vegetation: The area includes 4,845 acres of productive forest land. Part of the western portion has been harvested.

Minerals: The area is 2 miles from the highly mineralized Cornucopia mining district and contains several old mines and prospects in the southwest portion in an area of gold and silver potential.

Cultural: Several cultural resource sites exist near the west side of the Reservoir area, including historic mining structures.

Land Use/Special Uses: There are five irrigation reservoirs and ditch systems that distribute the water. They are all under special use permit. Russel Mt. Lookout is located on the northern boundary between the roadless area and the Eagle Cap Wilderness.

Fire: The majority of the area consists of Fire Regime 4 Condition Class 3.

Insects and Disease: Endemic levels of insect and disease provide diversity to forest stands and the landscape; however, many mixed conifer stands in the Wallowa Mountains have been damaged by a variety of insects and diseases, compounded by protracted draught, overstocking, and inappropriate past management (Schmitt and Scott, 1993). The major insect in this area is the tussock moth.

Private Land: None

Sheep Divide Roadless Area (#6602) partially located outside of HCNRA

26,930 acres

Overview

History: Much of the Hells Canyon National Recreation Area (HCNRA) is in a roadless and undeveloped condition. Congress recognized this in establishing the NRA in 1975. The enabling legislation established Hells Canyon Wilderness Area and directed the Forest Service to specifically review additional areas for wilderness suitability. Sheep Divide was not one of those congressionally designated study areas.

In 1977, the Secretary of Agriculture directed the Forest Service to make a comprehensive inventory, review, and evaluation of all National Forest roadless and undeveloped areas. This process, known as RARE II, resulted in an allocation of all inventoried areas to one of three categories: wilderness, non-wilderness or further planning. RARE II was completed early in 1979, but land-use allocations for roadless and undeveloped areas in the HCNRA were reserved for recommendation in the Comprehensive Management Plan. Sheep Ridge was allocated to non-wilderness and the forest plan land management allocations placed 50 percent of the area in forage emphasis and 50 percent in wildlife/timber management.

Location and access: The roadless area is located west of the Imnaha River between the town of Imnaha to the north and Line Creek to the south, primarily in T.1&2S., R.42E. Private lands along Sheep Creek form the western boundary and the eastern boundary abuts the private lands adjoining the Imnaha River. It includes most of the rim country overlooking the Imnaha River. The southwestern boundary is accessible by the Beeler Ridge Road. Although the area's eastern boundary is accessible from the Imnaha River Road through private land, much of the area is inaccessible to the public. Part of the roadless area is within the Hells Canyon National Recreation Area.

Geography/Topography: Elevations range from 2,400 to 5,400 feet. Basalt rimrock is the dominant feature.

Vegetation/Ecosystem: Existing stand structures and associated species composition vary with landform, elevation, and aspect changes, and with edaphic and precipitate gradients encountered within the Imnaha corridor. Toe slopes and drainage bottoms (2,400-4,400 feet) are characterized by early to mid-seral stands dominated by scattered large-diameter ponderosa pine and Douglas-fir predominants that are vertically arranged over even-aged groups of pole- to small-sized ponderosa pine second growth. Pinegrass and elk sedge dominate the ground vegetation. The oversteepened slopes (in excess of 60 percent) of basalt breaklands are characterized by vertical timbered stringers on northern slopes contrasted with bluebunch wheatgrass/Idaho fescue/silky lupine communities on the southern slopes. The timbered stringers are dominated by pole to small diameter Douglas-fir, grand fir, and ponderosa pine associated with scattered residual large diameter ponderosa pine. The percentage of understory grand fir increases to the south.

Current Uses: The area has a history of grazing because of its proximity to private land. Numerous fences exist throughout the roadless area. Big game hunting is limited because access from the east is mostly from private land. Partial access from the west is possible from a road atop Beeler Ridge.

Appearances and surroundings: Natural ecosystems for the most part operate freely. Much of the area appears natural even though it is close to private land.

Key Attractions: It is steep, rocky grassland with some trees and brush in stream bottoms and on north slopes. Rimrock formations are common and very scenic.

Inventory Criteria

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

Capability

Naturalness and Undeveloped Character: Sense of solitude and remoteness is low to moderate. Because of its orientation, most of the area is visible from the Imnaha River Road. This area is 2 miles across at its widest point.

The area provides limited big game hunting opportunities, mostly non-motorized. Topography and location limit access.

Primitive Recreation Opportunities and Challenge: The roadless area is very steep and rugged with basalt rimrock the dominant feature. It is only 2 miles wide at its widest point.

Special features: None.

Manageability and boundaries: The management of the area as a wilderness would be difficult due to its narrow configuration and many miles of boundary. In addition, the boundary could not be adjusted to effectively insulate the interior from the sites and sounds of human activity.

Availability

Recreation: Because of steepness and access issues, very little recreation activity exists. Some hunting does occur for those who have access through private land.

Wildlife: The area has a wide variety of habitat from rim country along the Imnaha River to high-elevation habitats.

This area provides escapement for elk, deer and bear during hunting seasons as well as movement corridors. Rock cliffs provide nesting for avian species, roosting sites for bats, and unique habitats for other wildlife species (such as cougars, rodents, etc.). Peregrine falcons have been noted foraging within the area, but are no suitable cliffs for nesting. Spotted bats prefer roosting sites in crevices in cliffs or canyon walls. This species has not been noted in this area, although no recent surveys have been conducted. Older surveys have noted other species of bats within the area. Possible wolverines have been sighted near this area.

This roadless area provides travel corridors for many wildlife species as well as habitat for Canada lynx and wolverine denning and foraging. Prairie falcons have been sighted and have possibly nested within or adjacent to this area. This area is unique because of its high-elevation communities and its use as summer range by elk and deer. This area provides many avenues of escapement for elk and deer during hunting seasons. Mountain goats have also been released within this area and appear to be increasing in population.

Water/Fish: The streams are primarily steep intermittent and perennial tributaries to the Imnaha River, none of which are habitat for any listed fish species. The area is bounded for approximately 2 miles by the Imnaha River, which provides rearing and migration habitat for Snake River steelhead, Snake River spring/summer Chinook salmon, and Columbia River bull trout. This part of the river is too warm for spawning of Chinook salmon, bull trout, and steelhead tend to spawn higher in the system in tributary streams.

This portion of the Imnaha River is on the Oregon Water Quality Limited Streams 303(d) List for the following criteria: bacteria, flow modification, nutrients, sedimentation, temperature exceeding 64 degrees for steelhead rearing, and toxics (mercury). The river flows primarily through private land in this reach**.**

Range: The roadless area intersects eight active allotments and one vacant allotment which provide 2,882 HMs (head months) of grazing and 3,687 AUMs (animal unit months) of annual forage. Range improvements found within the roadless area include 5¼ miles of wire fence and 25 spring developments.

The various forage-producing plant communities range from early seral to late seral. Generally, during the 120-year history of domestic livestock grazing in the area, the impacts on plant communities found on the gentler-sloped terrain were greatest in unmanaged areas. Because the majority of acres within the roadless area are steep to very steep, the impacts of livestock grazing have been regulated to some degree by slope preference of animals. Historically, the steep and very steep slopes were allocated as sheep and goat allotments and the gentler sloped range was allocated to cattle and horses. Today vegetative trends on the steep-sloped sheep range are stable to upward since sheep grazing has not been practiced for the past 10 years or more. Historic vegetative trends on the cattle ranges tend to be trending upward more slowly from the lows of the 1920s when stocking rates came off of the historic highs following World War I. Vegetative trends on cattle ranges rose at a steeper rate in the late 1950s and 60s as a result of changing from season-long grazing to deferred and rest rotation methods. This divided vast open rangelands into smaller units or pastures, which allowed a higher degree of control. During the late 1970s and '80s, vegetative trends within riparian zones began to move in a positive direction when rangeland ecologists introduced an initiative to improve the ecological status of western riparian zones.

Timber/Vegetation: Historically, mid- to late summer lightning-caused fires burned across a mosaic of plant communities. The fires were of mixed severity and varied in size depending upon the severity of the existing fire weather conditions and the vulnerability of the plant community to fire. Lower elevations, 1,900 to 4,400 feet, historically had short fire-free periods and limited encroachment by trees and brush. In the mid-elevation range, fires were less frequent and were of mixed severity and varied in size. Historically in the higher elevation subalpine zone, fires were infrequent and in some cases under severe weather conditions resulted in stand replacement fires. In the last 90 years, fire exclusion in forested plant communities has dramatically changed the woody vegetation from stands dominated by early seral, fire-adapted species to stands and communities that are less fire-resistant.

This area has received very limited plant inventory. There are no known Region Six sensitive plant species (2005) known to occur within this area. This area also has potential for several other FS-sensitive species.

Botanical species-of-interest* within this area:
*(Plant species found frequently enough within their own range and/or without significant threats, such that they would warrant inclusion on the Region 6 (or 1) sensitive species list, but they are of unique habitats and/or very limited distribution within the Wallowa-Whitman National Forest.)

- *Bolandra oregana* – six known occurrences - seeping cliffs and steep slopes in warm canyons
- *Mimulus patulus* – one known occurrence - ephemeral moist openings in timber or grasslands or on moist rock outcrops

A cursory look at the aerial photo coverage and GIS vegetation data suggests that it is likely that this area contains potential habitat for additional rare plants as well as unique plant communities/associations. There are many sensitive, endemic, and disjunct plant species likely to be found within that part of the Sheep Divide Roadless Area that falls within the HCNRA. A list of these species can be found in Appendix G of the Comprehensive Management Plan for the Hells Canyon National Recreation Area. At this time there is insufficient information to determine the extent to which they occur within this roadless area.

This roadless area also likely contains a number of rare combinations of outstanding and diverse ecosystems and parts of ecosystems. A list of these plant communities can be found in Appendix G of the Comprehensive Management Plan for the Hells Canyon National Recreation Area. At this time there is insufficient information to determine the extent to which they occur within this road-less area.

Minerals: None

Cultural: Only two prehistoric sites are currently identified in the Sheep Divide Roadless Area, however, within 50 meters or so of the boundary area, a late prehistoric or proto-historic burial cairn is located on private land. The two documented sites consist of a rock shelter and an extensive lithic scatter. Based on the inventory probability protocol, additional sites are expected to be in the area as it contains the divide between the Imnaha and Big Sheep creeks and would have had considerable spring, summer and fall resource use.

Land use/Special use: None.

Fire: Fire regime 1 and 2 with a mixed condition class of 2 and 3 represent the majority of the area. Fuel models consist of models 2 and 8.

Insects and Disease: Endemic levels of insect and disease provide diversity to forest stands and the landscape; however, many mixed conifer stands in the Wallowa Mountains have been damaged by a variety of insects and diseases, compounded by protracted draught, overstocking, and inappropriate past management (Schmitt and Scott, 1993).

Private Lands: None.

Squaw Roadless area is administratively shared with the Umatilla National Forest, and the discussion is located in the Umatilla's Areas with Wilderness Potential document.

Tope Creek Roadless Area (#G03)

11,780 Acres

Overview

History: This area was inventoried during the first Roadless Area Review and Evaluation and allocated to non-wilderness uses through the Wallowa Valley Forest Plan of November 3, 1975. During RARE II and the subsequent 1984 Oregon Omnibus Wilderness Act, this area was not recommended for wilderness.

Location and access: The area lies approximately 20 miles northwest of Enterprise in T.3&4N., R.43E., and can be reached via Wallowa County Road 500: the Powatka Ridge Road.

The area includes the upper reaches of Mud Creek, including Tope Creek, a major tributary. Mud Creek runs northerly and enters the Grande Ronde River about 5 miles north of the roadless area.

Geography/Topography: The canyons within the area are deep and precipitous, typical of many of the Snake River and Grande Ronde River breaks.

Vegetation/Ecosystem: Lower breaklands (3,200-4,500 feet) are characterized as warm/dry Douglas-fir climax plant associations. The type generally dominates the steep forested canyon slopes within the roadless area. Aspect strongly controls the location and orientation of these communities. Generally, contrasting bunchgrass communities occupy the southern aspects. A floor stratum of snowberry and ninebark has been stimulated following the release of available growing space and Douglas-fir advanced regeneration has become established in the created gaps. Riparian bottoms (2,400-3,200 feet) transition into a cool/dry environment and consist of multi-layered structures of ponderosa pine predominants, vertically arranged over a layered understory of Douglas-fir and grand fir. The south and west slopes are of grass and shrub types.

Current Uses: Most of the area is within the semi-primitive non-motorized portion of the recreation opportunity spectrum. Recreation use is almost exclusively for big-game hunting during elk and deer seasons and amounts to approximately 400 recreation visitor days per year. Other than hunting, the perimeter of the area offers interesting views of rugged canyon topography. However, because it is relatively inaccessible, it does not share the viewing popularity of nearby Joseph Canyon, which lies along State Highway 3.

The slopes formed by the tributaries of Kuhn Creek in T.4N., R.43E., Sections 22, 26, and 27, were logged by helicopter in a fire salvage years ago. Visible stumps remain. Line logging also occurred on the fringes of the roadless area off of Forest Roads 3030451, 3220175, and 8220145 in T.3N., R.43E., Sections 9, 11, and 14.

Appearances and surroundings: The interior of the area remains natural appearing except for fences, livestock watering facilities, and livestock trails. There are no known special features within the area.

Key Attractions: The deep canyons attract both hunters and sightseers.

Inventory Criteria

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

Capability

Naturalness and Undeveloped Character: Because of its shape and size, a visitor can perceive the entire area from nearby points. The sounds of motor vehicles would often be audible from much of the interior of the area.

There is a sense of solitude within the depths of the canyons, particularly in the timbered portions, and traversing the difficult terrain would contribute to a spirit of adventure.

Recreation use is almost exclusively big-game hunting during deer and elk seasons.

Primitive Recreational Opportunities and Challenges: The sense of self-reliance would be low for many users because of the relatively small size of the area and correspondingly short distances to roads.

Special features: None

Manageability and boundaries: Because of its narrow, relatively small sized, irregular configuration, and many miles of boundary, manageability of the area as wilderness would be difficult. Because of its shape and size, a visitor can perceive the entire area from nearby points on the perimeter. The sounds of motor vehicles would often be audible from much of the interior of area. There is a sense of solitude within the depths of the canyons, particularly in the timbered portions, and traversing the difficult terrain would contribute to a spirit of adventure. The sense of self-reliance would be low for many users because of the relatively small size of the area and correspondingly short distances to roads.

The interior of the area remains natural appearing except for fences, livestock watering facilities, and livestock trails. There are no known special features or notable opportunities for scientific, archaeological, or historical study, nor are there known threatened or endangered species of plants or animals.

Availability

Recreation: Recreation opportunities include big game hunting. Most of the area is considered to be within the semi-primitive non-motorized portion of the recreation opportunity spectrum.

Wildlife: The Tope Creek Roadless Area is comprised of three main drainages: Mud, McAllister and Tope Creek. These drainages are steep, mainly grasslands with some shrubs and some of the east and west draws are forested. There are many rock rims within the drainages.

These drainages provide partial wildlife corridors from the Grande Ronde River south to the Eagle Cap Wilderness although there is a large block of private land in between. This area provides many unique habitats that are used by many wildlife species.

This area provides escapement for elk, deer and bear during hunting seasons as well as movement corridors. The many rock cliffs provide nesting for avian species, roosting sites for bats and unique habitats for other wildlife species (such as cougars, rodents etc). Peregrine falcons have been noted foraging within the area, but are no suitable cliffs for nesting. Spotted bats prefer roosting sites in crevices in cliffs or canyon walls. This species has not been noted in this area, although no recent surveys have been conducted. Older surveys have noted other species of bats within the area. Wolverines have been sighted near this area.

This area also provides habitat for amphibian and reptiles. The rock rims provide excellent habitat for snakes and lizards and the riparian zones provide ample habitat for these species as well. This is appropriate habitat for bighorn sheep and there are some bighorns along the Grande Ronde River, none have noted within this roadless area.

Water/Fish: Mud and Tope creeks are anadromous fish streams and provide spawning habitat for salmon and steelhead.

Range: The roadless area intersects four active allotments which provide 2,453 HMs (head months) of grazing use and 3,223 AUMs (animal unit months) of forage annually. Range improvements found within the roadless area include wire fence.

The various forage-producing plant communities range from early seral to late seral. Generally, during the 120-year history of domestic livestock grazing in the area, the impacts on plant communities found on the gentler-sloped terrain were greatest in unmanaged areas. Because the majority of acres within the roadless area are steep to very steep, the impacts of livestock grazing have been regulated to some degree by slope preference of animals. Historically, the steep and very steep slopes were allocated as sheep and goat allotments and the gentler sloped range was allocated to cattle and horses. Today vegetative trends on the steep-sloped sheep range are stable to upward since sheep grazing has not been practiced for the past 10 years or more. Historic vegetative trends on the cattle ranges tend to be trending upward more slowly from the lows of the 1920s when stocking rates came off of the historic highs following World War I. Vegetative trends on cattle ranges rose at a steeper rate in the late 1950s and 60s as a result of changing from season-long grazing to deferred and rest rotation methods. This divided vast open rangelands into smaller units or pastures, which allowed a higher degree of control. During the late 1970s and ‘80s, vegetative trends within riparian zones began to move in a positive direction when rangeland ecologists introduced an initiative to improve the ecological status of western riparian zones.

Timber/Vegetation: Fire regimes have been altered from their historic range, and fire frequencies have departed from historical frequencies. Existing vegetation patterns have developed in the absence of periodic fire. Historically, periodic fire functioned to eliminate the development of a floor stratum of conifers and maintain open, park-like structures of ponderosa pine and Douglas-fir. Fire’s absence has resulted in structures dominated by sapling to small late seral species.

These areas have not received any botanical inventory. There are no known Region Six sensitive plant species (2005) within this area.

A cursory look at the aerial photo coverage and GIS vegetation data suggests that it is likely that these areas contain potential habitat for rare plants as well as unique plant communities/associations. At this time there is insufficient information to determine the extent to which they occur within this road-less area.

Minerals: There is no evidence of locatable mineralization but the area is considered prospectively valuable for oil and gas by the U.S. Geological Survey.

Cultural: Nine cultural resource sites and two isolated occurrences were documented for the Tope Creek Roadless Area. Historic sites consist of a homestead and grave and a rock foundation and historic trash. One multi-component site was recorded that contains a spring trough and a lithic scatter. Prehistoric sites include three lithic scatters and two possible burial cairns. Additionally, two cairns of unknown age were recorded.

Land use/Special use: None

Fire: Fire regimes 2 and 3 with a mixed condition class of 2 and 3 represent the majority of the area. Fuel models 2, 8, and 10 occupy most of the area.

Insects and Disease: Timbered stands are dominated by a continuous overstory of pole to small diameter, mistletoe-infected Douglas-fir. The moderate to heavy infestations of mistletoe has predisposed the infected trees to bark beetle mortality as well as killed trees outright.

Private Lands: Nearly half of the perimeter abuts private land.

South Fork/Tower Roadless area is administratively shared with the Umatilla National Forest, and the discussion is located in the Umatilla's Areas with wilderness potential.

Twin Mountain Roadless Area (#6273)

57,730 Acres

Overview

History: This area was considered in RARE and RARE II studies, but was not selected for wilderness. Mining within the area was the primary factor in eliminating the area from the wilderness consideration in RARE II. However, approximately 15,000 acres were placed in the North Fork John Day Wilderness by the Oregon Wilderness Bill of 1984. The carving out of this wilderness addition resulted in isolating two western portions of the area, including Mt. Ireland. The remainder lies primarily within the Powder River Drainage.

In 1988, the Omnibus Oregon Wild and Scenic Rivers Act designated the North Powder River as a Scenic River. Approximately 2,000 acres of the roadless area are within the Scenic River Corridor.

On the east side of the roadless area, roads have been closed, although several miles of open roads have been buffered out within the boundaries to access extensive private in-holdings.

Location and Access: The roadless area lies about 20 miles west of Baker City and is within Baker and Grant counties. It encompasses most of the Elkhorn Mountain Range.

Geography/Topography: Similar to the Wallowa Mountains (Eagle Cap Wilderness) 40 miles to the northeast, the area is characterized by jagged mountain peaks that reach above timberline, deep glaciated canyons, cirque basins with small lakes, and numerous headwaters of several streams, including Cracker Creek, Dutch Flat Creek, North Fork of Powder River, and Rock Creek. Five of the lakes have been enlarged by low dams to increase storage for downstream irrigation.

The Elkhorn Range is the second largest geologic batholith in Oregon (second to the Wallowa Mountains). Soils are formed from granodiorite parent material and volcanic ash from Cascade volcanic

eruptions. Elevations range from 5,000-8,900 feet. Along with the Marble Point Roadless Area, it forms a scenic backdrop from the Baker Valley on the east and the Sumpter Valley on the west.

Vegetation/Ecosystem: The area is characterized by jagged mountain peaks and high meadows above the timberline. Species composition has shifted to a greater percentage of fir, as compared to a historically greater dominance by pine and larch.

Current Uses: Most of the lakes and streams provide trout fishing and the area is popular in the fall for big-game hunting. Several trails are popular for hiking and off-road recreational uses. It includes the Elkhorn Crest National Recreation Trail.

Appearance and Surroundings: Approximately 3,900 acres of the area are in the semi-primitive motorized component of the recreation opportunity spectrum (ROS) while 34,000 acres are considered semi-primitive and 16,000 acres are in the roaded natural component, 7,003 acres are in roaded natural motorized.

Key Attractions: The Elkhorn Crest National Scenic Trail runs through the area.

Inventory Criteria

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

Capability

Naturalness and Undeveloped Character: The area is natural appearing with the exception of wheel-track roads, evidence of prospecting and mining, dams on several of the small lakes, and areas along the perimeter where woodcutting has encroached. Approximately 591 acres is excluded from the area for expansion of the Anthony Lake Ski Area.

The primary activities for the area include big-game hunting, hiker/packer, fishing, sightseeing, and ATV riding.

Primitive Recreational Opportunities and Challenges: Because the area is relatively large, there are ample opportunities for solitude and for experiencing a sense of self-reliance and adventure. There are many opportunities for panoramic views from the popular Elkhorn Crest Trail and other points.

Special Features: The area does not posses any special features.

Manageability and Boundaries: The eastern boundary is the Forest boundary. The northern boundary is Anthony Lake Ski Resort and Forest Road 7300. The western and southern boundaries are irregular and more difficult to identify.

Availability

Recreation: Big-game hunting, hiker/packer, fishing, ATV riding, sightseeing.

Wildlife: The area contains a wide variety of wildlife with elk, deer, and grouse being the primary game species. Mountain goats transplanted into the Elkhorn Range have increased in numbers.

Water/Fish: Some of the streams that start in this area include Cracker Creek, Dutch Flat Creek, North Fork of Powder River, and Rock Creek. Five of the lakes have been enlarged by low dams to increase storage for downstream irrigation.

Range: Most of the area is not suitable for grazing due to erodable soils, lack of forage, or rugged terrain. Several areas at lower elevations are grazed as part of livestock allotments.

Timber/Vegetation: Canyons and north slopes below 8,000 feet are timbered**.** The area contains 22,775 acres of productive forest land.

Minerals: The area is mineralized as evidenced by approximately 200 mining claims and many prospects and old mines. Portions of the North Pole-Columbia Lode (the largest gold-producing structure in the state), the Highland-Maxwell vein system, the Baisley-Elkhorn vein system, and the Cable Cove mining district are within this area. Gold is the most sought-after mineral, but copper, lead, tungsten, antimony, and molybdenum are also found. Although exploration continues, there are currently no operating mines in the roadless area.

Cultural: Sites related to the early mining history of the area abound, and some pre-historic sites exist within the roadless area.

Land Use/Special Uses: Baker City Watershed, a pipeline and a city-owned building.

Fire: The area consists of Fire Regime 4 Condition Class 1&2 and Fire Regime 3 Condition Class 1.

Insects and Disease: Many Endemic levels of insect and disease provide diversity to forest stands and the landscape; however, many mixed conifer stands in the Wallowa Mountains have been damaged by a variety of insects and diseases, compounded by protracted draught, overstocking, and inappropriate past management (Schmitt and Scott, 1993).

Private Land: The scattered patented mining claims total to over 1,300 acres of private land within the roadless area.

Upper Catherine Creek Roadless Area (#6281)

7,020 Acres

Overview

History: This area was not inventoried in RARE; however, it was inventoried in RARE II and allocated to non-wilderness in the 1978 FEIS for the Grande Ronde Planning Unit. It was again considered by Congress in 1984 when approximately 65 percent of the area was added to the Eagle Cap Wilderness by the Oregon Wilderness Bill of 1984.

Location and access: The Roadless area is located in T.4S., R.42E. at the southeastern end of the La Grande Ranger District within the Catherine Creek Watershed. It lies south of Bald Mountain, immediately south of the Little Creek Roadless Area, and north of Flagstaff Butte. Access to the area is via Forest Roads 7785, 7787, 7700 and 2036. It is immediately west of the Eagle Cap Wilderness.

Geography/Topography: Soils are dominantly of basalt origin with surface volcanic ash deposits. Uplift and erosion have exposed granite sedimentary and volcanic rock in the eastern portion of the Catherine Creek watershed. The headwater drainages along the eastern edge of Catherine Creek are steep and high elevation, and are highly dissected by the stream networks of the North Fork Catherine Creek, South Fork Catherine Creek, Pole Creek, Middle Fork Catherine Creek, Buck Creek, and Sand Pass Creek.

The remaining area is generally the lower elevation portion, although elevations do range from as high as 7,400 feet near Burger Butte to 4,200 feet near the North Fork Catherine Creek Trailhead.

Vegetation/Ecosystem: Virtually all species of trees on the forest are found here, with Douglas-fir, ponderosa pine, grand fir and western larch comprising most of the major commercial volume. The area is considered an above-average timber site for the Wallowa-Whitman.

There are no documented occurrences for any currently listed threatened, endangered, proposed, candidates, or Region Six sensitive plant species within the roadless area; however, several sensitive plant locations occur in the surrounding area.

Three inventoried noxious weed sites occur within the area and total 1.29 acres. Specific weeds found within the area are Canada thistle and hounds tongue. There are likely more weeds within the area than are currently inventoried.

Current Uses: Primary on-site recreation use is for big-game hunting and fishing. Some OHV and snowmobile cross country travel might occur.

The entire area is grazed by cattle and lies within three active allotments: Catherine Creek, Pole Creek, and Big Creek. Permittees use trails to move and gather livestock

Existing roads and trails are used for fire suppression activities.

Appearance and surroundings: Approximately 30 percent of the area is within the roaded natural component of the recreation opportunity spectrum (ROS), while 60 percent is considered semi primitive and 10 percent is in the semi primitive motorized component.

The area is natural appearing and the location next to the Eagle Cap results in a contiguous characteristic.

Key Attractions (if any): There are no unique or scenic landmarks within this narrow band, as most are included in the Eagle Cap Wilderness to the east.

Inventory Criteria

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

Capability

Naturalness and Undeveloped Character: Because the area amounts to a mile-wide fringe along the edge of the existing wilderness, a visitor is never far from roads or sounds of humans. Therefore, within the roadless area proper, there is not a high opportunity for experiencing a sense of self-reliance or solitude.

The area provides opportunity for semi primitive recreation. The southern third of the area is primarily backcountry with opportunities for horse and hiking trails.

Primitive Recreational Opportunities and Challenges: The area does not require the use of specialized skills, tools or experience.

Special Features: There are no special features or notable known opportunities for scientific, archaeological or historical study.

The Catherine Creek Roadless Area contains mapped habitat (2000 mapping) for threatened Canada lynx. The area provides high-quality summer range and security habitat for big game. It also contains one allocated old-growth area.

Manageability and boundaries: In general, the roadless area boundaries are determined by the location of harvested units and roads. The roadless area is a long, narrow strip of land, ranging from less than one-half to more than 2 miles wide. It is surrounded by National Forest land on the north, west and south. The eastern perimeter is immediately adjacent to the Eagle Cap Wilderness boundary.

It is suggested that the boundary between the Little Creek Roadless Area and Upper Catherine Creek be changed to the watershed boundary. This would move approximately 225 acres (in T.4S., R.42E., Sections 14 and 15) of the Little Creek area into the Upper Catherine Creek area in Sections 22 and 23.

Availability

Recreation: Five horse/hiker trails totaling about 7.7 miles pass through the area providing access to the Eagle Cap Wilderness. This roadless area is bordered by the Buck Creek Trailhead and the North Fork Catherine Recreation Area and Trailhead.

Wildlife: This entire roadless area is mapped as habitat for Canada lynx. This area is contiguous with other lynx habitat in the Eagle Cap Wilderness area. This area is likely capable of supporting lynx if they were to become re-established in the Eagle Caps.

The Upper Catherine Creek roadless area is high-quality summer range for deer and elk, and provides some of the best quality security habitat in the Catherine Creek Wildlife Management Unit. The area's adjacency to the Eagle Caps, contiguous un-fragmented cover, and low human intrusion contribute to its value as security habitat.

One allocated old growth area of approximately 170 acres is located at the North Fork of Catherine Creek in the middle of the roadless area. The old-growth habitat within this allocated area is of marginal to high quality, according to 1995 inventory. The northern portion of this roadless area is contiguous conifer cover and the southern portion is naturally fragmented land types. The area is capable of supporting breeding populations of American marten, northern goshawk, and other higher elevation old growth associated wildlife species.

Water: More than half of the roadless area is in the combined North Fork Catherine Creek, Middle Fork Catherine Creek, and Upper North Fork Catherine Creek Subwatersheds. Major perennial fish-bearing streams in the area are North Fork Catherine Creek, Middle Fork Catherine Creek, a tributary to North Fork Catherine Creek, and South Fork Catherine Creek. All converge to become a major tributary to the Grande Ronde River. Pole Creek and Sand Pass Creek, also perennial fish-bearing streams, are tributaries to South Fork Catherine Creek.

All of the reaches of streams listed on the Oregon Department of Environmental Quality (ODEQ) 1998 303(d) list of "Water Quality Limited Streams" are located downstream of the designated roadless area. In 2000 a Total Maximum Daily Load (TMDL) – Water Quality Management Plan (WQMP) for the Upper Grande Ronde Subbasin (UGRS) was developed and approved to address all of the streams on the 303 (d) list in the UGRS.

Water quality and stream habitat conditions are important for the maintenance of aquatic species using these stream systems. In general, the water quality in the upper headwaters of the streams that drain this area is good and is being maintained by roadless and topographic characteristics, and minimal disturbance.

Streamflow discharges or runoff in Catherine Creek watersheds are characteristic of a snowmelt hydrograph, with late spring and fall rains contributing to the annual average flows of Catherine Creek. Peak flows usually occur in May and June with flows gradually decreasing to minimum discharges in late August and September.

Fish: The fish-bearing streams within the roadless area are the North Fork of Catherine Creek, Pole Creek, Sand Pass Creek, the South Fork of Catherine Creek, and a small portion of Squaw Creek and Middle Fork of Catherine Creek. Spring Chinook salmon, summer steelhead, and bull trout, which are all listed as threatened under the Federal Endangered Species Act, inhabit the streams. Within the roadless area, the North Fork of Catherine Creek, Squaw Creek, Middle Fork of Catherine Creek, Pole Creek, Sand Pass Creek, and the South Fork of Catherine Creek provides spawning and rearing habitat for bull

trout. The North Fork of Catherine Creek, Middle Fork of Catherine Creek, Pole Creek, and the South Fork of Catherine Creek provide spawning and rearing habitat for summer steelhead. The North Fork of Catherine Creek provides rearing habitat for juvenile spring Chinook salmon. Favorable stream habitat conditions are being maintained by current management direction.

Range: The Catherine Creek, Pole Creek and Big Creek cattle and horse allotments cover the entire area. The area has limited use by livestock due to dense timber, steep slopes and lack of access

Timber/vegetation: There are 5,326 acres of productive land with a standing timber volume of 13.7 MMBF. Approximately 100 acres of the roadless area has been logged since 1990, mostly in the Middle Buck Timber Sale.

Minerals: There are no mineral claims.

Cultural: Two historic sites related to logging, and one isolated prehistoric site has been inventoried. Members of the Umatilla Confederated Tribes fish the area as part of their ceded land rights.

Land use/Special Uses: There are some outfitter guides with permitted use in the roadless area.

Fire: The Upper Catherine Creek Roadless Area is characterized by moderate to high surface fuels and continuous fuel beds. Most of the acreage within roadless area is within Fire Regimes 3 and 4. The majority of the fires that have occurred within this area have been caused by lightning. The potential for large wildfire is increased due to combination of fuels and topography.

Insects and disease: Endemic levels of insect and disease provide diversity to forest stands and the landscape; however, many mixed conifer stands in the Blue Mountains have been damaged by a variety of insects and diseases, compounded by protracted draught, overstocking, and inappropriate past management (Schmitt and Scott, 1993). The major insect in this area is the fir engraver (R6 2002, 2003 Aerial Pest Survey).

Private lands: The area contains no private land.

Upper Grande Ronde Roadless Area (#6275)

12,130 Acres

Overview

History: The Upper Grande Ronde Roadless Area was inventoried during the RARE II roadless area review and evaluation process but was not recommended for wilderness in the Grande Ronde Planning Unit Final Environmental Impact Statement in 1978.

Location and access: The roadless area lies to the north of the Elkhorn Range of the Blue Mountains, approximately 20-25 miles southwest of La Grande, Oregon, in T.7S., R.36E. Access is via National Forest Roads 51, 73 and 52.

The area is located in the Grand Ronde Sub-basin in Union County on the southwestern end of the La Grande Ranger District. It lies within the Upper Grande Ronde River Watershed.

Geography/Topography: Soils are moderately-to-very stable. Landslides are rare and surface materials are of fine to medium texture. Sub soils vary from very fine to course, depending on bedrock type. The area straddles the transition zone between Columbia River basalts in the lower north end, and the granitic material of the Elkhorn batholith to the south. Thus, soils are more erosive and of lower fertility in the southern portion.

Topography of the western half of the area is mostly a series of gentle basins and rolling ridges broken by steep but not particularly deep canyons. The eastern third of the area slopes steeply to the west toward the Grande Ronde River.

Elevations range from 4,700-7,200 feet.

Vegetation/Ecosystem: Nearly all tree species indigenous to the Forest are found in the area with lodgepole the most abundant. Grand fir, Engelmann spruce, and larch are common with ponderosa pine scattered along the eastern breaks of the Grande Ronde River. Small streams, springs and spruce bogs are numerous. Meadows are sprinkled throughout the southern end of the area and add variety to the otherwise unbroken tree canopy.

There are no currently listed threatened or endangered plant species within the area. There are several documented locations for Region Six Sensitive *Botrychium* (grapefern) species, as well as *Carex interior*.

The area contains one inventoried noxious weed site totaling 0.91 acres of Canada thistle. There are likely more weeds within the area than are currently inventoried.

The area contains the headwaters of the Grande Ronde River and the first 5 miles of its length. Also included are all of Tanner Creek, the upper reaches of Clear Creek and the East Fork of the Grande Ronde River. All are important tributaries of the Grande Ronde. The Grande Ronde River is an anadromous fish stream and efforts are underway to restore the salmon runs to levels that were present prior to the dams in the Snake and Columbia River.

There are no known threatened or endangered species of animals within the area, although the area does contain mapped lynx habitat.

Current Uses: The area supports deer and elk, which provide hunting opportunities. There is no longer a maintained trail system within the area; however, some cross country OHV and snowmobile travel might occur. Existing roads and trails are used for fire suppression. Designated snowmobile routes lie adjacent to the roadless area.

The area lies partially within the vacant Aurelia Sheep Allotment. There is no current livestock grazing.

Appearance and surroundings: The area provides semi primitive recreation opportunities. The area is inventoried as approximately 45 percent semi-primitive nonmotorized, and 45 percent semi-primitive motorized recreation opportunities. Due to the proximity of main roads, about 10 percent of the roadless area is classified Roaded Natural.

The Upper Grande Ronde Roadless area is comparatively large and contiguous, due to geographic location and steepness of terrain. There have been two relatively large wildfires within the area during the last 20 years.

Key Attractions (if any): There are no special features or unique ecosystems.

Inventory Criteria

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

Capability

Naturalness and Undeveloped Character: The area is surrounded by National Forest and the boundary is defined by roads or recent timber harvest. Within the area there are 10 or more miles of ditches constructed more than a half century ago to transfer water from natural drainages to hydraulic mining

sites. The ditches average 3 feet deep and 8 feet wide. There is no maintained trail system within the area.

The abandoned Aurelia Mine lies within the heart of the roadless area and is of historical interest. There are remnants of turn-of-the-century camps used by Chinese workers who were employed at the Aurelia and other mines to construct ditches.

The northern-most mile on the Grande Ronde River within the roadless area shows evidence of historic gold dredging, similar to several miles of mining activity outside the roadless area. Although trees of considerable size now grow on the tailing piles, the disturbance is far from healed, and like the ditches, serves as a reminder of historical mining activity. The same may be said of the remnants of several old mining cabins.

None of the man-made features are likely to detract from the recreation experience that is available and in fact they may add to it. It is doubtful that most people would consider the mining associated features as something that would disqualify the area from wilderness. In many areas, recently fallen insect-killed lodgepole pine trees make travel by foot or horseback difficult.

Primitive Recreational Opportunities and Challenges: There are no outstanding opportunities for unusual adventure, excitement or challenge.

Special Features: Attractive streams, meadows and forest scenes are abundant. This area contains mapped habitat (2000 mapping) for threatened Canada lynx, and provides high-quality summer range and security habitat for Rocky Mountain elk. There are three allocated old-growth areas at least partially within this area. Additionally, the area contains un-fragmented conifer cover and old-growth forest habitat.

Manageability and boundaries: Because of the size and configuration of the area, a visitor can seldom get more than 2 miles from a road. However, a sense of solitude is available because of the dense tree cover and numerous small draws and ridges. The size of the area would tend to limit the opportunity for primitive or challenging recreation experiences for most people, at least when compared to the opportunities for self-reliance found in larger, nearby primitive areas such as those of the North Fork John Day Wilderness or Eagle Cap Wilderness.

Proposed boundary changes include moving locations to more easily recognizable features.

Availability

Recreation: Currently there are no developed recreation opportunities. The majority of recreation use is associated with big game hunting.

Wildlife: Greater than 90 percent of the area is mapped as habitat for threatened Canada lynx. The portions that do not contain mapped lynx habitat are along the north boarder of the roadless area.

The entire roadless area is high-quality summer range for elk. The burned areas in the south and east provide abundant forage, whereas the remainder of the area functions as cover and security habitat. The contiguous conifer cover and low human intrusion provide security habitat in close proximity to abundant forage in the burned areas.

There are approximately 434 acres of high-quality, allocated old-growth within the roadless area. One allocated area exists entirely within the roadless boundary, and portions of two allocated areas lie within the roadless area.

The forested stands within the unburned portion provide a mosaic of lodgepole pine and mixed old-growth conifer. The type and arrangement of habitats provides for a variety of wildlife, including northern goshawk, black bear, elk, mule deer, several species of forest owls, Vaux's swifts, American martin, and

pileated woodpecker. The burned areas provide habitat for deer and elk foraging, red-tailed hawks, mountain blue birds, American kestrels, and other open habitat species.

Water/Fish: The majority of the designated roadless area is located in the Grande Ronde River/Tanner Gulch Subwatershed, and a small portion in the southeast part of the Grande Ronde River/Clear Creek. Major streams in the area are the Grande Ronde River, a tributary to the Snake River, and Clear Creek and East Fork Grande Ronde River, tributaries to the Grande Ronde River.

The reach of the Grande Ronde River located within the roadless area was listed for sediment and habitat problems and Clear Creek was listed for sediment problems on the Oregon Department of Environmental Quality (ODEQ) 1998 303(d) list of "Water Quality Limited Streams." In 2000, a Total Maximum Daily Load (TMDL) – Water Quality Management Plan (WQMP) for the Upper Grande Ronde Sub-basin (UGRS) was developed and approved to address all of the streams on the 303 (d) list in the UGRS.

Streamflow discharges or runoff in the Upper Grande Ronde River Watershed are characteristic of a snowmelt hydrograph, with late spring and fall rains contributing to the annual average flows. Peak flows usually occur in May and June with flows gradually decreasing to minimum discharges in August and September. A 10-year (1993-2002) streamflow record at a gauging station located just below Clear Creek on the Grande Ronde River has a mean yearly flow of 39 cfs and an average total flow of 13,171 cfs.

Water quality and stream habitat conditions are important for the maintenance of aquatic species present and using these streams. The water quality in the three streams that drain this area is generally good.

The fish-bearing streams within the roadless area are Clear Creek and headwater tributaries, the Grande Ronde River and headwater tributaries, and the East Fork of the Grande Ronde River. Spring Chinook salmon, summer steelhead, and bull trout, which are all listed as threatened under the Federal Endangered Species Act, inhabit the streams.

Within the roadless area, both Clear Creek and the Grande Ronde River, including their headwater tributaries, provides spawning and rearing habitat for remnant, fragmented populations of bull trout in the Upper Grande Ronde River Subbasin. The Grande Ronde River and East Fork Grande Ronde River provides spawning and rearing habitat for summer steelhead. Juvenile spring Chinook salmon use the Grande Ronde River as rearing habitat. Brook trout, which are an invasive species, are present in the Grande Ronde River.

Historic mining activities may have had some impact on habitat conditions within the roadless area. However, favorable stream habitat conditions are being maintained by current management direction.

Range: There area is not currently available for grazing. Most of the area is considered unsuitable for grazing and it is not likely to occur in the future.

Timber/vegetation: Productive forest land suitable for timber management occupies 9,664 acres with 24.9 MMBF. Harvest has occurred on approximately 1,700 acres since 1990.

Minerals: Mineral exploration occurs on a limited scale within the Upper Grande Ronde River drainage. Past activity within includes the historic Aurelia Mine, although no activity takes place there now. Aurelia, as well as Camp Carson located near the perimeter provide evidence that the area contains minerals. There are 10 active claims totaling approximately 200 acres within the roadless area.

Cultural: The Confederated Tribe of the Umatilla Indian Reservation has reserved fishing and other rights to the Upper Grande Ronde River. Numerous historic sites within the area are primarily related to gold dredging and hydrologic mining.

Land use/Special Uses: There are no leases, rights-of-way or other encumbrances.

Fire: The Upper Grande Ronde roadless area is characterized by high surface fuels and continuous fuel beds. This fuel profile combined with the steeply sloped terrain provides ideal conditions for large wildfires. Two large fires burned recently within the roadless area: Tanner Gulch Fire along the eastern boundary and Clear Fire on the southern boundary. The majority of the fires that occur within this area are caused by lightning.

Insects and disease: Endemic levels of insect and disease provide diversity to forest stands and the landscape; however, many mixed conifer stands in the Blue Mountains have been damaged by a variety of insects and diseases, compounded by protracted drought, overstocking, and inappropriate past management. The major insect problems in the area are balsam woolly adelgid and fir engraver.

Many factors affect tree and stand susceptibility to insects and diseases. Both inherited and environmental factors play a role in predisposition to insects and diseases.

Private lands: There is no private land within the roadless area.

Wildhorse Roadless Area (#6300)

15,290 acres

Overview

History: Much of the Hells Canyon National Recreation Area (HCNRA) is in a roadless and undeveloped condition. Congress recognized this in establishing the NRA in 1975. The enabling legislation established Hells Canyon Wilderness Area and directed the Forest Service to specifically review additional areas for wilderness suitability. Wildhorse was not one of them.

In 1977, the Secretary of Agriculture directed the Forest Service to make a comprehensive inventory, review, and evaluation of all National Forest roadless and undeveloped areas. This process, known as RARE II, resulted in an allocation of all inventoried areas to one of three categories: wilderness, non-wilderness or further planning. RARE II was completed early in 1979, but land-use allocations for roadless and undeveloped areas in the HCNRA were reserved for recommendation in the Comprehensive Management Plan. Wildhorse was not recommended for wilderness during this planning effort.

The 1990 Wallowa-Whitman National Forest Plan and the 2003 HCNRA Comprehensive Management Plan allocated 67 percent to forage and 33 percent to Dispersed Recreation/Timber Management. The DRTM portion of the roadless area was salvage-harvested following the Teepee Butte Fire of 1988. Substantial volume was removed via approximately 4 miles of permanent road which was constructed to facilitate harvest on the upper plateaus.

Location: The Wildhorse Roadless Area is bounded by the Cook Ridge Roadless area to the east and by the Wallowa Valley Ranger District to the west and south. The national forest boundary delineates the northern extent.

Geography/Topography: Elevations range from around 3,000 feet in Rock, Wildhorse, and Bear Creek drainages in the north to 5,400 feet at Poison Point.

Vegetation/Ecosystems: Much of the roadless area is characterized by forest uplands and grass-shrub uplands. The timbered landbase consists of primarily upper plateaus at the higher elevations and timbered stringers on the steeply dissected breaks. Lower elevation breaklands are dominated by bluebunch wheatgrass associated with sand dropseed dominant in more xeric microsites (southern and western exposures), and Idaho fescue associated with prairie junegrass on the more mesic exposures (northern and eastern). Coniferous tree species in the forested areas include Douglas-fir, ponderosa pine, grand fir, western larch, Engelmann spruce, and lodgepole pine.

Prior to the fire, logging had been limited to light salvage entries and restricted to ground-based equipment within the Dispersed Timber Recreation Management land allocation within the HCNRA.

Current Uses: Recreation use is limited to big-game hunting in the fall and bear hunting in the spring. Visitor-use days are approximately 3,100.

Appearances and surroundings: This area lies immediately west of the Cook Ridge Roadless Area, separated by Cold Springs Road. It extends northward from a forest road to the Wallowa-Whitman National Forest boundary. The area is readily accessible on all sides by forest roads. The area is generally steep and more than 50 percent is forested. Most of the drainages are oriented north-south.

Key Attractions: Other than hunting attractions, the area offers interesting views of the deep canyon country. It has some hiking and horseback riding potential.

Inventory Criteria

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

Capability

Naturalness and Undeveloped Character: Moderate to high expectation of solitude and some expectation of experiencing isolation from the sights and sounds of others. Solitude may be somewhat less during hunting seasons. Sense of remoteness is high.

Recreation use is primarily elk hunting and totals 3,100 visitor use days.

Primitive Recreational Opportunities and Challenges: Self-reliance through application of outdoor skills in an environment that offers a moderately high degree of challenge and risk. Contact with management personnel is infrequent.

Special features: None

Manageability and boundaries: Because the area is readily accessible on all sides by forest roads, it cannot feasibly be managed as a wilderness area.

Availability

Recreation: Recreation opportunities include big game hunting and the current recreation opportunity spectrum class is semi-primitive-non-motorized for the most part.

Wildlife: This roadless area offers a varied landscape from grassland terraces, rimrock, forested stringers and forested areas (a large portion of the timbered area was burned in the 1988 Teepee Butte Fire).

This area provides escapement for elk, deer and bear during hunting seasons as well as movement corridors. The many rock cliffs provide nesting for avian species, roosting sites for bats and unique habitats for other wildlife species (such as cougars, rodents etc). Peregrine falcons have been observed foraging within the area, but are no suitable cliffs for nesting. Spotted bats prefer roosting sites in crevices in cliffs or canyon walls. This species has not been observed in this area, although no recent surveys have been conducted. Older surveys have noted other species of bats within the area. Other wildlife species that may be seen within this area are Rocky Mountain bighorn sheep, mountain quail and golden eagles.

This area also provides habitat for amphibians and reptiles. The rock rims provide excellent habitat for snakes and lizards and the riparian zones provide ample habitat for these species as well. This area

provides movement corridors between the Snake River and other areas to the west, including the Imnaha Canyon and the Eagle Cap Wilderness.

Water/Fish: The Wildhorse Roadless Area contains the portions of Basin, Bear, and Cottonwood creeks. Basin and Bear Creek are tributaries to Cottonwood Creek, which flows into Joseph Creek. There are approximately 2 miles of steelhead habitat in Basin Creek, 1 mile in Bear Creek, and 10 miles in Cottonwood Creek. Fish habitat is currently of high quality.

Little is known about habitat conditions in Bear and Basin creeks due to their remoteness. Cottonwood Creek was most recently surveyed in 1994. The 1986 Teepee Butte Fire burned through approximately 70 percent of the Cottonwood drainage in a mosaic pattern, destroying most of the riparian vegetation, including conifers. As a result, large woody debris is plentiful, but future recruitment is lacking. The deciduous vegetation has come back and is dense along the mostly stable streambanks.

Range: The roadless area intersects two active allotments that provide 3,089 HMs (head months) of grazing use and 4,078 AUMs (animal unit months) of forage annually. Range improvements found within the roadless area include; ½-mile of primitive two-track road, one building, 9¾ miles of wire fence, 22 spring developments, and 13 ponds.

The various forage-producing plant communities range from early seral to late seral. Generally, during the 120-year history of domestic livestock grazing in the area, the impacts on plant communities found on the gentler-sloped terrain were greatest in unmanaged areas. Because the majority of acres within the roadless area are steep to very steep, the impacts of livestock grazing have been regulated to some degree by slope preference of animals. Historically, the steep and very steep slopes were allocated as sheep and goat allotments and the gentler sloped range was allocated to cattle and horses. Today vegetative trends on the steep-sloped sheep range are stable to upward since sheep grazing has not been practiced for the past 10 years or more. Historic vegetative trends on the cattle ranges tend to be trending upward more slowly from the lows of the 1920s when stocking rates came off of the historic highs following World War I. Vegetative trends on cattle ranges rose at a steeper rate in the late 1950s and 60s as a result of changing from season-long grazing to deferred and rest rotation methods. This divided vast open rangelands into smaller units or pastures, which allowed a higher degree of control. During the late 1970s and ‘80s, vegetative trends within riparian zones began to move in a positive direction when rangeland ecologists introduced an initiative to improve the ecological status of western riparian zones.

Timber/Vegetation: Approximately 1,700 acres of the upper plateau were replanted with Douglas-fir, ponderosa pine, and western larch in 1992. Regenerated stands are currently stocked with conifers averaging 4-6 feet in height. The unplanted and non-harvested landbase capable of supporting conifers will require decades to re-stock with conifers given the loss of potential seed source and the relative harshness of the exposed sites.

Previous high-intensity fires altered the landscape. The area is currently occupied by fire regimes 1, 2, and 3 with a condition class consisting of mostly 3. Fire regime 2 with a mixed condition class of 1 and 3 occurs at some of the mid to higher elevations. Fuel models consist of 2, 8, and 10.

Minerals: None

Cultural: Twenty-three sites and seven isolated occurrences have been documented for the Wildhorse Roadless Area. The prehistoric sites consist of nine lithic scatters. Proto-historic sites are comprised of three trees peeled to the cambium layer. Historic sites include a lookout tower location, two cabins (at one site), two aspen art/dendroglyph sites, and a historic dump. One multi-component site consists of a cow camp cabin and a lithic scatter. There is a rock shelter with a historic/recent hearth in it and four cairns of indeterminate affiliation. The isolated occurrences are six projectile points and a lithic debitage location.

There has only been limited archaeological survey work in the Wildhorse area, but considerable work (extensive timber sales) to the west which have documented a high number of lithic scatters, peeled trees

and historic material. Additionally, surveys along the 4680 road on the east edge of the area have identified many proto-historic peeled tree sites and lithic scatters so the expectation is that more undocumented sites exist within the designated area.

Lands/Special Uses: This area does not contain any lands/special uses,

Fire: The entire roadless area east of Wildhorse Ridge was impacted by the Teepee Butte fire of 1988. The effects of the fire vary according to differences in fire intensity, duration, and pre-fire vegetative composition. Primarily, the intensely burned portions of the area occurred on the steep breaklands and within the dense thin-barked, grand fir dominated stands on the upper plateau.

Insects and Disease: Endemic levels of insect and disease provide diversity to forest stands and the landscape; however, many mixed conifer stands in the Wallowa Mountains have been damaged by a variety of insects and diseases, compounded by protracted draught, overstocking, and inappropriate past management (Schmitt and Scott, 1993).

Private Lands: The area's northern border is private land. There is no access to private land through Wildhorse roadless area.

Hells Canyon National Recreation Area Roadless Areas with Wilderness Potential

All Areas found within Hells Canyon National Recreation Area will continue to be managed according to the 2003 Hells Canyon National Recreation Area Comprehensive Management Plan. Some roadless areas are not entirely within the National Recreation Area boundaries. These areas will be addressed according to Blue Mountain Forest Plan designation if they are not proposed as potential designated wilderness areas.

Big Canyon Roadless Area (#1853)
– 13,260 Acres

Overview

History: The Big Canyon roadless area is almost entirely within Hells Canyon National Recreation Area (HCNRA) and will continue to be managed under the 2003 Hells Canyon National Recreation Area Comprehensive Management Plan.

Much of the Hells Canyon National Recreation Area (HCNRA) is in a roadless and undeveloped condition. Congress recognized this in establishing the area in 1975. The enabling legislation established Hells Canyon Wilderness Area and directed the Forest Service to specifically review additional areas for wilderness suitability. Big Canyon was not one of the specific areas.

In 1977, the Secretary of Agriculture directed the Forest Service to make a comprehensive inventory, review, and evaluation of all national forest roadless and undeveloped areas. This process, known as RARE II, resulted in an allocation of all inventoried areas to one of three categories, wilderness, non-wilderness, or further planning. RARE II was completed early in 1979, but land use allocations for roadless and undeveloped areas in the HCNRA were reserved for recommendation in the *Hell's Canyon National Recreation Area Comprehensive Management Plan* (2003). Big Canyon was not recommended for wilderness during this planning effort.

The *Wallowa-Whitman National Forest Plan* (1990) and the Comprehensive Management Plan (2003) allocate all of Big Canyon Roadless Area to native vegetation management.

Approximately 14,260 acres of this area are in the HCNRA. The remaining acres are part of the Nez Perce National Forest, outside of the HCNRA.

Location and access: The legal description is Township 1 West, Range 27 North; Boise Meridian. The roadless area lies north of County Road 493 (the Pittsburg Landing Road). It is bounded by the Nez Perce National Forest boundary to the north, the Snake River to the west, and the Salmon/Snake River Divide to the east. The Pittsburg landing Road, associated four-wheel drive roads, and the Snake River provide access. Elevations range from 1,100-5,300 feet.

Geography and topography: The area is heavily dissected and is characterized by steep basalt canyons draining towards the Snake River.

Vegetation and ecosystems: Vegetation is dominated by grasslands on the heavily dissected topography. The lower elevational breaklands are dominated by blue bunch wheatgrass associated with sand dropseed dominate more xeric microsites (southern and western exposures), and Idaho fescue associated with prairie junegrass on the more mesic exposures (northern and eastern). The oversteepened (slopes in excess of 60 percent) basalt breaklands are characterized by vertical timbered stringers on northern slopes contrasted with bluebunch wheatgrass/Idaho fescue/silky lupine communities on the southern slopes. The timbered stringers are dominated by pole to small diameter Douglas-fir, grand fir, and ponderosa pine associated with scattered residual large diameter ponderosa pine.

Current uses: Pittsburg Landing has until recently been privately owned as has portions of Big Canyon Creek. This land and adjacent national forest land was grazed from the beginning of the century. There are ranch buildings still in use in Big Canyon Creek and at Pittsburg Landing. Numerous fences have been constructed. Pastures have been tilled and range structures built.

Appearance and Surroundings: Much of the area is unnatural in appearance because of the extent of man's activities. Views of the Snake River and its geologic formations are abundant.

Key Attractions: The area provides outstanding views of Hells Canyon. It also contains significant cultural resource sites.

Inventory Criteria

A classified road traverses the area from south to north, and once buffered, cuts the area roughly in half. Each half of the area meets the inventory criteria for size.

Although Big Canyon meets the inventory size criteria for areas with wilderness potential, the area has recognizable road prisms, and evidence of past harvest activities such as stumps, skid roads, and open plantations. The area has experienced human activity that has affected natural ecological processes such as domestic livestock grazing which has altered native vegetation patterns. The appearance of roadless area is not natural.

Capability

Naturalness and undeveloped Character: High expectation of solitude and isolation from sights and sounds of others. Solitude may be somewhat less during hunting season. Sense of remoteness is high.

Little recreation opportunity exists. There is some opportunity for big-game hunting in the fall months.

Primitive recreational opportunities and challenges: Self-reliance through application of outdoor skills in an environment that offers a high degree of challenge and risk. This entire roadless area is very rugged

and access is very limited. There are about five miles of trails. Accessibility challenge is classified as most difficult.

Special features: Numerous historic and prehistoric sites occur, primarily along the Snake River and its larger tributaries.

Manageability and boundaries: Big Canyon is bisected by a high use OHV road, very popular with region wide users, especially in the spring and fall. It has an open road through much of the main drainage before continuing another 7 miles past the Walters Cabin to the HCNRA boundary. The Pittsburg Landing road bounds the area on the south. This high use road accesses a popular boat launch and campground.

The boundaries of these parcels follow the Snake River to the west, a ridgeline to the east and a heavily traveled road to the south. The northern boundary follows section lines that are not easily defined on the ground. The northern boundary is shared with private land, creating a difficult management situation. Areas near motorized use and campgrounds limit opportunities for solitude, although more remote portion of the area do exist.

Noxious weeds abound in Big Canyon. There are hundreds of acres of white top (Hoary Cress), Scotch Thistle, Yellow starthistle, and rush skeletonweed needing treatment. Big Canyon was historically a private sheep ranch.for many years.

Availability

Recreation: Little recreation opportunity exists. Some opportunity for big-game hunting in the fall months is possible.

Wildlife: This roadless area is east of the Snake River. Most of the terrain consists of grassland terraces with steep rimrock walls, timbered or shrub draws.

This area provides escapement for elk, deer, and bear during hunting seasons as well as movement corridors. The many rock cliffs provide nesting for avian species, roosting sites for bats and unique habitats for other wildlife species (such as cougars, and rodents). Peregrine falcons have been noted foraging within the area, but are no suitable cliffs for nesting. Spotted bats prefer roosting sites in crevices in cliffs or canyon walls. This species has not been noted in this area, although no recent surveys have been conducted. Older surveys have noted other species of bats within the area. Other wildlife species that may be seen within this area are Rocky Mountain bighorn sheep, mountain quail and golden eagles. There have been several releases of Rocky Mountain bighorn sheep along the Oregon and Idaho side of the river. Bald eagles and golden eagles use this area especially in the winter.

This area also provides habitat for amphibian and reptiles. The rock rims provide excellent habitat for snakes and lizards and the riparian zones provide ample habitat for these species as well.

Water and fish: This roadless area contains two streams that supply habitat for Snake River steelhead. Big Canyon Creek has approximately four miles of habitat and West Creek (both forks combined) contains approximately seven miles. Both streams are steep gradient tributaries to the Snake River.

Range: The roadless area contains a portion of one vacant allotment and one closed allotment, which provide no head months of grazing use and no animal unit months of forage annually. Range improvements found within the roadless area include; ten miles of primitive two-track roads, three buildings, ten miles of wire fence, and 24 spring developments.

The various forage producing plant community stages found within the roadless area range between early seral and late seral. Generally speaking during the 120-year history of Anglo-dominated grazing of

domestic livestock within the area, the plant communities found on the gentler sloping terrain have had the greatest impacts by domestic grazing animals.

Because the majority of the roadless area is steep to very steep, the impacts of livestock grazing have been regulated naturally to some degree by preference of slope by specific animal species. Historically, the steep and very steep sloping ranges were allocated as sheep and goat allotments, whereas, the gentler slopes were allocated to cattle and horses. Today, vegetative trends on the steep sloping sheep range within the roadless area are stable to upward since sheep grazing has not been practiced for the past ten years or more. Historic vegetative trends on the cattle ranges tend to be trending upward more slowly from the 1920 lows when stocking rates came off of the historic highs following World War I. Vegetative trends on cattle ranges started trending upward at a steeper rate in the late 1950s and 1960s as a result of changing management strategies from season-long grazing to deferred and rest rotation systems. The adoption of rotational systems resulted in the division of vast open rangelands into smaller units or pastures, which allowed a higher degree of control of the factors of grazing (such as kind of animals, numbers, season of use, and intensity of use). During the late 1970's and 1980's, vegetative trends within riparian zones began to move in a positive direction when an initiative was introduced by rangeland ecologists to improve the ecological status of western riparian zones that were being managed at low intensity levels.

Timber and vegetation: Historically, mid- to late summer lightening-caused fires burned across a mosaic of plant communities. The fires were of mixed severity and varied in size depending upon the severity of the existing fire weather conditions and the vulnerability of the plant community to fire. The lower elevations, from 1,900 to 4,400 feet, historically had rather short fire-free periods and limited tree and brush encroachment within these areas. In the mid elevation range, fires were less frequent and were of mixed severity and varied in size. Historically in the higher elevation subalpine zone, fires were infrequent and in some cases under severe weather conditions resulted in stand replacement fires. In the last 90 years, fire exclusion in forested plant communities has dramatically changed the woody vegetation from stands dominated by early seral, fire-adapted species to stands and communities where species susceptible to fire predominate.

A stand replacement fire occurred within the roadless area prior to the 1960s. Timber stands on the north face of West Creek and within the lower reaches of Kurry Creek were converted to the stem initiation stage of development.

The total commercial forest land within the Big Canyon roadless area is approximately 800 acres (five percent the total acreage). Of the commercial timbered land base, 75 percent consists of ponderosa pine/Douglas-fir habitat types, and 25 percent true fir.

This area has received some plant inventory work, mostly in relation to the Pittsburg Grazing Allotment. The area contains six patches of the threatened *Mirabilis macfarlanei,* listed as threatened under the Endangered Species Act. This plant occupies habitat within low elevation Idaho fescue and Bluebunch wheatgrass grasslands. Three of these patches are away from the road up Big Canyon and three are near some form of road in that area.

There are three species listed as sensitive in the Pacific Northwest or Northern Region of the Forest Service known to occur within this area:

- *Erigeron engelmannii* – Six known occurrences – dry grassland habitat.
- *Calochortus nitidus* – Three known occurrences – dry grassland habitat (fescue and bluebunch wheatgrass).
- *Mimulus clivicola* – One known occurrence – dry to ephemerally moist openings in grasslands and timbered stands.

A cursory look at the aerial photo coverage and Geographic Information System (GIS) vegetation data suggests that it is likely that this area contains potential habitat for additional rare plants as well as unique plant communities/associations.

There are many sensitive, endemic, and disjunct plant species likely to be found within the Big Canyon Roadless Area. A list of these species can be found in Appendix G of the *Hells Canyon National Recreation Area Comprehensive Management Plan (CMS)* (2003). At this time there is insufficient information to determine the extent to which they occur within this roadless area.

This roadless area also likely contains a number of rare combinations of outstanding and diverse ecosystems and parts of ecosystems. A list of these plant communities can be found in Appendix G of the *CMS*. At this time there is insufficient information to determine the extent to which they occur within this roadless area.

Minerals and soils: One property has been identified with mineral resources and the area has favorable potential for additional discoveries; however, it is withdrawn from further mineral entry.

Cultural: Very little of this area has been surveyed for cultural resources. Additional sites are likely to be present along the smaller drainages to the Snake River, on the numerous benches and terraces adjacent to those drainages, and within geological formations that may contain outcroppings and overhangs sufficient for rock shelter and rock art locations. The entire area is known to have been heavily used for thousands of years, first by prehistoric and proto-historic native people, and within historic times by fur trappers, miners (both Chinese and Euro-American), and sheep and cattle ranchers.

The Big Canyon Roadless Area has 34 documented sites. The 26 pre-historic sites are mostly situated near the Snake River and include rock shelters (many with pictographs), as well as pit house villages and lithic scatters.

The historic sites are related to mining and ranching operations; and include placer mining traces, a mine shaft, a historic ranching site, and a historic stone feature.

Land use and special uses: No power withdrawals, existing or proposed impoundments or irrigation systems are located in the area. There is limited opportunity for these improvements.

Fire: Fire Regime 2 with a mixed Fire Regime Condition Class of 2 and 3 represent the majority of the area. Fuel models consists of models 1 and 2.

Insects and Disease: Endemic levels of insect and disease provide diversity to forest stands and the landscape; however, many mixed conifer stands in the Wallowa Mountains have been damaged by a variety of insects and diseases, compounded by protracted draught, overstocking, and inappropriate past management (Schmitt and Scott, 1993).

Private lands: None exist within the boundaries of this roadless area.

Buckhorn Roadless Area (#6297)

– 16,750 acres

Overview

History: Most of the Buckhorn Roadless Area is within the Hells Canyon National Recreation Area (HCNRA). Much of the Hells Canyon National Recreation Area is in a roadless and undeveloped condition. Congress recognized this in establishing the NRA in 1975. The enabling legislation established Hells Canyon Wilderness Area and directed the Forest Service to specifically review additional areas for wilderness suitability. Buckhorn Roadless Area was not recommended for wilderness designation or for further study.

In 1977, the Secretary of Agriculture directed the Forest Service to make a comprehensive inventory, review, and evaluation of all National Forest roadless and undeveloped areas. This process, known as RARE II, resulted in an allocation of all inventoried areas to one of three categories: wilderness, non-

wilderness or further planning. RARE II was completed early in 1979, but land-use allocations for roadless and undeveloped areas in the HCNRA were reserved for recommendation in the Hells Canyon National Recreation Area Comprehensive Management Plan (2003).

Current land management allocations for this roadless area are 77 percent in forage, 20 percent in native vegetation, and 3 percent in dispersed recreation/timber management.

Location and access: The roadless area lies below the rim overlooking the Imnaha River between Fence Creek and the Snake River, primarily in township 3 North, Range 48 East. The roadless area is bounded by the Wallowa Valley Ranger District and Cemetery Ridge to the west, private land to the east and south, and by the Snake River to the north. The Imnaha River Road and the Buckhorn Lookout Road provide vehicle access to the south and northern edges. The Imnaha River Trail skirts the northeastern edge.

Vegetation patterns have been significantly altered since the 1960s due to periodic episodes of fire. Vegetation patterns on the terraces (1,100-1,500 feet) adjacent to the Snake River have been altered by cultivation. However, most of these sites would be perennial bunchgrass communities. Vegetation patterns on mid-slope benches (2,000-4,500 feet) vary depending upon aspect. Bluebunch wheatgrass associated with sand dropseed dominate more xeric microsites (southern and western exposures), and Idaho fescue associated with prairie junegrass occupies the more mesic exposures (northern and eastern).

With slopes in excess of 60 percent, the basalt breaklands are characterized by vertical timbered stringers on northern slopes contrasted with bluebunch wheatgrass/Idaho fescue/ silky lupine communities on the southern slopes. The timbered stringers were dominated by pole-sized and small diameter Douglas-fir and ponderosa pine associated with scattered residual large diameter ponderosa pine predominants. The area has been subjected to successive waves of stand replacement fires since the 1960s. An unknown stand replacement fire in the 1960s consumed the timbered stringers in the Cottonwood and Log Creek drainages. Sites are currently dominated by perennial grasses and brush fields. The Teepee Butte Fire (1988) produced mixed effects. Residual stringers in the vicinity of Spain Saddle and Knights Creek drainage sustained considerable overstory mortality. In 2000, the Eastside Fire Complex converted many of the remaining timber stringers to the stem initiation stage of development in the Dry Lake Fork, Corral Creek, and Dodson drainages. Fire-damaged trees were not salvaged within the roadless area.

Geography/Topography: Elevations range from 1,200 feet in the north to around 5,200 feet near the headwalls of Corral Creek. The area contains basalt rimrock formations typical of the Snake River region.

Current uses: The area has been used historically for grazing. The Tulley Creek and Corral Creek ranches are some of the more significant historical features. Five miles of unimproved wagon road date from the early 1900s. Another seven miles of road is associated with powerline maintenance. Over ten miles of trail are scattered throughout the area. Numerous fences have been built. There is an old mine on private land in Township 4 north, Ranger 48 East, Sections 25 and 26. Some logging has occurred on other private lands. Much of the old ranching, logging, and mining activity is noticeable. The powerline construction is still noticeable.

Appearances and surroundings: This is steep, highly dissected country facing south-southwest. Grasses are found over much of the area with forest land on north slopes and in stream bottoms. Although there are many signs of man’s activities, the area would appear natural to most visitors.

Key attractions: Canyon views are spectacular but limited. They include undeveloped flat ridge tops covered with large ponderosa pine. Scenic integrity is high with some inconsistencies, but they are not evident.

Inventory Criteria

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

Capability

Naturalness and undeveloped character: Remoteness is of little relevance; however there are locations within the area where a moderate degree of solitude can be experienced. Solitude is greatly impacted during hunting seasons.

Recreation opportunities include big-game hunting in the fall, hiking, sightseeing, and mountain biking.

Primitive recreational opportunities and challenges: The terrain is steep and difficult. It is typical of the basalt rimrock formations found in the Snake River region.

Special features: One power site classification withdrawal totaling 230 acres is located in the area. No existing or planned impoundments or irrigation systems are located in the area. No producing or proven mineral resources are found in the area, although there has been mining close to the mouth of the Imnaha River in a small area of favorable geology. The entire area has been withdrawn from further mineral entry.

Manageability and boundaries: The area includes approximately ten miles of powerline and a bench road to service the lines (Forest Road 4260-150). This man-made feature associated with parcels of in-held private land renders the proposed wilderness area unmanageable. Managing the area as wilderness would be difficult due to its narrow configuration and many miles of boundary. In addition, the boundary could not be adjusted to effectively insulate the interior from the sites and sounds of human activity.

Availability

Recreation: Recreation is primarily big-game hunting, hiking, and mountain biking on Forest Road 780 and Eureka Bar Mine Trail.

Wildlife: This roadless area offers a varied landscape from grassland terraces, rimrock, forested stringers, and forested areas.

This area provides escapement for elk, deer, and bear during hunting seasons as well as movement corridors. The many rock cliffs provide nesting for avian species, roosting sites for bats and unique habitats for other wildlife species (such as cougars and rodents). Peregrine falcons have been noted foraging within the area, but are no suitable cliffs for nesting. Spotted bats prefer roosting sites in crevices in cliffs or canyon walls. This species has not been noted in this area, although no recent surveys have been conducted. Older surveys have noted other species of bats within the area. Other wildlife species that may be seen within this area are Rocky Mountain bighorn sheep, mountain quail and golden eagles. This area also provides habitat for amphibian and reptiles. The rock rims provide excellent habitat for snakes and lizards and riparian zones provide ample habitat for these species as well. This area provides movement corridors between the Snake River and other areas to the west, including the Imnaha River and over to the Eagle Cap Wilderness.

Water and fish: Corral Creek and its tributary Dodson Fork each contain less than one mile of habitat for Snake River steelhead. There are also numerous steep inaccessible intermittent and perennial non-fish bearing tributaries to the Imnaha River in this roadless area.

Range: The roadless area intersects seven active allotments that provide 5,126 head months of grazing use and 6,705 AUMs (animal unit months) of forage annually. Range improvements found within the roadless area include: 25 miles of primitive two-track roads, 10 miles of wire fence, 41 spring developments, and 3 ponds.

The various forage-producing plant communities range from early seral to late seral. Generally, during the 120-year history of domestic livestock grazing in the area, the impacts on plant communities found on the gentler-sloped terrain were greatest in unmanaged areas. Because the majority of acres within the roadless area are steep to very steep, the impacts of livestock grazing have been regulated to some degree by slope preference of animals. Historically, the steep and very steep slopes were allocated as sheep and goat allotments and the gentler sloped range was allocated to cattle and horses. Today vegetative trends on the steep-sloped sheep range are stable to upward since sheep grazing has not been practiced for the past ten years or more. Historic vegetative trends on the cattle ranges tend to be trending upward more slowly from the lows of the 1920s when stocking rates came off of the historic highs following World War I. Vegetative trends on cattle ranges rose at a steeper rate in the late 1950s and 1960s as a result of changing from season-long grazing to deferred and rest rotation methods. This divided vast open rangelands into smaller units or pastures, which allowed a higher degree of control. During the late 1970s and 1980s, vegetative trends within riparian zones began to move in a positive direction when rangeland ecologists introduced an initiative to improve the ecological status of western riparian zones.

Timber and vegetation: Prior to successive fires, approximately 15 percent of the land base within the roadless area consisted of timbered acreage. Presently, less than 10 percent of this acreage consists of mature timber.

Botanical Inventories for the area is limited.

There are three species listed as sensitive in the Pacific Northwest Region of the Forest Service known to occur within this area:

- *Phacelia minutisima* – one known occurrence – dry to ephemerally moist openings in grasslands and timbered stands.
- *Carex hystericina* – one known occurrence – seeps and open riparian areas in low warm canyon terrain.
- *Allium geyeri* – one known occurrence – dry openings in low elevation grassland habitats.

Botanical Species-of-Interest* within this area:

- *Mimulus patulus* – four known occurrences - ephemeral moist openings in timber or grasslands or on moist rock outcrops

  *(Plant species found frequently enough within their own range and/or without significant threats, such that they would warrant inclusion on the regional sensitive species list, but they are of unique habitats and/or very limited distribution within the Wallowa-Whitman National Forest.)

A cursory look at the aerial photo coverage and Geographic Information System (GIS) vegetation data suggests that it is likely that this area contains potential habitat for additional rare plants as well as unique plant communities/associations.

There are many sensitive, endemic, and disjunct plant species likely to be found within the Buckhorn Roadless Area. A list of these species can be found in Appendix G of the *Hells Canyon National Recreation Area Comprehensive Management Plan* (2003). At this time there is insufficient information to determine the extent to which they occur within this area.

This roadless area also likely contains a number of rare combinations of outstanding and diverse ecosystems and parts of ecosystems. A list of these plant communities can be found in Appendix G of the *Hells Canyon National Recreation Area Comprehensive Management Plan* (2003). It is not known to what extent they occur within this area.

Minerals: None.

Cultural: There are 35 cultural resource locations and isolates currently identified in the Buckhorn Roadless Area. The sites include prehistoric lithic scatters, camp sites, numerous burial cairns, rock shelters and cache pits. Sites related to late prehistoric and historic period Nez Perce sites include extensive stands of trees peeled to the cambium and possibly some of the burial cairns. The peeled trees date, for the most part, to the second half of the 19th century, and terminate with the removal of the Nez Perce Indians from the Wallowa Valley and Wallowa Mountains in 1877. During the early spring, the Nez Perce people would harvest a single large strip (varying from a 2-foot by 3- to 4-foot section) from a Ponderosa pine; each tree would have only a single strip removed so that the tree would continue to grow. The cambium layer is said to be slightly sweet and was collected as both a treat and for medicinal use. When logging began in this area during the late 19th and early 20th centuries, probably large peeled trees of much older dates were harvested for timber. Historic material may include some of the cairns, the remains of a cabin, and a historic fire lookout location.

The entire Buckhorn Roadless Area was well-documented as an important Nez Perce Indian congregation area in early spring. As snow receded, family groups that had wintered along Chesnimnus Creek, the Grande Ronde, Snake, and lower Imnaha Rivers would assemble to harvest the cambium from Ponderosa pines, and a variety of roots as they became available. The area around Buckhorn and the Chesnimnus was utilized not only in the spring for root harvest but equally in the fall for hunting as the Nez Perce moved back and forth between winter villages in the milder river valleys and their dispersed summer camps in the Wallowa Valley and surrounding mountains. Twice a year then, the Buckhorn and Chesnimnus area provided a central gathering location for all of the smaller tribal and family clusters to meet collectively, make decisions regarding resource use and territorial distribution among the various smaller groups, discuss regional political concerns, and re-establish social ties with members of the extended bands and tribes.

Land use and special uses: None.

Fire: The area has been subject to several large stand-replacement fires and currently is classified as a Fire Regime 2 and a Fire Regime Condition Class 2. Fuel Model 2 is most representative of the area.

Insects and Disease: Endemic levels of insect and disease provide diversity to forest stands and the landscape; however, many mixed conifer stands in the Wallowa Mountains have been damaged by a variety of insects and diseases, compounded by protracted draught, overstocking, and inappropriate past management (Schmitt and Scott, 1993).

Private lands: Section 16 is private land and surrounded by the roadless area, although not included in the acreage, several other parcels around the eastern edge provide a checker-boarded ownership pattern.

Cook Ridge

Area #6299 –18,290 Acres

OVERVIEW

History: The Cook Ridge Roadless Area is entirely within the Hells Canyon National Recreation Area Much of the Hells Canyon National Recreation Area is in a roadless and undeveloped condition. Congress recognized this in establishing the NRA in 1975. The enabling legislation established Hells Canyon Wilderness Area and directed the Forest Service to specifically review additional areas for wilderness suitability. Cook Ridge Roadless Area was not recommended for wilderness designation or for further study.

In 1977, the Secretary of Agriculture directed the Forest Service to make a comprehensive inventory, review, and evaluation of all National Forest roadless and undeveloped areas. This process, known as RARE II, resulted in an allocation of all inventoried areas to one of three categories: wilderness, non-wilderness or further planning. RARE II was completed early in 1979, but land-use allocations for

roadless and undeveloped areas in the HCNRA were reserved for recommendation in the Hells Canyon National Recreation Area Comprehensive Management Plan (2003).

Current land management allocations for the area are 89 percent native vegetation and 11 percent dispersed recreation/timber management.

Location and access: The Cook Ridge Roadless Area is located primarily in Township 4 North, Range 48 East northwest of Buckhorn Springs. It abuts the Mountain Sheep Roadless Area to the north and east, Cold Springs Ridge to the west, and the Wallowa Valley Ranger District to the south. The area is dominated by Cook Creek which bisects the roadless area, south to north.

Geography/Topography: The areas elevations range from 1,400 to 5,400 feet.

Vegetation and ecosystems: Much of the roadless area is characterized by forest and grass-shrub uplands. The timbered land base consists of primarily upper plateaus at the higher elevations and timbered stringers on the steeply dissected breaks. The lower elevation breaklands are dominated by bluebunch wheatgrass associated with sand dropseed in more xeric microsites (southern and western exposures), and Idaho fescue associated with prairie junegrass on the more mesic exposures (northern and eastern). Coniferous tree species in the forested areas include Douglas-fir, ponderosa pine, grand fir, western larch, Engelmann spruce, and lodgepole pine.

The entire roadless area was impacted by the 1988 Teepee Butte Fire. The effects of the fire varied according to differences in fire intensity, duration, and pre-fire vegetative composition. Primarily, the intensely burned portions of the area occurred on the steep breaklands and within the dense thin-barked, grand fir-dominated stands on the upper plateau.

Prior to the fire, logging had been limited to light salvage entries and restricted to ground-based equipment within the Dispersed Timber Recreation Management land allocation within the HCNRA. Following the Teepee Butte Fire, salvageable timber in excess of 12-inch DBH was removed from the upper flats of Cook Creek. About 4 miles of permanent road and 1 mile of temporary road was constructed to facilitate salvage harvest within both the Cook Ridge and Wildhorse Roadless Areas.

Current uses: Recreation use is mostly limited to elk hunting in the fall. No proven mineral resources are known to exist and the area has been withdrawn from further mineral entry.

Appearances and surroundings: The area offers seclusion and isolation. Scenic integrity is high with some inconsistencies, but they are not evident. Most of the area is considered natural appearing although evidence of man's past activities is noticeable. The broken terrain screens many activities and visitors but it also tends to concentrate use.

Key Attractions: The area offers interesting views of rugged canyon topography.

Inventory Criteria

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

Capability

Naturalness and undeveloped character: The expectation of solitude is moderate to high and there is some expectation of experiencing isolation from the sights and sounds of others. Solitude may be somewhat less during hunting seasons. Sense of remoteness is high. Some opportunity exists for solitude and primitive recreation.

Most of the recreation opportunities are limited to the fall big game hunting seasons. Recreation use totals 4,200 visitors days.

Primitive recreational opportunities and challenges: The environment offers a moderate degree of challenge and risk and self-reliance through application of outdoor skills. Contact with management personnel is infrequent and irregular.

Special features: None.

Manageability and boundaries: The native vegetation portion of the roadless area can feasibly manage as a potential wilderness. Areas that were harvested after the Teepee Butte Fire no longer meet the inventory criteria, and these areas along with buffered open roads would be excluded from the roadless area.

Availability

Recreation: Recreation uses are primarily limited to the fall hunting seasons.

Wildlife: This roadless area offers a varied landscape from grassland terraces, rimrock, forested stringers and forested areas.

This area provides escapement for elk, deer, and bear during hunting seasons as well as movement corridors. The many rock cliffs provide nesting for avian species, roosting sites for bats and unique habitats for other wildlife species (such as cougars and rodents). Peregrine falcons have been observed foraging within the area, but there are no suitable cliffs for nesting. Spotted bats prefer roosting sites in crevices in cliffs or canyon walls. This species has not been noted in this area, although no recent surveys have been conducted. Older surveys have noted other species of bats within the area. Other wildlife species that may be seen in this area are Rocky Mountain bighorn sheep, mountain quail, and golden eagles.

This area also provides habitat for amphibians and reptiles. The rock rims provide excellent habitat for snakes and lizards and riparian zones provide ample habitat for these species as well. This area provides movement corridors between the Snake River and other areas to the west, including the Imnaha River and over to the Eagle Cap Wilderness.

Water and fish: The primary perennial stream is Cook Creek, a pristine tributary to the Snake River. The roadless area contains approximately 80 percent of the Cook Creek subwatershed. It also contains most of the tributary streams from the east side of Cherry Creek above the Cherry Creek Ranch. There are no listed fish species; however, most perennial streams that are low enough gradient contain redband trout. Streams within the roadless area are very steep and not accessible to all but the most adventurous individuals. Streams are located in steep canyons lined with basalt rims and bunchgrass. Stream bottoms are densely populated with deciduous vegetation, including poison ivy. Rattlesnakes are common. A wilderness designation would not have an effect on the water or habitat quality of these streams.

Range: The roadless area intersects one active grazing allotment and one closed allotment which provide 2,196 head months of grazing use and 2,898 AUMs (animal unit months) of forage annually. Range improvements found within the roadless area include one and a half miles of primitive two-track roads, six miles of wire fence, one spring development, and eight ponds.

The various forage-producing plant communities range from early seral to late seral. Generally, during the 120-year history of domestic livestock grazing in the area, the impacts on plant communities found on the gentler-sloped terrain were greatest in unmanaged areas. Because the majority of acres within the roadless area are steep to very steep, the impacts of livestock grazing have been regulated to some degree by slope preference of animals. Historically, the steep and very steep slopes were allocated as sheep and goat allotments and the gentler sloped range was allocated to cattle and horses. Today vegetative trends on the steep-sloped sheep range are stable to upward since sheep grazing has not been practiced for the past 10 years or more.

Historic vegetative trends on the cattle ranges tend to be trending upward more slowly from the lows of the 1920s when stocking rates came off of the historic highs following World War I. Vegetative trends on cattle ranges rose at a steeper rate in the late 1950s and 1960s as a result of changing from season-long grazing to deferred and rest rotation methods. This divided vast open rangelands into smaller units or pastures, which allowed a higher degree of control. During the late 1970s and 1980s, vegetative trends within riparian zones began to move in a positive direction when rangeland ecologists introduced an initiative to improve the ecological status of western riparian zones.

Timber and vegetation: Approximately 700 acres of the severely burned upper plateau was replanted with Douglas-fir, ponderosa pine, and western larch in 1992. Regenerated stands are currently fully stocked with conifers averaging four to six feet in height. The unplanted and non-harvested land base capable of supporting conifers will require decades to restock with conifers given the loss of potential seed source and the relative harshness of the exposed sites.

This area has received very little plant inventory. There is one known occurrence of *Erigeron engelmanni* which is listed as sensitive by the Pacific Northwest Region of the Forest Service.

A cursory look at the aerial photo coverage and Geographic Information System (GIS) vegetation data suggests that it is likely that this area contains potential habitat for additional rare plants as well as unique plant communities and plant associations.

There are many sensitive, endemic, and disjunct plant species likely to be found within the Cook Ridge Roadless Area. The area also likely contains a number of rare combinations of outstanding and diverse ecosystems and parts of ecosystems. A list of these species and plant communities can be found in Appendix G of the Comprehensive Management Plan for the Hells Canyon National Recreation Area (USDA 2003). At this time there is insufficient information to determine the extent to which they occur within this area.

Minerals: None.

Cultural: Currently, 17 sites and 13 isolated occurrences have been documented in the Cook Ridge Roadless Area. The prehistoric sites consist of three lithic scatters/prehistoric encampments and a rock art site. The prehistoric isolates consist of projectile points and other lithic tools and debitage. The single most common sites and isolated occurrences in this area consist of proto-historic trees peeled to the cambium, either single or in groups. The cambium layer in these trees were harvested in the early spring, and based on the tree size probably date to the second half of the nineteenth century – the period immediately prior to the final removal of the Chief Joseph Band of the Nez Perce from the area in 1877. These kinds of concentrated peeled trees suggest relative large spring encampments. As most of the documented trees have been identified along roads near the perimeter of this designated area, it is likely that many more exist within the interior, unsurveyed portion.

Two historic sites have been identified: a water trough and some household artifacts (possibly a dump location). A single rock cairn of unknown age was also recorded. The Cook Ridge Roadless Area is located immediately west of the confluence of the Imnaha, Salmon, and Snake Rivers and is significant as an important resource procurement, habitation, and travel route area for native people for several thousand years.

Land use and special uses: None.

Fire: Currently the area is classified as a Fire Regime 2 and Condition Class 3 as a result of previous high-severity stand-replacement fires that occurred throughout most of the area. Fuel Model 2 occupies the majority of the area.

Insects and Disease: Endemic levels of insect and disease provide diversity to forest stands and the landscape; however, many mixed conifer stands in the Wallowa Mountains have been damaged by a

variety of insects and diseases, compounded by protracted draught, overstocking, and inappropriate past management (Schmitt and Scott, 1993).

Private lands: There are no private lands bordering or within the area boundaries.

Homestead Roadless Area (#6291)

9,500 Acres

Overview

History: Prior to the 2007 inventory, the area contained 13,895 acres of public land composed of 7,454 acres of National Forest Land, and 7,260 acres of BLM administered land. Approximately 259 acres of private land are within the BLM portion of the area.
Presently, 9,499 acres are administered by the Wallowa-Whitman National Forest.

Location and access: The Homestead area is located on the west side of the Snake River adjacent to Oregon State Highway 86 in Baker County, Oregon. Approximately 75 miles northeast of Baker City, Oregon, and 20 miles northeast of Halfway, Oregon. This area is on the generally east facing slopes above the Snake River north of Oxbow, Oregon. Its northern boundary is the powerline from Oxbow Dam to the Pallette Ranch.

Highway 86 provides immediate access along with the Oxbow-Pallette powerline road and some BLM roads in upper North Pine Creek. The boundary of the Hells Canyon NRA follows the crest of this ridge through most of the area. The area is almost 10 miles long and 5 miles wide at its widest point and 400 yards at its narrowest point. It is bordered by private land and power site withdrawals on the east and south, national forest land on the west, and a 500 KV powerline on the north, east and northwest sides. Two dead-end roads, one mile in length, enter the area along the southwest boundary.

Geography/Topography: The area is on a north-south oriented hogback ridge. Very short steep drainages run east to west through rugged canyons. Steep, dissected slopes are typical. The area is rugged. Elevations range from 2,300 to 5,800 feet.

Vegetation/Ecosystem: Much of the area is open bunchgrass slopes, some brush and tree species are found in drainage bottoms and on north slopes. The vegetation is diverse, and includes bunchgrass, cheatgrass and wheatgrass, big sagebrush, elderberry, hawthorne, poison ivy, snowberry, Douglas fir, white fir, and ponderosa pine. The timber in the area on BLM land is predominantly old growth. These trees are found on the moist, flatter areas of the steep draws.

Current Uses: Most of the unit has been extensively grazed. Some soil loss and vegetation change has occurred. Prospecting and mining have taken place on the adjacent BLM lands. Homestead, Oregon, immediately adjacent to the area, is an old mining community. Recreation use is primarily hunting during the fall and totals 1,000 visitor days.

Appearance and surroundings: The area is natural is appearance with rugged, grassy hillsides and timbered north aspects. Three old roadbeds traverse the Western portion of the area, although they are heavily overgrown with vegetation and difficult to see. Over one-half of the area is BLM owned, although the area is located within the Hells Canyon National Recreation Area and is managed by the Wallowa-Whitman NF. The area is within the Forage Emphasis Management Area and has active grazing allotments.

Key Attractions: None.

Inventory Criteria

This area meets the inventory criteria to be considered an area with wilderness potential.

Capability

Naturalness and Undeveloped Character:
The area is natural appearing. But non-conforming uses can be heard and observed from throughout the area.

Primitive Recreational Opportunities and Challenges:
Although natural in appearance, the area provides little in the way of primitive recreation opportunities.

Special Features: The area is adjacent to the Snake River, which provides winter habitat for 40-70 Bald Eagles (3-5 within the area boundary). The bald eagle is a federally listed threatened species in Oregon under the ESA. There is potential habitat for Rocky Mountain bighorn sheep.

Many unusual and specialized plant species occur in or near the Snake River Canyon. A high concentration of endemic species generally results in many one-of-a-kind plant associations of communities. The Snake River Canyon is second only to the Siskiyou Mountains in the Pacific Northwest in this regard. The Snake River Canyon is important not only for its unusual species, but also for its biological diversity. It is considered by many to be a center of evolution for many groups of species, botanically linking the Pacific Northwest with regions far to the south, such as the Mojave Desert. A plant species of special interest, *Allium madidum* (swamp onion), is found in the study area. This plant is considered to be limited in abundance throughout its range. McClain Gulch provided habitat for a variety of riparian species, including rushes, sedges, rose, and willows. Much of this riparian vegetation is pristine because of the steep, rocky terrain has prevented livestock grazing.

Manageability and boundaries: The area could not be managed as wilderness. Management would be difficult due to the private lands within the area, and the likelihood of mineral development in or partially within the area. Access to and development of the private land parcels could adversely affect wilderness characteristics and make management difficult in these areas.

Availability

Recreation: Big game hunting (bear, elk and deer) and upland bird hunting (chukar) are the primary recreational activities in the area. Most of the current use is horse and foot traffic during big game and upland game seasons. Little recreation use is associated with vehicles. Opportunities for backpacking, photography and sightseeing also are considered to be outstanding in the area. The area offers a 10 mile trek along a knife-edge ridge that plunges dramatically to each side. The deeply incised side creek drainages have created spectacular relief. These features, plus the area's diverse flora and fauna, offer outstanding opportunities for nature photography. Sightseeing from the main ridge is spectacular. To the Northeast, in Idaho, the visitor can see Idaho's Seven Devils Mountains, to the northwest, the snow capped peaks of Oregon's Wallowa Mountains.

Wildlife: The area contains habitat for elk, deer and numerous game and non-game species. The lower elevations are suitable for winter range. No threatened or endangered plant or animal species are known to occur. The area supports a summer population of 50 to 75 mule deer, and a winter population of 250 to 300 mule deer, and 10-15 elk during the summer and 75-100 elk during the winter. Other game animals found in the area are mountain lion, black bear, chukar, and blue grouse.

Water/Fish: None of the streams are known to contain resident trout or anadromous fish populations. No power withdrawals, existing or proposed impoundments or irrigation systems are in the area, which contributes high quality water to Pine Creek and the Snake River. Water is used for stock and domestic purposes as well as electrical generation.

Range: Livestock use at the current level of 660 AUM's is authorized in the area on 3 active cattle allotments.

Timber/vegetation: The timber in the area on BLM land is predominantly old growth. These trees are found on the moist, flatter areas of the steep draws.

Minerals: The area is almost entirely covered by non-mineralized volcanics; however, it is immediately adjacent to the Homestead mining area where a large body of copper bearing ore is known to occur. Texas Gulf Corporation has done extensive exploration in the Homestead area. The area is withdrawn from further mineral entry. Approximately 9,000 acres outside of the HCNRA could be open to mineral entry. Discovery of economic copper, silver, or gold deposits may occur on public land southwest of the town of Homestead. Projected development of four copper, silver and gold mines, including one open pit mine could occur. Even if the area were designated wilderness, projected development of three mines on existing claims would make management of wilderness values impossible.

Cultural: Inventories along the western edge have identified pre-historic rock cairns, isolated artifacts, and small lithic scatters. An old Native American trail crosses the area following a ridgeline from the Snake River to North Pine Creek.

Land use/Special Uses: None

Fire: The majority of the area consists of Fire Regime 1 Condition Class 3 and Fire Regime 2 Condition Class 3.

Insects and disease: Endemic levels of insect and disease provide diversity to forest stands and the landscape; however, many mixed conifer stands in the Wallowa Mountains have been damaged by a variety of insects and diseases, compounded by protracted draught, overstocking, and inappropriate past management (Schmitt and Scott, 1993). The major insect in this area is the tussock moth.

Private lands: 259 acres of private inholdings are located in the BLM portion of this area.

Imnaha Face Roadless Area (#6294)

30,400 Acres

Overview

History: Much of the Hells Canyon National Recreation Area (HCNRA) is in a roadless and undeveloped condition. Congress recognized this in establishing the NRA in 1975. The enabling legislation established Hells Canyon Wilderness Area and directed the Forest Service to specifically review additional areas for wilderness suitability. Imnaha Face Roadless Area was not one of the areas designated for further study.

In 1977, the Secretary of Agriculture directed the Forest Service to make a comprehensive inventory, review, and evaluation of all National Forest roadless and undeveloped areas. This process, known as RARE II, resulted in an allocation of all inventoried areas to one of three categories: wilderness, non-wilderness or further planning. RARE II was completed early in 1979, but land-use allocations for roadless and undeveloped areas in the HCNRA were reserved for recommendation in the Comprehensive Management Plan.

Current land management allocates 89 percent of the area to forage, and 11 percent to dispersed recreation/timber management.

Location and Access: The roadless area is located east of the Imnaha River between the town of Imnaha to the north and Grizzly Creek to the south in T.1 & 2S., R.48E. It includes most of the rim country overlooking the Imnaha River. The area's western boundary is accessible from the Imnaha River Road through private land. Freezeout Creek Road and Trail provides good access as does the Hat Point Road. However, much of the area is inaccessible.

Geography/Topography: Elevations range from 1,900-6,500 feet. The area is an example of the rugged topography of northeast Oregon. It is characterized as having numerous exposed basalt layers with deep canyons and steep, lightly vegetated slopes.

Vegetation/Ecosystem: Existing stand structures and associated species composition vary with landform, elevation, and aspect changes, and with edaphic and precipitate gradients encountered within the Imnaha corridor. Toe slopes and drainage bottoms (1,900-4,400 feet) are characterized by early to mid-seral stands dominated by scattered large-diameter ponderosa pine and Douglas-fir predominants vertically arranged over even-aged groups of pole-size to small ponderosa pine second growth. Pinegrass and elk sedge dominate the ground vegetation. On the dissected north slopes (4,600-5,600 feet), the percentage of Douglas-fir and western larch increases and the percentage of ponderosa pine decreases in the overwood layer. The multi-storied mixed conifer understory consists of grand fir, Engelmann spruce, and Douglas-fir. At the higher elevations, subalpine fir becomes a component of the seedling species composition. The upper broad flats (6,000 feet) are dominated by subalpine fir and lodgepole pine plant communities.

In 1989, the Lookout 2 Fire burned approximately 600 acres of the high-elevation subalpine fir/lodgepole pine community in the vicinity of Squirrel Prairie, converting the stands to the stem initiation stage of development. Total commercial forest land within the Imnaha Face is approximately 9,000 acres (30 percent of the total acreage). Of the commercial timbered landbase, 30 percent consists of ponderosa pine/ Douglas-fir habitat types, and 70 percent true fir.

Current Uses: Recreation use comes almost exclusively from hunters during the fall seasons. The area has several trails with the Freezeout Trailhead being the most popular. Hikers use the trail to access the Hells Canyon Wilderness and Snake River early in the season. As the season warms, however, hikers tend to use the higher elevation trails. Recreation use totals 9,200 visitor days.

The area includes 44 acres of power production withdrawals. Also, two impoundments covering 2 acres have been built for livestock purposes. Some roads have been built along the stream bottoms along the western boundary from adjacent private land. A 230 KV powerline and associated right-of-way crosses the area around Dunlap Creek. Many barbed wire range fences are scattered throughout the area.

Appearances and surroundings: Most of the area is steep and may be viewed from County Road 727. The northern portions are covered with bunchgrasses, while portions south of Freezeout Creek are more densely timbered. Elevations range from 1,900-6,500 feet. North slopes have dense forest and south slopes are rocky. Most slopes are oriented east-west.

Key Attractions: The area is noted as an example of the rugged topography of northeast Oregon, characterized by deep canyons with very steep grass- and timber-covered slopes interspersed with numerous exposed basalt layers.

Inventory Criteria

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

Capability

Naturalness and Undeveloped Character: Because of the shape and size of the area a visitor can see the entire size of the area from several points along County Road 727. The depth of the canyons and the height of the face provide opportunities for solitude. Hiking the rugged terrain would contribute to a sense of reliance. This would be diminished, however, by the knowledge that roads would always be within a relatively short distance.

The entire area falls into the Primitive component of the (ROS) classification. Primary activities are big-game hunting and scenic viewing with some hiking and camping by individuals and organized groups. Total recreation use amounts to an estimated 9,200 RVDs per year.

Primitive Recreation Opportunities and Challenge: Because of the steep slopes and deep canyons, the area provides opportunity for physically challenging experiences of hiking in and out of the area.

Special features: The areas rugged topography, characteristic of northeastern Oregon, provides scenic opportunities for users.

Manageability and boundaries: The northern half of the Imnaha Face Roadless Area is very narrow and is bounded by private land along the Imnaha River to the west and by the heavily traveled Hat Point Road to the east. Civilization is evident from all locations within this portion.

The southern half of the area has the characteristics of wilderness. The southern portion of the Imnaha Face Roadless Area as defined by the Freezeout Trail and Campbell Creek to the north, Freezeout Creek to the west, skirting the private in-holdings down Summit Creek to the southern boundary formed by Grizzly Creek and the power line to Saulsberry Saddle and is more manageable as potential wilderness.

Availability

Recreation: Primary activities are big-game hunting and scenic viewing with some hiking and camping

Wildlife: This roadless area has a wide variety of habitat from rim country along the Imnaha River to high-elevation habitats.

The area provides escapement for elk, deer, and bear during hunting seasons as well as movement corridors for several species. The many rock cliffs provide nesting for avian species, roosting sites for bats and unique habitats for other wildlife species (such as cougars, rodents, etc). Peregrine falcons have been noted foraging within the area, but are no suitable cliffs for nesting. Spotted bats prefer roosting sites in crevices in cliffs or canyon walls. This species has not been noted in this area, although no recent surveys have been conducted. Older surveys have noted other species of bats within the area. Possible wolverines have been sighted near this area.

The area contain habitat for Canada lynx and wolverine denning and foraging. Prairie falcons have been sighted and possibly nest within or adjacent to the area. Mountain goats have also been released within this area and appear to be increasing in population. This area is unique because of higher elevation communities and use as summer range by elk and deer. There is no current livestock grazing within the area.

Water/Fish: Freezeout and Summit Creek contain Snake River steelhead spawning, rearing, and migration habitat, and both provide rearing habitat for Snake River spring/summer Chinook salmon (also listed as threatened) downstream of the roadless area near their confluence with the Imnaha River on private land. Both streams are high-gradient systems and flow through narrow valley bottoms located in steep canyons. These snow-fed systems feature heavy spring and/or summer rain events that often result in sudden and significant flows down the steep tributary streams, and sometimes deliver large quantities of soil, rock, trees, and other vegetation to the narrow valley bottoms. Sections of these streams are regularly “blown out” with stream channels filled with debris or rerouted. Short sections of unstable cobble and gravel banks are common.

Range: The roadless area intersects nine active allotments and two vacant allotments which provide 3,525 HMs (head months] of grazing use and 4,581 AUMs (animal unit months) of forage annually. Range improvements found within the roadless area include one building, 11.2 miles of wire fence, 53 spring developments, and three ponds.

The various forage-producing plant communities range from early seral to late seral. Generally, during the 120-year history of domestic livestock grazing in the area, the impacts on plant communities found on the gentler-sloped terrain were greatest in unmanaged areas. Because the majority of acres within the roadless area are steep to very steep, the impacts of livestock grazing have been regulated to some degree by slope preference of animals. Historically, the steep and very steep slopes were allocated as sheep and goat allotments and the gentler sloped range was allocated to cattle and horses. Today vegetative trends on the steep-sloped sheep range are stable to upward since sheep grazing has not been practiced for the past 10 years or more. Historic vegetative trends on the cattle ranges tend to be trending upward more slowly from the lows of the 1920s when stocking rates came off of the historic highs following World War I. Vegetative trends on cattle ranges rose at a steeper rate in the late 1950s and 60s as a result of changing from season-long grazing to deferred and rest rotation methods. This divided vast open rangelands into smaller units or pastures, which allowed a higher degree of control. During the late 1970s and '80s, vegetative trends within riparian zones began to move in a positive direction when rangeland ecologists introduced an initiative to improve the ecological status of western riparian zones.

Timber/Vegetation: Plant inventory for this area is very limited.
Region Six Sensitive Plant species (2005) known to occur within this area:

- *Arabis hastatula* – two known occurrences – rock outcrops, open slopes/ridges w/coarse substrates
- *Mimulus clivicola* – two known occurrences – dry to ephemerally moist openings in grasslands and timbered stands.
  Botanical Species-of-Interest* within this area:
  *(Plant species found frequently enough within their own range and/or without significant threats, such that they would warrant inclusion on the Region Six (or 1) sensitive species list, but they are of unique habitats and/or very limited distribution within the Wallowa-Whitman National Forest.)
- *Bolandra oregana* – one known occurrence - seeping cliffs and steep slopes in warm canyons
- *Mimulus patulus* – two known occurrences - ephemeral moist openings in timber or grasslands or on moist rock outcrops

A cursory look at the aerial photo coverage and GIS vegetation data suggests that it is likely that this area contains potential habitat for additional rare plants as well as unique plant communities/associations. There are many sensitive, endemic, and disjunct plant species likely to be found within the Imnaha Face Roadless Area. A list of these species can be found in Appendix G of the Comprehensive Management Plan for the Hells Canyon National Recreation Area. At this time there is insufficient information to determine the extent to which they occur within this roadless area.

This roadless area also likely contains a number of rare combinations of outstanding and diverse ecosystems and parts of ecosystems. A list of these plant communities can be found in Appendix G of the Comprehensive Management Plan for the Hells Canyon National Recreation Area. At this time there is insufficient information to determine the extent to which they occur within this road-less area.

Cultural: Six sites and four isolated occurrences have been documented for the Imnaha Face Roadless Area. The sites consist of four prehistoric lithic scatters (in association with springs our streams), a historic cairn (thought to be related to shepherding), and the remains of a historic homestead. The four isolates consisted of projectile points and a unifacial tool fragment. The Imnaha River, which has numerous sites documented, runs immediately west of the roadless area and because sites have been found in association with springs, additional sites are expected to be present in the designated area.
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Minerals: None.

Land use/Special use: Two impoundments covering 2 acres have been built for livestock purposes. A 230 KV powerline and associated right-of-way crosses the area around Dunlap Creek.

Fire: Historically, mid- to late-summer lightning-caused fires burned across a mosaic of plant communities. The fires were of mixed severity and varied in size depending upon the severity of the

existing weather conditions and the vulnerability of the plant community to fire. Lower elevations, 1,900-4,400 feet, historically had short fire-free periods and limited tree and brush encroachment within these areas. In the mid-elevation range, fires were less frequent and were of mixed severity and varied in size. Historically in the higher elevation subalpine zone, fires were infrequent and in some cases under severe weather conditions resulted in stand replacement fires. In the last 90 years, fire exclusion in forested plant communities has dramatically changed the woody vegetation form stands dominated by early seral, fire-adapted species to stands and communities where species susceptible to fire predominate. In some of these stands, the change has contributed to increased outbreaks of insects and diseases. The trend for continued stand susceptibility and vulnerability to sustained disturbance events exceeding historic patterns would continue in the absence of management. This trend would occur primarily within the low- to mid-elevation range where fire regimes have been moderately or significantly altered from their historic range. In the higher elevation subalpine zone, fire regimes are most likely within their historic range.

Insects and Disease: Endemic levels of insect and disease provide diversity to forest stands and the landscape; however, many mixed conifer stands in the Wallowa Mountains have been damaged by a variety of insects and diseases, compounded by protracted draught, overstocking, and inappropriate past management (Schmitt and Scott, 1993). The major insect in this area is the tussock moth.

Private Lands: None.

Klopton-Corral Creek (#1854)

20,690 acres

Overview

History: Much of the Hells Canyon National Recreation Area (HCNRA) is in a roadless and undeveloped condition. Congress recognized this in establishing the NRA in 1975. The enabling legislation established Hells Canyon Wilderness Area and directed the Forest Service to specifically review additional areas for wilderness suitability. Klopton-Corral Creek roadless area was not listed as an area for additional study.

In 1977, the Secretary of Agriculture directed the Forest Service to make a comprehensive inventory, review, and evaluation of all National Forest roadless and undeveloped areas. This process, known as RARE II, resulted in an allocation of all inventoried areas to one of three categories: wilderness, non-wilderness or further planning. RARE II was completed early in 1979, but land-use allocations for roadless and undeveloped areas in the HCNRA were reserved for recommendation in the Comprehensive Management Plan.

The 1990 Wallowa-Whitman National Forest Plan and the 2003 HCNRA Comprehensive Management Plan allocated 95 percent to native vegetation and 5 percent to dispersed recreation/timber management.

Location and Access: These roadless areas border the Snake River on both the Oregon and Idaho sides of the river. The roadless area lies between the Pittsburg Landing Road (County Road 593) to the north, Hells Canyon Wilderness to the west and south, and the Salmon/Snake divide to the east. Access is provided via the Pittsburg Landing Road, the river, and several Nez Perce National Forest roads, most of which traverse the Snake-Salmon Divide. Several trails cross the area.

Geography and Topography: The topography is heavily dissected. Elevations range from 1,100-5,700 feet.

Vegetation/Ecosystem: Vegetation is dominated by grasslands in the northern quarter of the roadless area and by timbered stringers to the south. Total commercial forest land within the Klopton-Corral Creek Roadless Area is approximately 5,000 acres (25 percent of the total acreage). Of the commercial timbered landbase, 50 percent consists of ponderosa pine/ Douglas-fir habitat types, and 50 percent true fir.

In lower elevation breaklands, blue bunch wheatgrass associated with sand dropseed dominate the more xeric microsites (southern and western exposures), and Idaho fescue associated with prairie junegrass dominate the more mesic exposures (northern and eastern). Basalt breaklands, with slopes exceeding 60 percent, are characterized by vertical timbered stringers on northern slopes contrasted with bluebunch wheatgrass/Idaho fescue/ silky lupine communities on the southern slopes. The timbered stringers are dominated by pole-sized to small diameter Douglas-fir, grand fir, and ponderosa pine associated with scattered residual large diameter ponderosa pine.

Current Uses: Much of the area has been grazed. Numerous cabins exist as remnants of earlier homesteads and ranches. Some picnic tables and toilets have been located along the Snake River. Some water diversion structures have been constructed at Big Bar and Sheep Creek along the Snake River. Numerous fences have been built throughout. Extensive prospecting has occurred at the Blue Jacket Mine adjacent to Cow Creek Saddle. An unimproved road goes from Cow Creek Saddle to Kirkwood Creek on the river and serves the active Kirkwood Ranch. Numerous old clearcuts are located adjacent to the area in Sawpit Saddle and Dutch Oven Ridge.

Appearances and surroundings: Dominating grasslands, generally viewed from some other area, are not heavily visited, have few trails, and are fairly inaccessible. Scenic integrity is moderately high with some visually subordinate inconsistencies.

Key Attractions: The steep canyon walls typical of Hells Canyon and solitude they offer are the major key attraction.

Inventory Criteria

Although a road cuts the area into two pieces, each piece meets the size requirement for the inventory criteria for areas with wilderness potential.

Capability

Naturalness and Undeveloped Character: A high expectation of solitude and isolation from sights and sounds of others primarily exists due to topography and limited access. Solitude may be somewhat less during hunting season. Solitude may be interrupted by powerboat traffic on the Snake River but the degree depends on user's location in relationship to the river.

Access is overland, by trail, or by riverboat. One road, approximately 3 miles long, accesses Kirkwood Ranch, and is suitable for four-wheel drive only. Sixteen miles of trail from neighboring areas provide limited access to the area. Accessibility challenge is classified as most difficult. Recreation use is limited mostly to hunting.

Primitive Recreation Opportunities and Challenge: Self-reliance through application of outdoor skills in an environment that offers a high degree of risk and challenge.

Special features: The area possesses significant cultural sites. It also provides outstanding scenic views of the Snake River and Hells Canyon.

Manageability and boundaries: This area can feasibly be managed as a wilderness with minor boundary adjustments. Buffering out the roads with a 300-foot buffer would exclude the Kirkwood Ranch Road (132) and the Dixon Cow Camp Road (42050).

Availability

Recreation: The area is primarily used for hunting during the fall season. Photographic opportunities exist at numerous viewpoints including those at Sawpit Saddle.

Wildlife: These roadless areas border the Snake River on the Oregon and Idaho sides. Most of the terrain consists of grassland terraces with steep rimrock walls, timbered or shrub draws.

This area provides escapement for elk, deer and bear during hunting seasons as well as movement corridors. The many rock cliffs provide nesting for avian species, roosting sites for bats and unique habitats for other wildlife species (such as cougars, rodents, etc.). Peregrine falcons have been noted foraging within the area, but are no suitable cliffs for nesting. Spotted bats prefer roosting sites in crevices in cliffs or canyon walls. This species has not been noted in this area, although no recent surveys have been conducted. Older surveys have noted other species of bats within the area. Other wildlife species that may be seen within this area are Rocky Mountain bighorn sheep, mountain quail, and golden eagles.

Rocky Mountain bighorn sheep have been released at several sites on both sides of the Snake River. Bald eagles and golden eagles use this area especially in the winter.

This area also provides habitat for amphibians and reptiles. The rock rims provide excellent habitat for snakes and lizards and the riparian zones also provide ample habitat for these species.

Water/Fish: The area contains several steep-gradient perennial tributaries to the Snake River. Five of them contain habitat for ESA-threatened Snake River steelhead: Klopton Creek (approx. 2½ miles), Corral Creek (approx. 5 miles), Kirby Creek (approx. 2½ miles), Kirkwood Creek (approx. 2½ miles) and Lost Valley Creek (approx. 1 mile).

Range: The roadless area intersects one vacant allotment and one closed allotment, which provide no head months of grazing use and no animal unit months of forage annually. Range improvements found within the roadless area include 5 miles of primitive two-track roads, one building, 32 miles of wire fence, 26 spring developments, and 27 ponds.

The various forage-producing plant communities range from early seral to late seral. Generally, during the 120-year history of domestic livestock grazing in the area, the impacts on plant communities found on the gentler-sloped terrain were greatest in unmanaged areas. Because the majority of acres within the roadless area are steep to very steep, the impacts of livestock grazing have been regulated to some degree by slope preference of animals. Historically, the steep and very steep slopes were allocated as sheep and goat allotments and the gentler sloped range was allocated to cattle and horses. Today vegetative trends on the steep-sloped sheep range are stable to upward since sheep grazing has not been practiced for the past 10 years or more. Historic vegetative trends on the cattle ranges tend to be trending upward more slowly from the lows of the 1920s when stocking rates came off of the historic highs following World War I. Vegetative trends on cattle ranges rose at a steeper rate in the late 1950s and 60s as a result of changing from season-long grazing to deferred and rest rotation methods. This divided vast open rangelands into smaller units or pastures, which allowed a higher degree of control. During the late 1970s and ‘80s, vegetative trends within riparian zones began to move in a positive direction when rangeland ecologists introduced an initiative to improve the ecological status of western riparian zones.

Timber/Vegetation: Historically, mid- to late summer lightning-caused fires burned across a mosaic of plant communities. The fires were of mixed severity and varied in size depending upon the severity of conditions and vulnerability of the plant community. In the last 90 years, fire exclusion in forested plant communities has dramatically changed the woody vegetation from stands dominated by early seral, fire-adapted species to stands and communities where species susceptible to fire predominate.

This area has received some limited plant inventory work.
Region Six and 1 sensitive plant species (2005) known to occur within this area:

- *Erigeron engelmannii* – six known occurrences – dry grassland habitat
- *Calochortus nitidus* – four known occurrences – dry grassland habitat (fescue and bluebunch wheatgrass)
- *Mimulus ampliatus* – three known occurrences – rock outcrops

- *Leptodactylon pungens* ssp *hazeliae* acqd – 1 known occurrence – steep canyon slopes, rock outcrops

A cursory look at the aerial photo coverage and GIS vegetation data suggests that it is likely that this area contains potential habitat for additional rare plants as well as unique plant communities/associations. There are many sensitive, endemic, and disjunct plant species likely to be found within the Klopton Roadless Area. A list of these species can be found in Appendix G of the Comprehensive Management Plan for the Hells Canyon National Recreation Area. At this time there is insufficient information to determine the extent to which they occur within this roadless area.

This roadless area also likely contains a number of rare combinations of outstanding and diverse ecosystems and parts of ecosystems. A list of these plant communities can be found in Appendix G of the Comprehensive Management Plan for the Hells Canyon National Recreation Area. At this time there is insufficient information to determine the extent to which they occur within this roadless area.

Minerals: No producing mines exist, though the Blue Jacket Mining Group does contain a substantial resource and extensive exploration is being conducted by the owners. Several other mining properties in the area have very high mineral potential.

Cultural: There are 27 cultural resource sites currently identified in the Klopton/Corral Creek Roadless Area. Prehistoric site comprise the majority, and consist of 11 winter village pit house locations, three rock shelters, one with rock art, four separate rock art sites, a house/brush structure platform area, two possible cache pit areas, and two lithic scatters. Historic sites consist of two historic dwellings, an area of historic artifacts and a placer mining site.

Like the Big Canyon Roadless Area to the north of this designated area, only small portions of the area have been surveyed for cultural resources with the exception of the near river corridor, however, additional archaeological sites are likely present along the smaller drainages to the Snake River, on the numerous benches and terraces adjacent to the drainages, and within geological formations that may contain outcroppings and overhangs sufficient for rock shelter and rock art. The entire area is known to have been heavily used for thousands of years, first by prehistoric native people, and within historic times by fur trappers, miners (both Chinese and Euro-American), and sheep and cattle ranchers.

Land use/Special use: No power withdrawals, existing or proposed impoundments or irrigation systems are located in the area. Some historical water diversion structures have been developed at Big Bar and Sheep Creek.

Fire: Fire Regime 2 and a Condition Class 3 represent the majority of the area. Fuel model 1 and 2 represents most of the area.

Insects and Disease: Endemic levels of insect and disease provide diversity to forest stands and the landscape; however, many mixed conifer stands in the Wallowa Mountains have been damaged by a variety of insects and diseases, compounded by protracted draught, overstocking, and inappropriate past management (Schmitt and Scott, 1993).

Private Lands: None.

Lake Fork Roadless Area (#6290)

22,760 Acres

Overview

History: The Lake Fork Roadless Area has been twice considered for addition to the wilderness system by Congress in 1972 and in the 1981 Hells Canyon NRA study. Each time the land use allocations were

made to manage the area as non-wilderness. This area lies partially within the Hells Canyon National Recreation Area (HCNRA).

This roadless area was inventoried during the original Roadless Area Review and Evaluation (RARE) process, as well as during RARE II, and was allocated to non-wilderness uses through the 1981 HCNRA Comprehensive Management Plan.

Harvest has occurred in areas designated as big game summer range and within areas designated for harvest. No activities have occurred on 2,774 acres.

Location and Access: The area lies primarily within T.6S., R.46-47E. Its northwest boundary lies about ½-mile from the 1984 Lick Creek addition to the Eagle Cap Wilderness. Hells Canyon Wilderness is about 6 miles to the northeast. The boundary of Homestead Planning Area is 1 mile to the southeast. Lake Fork contains numerous tributaries to the Pine Creek system, and is immediately to the east of Fish Lake and Fish Lake Campground, which is accessed by Forest Road 66.

Geography/Topography: The area ranges in elevation from around 2,600 feet at the mouth of Little Elk Creek on the southeast, to over 7,000 feet in the northern portion. Topography in the lower third is rough and steep. The middle third is moderate with slopes of 10-30 percent.

Vegetation/Ecosystem: The area is typical of land on the southeast of the Wallowa Mountains that slopes to the Snake River with varied forest ecosystems of grass slopes intermixed with meadows. Lower elevation lands consist mainly of Columbia River basalts. Mid-elevation soils have developed from a mixture of basalt and windblown ash. Deeper ash deposits are evident in the north portion.

Current Uses: Recreation usage is primarily fall big-game hunting. Hiking, cross country skiing, berry picking, and fishing are popular in the Lake Fork Area. The entire area is open to snowmobile use. A designated route follows a main road along the west side.

Appearance and Surroundings: Approximately 7,000 acres are within the roaded natural component of the recreation opportunity spectrum, 4,500 acres are semi-primitive motorized, and 3,500 are semi-primitive.

Key Attractions: None.

Inventory Criteria

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

Capability

Naturalness and Undeveloped Character: Boundaries of this area are defined by roads, by topographic features and by North Pine Creek on the east. The varied forest canopy/grassland combinations provide good scenic qualities and a sense of solitude.

There are no developed recreation sites within the area; however there is one Forest Service cabin that receives moderate use during hunting season. Most of the recreation that occurs in the area is dispersed semi-primitive use, such as hiking, riding, hunting, and camping. The area is very popular for snowmobiling.

Primitive Recreation Opportunities and Challenge: This roadless area is easily accessed by hikers or packers and contains a trail system that is user-friendly to the majority of the public; however, the 1994 Twin Lakes Fire has made travel more difficult. The southwestern portion of the area provides a small degree of challenge for the user but is still easily accessed.

Special Features: There are no outstanding geological features in the area, however, there are, at times, large numbers of elk. The scenic views of the area have been degraded by the 1994 fire.

Manageability and Boundaries: Forest Road 66.3, from Fish Lake and Twin Lakes, separates the Lake Fork Roadless Area from the Eagle Cap Wilderness. A number of wheel-track roads exist throughout the area. Most are closed.

Availability

Recreation: The area provides opportunities for users to participate in such activities as hiking, riding, big-game hunting, camping, and snowmobiling,

Wildlife: Lynx habitat, elk summer range, travel corridors and connectivity for several species, old-growth habitat, Clear Creek RNA, sensitive plants. Winter use could impact lynx if they are present. There has been interest in keeping the area undeveloped for elk habitat and hunting.

Water/Fish: Elk, Lake Fork, and Duck creeks support bull trout, resident rainbow and eastern brook trout populations. Since construction of Hells Canyon Dam on the Snake River, no anadromous fish use this area. Water from these tributaries help sustain water quality in the Pine Creek watershed.

Range: The East Pine Valley and Big Elk grazing allotments are within this area.

Timber/Vegetation: This area was productive forest land but most of it burned in the 1994 fire. The eastern and southern portions of the area have had timber harvest but only on the fringe. Sensitive plants have been identified in the area.

Minerals: Surveys indicate low potential for placer gold or lode deposits, although the area is only 5 miles west of Homestead mining area and bout 10 miles east of gold-producing areas around Cornucopia. Nearly the entire length of Duck Creek, near the boundary of the Lake Fork area, has placer mining claims.

Cultural: A few scattered cultural resource finds, primarily lithic fragments, have been made in the Lake Fork area. Some old range improvements, such as corrals and sheds, are also within the area.

Land Use/Special Uses: Irrigation ditches under special use permits.

Fire: In 1994 about 10,000 acres burned, increasing habitat variability.

Insects and Disease: The area has undergone a serious spruce bark beetle epidemic.

Private Land: None

Lick Creek Roadless Area (#6285)
8,410 acres

Overview

History: The bulk of the original RARE II roadless area was incorporated into the Eagle Cap Wilderness in 1984. The acreage adjoining Lick Creek to the north and Indian Crossing Campground to the east constitutes the remaining unroaded acreage of the original roadless area.

The entire area is allocated to dispersed recreation/timber management.

Location and Access: The Lick Creek roadless area is accessed by Imnaha River Road 3960 and Forest Trail 1816. The area, located in T.5S., R.47E., abuts the eastern boundary of the Eagle Cap Wilderness and is bisected by the Imnaha River. It is bounded to the north by Lick Creek and to the south by Twin Lakes and Russel Mountain.

Geography and Topography: Elevations within the current roadless area range from 4,500-6,900 feet. The area is representative of valley glaciation.

Vegetation and Ecosystem: The steep mountainous terrain was dominated by heavily stocked, multi-layered subalpine fir, lodgepole pine, and Engelmann spruce stands prior to the stand-replacement Twin Lakes fire of 1994. Isolated islands of the original stand structure remain in the charred landscape. The timber was not salvaged and the forest now consists of standing dead snags over an understory of naturally regenerated lodgepole pine seedlings and saplings. Prior to the '94 fire, approximately 8.7 MMBF of timber was removed the area in the vicinity of Lick Creek in 1988 with the River Beetle Salvage Project. Mortality was the result of an epidemic spruce beetle infestation following a windstorm within the drainage.

Total commercial forest land within the Lick Creek Roadless Area is approximately 3,000 acres (50 percent of the total acreage). Of the commercial timbered landbase, 60 percent consists of true fir and 40 percent lodgepole pine.

Current Uses: Current recreation use of the area is by hikers and hunters. Indian Crossing Trailhead is located along the east boundary of this roadless area and is a main portal to the Eagle Cap Wilderness. Many hikers and hunters begin their trek from this trailhead.

Appearances and surroundings: Most of the area was burned in the 1994 Twin Lakes Fire. Visitors see a very large area of burned timber that is currently in the early stages of recovery. Brush fields and willows dominate the current vegetation with new conifers starting to emerge above the brush. The area has received very limited inventory work.

Key Attractions: The Imnaha River provides scenic opportunities for hikers and photographers.

Inventory Criteria

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

Capability

Naturalness and Undeveloped Character: Sense of solitude and remoteness are the same as a wilderness setting. Encounters with other hikers and outfitters can be expected during the summer and fall months along the Imnaha River. The remainder of the area is unroaded and untrailed.

As stated above, outdoor opportunities are primarily hunting, hiking, and photography.

Primitive Recreation Opportunities and Challenge: The area is relatively small. The trail through the area is approximately 2 miles long and is easily negotiated.

Special features: None.

Manageability and boundaries: The area can feasibly be managed as a wilderness.

Availability

Recreation: As noted above, Indian Crossing Trailhead is a major portal to the east side of the Eagle Cap Wilderness. This trailhead is located along the east boundary of the roadless area, and access to the wilderness area is through the roadless area. Use of the wilderness area is increasing and expected to continue.

Wildlife: This roadless area is comprised of higher elevation habitat and includes the major drainages of Lick Creek and Imnaha River and other smaller drainages.

This roadless area provides travel corridors for many wildlife species as well as Canada lynx and wolverine denning and foraging habitat. Other unique species that may be found within this area are pine martens, pacific fisher, white-tailed ptarmigan, and Wallowa rosy finches. There have also been some sightings and possible nesting by prairie falcons within or adjacent to this area. This area is unique because of higher elevation communities and its use by elk and deer for summer range. This area provides many avenues of escapement for elk and deer during hunting seasons. Currently there is no livestock grazing within this area.

Water/Fish: This small roadless area contains a short length (approximately ¼-mile) of the Imnaha River, and approximately 2.3 miles of Lick Creek. Both of these streams originate in the Eagle Cap Wilderness. The only management activity near them is backcountry recreation. The water quality is at its natural potential. However the Imnaha River, within this area, is within the section of the river (Summit Creek to North Fork confluence) listed on the Oregon State (303(d)) List of Water Quality Limited Streams for exceeding summer temperatures of 50 degrees Fahrenheit for bull trout.

The river within this area contains high-quality fish habitat for three fish species listed under ESA as threatened: Snake River steelhead, Snake River spring/summer Chinook salmon, and Columbia River bull trout. The section of Lick Creek within this area is spawning, rearing, and migration habitat for Columbia River bull trout. Approximately ½-mile is spawning and rearing habitat for Snake River steelhead. Designating this area as wilderness would have no effect on the quality of habitat available for these fish.

Range: The area is closed to commercial grazing of domestic livestock.

Timber/Vegetation: Fire regimes historically occurring within the subalpine fir zone are infrequent, and can be of high intensity and extensive when they occur under severe weather conditions (above 90th percentile). Under these conditions subalpine forests will exhibit sustained runs, especially on steep slopes or under the influence of strong winds and result in large stand-replacement fires combined with long-range spotting. The Twin Lakes Fire substantiated these anticipated effects. When fires occur in subalpine fir under average fire weather conditions (less than 90th percentile) the fire behavior is often single tree or clump torching with short to moderate range spotting resulting in a patchy or “dirty” burn pattern. Future trends in natural disturbance events within this habitat type would be expected to exhibit similar fire regime patterns. In some of these stands, the change has contributed to increased outbreaks of insects and diseases.
These areas have not received any botanical inventory. There are no known Region Six sensitive plant species (2005) within this area. A cursory look at the aerial photo coverage and GIS vegetation data suggests that it is likely that these areas contain potential habitat for rare plants as well as unique plant communities/associations. At this time there is insufficient information to determine the extent to which they occur within this roadless area.

Minerals: None.

Cultural: Currently there are no heritage resources identified within the Lick Creek Roadless Area.

Land use/Special use: None.

Fire: Fire Regime 3 and Condition Class 3 represent the majority of the area. Because of the higher fuel moisture availability normally found within these sites they have evolved with a longer fire regime which contributes to a greater degree of biomass accumulation. Fuel models consist of 8 and 10.

Insect and Disease: The area has seen spruce budworm infestation in the past leading to mortality. Much of this was removed in salvage sales.

Private Lands: None.

Lord Flat-Somers Point Roadless Area (#6295)

67,620 acres

Overview

History: Much of the Hells Canyon National Recreation Area (HCNRA) is in a roadless and undeveloped condition. Congress recognized this in establishing the NRA in 1975. The enabling legislation established Hells Canyon Wilderness Area and directed the Forest Service to specifically review additional areas for wilderness suitability. At that time, the Lord Flat-Somers Point Roadless Area was a congressionally designated Wilderness Study Area.

In 1977, the Secretary of Agriculture directed the Forest Service to make a comprehensive inventory, review, and evaluation of all National Forest roadless and undeveloped areas. This process, known as RARE II, resulted in an allocation of all inventoried areas to one of three categories: wilderness, non-wilderness or further planning. RARE II was completed early in 1979, but land-use allocations for roadless and undeveloped areas in the HCNRA were reserved for recommendation in the Comprehensive Management Plan. The 1984 Oregon Omnibus Wilderness Act did not designate Lord Flat-Somers Point as wilderness when the Hells Canyon Wilderness was expanded.

The 1990 Wallowa-Whitman National Forest Plan and the 2003 HCNRA Comprehensive Management Plan allocated the entire area to management for emphasis of native vegetation.

Location and access: The area abuts the Hells Canyon Wilderness to the east and Grizzly Ridge to the west, Monument Ridge to the south and the Snake River Roadless Area to the north, primarily in Townships 1 and 2 North, Ranges 49-50 East. The southern half is accessible via the Hat Point Road (FS 4240). The northern portion is reached by private and Forest Service roads up Horse, Lightning, and Cow creeks. Two grass airstrips, Memaloose and Lord Flat, provide additional access.

Geography/Topography: The area elevations range from 1,900 to 6,000 feet.

Vegetation/Ecosystem: Existing stand structures and associated species composition vary with landform, elevation, and aspect changes, and with edaphic and precipitate gradients encountered within the Imnaha corridor. Toe slopes and drainage bottoms (1,900-4,000 feet) are characterized by early to mid-seral stands dominated by scattered large-diameter ponderosa pine and Douglas-fir predominants, vertically arranged over even-aged groups of pole- to small-sized ponderosa pine second growth. Pinegrass and elk sedge dominate the ground vegetation. On the dissected north slopes (4,600-5,900 feet), the percentage of Douglas-fir and western larch increases and the percentage of ponderosa pine decreases in the overwood layer. The multi-storied mixed conifer understory consists of grand fir, Engelmann spruce, and Douglas-fir. At the higher elevations, subalpine fir becomes a component of the seedling species composition. The upper broad flats (6,000 feet) are dominated by subalpine fir and lodgepole pine communities.

Total commercial forest land within the Lord Flat-Somers Point Roadless Area is approximately 12,700 acres (18 percent of the total acreage). Of the commercial timbered land base, 30 percent consists of ponderosa pine/ Douglas-fir habitat types, 50 percent true fir, and 20 percent lodgepole pine.

The stand-replacing Summit Strip Fire of 1989 occurred in the vicinity of Windy Ridge, Sleepy Creek, Sour Apple Flat, Summit Ridge, and Haas Ridge. Approximately 4,700 acres of the high-elevation subalpine fir/lodgepole pine community within the roadless area was converted to the stem initiation stage by the fire. Approximately 750 acres totaling 2.6 MMBF was salvage-harvested in 1990 with 4.2 miles of temporary road constructed to access the salvage material.

Current Uses: Some of the land in Cow, Horse, and Lightning creeks has been logged. Approximately 5 miles of roads exist along the streams on the private land. Ranch buildings have been constructed and a variety of farming activities occur. Many miles of fence have been built throughout the area. A grass airstrip, just outside the area at Lord Flat, is used by ranchers and hunters. Recreation use within the area is approximately 8,100 visitor days per year. Most of the use is associated with fall big game hunting, primarily elk, but also for the general viewing of the Snake River Canyon.

Appearances and surroundings: Vistas constantly and continuously change along the semi-primitive challenging roads that follow a relatively narrow travel corridor. Abundant dispersed camping areas, a multitude of trails, a backcountry airstrip, and frequent encounters with other users makes the area feel and look used. An outstanding view of the Snake River Canyon can be part of a non-motorized experience near Somers Point, including an opportunity to see the Summit Burn. Scenic integrity is high with very few inconsistencies from sense of place.

Key Attractions: Remoteness, scenic vistas from trail/road into Hells Canyon, and big game hunting are the key attractions.

Inventory Criteria

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

Capability

Naturalness and Undeveloped Character: A moderate expectation of solitude and some expectation of isolation from sights and sounds of others begins upon leaving Warnock Corral due to road standard and travel way. Sense of remoteness is diminished due to openness of terrain and panoramic views, the road, and the airstrip at Lord Flat. Trails offer access to areas of more solitude.

Primary recreation activities are big-game hunting and scenic viewing, but some hiking and camping occurs.

Primitive Recreation Opportunities and Challenge: Opportunities for challenge in a natural environment with a moderate degree of challenge and risk. The area includes signs with directions and place names. Access to Lord Flat from Warnock Corral via a one-way, native surface, low-standard 15.3-mile 4x4 trail can also be challenging. A number of trails off the main travel route allow access to other areas. Access challenge is classified as moderate to difficult depending on the activity. There approximately 11 miles of trail and approximately 15 miles of SPM high-clearance road.

Special features: An airstrip is located on Lord Flat approximately 1 mile north of the Dorrance Cow Camp. It is used during the summer and fall months to shuttle administrative personnel and visitors into the area. A special use permit is currently issued to a local flight service.

Manageability and boundaries: The northern boundary of the roadless area has stringers of private land extending up Horse Creek, Lightning Creek, and Cow Creek. The private parcels are narrow (¼ mile wide) and extend into the roadless area 3½, 5, and 1 mile, respectively. Although the public land between the private stringers is unmanageable due to their narrow configuration and lack of solitude, they could afford future public access from the north in lieu of the existing inaccessible private access.

Availability

Recreation: Recreation opportunity would change with wilderness recommendation. Road/trail 1774 would be closed to motorized use. Currently this road is closed to motorized vehicles from 3 days before bow season, (late August) to the end of the last elk hunt, (mid-November). Hunting opportunities have decreased slightly in recent years due to reduced available hunting tags.

Wildlife: This roadless area has a wide variety of habitat from rim country along the Imnaha River to high-elevation habitats.

This area provides escapement for elk, deer and bear during hunting seasons as well as movement corridors. Rock cliffs provide nesting for avian species, roosting sites for bats, and unique habitats for other wildlife species (such as cougars, rodents, etc.). Peregrine falcons have been noted foraging within the area, but are no suitable cliffs for nesting. Spotted bats prefer roosting sites in crevices in cliffs or canyon walls. This species has not been noted in this area, although no recent surveys have been conducted. Older surveys have noted other species of bats within the area. Possible wolverines have been sighted near this area.

This roadless area provides travel corridors for many wildlife species and habitat for Canada lynx and wolverine denning and foraging. There have also been some sightings and possible nesting by prairie falcons within or adjacent to this area. This area is unique because of higher elevation communities and its heavy use by elk and deer as summer range. This area provides many avenues of escapement for elk and deer during hunting seasons. Mountain goats have also been released within this area and appear to be increasing in population.

Water/Fish: This area contains three large tributary streams to the Imnaha River: Horse, Lightning, and Cow creeks. The three streams are similar in size, geographic orientation, flows, and habitat. Each flows northward through narrow valleys within deep, inaccessible canyons. They all have slightly more than 20 miles of perennial flow, with the lower sections flowing several miles through private land. They are of moderate gradient, generally between 2-5 percent with sections up to 9 percent. Traditionally, the low-gradient headwater portions of most streams originating on the plateaus have been heavily grazed, resulting in the loss of streambank vegetation and some down-cutting due to erosion. Inside the steeper canyons where accessibility is limited, the habitat is very good with stable and well-vegetated banks. Both Cow and Lightning Creek are on the Oregon Water Quality Limited Streams 303(d) List for summer temperatures exceeding 64 degrees Fahrenheit for steelhead rearing. Zone biologists believe that this is a natural condition and have petitioned to remove the streams from the list. A wilderness designation would not change the quality of water or habitat of these streams.

Lightning, Cow, and Horse creeks and their major tributaries contain Snake River steelhead, which is listed as threatened under ESA. All three streams contain Snake River spring/summer Chinook (also listed as threatened) rearing habitat in their lower reaches on private land. One sighting of a fluvial bull trout (listed as threatened) was made in 1993 several miles up Lightning Creek, but subsequent snorkeling, both day and night, by Forest Service and ODFW biologists, and electro-shocking by Nez Perce tribal biologists did not verify bull trout in Lightning Creek. It is currently not considered a bull trout stream.

Range: The roadless area intersects four active allotments and one closed allotment, which provide 9,518 HMs (head months) of grazing use and 12,564 AUMs (animal unit months) of forage annually. Range improvements found within the roadless area include; 1½ miles of primitive two-track roads, four buildings, 13 miles of wire fence, 50 spring developments, and 18 ponds.

The various forage-producing plant communities range from early seral to late seral. Generally, during the 120-year history of domestic livestock grazing in the area, the impacts on plant communities found on the gentler-sloped terrain were greatest in unmanaged areas. Because the majority of acres within the roadless area are steep to very steep, the impacts of livestock grazing have been regulated to some degree by slope preference of animals. Historically, the steep and very steep slopes were allocated as

sheep and goat allotments and the gentler sloped range was allocated to cattle and horses. Today vegetative trends on the steep-sloped sheep range are stable to upward since sheep grazing has not been practiced for the past 10 years or more. Historic vegetative trends on the cattle ranges tend to be trending upward more slowly from the lows of the 1920s when stocking rates came off of the historic highs following World War I. Vegetative trends on cattle ranges rose at a steeper rate in the late 1950s and 60s as a result of changing from season-long grazing to deferred and rest rotation methods. This divided vast open rangelands into smaller units or pastures, which allowed a higher degree of control. During the late 1970s and '80s, vegetative trends within riparian zones began to move in a positive direction when rangeland ecologists introduced an initiative to improve the ecological status of western riparian zones.

Timber/Vegetation: Historically, mid- to late summer lightning-caused fires burned across a mosaic of plant communities. The fires were of mixed severity and varied in size depending upon the severity of the existing fire weather conditions and the vulnerability of the plant community. Low elevations, 1,900 to 4,400 feet, historically had short fire-free periods and limited encroachment by trees and brush. In mid-elevations, fires were less frequent, were of mixed severity, and varied in size. Historically, fires in the high-elevation subalpine zone were infrequent and in some cases under severe weather conditions, resulted in stand-replacement fires. In the last 90 years, fire exclusion in forested plant communities has dramatically changed the woody vegetation from stands dominated by early seral, fire-adapted species to stands and communities where species susceptible to fire predominate. In some of these stands, the change has contributed to increased outbreaks of insects and diseases. The trend for continued stand susceptibility and vulnerability to sustained disturbance events exceeding historic patterns would continue in the absence of management. This trend would occur primarily within the low- to mid-elevation ranges where fire regimes have been moderately or significantly altered from their historic range. In the higher elevation subalpine zone, fire regimes are most likely within their historic range.

This area has received very limited plant inventory. Region 6 sensitive plant species (2005) known to occur within this area:

- *Erigeron engelmannii* – five known occurrences – dry grassland habitat
- *Mimulus hymenophyllus* – nine known occurrences – seeping cliff habitat in warm canyons

  Botanical Species-of-Interest* known from within this area:
  *(Plant species found frequently enough within their own range and/or without significant threats, such that they would warrant inclusion on the Region 6 (or 1) sensitive species list, but they are of unique habitats and/or very limited distribution within the Wallowa-Whitman National Forest.)
- *Bolandra oregana* – five known occurrences – seeping cliffs and steep slopes in warm canyons
- *Mimulus patulus* – five known occurrences – ephemeral moist openings in timber or grasslands or on moist rock outcrops

A cursory look at the aerial photo coverage and GIS vegetation data suggests that it is likely that this area contains potential habitat for additional rare plants as well as unique plant communities/associations. There are many sensitive, endemic, and disjunct plant species likely to be found within the Lord Flat Roadless Area. A list of these species can be found in Appendix G of the Comprehensive Management Plan for the Hells Canyon National Recreation Area. At this time there is insufficient information to determine the extent to which they occur within this roadless area.

This roadless area also likely contains a number of rare combinations of outstanding and diverse ecosystems and parts of ecosystems. A list of these plant communities can be found in Appendix G of the Comprehensive Management Plan for the Hells Canyon National Recreation Area. Current information cannot determine the extent to which they occur within this roadless area.

Minerals: None

Cultural: There have been few surveys of the Lord Flat-Somers Point Roadless Area. Only three historic sites, three prehistoric isolated occurrences, and one proto-historic isolate have been documented. The historic sites consist of a cabin ruin, a stone foundation, and a spring location. The four isolates are

comprised of a projectile point, a bi-face tool, a few isolated flakes, and a tree peeled to the cambium layer.

Because this area lies directly between the Snake and Imnaha rivers, the expectation is that there should be more unidentified and undocumented prehistoric, proto-historic, and historic sites as native people traveled from river valley to the high country and back in their seasonal rounds of hunting and gathering.

Land use/Special use: An airstrip is located on Lord Flat approximately 1 mile north of the Dorrance Cow Camp. It is used during the summer and fall months to shuttle administrative personnel and visitors into the area. A special use permit is currently issued to a local flight service.
None

Fire: Fire Regime 2 and 3 and Condition Class 2 represent the majority of the area. The sites have evolved with a longer fire regime contributing to a greater degree of biomass accumulation as a result of the higher fuel moisture associated with fire regime 3 types. Fuel models consist of models 2, 8, and 10.

Insects and Disease: Endemic levels of insect and disease provide diversity to forest stands and the landscape; however, many mixed conifer stands in the Wallowa Mountains have been damaged by a variety of insects and diseases, compounded by protracted draught, overstocking, and inappropriate past management (Schmitt and Scott, 1993).

Private Lands: The northern boundary of the roadless area has stringers of private land extending up Horse Creek, Lightning Creek, and Cow Creek. The private parcels are narrow (¼-mile wide) and extend into the roadless area 3½, 5, and 1 mile, respectively. Although the public land between the private stringers is unmanageable due to their narrow configuration and lack of solitude, they could afford future public access from the north, (refer to the Snake River Roadless Area discussion).

Mountain Sheep Roadless Area (#6298)
10,420 acres

Overview

History: Much of the Hells Canyon National Recreation Area (HCNRA) is in a roadless and undeveloped condition. Congress recognized this in establishing the NRA in 1975. The enabling legislation established Hells Canyon Wilderness Area and directed the Forest Service to specifically review additional areas for wilderness suitability. Mountain Sheep roadless area was, at that time designated as a Wilderness Study Area.

In 1977, the Secretary of Agriculture directed the Forest Service to make a comprehensive inventory, review, and evaluation of all National Forest roadless and undeveloped areas. This process, known as RARE II, resulted in an allocation of all inventoried areas to one of three categories: wilderness, non-wilderness or further planning. RARE II was completed early in 1979, but land-use allocations for roadless and undeveloped areas in the HCNRA were reserved for recommendation in the Comprehensive Management Plan. Mountain Sheep Wilderness Study Area was not included in the expansion of the Hells Canyon Wilderness Area as a result of the 1984 Oregon Omnibus Wilderness Act.

The 1990 Wallowa-Whitman National Forest Plan and the 2003 HCNRA Comprehensive Management Plan allocated 100 percent of the area to native vegetation management emphasis.

Location and access: The roadless area lies adjacent to the Snake River between Eureka Bar to the southeast and the Washington/Oregon state line to the northwest. The southwestern boundary follows portions of Cold Springs Creek turning southeast cross-country to a point south of the mouth of the Imnaha River.

The river provides most of the access. The roads to the Cache Creek, Cherry Creek, and Jim Creek ranches provide additional access. The old wagon road from Spain Saddle to Eureka Bar provides trail access as does the Imnaha River Trail.

Geography/Topography: Similar to Hells Canyon to the south, the area is characterized by deep, rugged canyons. Elevations range from 900' ASL to approximately 5000' ASL.

Vegetation/Ecosystem: The bulk of the roadless area experienced a high-intensity, stand-replacement fire in 1988. The Teepee Butte Fire consumed the timbered stringers from Downey Saddle east to the Snake River and south to the extent of the roadless area. Prior to the fire, timbered stringers consisted of ponderosa pine old-growth over dense stands of pole to small diameter Douglas-fir and ponderosa pine. These structures only comprised 5 percent of the grassland dominated landbase within the roadless area. The fire converted the majority of the layered structures to the stem initiation stage of stand development.

As alluded to, the majority of the vegetation represented within the area reflects grassland community types. Vegetation patterns on mid-slope benches and dissected basalt breaklands vary depending upon aspect. Bluebunch wheatgrass associated with sand dropseed dominate more xeric microsites (southern and western exposures), whereas Idaho fescue associated with prairie junegrass occupy the more mesic exposures (northern and eastern).

Current Uses: This area has historically been grazed. The ranches at Cache, Cherry and Jim creeks have a long history of operation. Most of the area is unroaded, and the open roads within the area have been buffered out. Numerous structures are associated with the ranches. There are over 10 miles of fence.

Appearances and surroundings: The area is typically steep and rocky. Most of the area is non-forest except along stream bottoms. The area is remote and very natural appearing. The topography offers isolation from others and outside influences.

Key Attractions: The area is immediately adjacent to portions of the Snake River Scenic Corridor. The ruggedness and geologic formations are key attractions.

Inventory Criteria

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

Capability

Naturalness and Undeveloped Character: The area offers moderate to high expectation of solitude with some expectation of experiencing isolation from sights and sounds of others. Solitude may be somewhat less during hunting seasons. Sense of remoteness is low due to past evidence of man and the open character of the landscape.

Hiking opportunities exist, however terrain is rugged and summers are hot. Recreation opportunities are limited mostly to hunting in the fall months.

Primitive Recreation Opportunities and Challenge: The area offers seclusion and the absence of others and provides opportunities to experience self-reliance through application of outdoor skills in an environment that offers a moderate degree of challenge and risk. Contact with management personnel is infrequent and irregular.

Special features: The area offers scenic views of Hells Canyon.

Manageability and boundaries: The northern half of the roadless area has had the areas around the administrative sites at Cache Creek and Jim Creek buffered out. The numerous roads accessing these sites have also been buffered out of the inventoried roadless area. However, the southern portion, adjacent to Cook Ridge roadless area (south of cook creek) provides a high expectation of solitude and remoteness. The area offers a moderate- to high-degree of challenge and risk.

Availability

Recreation: This area is primarily used by big game hunters in the fall. The Snake River provides most of the access. Some hunters use the river to access hunting areas.

Wildlife: The roadless area borders the Snake River on the Oregon sides. Most of the terrain consists of grassland terraces with steep rimrock walls and timbered or shrub draws.

This area provides escapement for elk, deer and bear during hunting seasons as well as movement corridors. The many rock cliffs provide nesting for avian species, roosting sites for bats and unique habitats for other wildlife species (such as cougars, rodents etc). Peregrine falcons have been noted foraging within the area, but there are no suitable cliffs for nesting. Spotted bats prefer roosting sites in crevices in cliffs or canyon walls. This species has not been noted in this area, although no recent surveys have been conducted. Older surveys have noted other species of bats within the area. Other wildlife species that may be seen within this area are Rocky Mountain bighorn sheep, mountain quail, and golden eagles. There have been several releases of Rocky Mountain bighorn sheep on both sides of the river. Bald eagles and golden eagles use this area, especially in the winter.

This area also provides habitat for amphibians and reptiles. The rock rims provide excellent habitat for snakes and lizards and the riparian zones provide ample habitat as well. This area provides movement corridors between the Snake River.

Water/Fish: The streams are high-gradient tributaries to the Snake River and occupy steep-sided canyons lined with dense deciduous vegetation. These streams are largely inaccessible and are at their natural potential in terms of water quality and fish habitat. They tend to have falls over bedrock and large boulder substrate near their confluence with the Snake River that form barriers to upstream fish migration. For this reason, few of them are steelhead streams. One stream, Cook Creek, contains habitat for listed Snake River steelhead in the lower half mile within the roadless area. Most perennial streams within this area also contain redband trout. A wilderness designation would not change the habitat or water quality condition of these streams.

Range: The roadless area intersects one active allotment, three closed allotments, and one administrative horse pasture which provide 748 HMs (head months) of grazing use and 1,114 AUMs (animal unit months) of forage annually. Range improvements found within the roadless area include 2 miles of primitive two-track roads, three buildings, 6 miles of wire fence, and eight spring developments.

The various forage-producing plant communities range from early seral to late seral. Generally, during the 120-year history of domestic livestock grazing in the area, the impacts on plant communities found on the gentler-sloped terrain were greatest in unmanaged areas. Because the majority of acres within the roadless area are steep to very steep, the impacts of livestock grazing have been regulated to some degree by slope preference of animals. Historically, the steep and very steep slopes were allocated as sheep and goat allotments and the gentler sloped range was allocated to cattle and horses. Today vegetative trends on the steep-sloped sheep range are stable to upward since sheep grazing has not been practiced for the past 10 years or more. Historic vegetative trends on the cattle ranges tend to be trending upward more slowly from the lows of the 1920s when stocking rates came off of the historic highs following World War I. Vegetative trends on cattle ranges rose at a steeper rate in the late 1950s and 60s as a result of changing from season-long grazing to deferred and rest rotation methods. This divided vast open rangelands into smaller units or pastures, which allowed a higher degree of control. During the late 1970s and ‘80s, vegetative trends within riparian zones began to move in a positive

direction when rangeland ecologists introduced an initiative to improve the ecological status of western riparian zones.

Timber/Vegetation: The land base that is capable of supporting conifers will require many decades to regenerate with conifers given the loss of potential seed source and the relative harshness of the exposed sites.

This area has received a limited amount of plant inventory work. Region Six Sensitive Plant species (2005) known to occur within this area:

- *Erigeron engelmannii* – one known occurrence – dry grassland habitat *Calochortus nitidus* – four known occurrences – dry grassland habitat (fescue and bluebunch wheatgrass)*Allium geyeri* – one known occurrence – dry openings in low elevation grassland habitats.
  Botanical Species-of-Interest* within this area:
  *(Plant species found frequently enough within their own range and/or without significant threats, such that they would warrant inclusion on the Region Six (or 1) sensitive species list, but they are of unique habitats and/or very limited distribution within the Wallowa-Whitman National Forest.)
- *Dryopteris filix-mas* – one known occurrence – riparian areas, seeps, and mesic forest types.

A cursory look at the aerial photo coverage and GIS vegetation data suggests that it is likely that this area contains potential habitat for additional rare plants as well as unique plant communities/associations. There are many sensitive, endemic, and disjunct plant species likely to be found within the Mountain Sheep Roadless Area. A list of these species can be found in Appendix G of the Comprehensive Management Plan for the Hells Canyon National Recreation Area. At this time there is insufficient information to determine the extent to which they occur within this roadless area.

This roadless area also likely contains a number of rare combinations of outstanding and diverse ecosystems and parts of ecosystems. A list of these plant communities can be found in Appendix G of the Comprehensive Management Plan for the Hells Canyon National Recreation Area. At this time there is insufficient information to determine the extent to which they occur within this roadless area.

Cultural: Sixteen sites have been recorded in the Mountain Sheep Roadless Area. Prehistoric sites are comprised of five winter village house pit sites and two rock shelters. Historic sites include three homesteads, four historic structures, and a mining location. Because of the rugged landscape of this area, few archaeological surveys have been conducted, but additional prehistoric, proto-historic and historic cultural resources should be present in this area. Mountain Sheep is located immediately west of the Snake River and most of the drainages cutting through the area are expected to contain additional winter village (pit house) locations and suitable geologic formations for rock shelters also are present and undocumented historic properties are likely as well.

Minerals: Three mineral properties with resources and two more with potential occur in the area. Federal lands within the area are withdrawn from further mineral entry.

Land use/Special use: A withdrawal site for a high dam encompasses 600 acres. No existing or proposed impoundments or irrigation systems are located in the area.

Fire: The area is currently classified as a Fire Regime 2, Condition Class 3 as a result of stand replacement fires of high severity that occurred throughout most of the area. Fuel model 2 occupies the majority of the area.

Insects and Disease: Endemic levels of insect and disease provide diversity to forest stands and the landscape; however, many mixed conifer stands in the Wallowa Mountains have been damaged by a variety of insects and diseases, compounded by protracted draught, overstocking, and inappropriate past management (Schmitt and Scott, 1993).

Private Lands: Small in-holdings along the eastern edge.

Snake River Roadless Area (#6296)
25,610 acres

Overview

History: Much of the Hells Canyon National Recreation Area (HCNRA) is in a roadless and undeveloped condition. Congress recognized this in establishing the NRA in 1975. The enabling legislation established Hells Canyon Wilderness Area and directed the Forest Service to specifically review additional areas for wilderness suitability. Snake River was not one of them.

In 1977, the Secretary of Agriculture directed the Forest Service to make a comprehensive inventory, review, and evaluation of all National Forest roadless and undeveloped areas. This process, known as RARE II, resulted in an allocation of all inventoried areas to one of three categories: wilderness, non-wilderness or further planning. RARE II was completed early in 1979, but land-use allocations for roadless and undeveloped areas in the HCNRA were reserved for recommendation in the Comprehensive Management Plan. Snake River was not recommended for wilderness during this planning effort.

Current land management allocations are 30 percent as native vegetation, 54 percent forage, and 16 percent dispersed recreation/timber management.

Location: The Snake River Roadless Area consists of five separate units, which are bounded to the east by the Lord Flat-Somers Point Roadless Area and Hells Canyon Wilderness; to the west and south by private land adjoining the Imnaha River and the Imnaha Face Roadless Area; and to the north by Cactus Mountain. Access is provided by the Hat Point Road, the Imnaha River Road, and the roads up Cow, Horse, and Lightning creeks.

Geography/Topography: Landforms represented within the roadless area range from terraces along the Imnaha River to gently rolling uplands in the headwaters of Horse Creek.

Vegetation/Ecosystem: Vegetation patterns on the terraces (1,100-1,500 feet) have been altered by cultivation. However, most of these sites would be perennial bunchgrass communities. Vegetation patterns on mid-slope benches (2,000-4,500 feet) vary depending upon aspect. Bluebunch wheatgrass associated with sand dropseed dominate more xeric microsites (southern and western exposures) whereas Idaho fescue associated with prairie junegrass occupies the more mesic exposures (northern and eastern). The oversteepened (slopes in excess of 60 percent) basalt breaklands are characterized by vertical timbered stringers on northern slopes contrasted with bluebunch wheatgrass/Idaho fescue/silky lupine communities on the southern slopes. The timbered stringers are dominated by pole to small diameter Douglas-fir associated with scattered residual large diameter ponderosa pines. The basalt breaklands give way to rolling uplands dominated by subalpine fir and lodgepole pine at the southern end of the roadless area in the headwaters of Horse Creek.

Current Uses: Fences used in ranching operations are located throughout the area. The southwestern portion was logged after the Hoodoo Fire. More than 20 miles of trails are within the area. Several viewpoints and recreation sites are located along the Hat Point Road, near the southwestern boundary.

Approximately 20 miles of unclassified roads exist in the area; open, classified roads have been buffered out of the roadless area. There are at least nine corrals, three cabins, one house, one barn, two fenced pastures, and an airstrip. Some may be considered historic sites. Recreation use is primarily dispersed. Fall elk hunting is the major activity. Total use is estimated at 6,000 visitor days.

Appearances and surroundings: This area surrounds the Lord Flat roadless area and includes five separate units. The transportation corridor from Hat Point to Somers Point is just outside of the area. The

area can be reached by the Hat Point Road, the Imnaha River Road, and the roads up Cow, Horse, and Lightning Creeks. The northern units are reached via private land. Topography is generally steep and the vegetation is a mixture. Varying by aspect and elevation, south slopes are primarily grass while north slopes are forest. More forest land is encountered at higher elevations. The southern unit contains the headwaters of the Horse Creek drainage and is almost totally forested.

Key Attractions: The basalt rimrock formations of the Snake River canyons offer unique geologic viewing. Views of the Snake River and Imnaha River canyons are available.

Inventory Criteria

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

Capability

Naturalness and Undeveloped Character: There is a high potential for primitive recreation and solitude within the area. There are some permanent off-site intrusions, primarily the Hat Point Road and ranches adjacent to the north end. Vegetative screening is low because of the grasslands, while topographic screening is low on the east and high on the west side.

Outdoor recreation use is primarily dispersed. Fall elk hunting is the major activity.

Primitive Recreation Opportunities and Challenge: Opportunities for challenge in a natural environment with a moderate degree of challenge and risk. Contact with management personnel is infrequent. Some of the area is signed.

Special features: There are at least nine corrals, three cabins, one house, one barn, two fenced pastures, and an airstrip.

Manageability and boundaries: Portions of the roadless area can feasibly be managed as a wilderness; other portions could be easily combined with the Lord Flat-Somers Point Roadless Area, which takes a large piece out of the middle of these five separated pieces forming Snake River Roadless area.

Availability

Recreation: Opportunities for recreation are primarily fall elk hunting and sightseeing with approximately 6,000 visitor days of annual use.

Wildlife: This roadless area is mainly comprised of grassland terraces with timbered or shrub draws. This area provides escapement for elk, deer and bear during hunting seasons as well as movement corridors. The many rock cliffs provide nesting for avian species, roosting sites for bats and unique habitats for other wildlife species (such as cougars, rodents etc). Peregrine falcons have been noted foraging within the area, but are no suitable cliffs for nesting. Spotted bats prefer roosting sites in crevices in cliffs or canyon walls. This species has not been noted in this area, although no recent surveys have been conducted. Older surveys have noted other species of bats within the area. Other wildlife species that may be seen in this area are Rocky Mountain bighorn sheep, mountain quail, and golden eagles.

This area also provides habitat for amphibians and reptiles. The rock rims provide excellent habitat for snakes and lizards and the riparian zones provide ample habitat for these species as well. This area provides movement corridors between the Snake River

Water/Fish: The streams in this roadless area are primarily steep intermittent and perennial tributaries to the Imnaha River, and Horse, Lightning, and Cow creeks. The southernmost piece contains the upper 8 miles of Horse Creek, most of which provides spawning, rearing, and migration habitat for Snake River steelhead (listed as Threatened under ESA). This section of Horse Creek is characterized by moderate

gradient (2-5 percent) and large amounts of in-stream wood, primarily from blowdown and insect-killed trees (especially Engelmann spruce). Numerous seeps and springs provide cool water. Several tailed frogs were observed in a 1993 stream survey. Fish habitat is diverse and banks are well vegetated. There are numerous woody debris jams.

Range: The roadless area includes seven active allotments which provide 14,246 HMs (head months) of grazing use and 18,734 AUMs (animal unit months) of annual forage. Range improvements found within the roadless area include; 9¼ miles of wire fence, 13 spring developments, and nine ponds.

The various forage-producing plant communities range from early seral to late seral. Generally, during the 120-year history of domestic livestock grazing in the area, the impacts on plant communities found on the gentler-sloped terrain were greatest in unmanaged areas. Because the majority of acres within the roadless area are steep to very steep, the impacts of livestock grazing have been regulated to some degree by slope preference of animals. Historically, the steep and very steep slopes were allocated as sheep and goat allotments and the gentler sloped range was allocated to cattle and horses. Today vegetative trends on the steep-sloped sheep range are stable to upward since sheep grazing has not been practiced for the past 10 years or more. Historic vegetative trends on the cattle ranges tend to be trending upward more slowly from the lows of the 1920s when stocking rates came off of the historic highs following World War I. Vegetative trends on cattle ranges rose at a steeper rate in the late 1950s and 60s as a result of changing from season-long grazing to deferred and rest rotation methods. This divided vast open rangelands into smaller units or pastures, which allowed a higher degree of control. During the late 1970s and '80s, vegetative trends within riparian zones began to move in a positive direction when rangeland ecologists introduced an initiative to improve the ecological status of western riparian zones.

Timber/Vegetation: Historically, mid- to late summer lightning-caused fires burned across a mosaic of plant communities. The fires were of mixed severity and varied in size depending upon the severity of the existing fire weather conditions and the vulnerability of the plant community. The low elevation, 1,900-4,400 feet, historically had rather short fire-free periods and limited tree and brush encroachment within these areas. In the mid-elevation range, fires were less frequent and were of mixed severity and varied in size. Historically in the higher elevation subalpine zone, fires were infrequent and in some cases under severe weather conditions resulted in stand replacement fires. In the last 90 years, fire exclusion in forested plant communities has dramatically changed the woody vegetation form stands dominated by early seral, fire-adapted species to stands and communities where species susceptible to fire predominate. In some of these stands, the change has contributed to increased outbreaks of insects and diseases. The trend for continued stand susceptibility and vulnerability to sustained disturbance events exceeding historic patterns will continue in the absence of management. This trend would occur primarily within the low- to mid-elevation range where fire regimes have been moderately or significantly altered from their historic range. In the higher elevation subalpine zone, fire regimes are most likely within their historic range.

This area has received very limited plant inventory. Region Six Sensitive Plant species (2005) known to occur within this area:

- *Erigeron engelmannii* – 2 known occurrences – dry grassland habitat
- *Arabis hastatula* – 5 known occurrences – rock outcrops, open slopes/ridges w/course substrate
- *Mimulus hymenophyllus* – 1 known occurrence – seeping cliff habitat in warm canyons

Botanical Species-of-Interest* within this area:
*(Plant species found frequently enough within their own range and/or without significant threats, such that they would warrant inclusion on the Region 6 (or 1) Sensitive species list, but they are of unique habitats and/or very limited distribution within the Wallowa-Whitman National Forest.)

- *Bolandra oregana* –5 known occurrences - seeping cliffs and steep slopes in warm canyons
- *Mimulus patulus* – 6 known occurrences - ephemeral moist openings in timber or grasslands or on moist rock outcrops

A cursory look at the aerial photo coverage and GIS vegetation data suggests that it is likely that this area contains potential habitat for additional rare plants as well as unique plant communities/associations.

There are many sensitive, endemic, and disjunct plant species likely to be found within the Snake River Roadless Area. A list of these species can be found in Appendix G of the Comprehensive Management Plan for the Hells Canyon National Recreation Area. At this time there is insufficient information to determine the extent to which they occur within this roadless area.

This roadless area also likely contains a number of rare combinations of outstanding and diverse ecosystems and parts of ecosystems. A list of these plant communities can be found in Appendix G of the Comprehensive Management Plan for the Hells Canyon National Recreation Area. At this time there is insufficient information to determine the extent to which they occur within this road-less area.

Minerals: None

Cultural: Fourteen sites and three isolated occurrences have been documented for the Snake River Roadless Area. Prehistoric sites consist of eight lithic scatters (one associated with a small rock shelter). Two sites are proto-historic and are comprised of an Indian constructed trail marker cairn and an Indian burial from some time during the 19th century. The historic sites consist of a sheepherder camp, a tin can with two notes, (one from 1917 and another from 1933), and two cairns. The isolates were all lithic materials

Because this area almost completely surrounds the Lord Flat-Somers Point Roadless Area and, therefore lies directly between the Snake and Imnaha rivers, the expectation is that there should be more unidentified and undocumented prehistoric, proto-historic and historic sites.

Lands/Special Uses: This area does not contain any land or special uses

Fire: Fire regimes 1, 2, and 3 and condition class 2 represent the majority of the area. Fuel models consist of models 2, 8, and 10.

Insects and Disease: Endemic levels of insect and disease provide diversity to forest stands and the landscape; however, many mixed conifer stands in the Wallowa Mountains have been damaged by a variety of insects and diseases, compounded by protracted draught, overstocking, and inappropriate past management (Schmitt and Scott, 1993). The major insect in this area is the tussock moth.

Private Lands: Private land separates the area into five separate pieces.

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