## **WILDERNESS EVALUATION**

## Owl Mountain – 621016

## 11,083 acres

### **OVERVIEW**

### History

The 2006 inventory identified this area as meeting the criteria for a potential wilderness area (PWA) as described in Forest Service Handbook (FSH) 1909.12, Chapter 70. The area had not been identified in any previous inventory.

The following chart depicts the current 1988 Colville National Forest Land and Resource Management Plan direction for the 2006 inventoried area.

**Table 1--Management area percentages (rounded)** 

Colville National Forest					
MA1 Old Growth Dependant Species Habitat  MA10 Semi- primitive, Motorized Recreation		MA5 Scenic Timber	MA6 Scenic/ Winter range	MA7 Wood/ Forage	MA8 Winter Range
3%	32%	37%	9%	12%	6%

#### **Location and Access**

The Owl Mountain Proposed Wilderness Area (PWA) is contained wholly within Ferry County in T. 40 N., R. 35 E., Sec. 1, 12 13, 23, 24, and 25; and T. 40 N, R. 36 E., Sec. 3 - 10, 15 - 22, 27 - 31, and 34.

The area is accessed on the east side through the Little Boulder/Independent Creek road systems, ultimately Forest Road 9576-370, which ends at a road closure on Huckleberry Ridge. There is no access from the north because of the Canadian border. The northeast side of the area is extremely rugged and steep and provides no access. Access from the southeast side is along U.S. Highway 395. However, very few people actually access the area from this side. The terrain on the lower slope is such that few hike up from the highway. Most of the access to this area is derived from driving into the heart of the Kerry Creek watershed on Forest Road 9576-150, which leads to the east end of Forest Trail 102 (Owl Mountain Motorized Trail). To access the west side of this trail, one must use Forest Road 9576-160, which runs up the north fork of Little Boulder Creek and eventually links to the trail. It is not well marked, and is mostly known to hunters in the area.

## **Geography and Topography**

The Owl Mountain PWA is located in the Kettle Mountain Range, which is the divide between the Columbia River and the Curlew and Sanpoil Valleys. The Owl Mountain PWA is in the northern portion of this area and lies on the east side of the hydrologic divide between the Columbia River and the Curlew Valley. Generally, the area is part of the Okanogan Highlands landform province, which is characterized by moderate slopes with broad rounded summits as a result of repeated continental glaciation. The broader valley bottoms are characterized by out-washed terraces.

The Owl Mountain PWA consists of three major subdivisions: north of Owl Mountain facing north into Canada, and south of Owl Mountain in the Kerry Creek watershed, and south of Huckleberry Ridge/Grouse Mountain in the Jenny Creek watershed. The dividing line is Owl Mountain, which runs east-west. The Owl Mountain PWA is bordered on the northwest by Huckleberry Ridge, and on the east by the forest boundary near U.S. Highway 395. The land rises over 1800 feet in a short distance west of the town of Laurier. The high point in the Owl Mountain PWA is along Huckleberry Ridge at 5040 feet. The lowest point is approximately 1480 feet on the southern edge of the area near U.S. Highway 395.

The mid-slopes are heavily timbered; however, the major ridge tops and lower slopes are rocky and sparsely vegetated.

#### **Current Uses**

Current uses include hunting, hiking, and motorized outdoor recreation (ATVs/jeeps) on the Owl Mountain Trail.

## **Appearance and Surroundings**

The area north of Owl Mountain is very natural appearing, although vistas to the north look into Canada where power lines and highways are evident. Parts of the Kerry Creek watershed south of Owl Mountain are natural appearing, although management is evident in the heart of the watershed. Management activities are readily visible from vistas along Owl Mountain and Huckleberry Ridge looking into Kerry Creek. Lower Kerry Creek is relatively untrammeled ground; however, sounds and sights relating to US Highway 395 just below this area are evident. The upper north fork of Little Boulder Creek is very natural appearing, however some vistas to the south look into managed areas on the facing slopes. Sounds from Forest Road 9576 and from Ferry County Road 595 may be noticeable.

Watersheds to the south (Little Boulder Creek) and west (Independent Creek) have been heavily managed in the past with numerous roads and visible harvest units.

## **Key Attractions**

Attractions within the area are the native plants and wildlife common to the Colville National Forest. These animals include large mammals such as deer and black bear and many small mammals and birds. There are also scenic views of the Kettle River valley from the higher ridges.

#### CAPABILITY FOR WILDERNESS

### Level of Natural and Undeveloped Environment

Past logging activity can be seen and roads are visible from most locations. The area itself has not been significantly modified by humans, and in general is natural appearing, except for the old jeep trail that runs up the ridge; and livestock grazing is obvious during a portion of the months of June through September. One is seldom more than 1 mile from a road open to vehicles including U.S. Highway 395.

There is one range improvement within the area and one quarter mile of fence. A translator tower is also located within the PWA. The historic Talisman mine, which is scheduled for remediation, has a collection of buildings, mine tailings, and a cleared tramway.

Water quality data is not available for most of the PWA, however due to the relatively low-level disturbance water quality is assumed to be high. There may be localized disturbances due to grazing activities. Jenny Creek has 2.2 miles classified by the Washington State department of Ecology as Category 1, which means the water meets tested standards.

Noxious weed inventory data is not available for this PWA.

The Owl Mountain PWA is impaired by light pollution from the Republic and Grand Forks area. The northern portion of the PWA (21 percent of the PWA) rates a Class 4 on the Bortle Scale, whereas the southern portion (79 percent of the PWA) rates as a Class 3. A Class 4 Rural/Suburban Transition Sky exhibits fairly obvious light-pollution domes over population centers in several directions. The Milky Way well above the horizon is still impressive but lacks all but the most obvious structure. Clouds in the direction of light pollution sources are illuminated but only slightly so, and are still dark overhead. Modest to serious impact to deep sky observing and imaging occurs. A Class 3 Rural Sky has some indication of light pollution on the horizon. Clouds may appear faintly illuminated in the brightest parts of the sky near the horizon, but are dark overhead. The Milky Way still appears complex. Light domes from population centers may appear on the horizon (10-15 degrees above horizon). Visual observing is still relatively unimpaired. Time-lapse photography could be impaired by light pollution.

## Level of Outstanding Opportunities for Solitude or Primitive and Unconfined Recreation

A moderate amount of solitude can be found in the interior reaches of this PWA once one is away from open roads.

Primitive recreation opportunities are present in the form of hunting, cross-country hiking, and trail riding. Primitive or challenging recreational opportunities or features in the area are limited.

The principle attraction is the motorized trail and ridge tops, which afford views of the Kettle River valley. Absence of water on open knobs and ridge tops or along the trail require a certain degree of self-reliance on the part of hikers and horseman; however the distance to traverse is not so long that it would require an overnight to reach from one end of the PWA to the other.

### **Special Features**

There are three rare plants within the Owl Mountain PWA each of which are listed as sensitive by Washington State and as a species of concern under Federal status; sticky polemonium (*Botrychium ascendens*), scalloped moonwort (*Botrychium crenulatum*), and stalked moonwort (*Botrychium pedunculosum*).

The area has almost 8,000 acres of wolverine habitat, and a small amount of habitat for Canada lynx and American marten.

## **Manageability of Boundaries**

Boundaries on the west (ridgeline and old road system), north (Canadian border), and east (Laurier Cliffs and US Highway 395) are manageable. The southern boundary is mostly a nebulous line of old harvest units, which may not prove very manageable or discernable on the ground. A road system (Forest Road 9576-150 and arteries) runs north into the heart of Kerry Creek, creating horseshoe-shaped unroaded area, which could diminish wilderness capability for a portion of the area. The area from Owl Mountain northward creates much more of a discernable and secure parcel of land, as Owl Mountain forms a good barrier to sights, sounds and activities in the Kerry Creek area and Highway 395.

#### AVAILABILITY FOR WILDERNESS

#### Recreation

Existing trails include Owl Mountain Trail #102. The trail is open to ATV, 4 x 4s, motorcycle, hiker, horse, and mountain bike. There are no developed sites and just a couple of dispersed campsites within the area. Snowmobile use is allowed in the area.

About one third of the area is managed to feature semi-primitive motorized recreation (the Owl Mountain Trail). There are only five areas designated as such on the Colville National Forest, and thus, the interest in retaining this designation is extremely high from some outdoor recreation groups. The existing use on the trail in this area is very low. There is some use during the summer months but most of the activity is during the fall season for hunting access.

Access is limited from the Little Boulder road system. There was access from State Highway 395 but there is no right of way or easement over the private land and railroad tracks.

Wilderness designation would restrict use by ATVs, 4 x 4s, motorcycles, and mountain bikes. All of the jeep trails in the Colville National Forest are located in four PWAs. If all of these areas are designated for wilderness, jeep riders will be displaced from the forest unless alternate trails are developed.

The Owl Mountain PWA is most closely associated with the communities of Colville and Kettle Falls, and the small communities of Boyd and Orient. The Colville and Kettle Falls tourism websites promote outdoor recreation opportunities in the general vicinity, but do not specifically promote this PWA.

In considering the relative trade-off between wilderness designation and providing for other backcountry recreational uses, wilderness designation of this PWA would not augment hiking or equestrian opportunities, and it would displace motorized use. Despite being one of only a few 4x4 trails on the forest, this area is not likely to contribute significantly to the mix of regional recreation opportunities either with or without wilderness designation due to the small relative size and lack of attractions.

**Table 2--Miles of recreation trails** 

Motorized Trails	Non-motorized Trails	Snowmobile Trails		
6	0	0		

#### Wildlife

The Owl Mountain PWA contains low-to-mid-elevation habitats and the wildlife species present reflect this: nearly all mammal and bird species that occupy low-to mid-elevation habitats on the forest probably inhabit the area during some part of the year, except for grizzly bear.

Verified sightings of gray wolves have come from just east of the area. Grizzly bears occupied the area prior to the loss of the salmon fishery in Lake Roosevelt due to Grand Coulee Dam. Northern goshawks have nested in the area. The entire area contains summer range for big game and opening up the area via harvest would improve the amount of forage. The eastern side of the area supports winter range for mule deer and white-tailed deer. Projects like timber harvest and prescribed fire to improve big game winter cover and forage would be feasible in those areas.

If the area were designated wilderness, harvest to improve forage would not be an option and the forage base would continue to decline, though most of the decline in forage has already occurred because the area last experienced large-scale disturbance in the 1920s. The open stands of Douglas-fir on the higher elevation ridges on the southern and central parts of the area support blue grouse and small bands of wintering mule deer. Projects that improve deer winter range in this area would have an ancillary, positive effect to blue grouse habitat.

Prescribed fire could be used as the primary management tool on the ridges and saddles, so wilderness designation would not change potential management, but primary funding options via KV would not be available. About 15 percent of the area lies with a lynx analysis unit, though the habitat is marginal or nonexistent because it mainly is located in open, dry habitats. Younger stands could be created by timber harvest or fire. Designation of the area as wilderness would preclude timber harvest from creating foraging habitat, but because most of the area is marginal lynx habitat, this would not result in a significant loss.

One old growth area lays in the north central section and a portion of another laps the western edge. This area also serves as a link between the Kettle Crest and the Wedge to the east. The greatest benefits from designating the area as wilderness would be preventing road construction, benefiting those species that depend on secluded habitat and high quality forage (less affected by noxious weeds, which often spread along new roads). None of the large mammals that require secluded habitat exist in or near the area, though both mule deer and elk tend to live longer and thus the males achieve larger antlers in areas away from roads with vehicle traffic.

The PWAs provide varying levels of habitat for focal wildlife species. To help evaluate the habitat that these areas provide, the following information was provided: the focal species emphasized in the area, the amount of habitat for each focal species, the priority ranking for the habitat (based on conservation assessments and recovery plans), and the proportion of the total habitat available on the forest that is within the PWA.

Table 3--Availability of habitat for federally listed Threatened and Endangered wildlife species, and R6 focal species

Wildlife Species	Acres of Habitat	Habitat Priority Ranking (1=high, 2=mod., 3=low)	Percent Total Forest Habitat in Evaluation Area
Grizzly bear	NA	NA	NA
Canada lynx	56	1	<1
Wolverine	7,944	2	1
American marten	19	2	<1

#### Water and Fish

The Owl Mountain PWA is located entirely in the Kettle River Subbasin (4<sup>th</sup> HUC). The PWA contains tributaries to the Little Boulder Creek (6<sup>th</sup> HUC) and a small portion of the Deep Creek (6<sup>th</sup> HUC) containing Kerry Creek. Both creeks flow into the Kettle River. The tributaries within the PWA have been surveyed and are not fish bearing due to their intermittent nature. The Little Boulder Creek and Deep Creek subwatersheds have been analyzed for vegetation and road conditions. When vegetation conditions and road related effects are considered cumulatively, these two subwatersheds were rated poor. This is due to past harvest activities and high road densities.

This habitat is not considered essential to the recovery of the bull trout which has been observed within the Kettle River in the past due the intermittent nature of streams within the PWA. Wilderness designation would protect the basic ecological functions of these tributaries. This objective could also be accomplished without wilderness designation if the proposed PWA remained in an unroaded condition. A degradation of riparian and aquatic processes is expected if management actions, such as road building and timber harvest, are approved by the Regional Forester or Chief in the future. The adverse effects of such actions could extend beyond the boundaries of the PWA and continue throughout the 6<sup>th</sup> field HUCs.

There are no existing power withdrawals, proposed impoundments or known Federal Energy Regulatory Commission permits or licenses outstanding.

The PWA has a water source protection area totaling 1,000 acres of stream that contributes to a community water system for the town of Orient.

## Range

The area contains one domestic livestock grazing allotment. This allotment is grazed under a deferred rest rotation management system. There is one range improvement within the area and ¼ mile of fence. The permittee is allowed to use motorized vehicles within the PWA.

Percent Area Suitable for Cattle Grazing  Percent Area Currently in Cattle Allotments		Percent Area Suitable for Sheep Grazing	Percent Area Currently in Sheep Allotments	
6	100	7	0	

Table 4--Grazing suitability and current allotments

## **Vegetation and Ecology**

Vegetation is dominated by Douglas-fir and related plant associations. However, most of the other tree species found on the Colville National Forest can be found in this area including western white pine and western hemlock.

Commonly found plant association types in the area include subalpine fir/queencup beadlily, subalpine fir/dwarf huckleberry, Douglas-fir/pinegrass, and Douglas-fir/dwarf huckleberry. A few stands escaped wildfire early in the 1900s, and now qualify as old growth.

The Kerry Creek watershed, south of Owl Mountain, forms an east-facing bowl, and contains numerous water sources. The higher west side of Kerry Creek contains large amounts of western larch, lodgepole pine, and Douglas-fir. The area on the east side, below the road systems and past harvesting is drier, characterized by Douglas-fir and ponderosa pine in the overstory.

The area south and west of Huckleberry Ridge and Grouse Mountain is mostly south-facing, and contains more dry plant associations and species. Douglas-fir, ponderosa pine, and grand fir are commonly found in these stands. Douglas-fir/ninebark and Douglas-fir/ninebark-twinflower plant associations are more common here.

Ridgelines along Owl Mountain and Grouse Mountain are rocky and sparsely forested.

Most of the eastern edge of the Owl Mountain PWA qualifies as wildland urban interface (WUI), and much of this is dry forest. The Healthy Forest Restoration Act (HFRA) authorizes direction to implement fuel reduction projects in the WUI. The HFRA prohibits authorized projects in wilderness areas. Wilderness designation could affect the forest's ability to provide preventative wildfire protection to residents along U.S. Highway 395.

#### **Timber Harvest Suitability**

The underlying criteria for determining timber harvest suitability are found in the Forest and Rangeland Renewable Resources Planning Act of 1974, 36CFR219.12, and Forest Service Handbook 1909.12, Chapter 60.

For the Colville and Okanogan-Wenatchee National Forests, the general criteria for timber suitability that will be used for timber harvest suitability are:

- Is it forest land (10 percent crown cover minimum, productivity >20 ft<sup>3</sup>/ac/yr).
- The area has not been withdrawn from timber harvest or production.

- Soil, slope, or other watershed conditions will not be irreversibly damaged (based on soil attributes for erosion, instability, or compaction potential, slopes >65 percent, and certain land types)
- Reforestation can be assured within five years (lack of shallow soils, low frost heave potential, low surface rock, plant community type, certain land types, and elevation <5.500 feet)</li>
- Economic and technologic viability (less than 0.5 miles from existing transportation system, species value or condition, volume availability, logging systems)

In consideration of all the criteria for determining timber harvest or timber production suitability and not just the fact that harvestable species can grow at a specific location, it appears this PWA does not have conditions that pass all the criteria. The main criterion for failure is that unacceptable resource impacts would likely occur due to road construction activities. This does not preclude helicopter operations that could fly material over sensitive areas to adjacent road systems. However, in most if not all cases helicopter logging and the associated expenses (such as manual slash treatments) would not be an economically viable option.

Suitable for Timber Harvest	Forest Groups		WUI	
	Parkland	0%	Total WUI	44%
0%	Cold Dry	1%	WUI in Dry and Mesic Forest	72%
	Cold Moist	41%		
	Mesic	3%		
	Dry	53%		
	Non-forest	2%		

**Table 4--Stand data percentages** 

#### Fire

Fire occurrence is low to moderate with fires occurring in the area every one to three years, mostly started by natural ignitions. The southern portions of Owl Mountain PWA were visited by large fires in the earlier part of the  $20^{th}$  Century. Thus it can be expected that fuel loadings would be moderate to high in both the cold moist and dry forest groups that are prevalent throughout the PWA. This circumstance increases the risk of a stand replacement fire, especially in areas that have high concentrations of lodgepole pine, due to probable infestations of mountain pine beetle.

A unique characteristic to the north-facing slopes of the PWA is the influence of the Kettle River to the east, and to the north in Canada, which causes a drier environment than is normally found on most north-facing slopes. This characteristic could create a greater opportunity than is typical for the north-facing slopes to burn, and to burn with higher intensities.

The eastern portion of Owl Mountain PWA is adjacent to Highway 395 and within WUI boundaries. This situation makes the eastern edge of the PWA a moderate priority for fuel treatments. However, the priority to conduct fuel treatments would be reduced somewhat

due to the numerous rock and cliff faces jutting out along the PWAs eastern edge, which both limit fire spread and treatment opportunities.

#### **Insects and Disease**

The Wilderness Act of 1964 allows for the control of insects and disease, but taking such actions in wilderness is rare. Forest Service wilderness policy (Forest Service Manual 2324.11) directs the agency "to allow indigenous insect and plant diseases to play, as nearly as possible their natural ecological role". Policy also directs the agency to "protect the scientific value of observing the effect of insects and disease on ecosystems and identifying genetically resistant plant species", and finally, "to control insect and plant disease epidemics that threaten adjacent lands or resources."

An aerial survey of this PWA was completed in 2007. Douglas-fir beetles have been killing Douglas-firs since the outbreak that followed extensive winter storm damage in 1997. There are now large numbers of Douglas-fir snags standing and on the ground. Douglas-fir beetles are native bark beetles that commonly breed in blow-down Douglas-fir or in Douglas-firs that have been severely stressed by root disease, fire, heavy or repeated defoliation, or other damage. If substantial quantities of this breeding material are available the beetle population may build up to damaging levels, attacking and killing large, healthy Douglas-firs. Usually trees are killed in groups of five to 20, but group kills can become much larger during outbreaks. The largest trees are killed first. Removing Douglas-fir blow-down where possible can reduce tree-killing by these beetles. Blow-down in wilderness areas would not be removed, and can be a source of large numbers of beetles.

Douglas-fir dwarf mistletoe and western larch dwarf mistletoe probably occur in approximately 50 percent of the Douglas-fir and larch stands in the Three Rivers planning areas.

White pine blister rust caused by *Cronartium ribicola* was introduced into the Sullivan Lake area in the early 1920s following its introduction into Vancouver, British Columbia in 1910. The disease occurs in essentially every stand of western white pine and whitebark pine on the Three Rivers Ranger District. The disease is the greatest threat to 5-needle pines but it does not threaten the existence of five-needle pines. Western white pine regenerates naturally well on the District. Many of the white pines have some degree of genetic resistance because white pine stands in the area have been exposed to inoculum for 80 years. The most susceptible trees were eliminated decades ago. Lower crown pruning has been employed as an effective method of managing white pines to reduce losses to the disease on the District.

Armillaria root disease caused by *Armillaria ostoyae* is currently not a major cause of tree mortality in the roadless areas. The fungus is undoubtedly present in most of the stands especially those with Douglas-firs and/or grand firs but it is in equilibrium with the hosts. If stands in the roadless areas were to be logged or if other mortality agents were to kill large numbers of firs armillaria root disease would become a serious tree killer. The fungus gains energy from colonized roots and stumps and spreads to infect and kill adjacent trees, especially Douglas-firs.

#### Threatened, Endangered, and Sensitive Plant Species

There are three rare plants within the Owl Mountain PWA each of which are listed as sensitive by Washington State and as a species of concern under Federal status; sticky polemonium (*Botrychium ascendens*), scalloped moonwort (*Botrychium crenulatum*), and stalked moonwort (*Botrychium pedunculosum*).

#### **Noxious Weeds**

Noxious weed inventory data is not available for this PWA.

#### Minerals and Soils

Soils within the area are derived from volcanic ash, loess deposits, and glacial till. Steeper south and west aspects have less evidence of ash deposition due to past erosion. The ash material overlies rocky granitic glacial till.

The Owl Mountain PWA is located in the northeast part of the Kettle Metamorphic Core Complex, a significant structural feature where relatively deep crustal rocks have been exhumed as a result of major extensional tectonics. The subject lands are largely underlain by pre-Tertiary metamorphic rocks, namely gneiss, quartzite, marble, and amphibolite. Two Tertiary igneous plutons intrude these older rocks exposing granite in the vicinity of Independent Mountain in the southwest part of the area and exposing quartz monzonite in a narrow north-south trending band in the eastern part of the area from the headwaters of Jenny Creek and extending to the north.

Prospecting and exploration has been focused in the eastern half of the Owl Mountain PWA as indicated by historic mining claims records and the locations of historic prospects and mines. The most extensive mine in the area is the Talisman mine located in T. 40 N., R. 36 E. Section 10. The mine explores copper, lead, zinc, and to a lesser degree gold, silver, and tungsten mineralization in amphibolite schist intruded by granite (Wolff and others, 2004a). Total development at the property consists of a 70-foot vertical shaft and a 350-foot long adit, which developed two flat-lying stopes (Wolff and others, 2004a). A 3,200-foot long aerial tram connected the mine to a mill, located on private property in the Kettle River valley below, which first operated in 1948. Production information for the property is sparse but an estimated 5,000 tons of ore was produced from 1914-1915 and 1946-1953 (Wolff and others, 2004a). Two other historic prospects explore similar mineralization to the south of the Talisman mine. At present (4/2008), there is one active mining claim in the eastern part of the Owl Mountain PWA in the S.E. ¼ of Section 22, Township 40 N., Range 36 E.

Mineral resource assessments conducted by the U.S. Geological Survey indicate that the Owl Mountain PWA has been identified as favorable for the occurrence of porphyry-related polymetallic veins throughout and alkaline gold-telluride veins and porphyry copper deposits in the eastern half (Box and others, 1996). There is a high potential for the occurrence of copper, zinc, gold, and silver resources in the eastern half of the area (Grant, 1982). The remainder of the area has a low or unknown potential for locatable minerals.

The area has not been the subject of expressions of interest, lease applications, or leases for coal, oil and gas, or geothermal resources. The area has no potential for the occurrence of coal and oil and gas resources and a low or unknown potential for geothermal resources.

## **Cultural and Heritage Resources**

There are five known cultural resources within the Owl Mountain PWA. Themes for these cultural resources center on historic trapping and mining. Unless a site has been determined to be ineligible for the National Register, it is managed as a significant site until such a determination is made.

### **Land Uses and Special Uses**

The area has an ongoing permit for livestock grazing.

There is a Communications Use Lease issued to the Orient/Laurier TV Club for a broadcast translator located within the proposed Owl Mountain PWA. The power source for the translator equipment is a solar panel. The legal description of the facilities is the S.W. ¼, S.W. 1/4 Section 10, T. 40 N., R. 36 E., W.M. The translator has been authorized since 1957 and provides the only television service to the local area and serves as a primary source of emergency notifications. The translator tower is accessed via a jeep trail off Owl Mountain Road. Wilderness designation could result in the need to relocate this tower.

There is a special use permit issued for a water transmission pipeline used for irrigation purposes. The legal location of the waterline is N.E. ¼, N.W. 1/4 Section 10, T. 40 N., R. 36 E., W.M. The water system has been authorized since 1972. The upper portion of this pipeline is within the PWA.

The Talisman Mine is located in T. 40 N., R. 36 E., Sec. 10, N.W.-N.W. It is positioned near the top of the cliffs above Laurier, and is accessed from the flat west of Laurier by a primitive aerial tramway. A tramway into a wilderness area would be a provisional use, although the mine is on the very edge of the area, high on the cliffs overlooking Laurier.

#### **Private Lands**

Private lands border the Owl Mountain PWA on the east. They are a mixture of ranches and other small private holdings, some with houses and outbuildings. The town of Laurier lays within a mile the northeast corner of the area. A small ranch and other private properties lie within ½ mile of the southern edge of the area, along a county road. There are no private lands within the Owl Mountain PWA.

#### **NEED FOR WILDERNESS**

# Location and size of other wildernesses in the general vicinity, and distance from area and population centers

The Owl Mountain PWA is approximately 45 air miles west of the 41,335 acre Salmo-Priest Wilderness on the Colville National Forest, and 80 air miles east of the 529,477 Pasayten Wilderness. These wilderness areas are close enough for the local population to access within three hours. The Pasayten Wilderness is much closer to the major population center of Seattle than is the Owl Mountain PWA. The Owl Mountain PWA is about an hour further drive from Spokane than is the Salmo-Priest Wilderness. This area is only a fraction of the size of the Pasayten Wilderness and less than a third the size of the Salmo-Priest Wilderness.

In considering the relative trade-off between wilderness designation and providing for other backcountry recreational uses, wilderness designation of this PWA would not augment hiking or equestrian opportunities, and it would displace motorized use. Despite being one of only a few 4 x 4 trails on the forest, this area is not likely to contribute significantly to the mix of regional recreation opportunities either with or without wilderness designation due to the small relative size and lack of attractions.

## Present visitor pressure on other wildernesses, trends, and changing patterns of use

The visitor pressure on the wilderness areas mentioned above is low relative to other wilderness areas in the region. The Pasayten and the Salmo-Priest have experienced a slow increase in use, but they are still below capacity levels except for some popular spots. Trends for wilderness use show that length of stay has shortened, there is more day use, and visitors are not traveling as far into the wilderness.

The projected population increase for the period of 2000 through 2030 in Ferry, Pend Oreille, Stevens, and Spokane Counties ranges from 40 to 67 percent. With this increase in population comes the potential for overuse and crowding in the Salmo-Priest Wilderness.

# Extent to which non-wilderness lands provide opportunities for unconfined outdoor recreation experiences

There are three other potential wilderness areas within 15 miles of the Owl Mountain PWA (Deer Creek, Jackknife, and Profanity), which encompass an additional 52,499 acres. This acreage, in combination with other Colville National Forest PWAs and designated wilderness, totals approximately 226,000 acres.

Mountain biking and riding off highway vehicles and snowmobiles has increased in popularity and demand on the national forests. Demand for primitive and semi-primitive recreation opportunities outside of designated wilderness is growing for these users, as these opportunities are restricted in designated wilderness areas. With declining trail maintenance, horse-riders have become more dependent on trails outside of wilderness where there is no party size limitation.

## The need to provide a sanctuary for those biotic species that have demonstrated an inability to survive in less than primitive surrounding or the need for a protected area for other unique scientific value or phenomena

#### Wildlife

The area has almost 8,000 acres of wolverine habitat, and a small amount of habitat for Canada lynx and American marten. The wildlife sustainability index is 6.7 (a low relative ranking) and the habitat connectivity index is 10.3 (a moderate relative ranking).

#### **Fish**

This habitat is not considered essential to the recovery of the bull trout or the sustainability of other aquatic focal species. This is due to the fact that the stream habitat is intermittent

in nature. The analysis indicates that this PWA should be considered a *low* priority for wilderness designation due to the poor habitat condition and the lack of suitable habitat within this PWA for focal threatened or sensitive species.

Table 5--Little Boulder Creek and Deep Creek Watersheds

Focal Species	Miles of Habitat	Percent Total Forest Habitat in Evaluation Area	Vegetation Score	Overall Road Density Score	Habitat Priority Ranking (1=high, 2=mod., 3=low)
Bull trout	0	0	-1.00	-1.00	3
Westslope cutthroat trout	0	0	-1.00	-1.00	3
Interior redband trout	0	0	-1.00	-1.00	3
Pygmy whitefish	0	0	-1.00	-1.00	3

#### Threatened, Endangered, and Sensitive Plant Species

An analysis was completed to prioritize which PWAs would contribute the most to providing refugia for those plant species on the species of interest/species of concern (SOI/SOC) list. The analysis ranked three factors. The first factor, the total number of sites occurring within the PWA, ranked as low for this PWA. The second factor, which ranked as moderate for this PWA, examined the degree of rarity of any SOI/SOC species present, and also recognized the importance of individual PWAs in supporting a high incidence of populations relative to Washington State as a whole.

PWAs are generally unsurveyed for rare plants due to a relative lack of projects occurring in these areas. Thus, an additional factor examined the potential for the PWA to support SOI/SOC species. Based on databases, first the SOI/SOC plant species were identified that are present within a five-mile radius of the PWA, but are not known to occur within the PWA. Then the PWA was analyzed to see if the potential habitat for these species occurs within the PWA. Based on this analysis, this PWA ranks as high.

Finally, a composite score was assigned to each PWA based on combining each of the rankings described above. This PWA ranks overall as moderate priority for preserving rare plant refugia with a wilderness designation

## Ability to provide for preservation of identifiable landform types and ecosystems

This area represents the Okanogan Highlands ecoregion. Designated wilderness is underrepresented in the Okanogan Highlands ecoregion.

An analysis compared vegetative cover types that are under-represented in wilderness on the National Forest System in Region 6 with those same cover types present in the PWA. Large scale cover types were available through existing data layers and represent approximately 25 percent (approximately 2,800 acres) of the vegetative cover if this PWA. These types include forb lands, non-alpine meadows, ponderosa pine, and western red

cedar. Taken as a whole, the contribution of underrepresented vegetation types ranks as high for the portion of this area with underrepresented cover types, but as moderate for the number of acres that are represented within this PWA relative to the other PWAs in the planning area.

Some under-represented cover types fill microhabitats such as riparian areas or perched water tables. Such finer scale cover types represented in this PWA include sparse amounts of cottonwood and aspen.

In particular, the forb lands cover type, which comprises approximately 1,700 acres in this PWA, would make a significant contribution within the eastern Washington planning area.

