

WILDERNESS EVALUATION

HARVEY CREEK – 621012

6,338 acres

OVERVIEW

History

The Harvey Creek Roadless Area was initially inventoried and evaluated in the first Roadless Area Review and Evaluation (RARE I), and was not selected for wilderness study. In the second Roadless Area Review and Evaluation (RARE II) the area was recommended for non-wilderness.

The 2006 inventory removed approximately 7,327 acres from previous inventory due to nonconforming uses such as road construction, logging and private land; 242 acres were added to the previous inventory as they met the criteria for a potential wilderness area as described in Forest Service Handbook (FSH) 1909.12, Chapter 70. 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)

MA1 Old Growth Dependant Species Habitat	MA11 Semi- primitive, Non- motorized Recreation	MA2 Caribou Habitat	MA4 Research Natural Area	MA5 Scenic Timber	MA7 Wood/ Forage
8%	56%	2%	9%	2%	23%

Location and Access

The area is located in northern Pend Oreille County, Washington, 90 miles north of Spokane. Primary access is five miles east of Ione, Washington, via County Road 9345, to the Paupac Road (Forest Road 1936000), which provides access on the west and south sides of the area. The north and east sides of the area are accessed by the Harvey Creek Road (Forest Road 1935000). Access to the Harvey Creek Potential Wilderness Area (PWA) is fair. The area may be accessed on all sides by open National Forest System roads. There are currently no system trails within the potential wilderness area.

Geography and Topography

This area is located within the southwest edge of the Selkirk Mountains, which extend north into British Columbia. This mountain range lies between the Okanogan Highlands landform province on the west and the Rocky Mountain trench on the east. The Harvey

Creek PWA lies on the west slope of the divide between the Pend Oreille River on the west and Priest River area to the east. The geologic structure is complex due to repeated periods of continental glaciation.

The dominant topographic feature of this area is the ridge formed between Molybdenite Mountain and Monumental Mountain. The surrounding terrain is composed of moderate to steep side slopes dissected by small, fast flowing streams with the predominate ridge oriented in an east-west direction. From this ridge the area slopes steeply to the south forming numerous headwater drainages of a portion of LeClerc Creek. The area north of the ridge contains headwaters of the drainages flowing north into Harvey Creek. Elevation varies from 2,800 feet in Paupac Creek to 6,784 feet on Molybdenite Mountain.

Current Uses

Recreation is the predominant use in the area. It is generally concentrated near roads around the perimeter. The area on Molybdenite Ridge and Bunchgrass Meadows is visited frequently by berry pickers. It also receives a moderate amount of hunting during the deer and bear seasons. Bunchgrass Meadows receives some use for botanical and wildlife study and viewing because of ecosystem diversity.

Appearance and Surroundings

The appearance of the area is of rolling to steep mountainous terrain. The contrasts in seasonal colors and the textures of vegetation provide a pleasing contrast for viewing. This area offers a wide variety of scenery from the perimeter road. The evidence of human activities is apparent from most vantage points, but dense forest and topography make parts of the area seem isolated.

Key Attractions

Molybdenite Mountain is the predominant natural feature within the unit; it is a visual focal point from most vantage points. The south side of the mountain is a visual contrast of steep, rocky slopes, ravines, and scattered subalpine vegetation. The north side has a series of cirque basins containing small alpine ponds and boulder fields.

CAPABILITY FOR WILDERNESS

Level of Natural and Undeveloped Environment

Natural ecological processes are the only obvious influence on National Forest System land in this area. The last major natural change occurred when parts of the area burned in one of the big fires of 1926. The presence of a primitive road up Molybdenite Ridge detracts from the natural condition in that immediate area.

Human influence is evident in the activities that surround the area. The sounds of motorized vehicles can be heard from within the area. The sights and sounds of timber harvesting are noticeable in LeClerc Creek and the north side of Harvey Creek.

Eastern Brook trout are present in Whiteman, Saucon and Mineral creeks within the PWA. There are no surveyed noxious weed species within this PWA. Weeds are present along the roads that access the area.

Water quality data is not available from within the PWA, however due to the relatively low level of disturbance water quality is assumed to be high. There may be localized disturbances due to grazing activities.

The Harvey Creek PWA is partially impaired by light pollution from the Ione and Metaline area. The eastern portion of the PWA (47 percent of the PWA) rates a Class 2 on the Bortle Scale, whereas the western portion (53 percent of the PWA) rates as a Class 3. A Class 2 Typical Truly Dark Sky represents the darkest skies viewed in the continental United States. The summer Milky Way is highly structured to the unaided eye. Any clouds in the sky are visible only as dark holes or voids in the starry background. No light domes from population centers are visible. 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

Solitude can be experienced in the areas of dense timber where the screening effect of vegetation and distance reduce the sight and sound of human activity. The more open areas and higher ridges have views that include activity such as vehicle travel, timber harvest, residential activity, and road building in the background areas. When one views the natural surroundings within the area, there is an effect of being more remote than you really are.

Primitive recreation opportunities in this area include hiking, hunting, fishing, wildlife photography, viewing panoramic scenery, nature study, and some camping. Hunting, berry picking, and hiking attract most of the visitors to the area. Use of the area is primarily day use, because of lack of trails and destination campsites within the area. This area has the potential for more recreational use. Winter activity is limited by the steep terrain except in the Bunchgrass Meadows area. Molybdenite Mountain provides moderately challenging terrain for rock climbing and cross-country hiking.

The Harvey Creek PWA does not have any trail system, so any access to the area is in a non-motorized cross-country fashion. This mode of travel in itself would require skill and a level of daring that would create an unconfined outdoor recreation experience. From this area, the sights and sounds of civilization are noticeable, but they feel far away.

Special Features

Bunchgrass Meadows, located on the southeast edge of the potential wilderness area, was designated MA 4 - research natural area (RNA) by the Colville National Forest Land and Resource Management Plan in 1988. The 812 acre proposed RNA protects a mid-elevation permanent pond and sphagnum bog. Habitat types include a subalpine fir/Cascade azalea community, a subalpine fir/beargrass community, and a subalpine fire/big huckleberry community. A species unique to the area is the northern bog lemming (*Synaptomys borealis*). One invertebrate the Magnum mantleslug (*Magnipelta micophaga*), is limited to three known populations and is found in the subalpine fir forest of this area (Burke,

unpublished). The Washington Natural Heritage Program Data System (March 31, 1986) (Andrus and Leysner, 1971, 1976) reported eight species of sphagnum from this bog. *Sphagnum riparium* is found here, the only known location for that species in the contiguous western United States. Sensitive plant species present in Bunchgrass Meadows RNA are meadow pussytoes (*Antennaria corymbosa*) and beaked sedge (*Carex rostrata*).

The Harvey Creek PWA includes four other sensitive plant species: green-keeled cotton grass (*Eriophorum viridicarinatum*), boreal bog sedge (*Carex magellanica ssp irrigua*), teachers' sedge (*Carex praeceptorium*), and water avens (*Geum rivale*).

The entire potential wilderness area has been designated as grizzly bear recovery habitat (LeClerc Grizzly Bear Management Unit). It has also been designated as mountain caribou recovery habitat (Molybdenite Caribou Management Unit). The fisher, exceptionally rare in Washington State, has been observed on the edge of the area.

Manageability of Boundaries

This PWA is bounded by sections of private land on the north and east sides, and by a well-maintained road for portions of the south half. All of these boundaries are locatable on the ground as private land has been harvested, and the road is easy to locate. The only portion along the south have that doesn't have a road has an old rail road grade that was used to log in the 1920s. This rail grade can be located.

The area would be difficult to manage as wilderness due to close proximity of roads and private lands.

AVAILABILITY FOR WILDERNESS

Recreation

Molybdenite Mountain and Bunchgrass Meadows are the main recreational attractions of the area. Access to these features is over low standard roads adjacent to the area, which may increase the appreciation of them. There are some undeveloped campsites adjacent to these areas. Current use of the area is centered on berry picking. Opportunity for expanding this use is dependent upon the amount of huckleberry brush available, which is a direct result of the management activities within the area and user's tolerance of a voracious mosquito population. Snowmobile use is allowed in parts of the Harvey Creek PWA.

The Harvey Creek PWA is most closely associated with the small communities of Ione, Metaline Falls, and Metaline. These communities are all located along the 280 mile International Selkirk Loop, which likely accounts for much of their tourist traffic. Because these communities are small, they have limited resources for promoting tourism. The Metalines Chamber of Commerce promotes a wilderness setting: their tourism brochure is entitled, "Experience North Pend Oreille Valley: Where pristine wilderness meets rural communities with much to offer visitors". Tourism marketing promotes walking, hiking, fishing, hunting, and cross-country ski trails, but does not specifically promote this PWA. Because the PWA is fairly isolated, is accessed via dirt roads, and lacks a trail system, wilderness designation is not likely to result in an increase in tourism-based use.

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 snowmobile use. This change however, might result in improved recreation management of Bunchgrass Meadows, a research natural area where recreational uses should be minimized to protect the resource.

Table 2--Miles of recreation trails

Motorized Trails	Non-motorized Trails	Snowmobile Trails
0	0	0

Wildlife

Suitable habitat for the threatened grizzly bear and the endangered mountain caribou is in this area. Grizzly bear habitat in the area can provide many of the seasonal habitat needs of this animal. The entire potential wilderness area lies within an area designated as the LeClerc Grizzly Bear Management Unit. The majority of this PWA has been designated as the Molybdenite Caribou Management Unit. The grizzly bear and caribou, along with a wide variety of game and non-game species of wildlife, provide an excellent opportunity for both consumptive and non-consumptive use of this resource. Gray wolves may occasionally use the area, but at this time animals seen on the Colville National Forest are transient, moving over large areas. Habitat is available for Canada lynx within this PWA. Two Lynx Analysis Units (LAUs) have been mapped within this area: Harvey and Paupac LAUs. Habitat also exists for wolverine. Habitat manipulation would be precluded by wilderness designation.

Potential management activities necessary to maintain threatened, endangered, or sensitive species include:

Grizzly Bear: 1) provide seclusion by minimizing new roads in the area, 2) maintain or enhance habitat through the use of prescribed fire, regulated timber harvest or letting some natural fires burn, and 3) vegetation seeding or planting.

Selkirk Mountain Caribou: 1) maintain lichen producing habitat at high elevations, 2) regulate fires in subalpine habitat, 3) provide seclusion, and 4) use prescribed fire, timber harvest or natural fires to convert parts of cedar/hemlock stands above 4,200 foot elevation to subalpine fir stands.

A species unique to the Harvey Creek PWA is the northern bog lemming. Habitat for pileated woodpeckers, American marten, goshawks, and fisher exist in this area.

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	6,241	1	NA
Canada lynx	229	2	1.3
Wolverine	6,241	2	<1
American marten	174	2	<1

Water and Fish

The Harvey Creek PWA is located in the Pend Oreille River subbasin (4th HUC). The PWA contains tributaries of the Harvey Creek watershed (6th HUC) and tributaries of the West Branch Le Clerc Creek watershed (6th HUC).

Tributaries to Harvey Creek drain the northern half of this area. Most portions of these tributaries in the PWA are non-fish bearing or intermittent in nature. An exception is Bunchgrass Meadows at the headwaters of Harvey Creek. This area contains pure westslope cutthroat trout. Westslope cutthroat trout is a species listed as sensitive by the Forest Service. All these tributaries drain into main Harvey Creek, which also contains westslope cutthroat trout throughout its length. The Harvey Creek watershed has the distinction of not having any non-native fish species beyond the first two miles of stream. Harvey Creek flows into Sullivan Lake, which in turn flows into Sullivan Creek. There have been no observations of bull trout in the portion of the watershed within and adjacent to the PWA. The most recent observation, in 1994, was a 20-inch female bull trout while snorkeling below Mill Pond Dam.

Tributaries to the West Branch Le Clerc Creek and its headwaters drain the southern half of the PWA. Tributaries include Whiteman, Saucon and Mineral Creeks. These are all fish bearing for part of their length within the PWA and all contain pure westslope cutthroat trout as well as brook trout. There have been no observations of bull trout in the portion of the watershed within the PWA. The last observation of a bull trout downstream of the PWA was a 20 to 22-inch female on her redd, eight to nine miles downstream of the PWA southern boundary. Le Clerc Creek is one of only three watersheds on the Forest with evidence of successful spawning by bull trout.

Both the Le Clerc and Sullivan Creek watershed are considered to be core habitat that is essential for the recovery of the threatened bull trout in northeastern Washington. These watersheds also contains designated critical habitat for the recovery of this species downstream of each PWA. These streams are also designated as a priority watershed within the Colville Land and Resource Management Plan as amended by INFISH. This designation indicates that these watersheds have excellent habitat and/or strong assemblages of native fish with a priority on bull trout.

Habitat conditions in the Harvey Creek watershed range from excellent to fair. Habitat conditions in the Le Clerc Creek watershed range from good to poor.

All 6th field watersheds have been analyzed for vegetation and road conditions. When vegetation conditions and road related effects are considered cumulatively, the Harvey

Creek and West Branch Le Clerc creek watersheds were rated as fair. This rating is due primarily to past timber harvest, livestock grazing and high road densities.

This habitat in the Harvey and Le Clerc Creek portions of the PWA is considered important core area habitat necessary for the recovery of the bull trout within northeastern Washington. Although a large portion of both watersheds is not within the PWA, several tributaries are located in the PWA and could have significant effects on downstream water quality and instream habitat in lower Harvey and Le Clerc Creeks.

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 within this PWA. The adverse effects of such actions could extend beyond the boundaries of the PWA and continue throughout the 6th field HUCs.

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

There are no water source protection areas.

Range

This southernmost portion of this PWA is within an active cattle grazing allotment – LeClerc Creek Allotment. The area of Bunchgrass Meadows was removed from the allotment because of conflicts with maintaining the existing ecosystem in the research natural area (RNA). There is limited potential for grazing in this PWA due to steep slopes and heavily timbered areas. Permittees who use ATVs to manage their allotments will no longer be able to continue that practice if the area is designated wilderness.

Table 4--Percentage of grazing suitability areas and current allotments

Percent Area Suitable for Cattle Grazing	Percent Area Currently in Cattle Allotments	Percent Area Suitable for Sheep Grazing	Percent Area Currently in Sheep Allotments
12	51	20	0

Vegetation and Ecology

Most of the area is occupied with pole-sized stands of seral species including lodgepole pine, larch, grand fir, and western white pine. These pole-sized forests are mostly 80 years old resulting from large fires in the 1920s. The remaining forest area is occupied by climax forests of cedar, hemlock and subalpine fir. The forest vegetation types includes cedar-hemlock type at lower elevation, subalpine fir-Engelmann spruce stands at higher elevations, and scattered stands of whitebark pine-subalpine fir type on the higher ridges. There are grassy openings mostly on the south faces of Molybdenite Mountain. These openings contain a mixture of grass species along with some forbfields and shrubfields. A large bog area occurs at Bunchgrass Meadows in the eastern part of the area. The most abundant plant communities present in the area are cedar-lady fern, western hemlock-

pachistima, subalpine fir-menziesia, fescue grasslands, and bog. The Bunchgrass Meadows area is a proposed RNA, representing a mountain meadow and bog.

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 ft³/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)
- 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.

Table 5--Stand data percentages

Suitable for Timber Harvest	Forest Groups		WUI	
	0%	Parkland	7%	Total WUI
Cold Dry		0%	WUI in Dry and Mesic Forest	0%
Cold Moist		90%		
Mesic		0%		
Dry		3%		
Non-forest		0%		

Fire

A major fire in 1926 burned virtually the entire PWA. A second large fire returned the southernmost portion the area in 1929. Current fuel loading ranges from about 40 tons per acre to 125 tons per acre. The heavy fuels are in Onata Creek and in other lower elevation

drainages. The fire hazard is generally low to moderate with the moderate rating being on the south and southwest facing slopes. Over the past decade there have been three small fires (less than ¼ acre in size) staffed within the Harvey Creek PWA.

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. The most significant insect impact in and around the Harvey Creek PWA is attacks of western balsam bark beetle (*Dryocoetes confusus*) on subalpine fir. Even unsuccessful attacks by this beetle can result in tree mortality caused by the introduction of *Ceratocystis dryocoetidis*, a lesion-causing fungus. About 1,300 acres were affected by western balsam bark beetle in 2003 and over 1,000 acres in 2004. Over 13,000 trees were killed during those two years, primarily in the central and southern portions of the analysis area. Blowdown and root disease may play an important role in the buildup of western balsam bark beetle populations (McMillin 2001). It is also likely that severe drought in 2001 and 2003 left trees unable to produce adequate defensive chemicals. Western balsam bark beetle activity subsided after 2004, and fewer than 2,000 subalpine firs were killed between 2004 and 2006.

Detections of fir engraver (*Scolytus ventralis*) damage to true firs increased steadily in the last seven years. About 4,500 grand firs have been killed or had tops killed. Fir engraver activity is often associated with root disease. They are also attracted to trees under stress from drought, defoliation or other damage. Trees that are attacked may be killed outright, or they may survive with top-kill.

The Douglas-fir beetle (*Dendroctonus pseudotsugae*) outbreak which began in the late 1990s had subsided by 2002, though groups of two to twenty Douglas-firs continue to be killed by beetles every year. Douglas-fir beetle outbreaks typically last about four years, and occur when severe blowdown or similar disturbance provides abundant breeding material. Removing blowdown Douglas-firs before the beetles complete their life cycle can substantially reduce the size of an outbreak. Douglas-fir blowdown that occurs in wilderness cannot be removed, and can be a source of beetles.

In 2007, a large pocket of spruce beetle (*Dendroctonus rufipennis*) activity was reported in upper Paupac Creek. About 200 acres were mapped, and an estimated 3,200 Engelmann spruces killed. Spruce beetles commonly breed in blowdown or severely stressed spruce. If substantial quantities of this breeding material are available the beetle population may build up to damaging levels, attacking and killing large, healthy spruce. When an outbreak of spruce beetles occurs, it may continue until every large spruce in the vicinity has been killed. Removing blowdown spruce before the beetles complete their life cycle can substantially reduce the size of an outbreak. Spruce blowdown that occurs in wilderness cannot be removed, and can be a source of beetles.

Western larch dwarf mistletoe probably occurs in approximately 50 percent of the larch stands in the Sullivan Lake 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 Pend Oreille Valley Ranger District. The very first efforts to survey *Ribes* and develop practices of controlling the disease in western North America were tested on the Sullivan Lake District in the late 1920s. The disease is the greatest threat to five-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.

These whitebark pine stands, potentially on seven percent of the PWA, are of inherent value as a plant community, for providing important habitat for wildlife including the federally listed grizzly bear, and for their aesthetics in contributing to the social setting. Wilderness designation would limit restoration options for these stands. Manipulations would only be considered in order to protect the composite wilderness resource, and only as a last resort to preserve naturalness at the expense of trammeling. Vegetation cover manipulation and reforestation in wilderness require approval of the Chief of the Forest Service. The Regional Forester can approve pesticide use.

Armillaria root disease caused by *Armillaria ostoyae* is currently not a major cause of tree mortality in the potential wilderness 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 potential wilderness 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

Sensitive plant species present in Bunchgrass Meadows RNA are meadow pussytoes (*Antennaria corymbosa*) and beaked sedge (*Carex rostrata*).

The Harvey Creek PWA includes four other sensitive plant species: green-keeled cotton grass (*Eriophorum viridicarinatum*), boreal bog sedge (*Carex magellanica ssp irrigua*), teachers' sedge (*Carex praeceptorium*), and water avens (*Geum rivale*).

Noxious Weeds

There are no surveyed noxious weed species within this PWA. Weeds are established along the roads that border the PWA: species include spotted knapweed, orange hawkweed, and yellow hawkweed.

Minerals and Soils

Soils in this area are developed from a variety of rock materials that have been affected by glaciation, wind, water, and other erosive forces. The northern third of the area is phyllite, with the southern two-thirds of the area being granitic. The resulting silty soils are vulnerable to erosion and mass movement because of instability when soil moisture increases to a critical level.

The Harvey Creek PWA is located east of the Kootenay Arc within an area entirely underlain by Cretaceous igneous intrusive rocks, namely granodiorite. Based on historical claim records and the locations of historic prospects/mines, there has been a limited amount of prospecting and exploration in the far eastern and far western parts of the area. In the far western part of the area, the Molybdenite Mountain mine also had some development and produced a limited amount of molybdenum ore prior to 1916 (Derkey and others, 1990). At present (3/2008), there are no active claims within the Harvey Creek PWA.

The northern two thirds of the area has a moderate to high potential for the occurrence of porphyry molybdenum-tungsten mineralization related to the emplacement of several Cretaceous igneous plutons in the area. The remainder of the area has a low or unknown potential for the occurrence of 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 a no potential for the occurrence of coal and oil and gas resources and a low or unknown potential for geothermal resources.

Cultural Resources

There are three known cultural resources within the Harvey Creek area. One of the sites has the remnant foundations for the Molybdenite lookout. The remaining two sites are historic in nature. 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. Cultural sites are protected by law; however a wilderness designation or a roadless designation would afford additional protection to cultural sites from ground disturbing activities.

Land Uses and Special Uses

There is a special use permit issued to the Natural Resources Conservation Service for a snowcourse and SNOTEL site located within the Bunchgrass Meadows Research Natural Area. The legal description of the facilities is S.W.1/4 S.E. 1/4 Section 24, T. 37 N., R. 44 E., W.M. (See attached map.) The snow course has been in place since 1936 and the SNOTEL facility since 1979. Coordination with the NRCS on permitting snow courses and SNOTEL sites on National Forest System lands has been in accordance with Memorandums of Understanding between the Forest Service and the Natural Resources Conservation Service (formerly the Soil Conservation Service).

The SNOTEL site includes mechanized and electronic equipment for measuring snowpack remotely and transmitting the data.

Wilderness designation would likely result in the need to transition this facility to a non-wilderness location.

Grazing allotments are managed through term grazing permits.

Private Lands

There are no private land inholdings within the PWA that would require access. Stimson Lumber Company currently owns sections of land that border the Harvey Creek PWA. All private land is outside the designated Harvey Creek PWA boundaries. The sections appear as a “checkerboard” pattern north of the current PWA. These parcels were originally given to the Burlington Northern Railroad Company by the United States and were eventually sold to Stimson Lumber Company. Wilderness designation of this area would not affect management on these private lands.

NEED FOR WILDERNESS

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

The nearest designated area managed in a roadless condition is the Salmo-Priest Wilderness, which contains 41,335 acres. This wilderness is five air miles from the Harvey Creek PWA and is located within the Colville and Idaho Panhandle National Forests. The nearest population center is Spokane. The drive time from Spokane to the Salmo Priest Wilderness is approximately two hours. The drive time from Spokane to the Harvey Creek PWA is approximately two and a half hours.

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

Use of the Salmo-Priest Wilderness is fairly light. Wilderness use was monitored during the summer of 2004 through the national visitor use monitoring program (NVUM). Only 18 visitors to the wilderness were encountered during 21 days of sampling. Most visitors to these backcountry areas are from northeastern Washington. Spokane residents also have access to the Idaho Panhandle National Forests for recreation. Travel time and distance are comparable to the areas located on the Colville National Forest. There are 215,898 and 148,961 acres respectively proposed for managing in a roadless allocation and recommended for wilderness on the Idaho Panhandle National Forests. Seattle, ten hours driving time from this area, is the closest major metropolitan area. The abundance of prime backcountry recreation (including wilderness) close to Seattle precludes heavy use from that area.

The projected population increase for the period of 2000 to 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 of and crowding in the Salmo-Priest Wilderness.

There are only two relatively small congressionally designated wilderness areas within a three-hour drive of the Spokane area. In ranking this PWA for its potential to provide a high quality wilderness recreation setting it ranked as low. The area is remote to access.

There are only a couple attractions such as Bunchgrass Meadows and Molydenite Mountain, and there are no trails that would accommodate use.

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

There are six other PWAs within 15 air miles of the Harvey Creek PWA (Abercrombie-Hooknose, Grassy Top, Hall Mountain, Lost Creek, Salmo-Priest adjacent, and South Fork Mountain), which encompass an additional 72,502 acres. This acreage, in combination with other unroaded areas including wilderness, totals approximately 226,000 acres. The roadless areas identified in RARE II constitute about twenty percent of the Colville National Forest.

Another consideration is off-highway vehicle recreation, which has increased tenfold in the last 30 years and is projected to continue increasing in the future. This use often conflicts with non-motorized recreation in the Forest, creating need for areas where motorized recreation is prohibited.

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

Wildlife

The Harvey Creek PWA is not large or isolated enough to be considered “primitive surroundings” for most species. The Harvey Creek PWA is part of the LeClerc Grizzly Bear Management Unit and has habitat for Selkirk mountain caribou, Canada lynx, wolverine, and American marten. However the wildlife sustainability index is 9.5 (a low relative ranking) and the habitat connectivity index is 7.0 (also low relative ranking).

Fish

The habitat within the two watersheds within the PWA is considered essential to the recovery of the bull trout. This PWA contains primarily tributaries that are important to future water and instream habitat quality in West Branch Le Clerc, Le Clerc and Harvey Creeks. Bull trout adults and juveniles have been observed in the West and East Branches of Le Clerc Creek indicating some level of reproductive success. This PWA contains the headwaters of the West Branch of Le Clerc Creek. The habitat condition, for this watershed, is considered to be fair. This PWA also contains the headwaters of Harvey Creek. The habitat condition, for this watershed, is considered to be fair.

The 6th field HUCs in this PWA also provide suitable habitat for resident and adfluvial westslope cutthroat trout subpopulations; approximately 19 percent of the available habitat on the Forest. While the PWA contains only a small portion of these subpopulations, activities in the PWA could influence habitat conditions and water quality for those subpopulations located downstream. These are important factors that influence the future sustainability of these isolated subpopulations.

The Harvey Creek watershed also includes Sullivan Lake. This body of water provides 64 percent of the habitat occupied by pygmy whitefish on the Forest. This population is one of only two populations on the Forest and one of seven in the state of Washington. A few whitefish have been captured during spawning season in lower Harvey Creek. It is unclear how much of the population spawns in the lake versus spawning in Harvey Creek. Habitat conditions within the portion of the PWA in this watershed could influence the long-term sustainability of the pygmy whitefish.

It is understood that habitat conditions for TES species within the 6th field HUCs is fair. However, as a result of this analysis, the importance of this PWA to future water and habitat quality in potential and existing bull trout habitat and sustainability to three subpopulations of westslope cutthroat trout and one population of pygmy whitefish indicates that this PWA should be considered a high priority for wilderness classification.

Table 6--West Branch Le Clerc Creek watershed

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	13	13	-1.00	-0.10	2
Westslope cutthroat trout	18	10	-1.00	-0.10	2
Interior redband trout	0	0	-1.00	-0.10	3
Pygmy whitefish	0	0	-1.00	-0.10	3

Table 7--Harvey Creek watershed

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	0.01	-0.40	2
Westslope cutthroat trout	16	9	0.01	-0.40	2
Interior redband trout	0	0	0.01	-0.40	3
Pygmy whitefish	1291 (acres)	64	0.01	-0.40	2

Threatened, Endangered, and Sensitive Plants

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 high 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 high priority for preserving rare plant refugia with a wilderness designation. On a smaller scale, the unique ecosystem provided by Bunchgrass Meadows is needed to provide habitat for sensitive plants, invertebrates and small mammals.

Ability to provide for preservation of identifiable landform types and ecosystems

This area is classified as Okanogan Highlands using Bailey's Ecoregion classification and is underrepresented in the wilderness system. The area is part of the Selkirk Mountain Range.

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 13 percent (approximately 840 acres) of the vegetative cover if this PWA. These types include alpine meadows, forb lands, non-alpine meadows, ponderosa pine, and western red cedar. Taken as a whole, the contribution of underrepresented vegetation types ranks as low for the portion of this area with underrepresented cover types, and also as low 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 fine scale cover types represented in this PWA include sparse amounts of cottonwood and aspen.

This PWA would not make a significant contribution for providing individual underrepresented cover types within the eastern Washington planning area.