

**WILDERNESS EVALUATION**  
**South Fork Mountain - 621124**  
**Colville National Forest 1,198 acres**  
**Idaho Panhandle National Forest 5,291 acres**

## **OVERVIEW**

### **History**

This portion of South Fork Mountain had not been previously inventoried as part of a potential wilderness area (PWA). It is an addition to the existing South Fork Mountain potential wilderness area administered by the Idaho Panhandle National Forest (IPNF) and meets the criteria for a potential wilderness area as described in Forest Service Handbook (FSH) 1909.12, Chapter 70.

This evaluation will just describe conditions for the portion the Colville National Forest administers; however, the summary evaluations will consider the entire PWA, and will state the IPNF findings and proposals.

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

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

<b>MA1 Old Growth Dependant Species Habitat</b>	<b>MA7 Wood/ Forage</b>
9%	91%

### **Location and Access**

The area is located in northern Pend Oreille County, Washington, 90 miles north of Spokane, Washington. Primary access is thirteen miles from Usk, Washington from the LeClerc county road. Access is via the East Branch LeClerc Creek Road (Forest Road 1934000) to the pass at Kalispell Rock. Access to the two sections would be via roads located and maintained on Stimson land, or by hiking cross-country from Kalispell Rock Pass.

### **Geography and Topography**

This area is in the southwest edge of the Selkirk Mountains, which extend north into British Columbia. The Selkirk Mountain Range lies between the Okanogan Highlands

landform province on the west and the Rocky Mountain trench on the east. The South Fork PWA lies on the slope of the divide between the Pend Oreille River on the west and Priest River area to the east. The geologic structure in the area is complex due to repeated continental glaciation.

The dominant topographic features of the area are South Fork Mountain on the east side and Monumental Mountain to the north. The South Fork PWA extends east from the ridge towards South Fork Mountain, including the upper end of Sema Creek, Sema Meadows, several trails, and stops at the closed road along the South Fork of Granite Creek that flows into Priest Lake.

### **Current Uses**

There is very little known use in the PWA portion located on the Colville, other than cross-country activities such as hunting and berry picking. There are no developed trail systems within the area.

### **Appearance and Surroundings**

The portion of the South Fork Mountain PWA located on the Colville National Forest is adjacent to two sections of private timber land which has portions that have been logged. The area is covered dense timber, with some minor evidence of activity along the outside edges. The farther you go up the slope away from the private land, the more remote and wild the setting becomes.

### **Key Attractions**

There are no known attractions to the portion of the PWA located on the Colville National Forest.

## ***CAPABILITY FOR WILDERNESS***

### **Level of Natural and Undeveloped Environment**

The portion of the PWA that is located on the Colville National Forest abuts private timberland that is actively managed, and is likely to be managed into the future. The further you go from the edge, the more natural the environment becomes. There are no developments as you approach the divide between the Pend Oreille and the Priest drainages.

Eastern brook trout are present in the East Fork Le Clerc Creek within the PWA.

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.

Noxious weeds inventory data is not available for this PWA.

The South Fork Mountain PWA is minimally impaired by light pollution from the Ione area. The entire PWA rates as Class 2 on the Bortle scale. 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.

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

The portion of the PWA that is located on the Colville National Forest is not managed or developed in any way. It has no trail access, therefore reducing the likelihood of meeting others when in the area. However, given that it is located adjacent to logged and managed lands it does not have the feeling of solitude that would make it feel primitive or unconfined.

### **Special Features**

The PWA contains habitat for grizzly bear, wolverine, goshawk, pileated woodpeckers, fisher, and American marten.

### **Manageability of Boundaries**

The boundaries to this area are known and manageable as they are located along private land boundaries all the way around both sections located on the Colville National Forest.

## ***AVAILABILITY FOR WILDERNESS***

### **Recreation**

Primary recreation activities only include cross-country travel by foot, due to dense vegetation, lack of a trail system, and steep terrain. Activities include hunting, and berry picking. There are no other known recreation activities in this area, although most of the area is open to snowmobile use.

The South Fork Mountain 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 Metaline 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.

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 or significantly enhance recreation opportunities within the area.

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

Motorized Trails	Non-motorized Trails	Snowmobile Trails
0	0	0

## Wildlife

The PWA lies within recovery habitat for grizzly bears (threatened) and woodland caribou (endangered). Vegetation in the area can provide for many of the seasonal habitat needs of grizzly bears. The entire potential wilderness area lies within an area designated as the LeClerc Grizzly Bear Management Unit. A portion of this roadless area has been designated as the Molybdenite Caribou Management Unit. Individual gray wolves may occasionally use the area, although there is presently no evidence that a wolf pack has been established on the Colville National Forest. Habitat is available for Canada lynx within this potential wilderness area. One Lynx Analysis Units (LAU) has been mapped within the area: the Paupac LAU. Habitat manipulation for lynx would be precluded by wilderness designation. The PWA does not contain habitat that appears particularly suitable for wolverine denning. A wide variety of game and non-game wildlife species provide good opportunities for both consumptive and non-consumptive recreational use of the area.

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

**Grizzly bear:** 1) provide seclusion by allowing no new roads in the area, 2) maintain or enhance habitat through the use of prescribed fire, regulated timber harvest, or allowing some natural fires to burn, and 3) vegetation seeding or planting.

**Woodland caribou:** 1) maintain lichen-producing habitat at high elevations, 2) regulate fires in subalpine habitat, 3) provide seclusion, and 4) use timber harvest, prescribed fire, or natural fires to promote late and old structural stage stands of the correct species mix.

Habitats 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	1,178	1	NA
Canada lynx	0	NA	0
Wolverine	1,178	2	<1
American marten	36	2	<1

## Water and Fish

The South Fork Mountain PWA is located in the Pend Oreille River subbasin (4<sup>th</sup> HUC). The PWA contains tributaries of the of the East Branch Le Clerc Creek watershed (6<sup>th</sup> HUC).

The headwaters of the East Branch Le Clerc Creek are contained within the PWA. Approximately 0.25 miles of stream is fish bearing within the PWA and contains 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 juvenile bull trout in 2000 approximately 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.

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

Habitat conditions in the Le Clerc Creek watershed range from *good* to *poor*.

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. If management actions, such as road building and timber harvest, are approved by the Regional Forester or Chief in the future within this PWA, a degradation of riparian and aquatic processes is expected. 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.

There are no water source protection areas.

## Range

The PWA has no historical or active allotments.

**Table 4--Grazing suitability 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
0%	0%	1%	0%

## Vegetation and Ecology

This area is covered mostly by forest with some grassland and shrub vegetation types. About 90 percent of the area is covered by forests. These forested areas are a mixture of mature and immature stands. Most of the younger stands are nearing the age of 85 and are the result of large fires in the late 1920s. A sizeable block of larger diameter hemlock and Douglas-fir occurs at the south end and has had some selective logging which occurred more than 40 years previous. The forest vegetation types include: lodgepole pine and western larch on areas that had severe fire, mixed Douglas-fir, western redcedar, grand fir on north aspects, and western hemlock, western redcedar in draws and subalpine fir/Engelmann spruce type at higher elevations along the ridge that is the forest boundary. Trees in this forested area are extremely dense with some areas having a very dense understory of western redcedar and western hemlock whips. There are grassy openings on top of the ridge on the forest boundary and many small openings among the shrubs near rock outcrops scattered throughout the area.

The South Fork Mountain PWA is 15 percent wildland urban interface (WUI). The Healthy Forest Restoration Act (HFRA) authorizes direction to implement fuel reduction projects in the WUI. The HFRA prohibits authorized projects in wilderness areas.

### 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)

- 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	0%	Total WUI
Cold Dry		0%	WUI in Dry and Mesic Forest	37%
Cold Moist		90%		
Mesic		0%		
Dry		10%		
Non-forest		0%		

## Fire

Wildland fires are the major natural disturbance to vegetative communities within the analysis area fulfilling an important role in ecosystem maintenance and development across the landscape. Fire behavior and vegetation response is classified into three broad categories based on the severity of the fires characteristic to that regime. These categories are *low*, *mixed (or moderate)*, and *high severity* fire regimes.

*Low severity* fire regimes are those where fires result in 90 percent of the overstory vegetation surviving (Morgan et al. 1996). In this regime, surface fuels typically carry fire and only litter, herbaceous material, foliage and small twigs on woody undergrowth (i.e., “fine fuels”) are consumed by the fire. Examples within the South Fork Mountain analysis area include the steeper south to southwest-facing slopes and ridge-tops that contain an overstory of ponderosa pine and Douglas-fir, and an understory of bunchgrass and/or ninebark/snowberry (less than 20 percent of the analysis area). The historic fire-return interval is 5 to 35 years (LANDFIRE imagery, 2007).

The *mixed or moderate severity* fire regimes are those where fires result in 20 to 80 percent of the overstory vegetation surviving. Fire frequency and fire effects are variable across the landscape producing spatially uneven mosaics of even-aged stands. Typically, wildland fires in this regime are largely understory fires except when local fire weather and fuels interact to create periods of high severity (stand-replacing fires). This is the most common fire regime within the study area. Examples within the South Fork Mountain analysis area include the Douglas-fir/grand fir, lodgepole pine and western larch cover types, and subalpine fir/Engelmann spruce type in the draws and on the higher ridge-tops. The historic fire-return interval is typically 35 to 75 years.

The *high severity* fire regimes are those where fire often results in less than ten percent of the overstory vegetation surviving. Fire frequency is relatively long; severity is high (stand-replacing) and opportunity for ignition is limited. This fire regime is restricted to riparian areas and sheltered aspects (eg. north slopes). Examples within the South Fork Mountain analysis area include the western hemlock and western red cedar cover types. Large woody debris with an abundant shrub and herbaceous layer characterize the understory component of this fire regime. The historic fire-return interval is 100+ years.

Prescribed fire is an option that may be used to reduce surface and ladder fuels, promote fire-tolerant species, improve big-game browse, and maintain and/or restore the area to its historic fire regime.

### **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.”

No insect or disease activity has been reported in this area in the last two years.

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

There are no inventoried rare plant species on the Colville National Forest portion of the South Fork Mountain PWA.

### **Noxious Weeds**

Noxious weed inventory data is not available for this PWA.

### **Minerals and Soils**

Soils in this area are extremely varied comprising a complex of rock outcrops and sandy to silt loams. There is evidence of past mass failures (landslides). Soils usually consist of a thin layer of weathered volcanic ash over glacial till, colluvium or alluvium. The weathered volcanic ash soils have a high water holding capacity.

The South Fork Mountain PWA is located east of the Kootenay Arc within an area entirely underlain by Cretaceous igneous intrusive rocks, namely granodiorite. Much of the bedrock is mantled by Pleistocene glacial deposits. Based on historical claim records, there has been little prospecting or exploration within the area and there are no reported mineral occurrences or historic prospects/mines of significance within the area. At present (3/2008), there are no active claims within the South Fork Mountain PWA.

The southern half of the PWA has a low to moderate potential for the occurrence of uranium (Grant, 1982), the remainder of the parcel 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 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 no known cultural or heritage resources located within the portion of the potential wilderness area located on the Colville National Forest.

## **Land Uses and Special Uses**

There are no known special uses within the portion of the South Fork Mountain PWA on the Colville National Forest.

## **Private Lands**

Private lands surround the PWA, but are not located on the east side of the Colville National Forest portion, which allows these acres to be associated with the South Fork Mountain PWA. There are no private inholdings.

## ***NEED FOR WILDERNESS***

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

The nearest designated wilderness is the Salmo-Priest Wilderness which contains 41,335 acres. The nearest population center is Spokane. The drive time from Spokane to the Salmo-Priest Wilderness is approximately two and a half hours. The drive time from Spokane to the South Fork Mountain PWA is approximately three hours.

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 no known attractions; and there are no trails that would accommodate use.

### **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. Only 18 visitors to the wilderness were encountered during 21 days of sampling. Much of the use is from northeastern Washington. Residents of Spokane also have access to the Idaho Panhandle National Forests for recreation. Travel time and distance to potential wilderness areas in Idaho are comparable to the areas located on the Colville National Forest. There are 215,898 and 148,961 acres respectively proposed for roadless and wilderness allocation on the Idaho Panhandle National Forests. Seattle, a ten-hour driving distance 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 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 of and crowding in the Salmo Priest Wilderness.

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

There are five other PWAs within 15 air miles of the South Fork Mountain PWA (Abercrombie-Hooknose, Grassy Top, Hall Mountain, Harvey Creek, and Lost Creek), which encompass an additional 77,676 acres on the Colville National Forest. This acreage, in combination with other Inventoried Roadless areas and including wilderness, totals approximately 226,000 acres. The 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 surrounding or the need for a protected area for other unique scientific value or phenomena**

### **Wildlife**

The South Fork Mountain PWA is part of the LeClerc Grizzly Bear Management Unit and also contains habitat wolverine, goshawk, pileated woodpecker, fisher, and American marten. However the wildlife sustainability index rates 1.8 (a low relative ranking), and the habitat connectivity index rates 1.2 (also a low relative ranking).

### **Fish**

The habitat within the watershed within the PWA is considered essential to the recovery of the bull trout. This PWA contains tributaries that are important to future water and instream habitat quality in the East Branch Le Clerc and main Le Clerc Creek. 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 East Branch of Le Clerc Creek. The habitat condition, for this watershed, is considered to be poor.

The 6<sup>th</sup> field HUC in this PWA also provides suitable habitat for resident and adfluvial westslope cutthroat trout subpopulations; approximately 10 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.

It is understood that habitat conditions for TES species within the 6<sup>th</sup> field HUC is poor. 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 two subpopulations of westslope cutthroat trout indicates that this PWA should be considered a high priority for wilderness classification.

**Table 6--East Branch Le Clerc Creek Watershed**

<b>Focal Species</b>	<b>Miles of Habitat</b>	<b>Percent Total Forest Habitat in Evaluation Area</b>	<b>Vegetation Score</b>	<b>Overall Road Density Score</b>	<b>Habitat Priority Ranking (1=high, 2=mod., 3=low)</b>
Bull trout	13	13	-1.00	-0.70	3
Westslope cutthroat trout	17	10	-1.00	-0.70	3
Interior redband trout	0	0	-1.00	-0.70	3
Pygmy whitefish	0	0	-1.00	-0.70	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 also ranked as low 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 low.

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

### **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 39 percent (469 acres) of the vegetative cover of the Colville National Forest portion of 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 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.

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

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