

WILDERNESS EVALUATION

LONG DRAW - 608023

4,676 Acres

OVERVIEW

History

The Long Draw Potential Wilderness Area (PWA) was originally inventoried as two separate roadless areas totaling approximately 11,400 acres during RARE I. The areas were 14-Mile (8,600 acres) and Long Draw (2,800 acres). The RARE II process combined the two areas and recommended the Long Draw portion to be added to the Pasayten Wilderness, and the 14-Mile portion to be allocated to non-wilderness management. The Washington State Wilderness Act of 1984 added the Long Draw portion and approximately 2,900 acres of the 14-Mile portion to the Pasayten Wilderness. The 2006 inventory removed approximately 33 acres from previous inventory due to non-conforming uses such as road construction and logging; 784 acres were added to the previous inventory as they meet the criteria for a potential wilderness area as described in Forest Service Handbook (FSH) 1909.12, Chapter 70. The following chart depicts the 1989 Okanogan National Forest Land and Resource Management Plan allocations.

Table 1--Management area percentages (rounded)

Okanogan National Forest	
MA05 Recreation/ Scenic	MA12 Lynx Habitat/ Wood
31%	69%

Location and Access

The Long Draw PWA lies within T. 39 N., R. 23 and R. 24 E., Okanogan County, Washington. Long Draw is adjacent to the northeastern portion of the Pasayten Wilderness in the northern portion of the Okanogan-Wenatchee National Forest. Access to the area is afforded by Forest roads #39, #3900-500, and the #100 road accessing 14-Mile trailhead. Several National Forest System trails traverse, or originate within the potential wilderness area.

Geography and Topography

The Long Draw PWA lies approximately 10 miles west of Loomis, Washington. Gentle slopes covered with dense, small-diameter lodgepole pine stands are typical of the area.

Current Uses

The entire area is grazed annually from June through September. Otherwise, it is used by hunters, firewood cutters, hikers, and horseback riders. The trails in the area are amongst the most popular for accessing the Horseshoe Basin portion of the Pasayten Wilderness. The U.S. Border Patrol uses horseback-mounted officers to patrol the Horseshoe Basin area during summer months due to its proximity to Canada.

Appearance and Surroundings

The potential wilderness area is covered by dense lodgepole pine stands, with Engelmann spruce common in the riparian areas. A portion of the PWA burned in two recent fires (Tripod Complex and Windy Swamp). Fire suppression activities are noticeable in areas adjacent to the PWA, as several dozer lines were constructed to the east and south. Timber sale activities are adjacent to the northeast corner of the PWA in the vicinity of 14-Mile trailhead.

Key Attractions

The key attraction of this PWA is that it provides access to Horseshoe Basin and the Pasayten Wilderness.

CAPABILITY FOR WILDERNESS

Level of natural and Undeveloped Environment

The potential wilderness area consists of high elevation, broad rolling ridges. Elevations range from approximately 5,200 feet to over 6,700 feet. There is little evidence of human activity inside the area. Vegetation and topography are not greatly different from the surrounding area.

Another narrow strip of forest adjacent to the potential wilderness area and Irongate Road #3900-500 was treated during the Toats Timber Sale in the mid-1980s. Dead and dying lodgepole pine trees were removed from the area within and adjacent to 14-Mile Campground in the early 1990s to improve public safety. Signs of vegetation management are obvious from many sites within the area. The Albert Camp Trail #375 runs from 14-Mile to the Pasayten Wilderness through heavily managed state land; otherwise, the area appears unmodified by human activities.

Since the mid 1980s, no vegetation management has occurred in the PWA.

Water quality data is not available for 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.

There are three acres of diffuse knapweed, a noxious weed, within the PWA.

The Long Draw PWA is minimally impaired by light pollution. 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.

Outstanding Opportunities for Solitude or Primitive and Unconfined Recreation

The area provides limited opportunities for solitude and challenge. However, the trails provide access to the more remote Pasayten Wilderness. The area affords the opportunity for hiking, hunting, and horseback riding. The portions of the area adjacent to roads are influenced by the sights and sounds of the road and traffic. Timber management activities are visible south and east of the area on national forest, state, and private lands.

Special Features

The area is within the core recovery area for Canada lynx and the North Cascades Grizzly Bear Recovery Area, and provides source habitat for wolverine. All of these species have very limited distribution in the region.

The Long Draw PWA, similar to the nearby Long Swamp PWA, represents a unique wildlife habitat type. Boreal forests and their accompanying wildlife, such as Canada Lynx, snowshoe hare, and boreal owl, are found in both Long Draw and Long Swamp. The entire area is part of a larger expanse that has the highest concentration of Canada lynx in the lower 48 states.

Manageability of Boundaries

Although this area adjoins the Pasayten Wilderness, management as wilderness would be difficult because a long, narrow finger between two popular visitor roads would result.

AVAILABILITY FOR WILDERNESS

Recreation

A small section of one system trail, Albert Camp Trail #375, provides access to the Pasayten Wilderness and passes through the northeast corner of the area. Although the gentle, open brush and grass slopes lend themselves to cross-country hiking and horseback riding, recreation use remains low because of the lack of focal points in the area.

The current uses of the area include hiking, hunting, and horseback riding. There are no special points of interest within the interior, so recreation use is low. Most users who visit the general area continue into the Pasayten Wilderness via the trails from 14-Mile Campground and nearby Irongate trailhead (about 1 mile west).

Road #39, and state lands to the north and east of the PWA are very popular snowmobile areas.

Table 2--Miles of recreation trails

Motorized Trails	Non-motorized Trails	Snowmobile Trails
0	1	0

Wildlife

The grizzly bear (federally listed as a threatened species, and state-listed as an endangered species), northern goshawk (state listed as a sensitive species) and Canada lynx (federally listed as a threatened species) have been reported to occur in the area. There have been no

'Class 1' sightings in the area. The potential wilderness area is within the boundary of the North Cascades Grizzly Bear Recovery Zone, and is part of an evaluation to determine status of the grizzly bear population. The evaluation will also determine if suitable habitat is present to support a grizzly bear population. The entire area is part of a larger contiguous expanse of prime Canada lynx habitat, which has the highest reported concentration of lynx in the 48 contiguous states. This unique representative of boreal habitat in the Long Draw and Long Swamp PWAs provides habitat not only for Canada lynx and snowshoe hare, but also for boreal owls and other species associated with boreal habitats.

The Long Draw PWA is part of a series of potential wilderness areas along the western edge of the Tonasket Ranger District which, combined with the Pasayten Wilderness, provide important habitat for wide ranging carnivores. Each of these areas is located in close proximity to another potential wilderness area or the Pasayten Wilderness, which increases the importance of these areas as security habitat due to the relative ease of carnivore movement between these areas. Wide ranging carnivores, such as wolves, wolverines, and grizzly bears, need secure habitats free from human interference, and the Long Draw PWA adds to the availability of these habitats on the west side of the Tonasket Ranger District. Additionally, this area connects with wide ranging carnivore habitat through the Pasayten Wilderness and into Canada.

An estimated 700 to 900 acres of mixed-conifer old growth exist in the area, providing some of the most productive habitat types for wildlife. Snag numbers for cavity dwellers are estimated to be high in the small inclusions of mixed-conifer stands, and low throughout the lodgepole pine stands. Numerous other wildlife species common to the national forest inhabit the area.

The PWAs provide varying levels of habitat for focal wildlife species. To help evaluate the habitat 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 this particular 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)	%Total Forest Habitat in Evaluation Area
Grizzly bear	4,700	1	<1
Canada lynx	1,974	1	<1
Wolverine	4,445	1	<1
American marten	51	3	<1

Water/Fish

North Fork Toats Coulee Creek is the largest stream in the potential wilderness area. It intersects Toats Coulee Creek, which eventually drains into Spectacle and Whitestone Lakes. Rainbow and cutthroat trout have been found in the area. Recreation and irrigation are the primary water uses. There is livestock use of perennial and intermittent streams and at stock water developments.

The water is of high quality and is sufficient for current uses. Water yield on a per-acre basis is significant. Annual water yields average three to four feet of runoff. For comparison, runoff from low lands on the national forest is less than one-half foot per year. There may be some localized disturbance of water quality due to grazing activities.

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

Range

A small portion of the Toats Coulee Cattle Allotment lies within this area. Most of the allotment within the area is suitable for grazing.

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
40%	98%	43%	0%

Vegetation and Ecology

Southern slopes in the area are grass and shrub-covered, while the northern slopes are covered with shrubs and trees. The principal tree species is lodgepole pine, which grew after fires that occurred in the 1930s and 1940s. Some Douglas-fir, western larch, subalpine fir, Engelmann spruce, and ponderosa pine also exist. The majority of the area supports small-diameter, lodgepole pine stands. During the early 1970s, a small amount of pre-commercial thinning occurred along Toats Coulee Road 39.

Options to utilize mechanical treatments to manage vegetation would be precluded. Generally, the priority for restoration treatments occurs within the wildland urban interface (WUI) or within the dry and mesic forest groups. Because WUI represents over one-half of the potential wilderness area, the prohibition on restorative treatments is a concern. The concern is decreased, however, by recognizing that dry and mesic forest represents only one quarter of the acreage of the area.

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 (< 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		39%	WUI in Dry and Mesic Forest	25%
Cold Moist		35%		
Mesic		1%		
Dry		24%		
Non-forest		1%		

Fire

Forest records show that only three fires have occurred within the area since 1945; two were lightning-caused and one was human-caused. The area is dominated by lodgepole pine produced from the ecological cycle of mountain pine beetle invasion followed by the occurrence of large fires within the beetle-killed stands. The proximity of the area to state and private lands currently under intensive timber management, and the heavily used Iron Gate road contribute the most to the potential risk of a wildfire occurring. Lodgepole pine stands are very susceptible to attack from mountain pine beetle due to the maturity of the trees and stress from a lack of precipitation. Protecting commercial forests within and adjacent to the area is a concern for this area. Washington state’s Loomis Forest and public and private land border a portion of the area (U.S.D.A., 1983).

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.”

Low levels of mortality in lodgepole pine stands were observed during annual surveys in the early 1980s. Endemic populations of mountain pine beetle resulted in mortality of the pine stands. Subsequently, mountain pine beetles have killed many of the mature lodgepole trees. The remaining existing stands of mature lodgepole pine are highly susceptible to mountain pine beetle. Dwarf mistletoe is common in Douglas-fir stands. The nature and extent of root rot diseases is not known.

The ages and sizes of lodgepole pine stands in Long Draw make them highly likely to experience an outbreak of mountain pine beetles. Mountain pine beetle activity has been increasing steadily since 2005.

There is an active outbreak of spruce beetles which has been going on since about 2005. The outbreak will probably run its course by about 2013, by which time all of the large spruce trees will have been killed.

Threatened, Endangered, and Sensitive Species

There are no known threatened or endangered plant species in the area that are on federal, state, heritage, or Forest Service lists. Sensitive plant species that have been found in the area include: Triangular-lobed moonwort (*Botrychium ascendens*), scalloped moonwort (*Botrychium crenulatum*), peculiar moonwort (*Botrychium paradoxum*), valley sedge (*Carex vallicola*), and glaucous willow (*Salix glauca*).

Noxious Weeds

Diffuse knapweed is found on three acres in a single location within the PWA and along roads adjacent to Long Draw PWA. Oxeye daisy (a perennial) and coast fiddleneck (an annual) have been found at 14-Mile Campground. These areas are monitored for weeds annually. A lack of disturbance-related management activity adjacent to the area has resulted in few noxious weeds establishing themselves within the PWA. If present, the populations are isolated and small in size at this time.

Minerals and Soils

The Long Draw PWA is underlain by pre-Tertiary metamorphic rocks that have been intruded by Cretaceous intrusive igneous rocks. Approximately 2,400 acres in the central and western parts of the PWA have a low to moderate potential for the occurrence of post-glacial, surficial uranium deposits. The remainder of the area has a low or unknown potential for locatable minerals. At present (6/2008), there are no active claims within the PWA.

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 to moderate potential for geothermal resources.

Soils are derived from glacial till and are overlain with volcanic ash of varying thickness. Outwash soils near streams are often poorly drained because of high water tables. Soils generally have very high infiltration rates, except in areas with year-round high water tables. Ash soils become very dusty when dry. Trails may become very dusty when dry under moderate to heavy use. Soils without the ash layer tend to be stable during dry periods. Soils with surface litter cover have low erosion hazards and are considered

generally stable for management activities. Where soils are not covered with litter or are very shallow, erosion hazards are moderate. Mass erosion hazards are generally low.

Land Uses and Special Uses

The area is grazed by livestock under term grazing permit during the months June through September.

Private Lands

There is no private land within the area and no known outstanding subsurface rights. Washington state's Loomis Forest and private land border the PWA, where management of wildfire is a concern.

NEED FOR WILDERNESS

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

The area lies very near the southeast corner of the 529, 477-acre Pasayten Wilderness and is about 30 air miles northeast of the 151,435-acre Lake Chelan-Sawtooth Wilderness, and 60 air miles northeast of the 570,573-acre Glacier Peak Wilderness on the Okanogan-Wenatchee National Forest. Driving to the Long Draw PWA is about six to seven hours from Spokane and the Puget Sound areas.

A separate analysis identified where the PWAs could contribute to the wilderness recreation setting either by preserving the primitive recreation setting adjacent to existing wilderness, or by contributing assessable and attractive day use destinations (which are under heavy pressure in existing wilderness). The analysis also examined which PWAs would contribute either a unique landform to the wilderness system, or where trails access vegetation types that are underrepresented in wilderness at a regional scale.

In ranking this PWA for its potential to provide a high quality wilderness recreation setting it ranked as moderately high. The PWA has a trail system that enters the Pasayten Wilderness, but this trail receives low use and is less important as a wilderness access point than the Long Swamp and Pasayten Rim PWAs. The PWA does not contribute either a landform or vegetative setting that is underrepresented in wilderness at a regional scale.

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

Overall, there is a continuous, slight increase in the number of people visiting wilderness areas. The user groups showing the most increase are day-hikers in the Pasayten and Lake Chelan-Sawtooth Wildernesses and day horse users in the Lake Chelan-Sawtooth Wilderness. There also appears to be a slight increase in off trail travel to specific destinations within these wilderness areas. There is also a trend to shorter multiple-day trips.

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

The Colville and Okanogan-Wenatchee National Forests provide large backcountry areas (that are not designated wilderness) within 100 miles of the Long Draw PWA that provide opportunities for unconfined outdoor recreation. These areas include the PWAs of the Kettle Mountain Range, the Long Swamp and Tiffany PWAs and the Abercrombie-Hooknose PWA. These areas afford both motorized and non motorized opportunities.

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

The area provides high quality habitat for grizzly bear, Canada lynx, and wolverine, and a small amount of low quality habitat for American marten. When taken individually, the potential wilderness area is small and its close proximity to roads reduces the quality of habitat for species that require primitive surroundings and isolation. However, the close proximity to the Pasayten Wilderness and the Long Swamp PWA could provide wide-ranging carnivore habitat.

For American marten (*Martes Americana*), grizzly bear (*Ursus arctos*), wolverine (*Gulo gulo*), and Canada lynx (*Lynx Canadensis*) the wildlife sustainability index is 11.1 (a moderate relative ranking) and the habitat connectivity index is 4.6 (a low relative ranking).

Fish

Several native species in the interior Columbia River Basin have demonstrated an inability to survive in less than primitive surroundings, especially the bull trout. In addition to habitat changes on National Forest System lands, other factors off forest such as hydropower generation, hatchery programs, harvest, and changing ocean conditions further challenge the persistence of some far-ranging native species. Broad-scale assessments have demonstrated a positive correlation between unroaded areas and persisting native fish stocks. Often, assessments like these don't differentiate between wilderness and roadless areas; rather they combine the two into an "unroaded" category. These assessments show current strongholds (most secure and robust populations) are dependant on wilderness and roadless areas. Some of the more resilient native fish populations in the Interior Columbia Basin are located in unroaded areas on National Forest System lands.

For the Okanogan-Wenatchee National Forest PWAs were assigned an aquatic ranking based on federally listed and sensitive fish species that are sensitive to human disturbances. A high ranking was assigned when listed fish species occur in the PWA or when ecological process including high quality water help sustain listed fish species downstream of the PWA. All other PWAs are ranked low. This PWA is assigned a low ranking based on these factors.

Rare 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 moderate 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.

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

Using Bailey's Ecoregion Classification system, the Long Draw PWA is part of the Eastern Cascades Ecoregion, which is well represented in the wilderness system in the Pacific Northwest Region.

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 two percent of the vegetative cover of this PWA (113 acres). These types include forb lands, non-alpine meadows, and ponderosa pine. 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 finer scale cover types well-represented in this PWA include quaking aspen stands. In addition, sparse amounts of cottonwood are in this PWA.

Quaking aspen is the only cover type that would make a significant contribution within the eastern Washington planning area.