



"Deerfoot" – Sound familiar?

If you follow the management of your Forest, you may have heard of 'Deerfoot' before. That is because we originally proposed activities in the Deerfoot Resource Area in March of 2002.

Subsequently, in June of 2003 an Environmental Assessment was released and then a decision made to implement a variety of timber harvesting, road construction, watershed restoration and prescribed burning activities.

After the decision was issued, however, a lawsuit was filed against the project. In the meantime, other

Forest Service projects were also in court, and the results set new precedents that made it necessary to revise the environmental assessment for the Deerfoot project. We withdrew the Deerfoot decision and set out to revise the analysis to comply with the new court precedents.

The court allowed us to complete some watershed restoration activities such as road decommissioning, culvert removal and meadow restoration, but no timber harvesting or prescribed burning activities were completed.



View from the Deerfoot Resource Area, looking toward Hayden Lake

So, here we are -

The Forest Service is again proposing activities in the Deerfoot Resource Area to reduce hazardous fuels and promote more resilient, healthier forests. The Deerfoot Resource Area is within the wildland-urban interface as defined by Kootenai County. Being in the 'WUI' means that the Deerfoot Resource Area's location just east of Hayden Lake is very near to private land, homes and community infrastructure. An uncontrolled fire in the WUI could threaten lives, homes, infrastructure, air quality, and tourism. A severe wildfire could also result in the loss of environmental values such as forest cover, wildlife habitat, soil productivity, water quality, and visual quality.

- *An increase in hazardous fuels*
- *A shift in species composition from fire-resistant, shade intolerant species such as ponderosa pine and western larch to more Douglas-fir and grand fir*
- *Loss of dry-site stand structures that were created and maintained through periodic fires*
- *Landscapes that are more homogeneous with a lack of diversity in structural stages*

The need for action in the Deerfoot Resource Area begins with the premise that the dry sites in the resource area have been most altered by the departure from the historical fire regime. Dry sites are generally south-facing slopes that receive the most sunlight. Since they are drier, historically they burned more often in wildfires than shady, moist sites.

Dry sites generally had a shorter fire return interval than moist sites, and so have missed more fires and have experienced more pronounced changes than moist sites. This departure from the historical fire regime has resulted in:



An example of hazardous fuels in the Deerfoot Resource Area

What are we trying to accomplish?

We designed the proposed action to respond to those needs listed above; specifically, it is intended to meet the following objectives:

1. *Reduce hazardous fuels (surface, ladder and crown fuels) on dry sites*
2. *Improve and maintain resilient species such as ponderosa pine and western larch on dry sites*
3. *Improve and maintain dry site structure at both the stand and landscape scales, promoting stands with a significant component of large, old resilient trees, and promoting and distribution of structural stages across the landscape that is sustainable and will provide a range of habitats*

Why should we reduce hazardous fuels?

The Deerfoot Resource Area is located on the western edge of National Forest System lands within the Coeur d'Alene River Ranger District of the Idaho Panhandle National Forests (IPNFs). The Resource Area is immediately adjacent to private lands and near the community on the east side of Hayden Lake. There are approximately 450 structures within this community and most are within a mile of the Resource Area. Since the area is on the edge of the forest and so close to the community, it has been designated as being within the wildland-urban interface (WUI) by Kootenai County. As stated earlier, an uncontrolled fire in the WUI could threaten lives, homes, infrastructure, air quality, and tourism. A severe wildfire could result in the loss of environmental values such as forest cover, wildlife habitat, and soil productivity. The water quality and visual quality of Hayden Lake could also be compromised by a severe wildfire.

In the past, fire seasons varied widely, but about 250 acres would have burned **on average** each year in the Resource Area. However, there has not been a fire of significant size in the Resource Area since 1930, almost 80 years ago. Even including management-ignited prescribed burning, the recorded total of acres burned (about 700 acres) is only a small percentage of what would have burned historically since 1930 (about 19,250 acres). Since fire has not been consuming fuels, they have been building steadily on the ground, as well as in ladder and crown fuels in the form of dense trees and brush. Events such as the Ice Storm of 1996, followed by epidemic levels of Douglas-fir bark beetles and continuing mortality from root disease contribute to uncharacteristic fuel loadings that could result in high intensity, severe fires that resist control and threaten communities.



Why should we change species composition?

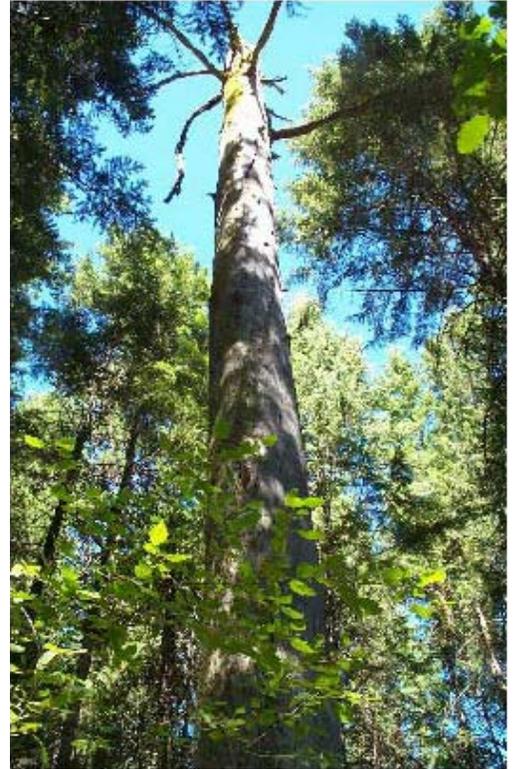
About 30% of the Deerfoot Resource Area is characterized as dry habitat, capable of supporting ponderosa pine dominated forests. According to forest surveys from the 1930's, a corresponding 30% of the Resource Area was characterized as ponderosa pine forests. Currently, however, only about 5% of the area is classified as ponderosa pine forests.

Since fire was such a huge factor in shaping forest composition in the past, removing it from the system has had significant implications in terms of species composition. Ponderosa pine is a species that is highly adapted to frequent fires, and without those fires to maintain its dominance in the stand, it is out-competed by other tree species such as Douglas-fir and grand fir.

Maintaining an appropriate balance of species composition in the Resource Area will contribute to better forest health and increased resilience to disturbances like fire, insects, and diseases. Species such as ponderosa pine and western larch are fire resistant, and are much more likely to survive a fire, resulting in less mortality and lower severity fires.

The recent outbreak of the Douglas-fir bark beetle was largely fueled by the amount of Douglas-fir that currently exists in the forest. Ponderosa pine and western larch are also more resistant to root disease, which causes a considerable amount of mortality every year in more susceptible species such as Douglas-fir and grand fir.

A large ponderosa pine snag surrounded by Douglas-fir trees.



Why should we restore stand and landscape structures?

Historically, large, well-spaced ponderosa pine trees characterized many of the dry-site stands in the Deerfoot Resource Area. The undergrowth consisted primarily of grass and forbs. The brush in these stands was relatively short (2 to 5 feet or less) and was much less abundant than it is today. The lower branches of large trees were pruned by fire, and regeneration of Douglas-fir and grand fir was substantially restricted due to frequent fire. This led to stands much less dense and with fewer ladder fuels than exist today.

Fires in many ponderosa pine and drier-site ecosystems were more frequent, less intense, of lower severity and of different spatial arrangements, resulting in open, large-diameter overstory ponderosa pine with low surface fuels.

Present-day stands are characterized by thickets of sapling and pole-sized fir, dense Douglas-fir with incidence of root rot and scattered ponderosa pine. These stand structures are more likely to support intense, stand-replacing fires.

There is also a lack of nesting and foraging habitat for sensitive wildlife species such as the flammulated owl and pygmy nuthatch. These species prefer habitats with large diameter ponderosa pine trees, a mix of grass understories, small patches of brush and multi-aged Douglas fir.



A circa-1930 photo of a train on the Ohio Match Railroad, likely within the current Deerfoot Resource Area (note the open ponderosa pine forest in the background).

Young forests are much more scarce than they were historically. Currently, only 5% of the Deerfoot Resource Area is in the young forest structural stage, while the historic range for the Coeur d'Alene Basin is 15-50%.

Fully 95% of the Deerfoot Resource Area is in the mid-aged to mature structural stages. A more homogeneous landscape such as this is more susceptible to various disturbances such as fire, insects, and diseases. When the landscape is very uniform, insect and disease epidemics can spread very easily, just like a fire spreads easily through a uniform bed of fuels.

Stand conditions typical of the Deerfoot Resource Area today - thick regeneration of Douglas-fir, with heavy brush, and ponderosa pine snags in the background.



Forests are very complex, interconnected entities, so accomplishing our objectives will also provide other benefits to the forest, such as:

- ✓ *Protecting water quality by reducing the risk and possible effects of an uncontrolled wildfire*
- ✓ *Improving flammulated owl, pygmy nuthatch habitat and wildlife browse*
- ✓ *Improving and maintaining productivity of the forest stands*

What, specifically, is the Forest Service proposing this time?

The proposed action includes prescribed burning, timber harvesting, and vegetative rehabilitation activities.

Prescribed Burning

Prescribed burning reduces hazardous surface and ladder fuels that contribute to wildfire spread and intensity. Prescribed burning has been proven effective at slowing large wildfire spread and at reducing wildfire severity. The prescribed burning would be conducted at times of the year when risk of escape is minimal and when soil moisture is high so productivity is protected. Burns would be implemented in a manner that would protect and enhance wildlife habitat and old growth stands now and into the future. Prescribed burning would help restore stand structures more characteristic of dry-site stands shaped by periodic fire. Burning would be implemented in a manner that would comply with applicable regulations such as the Clean Air Act and the Inland Native Fish Strategy.

Timber Harvesting

Timber harvesting would be used to re-establish long-lived early seral species such as ponderosa pine and western larch, which have declined significantly over the last 80 years. Many stands are now dominated by Douglas-fir and grand fir, which must be harvested in order to regenerate the stand to long-lived early seral

species. Without harvest of the overstory, the planted ponderosa pine and western larch will not have enough sunlight to survive.

Once the overstory is removed, prescribed burning would reduce fuels and prepare the site for planting of long-lived, early seral species. Where there are more ponderosa pine and western larch still on site, a thinning method of harvest would be used. However, since there isn't a lot of ponderosa pine and western larch left, the extent of thinning activities is very limited in this proposal. The result of all of the timber harvest activities would be a reduction in hazardous fuels, a more balanced landscape with a greater number of younger stands, and a more resilient, sustainable, productive forest.

Forest Service policy normally limits the size of openings created by even-aged silvicultural methods to 40 acres or less. With some exceptions, creation of larger openings is allowed with Regional Forester approval. Under the Deerfoot proposal, some units may exceed the 40-acre openings size to create more effective fuel reduction treatments, and to accomplish the goals of improving species composition, stand structure and landscape structure at meaningful scales. As part of the project planning, the project silviculturist will seek Regional Forester approval for any openings larger than 40 acres.

Activities Proposed in the Deerfoot Resource Area

Acres of Prescribed Burning		1,250
Acres of Timber Harvesting		610
Acres by	Shelterwood	552
Harvest Method	Thin	8
	Shelterwood/Thin Mix	17
	Clearcut w/Reserves	33
	Helicopter	149
Acres by	Skyline/skyline with	376
Yarding System	swing	
	Tractor	85
Miles of	Fern Road	0.6
Associated Road	Temp Road	0.6
Construction	Temp Skid Road	0.4
Acres of Vegetative Rehabilitation Treatment		15
Number of Culvert Upgrades		2
Number of Barriers to Illegal Off-Road Travel		15
Number of	Debris Barriers	12
Barriers by Type	Ditches	1
	Front End Obliterations	2

In order to complete the timber harvesting, road construction would be needed for six-tenths of a mile of new permanent road, six-tenths of a mile of temporary road, and four-tenths of a mile of temporary skid road.

Design Features

In the past several years, a significant amount of watershed restoration such as road obliteration, culvert upgrades, and road decommissioning have been completed in the Deerfoot Resource Area. Since so much has already been done, we are only proposing two culvert upgrades as features of the proposed action. These culvert upgrades would allow for more water flow, reducing the risk of culvert failure and sediment delivery to the streams.

While we're there

We know there are problems with illegally pioneered trails in the Resource Area, so while we're there, we plan on placing barriers and completing some road obliterations to discourage use of the illegal trails. Many of the targeted trails were pioneered to breach road closures, which in turn were put in place for a variety of reasons, including wildlife habitat security, maintaining watershed health and to provide a diversity of recreational experiences. The illegal trails have resulted in resource damage by directly contributing sediment into Nilsen Creek along a section of road, indirectly facilitating

Timber harvesting would be completed using helicopter, skyline and tractor yarding systems. All timber harvesting

and road building has been carefully planned to comply with all regulatory requirements such as the Forest Plan, Clean Water Act, Inland Native Fish Strategy, and the Endangered Species Act. Activities would be completed using Best Management Practices (BMP's) as identified in Idaho Water Quality Standards. Measures to reduce the spread of noxious weeds, protect wildlife security and protect soil productivity are incorporated into the proposed action. Reforestation is a crucial aspect of meeting the purpose and need of this project, and is also required by the National Forest Management Act.

Vegetative Rehabilitation

Vegetative rehabilitation is proposed for a 15-acre area where we want to re-establish long-lived early seral species. This rehabilitation would consist of prescribed burning to prepare the site prior to planting of ponderosa pine and western larch.

Our familiarity with the Deerfoot Resource Area has allowed us to design a proposed action that addresses all of the issues that we believe are relevant to this project. Specific unit locations and other aspects of the proposed action are shown on the attached map.

sediment delivery to Stump, Nilsen, and Mokins Creeks from trails located on steep ground, and causing additional soil compaction and displacement that is detrimental to site productivity. The illegal trails decrease wildlife security and encroach on ridges, which serve as travel corridors for many animal species. In addition, the pioneered routes contribute to the spread of noxious weeds. Bringing to an end to use of the pioneered trails will protect water quality, enhance wildlife security, protect habitat, and allow for a range of recreational experiences.

Why is this proposal different than the 2003 project?

This proposed action is different from the 2003 project for several reasons. First, conditions have changed in the forest, and some of the harvest treatments we designed back then are no longer viable due to gradual mortality of the trees. We have also found some better ways to harvest with less impact on the land. Court decisions made since

2003 have changed the paradigm for management of the National Forests, and in that context we have re-assessed and modified our proposed action. The original Deerfoot project also included many watershed restoration activities, such as road decommissioning, culvert removal and meadow restoration, which we have since completed.

How is this proposal different than the 2003 project?

This proposal has less than half of the timber harvesting and much more prescribed burning (independent of timber harvesting) than the 2003 project. In fact, some of the units proposed for timber harvesting in 2003 are now

being proposed for only prescribed burning. Some units were dropped altogether. Although the reason for change is different for each unit, some of the considerations for taking a lighter approach include:

- ✓ *Maintaining suitable flammulated owl habitat*
- ✓ *A more cautious approach to managing allocated old growth stands while reducing risk of future loss to fire*
- ✓ *Cost efficiency*

Since there is less timber harvesting in this proposal, there is also less associated road construction. The 2003 Deerfoot project included over 30 miles of road reconstruction and construction. This proposal includes less than 2 miles of road reconstruction and construction. The current proposal has only 2 culvert upgrades

included, since many culvert upgrades and watershed restoration activities have already been completed. As we completed more fieldwork following the 2003 Deerfoot decision, we found a lot of illegal off-road travel. To address this issue in the current proposal, we included 15 barriers to illegal off-road travel.

In the Coming Months

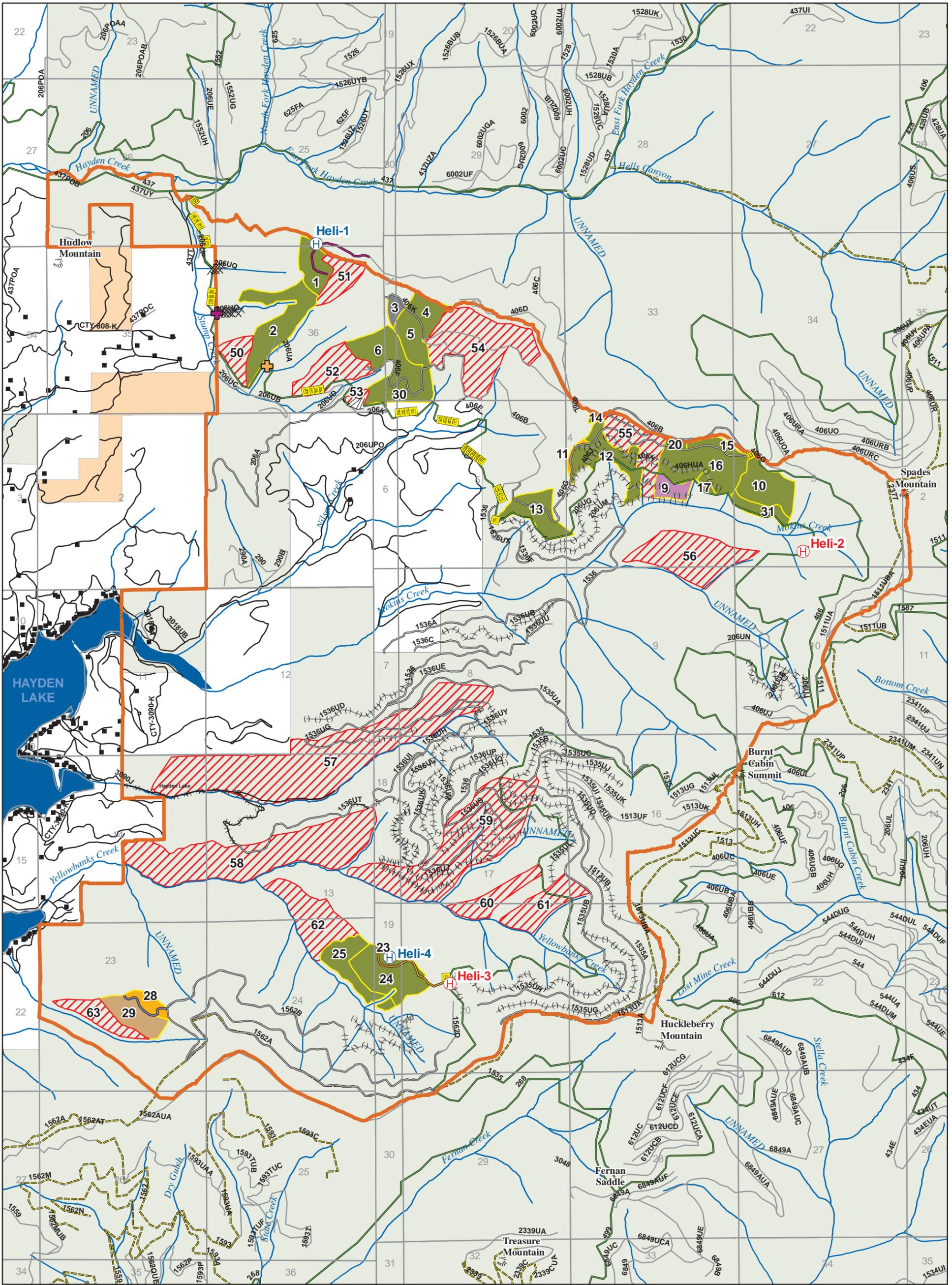
Our process is guided by many laws, regulations, and policies, but primarily by the National Environmental Policy Act, or NEPA. In accordance with NEPA, the process for the Deerfoot Resource Area project will involve:

We are
here!



- *Data and information gathering*
- **Scoping** (to gather information, concerns and ideas from the public and other agencies)
- *Identification of issues and concerns that will need to be addressed*
- *Development of a reasonable range of alternatives to address the issues, including a "No-Action" Alternative*
- *Analysis of alternatives and documentation of our findings in an Environmental Assessment*
- *Public review of the environmental assessment*
- *Response to public input (for example, through changing the proposed activities or the manner in which they are implemented)*
- *Issuing a written decision to notify the public which course of action (or no action) has been selected for implementation*

If you are interested in providing comments on this proposal, please send written comments to the **Coeur d'Alene River Ranger District, Fernan Office, 2502 East Sherman Avenue, Coeur d'Alene, ID 83814**. Comments may also be submitted electronically. Electronic comments must be submitted in rich text format (.rtf), Word (.doc) or Word Perfect format to **comments-northern-idpanhandle-coeur-dalene@fs.fed.us**. The subject line must contain the name of the project for which you are submitting comments. For electronically mailed comments, the sender should normally receive an automated electronic acknowledgement from the agency as confirmation of receipt. If the sender does not receive an automated receipt, it is the sender's responsibility to ensure timely receipt of comments by other means. Your comments will be accepted for 30 calendar days following publication of the legal notice in the Coeur d'Alene Press newspaper. If you have any questions, please contact Project Team Leader Sarah Jerome at (208) 783-2109 or sjerome@fs.fed.us.



Legend	
RESOURCE AREA	ROADS OPEN TO ALL MOTORIZED USE
STREAMS	BURN
LAKES	CLEARCUT WITH RESERVES
SECTIONS	REHABILITATION
STRUCTURES	SHELTERWOOD
CULVERTS	SHELTERWOOD / THIN
RELIEF CULVERT	THIN
UPGRADE CULVERT	PROPOSED BARRIER ON ILLEGAL OHV TRAIL
HELISPOTS	DEBRIS BARRIER
EXISTING	FRONT END DECOMMISSIONED
PROPOSED	DITCH
DECOMMISSIONED	
RECONTOURED	
ADDITIONAL ROADS	
PERMANENT ROAD	
SKID ROAD FOR TRACTOR SWING	
TEMPORARY ROADS	

DEERFOOT PROPOSED ACTION



ATTENTION

This product is reproduced from geospatial information prepared by the U.S. Department of Agriculture, Forest Service. GIS data and product accuracy may vary. They may be developed from sources of differing accuracy, accurate only at certain scales, based on modeling or interpretation, incomplete while being created or revised, etc. Using GIS products for purposes other than those for which they were created, may yield inaccurate or misleading results. This information was released on Date: May, 2007. The Forest Service reserves the right to correct, update, modify, or replace GIS products without notification. For more information, contact: Fernan Office, IPNF (208)-664-2318