

## CHAPTER I PURPOSE AND NEED

### INTRODUCTION AND MANAGEMENT DIRECTION

The *Healthy Forests Restoration Act of 2003* (HFRA) was signed into law on December 3, 2003 by President George W. Bush. It is designed to improve the capacity of the Departments of Interior and Agriculture to conduct hazardous fuels reduction projects to protect communities, watersheds, and other at-risk lands from stand-replacing wildfire. The Misery Lake Timber and Fuels Management Projects is the first District project to be analyzed under HFRA.

This project is an Authorized Hazardous Fuels Reduction Project in accordance with the HFRA because:

- The measures and methods used to implement this project include prescribed fire, hand piling, thinning (to produce commercial and precommercial products), and various mechanical treatments that were selected on a site-specific basis and are ecologically appropriate and cost effective.
- The project is on Federal lands in wildland urban interface areas.
- The project is being conducted under sections 103 and 104 of the HFRA.

The project area is located on the Newport-Sullivan Lake Ranger Districts of the Colville National Forest, west of the community of Blueslide. *Protecting People and Sustaining Resources in Fire-Adapted Ecosystems, A Cohesive Strategy* (2000) is a report providing the strategic framework for reducing hazardous fuels buildup within wildland-urban interface communities, municipal watersheds, threatened and endangered species habitat, and other important local features. This project is designed to address the intents of the Cohesive Strategy and the HFRA by reducing hazardous fuel levels on National Forest lands near the community of Blueslide and along a portion of the Bonneville Power Administration (BPA) powerline. Blueslide was identified as a community at risk in the Pend Oreille County Community Wildfire Protection Plan. The Pend Oreille County Community Wildfire Protection Plan identified Blueslide (listed as priority #1B by the fire chiefs within Pend Oreille County) as a community at risk based on guidance found in *Handbook for Wildland-Urban Interface Communities, Preparing a Community Wildfire Protection Plan* (March 2004).

The Land and Resource Management Plan of the Colville National Forest (hereafter referred to as the Forest Plan) represents the preferred alternative of the Final Environmental Impact Statement (FEIS, approved December, 1988) and, together with the Record of Decision, as amended by the Regional Forester's Forest Plan Amendment #2 and the Inland Native Fish Strategy (INFISH), provides direction for management of the Forest and general discussions of associated environmental impacts. This Environmental Assessment (EA) is "tiered" to the Forest Plan FEIS. Projects identified in this EA are being proposed to meet some of the Forest Management Objectives identified on pages 4-3 through 4-5 of the Forest Plan.

The Newport-Sullivan Lake Ranger Districts are conducting this EA to analyze options for restoring forest health and reducing hazardous fuels, and to provide data from which the Forest Supervisor can make a decision. Treatment options analyzed include commercial timber harvest, prescribed burning, and other timber and wildlife (winter range management) projects.

### Location

The analysis area encompasses about 14,093 acres of land (9,873 of National Forest System [NFS] and 4,220 of other ownership) within the South Fork Lost Creek, North Fork Ruby Creek, and Ruby Creek drainages. The elevation of the area ranges from about 2,200 to 4,000 feet. The legal description is all or portions of the following: Sections 20, 21, 22, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35 of T. 36 N., R. 43 E.; Sections 3, 4, 5, 8, 9, 10, 11, 12, 13, 14, 15, 16, 21, 22, 23, 24, 25, 26, 27, 28 of T. 35 N., R. 43 E.; Sections 18, 19, 30 of T. 35 N., R. 44 E.; Willamette P.M.; Pend Oreille County, Washington. A detailed vicinity map is located in appendix B.

## PURPOSE AND NEED

The need to implement the Forest Service Strategic Plan (revision 2000) in a manner consistent with the Colville National Forest Land and Resources Management Plan, and utilizing commercial timber sales as a tool whenever possible forms the underlying basis for this project.

There is a need to reduce hazardous fuels<sup>1</sup> (ground fuels, ladder fuels, and forest crown continuity), for the purpose of reducing the risk of large, stand-replacing fires. The effect of reducing the risk of large, stand-replacing fires would be to: 1) decrease the probability that a future wildland fire would develop into, or be sustained as, a stand-replacing or crown fire, 2) increase the ability to provide for public and firefighter health and safety during a wildland fire, and 3) increase the effectiveness and efficiency of protecting property within the wildland-urban interface<sup>2</sup>. The Pend Oreille County, Washington, Community Wildfire Protection Plan includes the need to consider forest management efforts that would slow the approach of a fire that may threaten the community of Blueslide.

Wildfires are becoming increasingly expensive; dangerous to firefighters; and threatening to wildlife habitat, beneficial uses of water, and adjoining private land and property. During the past 75 years, fire suppression has resulted in increased ground and ladder fuel conditions, and increased tree-crown continuity in portions of the Misery Lake project area. As forest fuels have increased over time, the potential for high intensity crown fires has also increased. Therefore, there is a need to start the process of reversing this hazardous and expensive trend by reducing fuel levels and stocking. Over the long-term, hazardous fuels reduction will offset and eventually reduce escalating fire suppression costs and create a more “fire-safe” forest environment.

The health, resilience, and productivity of fire-adapted ecosystems rely on periodic burning at ecologically appropriate frequencies. Today, many of the most serious wildfire threats and forest health issues occur in these fire-adapted ecosystems. Reducing forest fuels in these fire-dependant ecosystems can make them more resilient to wildfires.

Most of the natural fuels proposed for treatment in the Misery Lake analysis area are already in Condition Class<sup>3</sup> 2 or are in Condition Class 1 and moving toward Condition Class 2. Reducing fuels in Condition Class 2 stands, and maintenance activities in Condition Class 1 stands, will be the focus in achieving the primary purpose as mentioned above<sup>2</sup>.

The consequence of deferral is high: allowing fire-adapted forests to develop into Condition Class 3 stands greatly increases the wildfire severity. The cost of fuel reduction and maintenance burning can be substantial; yet without fuel reduction treatments, fire suppression costs, public resource losses (including wildlife & riparian habitat), private property losses, and environmental damages are expected to be significantly greater over time.

There is a need to remove diseased trees, reduce stand density, and modify tree-species composition for the purpose of improving forest health<sup>4</sup>. This will have the effect of 1) improving tree growth, 2) reducing tree and stand susceptibility to damaging insects and diseases, 3) improving the distribution of stand structures<sup>5</sup> across the forest landscape, and 4) improving vegetative composition within areas adjacent to riparian corridors to help meet riparian habitat management objectives.

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<sup>1</sup> 10-year Comprehensive Strategy Implementation Plan (USDA Forest Service, 2002)

<sup>2</sup> Cohesive Strategy Priority (USDA Forest Service, 2000)

<sup>3</sup> Condition Class is one way of determining a stand's potential risk to wildfire. Condition Class 1: trees tend to be widely spaced, resulting in low-intensity ground fires. Most large trees survive wildfire. Condition Class 2: tree spacing is denser; fire occasionally reaches the crowns. Heavy mortality occurs in small trees, and is light to moderate in large trees. Condition Class 3: tree stands are dense with intense fire burning in most tree crowns; wildfire would cause heavy mortality to entire stand and the soil's organic layer may be removed.

<sup>4</sup> A healthy forest is defined as the condition in which the forest (trees, stands, and forested landscape) meets the desired conditions described in the Forest Plan.

<sup>5</sup> A structural stage is a stage in development of a vegetation community. Examples of structural stages include stand initiation, stem inclusion, understory re-initiation, multi-stratum without large trees, multi-stratum with large trees, and single-stratum with large trees.

The Forest Plan directs that the Forest Service promote tree growth, have reduced insect and disease levels, and have stand densities that will sustain wood fiber production (Forest Plan pages 4-2, 4-18, 4-64, 4-65). For Forest Plan Management Areas 1, 5, 6, 7, and 8, the Forest Plan directs that insect and disease outbreaks be prevented or suppressed when Management Area values are threatened (Forest Plan pages 4-72, 4-96, 4-100, 4-101, 4-104, 4-108).

Currently the Misery Lake analysis area includes many acres of vegetation that are crowded and highly susceptible to a variety of pathogens. These include bark beetles, defoliating insects, dwarf mistletoes, and root diseases. These and other forest pathogens are currently present at endemic levels; however, without stand improvements, there is a high probability of population increases resulting in significant tree mortality and increased fuel loading. Stand treatments are needed to reduce susceptibility to continuing insect and disease-caused mortality over the longer-term.

Treating excess fuel build-up and beginning to restore fire to its historic function in the ecosystem would push treated areas towards a healthier, more resilient condition. Historically, fire was the primary ecosystem disturbance shaping the upland vegetation and wildlife populations (because of fire's effect on habitat). Fire suppression through past decades has changed the relationship between fire and the landscape; this has caused shifts in species composition, stand structure, and created homogeneity. Restoring fire where possible will increase the resiliency of the landscape to stand-replacement wildfires and impacts of high insect population levels. Consistent with the National Fire Plan, this project emphasizes treatment in the portions of the analysis area with shorter-interval, fire-adapted ecosystems.

Restoring early seral species<sup>6</sup> to their historic level will improve sustainability and resiliency in this ecosystem. Under historic fire regimes, early seral species played a more dominant role in the landscape. Many of the largest trees were early seral species. Harvest, especially during the homestead era, removed the largest early seral trees. Restoring early seral species would result in a landscape that is less susceptible to insects and diseases and better able to withstand effects of fire.

There is a need to treat the area to improve winter range habitat for big game. Providing quality winter range is a key factor in maintaining healthy herds of big game animals. West of the Pend Oreille River (including the Misery Lake project area), the Forest Plan emphasizes managing winter range for deer. The objective for deer winter range in the Forest Plan (page 4-106) is to “Manage for cover/forage ratios approaching 50:50 dispersed to provide for a maximum utilization of forage.” At least 20 percent of the cover component should be thermal cover and the rest can be thermal or hiding cover. The Forest Plan defines adequate thermal cover for deer as stands of evergreen trees that are at least 40 feet tall with a crown cover of 60 percent or greater. Designated winter range in the project area is low in forage (24 percent) and exceeds cover goals (76 percent).

Vegetation management utilizing commercial harvest and/or noncommercial treatments (including prescribed fire, pre-commercial thinning, and reforestation) would improve forage opportunities and long-term cover habitat for ungulates.

## **SUMMARY OF NEEDS**

Based on management guidelines and Forest Plan Standards, the following needs have been identified:

- Reduce fuels in areas where property damage could be incurred by high-intensity (stand-replacing) fires.
- Meet the goals of the Pend Oreille County Wildland-Urban Interface Wildfire Mitigation Plan. This could be accomplished by managing National Forest lands adjacent to the community of Blueslide and the BPA powerline would reduce the risk of wildfire burning WUI lands and losses experienced because of wildfires. This would also protect ecosystems that contribute to their way of life and the sustainability of the local and regional economy.

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<sup>6</sup> Early seral species are fire-tolerant tree species (such as WL, PP, and WP) that historically dominated the landscape. These tree species grow in natural succession soon after a disturbance (fire or logging).

- Reintroduce historic disturbance regime with use of prescribed fire.
- Improve fire resiliency with fire-tolerant tree species (early seral species).
- Improve forest health by removing diseased trees, reducing stand density, and restoring early seral species to their historic level.
- Manage stands to develop late and old<sup>7</sup> (including park-like) structural stage stands.
- Improve vigor in residual stands to increase resistance to insect outbreaks.
- Regenerate areas that fall below minimum stocking levels.
- Improve structure and composition in stands adjacent to riparian areas for long term management and to move the stands toward riparian management objectives.

**MANAGEMENT AREA GUIDELINES**

Management direction for each Management Area (MA) is provided by the Forest Plan, which describes in detail the Goals, Objectives, Standards, Guidelines, and Management Prescriptions (Forest Plan chapter 4). About 9,873 acres of NFS land and 4,220 acres of non-NFS land lie within the analysis area. The goal of each MA is briefly described below. No federal actions are proposed on any non-NFS lands.

Management Area	Acres	Percent of Analysis Area
1	630	4%
5	1,984	14%
6	2,613	19%
7	2,198	16%
8	2,448	17%
Non-NFS	4,220	30%

There are five MAs in the analysis area. This table shows the percent of NFS land allocated to each management prescription, and maps in appendix B show the locations of these management prescription areas.

**MA-1 - Old-growth Habitat** – The goal is to provide essential habitat for wildlife species that require old-growth forest components and contribute to the maintenance of diversity of wildlife habitats and plant communities.

**MA-5 - Scenic/Timber** – The goal of these areas is to provide a natural appearing foreground, middle, and background along major scenic travel routes, while at the same time providing wood products.

**MA-6 - Scenic/Winter Range** – The goal is to provide a natural appearing foreground, middle, and background along major scenic travel routes while providing quality winter range for deer.

**MA-7 - Wood/Forage** – The goal is to achieve optimum production of timber products while protecting basic resources.

**MA-8 - Winter Range** – The goal is to meet the habitat needs of deer to sustain carrying capacity at 120% of the 1980 level, while managing timber and other resources consistent with fish and wildlife management objectives.

**PROPOSED ACTION**

The proposed action would treat vegetation to move this area toward the desired future condition, while attaining some of the specific Forest Management Objectives and related improvement projects (Forest Plan, chapter 4, page 4). The proposals are tentatively planned for implementation in fiscal years 2008 and 2009, and would

<sup>7</sup> Late and old structural stage stands are remnants of stands that survived numerous fire regimes, and are dominated by large seral species.

utilize prescribed fire in the project analysis area. This project analysis area would provide up to 50,000 hundred cubic feet (Ccf) (25,000 Mbf) of wood products. The proposed action is analyzed in chapters II and III as alternative B.

**The proposed action would include:**

- Prescribed underburning of approximately 4,380 acres to eliminate unwanted vegetation and reintroduce a historic disturbance regime. This would also reduce fuels in areas where property damage could be incurred by high-intensity (stand-replacing) fires. Other fuels treatments proposed include mechanical fuels treatments<sup>8</sup> on approximately 1,425 acres, fuels/fire treatments on approximately 392 acres, and precommercial thinning and western white pine pruning on approximately 427 acres.
- Timber harvest within MAs 5, 6, 7, and 8 to treat stands that are currently overstocked, which makes them more susceptible to insect and disease attack. The silvicultural prescriptions on MA 5 and 6 lands would be compatible with visual quality objectives. Management on MAs 6 and 8 lands would be compatible with management for big-game winter range. Up to 2,815 acres could be treated within the areas proposed for treatment. See appendix A and appendix B for maps and additional information on where these treatments would occur.
- Ground-based logging systems are expected to be used for yarding the majority of the sale area. Some helicopter and skyline logging systems would be used in more remote areas. See appendix A and appendix B for maps and additional information on where these treatments would occur.
- Approximately 4.8 miles of new specified road construction, and approximately 0.5 miles of temporary road construction, are needed to improve access for the proposed timber harvest in alternative B. Approximately 18.9 miles of existing system road could receive light (occasional drain dip construction with associated light blading and brushing) reconstruction, and approximately 1.9 miles of existing system road could receive medium (includes “light reconstruction” plus the occasional clearing of vegetation; excavation of cutbank and roadbed for additional width to accommodate the vehicles used for commercial harvest activities, embankment construction and culvert replacement and installation) reconstruction. Up to 2 existing rock sources outside the analysis area might be used to provide material for road construction, reconstruction, or maintenance. There are potentially 4 additional new rock sources within the analysis area that would be economical for development.
- Approximately 8 miles of existing road are planned for removal from the Forest transportation system. These roads would be decommissioned and/or obliterated. (See map in appendix B for specific road locations.)
- No project activities would occur in any Forest Plan designated roadless areas or in unroaded areas greater than 5,000 acres in size.
- No project activities would occur in recovery areas for bull trout, grizzly bear, woodland caribou, or gray wolf or in primary Canada lynx range.
- Any areas needing regeneration would be planted with species that are more resistant to fire, insects and diseases.
- Areas within riparian-influence zones would also be planted with spruce, or advanced regeneration of hardwood species, western redcedar or western hemlock would be released to encourage development of species that generally have longer life-spans than lodgepole pine.

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<sup>8</sup> Mechanical fuel treatments include grapple piling and mastication. See appendix A and appendix B for maps and additional information on where these treatments would occur.

## SCOPING THE ISSUES

The Forest Service used multiple methods to determine the major issues that would affect the decision on this project. In summary, the Forest Service involved members of the public, interested private groups, and State and Federal agencies by doing the following:

- Publishing a News Release requesting public comment in the Newport Miner.
- Listing the project in the “Projects” newsletter (Schedule of Proposed Actions), which is published quarterly by the Colville National Forest.
- Sending a letter to landowners whose property is within or adjacent to the project analysis area.
- Sending a letter to individuals or groups having Special Use permits within the project analysis area.
- Collaboration with the Northeast Washington Forestry Coalition (NEWFC) group.
- Holding public meetings to discuss the proposed projects with interested members of the public. The first meeting was held at the Newport district office on December 8, 2006, and the second meeting was held on Saturday September 22, 2007, at the US Air Force Tacoma Creek Command Post.
- Requesting consultation with Kalispel Tribe of Indians, Spokane Tribe, and Confederated Tribes of the Colville Reservation.

Letters mailed to adjacent landowners, special use permittees, and parties on the Forest Service mailing list included a map, and a description of the proposed action for their review and comment. Information compiled during this environmental assessment is included in the analysis file for this project.

## Collaboration

The NEWFC group includes mill workers, conservationists, business owners, recreationists, loggers, and foresters. The purpose of this group is to:

- design and implement forest restoration and fuels reduction projects that demonstrate innovative approaches to forestry.
- demonstrate how a diverse coalition of stakeholders can work together to successfully promote restoration forestry and community protection from wildfire.
- use the projects to educate the public about the ecological and socio-economic benefits of restoration forestry and fuels reduction strategies.
- develop model forest restoration and fuels reduction projects that can be emulated in other regions of the country.

On September 30, 2006, the NEWFC formally requested to collaborate with the Forest Service on the Misery Lake project, with a goal of “minimizing controversy, and to reach a high level of support for the timber sales”. In an effort to better understand the treatment proposals, various members of the NEWFC met with the Forest Service on several occasions (12/8/2006; 3/14/2007; 4/16/2007) to discuss the project, and treatment information was exchanged over the course of project analysis work to clarify issues and attempt resolution of differing opinions.

District representatives met with members of the NEWFC and other members of the public at two public meetings (6/12/2006; 9/22/2007) to discuss treatment proposals and receive public input.

During collaboration meetings with the NEWFC two primary issues were discussed. The following provides a summary of the discussion. Complete documentation of the collaboration discussions can be found in the project file.

Road construction and reconstruction – the concern was that the Forest Service not increase the mileage of system roads within the project area. The Lands Council members (part of the NEWFC) at these meetings discussed the groups desire to reduce road mileage on National Forest System lands due to lack of federal funds to provide sufficient maintenance, potential for increased noxious weed spread, potential for impacts to wildlife populations, and potential for increased sediment input to streams.

The NEWFC members and interdisciplinary team (IDT) members discussed each proposed specified road location, along with why the IDT felt it was needed (e.g., management access, relocation to protect streams); each road proposed for closing, decommissioning, or obliteration; and proposed temporary road locations. Based on these discussions the IDT relocated some roads and shortened some roads. The specified road construction for the Misery Lake project was reduced from approximately 5.9 miles of new road to approximately 4.8 miles. The current proposed action incorporates these changes, and would result in a net decrease (approximately 3.2 miles) in system roads following project implementation. The NEWFC members concurred with the road management activities proposed with this project.

Residual stocking – the concern was that the Forest Service retain sufficient trees following harvest activities to meet aesthetic values of their member groups. The suggestions from NEWFC members included meeting a minimum stocking level, maintaining trees throughout the proposed harvest unit, and minimizing the size and distribution of created openings (defined by NEWFC as areas with no trees) in all units proposed for commercial harvest activity. NEWFC members and IDT members met both in the office and in the field to discuss specific treatments and options. Where the IDT had unit-specific residual stocking information, that information was provided to NEWFC members for their review.

Due to the high concentration of lodgepole pine with height-diameter ratios greater than 100 and crown ratios less than 40%, agreement was reached that proposed treatment units in this project would not all meet the residual stocking levels desired by members of NEWFC. The Forest Service agreed to leave pockets of trees as well as individual trees; try to distribute trees designated for retention through out the proposed units; and to retain the larger, fire-resistant trees in the units proposed for shelterwood harvest. These agreements are reflected in the unit-specific treatment prescriptions<sup>9</sup>.

The IDT also worked with the range allotment permittee to ensure that issues or concerns related to permit administration would be addressed. The permittee wanted to make sure that any reductions of natural barriers created by project activities would not change the accessibility of new areas to his cattle as well as protection of existing range allotment improvements. He was also interested in opportunities for improving access to one of his holding corrals. The IDT members reviewed these concerns with the permittee on the ground and included the following in the design of the project:

- Existing range allotment improvements would be protected in any resulting contracts or force account projects.
- If natural barriers to livestock are breached by the proposed activities, fencing would need to be constructed to limit livestock dispersal.
- A stock driveway would be constructed in the southern end of unit 44 to allow livestock to be trailed from the creek crossing near the southeast corner of unit 44 southeast to the corral in the powerline right-of-way. This would encourage cattle to move away from the creek and allow for better management by the permittee.

New access to the permittee's holding corral was reviewed on the ground by IDT members and the permittee. Although the proposed access location was determined not to be feasible due to soil and other resource concerns, the permittee would still have access to his holding corral.

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<sup>9</sup> Unit-specific prescriptions are located in the Misery Lake project file.

## COMMENTS RECEIVED DURING SCOPING

A District Interdisciplinary Team (ID Team) identified issues to be addressed in developing alternatives for this area based on input received from adjacent landowners, other interested members of the public, and collaboration meetings with members of the NEWFC. See appendix F for additional discussion on how these issues, concerns, and comments were or were not addressed in the effects analysis, or incorporated in the project design. During scoping the following comments and concerns were received from members of the public:

- Encourage the use of stewardship contracting,
- Additional winter range for wildlife is unneeded,
- Using winter range to keep the public from recreation is unacceptable,
- Putting up barriers after each timber cut is not what our public wants,
- The world is not going to end if there's a little soil disturbance, disturbance is good for growing natural regeneration,
- The FS has too many restrictions,
- Would like to see the aspen come back,
- Concerned that the FS has a different view of protecting wolves than the Fish and Wildlife Service does,
- Would like to see some improvement of forage as well as hiding cover in big-game habitat,
- In favor of implementing thinning projects on NFS lands,
- Agree with the FS analysis regarding the reduction of hazardous fuels which would decrease the probability of future wildfire, increase access for firefighting purposes, and increased protection of private ownerships and structures within the wildland urban interface,
- Concerned about the fuels buildup within the watershed,
- Request that the EA provide a condition class map along with the proposed unit treatment prescriptions,
- Regarding a dispersed recreation site located approximately 1/2 to 2/3 mile up Ruby Creek Road on the south side of the road, right along the creek - either clean up and maintain the site as a monitored dispersed camping location or completely close off the road and obliterate the site.
- Range Allotment Permittee's concerns/requests:
  1. Protect improvements including drift fencing,
  2. Concerned about location of new roads, how it affects livestock movement,
  3. Ensure that any reduction of natural barriers created by the proposed treatments does not change the accessibility of new areas to livestock,
  4. Consider adding a drift fence along the powerline corridor to restrict cattle movement.
  5. In favor of obliterating the switchbacks on the 2700005 road,
  6. Would like to either relocate the corral currently located at the south end of section 15, or have better access to it,
- United States Air Force (USAF) concerns/requests:
  1. Protect the investment in the road systems that the USAF has accomplished.
  2. Allow the USAF to use new roads and temporary roads, especially if they access areas suitable for training (<35 % slope near water).
  3. Allow access on any newly gated roads.
  4. Allow the ability of the USAF to use log landing areas for temporary winter shelter sites or for helicopter landing zones after harvesting is complete.
  5. Limit log haul during winter if it conflicts with winter training.
  6. Allow the use of MA 6 and MA 8 over the threshold for winter training within the Parker Lake closure.
  7. Coordinate Helicopter logging with the 36 Rescue Flight to alleviate conflicts.
  8. Reroute the 2700005 road for better access of larger trucks down to the BPA power lines.

9. Clear the edges of the existing landing zones for safer helicopter landings.
10. Protect the power line and phone line along the Ruby creek road, which services the Ruby Command Post.
11. Clear the trees along the 2700004 and 005 road for snow plowing and snow storage.
12. Create additional turnouts on the roads for safer travel.
13. Create more road access into Section 16 within the Parker Lake closure. This area is a very good training area, unavailable for use due to limited road access.
14. In areas <35% slope near roads, slash clean up would be important for training purposes.

## ISSUES

The following concerns raised by the Forest Service interdisciplinary team analyzing this project and members of the public are discussed in depth in this environmental assessment:

- Protection of soil resources – proposed treatments have the potential to decrease soil productivity; project design should reduce or minimize compaction, sedimentation, displacement and erosion;
- Treatment of noxious weed populations – proposed treatments have the potential to spread or introduce noxious weed populations; project design should prevent, reduce, or minimize spread of noxious weeds.
- New specified road construction – there is disagreement between members of the public as to whether proposed new roads should remain open for public use or that there should be either no increase, or a decrease, in open road miles within the project area.
- Regeneration harvest – The Lands Council and Conservation Northwest members contend that regeneration harvest systems create areas with insufficient residual stocking and the resulting units are aesthetically unacceptable.

## Purpose and Need Objectives

Major project objectives that will be used to design and compare the alternatives presented in Chapter II are as follows:

### *Purpose and Need Objective #1 – Reduction of Hazardous Fuels*

Fire as a natural process, through suppression efforts, has been removed from the ecosystem. Tree encroachment and high fuel loads are common, especially in the dry Douglas-fir biophysical environment<sup>10</sup>. Fires that burn on these sites in the future will be of higher severity and result in mortality of larger trees than historically occurred. There is a need to reduce hazardous fuels, for the purpose of reducing the risk of large, stand-replacing fires, as well as reducing the chance of fires damaging private property, and return fire regime stand condition class back to a historical range within the analysis area.

Comparison Criteria – Acres of priority stands commercially and noncommercially treated to manage existing and potential risk of stand-replacing fires.

### *Purposed and Need Objective # 2 – Forest Health*

Effective fire suppression and past selection cutting has altered the structure and composition of many of these stands. These stands are overstocked, show signs of low vigor, and provide a climate for continued concerns for insect and disease outbreaks.

Comparison Criteria – Acres of priority stands commercially and noncommercially treated to manage existing and potential risk of insect and disease outbreaks.

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<sup>10</sup> Biophysical environments represent potential natural vegetation association groups with similar fire ecology regimes.

*Purpose and Need Objective #3 – Winter Range Habitat*

The Cover:Forage ratio goal of 50:50 is not currently being met on big-game winter range in the analysis area. There are not enough productive foraging sites to meet Forest Plan standards.

Comparison Criteria – Percent increase in acres with improved forage quality and quantity. Comparison with Forest Plan standards.

**DECISION NEEDED**

The decision needed from the Colville National Forest Supervisor, the responsible official, is whether to implement these projects to meet management direction as stated in the Forest Plan.