

Pacific Northwest Region

# Colville National Forest

Fiscal Year 2015

## Forest Plan Monitoring and Evaluation Report



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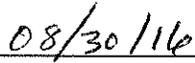
for the greatest good

*A message from the Forest Supervisor*

I am pleased to present this report documenting the Colville National Forest's monitoring efforts for Fiscal Year 2015. Each year the Forest monitors important components of individual programs, projects, and best management practices to ensure that efforts to manage and restore our national forest lands are successful, and identify where improvements can be made. This report is not a comprehensive list of the monitoring completed, but is a snapshot of our accomplishments. Please contact Holly Hutchinson, Forest Environmental Coordinator, at 509-684-7201 with questions regarding this report.

Thank you,

  
\_\_\_\_\_  
Rodney D. Smoldon  
Forest Supervisor

  
\_\_\_\_\_  
Date

*Cover photo: Woodland caribou by Wayne Wakinnen*

# Colville National Forest Fiscal Year 2015 Forest Plan Monitoring and Evaluation Report

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## Introduction

The purpose of this report is to provide the results of monitoring the implementation of the 1988 Colville National Forest Land and Resource Management Plan (Forest Plan) during Fiscal Year 2015 (FY '15) (October 1, 2014—September 30, 2015) to the Forest Supervisor, the Regional Forester, and the public.

This report focuses on the monitoring and evaluation process described in Chapter V of the Forest Plan and as updated through Forest Plan amendment and Forest Service direction. It is not intended to be a complete overview of the many accomplishments and activities on the Colville National Forest during this time period.

Summary information for individual monitoring items is located on pages 3 through 12. Some items listed individually in the Forest Plan are grouped together in this report as resource impacts are intertwined.

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Acronyms used in this document:

BCME = British Columbia Ministry of Env.	BMP = Best Management Practices
BMU = Bear Management Unit	FY = Fiscal Year
IDFG = Idaho Fish and Game	IPNF = Idaho Panhandle National Forest
NEPA = National Environmental Policy Act	OHV = Off Highway Vehicle
USFWS = US Fish and Wildlife Service	WDFW = Washington Dept. of Fish and Wildlife

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## Monitoring Items

The following monitoring items were reviewed as part of existing condition review and effects analysis for projects reviewed under NEPA direction and incorporated into monitoring conducted in combination with other resources during FY '15. Therefore, these resource areas do not have separate discussions in this report.

- Visual Quality
- Soil
- Facilities/Roads
- Cultural Resources
- Minerals

Review of NEPA documents and monitoring conducted by other resource specialists shows that each of the resource areas listed above are meeting standards and guidelines located in the Forest Plan.

## General

### *Project compliance with National Environmental Policy Act (NEPA)*

The following information pertains to NEPA documents with signed decisions and administratively reviewed during FY '15. There were a total of fourteen NEPA decisions on the Colville National Forest (Colville NF) in FY '15. These decisions did not amend the Forest Plan (total of zero Forest Plan amendments in FY '15).

Decisions are listed by category in below in Tables 1 and 2. Two objections were filed in FY '15 on Colville NF NEPA decisions, and all decisions were upheld.

**Table 1.** Decision Memos, FY '15.

Resource Area	Number
Roads/Right of Way	1
Wildlife/Fish/Watershed Mgt	3
Special Uses	5
Vegetation Management	1
Total	10

**Table 2.** Decision Notices, FY '15.

Resource Area	Number
Vegetation Management	2
Fish Habitat/Water Quality Enhancement	2
Total	4

## Fisheries, Water, and Riparian Resources

*Monitor habitat capability and productivity for fish species; water quality; management of riparian resources such as wetlands and floodplains*

In FY '15, the Colville NF monitored Best Management Practices (BMPs) on 11 Forest projects as part of the US Forest Service (USFS) National BMP Program<sup>1</sup>. Monitoring was conducted to evaluate the implementation and effectiveness of BMPs applied to Colville NF projects and activities (see Appendix A).

Monitoring described in this report was conducted using protocols developed under the USFS National BMP Program. Specific sites monitored on the Colville NF were selected based on Regional Office guidance and criteria provided in the National BMP Program.

Colville NF sites monitored in 2015 included the following categories. Projects were located in 11 separate subwatersheds across three ranger districts on the Forest.

- Aquatic Ecosystem Improvements (1 site)
- Minerals - Active Non-Placer Mineral Operations (1 site)
- Grazing Management (3 sites)
- Road Management - Active Road and/or Waterbody Crossing Construction or Reconstruction, Active Road Decommissioning (4 sites)
- Vegetation Management - Ground-based Skidding and Harvesting (4 sites), Cable or Aerial Yarding (1 site)
- Water Uses - Operation and Maintenance of Spring-Source Facilities (1 site)

**Implementation of BMPs:** Implementation ratings (see Appendix A, Table A-1 for definitions) summarize the required BMPs from project NEPA documents that were actually implemented on the ground at the site monitored. Corrective action or adaptive management recommendations are made based on results of monitoring (see Appendix A).

### *Implementation Ratings for 2015*

- |  |                                |
|--|--------------------------------|
| • Minerals (1 site evaluated)                          | No BMPS                        |
| • Active Road/Crossing Reconst (1 site evaluated)      | Fully Implemented              |
| • Active Road Decommissioning (2 sites evaluated)      | Marginally - Fully Implemented |
| • Grazing Management (3 sites evaluated)               | Marginally Implemented         |
| • Ground-based Harvesting (4 sites evaluated)          | Mostly - Fully Implemented     |
| • Cable or Aerial Yarding (1 site evaluated)           | Marginally Implemented         |
| • Spring Source Facility Water Uses (1 site evaluated) | Fully Implemented              |

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<sup>1</sup> <http://www.fs.fed.us/biology/watershed/BMP.html>



**Figure 1.** Bridge replacement on Trail 314.

**Effectiveness of BMPs:** Effectiveness ratings (see Appendix A, Table A-2 for definitions) indicate the level to which BMPs were effective at protecting water quality. In 2015, this rating was determined by addressing the questions of 1) was there unanticipated erosion or release of pollutants at the site monitored? And 2) did pollutant(s) reach the stream? Corrective action or adaptive management recommendations are made based on results of monitoring (see Appendix A).

*Effectiveness Ratings for 2015*

- |   |                               |
|---|-------------------------------|
| • Aquatic Ecosystem Improvements                        | Effective                     |
| • Grazing Management (1 sites evaluated)                | Marginally Effective          |
| • Minerals (1 site evaluated)                           | No BMPS                       |
| • Active Road/Crossing Reconst (1 site evaluated)       | Mostly Effective              |
| • Active Road Decommissioning (2 site evaluated)        | Marginally - Mostly Effective |
| • Spring Source Facility Water Uses (1 sites evaluated) | Marginally Effective          |

## Wildlife

*Monitor habitat for Forest Plan Management Indicator Species, Threatened, Endangered and Sensitive Species to determine if management and recovery efforts are being met*

### Grizzly Bear

The Colville NF contains a portion of the Selkirk Mountains Grizzly Bear Recovery Area. The recovery area is located east of the Pend Oreille River and north of the Middle Creek drainage on the Newport-Sullivan Lake Ranger Districts. The Forest monitored core habitat, open and total road densities, and populations in cooperation with the Idaho Panhandle National Forest (IPNF), Washington Department of Fish and Wildlife (WDFW), Idaho Fish and Game (IDFG) and British Columbia Ministry of Environment (BCME) in FY '15. The Forest also partnered with IPNF and US Fish and Wildlife Service (USFWS) on two hair snare corrals in the Salmo-Priest Grizzly Bear Management Unit (BMU) (see Appendix B).

In FY 2015, Forest Protection Officers (FPOs) completed 20 weekend visitor contact patrols in the recovery areas for grizzly bears and caribou, which overlap. A primary objective of these patrols is to inform hunters about proper species identification, so a threatened or endangered species is not mistaken for a game animal.

The Colville NF maintains 58 gates on closed roads in its portion of the grizzly recovery area. The Forest attempts to monitor each closed road several times a year, using appropriated dollars or timber sale area improvement funds. Motorized use behind road closures and gate locks and signs are monitored. The Forest assesses needs for future road closure improvement work based on this monitoring. Table 3 displays monitoring performed in FY '15.

**Table 3.** Colville National Forest/ Idaho Panhandle National Forest closed road monitoring effort for three BMUs in 2015.

<b>BMU</b>	<b>Closure type (all ownerships)</b>	<b>Number of roads</b>	<b>Number of closures monitored</b>	<b>Percent monitored</b>	<b>Number of breaches detected</b>
Salmo- Priest	gate	21	21	100	0
	guardrail	2	2	100	0
	impassable	24	24	100	0
Sullivan- Hughes	gate	31	19	61	0
	guardrail	3	1	33	0
	impassable	6	5	83	0
LeClerc	gate	42	26	62	3
	guardrail	2	2	100	0
	impassable	17	13	76	0
<b>All</b>	<b>All</b>	<b>148</b>	<b>113</b>	<b>76</b>	<b>3</b>

In addition to these monitoring efforts, the Colville NF purchased 32 food storage lockers for developed campgrounds in 2015. These devices are intended to provide campers with a secure place to store food and other wildlife attractants.

## Woodland Caribou

### *Snow Patrols*

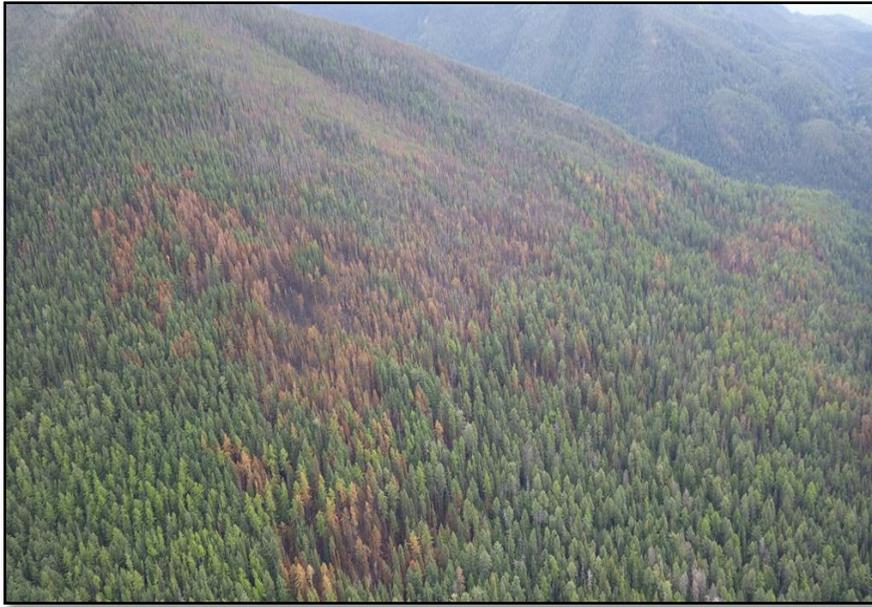
During the winter of 2014/2015, FPOs completed two weekend patrols on snowmobile in the Forest's portion of the Selkirk Mountains Woodland Caribou Recovery Area. A biologist with the WDFW participated. The purpose of these patrols is to educate snowmobile riders about the special needs of wintering caribou, and to monitor for snowmobile use on closed roads and areas (see Appendix C). Snow conditions were unusually shallow and hard-packed in the winter of 2014/ 2015, which appeared to have limited overall snowmobile recreation in the recovery area, compared to past years.

Snowmobile riding on open roads is not a caribou management concern. Off-road riding on high ridges can bring snowmobiles into contact with wintering caribou. Animals may become stressed if they are approached too closely, causing them to run and deplete energy reserves. Consistent snowmobile use may cause caribou to abandon an entire ridge system.

As in recent years, Forest staff observed a small number of illegal snowmobile tracks on closed roads that can be used to access Molybdenite Ridge. Use of a snow-bike that was driven around a gate was also detected during these patrols. Caribou have not been known to use Molybdenite Ridge for many years, however solutions to prevent illegal entries are being considered by biologists. There were no other known incursions on high ridges in the Forest's portion of the recovery area.

### *Kaniksu Complex Wildfires*

Lightning storms in August of 2015 sparked a number of wildfires in the caribou recovery area and grizzly BMU's, ranging from a fraction of an acre on up to several hundred acres in size. Owing to a lack of access and other firefighting priorities on the Forest, these fires were mostly monitored until they were put out by season-ending weather events. Where the fires created openings in the forest canopy and soils were not overly heated, the shrub and herb layers should respond with profuse sprouting. Existing forage plants utilized by grizzly bears should become more robust and palatable over the short to mid-term on these sites. See Appendix B for details of fire locations within BMU's.



**Figure 2.** South Fork Slate Creek fire burned within woodland caribou recovery area in 2015.

## Soils

*Monitor changes in soil productivity to determine if soil management and conservation practices are being implemented and to assess their effectiveness.*

In FY '15, the Colville NF soil crew completed pre-harvest, post-harvest, and prescribed burn monitoring across the Forest (Table 4).

**Table 4.** Soil crew monitoring, FY '15.

Project name	Number of units	Type of Monitoring
Orient	110	Pre-harvest
Timber Mountain	11	Pre-harvest
Kettle Face	3	Pre-harvest
Kettle Face	7	Post-harvest
Flowery Trail	4	Post-harvest
Sand Creek	3	Post-harvest
Rogers Mountain	1	Prescribed burn monitoring
Paradise	1	Prescribed burn monitoring
Sand Creek	1	Prescribed burn monitoring
Finn	1	Prescribed burn monitoring
Misery Lake	1	Prescribed burn monitoring

The soil crew uses a monitoring protocol to document soil conditions in proposed timber harvest units to determine existing conditions. This creates a baseline by which to compare the effects to soils post-harvest.

Post-harvest soil monitoring also adheres to a protocol, and that took place on the Kettle Face, Flowery Trail, and Sand Creek projects in FY '15. Out of 14 post-harvest units surveyed across various project areas, ten met Regional and Forest soil quality standards. Regional and Forest soil quality standards state that a minimum of 80% of an activity area is to be left with an acceptable soil quality condition.

The soil crew also monitors soil burn severity for prescribed burns. In FY '15, five prescribed burn projects were monitored by the crew. All prescribed burns were found to have minimal impacts to soil resources due to low to moderate soil burn severity. All prescribed burn projects monitored for soil impacts were determined to meet Regional and Forest Soil Quality standards.

## Timber and Forest Health

*Monitor timber yields in existing and regenerated stands.*

Table 5 shows timber and forest product yields for FY '15.

**Table 5.** Timber yields for FY '15.

Firewood Permits Sold	1,492
Miscellaneous Permits Sold	548
Commercial Sales (>\$300 each)	4
Volume Sold (commercial sales MBF)	57,338
Volume Cut (commercial sales MBF)	38,034

## List of Appendices

- Appendix A. Colville National Forest BMP Monitoring FY 2015
- Appendix B. Colville National Forest Management  
Accomplishments in the Selkirk Mountains Grizzly  
Bear Recovery Area: Calendar Year 2015
- Appendix C. 2015 Woodland Caribou Center of Excellence  
Accomplishments

## Colville National Forest BMP Monitoring -- FY2015

### Executive Summary

#### Introduction

In fiscal year 2015, the Colville National Forest (Colville) monitored Best Management Practices (BMPs) on 11 Forest projects as part of the USFS National BMP Program (USDA 2012). Monitoring was conducted to evaluate the *implementation* and *effectiveness* of BMPs applied to Colville projects and activities. This report summarizes results of all BMP monitoring conducted on the Forest in FY2015.

#### Monitoring Approach

Monitoring described in this report was conducted using protocols developed under the USFS National BMP Program.

Specific sites monitored on the Colville were selected based on Regional Office guidance and criteria provided in the National BMP Program.



Trail 314 – Bridge replacement



Excavation at White Raven Mine

#### 2015 Monitoring

Colville sites monitored in 2015 included the following categories:

- Aquatic Ecosystem Improvements (1 site)
- Minerals - Active Non-Placer Mineral Operations (1 site)
- Grazing Management (3 sites)
- Road Management - Active Road and/or Waterbody Crossing Construction or Reconstruction, Active Road Decommissioning (4 sites)
- Vegetation Management - Ground-based Skidding and Harvesting (4 sites), Cable or Aerial Yarding (1 site))
- Water Uses - Operation and Maintenance of Spring-Source Facilities (1 site)

Projects were located in eleven separate subwatersheds across three ranger districts on the Forest.

## 2015 Results

1) **Implementation of BMPs:** Implementation ratings summarize the percentage of required BMPs from project NEPA documents that were actually implemented on the ground at the site monitored.

### Implementation Ratings for 2015

- |   |                                       |
|---|---------------------------------------|
| • <i>Minerals (1 site evaluated)</i>                          | <i>No BMPS</i>                        |
| • <i>Active Road/Crossing Reconst (1 site evaluated)</i>      | <i>Fully Implemented</i>              |
| • <i>Active Road Decommissioning (2 sites evaluated)</i>      | <i>Marginally - Fully Implemented</i> |
| • <i>Grazing Management (3 sites evaluated)</i>               | <i>Marginally Implemented</i>         |
| • <i>Ground-based Harvesting (4 sites evaluated)</i>          | <i>Mostly - Fully Implemented</i>     |
| • <i>Cable or Aerial Yarding (1 site evaluated)</i>           | <i>Marginally Implemented</i>         |
| • <i>Spring Source Facility Water Uses (1 site evaluated)</i> | <i>Fully Implemented</i>              |

2) **Effectiveness of BMPs:** Effectiveness ratings indicate the level to which BMPs were effective at protecting water quality. In 2015 this rating was determined by addressing the questions:

- Was there unanticipated erosion or release of pollutants at the site monitored?
- Did pollutant(s) reach the stream?

### Effectiveness Ratings for 2014

- |  |                                      |
|--|--------------------------------------|
| • <i>Aquatic Ecosystem Improvements</i>                        | <i>Effective</i>                     |
| • <i>Grazing Management (1 sites evaluated)</i>                | <i>Marginally Effective</i>          |
| • <i>Minerals (1 site evaluated)</i>                           | <i>No BMPS</i>                       |
| • <i>Active Road/Crossing Reconst (1 site evaluated)</i>       | <i>Mostly Effective</i>              |
| • <i>Active Road Decommissioning (2 site evaluated)</i>        | <i>Marginally - Mostly Effective</i> |
| • <i>Spring Source Facility Water Uses (1 sites evaluated)</i> | <i>Marginally Effective</i>          |

*\*National rulesets for rating BMP implementation and effectiveness are in development. For this year, ratings were developed by Forest hydrologists using the Region 6 Interim Scoring.*

**3) Corrective Action Recommendations:** 4 site-specific Corrective Actions were recommended as a result of BMP monitoring:

- Minerals: Authorizing instrument is needed with BMPs identified and implemented.
- Road Management: Communicatio with excavator Operators the night before to avoid water impacts not necessary to implement the project.
- Harvesting: Change verbiage in design elements.
- Harvesting: Have Hydrologist or fish biologist check on landing locations before they are accepted.

**4) Adaptive Management Recommendations:** One adaptive Management recommendations was made.

- Grazing: Implement fencing and off site watering.
- Harvesting: Supply presale with a list of stream names and associated buffer widths prior to layout being implemented.
- Road Decommissioning: This site met the definition of closed road and not decommissioned. The site needs to be redone by recontouring of the road, re-ripping, reseeding, rewater barring, and adding slash to site. Clarify all definitions and intent and provide more detailed design elements



Sherman Creek Restoration

**Table A-1.** Definitions for BMP implementation ratings.

Implementation rating	Interpretation
Fully Implemented	Prescriptions are identified in project planning documents, –and– <u>All</u> prescriptions are translated into action documents, –and– <u>All</u> specified prescriptions are implemented fully, –and– <u>All</u> necessary corrective actions identified during the project are implemented fully.
Mostly Implemented	Prescriptions are identified in project planning documents, –and– <u>All</u> or <u>Some</u> prescriptions are translated into action documents, –and– <u>All</u> specified prescriptions are implemented fully, –and– <u>All</u> or <u>Some</u> necessary corrective actions identified during the project are implemented fully.
Marginally Implemented	Prescriptions are identified in project planning documents, –and– <u>All</u> or <u>Some</u> prescriptions are translated into action documents, –and– <u>Some</u> specified prescriptions are implemented fully, –and– <u>All</u> or <u>Some</u> necessary corrective actions identified during the project are implemented fully.
Not Implemented	Prescriptions are identified in project planning documents, –and– <u>No</u> prescriptions are translated into action documents, –or– <u>No</u> specified prescriptions are implemented fully, –or– <u>No</u> necessary corrective actions identified during the project are implemented.
No BMPs	Site-specific BMP prescriptions were not developed or identified during project planning.

**Table A-2.** Definitions for BMP effectiveness ratings.

Effectiveness rating	Interpretation	
Effective	<u>No</u> pollutants reached the waterbody and there is no potential threat evident, –and– <u>Waterbody received no</u> adverse effects from the project or activity (e.g., physical disturbance).	
Mostly Effective	<u>Minor</u> amounts of pollutants reached the waterbody or there is a <u>potential threat</u> evident, –and/or– Waterbody received <u>minor</u> adverse effects from the project or activity, –and/or– Impacts to water quality are <u>temporary</u> , lasting less than 1 year.	
Marginally Effective	<u>Minor</u> amounts of pollutants reached the waterbody or there is a <u>potential threat</u> evident, –and/or– Waterbody received <u>minor</u> adverse effects from the project or activity, –and/or– Impacts to water quality are <u>prolonged</u> , lasting more than 1 year.	<u>Major</u> amounts of pollutants reached the waterbody or there is a <u>potential threat</u> evident, –and/or– Waterbody received <u>major</u> adverse effects from the project or activity, –and/or– Impacts to water quality are <u>temporary</u> , lasting less than 1 year.
Not Effective	<u>Major</u> amounts of pollutants reached the waterbody or are very close to entering the waterbody, –or– Waterbody received <u>major</u> adverse effects from the project or activity, –and– Impacts to water quality are <u>prolonged</u> , lasting more than 1 year.	

## Appendix B. Colville National Forest Management Accomplishments in the Selkirk Mountains Grizzly Bear Recovery Area: Calendar Year 2015

### **INTRODUCTION**

The Colville National Forest (NF) contains a portion of the Selkirk Mountains Grizzly Bear Recovery Area. The recovery area is located east of the Pend Oreille River and north of the Middle Creek drainage on the Newport-Sullivan Lake Ranger Districts. This document describes the habitat improvement, information and education efforts, and other management activities pertaining to grizzly bears completed on the Forest in calendar year 2015.

### **HABITAT IMPROVEMENTS**

#### **Animal Resistant Containers**

All developed campgrounds on the Colville NF presently have animal-resistant trash cans. We continue to install food storage lockers at heavily-used recreation sites across the Forest, particularly within or adjacent to the recovery area. These lockers are intended to provide campers with a secure place to store food, beverages and other wildlife attractants when their camp is unoccupied, or when they are sleeping at night. The devices have been well-received and used by the public.

In 2015, we purchased 32 food storage lockers with funding provided by;

- Conservation Northwest,
- Defenders of Wildlife,
- Kalispel Tribe of Indians,
- Pend Oreille County Public Utility District,
- Seattle City Light,
- Selkirk Conservation Alliance,
- USDA Forest Service Region 6 (Regional cost-share funds),

Scenic Canyons Recreational Services Inc. (Colville NF campground concessionaire) purchased 3 additional lockers.

These metal, 30 cubic foot structures are compliant with the American with Disabilities Act. In 2015 we installed 3 lockers on poured cement pads in West Sullivan Campground and 2 in Sullivan Lake Group Campground located on the western edge of the recovery area. We will install the remaining lockers in the summer of 2016.

#### **Riparian Exclosure Maintenance**

We maintained 2 livestock exclosures that protect roughly 20 acres of wetlands and streamside riparian habitat in the LeClerc BMU.

#### **Kaniksu Complex Wildfires**

This year brought drought conditions to eastern Washington. Lightning storms in August sparked a number of wildfires on the CNF, some of which became very large, project fires. Several wildfires occurred in the Forest's portion of the grizzly bear recovery area, ranging from a fraction of an acre on up to several hundred acres in size. These fires predominantly burned

within remote, roadless areas. They tended to be on steep / broken terrain, in continuous stands of timber, and with poor access for ground fire-fighting resources. The larger fires were “contained” to some extent with aerial water drops and burn-outs from a few existing roads. Mostly these fires were simply monitored until they were put out by season-ending weather events. Fire severity tended to be mixed, leaving behind patches where the tree canopy was completely removed, areas where the fires were mostly confined to the forest understory, and unburned swaths. This is thought to be the historic fire regime over much of the forest land in Pend Oreille County.



Figure 1. South Fork Slate Creek Trail Fire

Where the fires created openings in the forest canopy and soils were not overly heated, the shrub and herb layers should respond with profuse sprouting. Existing forage plants utilized by grizzly bears should become more robust and palatable over the short to mid-term on these sites. The following table displays information on the fires which burned in the Forest’s portion of the recovery area.

**Table 1.** Wildfires in the CNF's portion of the Grizzly Bear Recovery Area in 2015

Fire Name	Approx. fire perimeter acres	Grizzly Bear Management Unit	Comments
Cascade	2	Salmo-Priest	
South Fork Slate Creek	166		roadless area
3 fires < 1 acre	< 3		2 in Salmo-Priest Wilderness
Hall Mountain	39	Sullivan-Hughes	roadless area
Grease Creek	717		roadless area
4 fires < 1 acre	< 4		
Onata	545	LeClerc	mostly on Stimson Lumber Company land
Tower spots	48		spot fires originating from the Tower Fire, south of the BMU
6 fires < 1 acre	< 6		

## RESEARCH AND MONITORING

### Cooperative Selkirk Ecosystem Grizzly Bear Study

This project is a multi-year (2012-2017), interagency effort led by Wayne Kasworm, Grizzly Bear Biologist with the USDI Fish and Wildlife Service (FWS). The objectives are to determine grizzly bear survival rates, population trend, and causes of death, as well as to develop habitat use models for the Selkirk Mountains Ecosystem. Partners in this effort include the FWS, Kalispel Tribe of Indians, Kootenai Tribe of Idaho, British Columbia Ministry of Forests, Lands, and Natural Resource Operations, Idaho Department of Fish and Game, Idaho Department of Lands, Washington Department of Fish and Wildlife, Idaho Panhandle National Forests, and the Colville National Forest.

As was the case in 2014, the FWS hired a 2-person crew to capture and collar grizzly bears in the U.S. portion of the Selkirk Mountains Ecosystem. While they were trapping in Washington, the CNF east zone biologist assisted the crew by securing a trailer parking space, issuing closed road use permits and gate keys, and providing local area knowledge. In 2015, no grizzly bears were captured on the Washington side of the ecosystem, but 2 previously collared bears spent time in the state, based on GPS collar locations. The CNF contributed \$5,000 towards the cost of aerial telemetry flights conducted by FWS personnel to track collared bears.

Many of the participating agencies and tribes installed “hair snag corrals” across the recovery area, in an attempt to document grizzly bear presence and collect hair samples for DNA testing. Corrals consist of a single strand of barbed wire strung between 4 or more trees at about knee height. In the center of these small enclosures, a liquid scent lure is poured over decaying woody debris. As a bear enters the enclosure to investigate the smelly lure, hairs on the bear’s coat may be snagged on the barbed wire strand, and collected at a later date. A remote camera photographs the animal.

The CNF installed and monitored two hair snag corrals in the Salmo-Priest Grizzly Bear Management Unit (BMU). In 2015, the only corral that yielded a confirmed detection of grizzly

bears on the Forest was one installed in the Jungle Creek area (LeClerc BMU) by biologists with the Washington Department of Fish and Wildlife. At this site, a sow grizzly bear with 2 cubs were photographed on June 21. All black and grizzly bear hair samples collected by the cooperating agencies and tribes were provided to Wayne Kasworm for DNA analysis.

### **Bear Observation Interviews**

The CNF east zone biologist interviewed 4 individuals who reported seeing grizzly bears in the recovery area, including one observation from 2013, incidentally reported this year. Included in this year's observations was a sow with 2 cubs encountered by a hiker on the Salmo Loop Trail near the Washington / Idaho state line. All of these observations appeared to have high reliability, but none were confirmed by a biologist. In addition, there were 2 recorded observations from *outside* of the recovery area. With one of these sightings, the description and photos provided were inconclusive as to species identification. The other sighting was of grizzly bear tracks within the Tower Fire burned area perimeter. All observation records were shared with FWS and WDFW.

### **Closed Road Monitoring**

The CNF maintains 58 gates on closed roads in our portion of the grizzly recovery area. We attempt to monitor each closed road several times a year, using appropriated dollars or timber sale area improvement funds. We check for motorized use behind road closures and maintain gate locks and signs. We assess needs for future road closure improvement work. This could include installing barriers (e.g.; cement posts, boulders) to prevent vehicles from being driven around a gate, or replacing gates with boulders or earthen berms.

## **INFORMATION / EDUCATION / ENFORCEMENT**

### **Signage / Brochures**

We maintain about 20 informational boards on roads and in dispersed campsites in the recovery area and 18 boards in formal campgrounds directly adjacent to the recovery area. These boards display signage pertaining to grizzly bear management, including food storage requirements.

### **Presentations**

Our recreation specialist provided training on proper food storage / large carnivore safety to 22 campground hosts and managers. The east zone biologist gave separate presentations on grizzly bear ecology and management to; 12 boy scouts, 4 student volunteers from North Idaho College, and 10 Northwest Youth Corps volunteers. He also provided a briefing on bear safety and proper food storage to 6 safety officers attached to the Kaniksu Wildland Fire Complex.

### **Visitor Contact Patrols**

We completed approximately 20 visitor contact patrols within the CNF's portion of the grizzly recovery area. These patrols are conducted by CNF employees who have completed the Forest Service's 40 hour, Level 2 Law Enforcement training and are now active, experienced forest protection officers. Patrols occurred mostly over the summer holiday weekends and weekends during the hunting seasons.

Participants in these patrols inform / educate forest visitors about camping and hunting safely in grizzly bear occupied habitat. We distribute informational brochures, discuss bear identification with hunters, and provide other information as requested.

These patrols provide an agency “presence” in the recovery area on high-visitation weekends when the potential for human / bear conflict is greatest. Patrollers are in uniform and drive recognizable agency trucks. Officer discretion is exercised in issuing warnings / citations for violations of regulations pertaining to food storage, off-highway vehicle use, road closures, etc. We also provide the local state game agent with information pertaining to suspected fish and game violations.

## Colville National Forest

### 2015 Woodland Caribou Center of Excellence Accomplishments

**SNOW PATROLS:** As in past winters, Forest Protection Officers (FPOs) continued to complete weekend visitor contact patrols on snowmobile in the Forest's portion of the Selkirk Mountains Woodland Caribou Recovery Area. We were only able to complete 2 patrols due to a break-down of a snowmobile (seized gearbox) that required costly repairs. Snow conditions were unusually shallow and hard-packed in the winter of 2014 - 2015, which appeared to have limited overall snowmobile recreation in the recovery area, compared to past years.

For the first time we detected snow-bike (tracked motorcycle) use in the caribou recovery area. This vehicle was driven around a gate and onto a closed road. Physically prohibiting this type of machine from being driven around almost any gate may be problematic.

As in recent years, we detected a small number of illegal entries by snowmobile riders onto Molybdenite Ridge, via closed roads. There were no other known incursions on high ridges in the forest's portion of the recovery area.

**VISITOR CONTACT PATROLS:** In Fiscal Year 2015, FPOs completed 20 weekend visitor contact patrols in the recovery areas for grizzly bears and caribou (which overlap). A primary objective of these patrols is to inform hunters about proper species identification, so a threatened or endangered species is not mistaken for a game animal. We also provide information (including brochures) on caribou ecology and recovery efforts.



Figure 1: Forest protection officer making a hunter contact.



Figure 2. Wildfire that burned in the woodland caribou recovery area in 2015.

**KANIKSU COMPLEX WILDFIRES:** Lightning storms in August sparked a number of wildfires in the caribou recovery area, ranging from a fraction of an acre on up to several hundred acres in size. Owing to a lack of access and other firefighting priorities on the Forest, these fires were mostly monitored until they were put out by season-ending weather events. Fire severity tended to be mixed, which is thought to be the historic fire regime over most of the forest land in Pend Oreille County. The acres of "target" stands for caribou affected were small. The east zone biologist was assigned to a Burned Area Emergency Response Team for this complex of fires.

**CARIBOU MONITORING / PREDATOR MANAGEMENT:** Biologists in British Columbia (BC) continued to monitor 6 GPS collared caribou. The Colville National Forest contributed \$2,500 towards this effort. BC continued to remove wolf packs to reduce predation on the remnant caribou herd (estimated to be less than 20 animals). Cougar hunting regulations have been relaxed in BC. Methods to boost the population size of the herd are being discussed, including maternal penning, augmentation from elsewhere in BC, and additional predator control.

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